

# Installation Products for Industrial Applications



## Product Information

- Circuit Breakers FAZ



Powering Business Worldwide



# Optimum and powerful protection for every application

When it comes to protecting and switching, industry in many countries relies on Eaton products.

Top product quality as well as tested reliability and safety guarantee a high level of protection for people, installations and systems. Official approvals in many countries prove that Eaton builds its products in line with the latest national and international regulations.

|   |                 |
|---|-----------------|
| <b>up to 25 kA</b>                      | IEC/EN 60947-2  |
| <b>up to 15 kA</b>                      | IEC/EN 60898-1  |
| <b>up to 14 kA</b>                      | UL 489          |
| <b>up to 10 kA</b>                      | UL 1077         |
| <b>10 kA</b>                            | IEC/EN 60947-2  |
| at 60 V DC 1-pole<br>at 120 V DC 2-pole | (for FAZT only) |

# Content FAZ Miniature Circuit Breakers (MCBs)

SG06811



## FAZ

|                        |     |
|------------------------|-----|
| Characteristic B ..... | .XX |
| Characteristic C ..... | .XX |
| Characteristic D ..... | .XX |
| Characteristic K ..... | .XX |
| Characteristic S ..... | .XX |
| Characteristic Z ..... | .XX |

## FAZ-PN

|                        |     |
|------------------------|-----|
| Characteristic B ..... | .XX |
| Characteristic C ..... | .XX |

## FAZ-...-HS

|                        |     |
|------------------------|-----|
| Characteristic B ..... | .XX |
|------------------------|-----|

## FAZ Specifications

|  |     |
|--|-----|
| Specifications .....                   | .XX |
| Dimensions .....                       | .XX |
| Tripping Characteristic .....          | .XX |
| Internal Resistance .....              | .XX |
| Fault Loop Impedance .....             | .XX |
| Power Loss .....                       | .XX |
| Influence of Ambient Temperature ..... | .XX |
| Maximum Let-Through Energy .....       | .XX |
| Maximum Let-Through Current .....      | .XX |
| Short Circuit Selectivity .....        | .XX |
| Back-up Protection .....               | .XX |
| Overload Selectivity .....             | .XX |
| Influence of the Line Frequency .....  | .XX |
| BB Busbars .....                       | .XX |
| Accessories .....                      | .XX |

## FAZ-T

|                        |     |
|------------------------|-----|
| Characteristic B ..... | .XX |
| Characteristic C ..... | .XX |
| Characteristic D ..... | .XX |

## FAZ-T, FAZ-...-DC Specifications

|  |     |
|--|-----|
| Specifications .....   | .XX |
| Dimensions .....   | .XX |
| Tripping Characteristic .....  | .XX |
| Power Loss .....   | .XX |
| Influence of Ambient Temperature .....                                       | .XX |
| Influence of the Line Frequency .....  | .XX |
| Load rating in case of circuit breakers arranged one next to the other ..... | .XX |
| Maximum Let-Through Energy .....   | .XX |
| Maximum Let-Through Current .....  | .XX |

## FAZ-...-DC

|                        |     |
|------------------------|-----|
| Characteristic C ..... | .XX |
|------------------------|-----|

# Content FAZ Miniature Circuit Breakers (MCBs)

- FAZ-...-DC Specifications**
  - Specifications .....XX
  - Dimensions .....XX
  - Tripping Characteristic .....XX
  
- FAZ-...-NA**
  - Characteristic B .....XX
  - Characteristic C .....XX
  - Characteristic D .....XX
  
- FAZ-...-NA-DC**
  - Characteristic C .....XX
  
- FAZ-...-RT**
  - Characteristic B .....XX
  - Characteristic C .....XX
  - Characteristic D .....XX
  
- FAZ-NA/RT Specifications**
  - Specifications .....XX
  - Dimensions .....XX
  - Tripping Characteristic .....XX
  - Internal Resistance .....XX
  - Power Loss .....XX
  - Maximum Let-Through Energy .....XX
  - Maximum Let-Through Current .....XX
  - Z-SV/UL-16 Busbars .....XX
  - Accessories .....XX

# FAZ | Characteristic B

## FAZ Miniature Circuit Breakers (MCBs) Characteristic B

SG06811



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

### 1-pole

|     |         |    |     |    |            |        |        |
|-----|---------|----|-----|----|------------|--------|--------|
| 1   | 240/415 | 15 | 277 | 10 | FAZ-B1/1   | 278520 | 12/120 |
| 1,5 | 240/415 | 15 | 277 | 10 | FAZ-B1,5/1 | 278521 | 12/120 |
| 1,6 | 240/415 | 15 | 277 | 10 | FAZ-B1,6/1 | 278522 | 12/120 |
| 2   | 240/415 | 15 | 277 | 10 | FAZ-B2/1   | 278523 | 12/120 |
| 2,5 | 240/415 | 15 | 277 | 10 | FAZ-B2,5/1 | 278524 | 12/120 |
| 3   | 240/415 | 15 | 277 | 10 | FAZ-B3/1   | 278525 | 12/120 |
| 3,5 | 240/415 | 15 | 277 | 10 | FAZ-B3,5/1 | 278526 | 12/120 |
| 4   | 240/415 | 15 | 277 | 10 | FAZ-B4/1   | 278527 | 12/120 |
| 5   | 240/415 | 15 | 277 | 10 | FAZ-B5/1   | 278528 | 12/120 |
| 6   | 240/415 | 15 | 277 | 10 | FAZ-B6/1   | 278529 | 12/120 |
| 8   | 240/415 | 15 | 277 | 10 | FAZ-B8/1   | 278530 | 12/120 |
| 10  | 240/415 | 15 | 277 | 10 | FAZ-B10/1  | 278531 | 12/120 |
| 12  | 240/415 | 15 | 277 | 10 | FAZ-B12/1  | 278532 | 12/120 |
| 13  | 240/415 | 15 | 277 | 10 | FAZ-B13/1  | 278533 | 12/120 |
| 15  | 240/415 | 15 | 277 | 10 | FAZ-B15/1  | 278534 | 12/120 |
| 16  | 240/415 | 15 | 277 | 10 | FAZ-B16/1  | 278535 | 12/120 |
| 20  | 240/415 | 15 | 277 | 10 | FAZ-B20/1  | 278536 | 12/120 |
| 25  | 240/415 | 15 | 277 | 10 | FAZ-B25/1  | 278537 | 12/120 |
| 32  | 240/415 | 15 | 277 | 10 | FAZ-B32/1  | 278538 | 12/120 |
| 40  | 240/415 | 15 | 277 | 5  | FAZ-B40/1  | 278539 | 12/120 |
| 50  | 240/415 | 15 | 277 | 5  | FAZ-B50/1  | 278540 | 12/120 |
| 63  | 240/415 | 15 | 277 | 5  | FAZ-B63/1  | 278541 | 12/120 |

SG06811



### 1+N-pole

|     |     |    |     |    |             |        |      |
|-----|-----|----|-----|----|-------------|--------|------|
| 1   | 240 | 15 | 277 | 10 | FAZ-B1/1N   | 278633 | 1/60 |
| 1,5 | 240 | 15 | 277 | 10 | FAZ-B1,5/1N | 278634 | 1/60 |
| 1,6 | 240 | 15 | 277 | 10 | FAZ-B1,6/1N | 278635 | 1/60 |
| 2   | 240 | 15 | 277 | 10 | FAZ-B2/1N   | 278636 | 1/60 |
| 2,5 | 240 | 15 | 277 | 10 | FAZ-B2,5/1N | 278637 | 1/60 |
| 3   | 240 | 15 | 277 | 10 | FAZ-B3/1N   | 278638 | 1/60 |
| 3,5 | 240 | 15 | 277 | 10 | FAZ-B3,5/1N | 278639 | 1/60 |
| 4   | 240 | 15 | 277 | 10 | FAZ-B4/1N   | 278640 | 1/60 |
| 5   | 240 | 15 | 277 | 10 | FAZ-B5/1N   | 278641 | 1/60 |
| 6   | 240 | 15 | 277 | 10 | FAZ-B6/1N   | 278642 | 1/60 |
| 8   | 240 | 15 | 277 | 10 | FAZ-B8/1N   | 278643 | 1/60 |
| 10  | 240 | 15 | 277 | 10 | FAZ-B10/1N  | 278644 | 1/60 |
| 12  | 240 | 15 | 277 | 10 | FAZ-B12/1N  | 278645 | 1/60 |
| 13  | 240 | 15 | 277 | 10 | FAZ-B13/1N  | 278646 | 1/60 |
| 15  | 240 | 15 | 277 | 10 | FAZ-B15/1N  | 278647 | 1/60 |
| 16  | 240 | 15 | 277 | 10 | FAZ-B16/1N  | 278648 | 1/60 |
| 20  | 240 | 15 | 277 | 10 | FAZ-B20/1N  | 278649 | 1/60 |
| 25  | 240 | 15 | 277 | 10 | FAZ-B25/1N  | 278650 | 1/60 |
| 32  | 240 | 15 | 277 | 10 | FAZ-B32/1N  | 278651 | 1/60 |
| 40  | 240 | 15 | 277 | 5  | FAZ-B40/1N  | 278652 | 1/60 |
| 50  | 240 | 15 | 277 | 5  | FAZ-B50/1N  | 278653 | 1/60 |
| 63  | 240 | 15 | 277 | 5  | FAZ-B63/1N  | 278654 | 1/60 |

# FAZ | Characteristic B

SG07011



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

## 2-pole

|     |     |    |          |    |            |        |      |
|-----|-----|----|----------|----|------------|--------|------|
| 1   | 415 | 15 | 480Y/277 | 10 | FAZ-B1/2   | 278719 | 1/60 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B1,5/2 | 278720 | 1/60 |
| 1,6 | 415 | 15 | 480Y/277 | 10 | FAZ-B1,6/2 | 278721 | 1/60 |
| 2   | 415 | 15 | 480Y/277 | 10 | FAZ-B2/2   | 278722 | 1/60 |
| 2,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B2,5/2 | 278723 | 1/60 |
| 3   | 415 | 15 | 480Y/277 | 10 | FAZ-B3/2   | 278724 | 1/60 |
| 3,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B3,5/2 | 278725 | 1/60 |
| 4   | 415 | 15 | 480Y/277 | 10 | FAZ-B4/2   | 278726 | 1/60 |
| 5   | 415 | 15 | 480Y/277 | 10 | FAZ-B5/2   | 278727 | 1/60 |
| 6   | 415 | 15 | 480Y/277 | 10 | FAZ-B6/2   | 278728 | 1/60 |
| 8   | 415 | 15 | 480Y/277 | 10 | FAZ-B8/2   | 278729 | 1/60 |
| 10  | 415 | 15 | 480Y/277 | 10 | FAZ-B10/2  | 278730 | 1/60 |
| 12  | 415 | 15 | 480Y/277 | 10 | FAZ-B12/2  | 278731 | 1/60 |
| 13  | 415 | 15 | 480Y/277 | 10 | FAZ-B13/2  | 278732 | 1/60 |
| 15  | 415 | 15 | 480Y/277 | 10 | FAZ-B15/2  | 278733 | 1/60 |
| 16  | 415 | 15 | 480Y/277 | 10 | FAZ-B16/2  | 278734 | 1/60 |
| 20  | 415 | 15 | 480Y/277 | 10 | FAZ-B20/2  | 278735 | 1/60 |
| 25  | 415 | 15 | 480Y/277 | 10 | FAZ-B25/2  | 278736 | 1/60 |
| 32  | 415 | 15 | 480Y/277 | 10 | FAZ-B32/2  | 278737 | 1/60 |
| 40  | 415 | 15 | 480Y/277 | 5  | FAZ-B40/2  | 278738 | 1/60 |
| 50  | 415 | 15 | 480Y/277 | 5  | FAZ-B50/2  | 278739 | 1/60 |
| 63  | 415 | 15 | 480Y/277 | 5  | FAZ-B63/2  | 278740 | 1/60 |

SG07111



## 3-pole

|     |     |    |          |    |            |        |      |
|-----|-----|----|----------|----|------------|--------|------|
| 1   | 415 | 15 | 480Y/277 | 10 | FAZ-B1/3   | 278832 | 1/40 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B1,5/3 | 278833 | 1/40 |
| 1,6 | 415 | 15 | 480Y/277 | 10 | FAZ-B1,6/3 | 278834 | 1/40 |
| 2   | 415 | 15 | 480Y/277 | 10 | FAZ-B2/3   | 278835 | 1/40 |
| 2,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B2,5/3 | 278836 | 1/40 |
| 3   | 415 | 15 | 480Y/277 | 10 | FAZ-B3/3   | 278837 | 1/40 |
| 3,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B3,5/3 | 278838 | 1/40 |
| 4   | 415 | 15 | 480Y/277 | 10 | FAZ-B4/3   | 278839 | 1/40 |
| 5   | 415 | 15 | 480Y/277 | 10 | FAZ-B5/3   | 278840 | 1/40 |
| 6   | 415 | 15 | 480Y/277 | 10 | FAZ-B6/3   | 278841 | 1/40 |
| 8   | 415 | 15 | 480Y/277 | 10 | FAZ-B8/3   | 278842 | 1/40 |
| 10  | 415 | 15 | 480Y/277 | 10 | FAZ-B10/3  | 278843 | 1/40 |
| 12  | 415 | 15 | 480Y/277 | 10 | FAZ-B12/3  | 278844 | 1/40 |
| 13  | 415 | 15 | 480Y/277 | 10 | FAZ-B13/3  | 278845 | 1/40 |
| 15  | 415 | 15 | 480Y/277 | 10 | FAZ-B15/3  | 278846 | 1/40 |
| 16  | 415 | 15 | 480Y/277 | 10 | FAZ-B16/3  | 278847 | 1/40 |
| 20  | 415 | 15 | 480Y/277 | 10 | FAZ-B20/3  | 278848 | 1/40 |
| 25  | 415 | 15 | 480Y/277 | 10 | FAZ-B25/3  | 278849 | 1/40 |
| 32  | 415 | 15 | 480Y/277 | 10 | FAZ-B32/3  | 278850 | 1/40 |
| 40  | 415 | 15 | 480Y/277 | 5  | FAZ-B40/3  | 278851 | 1/40 |
| 50  | 415 | 15 | 480Y/277 | 5  | FAZ-B50/3  | 278852 | 1/40 |
| 63  | 415 | 15 | 480Y/277 | 5  | FAZ-B63/3  | 278853 | 1/40 |

# FAZ | Characteristic B

SG07311



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

## 3+N-pole

|     |     |    |          |    |             |        |      |
|-----|-----|----|----------|----|-------------|--------|------|
| 1   | 415 | 15 | 480Y/277 | 10 | FAZ-B1/3N   | 278934 | 1/30 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B1,5/3N | 278935 | 1/30 |
| 1,6 | 415 | 15 | 480Y/277 | 10 | FAZ-B1,6/3N | 278936 | 1/30 |
| 2   | 415 | 15 | 480Y/277 | 10 | FAZ-B2/3N   | 278937 | 1/30 |
| 2,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B2,5/3N | 278938 | 1/30 |
| 3   | 415 | 15 | 480Y/277 | 10 | FAZ-B3/3N   | 278939 | 1/30 |
| 3,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B3,5/3N | 278940 | 1/30 |
| 4   | 415 | 15 | 480Y/277 | 10 | FAZ-B4/3N   | 278941 | 1/30 |
| 5   | 415 | 15 | 480Y/277 | 10 | FAZ-B5/3N   | 278942 | 1/30 |
| 6   | 415 | 15 | 480Y/277 | 10 | FAZ-B6/3N   | 278943 | 1/30 |
| 8   | 415 | 15 | 480Y/277 | 10 | FAZ-B8/3N   | 278944 | 1/30 |
| 10  | 415 | 15 | 480Y/277 | 10 | FAZ-B10/3N  | 278945 | 1/30 |
| 12  | 415 | 15 | 480Y/277 | 10 | FAZ-B12/3N  | 278946 | 1/30 |
| 13  | 415 | 15 | 480Y/277 | 10 | FAZ-B13/3N  | 278947 | 1/30 |
| 15  | 415 | 15 | 480Y/277 | 10 | FAZ-B15/3N  | 278948 | 1/30 |
| 16  | 415 | 15 | 480Y/277 | 10 | FAZ-B16/3N  | 278949 | 1/30 |
| 20  | 415 | 15 | 480Y/277 | 10 | FAZ-B20/3N  | 278950 | 1/30 |
| 25  | 415 | 15 | 480Y/277 | 10 | FAZ-B25/3N  | 278951 | 1/30 |
| 32  | 415 | 15 | 480Y/277 | 10 | FAZ-B32/3N  | 278952 | 1/30 |
| 40  | 415 | 15 | 480Y/277 | 5  | FAZ-B40/3N  | 278953 | 1/30 |
| 50  | 415 | 15 | 480Y/277 | 5  | FAZ-B50/3N  | 278954 | 1/30 |
| 63  | 415 | 15 | 480Y/277 | 5  | FAZ-B63/3N  | 278955 | 1/30 |

SG07211



## 4-pole

|     |     |    |          |    |            |        |      |
|-----|-----|----|----------|----|------------|--------|------|
| 1   | 415 | 15 | 480Y/277 | 10 | FAZ-B1/4   | 279020 | 1/30 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B1,5/4 | 279021 | 1/30 |
| 1,6 | 415 | 15 | 480Y/277 | 10 | FAZ-B1,6/4 | 279022 | 1/30 |
| 2   | 415 | 15 | 480Y/277 | 10 | FAZ-B2/4   | 279023 | 1/30 |
| 2,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B2,5/4 | 279024 | 1/30 |
| 3   | 415 | 15 | 480Y/277 | 10 | FAZ-B3/4   | 279025 | 1/30 |
| 3,5 | 415 | 15 | 480Y/277 | 10 | FAZ-B3,5/4 | 279026 | 1/30 |
| 4   | 415 | 15 | 480Y/277 | 10 | FAZ-B4/4   | 279027 | 1/30 |
| 5   | 415 | 15 | 480Y/277 | 10 | FAZ-B5/4   | 279028 | 1/30 |
| 6   | 415 | 15 | 480Y/277 | 10 | FAZ-B6/4   | 279029 | 1/30 |
| 8   | 415 | 15 | 480Y/277 | 10 | FAZ-B8/4   | 279030 | 1/30 |
| 10  | 415 | 15 | 480Y/277 | 10 | FAZ-B10/4  | 279031 | 1/30 |
| 12  | 415 | 15 | 480Y/277 | 10 | FAZ-B12/4  | 279032 | 1/30 |
| 13  | 415 | 15 | 480Y/277 | 10 | FAZ-B13/4  | 279033 | 1/30 |
| 15  | 415 | 15 | 480Y/277 | 10 | FAZ-B15/4  | 279034 | 1/30 |
| 16  | 415 | 15 | 480Y/277 | 10 | FAZ-B16/4  | 279035 | 1/30 |
| 20  | 415 | 15 | 480Y/277 | 10 | FAZ-B20/4  | 279036 | 1/30 |
| 25  | 415 | 15 | 480Y/277 | 10 | FAZ-B25/4  | 279037 | 1/30 |
| 32  | 415 | 15 | 480Y/277 | 10 | FAZ-B32/4  | 279038 | 1/30 |
| 40  | 415 | 15 | 480Y/277 | 5  | FAZ-B40/4  | 279039 | 1/30 |
| 50  | 415 | 15 | 480Y/277 | 5  | FAZ-B50/4  | 279040 | 1/30 |
| 63  | 415 | 15 | 480Y/277 | 5  | FAZ-B63/4  | 279041 | 1/30 |

# FAZ | Characteristic C

## FAZ Miniature Circuit Breakers (MCBs) Characteristic C

SG06811



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

### 1-pole

|      |         |    |     |    |             |        |        |
|------|---------|----|-----|----|-------------|--------|--------|
| 0,16 | 240/415 | 15 | 277 | 5  | FAZ-C0,16/1 | 278542 | 12/120 |
| 0,25 | 240/415 | 15 | 277 | 5  | FAZ-C0,25/1 | 278543 | 12/120 |
| 0,5  | 240/415 | 15 | 277 | 10 | FAZ-C0,5/1  | 278544 | 12/120 |
| 0,75 | 240/415 | 15 | 277 | 10 | FAZ-C0,75/1 | 278545 | 12/120 |
| 1    | 240/415 | 15 | 277 | 10 | FAZ-C1/1    | 278546 | 12/120 |
| 1,5  | 240/415 | 15 | 277 | 10 | FAZ-C1,5/1  | 278547 | 12/120 |
| 1,6  | 240/415 | 15 | 277 | 10 | FAZ-C1,6/1  | 278548 | 12/120 |
| 2    | 240/415 | 15 | 277 | 10 | FAZ-C2/1    | 278549 | 12/120 |
| 2,5  | 240/415 | 15 | 277 | 10 | FAZ-C2,5/1  | 278550 | 12/120 |
| 3    | 240/415 | 15 | 277 | 10 | FAZ-C3/1    | 278551 | 12/120 |
| 3,5  | 240/415 | 15 | 277 | 10 | FAZ-C3,5/1  | 278552 | 12/120 |
| 4    | 240/415 | 15 | 277 | 10 | FAZ-C4/1    | 278553 | 12/120 |
| 5    | 240/415 | 15 | 277 | 10 | FAZ-C5/1    | 278554 | 12/120 |
| 6    | 240/415 | 15 | 277 | 10 | FAZ-C6/1    | 278555 | 12/120 |
| 8    | 240/415 | 15 | 277 | 10 | FAZ-C8/1    | 278556 | 12/120 |
| 10   | 240/415 | 15 | 277 | 10 | FAZ-C10/1   | 278557 | 12/120 |
| 12   | 240/415 | 15 | 277 | 10 | FAZ-C12/1   | 278558 | 12/120 |
| 13   | 240/415 | 15 | 277 | 10 | FAZ-C13/1   | 278559 | 12/120 |
| 15   | 240/415 | 15 | 277 | 10 | FAZ-C15/1   | 278560 | 12/120 |
| 16   | 240/415 | 15 | 277 | 10 | FAZ-C16/1   | 278561 | 12/120 |
| 20   | 240/415 | 15 | 277 | 10 | FAZ-C20/1   | 278562 | 12/120 |
| 25   | 240/415 | 15 | 277 | 10 | FAZ-C25/1   | 278563 | 12/120 |
| 32   | 240/415 | 15 | 277 | 10 | FAZ-C32/1   | 278564 | 12/120 |
| 40   | 240/415 | 15 | 277 | 5  | FAZ-C40/1   | 278565 | 12/120 |
| 50   | 240/415 | 15 | 277 | 5  | FAZ-C50/1   | 278566 | 12/120 |
| 63   | 240/415 | 15 | 277 | 5  | FAZ-C63/1   | 278567 | 12/120 |

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### 1+N-pole

|      |     |    |     |    |              |        |      |
|------|-----|----|-----|----|--------------|--------|------|
| 0,16 | 240 | 15 | 277 | 5  | FAZ-C0,16/1N | 278655 | 1/60 |
| 0,25 | 240 | 15 | 277 | 5  | FAZ-C0,25/1N | 278656 | 1/60 |
| 0,5  | 240 | 15 | 277 | 10 | FAZ-C0,5/1N  | 278657 | 1/60 |
| 0,75 | 240 | 15 | 277 | 10 | FAZ-C0,75/1N | 278658 | 1/60 |
| 1    | 240 | 15 | 277 | 10 | FAZ-C1/1N    | 278659 | 1/60 |
| 1,5  | 240 | 15 | 277 | 10 | FAZ-C1,5/1N  | 278660 | 1/60 |
| 1,6  | 240 | 15 | 277 | 10 | FAZ-C1,6/1N  | 278661 | 1/60 |
| 2    | 240 | 15 | 277 | 10 | FAZ-C2/1N    | 278662 | 1/60 |
| 2,5  | 240 | 15 | 277 | 10 | FAZ-C2,5/1N  | 278663 | 1/60 |
| 3    | 240 | 15 | 277 | 10 | FAZ-C3/1N    | 278664 | 1/60 |
| 3,5  | 240 | 15 | 277 | 10 | FAZ-C3,5/1N  | 278665 | 1/60 |
| 4    | 240 | 15 | 277 | 10 | FAZ-C4/1N    | 278666 | 1/60 |
| 5    | 240 | 15 | 277 | 10 | FAZ-C5/1N    | 278667 | 1/60 |
| 6    | 240 | 15 | 277 | 10 | FAZ-C6/1N    | 278668 | 1/60 |
| 8    | 240 | 15 | 277 | 10 | FAZ-C8/1N    | 278669 | 1/60 |
| 10   | 240 | 15 | 277 | 10 | FAZ-C10/1N   | 278670 | 1/60 |
| 12   | 240 | 15 | 277 | 10 | FAZ-C12/1N   | 278671 | 1/60 |
| 13   | 240 | 15 | 277 | 10 | FAZ-C13/1N   | 278672 | 1/60 |
| 15   | 240 | 15 | 277 | 10 | FAZ-C15/1N   | 278673 | 1/60 |
| 16   | 240 | 15 | 277 | 10 | FAZ-C16/1N   | 278674 | 1/60 |
| 20   | 240 | 15 | 277 | 10 | FAZ-C20/1N   | 278675 | 1/60 |
| 25   | 240 | 15 | 277 | 10 | FAZ-C25/1N   | 278676 | 1/60 |
| 32   | 240 | 15 | 277 | 10 | FAZ-C32/1N   | 278677 | 1/60 |
| 40   | 240 | 15 | 277 | 5  | FAZ-C40/1N   | 278678 | 1/60 |
| 50   | 240 | 15 | 277 | 5  | FAZ-C50/1N   | 278679 | 1/60 |
| 63   | 240 | 15 | 277 | 5  | FAZ-C63/1N   | 278680 | 1/60 |



# FAZ | Characteristic C

SG07011



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

## 2-pole

|      |     |    |          |    |             |        |      |
|------|-----|----|----------|----|-------------|--------|------|
| 0,16 | 415 | 15 | 480Y/277 | 5  | FAZ-C0,16/2 | 278741 | 1/60 |
| 0,25 | 415 | 15 | 480Y/277 | 5  | FAZ-C0,25/2 | 278742 | 1/60 |
| 0,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C0,5/2  | 278743 | 1/60 |
| 0,75 | 415 | 15 | 480Y/277 | 10 | FAZ-C0,75/2 | 278744 | 1/60 |
| 1    | 415 | 15 | 480Y/277 | 10 | FAZ-C1/2    | 278745 | 1/60 |
| 1,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C1,5/2  | 278746 | 1/60 |
| 1,6  | 415 | 15 | 480Y/277 | 10 | FAZ-C1,6/2  | 278747 | 1/60 |
| 2    | 415 | 15 | 480Y/277 | 10 | FAZ-C2/2    | 278748 | 1/60 |
| 2,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C2,5/2  | 278749 | 1/60 |
| 3    | 415 | 15 | 480Y/277 | 10 | FAZ-C3/2    | 278750 | 1/60 |
| 3,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C3,5/2  | 278751 | 1/60 |
| 4    | 415 | 15 | 480Y/277 | 10 | FAZ-C4/2    | 278752 | 1/60 |
| 5    | 415 | 15 | 480Y/277 | 10 | FAZ-C5/2    | 278753 | 1/60 |
| 6    | 415 | 15 | 480Y/277 | 10 | FAZ-C6/2    | 278754 | 1/60 |
| 8    | 415 | 15 | 480Y/277 | 10 | FAZ-C8/2    | 278755 | 1/60 |
| 10   | 415 | 15 | 480Y/277 | 10 | FAZ-C10/2   | 278756 | 1/60 |
| 12   | 415 | 15 | 480Y/277 | 10 | FAZ-C12/2   | 278757 | 1/60 |
| 13   | 415 | 15 | 480Y/277 | 10 | FAZ-C13/2   | 278758 | 1/60 |
| 15   | 415 | 15 | 480Y/277 | 10 | FAZ-C15/2   | 278759 | 1/60 |
| 16   | 415 | 15 | 480Y/277 | 10 | FAZ-C16/2   | 278760 | 1/60 |
| 20   | 415 | 15 | 480Y/277 | 10 | FAZ-C20/2   | 278761 | 1/60 |
| 25   | 415 | 15 | 480Y/277 | 10 | FAZ-C25/2   | 278762 | 1/60 |
| 32   | 415 | 15 | 480Y/277 | 10 | FAZ-C32/2   | 278763 | 1/60 |
| 40   | 415 | 15 | 480Y/277 | 5  | FAZ-C40/2   | 278764 | 1/60 |
| 50   | 415 | 15 | 480Y/277 | 5  | FAZ-C50/2   | 278765 | 1/60 |
| 63   | 415 | 15 | 480Y/277 | 5  | FAZ-C63/2   | 278766 | 1/60 |

SG07111



## 3-pole

|      |     |    |          |    |             |        |      |
|------|-----|----|----------|----|-------------|--------|------|
| 0,16 | 415 | 15 | 480Y/277 | 5  | FAZ-C0,16/3 | 278854 | 1/40 |
| 0,25 | 415 | 15 | 480Y/277 | 5  | FAZ-C0,25/3 | 278855 | 1/40 |
| 0,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C0,5/3  | 278856 | 1/40 |
| 0,75 | 415 | 15 | 480Y/277 | 10 | FAZ-C0,75/3 | 278857 | 1/40 |
| 1    | 415 | 15 | 480Y/277 | 10 | FAZ-C1/3    | 278858 | 1/40 |
| 1,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C1,5/3  | 278859 | 1/40 |
| 1,6  | 415 | 15 | 480Y/277 | 10 | FAZ-C1,6/3  | 278860 | 1/40 |
| 2    | 415 | 15 | 480Y/277 | 10 | FAZ-C2/3    | 278861 | 1/40 |
| 2,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C2,5/3  | 278862 | 1/40 |
| 3    | 415 | 15 | 480Y/277 | 10 | FAZ-C3/3    | 278863 | 1/40 |
| 3,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C3,5/3  | 278864 | 1/40 |
| 4    | 415 | 15 | 480Y/277 | 10 | FAZ-C4/3    | 278865 | 1/40 |
| 5    | 415 | 15 | 480Y/277 | 10 | FAZ-C5/3    | 278866 | 1/40 |
| 6    | 415 | 15 | 480Y/277 | 10 | FAZ-C6/3    | 278867 | 1/40 |
| 8    | 415 | 15 | 480Y/277 | 10 | FAZ-C8/3    | 278868 | 1/40 |
| 10   | 415 | 15 | 480Y/277 | 10 | FAZ-C10/3   | 278869 | 1/40 |
| 12   | 415 | 15 | 480Y/277 | 10 | FAZ-C12/3   | 278870 | 1/40 |
| 13   | 415 | 15 | 480Y/277 | 10 | FAZ-C13/3   | 278871 | 1/40 |
| 15   | 415 | 15 | 480Y/277 | 10 | FAZ-C15/3   | 278872 | 1/40 |
| 16   | 415 | 15 | 480Y/277 | 10 | FAZ-C16/3   | 278873 | 1/40 |
| 20   | 415 | 15 | 480Y/277 | 10 | FAZ-C20/3   | 278874 | 1/40 |
| 25   | 415 | 15 | 480Y/277 | 10 | FAZ-C25/3   | 278875 | 1/40 |
| 32   | 415 | 15 | 480Y/277 | 10 | FAZ-C32/3   | 278876 | 1/40 |
| 40   | 415 | 15 | 480Y/277 | 5  | FAZ-C40/3   | 278877 | 1/40 |
| 50   | 415 | 15 | 480Y/277 | 5  | FAZ-C50/3   | 278878 | 1/40 |
| 63   | 415 | 15 | 480Y/277 | 5  | FAZ-C63/3   | 278879 | 1/40 |

# FAZ | Characteristic C

SG07311



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

## 3+N-pole

|      |     |    |          |    |              |        |      |
|------|-----|----|----------|----|--------------|--------|------|
| 0,16 | 415 | 15 | 480Y/277 | 5  | FAZ-C0,16/3N | 278956 | 1/30 |
| 0,25 | 415 | 15 | 480Y/277 | 5  | FAZ-C0,25/3N | 278957 | 1/30 |
| 0,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C0,5/3N  | 278958 | 1/30 |
| 0,75 | 415 | 15 | 480Y/277 | 10 | FAZ-C0,75/3N | 278959 | 1/30 |
| 1    | 415 | 15 | 480Y/277 | 10 | FAZ-C1/3N    | 278960 | 1/30 |
| 1,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C1,5/3N  | 278961 | 1/30 |
| 1,6  | 415 | 15 | 480Y/277 | 10 | FAZ-C1,6/3N  | 278962 | 1/30 |
| 2    | 415 | 15 | 480Y/277 | 10 | FAZ-C2/3N    | 278963 | 1/30 |
| 2,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C2,5/3N  | 278964 | 1/30 |
| 3    | 415 | 15 | 480Y/277 | 10 | FAZ-C3/3N    | 278965 | 1/30 |
| 3,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C3,5/3N  | 278966 | 1/30 |
| 4    | 415 | 15 | 480Y/277 | 10 | FAZ-C4/3N    | 278967 | 1/30 |
| 5    | 415 | 15 | 480Y/277 | 10 | FAZ-C5/3N    | 278968 | 1/30 |
| 6    | 415 | 15 | 480Y/277 | 10 | FAZ-C6/3N    | 278969 | 1/30 |
| 8    | 415 | 15 | 480Y/277 | 10 | FAZ-C8/3N    | 278970 | 1/30 |
| 10   | 415 | 15 | 480Y/277 | 10 | FAZ-C10/3N   | 278971 | 1/30 |
| 12   | 415 | 15 | 480Y/277 | 10 | FAZ-C12/3N   | 278972 | 1/30 |
| 13   | 415 | 15 | 480Y/277 | 10 | FAZ-C13/3N   | 278973 | 1/30 |
| 15   | 415 | 15 | 480Y/277 | 10 | FAZ-C15/3N   | 278974 | 1/30 |
| 16   | 415 | 15 | 480Y/277 | 10 | FAZ-C16/3N   | 278975 | 1/30 |
| 20   | 415 | 15 | 480Y/277 | 10 | FAZ-C20/3N   | 278976 | 1/30 |
| 25   | 415 | 15 | 480Y/277 | 10 | FAZ-C25/3N   | 278977 | 1/30 |
| 32   | 415 | 15 | 480Y/277 | 10 | FAZ-C32/3N   | 278978 | 1/30 |
| 40   | 415 | 15 | 480Y/277 | 5  | FAZ-C40/3N   | 278979 | 1/30 |
| 50   | 415 | 15 | 480Y/277 | 5  | FAZ-C50/3N   | 278980 | 1/30 |
| 63   | 415 | 15 | 480Y/277 | 5  | FAZ-C63/3N   | 278981 | 1/30 |

SG07211



## 4-pole

|      |     |    |          |    |             |        |      |
|------|-----|----|----------|----|-------------|--------|------|
| 0,16 | 415 | 15 | 480Y/277 | 5  | FAZ-C0,16/4 | 279042 | 1/30 |
| 0,25 | 415 | 15 | 480Y/277 | 5  | FAZ-C0,25/4 | 279043 | 1/30 |
| 0,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C0,5/4  | 279044 | 1/30 |
| 0,75 | 415 | 15 | 480Y/277 | 10 | FAZ-C0,75/4 | 279045 | 1/30 |
| 1    | 415 | 15 | 480Y/277 | 10 | FAZ-C1/4    | 279046 | 1/30 |
| 1,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C1,5/4  | 279047 | 1/30 |
| 1,6  | 415 | 15 | 480Y/277 | 10 | FAZ-C1,6/4  | 279048 | 1/30 |
| 2    | 415 | 15 | 480Y/277 | 10 | FAZ-C2/4    | 279049 | 1/30 |
| 2,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C2,5/4  | 279050 | 1/30 |
| 3    | 415 | 15 | 480Y/277 | 10 | FAZ-C3/4    | 279051 | 1/30 |
| 3,5  | 415 | 15 | 480Y/277 | 10 | FAZ-C3,5/4  | 279052 | 1/30 |
| 4    | 415 | 15 | 480Y/277 | 10 | FAZ-C4/4    | 279053 | 1/30 |
| 5    | 415 | 15 | 480Y/277 | 10 | FAZ-C5/4    | 279054 | 1/30 |
| 6    | 415 | 15 | 480Y/277 | 10 | FAZ-C6/4    | 279055 | 1/30 |
| 8    | 415 | 15 | 480Y/277 | 10 | FAZ-C8/4    | 279056 | 1/30 |
| 10   | 415 | 15 | 480Y/277 | 10 | FAZ-C10/4   | 279057 | 1/30 |
| 12   | 415 | 15 | 480Y/277 | 10 | FAZ-C12/4   | 279058 | 1/30 |
| 13   | 415 | 15 | 480Y/277 | 10 | FAZ-C13/4   | 279059 | 1/30 |
| 15   | 415 | 15 | 480Y/277 | 10 | FAZ-C15/4   | 279060 | 1/30 |
| 16   | 415 | 15 | 480Y/277 | 10 | FAZ-C16/4   | 279061 | 1/30 |
| 20   | 415 | 15 | 480Y/277 | 10 | FAZ-C20/4   | 279062 | 1/30 |
| 25   | 415 | 15 | 480Y/277 | 10 | FAZ-C25/4   | 279063 | 1/30 |
| 32   | 415 | 15 | 480Y/277 | 10 | FAZ-C32/4   | 279064 | 1/30 |
| 40   | 415 | 15 | 480Y/277 | 5  | FAZ-C40/4   | 279065 | 1/30 |
| 50   | 415 | 15 | 480Y/277 | 5  | FAZ-C50/4   | 279066 | 1/30 |
| 63   | 415 | 15 | 480Y/277 | 5  | FAZ-C63/4   | 279067 | 1/30 |

# FAZ | Characteristic D

## FAZ Miniature Circuit Breakers (MCBs) Characteristic D

SG06811



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to IEC/EN 60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to UL1077<br>(kA) | Type Designation | Article No. | Units per package |
|----------------------------|----------------------|---|--------------------------------|---|------------------|-------------|-------------------|
|----------------------------|----------------------|---|--------------------------------|---|------------------|-------------|-------------------|

### 1-pole

|     |         |    |     |   |            |        |        |
|-----|---------|----|-----|---|------------|--------|--------|
| 0,5 | 240/415 | 15 | 277 | 5 | FAZ-D0,5/1 | 278568 | 12/120 |
| 1   | 240/415 | 15 | 277 | 5 | FAZ-D1/1   | 278569 | 12/120 |
| 1,5 | 240/415 | 15 | 277 | 5 | FAZ-D1,5/1 | 278570 | 12/120 |
| 1,6 | 240/415 | 15 | 277 | 5 | FAZ-D1,6/1 | 278571 | 12/120 |
| 2   | 240/415 | 15 | 277 | 5 | FAZ-D2/1   | 278572 | 12/120 |
| 2,5 | 240/415 | 15 | 277 | 5 | FAZ-D2,5/1 | 278573 | 12/120 |
| 3   | 240/415 | 15 | 277 | 5 | FAZ-D3/1   | 278574 | 12/120 |
| 3,5 | 240/415 | 15 | 277 | 5 | FAZ-D3,5/1 | 278575 | 12/120 |
| 4   | 240/415 | 15 | 277 | 5 | FAZ-D4/1   | 278576 | 12/120 |
| 5   | 240/415 | 15 | 277 | 5 | FAZ-D5/1   | 278577 | 12/120 |
| 6   | 240/415 | 15 | 277 | 5 | FAZ-D6/1   | 278578 | 12/120 |
| 8   | 240/415 | 15 | 277 | 5 | FAZ-D8/1   | 278579 | 12/120 |
| 10  | 240/415 | 15 | 277 | 5 | FAZ-D10/1  | 278580 | 12/120 |
| 12  | 240/415 | 15 | 277 | 5 | FAZ-D12/1  | 278581 | 12/120 |
| 13  | 240/415 | 15 | 277 | 5 | FAZ-D13/1  | 278582 | 12/120 |
| 15  | 240/415 | 15 | 277 | 5 | FAZ-D15/1  | 278583 | 12/120 |
| 16  | 240/415 | 15 | 277 | 5 | FAZ-D16/1  | 278584 | 12/120 |
| 20  | 240/415 | 15 | 277 | 5 | FAZ-D20/1  | 278585 | 12/120 |
| 25  | 240/415 | 15 | 277 | 5 | FAZ-D25/1  | 278586 | 12/120 |
| 32  | 240/415 | 15 | 277 | 5 | FAZ-D32/1  | 278587 | 12/120 |
| 40  | 240/415 | 15 | 277 | 5 | FAZ-D40/1  | 278588 | 12/120 |
| 50  | 240/415 | 10 | -   | - | FAZ-D50/1  | 115370 | 12/120 |
| 63  | 240/415 | 10 | -   | - | FAZ-D63/1  | 115371 | 12/120 |

SG06911



### 1+N-pole

|     |     |    |     |   |             |        |      |
|-----|-----|----|-----|---|-------------|--------|------|
| 0,5 | 240 | 15 | 277 | 5 | FAZ-D0,5/1N | 278681 | 1/60 |
| 1   | 240 | 15 | 277 | 5 | FAZ-D1/1N   | 278682 | 1/60 |
| 1,5 | 240 | 15 | 277 | 5 | FAZ-D1,5/1N | 278683 | 1/60 |
| 1,6 | 240 | 15 | 277 | 5 | FAZ-D1,6/1N | 278684 | 1/60 |
| 2   | 240 | 15 | 277 | 5 | FAZ-D2/1N   | 278685 | 1/60 |
| 2,5 | 240 | 15 | 277 | 5 | FAZ-D2,5/1N | 278686 | 1/60 |
| 3   | 240 | 15 | 277 | 5 | FAZ-D3/1N   | 278687 | 1/60 |
| 3,5 | 240 | 15 | 277 | 5 | FAZ-D3,5/1N | 278688 | 1/60 |
| 4   | 240 | 15 | 277 | 5 | FAZ-D4/1N   | 278689 | 1/60 |
| 5   | 240 | 15 | 277 | 5 | FAZ-D5/1N   | 278690 | 1/60 |
| 6   | 240 | 15 | 277 | 5 | FAZ-D6/1N   | 278691 | 1/60 |
| 8   | 240 | 15 | 277 | 5 | FAZ-D8/1N   | 278692 | 1/60 |
| 10  | 240 | 15 | 277 | 5 | FAZ-D10/1N  | 278693 | 1/60 |
| 12  | 240 | 15 | 277 | 5 | FAZ-D12/1N  | 278694 | 1/60 |
| 13  | 240 | 15 | 277 | 5 | FAZ-D13/1N  | 278695 | 1/60 |
| 15  | 240 | 15 | 277 | 5 | FAZ-D15/1N  | 278696 | 1/60 |
| 16  | 240 | 15 | 277 | 5 | FAZ-D16/1N  | 278697 | 1/60 |
| 20  | 240 | 15 | 277 | 5 | FAZ-D20/1N  | 278698 | 1/60 |
| 25  | 240 | 15 | 277 | 5 | FAZ-D25/1N  | 278699 | 1/60 |
| 32  | 240 | 15 | 277 | 5 | FAZ-D32/1N  | 278700 | 1/60 |
| 40  | 240 | 15 | 277 | 5 | FAZ-D40/1N  | 278701 | 1/60 |
| 50  | 240 | 10 | -   | - | FAZ-D50/1N  | 115378 | 1/60 |
| 63  | 240 | 10 | -   | - | FAZ-D63/1N  | 115379 | 1/60 |

# FAZ | Characteristic D

SG07011



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

## 2-pole

|     |     |    |          |   |            |        |      |
|-----|-----|----|----------|---|------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D0,5/2 | 278767 | 1/60 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-D1/2   | 278768 | 1/60 |
| 1,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D1,5/2 | 278769 | 1/60 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-D1,6/2 | 278770 | 1/60 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-D2/2   | 278771 | 1/60 |
| 2,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D2,5/2 | 278772 | 1/60 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-D3/2   | 278773 | 1/60 |
| 3,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D3,5/2 | 278774 | 1/60 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-D4/2   | 278775 | 1/60 |
| 5   | 415 | 15 | 480Y/277 | 5 | FAZ-D5/2   | 278776 | 1/60 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-D6/2   | 278777 | 1/60 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-D8/2   | 278778 | 1/60 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-D10/2  | 278779 | 1/60 |
| 12  | 415 | 15 | 480Y/277 | 5 | FAZ-D12/2  | 278780 | 1/60 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-D13/2  | 278781 | 1/60 |
| 15  | 415 | 15 | 480Y/277 | 5 | FAZ-D15/2  | 278782 | 1/60 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-D16/2  | 278783 | 1/60 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-D20/2  | 278784 | 1/60 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-D25/2  | 278785 | 1/60 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-D32/2  | 278786 | 1/60 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-D40/2  | 278787 | 1/60 |
| 50  | 415 | 10 | -        | - | FAZ-D50/2  | 115372 | 1/60 |
| 63  | 415 | 10 | -        | - | FAZ-D63/2  | 115373 | 1/60 |

SG07111



## 3-pole

|     |     |    |          |   |            |        |      |
|-----|-----|----|----------|---|------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D0,5/3 | 278880 | 1/40 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-D1/3   | 278881 | 1/40 |
| 1,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D1,5/3 | 278882 | 1/40 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-D1,6/3 | 278883 | 1/40 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-D2/3   | 278884 | 1/40 |
| 2,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D2,5/3 | 278885 | 1/40 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-D3/3   | 278886 | 1/40 |
| 3,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D3,5/3 | 278887 | 1/40 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-D4/3   | 278888 | 1/40 |
| 5   | 415 | 15 | 480Y/277 | 5 | FAZ-D5/3   | 278889 | 1/40 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-D6/3   | 278890 | 1/40 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-D8/3   | 278891 | 1/40 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-D10/3  | 278892 | 1/40 |
| 12  | 415 | 15 | 480Y/277 | 5 | FAZ-D12/3  | 278893 | 1/40 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-D13/3  | 278894 | 1/40 |
| 15  | 415 | 15 | 480Y/277 | 5 | FAZ-D15/3  | 278895 | 1/40 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-D16/3  | 278896 | 1/40 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-D20/3  | 278897 | 1/40 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-D25/3  | 278898 | 1/40 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-D32/3  | 278899 | 1/40 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-D40/3  | 278900 | 1/40 |
| 50  | 415 | 10 | -        | - | FAZ-D50/3  | 115374 | 1/40 |
| 63  | 415 | 10 | -        | - | FAZ-D63/3  | 115375 | 1/40 |

# FAZ | Characteristic D

SG07311



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

## 3+N-pole

|     |     |    |          |   |             |        |      |
|-----|-----|----|----------|---|-------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D,5/3N  | 278982 | 1/30 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-D1/3N   | 278983 | 1/30 |
| 1,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D1,5/3N | 278984 | 1/30 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-D1,6/3N | 278985 | 1/30 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-D2/3N   | 278986 | 1/30 |
| 2,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D2,5/3N | 278987 | 1/30 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-D3/3N   | 278988 | 1/30 |
| 3,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D3,5/3N | 278989 | 1/30 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-D4/3N   | 278990 | 1/30 |
| 5   | 415 | 15 | 480Y/277 | 5 | FAZ-D5/3N   | 278991 | 1/30 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-D6/3N   | 278992 | 1/30 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-D8/3N   | 278993 | 1/30 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-D10/3N  | 278994 | 1/30 |
| 12  | 415 | 15 | 480Y/277 | 5 | FAZ-D12/3N  | 278995 | 1/30 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-D13/3N  | 278996 | 1/30 |
| 15  | 415 | 15 | 480Y/277 | 5 | FAZ-D15/3N  | 278997 | 1/30 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-D16/3N  | 278998 | 1/30 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-D20/3N  | 278999 | 1/30 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-D25/3N  | 279000 | 1/30 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-D32/3N  | 279001 | 1/30 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-D40/3N  | 279002 | 1/30 |
| 50  | 415 | 10 | -        | - | FAZ-D50/3N  | 115380 | 1/30 |
| 63  | 415 | 10 | -        | - | FAZ-D63/3N  | 115381 | 1/30 |

SG07211



## 4-pole

|     |     |    |          |   |            |        |      |
|-----|-----|----|----------|---|------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D0,5/4 | 279068 | 1/30 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-D1/4   | 279069 | 1/30 |
| 1,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D1,5/4 | 279070 | 1/30 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-D1,6/4 | 279071 | 1/30 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-D2/4   | 279072 | 1/30 |
| 2,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D2,5/4 | 279073 | 1/30 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-D3/4   | 279074 | 1/30 |
| 3,5 | 415 | 15 | 480Y/277 | 5 | FAZ-D3,5/4 | 279075 | 1/30 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-D4/4   | 279076 | 1/30 |
| 5   | 415 | 15 | 480Y/277 | 5 | FAZ-D5/4   | 279077 | 1/30 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-D6/4   | 279078 | 1/30 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-D8/4   | 279079 | 1/30 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-D10/4  | 279080 | 1/30 |
| 12  | 415 | 15 | 480Y/277 | 5 | FAZ-D12/4  | 279081 | 1/30 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-D13/4  | 279082 | 1/30 |
| 15  | 415 | 15 | 480Y/277 | 5 | FAZ-D15/4  | 279083 | 1/30 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-D16/4  | 279084 | 1/30 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-D20/4  | 279085 | 1/30 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-D25/4  | 279086 | 1/30 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-D32/4  | 279087 | 1/30 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-D40/4  | 279088 | 1/30 |
| 50  | 415 | 10 | -        | - | FAZ-D50/4  | 115376 | 1/30 |
| 63  | 415 | 10 | -        | - | FAZ-D63/4  | 115377 | 1/30 |

# FAZ | Characteristic K

## FAZ Miniature Circuit Breakers (MCBs) Characteristic K

SG06811



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

### 1-pole

|     |         |    |     |   |            |        |        |
|-----|---------|----|-----|---|------------|--------|--------|
| 0,5 | 240/415 | 15 | 277 | 5 | FAZ-K0,5/1 | 278589 | 12/120 |
| 1   | 240/415 | 15 | 277 | 5 | FAZ-K1/1   | 278590 | 12/120 |
| 1,6 | 240/415 | 15 | 277 | 5 | FAZ-K1,6/1 | 278591 | 12/120 |
| 2   | 240/415 | 15 | 277 | 5 | FAZ-K2/1   | 278592 | 12/120 |
| 3   | 240/415 | 15 | 277 | 5 | FAZ-K3/1   | 278593 | 12/120 |
| 4   | 240/415 | 15 | 277 | 5 | FAZ-K4/1   | 278594 | 12/120 |
| 6   | 240/415 | 15 | 277 | 5 | FAZ-K6/1   | 278595 | 12/120 |
| 8   | 240/415 | 15 | 277 | 5 | FAZ-K8/1   | 278596 | 12/120 |
| 10  | 240/415 | 15 | 277 | 5 | FAZ-K10/1  | 278597 | 12/120 |
| 13  | 240/415 | 15 | 277 | 5 | FAZ-K13/1  | 278598 | 12/120 |
| 16  | 240/415 | 15 | 277 | 5 | FAZ-K16/1  | 278599 | 12/120 |
| 20  | 240/415 | 15 | 277 | 5 | FAZ-K20/1  | 278600 | 12/120 |
| 25  | 240/415 | 15 | 277 | 5 | FAZ-K25/1  | 278601 | 12/120 |
| 32  | 240/415 | 15 | 277 | 5 | FAZ-K32/1  | 278602 | 12/120 |
| 40  | 240/415 | 15 | 277 | 5 | FAZ-K40/1  | 278603 | 12/120 |
| 50  | 240/415 | 15 | 277 | 5 | FAZ-K50/1  | 278604 | 12/120 |
| 63  | 240/415 | 15 | 277 | 5 | FAZ-K63/1  | 278605 | 12/120 |

SG06911



### 1+N-pole

|     |     |    |     |   |             |        |      |
|-----|-----|----|-----|---|-------------|--------|------|
| 0,5 | 240 | 15 | 277 | 5 | FAZ-K0,5/1N | 278702 | 1/60 |
| 1   | 240 | 15 | 277 | 5 | FAZ-K1/1N   | 278703 | 1/60 |
| 1,6 | 240 | 15 | 277 | 5 | FAZ-K1,6/1N | 278704 | 1/60 |
| 2   | 240 | 15 | 277 | 5 | FAZ-K2/1N   | 278705 | 1/60 |
| 3   | 240 | 15 | 277 | 5 | FAZ-K3/1N   | 278706 | 1/60 |
| 4   | 240 | 15 | 277 | 5 | FAZ-K4/1N   | 278707 | 1/60 |
| 6   | 240 | 15 | 277 | 5 | FAZ-K6/1N   | 278708 | 1/60 |
| 8   | 240 | 15 | 277 | 5 | FAZ-K8/1N   | 278709 | 1/60 |
| 10  | 240 | 15 | 277 | 5 | FAZ-K10/1N  | 278710 | 1/60 |
| 13  | 240 | 15 | 277 | 5 | FAZ-K13/1N  | 278711 | 1/60 |
| 16  | 240 | 15 | 277 | 5 | FAZ-K16/1N  | 278712 | 1/60 |
| 20  | 240 | 15 | 277 | 5 | FAZ-K20/1N  | 278713 | 1/60 |
| 25  | 240 | 15 | 277 | 5 | FAZ-K25/1N  | 278714 | 1/60 |
| 32  | 240 | 15 | 277 | 5 | FAZ-K32/1N  | 278715 | 1/60 |
| 40  | 240 | 15 | 277 | 5 | FAZ-K40/1N  | 278716 | 1/60 |
| 50  | 240 | 15 | 277 | 5 | FAZ-K50/1N  | 278717 | 1/60 |
| 63  | 240 | 15 | 277 | 5 | FAZ-K63/1N  | 278718 | 1/60 |

# FAZ | Characteristic K

SG07011



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

## 2-pole

|     |     |    |          |   |            |        |      |
|-----|-----|----|----------|---|------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-K0,5/2 | 278788 | 1/60 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-K1/2   | 278789 | 1/60 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-K1,6/2 | 278790 | 1/60 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-K2/2   | 278791 | 1/60 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-K3/2   | 278792 | 1/60 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-K4/2   | 278793 | 1/60 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-K6/2   | 278794 | 1/60 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-K8/2   | 278795 | 1/60 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-K10/2  | 278796 | 1/60 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-K13/2  | 278797 | 1/60 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-K16/2  | 278798 | 1/60 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-K20/2  | 278799 | 1/60 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-K25/2  | 278800 | 1/60 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-K32/2  | 278801 | 1/60 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-K40/2  | 278802 | 1/60 |
| 50  | 415 | 15 | 480Y/277 | 5 | FAZ-K50/2  | 278803 | 1/60 |
| 63  | 415 | 15 | 480Y/277 | 5 | FAZ-K63/2  | 278804 | 1/60 |

SG07111



## 3-pole

|     |     |    |          |   |            |        |      |
|-----|-----|----|----------|---|------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-K0,5/3 | 278901 | 1/40 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-K1/3   | 278902 | 1/40 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-K1,6/3 | 278903 | 1/40 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-K2/3   | 278904 | 1/40 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-K3/3   | 278905 | 1/40 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-K4/3   | 278906 | 1/40 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-K6/3   | 278907 | 1/40 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-K8/3   | 278908 | 1/40 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-K10/3  | 278909 | 1/40 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-K13/3  | 278910 | 1/40 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-K16/3  | 278911 | 1/40 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-K20/3  | 278912 | 1/40 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-K25/3  | 278913 | 1/40 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-K32/3  | 278914 | 1/40 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-K40/3  | 278915 | 1/40 |
| 50  | 415 | 15 | 480Y/277 | 5 | FAZ-K50/3  | 278916 | 1/40 |
| 63  | 415 | 15 | 480Y/277 | 5 | FAZ-K63/3  | 278917 | 1/40 |

# FAZ | Characteristic K

SG07311



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

## 3+N-pole

|     |     |    |          |   |             |        |      |
|-----|-----|----|----------|---|-------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-K0,5/3N | 279003 | 1/30 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-K1/3N   | 279004 | 1/30 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-K1,6/3N | 279005 | 1/30 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-K2/3N   | 279006 | 1/30 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-K3/3N   | 279007 | 1/30 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-K4/3N   | 279008 | 1/30 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-K6/3N   | 279009 | 1/30 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-K8/3N   | 279010 | 1/30 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-K10/3N  | 279011 | 1/30 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-K13/3N  | 279012 | 1/30 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-K16/3N  | 279013 | 1/30 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-K20/3N  | 279014 | 1/30 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-K25/3N  | 279015 | 1/30 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-K32/3N  | 279016 | 1/30 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-K40/3N  | 279017 | 1/30 |
| 50  | 415 | 15 | 480Y/277 | 5 | FAZ-K50/3N  | 279018 | 1/30 |
| 63  | 415 | 15 | 480Y/277 | 5 | FAZ-K63/3N  | 279019 | 1/30 |

SG07211



## 4-pole

|     |     |    |          |   |            |        |      |
|-----|-----|----|----------|---|------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-K0,5/4 | 279089 | 1/30 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-K1/4   | 279090 | 1/30 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-K1,6/4 | 279091 | 1/30 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-K2/4   | 279092 | 1/30 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-K3/4   | 279093 | 1/30 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-K4/4   | 279094 | 1/30 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-K6/4   | 279095 | 1/30 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-K8/4   | 279096 | 1/30 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-K10/4  | 279097 | 1/30 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-K13/4  | 279098 | 1/30 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-K16/4  | 279099 | 1/30 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-K20/4  | 279100 | 1/30 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-K25/4  | 279101 | 1/30 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-K32/4  | 279102 | 1/30 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-K40/4  | 279103 | 1/30 |
| 50  | 415 | 15 | 480Y/277 | 5 | FAZ-K50/4  | 279104 | 1/30 |
| 63  | 415 | 15 | 480Y/277 | 5 | FAZ-K63/4  | 279105 | 1/30 |



# FAZ | Characteristic S

## FAZ Miniature Circuit Breakers (MCBs) Characteristic S

SG06811



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

### 1-pole

|    |         |    |     |   |           |        |        |
|----|---------|----|-----|---|-----------|--------|--------|
| 1  | 240/415 | 10 | 277 | 5 | FAZ-S1/1  | 278606 | 12/120 |
| 2  | 240/415 | 10 | 277 | 5 | FAZ-S2/1  | 278607 | 12/120 |
| 3  | 240/415 | 10 | 277 | 5 | FAZ-S3/1  | 278608 | 12/120 |
| 4  | 240/415 | 10 | 277 | 5 | FAZ-S4/1  | 278609 | 12/120 |
| 6  | 240/415 | 10 | 277 | 5 | FAZ-S6/1  | 278610 | 12/120 |
| 10 | 240/415 | 10 | 277 | 5 | FAZ-S10/1 | 278611 | 12/120 |
| 16 | 240/415 | 10 | 277 | 5 | FAZ-S16/1 | 278612 | 12/120 |
| 20 | 240/415 | 10 | 277 | 5 | FAZ-S20/1 | 278613 | 12/120 |
| 25 | 240/415 | 10 | 277 | 5 | FAZ-S25/1 | 278614 | 12/120 |
| 32 | 240/415 | 10 | 277 | 5 | FAZ-S32/1 | 278615 | 12/120 |
| 40 | 240/415 | 10 | 277 | 5 | FAZ-S40/1 | 278616 | 12/120 |

SG07011



### 2-pole

|    |     |    |          |   |           |        |      |
|----|-----|----|----------|---|-----------|--------|------|
| 1  | 415 | 10 | 480Y/277 | 5 | FAZ-S1/2  | 278805 | 1/60 |
| 2  | 415 | 10 | 480Y/277 | 5 | FAZ-S2/2  | 278806 | 1/60 |
| 3  | 415 | 10 | 480Y/277 | 5 | FAZ-S3/2  | 278807 | 1/60 |
| 4  | 415 | 10 | 480Y/277 | 5 | FAZ-S4/2  | 278808 | 1/60 |
| 6  | 415 | 10 | 480Y/277 | 5 | FAZ-S6/2  | 278809 | 1/60 |
| 10 | 415 | 10 | 480Y/277 | 5 | FAZ-S10/2 | 278810 | 1/60 |
| 16 | 415 | 10 | 480Y/277 | 5 | FAZ-S16/2 | 278811 | 1/60 |
| 20 | 415 | 10 | 480Y/277 | 5 | FAZ-S20/2 | 278812 | 1/60 |
| 25 | 415 | 10 | 480Y/277 | 5 | FAZ-S25/2 | 278813 | 1/60 |
| 32 | 415 | 10 | 480Y/277 | 5 | FAZ-S32/2 | 278814 | 1/60 |
| 40 | 415 | 10 | 480Y/277 | 5 | FAZ-S40/2 | 278815 | 1/60 |

# FAZ | Characteristic Z

## FAZ Miniature Circuit Breakers (MCBs) Characteristic Z

SG06811



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

### 1-pole

|     |         |    |     |   |            |        |        |
|-----|---------|----|-----|---|------------|--------|--------|
| 0,5 | 240/415 | 15 | 277 | 5 | FAZ-Z0,5/1 | 278617 | 12/120 |
| 1   | 240/415 | 15 | 277 | 5 | FAZ-Z1/1   | 278618 | 12/120 |
| 1,6 | 240/415 | 15 | 277 | 5 | FAZ-Z1,6/1 | 278619 | 12/120 |
| 2   | 240/415 | 15 | 277 | 5 | FAZ-Z2/1   | 278620 | 12/120 |
| 3   | 240/415 | 15 | 277 | 5 | FAZ-Z3/1   | 278621 | 12/120 |
| 4   | 240/415 | 15 | 277 | 5 | FAZ-Z4/1   | 278622 | 12/120 |
| 6   | 240/415 | 15 | 277 | 5 | FAZ-Z6/1   | 278623 | 12/120 |
| 8   | 240/415 | 15 | 277 | 5 | FAZ-Z8/1   | 278624 | 12/120 |
| 10  | 240/415 | 15 | 277 | 5 | FAZ-Z10/1  | 278625 | 12/120 |
| 13  | 240/415 | 15 | 277 | 5 | FAZ-Z13/1  | 106020 | 12/120 |
| 16  | 240/415 | 15 | 277 | 5 | FAZ-Z16/1  | 278626 | 12/120 |
| 20  | 240/415 | 15 | 277 | 5 | FAZ-Z20/1  | 278627 | 12/120 |
| 25  | 240/415 | 15 | 277 | 5 | FAZ-Z25/1  | 278628 | 12/120 |
| 32  | 240/415 | 15 | 277 | 5 | FAZ-Z32/1  | 278629 | 12/120 |
| 40  | 240/415 | 15 | 277 | 5 | FAZ-Z40/1  | 278630 | 12/120 |
| 50  | 240/415 | 15 | 277 | 5 | FAZ-Z50/1  | 278631 | 12/120 |
| 63  | 240/415 | 15 | 277 | 5 | FAZ-Z63/1  | 278632 | 12/120 |

SG07011



### 2-pole

|     |     |    |          |   |            |        |      |
|-----|-----|----|----------|---|------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-Z0,5/2 | 278816 | 1/60 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-Z1/2   | 278817 | 1/60 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-Z1,6/2 | 278818 | 1/60 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-Z2/2   | 278819 | 1/60 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-Z3/2   | 278820 | 1/60 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-Z4/2   | 278821 | 1/60 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-Z6/2   | 278822 | 1/60 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-Z8/2   | 278823 | 1/60 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-Z10/2  | 278824 | 1/60 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-Z13/2  | 106021 | 1/60 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-Z16/2  | 278825 | 1/60 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-Z20/2  | 278826 | 1/60 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-Z25/2  | 278827 | 1/60 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-Z32/2  | 278828 | 1/60 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-Z40/2  | 278829 | 1/60 |
| 50  | 415 | 15 | 480Y/277 | 5 | FAZ-Z50/2  | 278830 | 1/60 |
| 63  | 415 | 15 | 480Y/277 | 5 | FAZ-Z63/2  | 278831 | 1/60 |

# FAZ | Characteristic Z

SG07111



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL1077<br>(V) | Breaking capacity<br>acc. to<br>UL1077<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|
|----------------------------|----------------------|---|--------------------------------|--|---------------------|-------------|-------------------------|

## 3-pole

|     |     |    |          |   |            |        |      |
|-----|-----|----|----------|---|------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-Z0,5/3 | 278918 | 1/40 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-Z1/3   | 278919 | 1/40 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-Z1,6/3 | 278920 | 1/40 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-Z2/3   | 278921 | 1/40 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-Z3/3   | 278922 | 1/40 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-Z4/3   | 278923 | 1/40 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-Z6/3   | 278924 | 1/40 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-Z8/3   | 278925 | 1/40 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-Z10/3  | 278926 | 1/40 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-Z13/3  | 106022 | 1/40 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-Z16/3  | 278927 | 1/40 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-Z20/3  | 278928 | 1/40 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-Z25/3  | 278929 | 1/40 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-Z32/3  | 278930 | 1/40 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-Z40/3  | 278931 | 1/40 |
| 50  | 415 | 15 | 480Y/277 | 5 | FAZ-Z50/3  | 278932 | 1/40 |
| 63  | 415 | 15 | 480Y/277 | 5 | FAZ-Z63/3  | 278933 | 1/40 |

SG07211



## 4-pole

|     |     |    |          |   |            |        |      |
|-----|-----|----|----------|---|------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 5 | FAZ-Z0,5/4 | 279106 | 1/60 |
| 1   | 415 | 15 | 480Y/277 | 5 | FAZ-Z1/4   | 279107 | 1/60 |
| 1,6 | 415 | 15 | 480Y/277 | 5 | FAZ-Z1,6/4 | 279108 | 1/60 |
| 2   | 415 | 15 | 480Y/277 | 5 | FAZ-Z2/4   | 279109 | 1/60 |
| 3   | 415 | 15 | 480Y/277 | 5 | FAZ-Z3/4   | 279110 | 1/60 |
| 4   | 415 | 15 | 480Y/277 | 5 | FAZ-Z4/4   | 279111 | 1/60 |
| 6   | 415 | 15 | 480Y/277 | 5 | FAZ-Z6/4   | 279112 | 1/60 |
| 8   | 415 | 15 | 480Y/277 | 5 | FAZ-Z8/4   | 279113 | 1/60 |
| 10  | 415 | 15 | 480Y/277 | 5 | FAZ-Z10/4  | 279114 | 1/60 |
| 13  | 415 | 15 | 480Y/277 | 5 | FAZ-Z13/4  | 106023 | 1/60 |
| 16  | 415 | 15 | 480Y/277 | 5 | FAZ-Z16/4  | 279115 | 1/60 |
| 20  | 415 | 15 | 480Y/277 | 5 | FAZ-Z20/4  | 279116 | 1/60 |
| 25  | 415 | 15 | 480Y/277 | 5 | FAZ-Z25/4  | 279117 | 1/60 |
| 32  | 415 | 15 | 480Y/277 | 5 | FAZ-Z32/4  | 279118 | 1/60 |
| 40  | 415 | 15 | 480Y/277 | 5 | FAZ-Z40/4  | 279119 | 1/60 |
| 50  | 415 | 15 | 480Y/277 | 5 | FAZ-Z50/4  | 279120 | 1/60 |
| 63  | 415 | 15 | 480Y/277 | 5 | FAZ-Z63/4  | 279121 | 1/60 |

# FAZ-PN | Characteristic B und C

## FAZ-PN Miniature Circuit Breakers (MCBs) Characteristic B

SG08311



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60898-1<br>(kA) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|---|---------------------|-------------|-------------------------|
| <b>1+N-pole (1MU)</b>      |                      |   |   |                     |             |                         |
| 6                          | 240                  | 6   | 10  | FAZ-PN-B6/1N        | 279146      | 12/120                  |
| 10                         | 240                  | 6   | 10  | FAZ-PN-B10/1N       | 279147      | 12/120                  |
| 13                         | 240                  | 6   | 10  | FAZ-PN-B13/1N       | 279148      | 12/120                  |
| 16                         | 240                  | 6   | 10  | FAZ-PN-B16/1N       | 279149      | 12/120                  |
| 20                         | 240                  | 6   | 10  | FAZ-PN-B20/1N       | 279150      | 12/120                  |
| 25                         | 240                  | 6   | 10  | FAZ-PN-B25/1N       | 279151      | 12/120                  |
| 32                         | 240                  | 6   | 10  | FAZ-PN-B32/1N       | 279152      | 12/120                  |
| 40                         | 240                  | 6   | 10  | FAZ-PN-B40/1N       | 279153      | 12/120                  |

## FAZ-PN Miniature Circuit Breakers (MCBs) Characteristic C



SG08311



| Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60898-1<br>(kA) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|----------------------|---|---|---------------------|-------------|-------------------------|
| <b>1+N-pole (1MU)</b>      |                      |   |   |                     |             |                         |
| 2                          | 240                  | 6   | 10  | FAZ-PN-C2/1N        | 279154      | 12/120                  |
| 4                          | 240                  | 6   | 10  | FAZ-PN-C4/1N        | 279155      | 12/120                  |
| 6                          | 240                  | 6   | 10  | FAZ-PN-C6/1N        | 279156      | 12/120                  |
| 10                         | 240                  | 6   | 10  | FAZ-PN-C10/1N       | 279157      | 12/120                  |
| 13                         | 240                  | 6   | 10  | FAZ-PN-C13/1N       | 279158      | 12/120                  |
| 16                         | 240                  | 6   | 10  | FAZ-PN-C16/1N       | 279159      | 12/120                  |
| 20                         | 240                  | 6   | 10  | FAZ-PN-C20/1N       | 279160      | 12/120                  |
| 25                         | 240                  | 6   | 10  | FAZ-PN-C25/1N       | 279161      | 12/120                  |
| 32                         | 240                  | 6   | 10  | FAZ-PN-C32/1N       | 279162      | 12/120                  |
| 40                         | 240                  | 6   | 10  | FAZ-PN-C40/1N       | 279163      | 12/120                  |

# FAZ-...-HS | Characteristic B

## FAZ-...-HS Miniature Circuit Breakers (MCBs) Characteristic B

|  | Rated current<br>$I_n$ (A) | Rated voltage<br>(V) | Breaking capacity<br>acc. to IEC/EN 60898-1<br>(kA) | Type Designation | Article No. | Units per package |
|--|----------------------------|----------------------|---|------------------|-------------|-------------------|
| <b>1-pole</b>  |                            |                      |   |                  |             |                   |
|  <p>SG08411</p> | 4                          | 240                  | 10  | FAZ-B4/1-HS      | 279274      | 12/120            |
| <b>2-pole</b>  |                            |                      |   |                  |             |                   |
|  <p>SG12911</p> | 4                          | 240                  | 10  | FAZ-B4/2-HS      | 279275      | 1/60              |

# FAZ | Specifications

## Specifications

### Technical data

|   | B Curve                              | C Curve                        | D Curve                        |
|---|--------------------------------------|--------------------------------|--------------------------------|
| <b>Electrical</b>                       |                                      |                                |                                |
| Approvals                               | UR (UL 1077), CSA (CSA 22.2 No. 235) |                                |                                |
| Standards                               | IEC/EN 60947-2                       |                                |                                |
| Short-circuit trip response             | 3–5 $I_n$                            | 5–10 $I_n$                     | 10–20 $I_n$                    |
| <b>Supplementary Protectors—UL/CSA</b>  |                                      |                                |                                |
| Current range                           | 1–63A                                | 0.5–63A                        | 0.5–40A                        |
| Maximum voltage ratings—UL/CSA          |                                      |                                |                                |
| Single-pole                             | 277 Vac<br>48 Vdc                    | 277 Vac<br>48 Vdc              | 277 Vac<br>48 Vdc              |
| Two-, three-pole                        | 480Y/277 Vac                         | 480Y/277 Vac                   | 480Y/277 Vac                   |
| Two poles in series                     | 96 Vdc                               | 96 Vdc                         | 96 Vdc                         |
| Thermal tripping characteristics        |                                      |                                |                                |
| Single-pole                             | 1.35 x $I_n$ @ 40°C                  | 1.35 x $I_n$ @ 40°C            | 1.35 x $I_n$ @ 40°C            |
| Multi-pole                              | 1.45 x $I_n$ @ 40°C                  | 1.45 x $I_n$ @ 40°C            | 1.45 x $I_n$ @ 40°C            |
| Short-circuit ratings (at max. voltage) |                                      |                                |                                |
| Single-pole                             | 10 kA (5 kA for 40–63A device)       | 10 kA (5 kA for 40–63A device) | 5 kA                           |
| Two-, three-pole                        | 10 kA (5 kA for 40–63A device)       | 10 kA (5 kA for 40–63A device) | 5 kA                           |
| Single-pole                             | 10 kA @ 48 Vdc                       | 10 kA @ 48 Vdc                 | 10 kA @ 48 Vdc                 |
| Two poles in series                     | 10 kA @ 96 Vdc                       | 10 kA @ 96 Vdc                 | 10 kA @ 96 Vdc                 |
| <b>Miniature Circuit Breaker—IEC</b>    |                                      |                                |                                |
| Current range                           | 1–63A                                | 0.5–63A                        | 0.5–63A                        |
| Maximum voltage ratings—IEC 60947-2     |                                      |                                |                                |
| Single-pole                             | 230 Vac<br>48 Vdc                    | 230 Vac<br>48 Vdc              | 230 Vac<br>48 Vdc              |
| Two-, three-pole                        | 230/400 Vac                          | 230/400 Vac                    | 230/400 Vac                    |
| Maximum Voltage Ratings—IEC 60898       |                                      |                                |                                |
| Single-pole                             | 240 Vac<br>48 Vdc                    | 240 Vac<br>48 Vdc              | 240 Vac<br>48 Vdc              |
| Two-, three-pole                        | 240/415 Vac                          | 240/415 Vac                    | 240/415 Vac                    |
| Thermal tripping characteristics        |                                      |                                |                                |
| Single-pole                             | > 1 hour @ 1.05 x $I_n$              | > 1 hour @ 1.05 x $I_n$        | > 1 hour @ 1.05 x $I_n$        |
| Multi-pole                              | < 1 hour @ 1.3 x $I_n$               | < 1 hour @ 1.3 x $I_n$         | < 1 hour @ 1.3 x $I_n$         |
| Interrupt ratings (at max. voltage)     |                                      |                                |                                |
| IEC 60947-2                             | 15 kA                                | 15 kA                          | 15 kA                          |
| IEC 60898                               | 10 kA                                | 10 kA                          | 10 kA                          |
| Operational switching capacity          | 7.5 kA                               | 7.5 kA                         | 7.5 kA                         |
| Max. back-up fuse [gL/gG]               | 125A                                 | 125A                           | 125A                           |
| Rated impulse withstand— $U_{imp}$      | 4000 Vac                             | 4000 Vac                       | 4000 Vac                       |
| Rated insulation voltage— $U_i$         | 440 Vac                              | 440 Vac                        | 440 Vac                        |
| <b>Environmental/General</b>            |                                      |                                |                                |
| Selectivity class                       | 3                                    | 3                              | 3                              |
| Lifespan (operations)                   | > 10000 (1 operation = ON/OFF)       | > 10000 (1 operation = ON/OFF) | > 10000 (1 operation = ON/OFF) |
| Shock (IEC 68-2-22)                     | 10g–120 ms                           | 10g–120 ms                     | 10g–120 ms                     |
| Operating temperature range             | -40 to +75°C                         | -40 to +75°C                   | -40 to +75°C                   |
| <b>Mechanical</b>                       |                                      |                                |                                |
| Standard front dimension                |                                      |                                |                                |
| Device height                           | 80 mm                                | 80 mm                          | 80 mm                          |
| Terminal protection                     | Finger and back-of-hand proof        | Finger and back-of-hand proof  | Finger and back-of-hand proof  |
| Mounting width per pole                 | 17.5 mm                              | 17.5 mm                        | 17.5 mm                        |
| Mounting                                | IEC/EN 60715 top-hat rail            | IEC/EN 60715 top-hat rail      | IEC/EN 60715 top-hat rail      |
| Degree of protection                    | IP20                                 | IP20                           | IP20                           |
| Terminals top and bottom                | Twin-purpose terminals               | Twin-purpose terminals         | Twin-purpose terminals         |
| Supply connection                       | Line or load side                    | Line or load side              | Line or load side              |
| Terminal capacity [mm <sup>2</sup> ]    | 1 x 25 / 2 x 10                      | 1 x 25 / 2 x 10                | 1 x 25 / 2 x 10                |
| Torque                                  | 2.4 Nm                               | 2.4 Nm                         | 2.4 Nm                         |
| Thickness of busbar material            | 0.8–2 mm                             | 0.8–2 mm                       | 0.8–2 mm                       |
| Mounting position                       | As required                          | As required                    | As required                    |

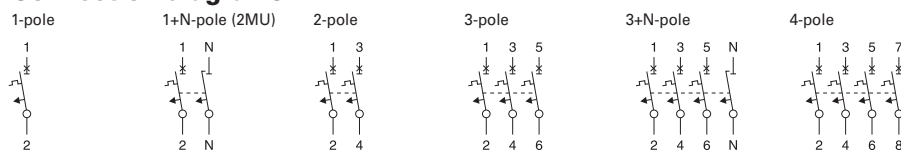
# FAZ | Specifications

## Specifications

### Technical Data (continued)

|  | K Curve                                       | S Curve                        | Z Curve                        |
|--|---|--------------------------------|--------------------------------|
| <b>Electrical</b>                                |   |                                |                                |
| Approvals  | UR (UL 1077), CSA (CSA 22.2 No. 235), CE, VDE |                                |                                |
| Standards  | IEC/EN 60947-2                                |                                |                                |
| Short-circuit trip response                      | 8–12 $I_n$                                    | 13–17 $I_n$                    | 2–3 $I_n$                      |
| <b>Supplementary Protectors—UL/CSA</b>           |   |                                |                                |
| Current range                                    | 0.5–63A                                       | 0.5–40A                        | 1–63A                          |
| Maximum voltage ratings—UL/CSA                   |   |                                |                                |
| Single-pole, single-pole + neutral               | 277 Vac<br>48 Vdc                             | 277 Vac<br>48 Vdc              | 277 Vac<br>48 Vdc              |
| Two-, three-, four-pole and three-pole + neutral | 480Y/277 Vac                                  | 480Y/277 Vac                   | 480Y/277 Vac                   |
| Two poles in series                              | 96 Vdc  | 96 Vdc                         | 96 Vdc                         |
| Thermal tripping characteristics                 |   |                                |                                |
| Single-pole                                      | 1.35 x $I_n$ @ 40°C                           | 1.35 x $I_n$ @ 40°C            | 1.35 x $I_n$ @ 40°C            |
| Multi-pole                                       | 1.45 x $I_n$ @ 40°C                           | 1.45 x $I_n$ @ 40°C            | 1.45 x $I_n$ @ 40°C            |
| Short-circuit ratings (at max. voltage)          |   |                                |                                |
| Single-pole                                      | 5 kA @ 277 Vac                                | 5 kA @ 277 Vac                 | 5 kA @ 277 Vac                 |
| Single-pole + neutral                            | 5 kA @ 277 Vac                                | 5 kA @ 277 Vac                 | 5 kA @ 277 Vac                 |
| Two-, three-, four-pole                          | 5 kA @ 480Y/277 Vac                           | 5 kA @ 480Y/277 Vac            | 5 kA @ 480Y/277 Vac            |
| <b>Miniature Circuit Breaker—IEC</b>             |   |                                |                                |
| Current range                                    | 0.5–63A                                       | 0.5–40A                        | 1–63A                          |
| Maximum voltage ratings—IEC 60947-2              |   |                                |                                |
| Single-pole, single-pole + neutral               | 240 Vac                                       | 240 Vac                        | 240 Vac                        |
| Two-, three-, four-pole, three-pole + neutral    | 240/415 Vac                                   | 240/415 Vac                    | 240/415 Vac                    |
| Thermal tripping characteristics                 |   |                                |                                |
| Single-pole                                      | > 1 hour @ 1.05 x $I_n$                       | > 1 hour @ 1.05 x $I_n$        | > 1 hour @ 1.05 x $I_n$        |
| Multi-pole                                       | < 1 hour @ 1.3 x $I_n$                        | < 1 hour @ 1.3 x $I_n$         | < 1 hour @ 1.3 x $I_n$         |
| Interrupt ratings (at max. voltage)              |   |                                |                                |
| IEC 60947-2                                      | 15 kA   | 10 kA                          | 10 kA                          |
| IEC 60898  | 15 kA   | 10 kA                          | 10 kA                          |
| Operational switching capacity                   | 7.5 kA  | 7.5 kA                         | 7.5 kA                         |
| Max. back-up fuse [gL/gG]                        | 125A  | 125A                           | 125A                           |
| Rated impulse withstand— $U_{imp}$               | 4000 Vac                                      | 4000 Vac                       | 4000 Vac                       |
| Rated insulation voltage— $U_i$                  | 440 Vac                                       | 440 Vac                        | 440 Vac                        |
| <b>Environmental/General</b>                     |   |                                |                                |
| Selectivity class                                | 3   | 3                              | 3                              |
| Lifespan (operations)                            | > 10000 (1 operation = ON/OFF)                | > 10000 (1 operation = ON/OFF) | > 10000 (1 operation = ON/OFF) |
| Shock (IEC 68-2-22)                              | 10g–120 ms                                    | 10g–120 ms                     | 10g–120 ms                     |
| Operating temperature range                      | -5 to +40°C                                   | -5 to +40°C                    | -5 to +40°C                    |
| <b>Mechanical</b>                                |   |                                |                                |
| Standard front dimension                         |   |                                |                                |
| Device height                                    | 80 mm   | 80 mm                          | 80 mm                          |
| Terminal protection                              | Finger and back-of-hand proof                 | Finger and back-of-hand proof  | Finger and back-of-hand proof  |
| Mounting width per pole                          | 17.5 mm                                       | 17.5 mm                        | 17.5 mm                        |
| Mounting   | IEC/EN 60715 top-hat rail                     | IEC/EN 60715 top-hat rail      | IEC/EN 60715 top-hat rail      |
| Degree of protection                             | IP20  | IP20                           | IP20                           |
| Terminals top and bottom                         | Twin-purpose terminals                        | Twin-purpose terminals         | Twin-purpose terminals         |
| Supply connection                                | Line or load side                             | Line or load side              | Line or load side              |
| Terminal capacity [mm <sup>2</sup> ]             | 1 x 25 / 2 x 10                               | 1 x 25 / 2 x 10                | 1 x 25 / 2 x 10                |
| Torque   | 2.4 Nm  | 2.4 Nm                         | 2.4 Nm                         |
| Thickness of busbar material                     | 0.8–2 mm                                      | 0.8–2 mm                       | 0.8–2 mm                       |
| Mounting position                                | As required                                   | As required                    | As required                    |

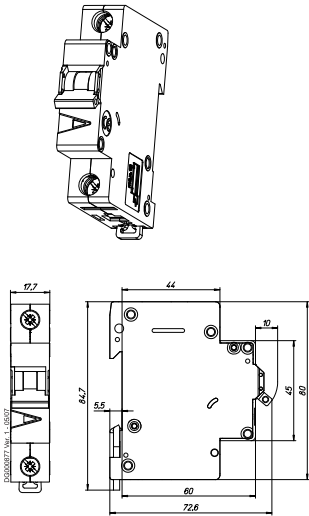
### Connection diagrams



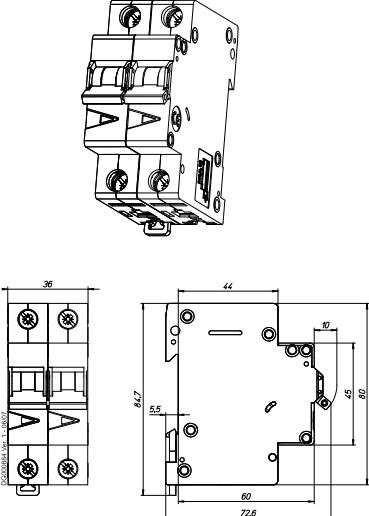
# FAZ | Specifications

## Dimensions (mm) FAZ

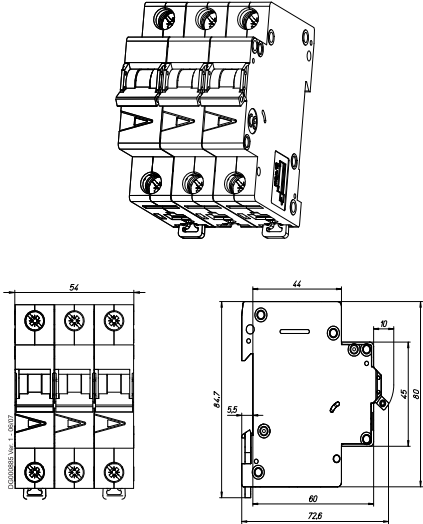
1-pole



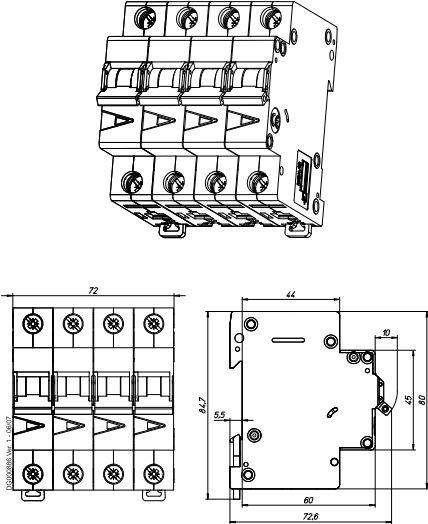
1+N-pole, 2-pole



3-pole



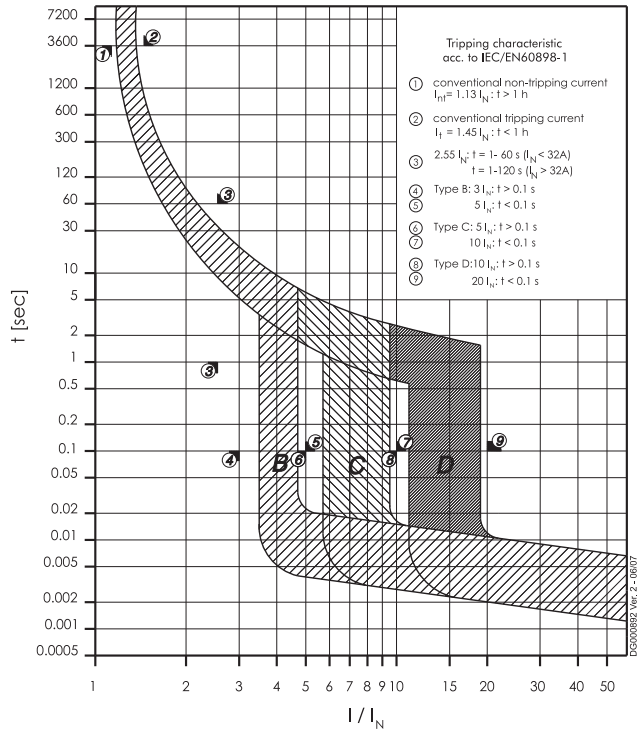
3+N-pole, 4-pole



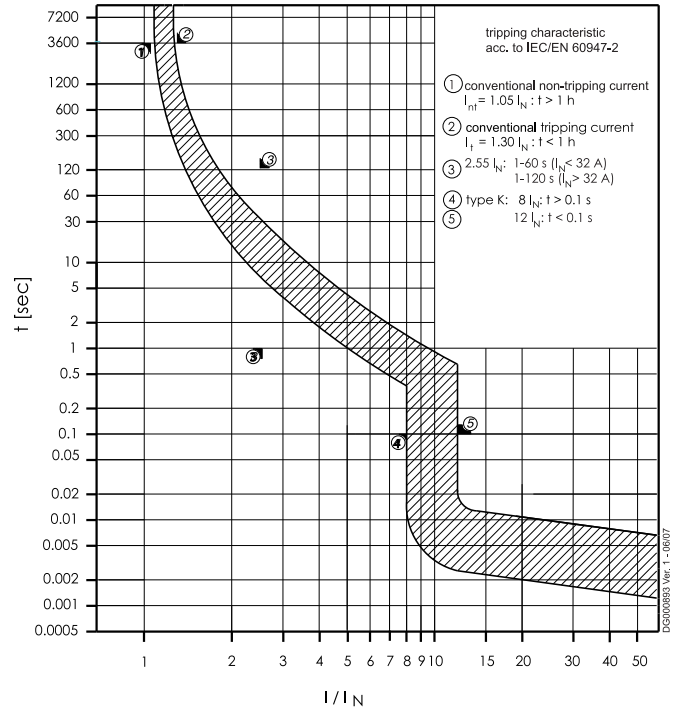


## Tripping Characteristic FAZ

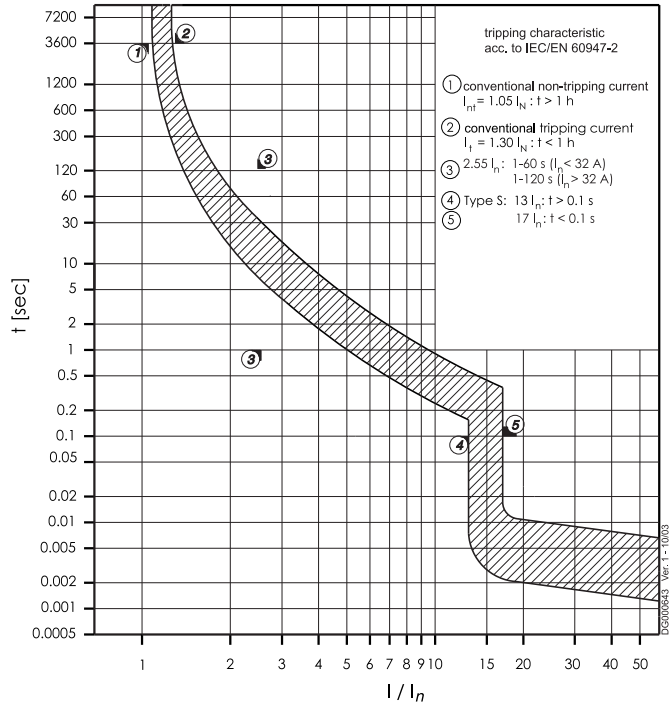
Characteristics B, C and D - IEC/EN60898-1



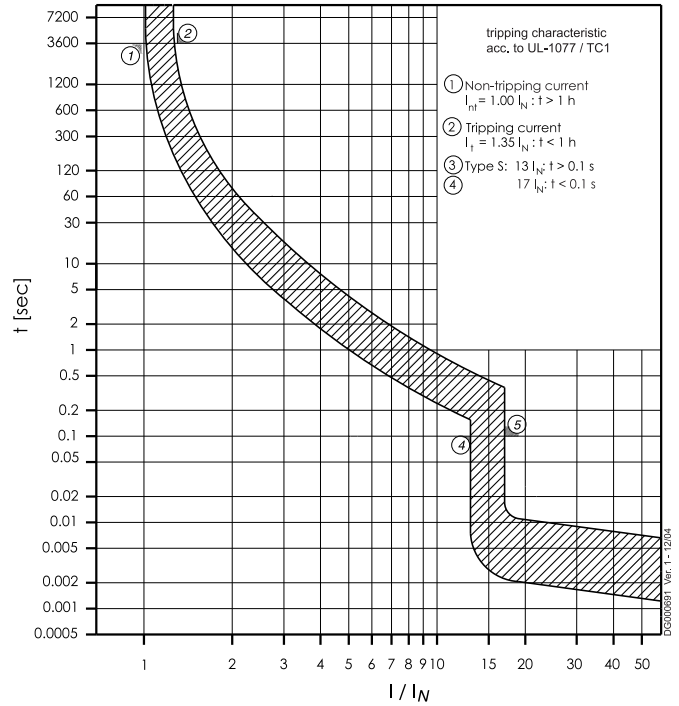
Characteristic K - IEC/EN 60947-2



Characteristic S - IEC/EN 60947-2

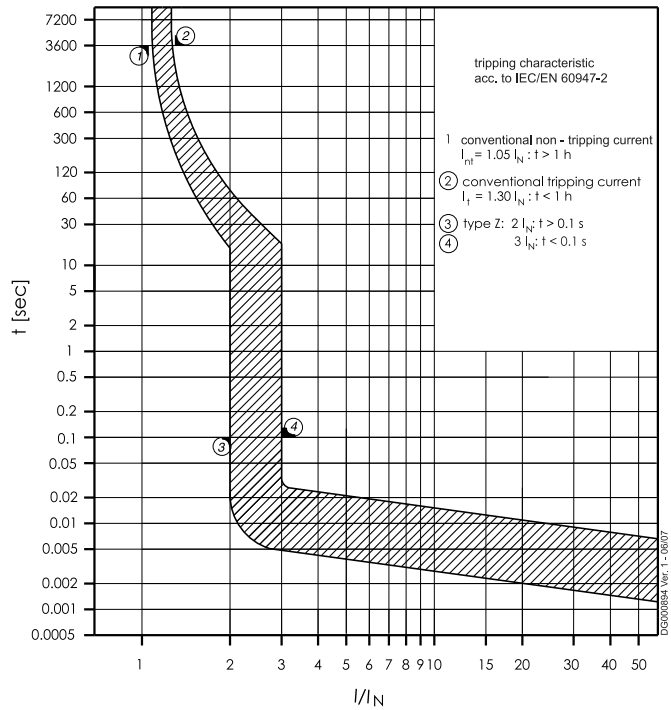


Characteristic S - UL1077

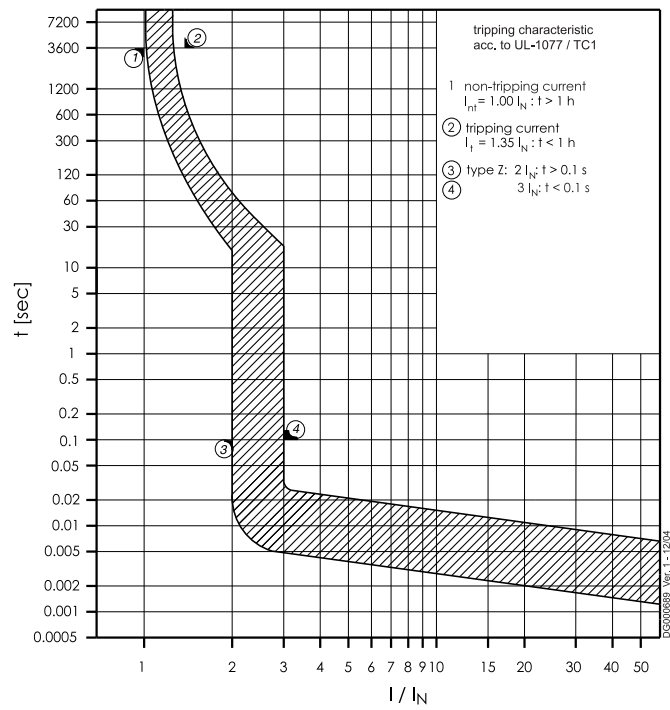


## Tripping Characteristic FAZ

### Characteristic Z - IEC/EN 60947-2



### Characteristic Z - UL1077



# FAZ | Specifications

## Internal Resistance FAZ

### Type B

At room temperature (single pole)

| In [A] | Z* [mΩ] | R [mΩ] |
|--------|---------|--------|
| 1      | 1120    | 1102   |
| 1.5    | 922     | 912    |
| 1.6    | 922     | 912    |
| 2      | 335     | 333    |
| 2.5    | 234     | 230    |
| 3      | 211     | 208    |
| 3.5    | 184     | 180    |
| 4      | 87.7    | 87.2   |
| 5      | 73.5    | 72.8   |
| 6      | 46.8    | 46.3   |
| 8      | 30.5    | 30.4   |
| 10     | 17.5    | 17.4   |
| 12     | 16.9    | 16.8   |
| 13     | 13.4    | 13.3   |
| 15     | 8.0     | 7.9    |
| 16     | 8.0     | 7.9    |
| 20     | 7.2     | 7.1    |
| 25     | 5.0     | 4.9    |
| 32     | 3.7     | 3.7    |
| 40     | 2.6     | 2.5    |
| 50     | 2.1     | 2.1    |
| 63     | 2.0     | 2.0    |

\* 50Hz

### Type C

At room temperature (single pole)

| In [A] | Z* [mΩ] | R [mΩ] |
|--------|---------|--------|
| 0.16   | 68500   | 68300  |
| 0.25   | 27500   | 27400  |
| 0.5    | 4680    | 4670   |
| 0.75   | 2280    | 2250   |
| 1      | 1120    | 1100   |
| 1.5    | 589     | 587    |
| 1.6    | 589     | 587    |
| 2      | 335     | 333    |
| 2.5    | 234     | 230    |
| 3      | 131     | 130    |
| 3.5    | 143     | 141    |
| 4      | 87.7    | 87.2   |
| 5      | 73.5    | 72.8   |
| 6      | 39.3    | 39.1   |
| 8      | 30.5    | 30.4   |
| 10     | 14.1    | 14.0   |
| 12     | 13.5    | 13.4   |
| 13     | 13.4    | 13.3   |
| 15     | 8.0     | 7.9    |
| 16     | 8.0     | 7.9    |
| 20     | 7.2     | 7.1    |
| 25     | 5.0     | 4.9    |
| 32     | 3.7     | 3.7    |
| 40     | 2.6     | 2.5    |
| 50     | 2.1     | 2.1    |
| 63     | 2.0     | 2.0    |

\* 50Hz

### Type D

At room temperature (single pole)

| In [A] | Z* [mΩ] | R [mΩ] |
|--------|---------|--------|
| 0.5    | 4680    | 4670   |
| 1      | 772     | 770    |
| 1.5    | 512     | 508    |
| 1.6    | 512     | 508    |
| 2      | 250     | 249    |
| 2.5    | 153     | 153    |
| 3      | 131     | 130    |
| 3.5    | 143     | 141    |
| 4      | 87.7    | 87.2   |
| 5      | 65.4    | 65.1   |
| 6      | 39.3    | 39.1   |
| 8      | 19.5    | 19.5   |
| 10     | 14.1    | 14.0   |
| 12     | 11.3    | 11.2   |
| 13     | 10.1    | 10.1   |
| 15     | 8.0     | 7.9    |
| 16     | 8.0     | 7.9    |
| 20     | 4.9     | 4.9    |
| 25     | 3.9     | 3.8    |
| 32     | 3.5     | 3.4    |
| 40     | 2.7     | 2.6    |

\* 50Hz

# FAZ | Specifications

## Fault Loop Impedance FAZ

Max. allowed value for the Fault Loop Impedance  $Z_s$   
(acc. to DIN VDE 0100, part 410)

$U_0 = 230 \text{ V}$

| Tripping time<br>$I_n/A$ | Type B                 |                      | Type C                 |                      | Type D                 |                      |
|--------------------------|------------------------|----------------------|------------------------|----------------------|------------------------|----------------------|
|                          | 0,4s<br>$Z_s (\Omega)$ | 5s<br>$Z_s (\Omega)$ | 0,4s<br>$Z_s (\Omega)$ | 5s<br>$Z_s (\Omega)$ | 0,4s<br>$Z_s (\Omega)$ | 5s<br>$Z_s (\Omega)$ |
| 1                        | 40,4                   | 40,4                 | 24,3                   | 40,4                 | 12,4                   | 40,4                 |
| 1,5                      | 26,9                   | 26,9                 | 16,2                   | 26,9                 | 8,3                    | 26,9                 |
| 2                        | 20,2                   | 20,2                 | 12,2                   | 20,2                 | 6,2                    | 20,2                 |
| 2,5                      | 16,1                   | 16,1                 | 9,7                    | 16,1                 | 5,0                    | 16,1                 |
| 3                        | 13,5                   | 13,5                 | 8,1                    | 13,5                 | 4,1                    | 13,5                 |
| 3,5                      | 11,5                   | 11,5                 | 7,0                    | 11,5                 | 3,6                    | 11,5                 |
| 4                        | 10,1                   | 10,1                 | 6,1                    | 10,1                 | 3,1                    | 10,1                 |
| 5                        | 8,1                    | 8,1                  | 4,9                    | 8,1                  | 2,5                    | 8,1                  |
| 6                        | 6,7                    | 6,7                  | 4,1                    | 6,7                  | 2,1                    | 6,7                  |
| 8                        | 5,0                    | 5,0                  | 3,0                    | 5,0                  | 1,6                    | 5,0                  |
| 10                       | 4,0                    | 4,0                  | 2,4                    | 4,0                  | 1,2                    | 4,0                  |
| 12                       | 3,4                    | 3,4                  | 2,0                    | 3,4                  | 1,0                    | 3,4                  |
| 13                       | 3,1                    | 3,1                  | 1,9                    | 3,1                  | 1,0                    | 3,1                  |
| 15                       | 2,7                    | 2,7                  | 1,6                    | 2,7                  | 0,8                    | 2,7                  |
| 16                       | 2,5                    | 2,5                  | 1,5                    | 2,5                  | 0,8                    | 2,5                  |
| 20                       | 2,0                    | 2,0                  | 1,2                    | 2,0                  | 0,6                    | 2,0                  |
| 25                       | 1,6                    | 1,6                  | 1,0                    | 1,6                  | 0,5                    | 1,6                  |
| 32                       | 1,3                    | 1,3                  | 0,8                    | 1,3                  | 0,4                    | 1,3                  |
| 40                       | 1,0                    | 1,0                  | 0,6                    | 1,0                  | 0,3                    | 1,0                  |
| 50                       | 0,8                    | 0,8                  | 0,5                    | 0,8                  | 0,2                    | 0,8                  |
| 63                       | 0,6                    | 0,6                  | 0,4                    | 0,6                  | 0,2                    | 0,6                  |

$$Z_s = R_{M.C.B.} + R_{Loop}$$

Data/factors taken from the time-current characteristic FAZ

For other rated voltages  $U_0$ :

$U_0 = 240 \text{ V}$ :  $Z_s * 1,04$  applies

$U_0 = 127 \text{ V}$ :  $Z_s * 0,55$  applies

# FAZ | Specifications

## Power Loss at $I_n$ FAZ

### Type B

| $I_n$ [A] | 1p    | 1pN   | 2p    | 3p    | 3pN*  |
|-----------|-------|-------|-------|-------|-------|
|           | P [W] | P [W] | P [W] | P [W] | P [W] |
| 1         | 1.6   | 1.7   | 3.1   | 4.7   | 4.8   |
| 1.5       | 2.3   | 2.5   | 4.6   | 6.9   | 7.2   |
| 1.6       | 2.5   | 2.7   | 4.9   | 7.4   | 7.6   |
| 2         | 1.4   | 1.5   | 2.8   | 4.1   | 4.3   |
| 2.5       | 1.5   | 1.7   | 3.1   | 4.6   | 4.7   |
| 3         | 2.5   | 2.7   | 5.0   | 7.6   | 7.8   |
| 3.5       | 2.5   | 2.8   | 5.1   | 7.8   | 8.0   |
| 4         | 1.4   | 1.6   | 2.9   | 4.4   | 4.5   |
| 5         | 1.9   | 2.1   | 3.8   | 5.8   | 6.0   |
| 6         | 1.8   | 2.0   | 3.6   | 5.5   | 5.6   |
| 8         | 2.1   | 2.3   | 4.1   | 6.3   | 6.5   |
| 10        | 1.9   | 2.1   | 3.9   | 5.9   | 6.1   |
| 12        | 2.8   | 3.2   | 5.9   | 8.7   | 9.0   |
| 13        | 2.5   | 2.9   | 5.3   | 7.8   | 8.1   |
| 15        | 2.1   | 2.4   | 4.4   | 6.5   | 6.7   |
| 16        | 2.2   | 2.6   | 4.7   | 6.9   | 7.2   |
| 20        | 3.2   | 3.6   | 6.6   | 9.8   | 10.1  |
| 25        | 3.0   | 3.5   | 6.4   | 9.4   | 9.7   |
| 32        | 3.7   | 4.4   | 8.1   | 12.1  | 12.5  |
| 40        | 3.4   | 4.1   | 7.5   | 11.2  | 11.5  |
| 50        | 4.5   | 5.4   | 9.9   | 14.9  | 15.3  |
| 63        | 5.2   | 6.3   | 11.5  | 17.2  | 17.7  |

\*symmetrical load

### Type C

| $I_n$ [A] | 1p    | 1pN   | 2p    | 3p    | 3pN*  |
|-----------|-------|-------|-------|-------|-------|
|           | P [W] | P [W] | P [W] | P [W] | P [W] |
| 0.16      | 2.2   | 2.4   | 4.4   | 6.7   | 6.9   |
| 0.25      | 2.0   | 2.2   | 4.0   | 6.1   | 6.3   |
| 0.5       | 1.2   | 1.3   | 2.4   | 3.5   | 3.7   |
| 0.75      | 1.3   | 1.4   | 2.6   | 3.9   | 4.1   |
| 1         | 1.6   | 1.7   | 3.1   | 4.7   | 4.8   |
| 1.5       | 1.5   | 1.6   | 2.9   | 4.4   | 4.6   |
| 1.6       | 1.6   | 1.7   | 3.1   | 4.7   | 4.9   |
| 2         | 1.4   | 1.5   | 2.8   | 4.1   | 4.3   |
| 2.5       | 1.5   | 1.7   | 3.1   | 4.6   | 4.7   |
| 3         | 1.2   | 1.3   | 2.4   | 3.6   | 3.7   |
| 3.5       | 1.3   | 1.4   | 2.6   | 3.9   | 4.0   |
| 4         | 1.4   | 1.6   | 2.9   | 4.4   | 4.5   |
| 5         | 1.9   | 2.1   | 3.8   | 5.8   | 6.0   |
| 6         | 1.5   | 1.6   | 2.9   | 4.4   | 4.6   |
| 8         | 2.1   | 2.3   | 4.1   | 6.3   | 6.5   |
| 10        | 1.5   | 1.7   | 3.0   | 4.6   | 4.7   |
| 12        | 2.1   | 2.4   | 4.4   | 6.5   | 6.8   |
| 13        | 2.5   | 2.9   | 5.3   | 7.8   | 8.1   |
| 15        | 2.1   | 2.4   | 4.4   | 6.5   | 6.7   |
| 16        | 2.2   | 2.6   | 4.7   | 6.9   | 7.2   |
| 20        | 3.2   | 3.6   | 6.6   | 9.8   | 10.1  |
| 25        | 3.0   | 3.5   | 6.4   | 9.4   | 9.7   |
| 32        | 3.7   | 4.4   | 8.1   | 12.1  | 12.5  |
| 40        | 3.4   | 4.1   | 7.5   | 11.2  | 11.5  |
| 50        | 4.5   | 5.4   | 9.9   | 14.9  | 15.3  |
| 63        | 5.2   | 6.3   | 11.5  | 17.2  | 17.7  |

\*symmetrical load

### Type D

| $I_n$ [A] | 1p    | 1pN   | 2p    | 3p    | 3pN*  |
|-----------|-------|-------|-------|-------|-------|
|           | P [W] | P [W] | P [W] | P [W] | P [W] |
| 0.5       | 1.2   | 1.3   | 2.4   | 3.5   | 3.7   |
| 1         | 0.8   | 0.9   | 1.6   | 2.4   | 2.5   |
| 1.5       | 1.2   | 1.3   | 2.3   | 3.5   | 3.6   |
| 1.6       | 1.3   | 1.4   | 2.5   | 3.8   | 3.9   |
| 2         | 1.0   | 1.1   | 2.0   | 3.0   | 3.1   |
| 2.5       | 1.0   | 1.1   | 1.9   | 2.9   | 3.0   |
| 3         | 1.2   | 1.3   | 2.4   | 3.6   | 3.7   |
| 3.5       | 1.3   | 1.4   | 2.6   | 3.9   | 4.0   |
| 4         | 1.4   | 1.6   | 2.9   | 4.4   | 4.5   |
| 5         | 1.7   | 1.8   | 3.3   | 5.1   | 5.3   |
| 6         | 1.5   | 1.6   | 2.9   | 4.4   | 4.6   |
| 8         | 1.3   | 1.5   | 2.6   | 4.0   | 4.2   |
| 10        | 1.5   | 1.7   | 3.0   | 4.6   | 4.7   |
| 12        | 1.7   | 2.0   | 3.6   | 5.3   | 5.4   |
| 13        | 1.9   | 2.2   | 4.0   | 5.9   | 6.1   |
| 15        | 2.1   | 2.4   | 4.4   | 6.5   | 6.7   |
| 16        | 2.2   | 2.6   | 4.7   | 6.9   | 7.2   |
| 20        | 2.0   | 2.2   | 4.1   | 6.1   | 6.2   |
| 25        | 2.5   | 2.9   | 5.2   | 7.7   | 7.9   |
| 32        | 3.4   | 4.0   | 7.4   | 11.1  | 11.4  |
| 40        | 3.2   | 3.8   | 7.0   | 10.4  | 10.7  |

\*symmetrical load

# FAZ | Specifications

## Influence of Ambient Temperature FAZ

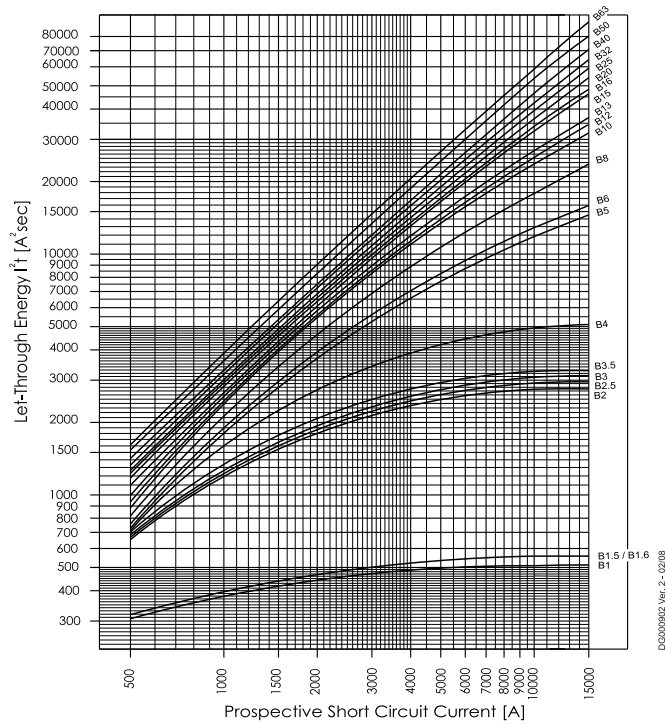
On Load Carrying Capacity (temperature derating)

| I <sub>N</sub> [A] | Ambient temperature T [°C] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                    | -40                        | -30  | -20  | -10  | 0    | 10   | 20   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   |
| 0,16               | 0,2                        | 0,2  | 0,19 | 0,19 | 0,18 | 0,17 | 0,17 | 0,16 | 0,16 | 0,15 | 0,15 | 0,15 | 0,14 | 0,14 | 0,14 | 0,14 | 0,13 |
| 0,25               | 0,32                       | 0,31 | 0,3  | 0,29 | 0,28 | 0,27 | 0,26 | 0,25 | 0,25 | 0,24 | 0,24 | 0,23 | 0,23 | 0,22 | 0,22 | 0,21 | 0,21 |
| 0,5                | 0,64                       | 0,62 | 0,6  | 0,58 | 0,56 | 0,54 | 0,52 | 0,5  | 0,49 | 0,48 | 0,47 | 0,46 | 0,45 | 0,44 | 0,43 | 0,42 | 0,41 |
| 0,75               | 0,96                       | 0,93 | 0,9  | 0,87 | 0,84 | 0,81 | 0,78 | 0,75 | 0,74 | 0,73 | 0,71 | 0,69 | 0,68 | 0,66 | 0,65 | 0,64 | 0,62 |
| 1                  | 1,3                        | 1,2  | 1,2  | 1,2  | 1,1  | 1,1  | 1    | 1    | 0,99 | 0,97 | 0,95 | 0,93 | 0,9  | 0,89 | 0,87 | 0,85 | 0,83 |
| 1,5                | 1,9                        | 1,9  | 1,8  | 1,7  | 1,7  | 1,6  | 1,6  | 1,5  | 1,5  | 1,5  | 1,4  | 1,4  | 1,4  | 1,3  | 1,3  | 1,3  | 1,2  |
| 1,6                | 2                          | 2    | 1,9  | 1,9  | 1,8  | 1,7  | 1,7  | 1,6  | 1,6  | 1,5  | 1,5  | 1,5  | 1,4  | 1,4  | 1,4  | 1,4  | 1,3  |
| 2                  | 2,6                        | 2,5  | 2,4  | 2,3  | 2,2  | 2,2  | 2,1  | 2    | 2    | 1,9  | 1,9  | 1,9  | 1,8  | 1,8  | 1,7  | 1,7  | 1,7  |
| 2,5                | 3,2                        | 3,1  | 3    | 2,9  | 2,8  | 2,7  | 2,6  | 2,5  | 2,5  | 2,4  | 2,4  | 2,3  | 2,3  | 2,2  | 2,2  | 2,1  | 2,1  |
| 3                  | 3,8                        | 3,7  | 3,6  | 3,5  | 3,4  | 3,3  | 3,1  | 3    | 3    | 2,9  | 2,8  | 2,8  | 2,7  | 2,7  | 2,6  | 2,5  | 2,5  |
| 3,5                | 4,5                        | 4,4  | 4,2  | 4,1  | 3,9  | 3,8  | 3,7  | 3,5  | 3,4  | 3,4  | 3,3  | 3,2  | 3,2  | 3,1  | 3    | 3    | 2,9  |
| 4                  | 5,1                        | 5    | 4,8  | 4,7  | 4,5  | 4,3  | 4,2  | 4    | 3,9  | 3,9  | 3,8  | 3,7  | 3,6  | 3,5  | 3,5  | 3,4  | 3,3  |
| 5                  | 6,4                        | 6,2  | 6    | 5,8  | 5,6  | 5,4  | 5,2  | 5    | 4,9  | 4,8  | 4,7  | 4,6  | 4,5  | 4,4  | 4,3  | 4,2  | 4,1  |
| 6                  | 7,7                        | 7,5  | 7,2  | 7    | 6,7  | 6,5  | 6,3  | 6    | 5,9  | 5,8  | 5,7  | 5,6  | 5,4  | 5,3  | 5,2  | 5,1  | 5    |
| 8                  | 10,2                       | 9,9  | 9,6  | 9,3  | 9    | 8,7  | 8,4  | 8    | 7,9  | 7,7  | 7,6  | 7,4  | 7,2  | 7,1  | 6,9  | 6,8  | 6,6  |
| 10                 | 13                         | 12   | 12   | 12   | 11   | 11   | 10   | 10   | 9,9  | 9,7  | 9,5  | 9,3  | 9    | 8,9  | 8,7  | 8,5  | 8,3  |
| 12                 | 15                         | 15   | 14   | 14   | 13   | 13   | 13   | 12   | 12   | 12   | 11   | 11   | 11   | 11   | 10   | 10   | 10   |
| 13                 | 17                         | 16   | 16   | 15   | 15   | 14   | 14   | 13   | 13   | 13   | 12   | 12   | 12   | 12   | 11   | 11   | 11   |
| 15                 | 19                         | 19   | 18   | 17   | 17   | 16   | 16   | 15   | 15   | 15   | 14   | 14   | 14   | 13   | 13   | 13   | 12   |
| 16                 | 20                         | 20   | 19   | 19   | 18   | 17   | 17   | 16   | 16   | 15   | 15   | 15   | 14   | 14   | 14   | 14   | 13   |
| 20                 | 26                         | 25   | 24   | 23   | 22   | 22   | 21   | 20   | 20   | 19   | 19   | 19   | 18   | 18   | 17   | 17   | 17   |
| 25                 | 32                         | 31   | 30   | 29   | 28   | 27   | 26   | 25   | 25   | 24   | 24   | 23   | 23   | 22   | 22   | 21   | 21   |
| 32                 | 41                         | 40   | 38   | 37   | 36   | 35   | 33   | 32   | 32   | 31   | 30   | 30   | 29   | 28   | 28   | 27   | 26   |
| 40                 | 51                         | 50   | 48   | 47   | 45   | 43   | 42   | 40   | 39   | 39   | 38   | 37   | 36   | 35   | 35   | 34   | 33   |
| 50                 | 64                         | 62   | 60   | 58   | 56   | 54   | 52   | 50   | 49   | 48   | 47   | 46   | 45   | 44   | 43   | 42   | 41   |
| 63                 | 81                         | 78   | 76   | 73   | 71   | 68   | 66   | 63   | 62   | 61   | 60   | 58   | 57   | 56   | 55   | 53   | 52   |

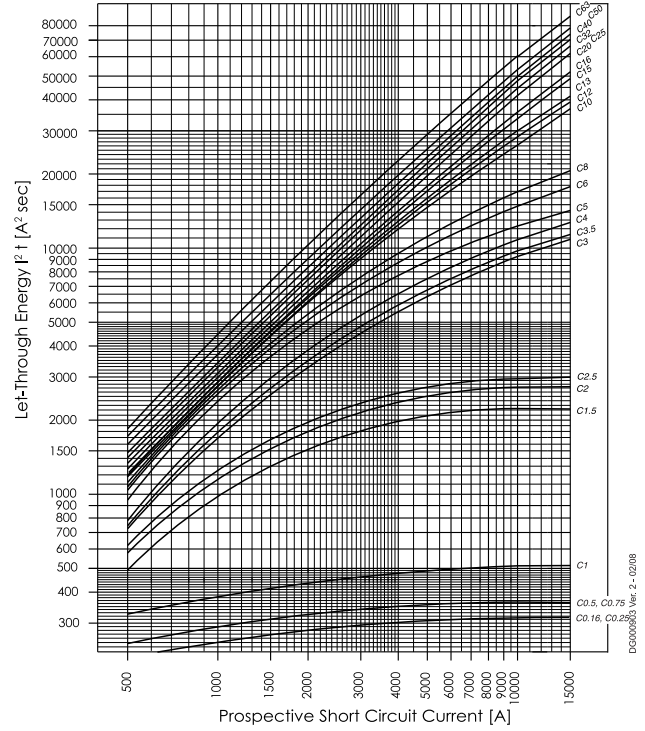
# FAZ | Specifications

## Maximum Let-Through Energy FAZ

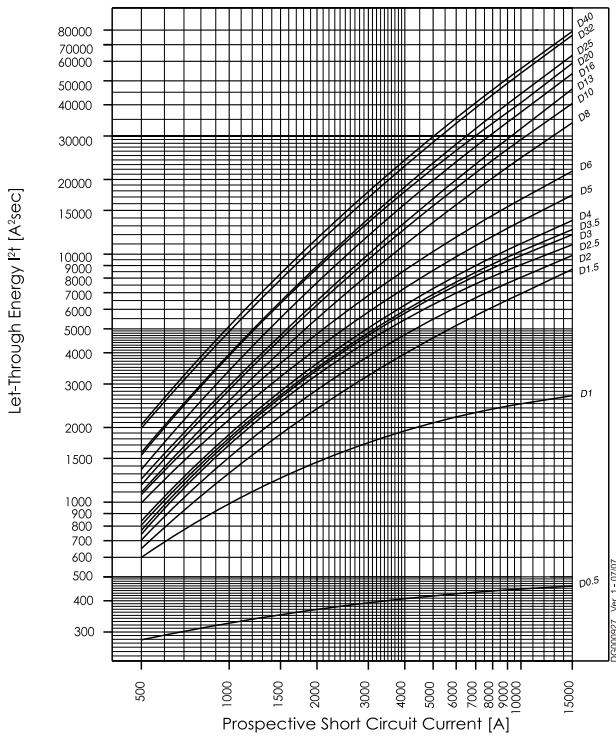
**Type B (IEC/EN60947-2)**



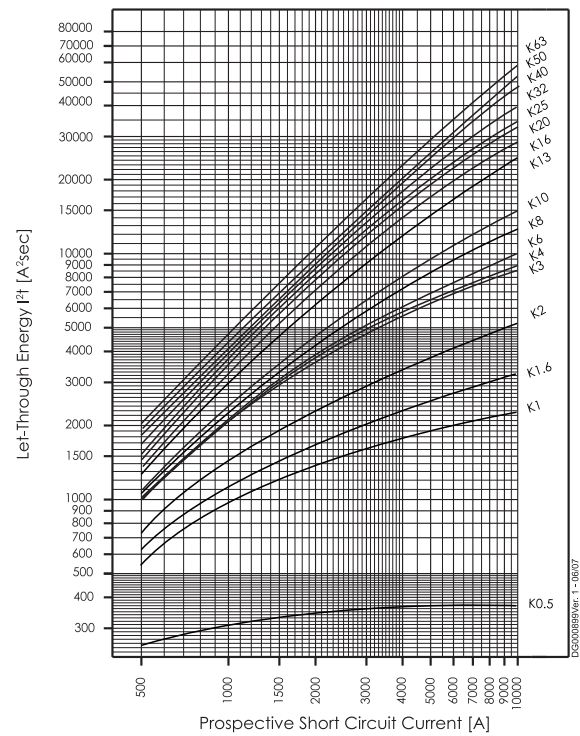
**Type C (IEC/EN60947-2)**



**Type D (IEC/EN60947-2)**



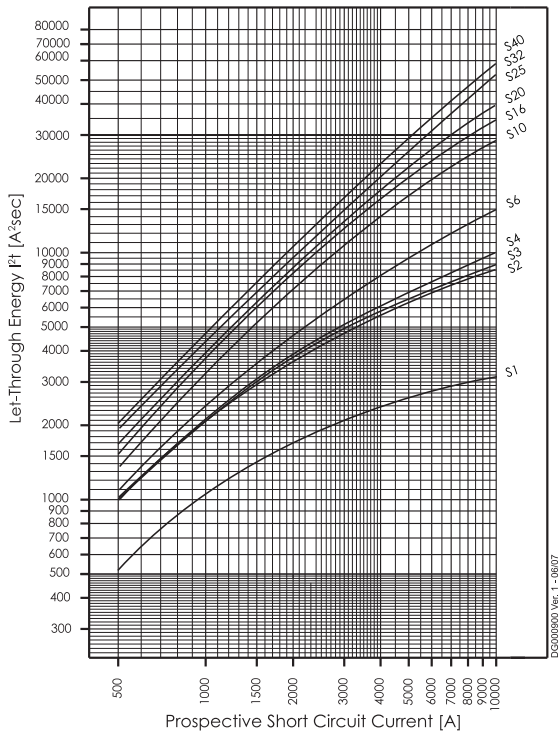
**Type K**



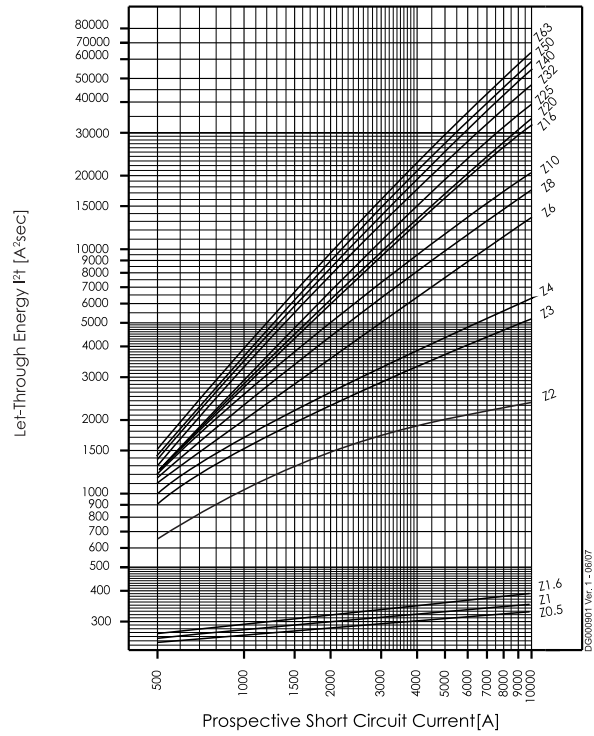
# FAZ | Specifications

## Maximum Let-Through Energy FAZ

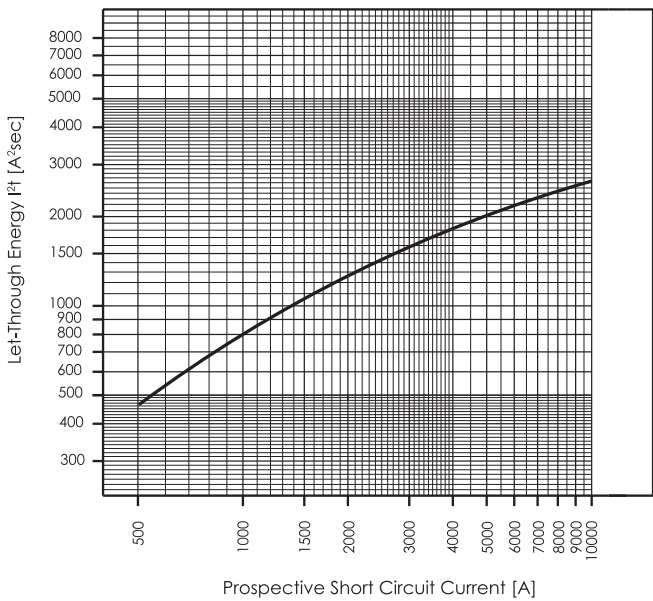
Type S



Type Z



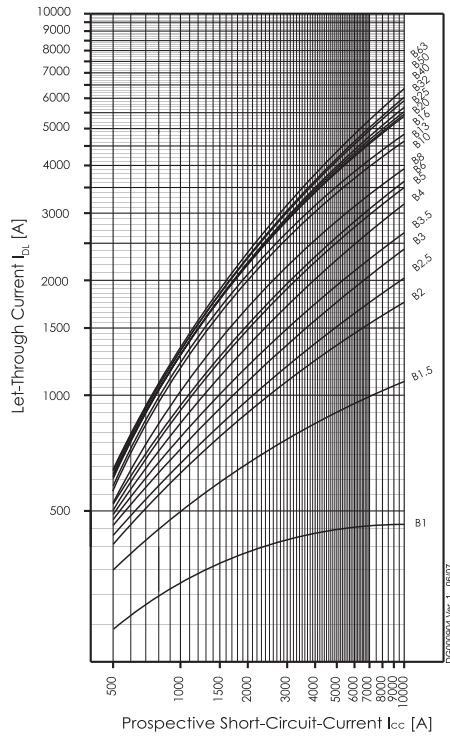
Type FAZ....-HS



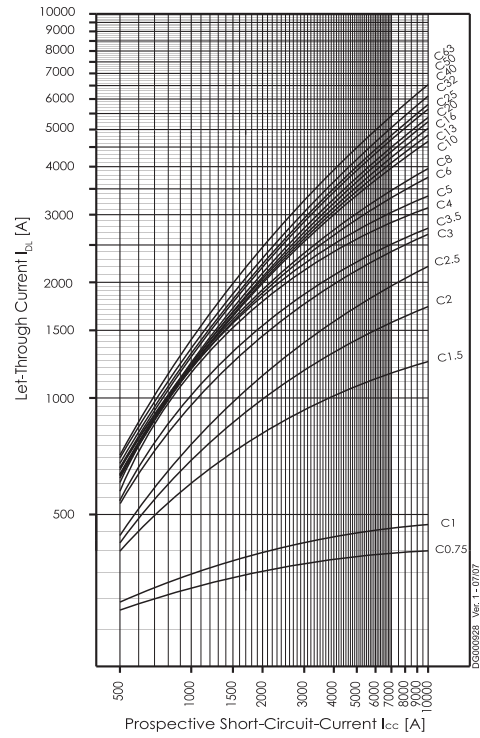


## Maximum Let-Through Current FAZ

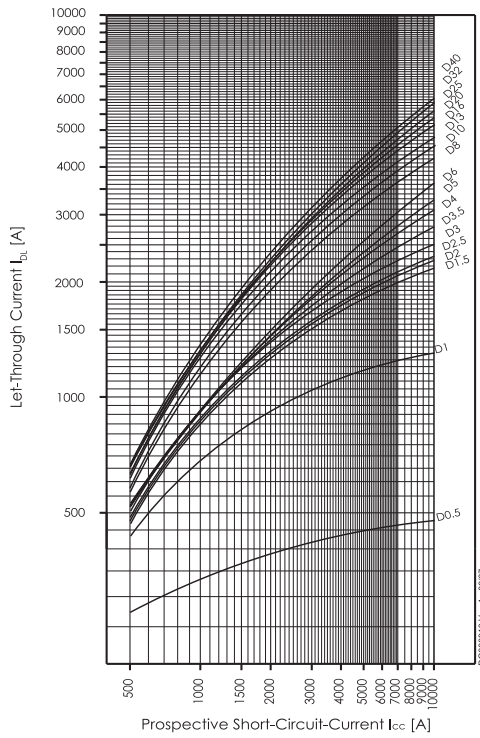
**Type B (IEC/EN60898)**



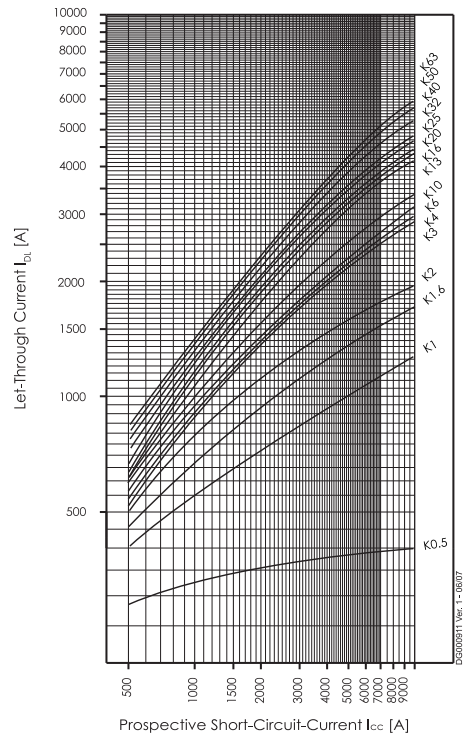
**Type C (IEC/EN60898)**



**Type D (IEC/EN60898)**



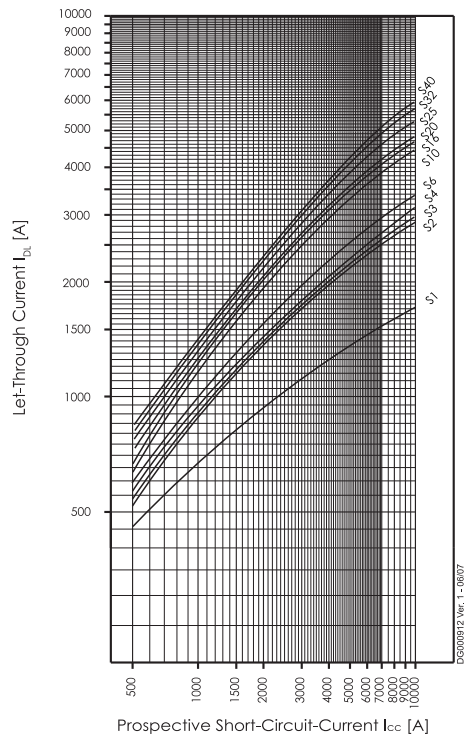
**Type K**



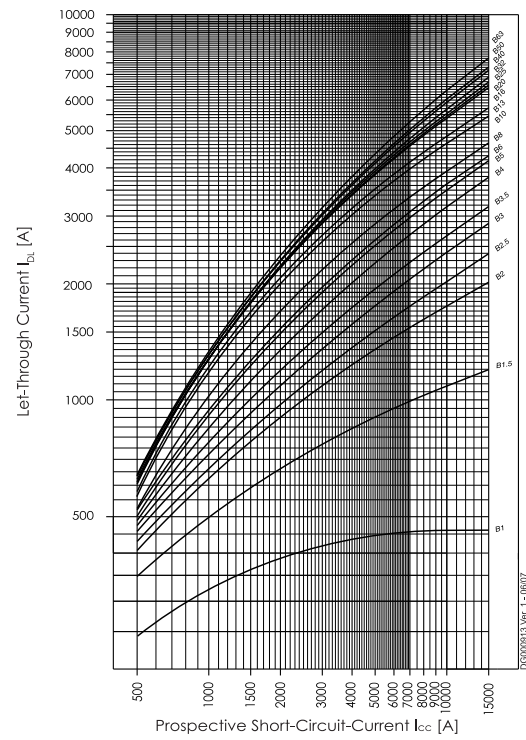
# FAZ | Specifications

## Maximum Let-Through Current FAZ

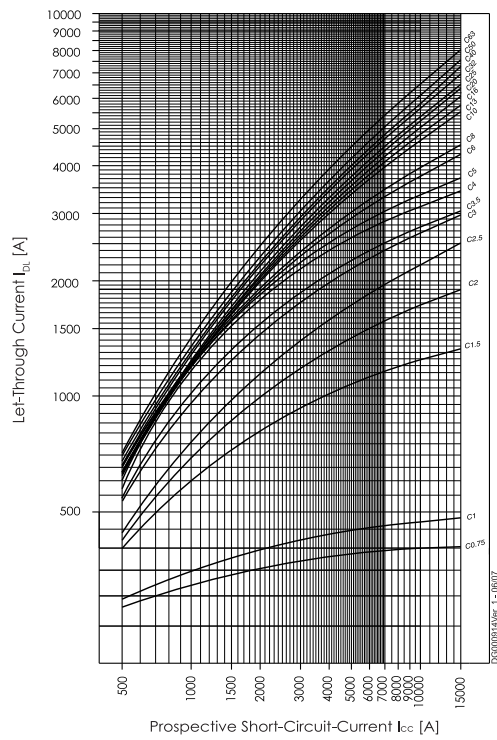
**Type S**



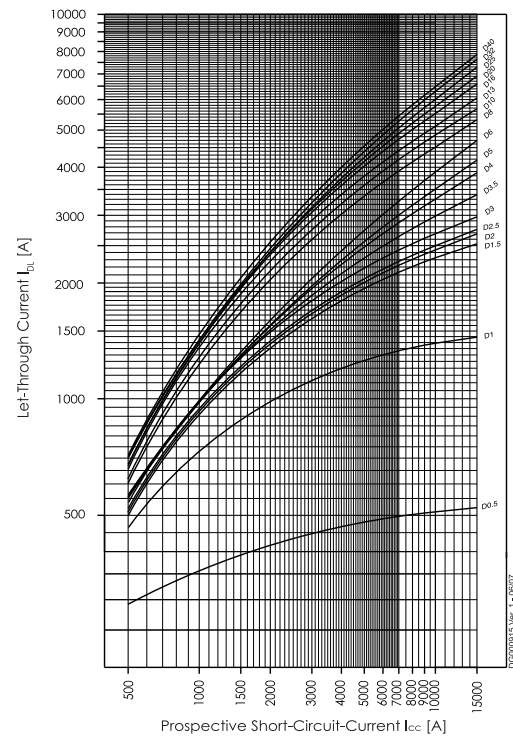
**Type B (IEC/EN60947-2)**



**Type C (IEC/EN60947-2)**



**Type D (IEC/EN60947-2)**



# FAZ | Specifications

## Short Circuit Selectivity FAZ towards NH-00 Fuses



In case of short circuit, there is selectivity between the miniature circuit breakers FAZ and the upstream fuses up to the specified values of the selectivity limit current  $I_s$  [kA] (i. e. in case of short-circuit currents  $I_{ks}$  under  $I_s$ , only the MCB will trip, in case of short circuit currents above this value both protective devices will respond).

\*) basically in accordance with EN 60898-1 D.5.2.b

Short circuit selectivity **characteristic B** towards fuse link **NH-00\***

| FAZ       | NH-00 gL/gG        |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| $I_n$ [A] | 16                 | 20                 | 25                 | 32                 | 35                 | 40                 | 50                 | 63                 | 80                 | 100                | 125                | 160                |
| 1.0       | 0.9                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.5       | 0.8                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.0       | <0.5 <sup>1)</sup> | 0.5                | 1.0                | 2.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.5       | <0.5 <sup>1)</sup> | 0.5                | 1.0                | 2.3                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.0       | <0.5 <sup>1)</sup> | 0.5                | 0.9                | 2.1                | 8.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.5       | <0.5 <sup>1)</sup> | 0.5                | 0.9                | 1.8                | 5.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 4         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.8                | 1.3                | 2.3                | 4.3                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 5         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.1                | 1.6                | 2.2                | 3.6                | 4.8                | 8.9                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 6         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.1                | 1.5                | 2.0                | 3.3                | 4.3                | 7.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 8         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.0                | 1.3                | 1.7                | 2.6                | 3.3                | 5.2                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 10        |                    | <0.5 <sup>1)</sup> | 0.6                | 0.9                | 1.2                | 1.5                | 2.2                | 2.7                | 4.0                | 9.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 13        |                    | <0.5 <sup>1)</sup> | 0.6                | 0.8                | 1.1                | 1.4                | 2.1                | 2.6                | 3.8                | 7.9                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 16        |                    |                    | 0.5                | 0.7                | 1.0                | 1.3                | 1.9                | 2.4                | 3.4                | 6.4                | 9.3                | 10.0 <sup>2)</sup> |
| 20        |                    |                    |                    | 0.7                | 1.0                | 1.3                | 1.9                | 2.4                | 3.3                | 6.0                | 8.7                | 10.0 <sup>2)</sup> |
| 25        |                    |                    |                    | 0.7                | 1.0                | 1.3                | 1.8                | 2.3                | 3.2                | 5.7                | 8.0                | 10.0 <sup>2)</sup> |
| 32        |                    |                    |                    |                    | 0.9                | 1.2                | 1.7                | 2.2                | 3.1                | 5.4                | 7.6                | 10.0 <sup>2)</sup> |
| 40        |                    |                    |                    |                    |                    |                    |                    | 2.1                | 3.0                | 5.1                | 7.2                | 10.0 <sup>2)</sup> |
| 50        |                    |                    |                    |                    |                    |                    |                    | 1.9                | 2.8                | 4.7                | 6.6                | 9.5                |
| 63        |                    |                    |                    |                    |                    |                    |                    |                    | 4.4                | 6.3                | 8.6                |                    |

Short circuit selectivity **characteristic C** towards fuse link **NH-00\***

| FAZ       | NH-00 gL/gG        |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| $I_n$ [A] | 16                 | 20                 | 25                 | 32                 | 35                 | 40                 | 50                 | 63                 | 80                 | 100                | 125                | 160                |
| 0.75      | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.0       | 0.9                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.5       | <0.5 <sup>1)</sup> | 0.6                | 1.3                | 4.2                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.0       | <0.5 <sup>1)</sup> | 0.6                | 1.0                | 2.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.5       | <0.5 <sup>1)</sup> | 0.5                | 1.0                | 2.1                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.2                | 1.8                | 2.6                | 4.7                | 6.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.1                | 1.7                | 2.4                | 4.2                | 6.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 4         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.0                | 1.5                | 2.1                | 3.6                | 5.0                | 10.0               | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 5         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 0.8                | 1.2                | 1.7                | 2.8                | 3.8                | 8.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 6         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 0.8                | 1.2                | 1.5                | 2.5                | 3.3                | 5.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 8         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 0.8                | 1.1                | 1.5                | 2.3                | 2.9                | 4.9                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 10        |                    |                    | 0.5                | 0.7                | 1.0                | 1.4                | 2.0                | 2.5                | 3.8                | 8.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 13        |                    |                    |                    |                    | 1.0                | 1.3                | 1.9                | 2.4                | 3.6                | 7.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 16        |                    |                    |                    |                    | 1.0                | 1.3                | 1.8                | 2.3                | 3.3                | 6.0                | 8.8                | 10.0 <sup>2)</sup> |
| 20        |                    |                    |                    |                    | 1.0                | 1.2                | 1.7                | 2.2                | 3.2                | 5.5                | 7.7                | 10.0 <sup>2)</sup> |
| 25        |                    |                    |                    |                    |                    | 1.6                | 2.1                | 3.0                | 5.2                | 7.3                | 10.0 <sup>2)</sup> |                    |
| 32        |                    |                    |                    |                    |                    |                    | 2.1                | 2.9                | 5.0                | 7.0                | 10.0 <sup>2)</sup> |                    |
| 40        |                    |                    |                    |                    |                    |                    |                    | 2.8                | 4.8                | 6.7                | 10.0               |                    |
| 50        |                    |                    |                    |                    |                    |                    |                    |                    | 4.5                | 6.3                | 9.5                |                    |
| 63        |                    |                    |                    |                    |                    |                    |                    |                    |                    | 5.9                | 8.4                |                    |

Short circuit selectivity **characteristic D** towards fuse link **NH-00\***

| FAZ       | NH-00 gL/gG        |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| $I_n$ [A] | 16                 | 20                 | 25                 | 32                 | 35                 | 40                 | 50                 | 63                 | 80                 | 100                | 125                | 160                |
| 0.5       | 2.1                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.0       | <0.5 <sup>1)</sup> | 0.6                | 1.4                | 4.3                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.9                | 1.6                | 2.7                | 4.0                | 8.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.8                | 1.3                | 2.1                | 3.1                | 6.0                | 8.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.2                | 1.8                | 2.6                | 4.8                | 6.9                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.1                | 1.7                | 2.4                | 4.3                | 6.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.1                | 1.7                | 2.4                | 4.2                | 5.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 4         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.0                | 1.6                | 2.2                | 3.8                | 5.2                | 10.0               | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 5         |                    | <0.5 <sup>1)</sup> | 0.6                | 0.9                | 1.4                | 1.9                | 3.2                | 4.1                | 7.1                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 6         |                    | <0.5 <sup>1)</sup> | 0.5                | 0.8                | 1.2                | 1.6                | 2.6                | 3.3                | 5.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 8         |                    |                    | 0.5                | 0.8                | 1.1                | 1.5                | 2.2                | 2.7                | 4.1                | 8.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 10        |                    |                    | 0.5                | 0.7                | 1.0                | 1.3                | 1.9                | 2.5                | 3.6                | 7.2                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 13        |                    |                    |                    |                    | 1.0                | 1.3                | 1.9                | 2.3                | 3.4                | 6.5                | 9.5                | 10.0 <sup>2)</sup> |
| 16        |                    |                    |                    |                    |                    | 1.1                | 1.6                | 2.0                | 3.0                | 5.5                | 8.0                | 10.0 <sup>2)</sup> |
| 20        |                    |                    |                    |                    |                    |                    | 1.4                | 1.8                | 2.8                | 5.0                | 7.5                | 10.0 <sup>2)</sup> |
| 25        |                    |                    |                    |                    |                    |                    |                    | 1.8                | 2.7                | 4.8                | 7.0                | 10.0 <sup>2)</sup> |
| 32        |                    |                    |                    |                    |                    |                    |                    |                    | 2.4                | 4.1                | 6.2                | 9.3                |
| 40        |                    |                    |                    |                    |                    |                    |                    |                    |                    | 4.0                | 6.0                | 9.0                |

1) Selectivity limit current  $I_s$  under 0.5 kA

2) Selectivity limit current  $I_s$  = rated breaking capacity  $I_{cn}$  of the MCB

Shaded fields: no selectivity

# FAZ | Specifications

## Short Circuit Selectivity FAZ towards D01-D03 fuse link



In case of short circuit, there is selectivity between the miniature circuit breakers FAZ and the upstream fuses up to the specified values of the selectivity limit current  $I_s$  [kA] (i. e. in case of short-circuit currents  $I_{ks}$  under  $I_s$ , only the MCB will trip, in case of short circuit currents above this value both protective devices will respond).

\*) basically in accordance with EN 60898-1 D.5.2.b

Short circuit selectivity **characteristic B** towards fuse link **D01-D03\***)

| FAZ       | D01-D03 gL/gG      |                    |                    |                    |                    |                    |                    |                    |                    |
|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| $I_n$ [A] | 10                 | 16                 | 20                 | 25                 | 35                 | 50                 | 63                 | 80                 | 100                |
| 1.0       | <0.5 <sup>1)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.5       | <0.5 <sup>1)</sup> | 4.1                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 1.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 0.9                | 7.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 4         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 0.9                | 2.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 5         |                    | <0.5 <sup>1)</sup> | 0.5                | 0.8                | 1.7                | 4.0                | 7.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 6         |                    | <0.5 <sup>1)</sup> | 0.5                | 0.8                | 1.6                | 3.6                | 6.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 8         |                    |                    | 0.5                | 0.8                | 1.4                | 2.8                | 4.3                | 8.2                | 10.0 <sup>2)</sup> |
| 10        |                    |                    | 0.5                | 0.7                | 1.3                | 2.4                | 3.4                | 6.0                | 10.0 <sup>2)</sup> |
| 13        |                    |                    | <0.5 <sup>1)</sup> | 0.7                | 1.2                | 2.3                | 3.2                | 5.3                | 10.0 <sup>2)</sup> |
| 16        |                    |                    |                    | 0.6                | 1.1                | 2.2                | 2.9                | 4.6                | 10.0               |
| 20        |                    |                    |                    |                    | 1.1                | 2.1                | 2.8                | 4.4                | 9.3                |
| 25        |                    |                    |                    |                    | 1.1                | 2.0                | 2.7                | 4.2                | 8.7                |
| 32        |                    |                    |                    |                    |                    | 2.0                | 2.6                | 4.0                | 8.0                |
| 40        |                    |                    |                    |                    |                    |                    | 2.5                | 3.8                | 7.5                |
| 50        |                    |                    |                    |                    |                    |                    | 2.3                | 3.4                | 6.7                |
| 63        |                    |                    |                    |                    |                    |                    |                    |                    | 6.2                |

Short circuit selectivity **characteristic C** towards fuse link **D01-D03\***)

| FAZ       | D01-D03 gL/gG      |                    |                    |                    |                    |                    |                    |                    |                    |
|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| $I_n$ [A] | 10                 | 16                 | 20                 | 25                 | 35                 | 50                 | 63                 | 80                 | 100                |
| 0.75      | <0.5 <sup>1)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.0       | <0.5 <sup>1)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.5       | <0.5 <sup>1)</sup> | 0.5                | 0.6                | 0.9                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 0.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 0.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.9                | 5.2                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.8                | 4.7                | 9.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 4         | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.6                | 4.0                | 7.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 5         |                    | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 1.3                | 3.1                | 5.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 6         |                    | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 1.2                | 2.7                | 4.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 8         |                    | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 1.2                | 2.5                | 4.0                | 8.6                | 10.0 <sup>2)</sup> |
| 10        |                    |                    | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 1.2                | 2.3                | 3.1                | 5.4                | 10.0 <sup>2)</sup> |
| 13        |                    |                    |                    |                    | 1.1                | 2.2                | 3.0                | 4.9                | 10.0 <sup>2)</sup> |
| 16        |                    |                    |                    |                    | 1.1                | 2.1                | 2.8                | 4.4                | 9.5                |
| 20        |                    |                    |                    |                    | 1.0                | 2.0                | 2.6                | 4.0                | 8.3                |
| 25        |                    |                    |                    |                    |                    | 1.9                | 2.5                | 3.8                | 7.8                |
| 32        |                    |                    |                    |                    |                    |                    | 2.5                | 3.7                | 7.3                |
| 40        |                    |                    |                    |                    |                    |                    |                    | 3.5                | 7.0                |
| 50        |                    |                    |                    |                    |                    |                    |                    |                    | 6.5                |
| 63        |                    |                    |                    |                    |                    |                    |                    |                    |                    |

Short circuit selectivity **characteristic D** towards fuse link **D01-D03\***)

| FAZ       | D01-D03 gL/gG      |                    |                    |                    |                    |                    |                    |                    |                    |
|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| $I_n$ [A] | 10                 | 16                 | 20                 | 25                 | 35                 | 50                 | 63                 | 80                 | 100                |
| 0.5       | <0.5 <sup>1)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.3                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 0.9                | 2.8                | 9.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 0.8                | 2.2                | 6.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 0.7                | 1.9                | 5.4                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.0       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 0.7                | 1.8                | 4.8                | 9.3                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.5       | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.5                | 0.7                | 1.7                | 4.7                | 8.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 4         |                    | <0.5 <sup>1)</sup> | 0.5                | 0.7                | 1.7                | 4.6                | 7.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 5         |                    | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.5                | 3.5                | 5.8                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 6         |                    |                    | <0.5 <sup>1)</sup> | 0.5                | 1.3                | 2.9                | 4.5                | 9.0                | 10.0 <sup>2)</sup> |
| 8         |                    |                    | <0.5 <sup>1)</sup> | 0.5                | 1.2                | 2.4                | 3.5                | 6.0                | 10.0 <sup>2)</sup> |
| 10        |                    |                    |                    | 0.5                | 1.1                | 2.2                | 3.0                | 5.0                | 10.0 <sup>2)</sup> |
| 13        |                    |                    |                    |                    | 1.1                | 2.1                | 2.9                | 4.6                | 10.0 <sup>2)</sup> |
| 16        |                    |                    |                    |                    |                    | 1.9                | 2.6                | 3.9                | 9.0                |
| 20        |                    |                    |                    |                    |                    | 1.7                | 2.3                | 3.5                | 8.0                |
| 25        |                    |                    |                    |                    |                    |                    | 2.2                | 3.4                | 7.5                |
| 32        |                    |                    |                    |                    |                    |                    |                    | 2.9                | 6.0                |
| 40        |                    |                    |                    |                    |                    |                    |                    |                    | 5.7                |

<sup>1)</sup> Selectivity limit current  $I_s$  under 0.5 kA

<sup>2)</sup> Selectivity limit current  $I_s$  = rated breaking capacity  $I_{cn}$  of the MCB

Shaded fields: no selectivity

# FAZ | Specifications

## Short Circuit Selectivity FAZ towards DII-DIV fuse link



In case of short circuit, there is selectivity between the miniature circuit breakers FAZ and the upstream fuses up to the specified values of the selectivity limit current  $I_s$  [kA] (i. e. in case of short-circuit currents  $I_{ks}$  under  $I_s$ , only the MCB will trip, in case of short circuit currents above this value both protective devices will respond).

\*) basically in accordance with EN 60898-1 D.5.2.b

| FAZ<br>$I_n$ [A] | DII-DIV gL/gG      |                    |                    |                    |                    |                    |                    |                    |                    |
|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                  | 10                 | 16                 | 20                 | 25                 | 35                 | 50                 | 63                 | 80                 | 100                |
| 1.0              | <0.5 <sup>1)</sup> | 1.2                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.5              | <0.5 <sup>1)</sup> | 1.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.0              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.8                | 1.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.5              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.8                | 1.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.0              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.8                | 1.4                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.5              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.3                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 4                | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.0                | 3.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 5                | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 0.9                | 2.0                | 3.5                | 8.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 6                |                    | <0.5 <sup>1)</sup> | 0.6                | 0.9                | 1.8                | 3.2                | 7.4                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 8                |                    | <0.5 <sup>1)</sup> | 0.5                | 0.8                | 1.6                | 2.6                | 5.2                | 8.3                | 10.0 <sup>2)</sup> |
| 10               |                    |                    | 0.5                | 0.8                | 1.4                | 2.2                | 3.9                | 6.0                | 10.0 <sup>2)</sup> |
| 13               |                    |                    | 0.5                | 0.7                | 1.3                | 2.0                | 3.6                | 5.4                | 10.0 <sup>2)</sup> |
| 16               |                    |                    |                    | 0.6                | 1.2                | 1.9                | 3.2                | 4.6                | 8.4                |
| 20               |                    |                    |                    |                    | 1.2                | 1.8                | 3.1                | 4.4                | 7.8                |
| 25               |                    |                    |                    |                    | 1.2                | 1.8                | 3.0                | 4.2                | 7.3                |
| 32               |                    |                    |                    |                    |                    | 1.7                | 2.8                | 3.9                | 6.8                |
| 40               |                    |                    |                    |                    |                    |                    | 2.7                | 3.8                | 6.5                |
| 50               |                    |                    |                    |                    |                    |                    | 2.5                | 3.5                | 5.7                |
| 63               |                    |                    |                    |                    |                    |                    |                    |                    | 5.3                |

| FAZ<br>$I_n$ [A] | DII-DIV gL/gG      |                    |                    |                    |                    |                    |                    |                    |                    |
|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                  | 10                 | 16                 | 20                 | 25                 | 35                 | 50                 | 63                 | 80                 | 100                |
| 0.75             | 1.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.0              | <0.5 <sup>1)</sup> | 1.2                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.5              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 1.0                | 2.2                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.0              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.8                | 1.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.5              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.8                | 1.4                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.0              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.8                | 0.9                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.5              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 0.9                | 2.2                | 4.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 4                | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 0.8                | 1.8                | 3.6                | 9.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 5                | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 0.7                | 1.5                | 2.7                | 7.3                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 6                |                    | <0.5 <sup>1)</sup> | 0.5                | 0.6                | 1.4                | 2.4                | 5.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 8                |                    | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.3                | 2.2                | 4.7                | 8.7                | 10.0 <sup>2)</sup> |
| 10               |                    |                    | <0.5 <sup>1)</sup> | 0.6                | 1.3                | 2.0                | 3.6                | 5.4                | 10.0 <sup>2)</sup> |
| 13               |                    |                    |                    |                    | 1.3                | 1.9                | 3.3                | 5.0                | 9.4                |
| 16               |                    |                    |                    |                    | 1.2                | 1.8                | 3.2                | 4.4                | 8.0                |
| 20               |                    |                    |                    |                    | 1.2                | 1.8                | 3.1                | 4.1                | 7.0                |
| 25               |                    |                    |                    |                    |                    | 1.7                | 2.8                | 3.8                | 6.5                |
| 32               |                    |                    |                    |                    |                    |                    | 2.7                | 3.7                | 6.2                |
| 40               |                    |                    |                    |                    |                    |                    |                    | 3.5                | 5.9                |
| 50               |                    |                    |                    |                    |                    |                    |                    |                    | 5.5                |
| 63               |                    |                    |                    |                    |                    |                    |                    |                    |                    |

Short circuit selectivity **characteristic D** towards fuse link **DII-DIV\***)

| FAZ<br>$I_n$ [A] | DII-DIV gL/gG      |                    |                    |                    |                    |                    |                    |                    |                    |
|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                  | 10                 | 16                 | 20                 | 25                 | 35                 | 50                 | 63                 | 80                 | 100                |
| 0.5              | 0.5                | 3.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.0              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 1.0                | 2.4                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 1.5              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.7                | 1.2                | 3.5                | 7.7                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.0              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.0                | 2.8                | 5.8                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 2.5              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 1.4                | 2.3                | 4.6                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.0              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 0.9                | 2.3                | 4.3                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 3.5              | <0.5 <sup>1)</sup> | <0.5 <sup>1)</sup> | 0.6                | 0.9                | 2.1                | 4.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 4                |                    | <0.5 <sup>1)</sup> | 0.6                | 0.9                | 2.0                | 3.8                | 9.5                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 5                |                    | <0.5 <sup>1)</sup> | 0.5                | 0.7                | 1.7                | 3.1                | 7.0                | 10.0 <sup>2)</sup> | 10.0 <sup>2)</sup> |
| 6                |                    |                    | 0.5                | 0.7                | 1.5                | 2.6                | 5.3                | 9.1                | 10.0 <sup>2)</sup> |
| 8                |                    |                    | <0.5 <sup>1)</sup> | 0.7                | 1.4                | 2.2                | 3.9                | 6.0                | 10.0 <sup>2)</sup> |
| 10               |                    |                    |                    | 0.7                | 1.2                | 1.9                | 3.4                | 5.0                | 9.5                |
| 13               |                    |                    |                    |                    | 1.2                | 1.8                | 3.2                | 4.6                | 8.6                |
| 16               |                    |                    |                    |                    |                    | 1.6                | 2.7                | 4.0                | 7.4                |
| 20               |                    |                    |                    |                    |                    | 1.5                | 2.5                | 3.5                | 6.7                |
| 25               |                    |                    |                    |                    |                    |                    | 2.4                | 3.4                | 6.2                |
| 32               |                    |                    |                    |                    |                    |                    |                    | 2.8                | 5.0                |
| 40               |                    |                    |                    |                    |                    |                    |                    |                    | 4.8                |

<sup>1)</sup> Selectivity limit current  $I_s$  under 0.5 kA

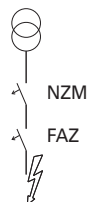
<sup>2)</sup> Selectivity limit current  $I_s$  = rated breaking capacity  $I_{cn}$  of the MCB

Shaded fields: no selectivity

# FAZ | Specifications

## Short-Circuit Selectivity

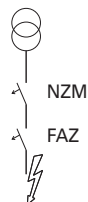
### Between FAZ-B and NZM 1/2



Selectivity-limit current  $I_s$  [kA] for selectivity between FAZ-B and NZM (overload and short-circuit release unit NZM at max. value).

| $I_n$ [A] | NZM...1-A...          |     |     |     |     |     | NZM...2-A...                    |     |     |     |     |     |     |     |     |
|-----------|-----------------------|-----|-----|-----|-----|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|           | $I_{cu} = 25 (50)$ kA |     |     |     |     |     | $I_{cu} = 25 (50)(100)(150)$ kA |     |     |     |     |     |     |     |     |
| FAZ-B     | 40                    | 50  | 63  | 80  | 100 | 125 | 40                              | 50  | 63  | 80  | 100 | 125 | 160 | 200 | 250 |
| 1         | 15                    | 15  | 15  | 15  | 15  | 15  | 15                              | 15  | 15  | 15  | 15  | 15  | 15  | 15  | 15  |
| 2         | 2                     | 15  | 15  | 15  | 15  | 15  | 3                               | 15  | 15  | 15  | 15  | 15  | 15  | 15  | 15  |
| 3         | 1.2                   | 2   | 3   | 3   | 10  | 15  | 1.5                             | 1.5 | 3   | 5   | 15  | 15  | 15  | 15  | 15  |
| 4         | 1.2                   | 2   | 3   | 3   | 8   | 15  | 1.2                             | 1.5 | 3   | 4   | 15  | 15  | 15  | 15  | 15  |
| 6         | 1.2                   | 2   | 2.5 | 3   | 5   | 10  | 1.2                             | 1.5 | 2.5 | 3   | 15  | 15  | 15  | 15  | 15  |
| 10        | 1.2                   | 1.5 | 2   | 2   | 4   | 10  | 1                               | 1.5 | 2.5 | 3   | 10  | 10  | 10  | 10  | 10  |
| 13        | 1                     | 1.5 | 2   | 2   | 4   | 10  | 1                               | 1.2 | 2   | 3   | 10  | 10  | 10  | 10  | 10  |
| 16        | 1                     | 1.2 | 1.5 | 2   | 3   | 8   | 1                               | 1.2 | 1.5 | 2.5 | 10  | 10  | 10  | 10  | 10  |
| 20        | 0.8                   | 1.2 | 1.5 | 1.5 | 3   | 8   | 1                               | 1.2 | 1.5 | 1.5 | 10  | 10  | 10  | 10  | 10  |
| 25        | 0.7                   | 1.2 | 1.5 | 1.5 | 3   | 7   | 0.8                             | 1   | 1.5 | 2   | 10  | 10  | 10  | 10  | 10  |
| 32        | -                     | 1.2 | 1   | 1.5 | 2   | 6   | -                               | 1   | 1.5 | 2   | 8   | 8   | 8   | 8   | 10  |
| 40        | -                     | -   | 1   | 1.5 | 2   | 5   | -                               | -   | 1.2 | 1.5 | 7   | 7   | 7   | 7   | 10  |
| 50        | -                     | -   | -   | 1.2 | 1.5 | 4   | -                               | -   | -   | 1.5 | 6   | 6   | 6   | 6   | 10  |
| 63        | -                     | -   | -   | -   | 1.5 | 3   | -                               | -   | -   | -   | 6   | 6   | 6   | 6   | 10  |

### Between FAZ-C and NZM 1/2



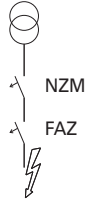
Selectivity-limit current  $I_s$  [kA] for selectivity between FAZ-C and NZM (overload and short-circuit release unit NZM at max. value).

| $I_n$ [A] | NZM...1-A...          |     |     |     |     |     | NZM...2-A...                    |     |     |     |     |     |     |     |     |
|-----------|-----------------------|-----|-----|-----|-----|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|           | $I_{cu} = 25 (50)$ kA |     |     |     |     |     | $I_{cu} = 25 (50)(100)(150)$ kA |     |     |     |     |     |     |     |     |
| FAZ-C     | 40                    | 50  | 63  | 80  | 100 | 125 | 40                              | 50  | 63  | 80  | 100 | 125 | 160 | 200 | 250 |
| 0.5       | 15                    | 15  | 15  | 15  | 15  | 15  | 15                              | 15  | 15  | 15  | 15  | 15  | 15  | 15  | 15  |
| 1         | 15                    | 15  | 15  | 15  | 15  | 15  | 15                              | 15  | 15  | 15  | 15  | 15  | 15  | 15  | 15  |
| 2         | 2                     | 15  | 15  | 15  | 15  | 15  | 3                               | 15  | 15  | 15  | 15  | 15  | 15  | 15  | 15  |
| 3         | 1.2                   | 2   | 3   | 3   | 10  | 15  | 1.5                             | 1.5 | 3   | 5   | 15  | 15  | 15  | 15  | 15  |
| 4         | 1.2                   | 2   | 3   | 3   | 8   | 15  | 1.2                             | 1.5 | 3   | 4   | 15  | 15  | 15  | 15  | 15  |
| 6         | 1.2                   | 2   | 2.5 | 3   | 5   | 10  | 1.2                             | 1.5 | 2.5 | 3   | 15  | 15  | 15  | 15  | 15  |
| 10        | 1.2                   | 1.5 | 2   | 2   | 4   | 10  | 1                               | 1.5 | 2.5 | 3   | 10  | 10  | 10  | 10  | 10  |
| 13        | 1                     | 1.5 | 2   | 2   | 4   | 10  | 1                               | 1.2 | 2   | 3   | 10  | 10  | 10  | 10  | 10  |
| 16        | 1                     | 1.2 | 1.5 | 2   | 3   | 8   | 1                               | 1.2 | 1.5 | 2.5 | 10  | 10  | 10  | 10  | 10  |
| 20        | 0.8                   | 1.2 | 1.5 | 1.5 | 3   | 8   | 1                               | 1.2 | 1.5 | 1.5 | 10  | 10  | 10  | 10  | 10  |
| 25        | 0.7                   | 1.2 | 1.5 | 1.5 | 3   | 7   | 0.8                             | 1   | 1.5 | 2   | 10  | 10  | 10  | 10  | 10  |
| 32        | -                     | 1.2 | 1   | 1.5 | 2   | 6   | -                               | 1   | 1.5 | 2   | 8   | 8   | 8   | 8   | 10  |
| 40        | -                     | -   | 1   | 1.5 | 2   | 5   | -                               | -   | 1.2 | 1.5 | 7   | 7   | 7   | 7   | 10  |
| 50        | -                     | -   | -   | 1.2 | 1.5 | 4   | -                               | -   | -   | 1.5 | 6   | 6   | 6   | 6   | 10  |
| 63        | -                     | -   | -   | -   | 1.5 | 3   | -                               | -   | -   | -   | 6   | 6   | 6   | 6   | 10  |

# FAZ | Specifications

## Short-Circuit Selectivity

### Between FAZ-D and NZM 1/2



Selectivity-limit current  $I_s$  [kA] for selectivity between FAZ-D and NZM (overload and short-circuit release unit NZM at max. value).

| $I_n$ [A] | NZM...1-A...                  |     |      |      |      |     | NZM...2-A...                            |     |      |      |      |     |     |     |     |
|-----------|-------------------------------|-----|------|------|------|-----|---|-----|------|------|------|-----|-----|-----|-----|
|           | $I_{cu} = 25 (50) \text{ kA}$ |     |      |      |      |     | $I_{cu} = 25 (50)(100)(150) \text{ kA}$ |     |      |      |      |     |     |     |     |
| FAZ-D     | 40                            | 50  | 63   | 80   | 100  | 125 | 40                                      | 50  | 63   | 80   | 100  | 125 | 160 | 200 | 250 |
| 0.5       | 9                             | 15  | 15   | 15   | 15   | 15  | 9                                       | 15  | 15   | 15   | 15   | 15  | 15  | 15  | 15  |
| 1         | 0.5                           | 0.7 | 1.1  | 1.9  | 4.2  | 15  | 0.5                                     | 0.7 | 1.1  | 1.9  | 4.2  | 15  | 15  | 15  | 15  |
| 1.5       | 0.3                           | 0.6 | 0.8  | 1.1  | 1.6  | 2.6 | 0.3                                     | 0.6 | 0.8  | 1.1  | 1.6  | 2.6 | 5   | 15  | 15  |
| 2         | 0.3                           | 0.5 | 0.75 | 0.95 | 1.4  | 2.4 | 0.3                                     | 0.5 | 0.75 | 0.95 | 1.4  | 2.4 | 4.5 | 10  | 15  |
| 2.5       | 0.3                           | 0.5 | 0.75 | 0.95 | 1.3  | 2.3 | 0.3                                     | 0.5 | 0.75 | 0.95 | 1.3  | 2.3 | 4.2 | 9   | 15  |
| 3         | 0.3                           | 0.5 | 0.7  | 0.9  | 1.3  | 2.1 | 0.3                                     | 0.5 | 0.7  | 0.9  | 1.3  | 2.1 | 3.6 | 7   | 15  |
| 3.5       | 0.3                           | 0.5 | 0.7  | 0.9  | 1.3  | 2   | 0.3                                     | 0.5 | 0.7  | 0.9  | 1.3  | 2   | 3.3 | 5.6 | 10  |
| 4         | 0.3                           | 0.5 | 0.7  | 0.9  | 1.3  | 1.9 | 0.3                                     | 0.5 | 0.7  | 0.9  | 1.3  | 1.9 | 3   | 4.7 | 8   |
| 5         | 0.3                           | 0.5 | 0.7  | 0.9  | 1.3  | 1.9 | 0.3                                     | 0.5 | 0.7  | 0.9  | 1.3  | 1.9 | 3   | 4.4 | 7   |
| 6         | 0.3                           | 0.5 | 0.6  | 0.9  | 1.3  | 1.8 | 0.3                                     | 0.5 | 0.6  | 0.9  | 1.3  | 1.8 | 2.8 | 4   | 6   |
| 8         | 0.3                           | 0.3 | 0.6  | 0.75 | 1    | 1.3 | 0.3                                     | 0.3 | 0.6  | 0.75 | 1    | 1.3 | 1.8 | 2.7 | 4   |
| 10        | 0.3                           | 0.3 | 0.6  | 0.75 | 0.95 | 1.2 | 0.3                                     | 0.3 | 0.6  | 0.75 | 0.95 | 1.2 | 1.7 | 2.4 | 3.6 |
| 13        | 0.3                           | 0.3 | 0.5  | 0.7  | 0.9  | 1.1 | 0.3                                     | 0.3 | 0.5  | 0.7  | 0.9  | 1.1 | 1.6 | 2.2 | 3.2 |
| 16        | -                             | 0.3 | 0.5  | 0.65 | 0.8  | 1.1 | -                                       | 0.3 | 0.5  | 0.65 | 0.8  | 1.1 | 1.5 | 2.1 | 3   |
| 20        | -                             | -   | 0.5  | 0.65 | 0.8  | 1.1 | -                                       | -   | 0.5  | 0.65 | 0.8  | 1.1 | 1.4 | 2.1 | 3   |
| 25        | -                             | -   | 0.5  | 0.65 | 0.8  | 1.1 | -                                       | -   | 0.5  | 0.65 | 0.8  | 1.1 | 1.4 | 1.9 | 2.7 |
| 32        | -                             | -   | -    | -    | 0.8  | 1.1 | -                                       | -   | -    | -    | 0.8  | 1.1 | 1.4 | 1.9 | 2.7 |
| 40        | -                             | -   | -    | -    | -    | 1   | -                                       | -   | -    | -    | -    | 1   | 1.4 | 1.8 | 2.6 |

# FAZ | Specifications

## Back-up Protection

### FAZ/C through PLHT/C

Upstream PLHT protects downstream FAZ up to the specified prospective short-circuit current. Test acc. to IEC 60947.2 -A.6

| $I_n$ [A] | PLHT/C    |    |    |    |    |    |    |     |       |
|-----------|-----------|----|----|----|----|----|----|-----|-------|
|           | $I_n$ [A] |    |    |    |    |    |    |     |       |
| FAZ/C     | 20        | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125   |
| 1         | 25        | 25 | 25 | 25 | 25 | 25 | 20 | 20  | 15 kA |
| 2         | 25        | 25 | 25 | 25 | 25 | 25 | 20 | 20  | 15 kA |
| 4         | 25        | 25 | 25 | 25 | 25 | 25 | 20 | 20  | 15 kA |
| 6         | 25        | 25 | 25 | 25 | 25 | 25 | 20 | 20  | 15 kA |
| 10        | 25        | 25 | 25 | 25 | 25 | 25 | 20 | 20  | 15 kA |
| 13        | 25        | 25 | 25 | 25 | 25 | 25 | 20 | 20  | 15 kA |
| 16        | 25        | 25 | 25 | 25 | 25 | 25 | 20 | 20  | 15 kA |
| 20        | 1)        | 25 | 25 | 25 | 25 | 25 | 20 | 20  | 15 kA |
| 25        | 1)        | 1) | 25 | 25 | 25 | 25 | 20 | 20  | 15 kA |
| 32        | 1)        | 1) | 1) | 25 | 25 | 25 | 20 | 20  | -     |
| 40        | 1)        | 1) | 1) | 1) | 25 | 25 | 20 | 20  | -     |
| 50        | 1)        | 1) | 1) | 1) | 1) | 25 | 20 | 20  | -     |
| 63        | 1)        | 1) | 1) | 1) | 1) | 1) | -  | -   | -     |

1)  $I_n$  (PLHT)  $\leq I_n$  (FAZ)

### FAZ / CL-PKZ0

Back-up tests acc. to EN/IEC 60947-2, App. A:  $U = 1.05 U_e$ , (O - t - CO)

| $I_n$ [A] | FAZ- $I_n/1(2,3,4)/B(C)$ + CL-PKZ0<br>$U_e = 230/400$ V |
|-----------|---|
| 0.16      | 65 kA   |
| 0.25      | 65 kA   |
| 0.5       | 65 kA   |
| 0.75      | 65 kA   |
| 1         | 65 kA   |
| 1.5       | 65 kA   |
| 2         | 65 kA   |
| 2.5       | 65 kA   |
| 3         | 65 kA   |
| 3.5       | 65 kA   |
| 4         | 65 kA   |
| 5         | 45 kA   |
| 6         | 45 kA   |
| 8         | 45 kA   |
| 10        | 45 kA   |
| 12        | 45 kA   |
| 13        | 45 kA   |
| 15        | 45 kA   |
| 16        | 45 kA   |
| 20        | 45 kA   |
| 25        | 45 kA   |
| 32        | 45 kA   |
| 40        | 25 kA   |
| 50        | 25 kA   |
| 63        | 25 kA   |

### FAZ / NZM7

| $I_n$ [A] | FAZ- $I_n/1(2,3,4)/B(C)$ + NZM7-40(...100)<br>$U_e = 230/400$ V |
|-----------|---|
| 0.16      | 25 kA   |
| 0.25      | 25 kA   |
| 0.5       | 25 kA   |
| 0.75      | 25 kA   |
| 1         | 25 kA   |
| 1.5       | 25 kA   |
| 2         | 25 kA   |
| 2.5       | 25 kA   |
| 3         | 25 kA   |
| 3.5       | 25 kA   |
| 4         | 25 kA   |
| 5         | 20 kA   |
| 6         | 20 kA   |
| 8         | 20 kA   |
| 10        | 20 kA   |
| 12        | 20 kA   |
| 13        | 20 kA   |
| 15        | 20 kA   |
| 16        | 20 kA   |
| 20        | 18 kA   |
| 25        | 18 kA   |
| 32        | 18 kA   |
| 40        | 18 kA   |
| 50        | 15 kA   |
| 63        | 15 kA   |



# FAZ | Specifications

## Back-up Protection

### FAZ / NZMB1

$U_e = 230/400\text{ V}$ :  $I_{cu}$  (FAZ) = 15 kA

$U_e = 230/400\text{ V}$ :  $I_{cu}$  (NZMB1) = 25 kA

Back-up test acc. EN/IEC 60947-2, app. A:  $U = 1.05U_e$ , (O - t - CO)

(Settings NZMB1:  $I_r$ ,  $I_{rm}$  at max. volumes)

| $I_n$ [A] | <b>FAZ-<math>I_n/1(2,3,4)/B(C)</math> + NZMB1</b><br>$U_e = 230/400\text{ V}$ |
|-----------|---|
| 0.16      | 25 kA   |
| 0.25      | 25 kA   |
| 0.5       | 25 kA   |
| 0.75      | 25 kA   |
| 1         | 25 kA   |
| 1.5       | 25 kA   |
| 2         | 25 kA   |
| 2.5       | 25 kA   |
| 3         | 25 kA   |
| 3.5       | 25 kA   |
| 4         | 25 kA   |
| 5         | 25 kA   |
| 6         | 25 kA   |
| 8         | 25 kA   |
| 10        | 25 kA   |
| 12        | 25 kA   |
| 13        | 25 kA   |
| 15        | 25 kA   |
| 16        | 25 kA   |
| 20        | 20 kA   |
| 25        | 20 kA   |
| 32        | 20 kA   |
| 40        | 20 kA   |
| 50        | 15 kA   |
| 63        | 15 kA   |

### FAZ / NZMN1

$U_e = 230/400\text{ V}$ :  $I_{cu}$  (FAZ) = 15 kA

$U_e = 230/400\text{ V}$ :  $I_{cu}$  (NZMN1) = 25 kA

Back-up test acc. EN/IEC 60947-2, app. A:  $U = 1.05U_e$ , (O - t - CO)

(Settings NZM at max. values)

| $I_n$ [A] | <b>FAZ-<math>I_n/1(2,3,4)/B(C)</math> + NZMN1</b><br>$U_e = 230/400\text{ V}$ |
|-----------|---|
| 0.16      | 25 kA   |
| 0.25      | 25 kA   |
| 0.5       | 25 kA   |
| 0.75      | 25 kA   |
| 1         | 25 kA   |
| 1.5       | 25 kA   |
| 2         | 25 kA   |
| 2.5       | 25 kA   |
| 3         | 25 kA   |
| 3.5       | 25 kA   |
| 4         | 25 kA   |
| 5         | 25 kA   |
| 6         | 25 kA   |
| 8         | 25 kA   |
| 10        | 25 kA   |
| 12        | 25 kA   |
| 13        | 25 kA   |
| 15        | 25 kA   |
| 16        | 25 kA   |
| 20        | 20 kA   |
| 25        | 20 kA   |
| 32        | 20 kA   |
| 40        | 20 kA   |
| 50        | 15 kA   |
| 63        | 15 kA   |

# FAZ | Specifications

## Back-up Protection

### FAZ / NZMB2

$U_e = 230/400\text{ V}$ :  $I_{cu}$  (FAZ) = 15 kA  
 $U_e = 230/400\text{ V}$ :  $I_{cu}$  (NZMB2) = 25 kA  
 $U_e = 133/230\text{ V}$ :  $I_{cu}$  (FAZ) = 20 kA  
 $U_e = 133/230\text{ V}$ :  $I_{cu}$  (NZMB2) = 30 kA  
 Back-up test acc. EN/IEC 60947-2, app. A:  $U = 1.05U_e$ , (O - t - CO)  
 (Settings NZM at max. values)

| $I_n$ [A] | FAZ- $I_n/1(2,3,4)/B(C)$ + NZMB2 |                          |
|-----------|----------------------------------|--------------------------|
|           | $U_e = 230/400\text{ V}$         | $U_e = 133/230\text{ V}$ |
| 0.16      | 25 kA                            | 30 kA                    |
| 0.25      | 25 kA                            | 30 kA                    |
| 0.5       | 25 kA                            | 30 kA                    |
| 0.75      | 25 kA                            | 30 kA                    |
| 1         | 25 kA                            | 30 kA                    |
| 1.5       | 25 kA                            | 30 kA                    |
| 2         | 25 kA                            | 30 kA                    |
| 2.5       | 25 kA                            | 30 kA                    |
| 3         | 25 kA                            | 30 kA                    |
| 3.5       | 25 kA                            | 30 kA                    |
| 4         | 25 kA                            | 30 kA                    |
| 5         | 25 kA                            | 25 kA                    |
| 6         | 25 kA                            | 25 kA                    |
| 8         | 25 kA                            | 25 kA                    |
| 10        | 25 kA                            | 25 kA                    |
| 12        | 20 kA                            | 25 kA                    |
| 13        | 20 kA                            | 25 kA                    |
| 15        | 20 kA                            | 25 kA                    |
| 16        | 20 kA                            | 25 kA                    |
| 20        | 20 kA                            | 25 kA                    |
| 25        | 20 kA                            | 25 kA                    |
| 32        | 20 kA                            | 25 kA                    |
| 40        | 15 kA                            | 20 kA                    |
| 50        | 15 kA                            | 20 kA                    |
| 63        | 15 kA                            | 20 kA                    |

### FAZ / NZMN2

$U_e = 230/400\text{ V}$ :  $I_{cu}$  (FAZ) = 15 kA  
 $U_e = 230/400\text{ V}$ :  $I_{cu}$  (NZMN2) = 50 kA  
 $U_e = 133/230\text{ V}$ :  $I_{cu}$  (FAZ) = 20 kA  
 $U_e = 133/230\text{ V}$ :  $I_{cu}$  (NZMN2) = 85 kA  
 Back-up test acc. EN/IEC 60947-2, app. A:  $U = 1.05U_e$ , (O - t - CO)  
 (Settings NZM at max. values)

| $I_n$ [A] | FAZ- $I_n/1(2,3,4)/B(C)$ + NZMN2 |                          |
|-----------|----------------------------------|--------------------------|
|           | $U_e = 230/400\text{ V}$         | $U_e = 133/230\text{ V}$ |
| 0.16      | 50 kA                            | 85 kA                    |
| 0.25      | 50 kA                            | 85 kA                    |
| 0.5       | 50 kA                            | 85 kA                    |
| 0.75      | 50 kA                            | 85 kA                    |
| 1         | 50 kA                            | 85 kA                    |
| 1.5       | 50 kA                            | 85 kA                    |
| 2         | 50 kA                            | 85 kA                    |
| 2.5       | 50 kA                            | 85 kA                    |
| 3         | 50 kA                            | 85 kA                    |
| 3.5       | 50 kA                            | 85 kA                    |
| 4         | 50 kA                            | 85 kA                    |
| 5         | 50 kA                            | 80 kA                    |
| 6         | 50 kA                            | 80 kA                    |
| 8         | 50 kA                            | 80 kA                    |
| 10        | 50 kA                            | 80 kA                    |
| 12        | 30 kA                            | 60 kA                    |
| 13        | 30 kA                            | 60 kA                    |
| 15        | 30 kA                            | 60 kA                    |
| 16        | 30 kA                            | 60 kA                    |
| 20        | 30 kA                            | 60 kA                    |
| 25        | 30 kA                            | 60 kA                    |
| 32        | 30 kA                            | 60 kA                    |
| 40        | 20 kA                            | 40 kA                    |
| 50        | 20 kA                            | 40 kA                    |
| 63        | 20 kA                            | 40 kA                    |

# FAZ | Specifications

## Back-up Protection

### FAZ / NZMH2

$U_e = 230/400\text{ V}$ :  $I_{cu}$  (FAZ) = 15 kA  
 $U_e = 230/400\text{ V}$ :  $I_{cu}$  (NZMH2) = 150 kA  
 $U_e = 133/230\text{ V}$ :  $I_{cu}$  (FAZ) = 20 kA  
 $U_e = 133/230\text{ V}$ :  $I_{cu}$  (NZMH2) = 150 kA  
 Back-up test acc. EN/IEC 60947-2, app. A:  $U = 1.05U_e$ , (O - t - CO)  
 (Settings NZM at max. values)

| $I_n$ [A] | FAZ- $I_n/1(2,3,4)/B(C)$ + NZMH2 |                          |
|-----------|----------------------------------|--------------------------|
|           | $U_e = 230/400\text{ V}$         | $U_e = 133/230\text{ V}$ |
| 0.16      | 50 kA                            | 85 kA                    |
| 0.25      | 50 kA                            | 85 kA                    |
| 0.5       | 50 kA                            | 85 kA                    |
| 0.75      | 50 kA                            | 85 kA                    |
| 1         | 50 kA                            | 85 kA                    |
| 1.5       | 50 kA                            | 85 kA                    |
| 2         | 50 kA                            | 85 kA                    |
| 2.5       | 50 kA                            | 85 kA                    |
| 3         | 50 kA                            | 85 kA                    |
| 3.5       | 50 kA                            | 85 kA                    |
| 4         | 50 kA                            | 85 kA                    |
| 5         | 50 kA                            | 80 kA                    |
| 6         | 50 kA                            | 80 kA                    |
| 8         | 50 kA                            | 80 kA                    |
| 10        | 50 kA                            | 80 kA                    |
| 12        | 30 kA                            | 60 kA                    |
| 13        | 30 kA                            | 60 kA                    |
| 15        | 30 kA                            | 60 kA                    |
| 16        | 30 kA                            | 60 kA                    |
| 20        | 30 kA                            | 60 kA                    |
| 25        | 30 kA                            | 60 kA                    |
| 32        | 30 kA                            | 60 kA                    |
| 40        | 20 kA                            | 40 kA                    |
| 50        | 20 kA                            | 40 kA                    |
| 63        | 20 kA                            | 40 kA                    |

### FAZ / NZML2

$U_e = 230/400\text{ V}$ :  $I_{cu}$  (FAZ) = 15 kA  
 $U_e = 230/400\text{ V}$ :  $I_{cu}$  (NZML2) = 150 kA  
 $U_e = 133/230\text{ V}$ :  $I_{cu}$  (FAZ) = 20 kA  
 $U_e = 133/230\text{ V}$ :  $I_{cu}$  (NZML2) = 150 kA  
 Back-up test acc. EN/IEC 60947-2, app. A:  $U = 1.05U_e$ , (O - t - CO)  
 (Settings NZM at max. values)

| $I_n$ [A] | FAZ- $I_n/1(2,3,4)/B(C)$ + NZML2 |                          |
|-----------|----------------------------------|--------------------------|
|           | $U_e = 230/400\text{ V}$         | $U_e = 133/230\text{ V}$ |
| 0.16      | 50 kA                            | 85 kA                    |
| 0.25      | 50 kA                            | 85 kA                    |
| 0.5       | 50 kA                            | 85 kA                    |
| 0.75      | 50 kA                            | 85 kA                    |
| 1         | 50 kA                            | 85 kA                    |
| 1.5       | 50 kA                            | 85 kA                    |
| 2         | 50 kA                            | 85 kA                    |
| 2.5       | 50 kA                            | 85 kA                    |
| 3         | 50 kA                            | 85 kA                    |
| 3.5       | 50 kA                            | 85 kA                    |
| 4         | 50 kA                            | 85 kA                    |
| 5         | 50 kA                            | 80 kA                    |
| 6         | 50 kA                            | 80 kA                    |
| 8         | 50 kA                            | 80 kA                    |
| 10        | 50 kA                            | 80 kA                    |
| 12        | 30 kA                            | 60 kA                    |
| 13        | 30 kA                            | 60 kA                    |
| 15        | 30 kA                            | 60 kA                    |
| 16        | 30 kA                            | 60 kA                    |
| 20        | 30 kA                            | 60 kA                    |
| 25        | 30 kA                            | 60 kA                    |
| 32        | 30 kA                            | 60 kA                    |
| 40        | 20 kA                            | 40 kA                    |
| 50        | 20 kA                            | 40 kA                    |
| 63        | 20 kA                            | 40 kA                    |

# FAZ | Specifications

## Back-up Protection

### FAZ / NH

$U_e = 230\text{ V}$ :  $I_{cu}$  (FAZ) = 15 (10) kA (acc. to IEC/EN 60947)

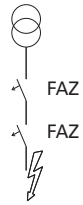
$U_e = 500\text{ V}$ :  $I_{cu}$  (NH00 125 A gL / gG) = 120kA

| $I_n$ [A] | <b>FAZ-I<sub>n</sub>/B,(C),(D)... + NH00 125 A gL/gG</b><br>IT-system U = 230 V |
|-----------|---|
| 0,5       | 50 kA   |
| 1         | 50 kA   |
| 2         | 50 kA   |
| 3         | 50 kA   |
| 4         | 50 kA   |
| 6         | 50 kA   |
| 10        | 50 kA   |
| 13        | 50 kA   |
| 16        | 50 kA   |
| 20        | 50 kA   |
| 25        | 50 kA   |
| 32        | 50 kA   |
| 40        | 50 kA   |
| 50        | 50 kA   |
| 63        | 50 kA   |

# FAZ | Specifications

## Overload Selectivity

### FAZ-B(C)(D) to FAZ-B



Upstream side FAZ, Characteristic B  
Downstream side FAZ, Characteristic B, C, D

x ... Selectivity range (i.e. only the downstream switch drops in case  $I < I_s$ )

| Upstream side                           | FAZ Characteristic B                              |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type B rated current $I_n$ [A]          | 2 3 4 6 10 13 16 20 25 32 40 50 63                |   |   |   |   |   |   |   |   |   |   |   |   |
| Selectivity limiting current $I_s$ [A]  | 7 10.5 14 21 35 45.5 56 70 87.5 112 140 175 220.5 |   |   |   |   |   |   |   |   |   |   |   |   |
| Downstream side<br>FAZ Characteristic B | 2   | x | x | x | x | x | x | x | x | x | x | x | x |
|   | 3   |   | x | x | x | x | x | x | x | x | x | x | x |
|   | 4   |   |   | x | x | x | x | x | x | x | x | x | x |
|   | 6   |   |   |   | x | x | x | x | x | x | x | x | x |
|   | 10  |   |   |   |   | x | x | x | x | x | x | x | x |
|   | 13  |   |   |   |   |   | x | x | x | x | x | x | x |
|   | 16  |   |   |   |   |   |   | x | x | x | x | x | x |
|   | 20  |   |   |   |   |   |   |   | x | x | x | x | x |
|   | 25  |   |   |   |   |   |   |   |   | x | x | x | x |
|   | 32  |   |   |   |   |   |   |   |   |   | x | x | x |
|   | 40  |   |   |   |   |   |   |   |   |   |   | x | x |
|   | 50  |   |   |   |   |   |   |   |   |   |   |   | x |
|   | 63  |   |   |   |   |   |   |   |   |   |   |   |   |

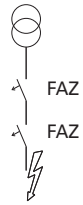
| Upstream side                           | FAZ Characteristic B                              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type B rated current $I_n$ [A]          | 2 3 4 6 10 13 16 20 25 32 40 50 63                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Selectivity limiting current $I_s$ [A]  | 7 10.5 14 21 35 45.5 56 70 87.5 112 140 175 220.5 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Downstream side<br>FAZ Characteristic C | 0.5   | x | x | x | x | x | x | x | x | x | x | x | x |   |   |   |
|   | 1   | x | x | x | x | x | x | x | x | x | x | x | x |   |   |   |
|   | 2   |   |   | x | x | x | x | x | x | x | x | x | x |   |   |   |
|   | 3   |   |   |   | x | x | x | x | x | x | x | x | x |   |   |   |
|   | 4   |   |   |   |   | x | x | x | x | x | x | x | x |   |   |   |
|   | 6   |   |   |   |   |   | x | x | x | x | x | x | x |   |   |   |
|   | 8   |   |   |   |   |   |   | x | x | x | x | x | x |   |   |   |
|   | 10  |   |   |   |   |   |   |   | x | x | x | x | x |   |   |   |
|   | 13  |   |   |   |   |   |   |   |   | x | x | x | x |   |   |   |
|   | 16  |   |   |   |   |   |   |   |   |   | x | x | x |   |   |   |
|   | 20  |   |   |   |   |   |   |   |   |   |   | x | x |   |   |   |
|   | 25  |   |   |   |   |   |   |   |   |   |   |   | x |   |   |   |
|   | 32  |   |   |   |   |   |   |   |   |   |   |   |   | x |   |   |
|   | 40  |   |   |   |   |   |   |   |   |   |   |   |   |   | x |   |
|   | 50  |   |   |   |   |   |   |   |   |   |   |   |   |   |   | x |
| 63                                      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | x |

| Upstream side                           | FAZ Characteristic B                              |  |  |  |  |   |   |   |   |   |   |   |   |   |   |
|---|---|--|--|--|--|---|---|---|---|---|---|---|---|---|---|
| Type B rated current $I_n$ [A]          | 2 3 4 6 10 13 16 20 25 32 40 50 63                |  |  |  |  |   |   |   |   |   |   |   |   |   |   |
| Selectivity limiting current $I_s$ [A]  | 7 10.5 14 21 35 45.5 56 70 87.5 112 140 175 220.5 |  |  |  |  |   |   |   |   |   |   |   |   |   |   |
| Downstream side<br>FAZ Characteristic D | 2   |  |  |  |  | x | x | x | x | x | x | x | x |   |   |
|   | 4   |  |  |  |  |   |   | x | x | x | x | x | x |   |   |
|   | 6   |  |  |  |  |   |   |   | x | x | x | x | x |   |   |
|   | 10  |  |  |  |  |   |   |   |   | x | x | x | x |   |   |
|   | 13  |  |  |  |  |   |   |   |   |   | x | x | x |   |   |
|   | 16  |  |  |  |  |   |   |   |   |   |   | x | x |   |   |
|   | 20  |  |  |  |  |   |   |   |   |   |   |   | x |   |   |
|   | 25  |  |  |  |  |   |   |   |   |   |   |   |   | x |   |
|   | 32  |  |  |  |  |   |   |   |   |   |   |   |   |   | x |
| 40                                      |   |  |  |  |  |   |   |   |   |   |   |   |   |   | x |

# FAZ | Specifications

## Overload Selectivity

### FAZ-B(C)(D) to FAZ-C



Upstream side FAZ, Characteristic C  
Downstream side FAZ, Characteristic B, C, D

x ... Selectivity range (i.e. only the downstream switch drops in case  $I < I_s$ )

| Upstream side →                         |    | FAZ Characteristic C |     |      |      |      |      |      |    |      |      |     |       |       |     |     |       |   |
|---|----|----------------------|-----|------|------|------|------|------|----|------|------|-----|-------|-------|-----|-----|-------|---|
| Type B rated current $I_n$ [A]          |    | 0.5                  | 1   | 2    | 3    | 4    | 6    | 8    | 10 | 13   | 16   | 20  | 25    | 32    | 40  | 50  | 63    |   |
| Selectivity limiting current $I_s$ [A]  |    | 2.85                 | 5.7 | 11.4 | 17.1 | 22.8 | 34.2 | 45.6 | 57 | 74.1 | 91.2 | 114 | 142.5 | 182.4 | 228 | 285 | 359.1 |   |
| Downstream side<br>FAZ Characteristic B | 2  |                      |     | x    | x    | x    | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |   |
|   | 3  |                      |     |      | x    | x    | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |   |
|   | 4  |                      |     |      |      | x    | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |   |
|   | 6  |                      |     |      |      |      | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |   |
|   | 10 |                      |     |      |      |      |      |      | x  | x    | x    | x   | x     | x     | x   | x   | x     |   |
|   | 13 |                      |     |      |      |      |      |      |    | x    | x    | x   | x     | x     | x   | x   | x     |   |
|   | 16 |                      |     |      |      |      |      |      |    |      | x    | x   | x     | x     | x   | x   | x     |   |
|   | 20 |                      |     |      |      |      |      |      |    |      |      | x   | x     | x     | x   | x   | x     |   |
|   | 25 |                      |     |      |      |      |      |      |    |      |      |     | x     | x     | x   | x   | x     |   |
|   | 32 |                      |     |      |      |      |      |      |    |      |      |     |       | x     | x   | x   | x     |   |
|   | 40 |                      |     |      |      |      |      |      |    |      |      |     |       |       |     | x   | x     |   |
|   | 50 |                      |     |      |      |      |      |      |    |      |      |     |       |       |     |     | x     | x |
|   | 63 |                      |     |      |      |      |      |      |    |      |      |     |       |       |     |     |       | x |

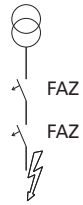
| Upstream side →                         |     | FAZ Characteristic C |     |      |      |      |      |      |    |      |      |     |       |       |     |     |       |
|---|-----|----------------------|-----|------|------|------|------|------|----|------|------|-----|-------|-------|-----|-----|-------|
| Type B rated current $I_n$ [A]          |     | 0.5                  | 1   | 2    | 3    | 4    | 6    | 8    | 10 | 13   | 16   | 20  | 25    | 32    | 40  | 50  | 63    |
| Selectivity limiting current $I_s$ [A]  |     | 2.85                 | 5.7 | 11.4 | 17.1 | 22.8 | 34.2 | 45.6 | 57 | 74.1 | 91.2 | 114 | 142.5 | 182.4 | 228 | 285 | 359.1 |
| Downstream side<br>FAZ Characteristic C | 0.5 |                      | x   | x    | x    | x    | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 1   |                      |     | x    | x    | x    | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 2   |                      |     |      | x    | x    | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 3   |                      |     |      |      | x    | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 4   |                      |     |      |      |      | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 6   |                      |     |      |      |      |      | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 8   |                      |     |      |      |      |      |      | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 10  |                      |     |      |      |      |      |      |    | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 13  |                      |     |      |      |      |      |      |    |      | x    | x   | x     | x     | x   | x   | x     |
|   | 16  |                      |     |      |      |      |      |      |    |      |      | x   | x     | x     | x   | x   | x     |
|   | 20  |                      |     |      |      |      |      |      |    |      |      |     | x     | x     | x   | x   | x     |
|   | 25  |                      |     |      |      |      |      |      |    |      |      |     |       | x     | x   | x   | x     |
|   | 32  |                      |     |      |      |      |      |      |    |      |      |     |       |       | x   | x   | x     |
| 40                                      |     |                      |     |      |      |      |      |      |    |      |      |     |       |       | x   | x   |       |
| 50                                      |     |                      |     |      |      |      |      |      |    |      |      |     |       |       |     | x   | x     |
| 63                                      |     |                      |     |      |      |      |      |      |    |      |      |     |       |       |     |     | x     |

| Upstream side →                         |    | FAZ Characteristic C |     |      |      |      |      |      |    |      |      |     |       |       |     |     |       |
|---|----|----------------------|-----|------|------|------|------|------|----|------|------|-----|-------|-------|-----|-----|-------|
| Type B rated current $I_n$ [A]          |    | 0.5                  | 1   | 2    | 3    | 4    | 6    | 8    | 10 | 13   | 16   | 20  | 25    | 32    | 40  | 50  | 63    |
| Selectivity limiting current $I_s$ [A]  |    | 2.85                 | 5.7 | 11.4 | 17.1 | 22.8 | 34.2 | 45.6 | 57 | 74.1 | 91.2 | 114 | 142.5 | 182.4 | 228 | 285 | 359.1 |
| Downstream side<br>FAZ Characteristic D | 2  |                      |     |      |      | x    | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 4  |                      |     |      |      |      | x    | x    | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 6  |                      |     |      |      |      |      |      | x  | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 10 |                      |     |      |      |      |      |      |    | x    | x    | x   | x     | x     | x   | x   | x     |
|   | 13 |                      |     |      |      |      |      |      |    |      | x    | x   | x     | x     | x   | x   | x     |
|   | 16 |                      |     |      |      |      |      |      |    |      |      | x   | x     | x     | x   | x   | x     |
|   | 20 |                      |     |      |      |      |      |      |    |      |      |     | x     | x     | x   | x   | x     |
|   | 25 |                      |     |      |      |      |      |      |    |      |      |     |       |       | x   | x   | x     |
| 32                                      |    |                      |     |      |      |      |      |      |    |      |      |     |       |       |     |     |       |
| 40                                      |    |                      |     |      |      |      |      |      |    |      |      |     |       |       |     |     |       |

# FAZ | Specifications

## Overload Selectivity

### FAZ-B(C)(D) to FAZ-D



**Upstream side FAZ, Characteristic D**  
**Downstream side FAZ, Characteristic B, C, D**

x ... Selectivity range (i.e. only the downstream switch drops in case  $I < I_s$ )

| Upstream side →                         |    | FAZ Characteristic D |    |    |     |       |     |     |       |     |     |
|---|----|----------------------|----|----|-----|-------|-----|-----|-------|-----|-----|
| Type B rated current $I_n$ [A]          |    | 2                    | 4  | 6  | 10  | 13    | 16  | 20  | 25    | 32  | 40  |
| Selectivity limiting current $I_s$ [A]  |    | 21                   | 42 | 63 | 105 | 136.5 | 168 | 210 | 262.5 | 336 | 420 |
| Downstream side<br>FAZ Characteristic B | 2  |                      | x  | x  | x   | x     | x   | x   | x     | x   | x   |
|   | 3  |                      | x  | x  | x   | x     | x   | x   | x     | x   | x   |
|   | 4  |                      |    | x  | x   | x     | x   | x   | x     | x   | x   |
|   | 6  |                      |    |    | x   | x     | x   | x   | x     | x   | x   |
|   | 10 |                      |    |    |     | x     | x   | x   | x     | x   | x   |
|   | 13 |                      |    |    |     |       | x   | x   | x     | x   | x   |
|   | 16 |                      |    |    |     |       |     | x   | x     | x   | x   |
|   | 20 |                      |    |    |     |       |     |     | x     | x   | x   |
|   | 25 |                      |    |    |     |       |     |     |       | x   | x   |
|   | 32 |                      |    |    |     |       |     |     |       |     | x   |
|   | 40 |                      |    |    |     |       |     |     |       |     |     |
|   | 50 |                      |    |    |     |       |     |     |       |     |     |
|   | 63 |                      |    |    |     |       |     |     |       |     |     |

| Upstream side →                         |     | FAZ Characteristic D |    |    |     |       |     |     |       |     |     |   |
|---|-----|----------------------|----|----|-----|-------|-----|-----|-------|-----|-----|---|
| Type B rated current $I_n$ [A]          |     | 2                    | 4  | 6  | 10  | 13    | 16  | 20  | 25    | 32  | 40  |   |
| Selectivity limiting current $I_s$ [A]  |     | 21                   | 42 | 63 | 105 | 136.5 | 168 | 210 | 262.5 | 336 | 420 |   |
| Downstream side<br>FAZ Characteristic C | 0.5 | x                    | x  | x  | x   | x     | x   | x   | x     | x   | x   |   |
|   | 1   | x                    | x  | x  | x   | x     | x   | x   | x     | x   | x   |   |
|   | 2   |                      | x  | x  | x   | x     | x   | x   | x     | x   | x   |   |
|   | 3   |                      | x  | x  | x   | x     | x   | x   | x     | x   | x   |   |
|   | 4   |                      |    | x  | x   | x     | x   | x   | x     | x   | x   |   |
|   | 6   |                      |    |    | x   | x     | x   | x   | x     | x   | x   |   |
|   | 8   |                      |    |    |     | x     | x   | x   | x     | x   | x   |   |
|   | 10  |                      |    |    |     |       | x   | x   | x     | x   | x   |   |
|   | 13  |                      |    |    |     |       |     | x   | x     | x   | x   |   |
|   | 16  |                      |    |    |     |       |     |     | x     | x   | x   |   |
|   | 20  |                      |    |    |     |       |     |     |       | x   | x   |   |
|   | 25  |                      |    |    |     |       |     |     |       |     | x   |   |
|   | 32  |                      |    |    |     |       |     |     |       |     |     | x |
|   | 40  |                      |    |    |     |       |     |     |       |     |     |   |
|   | 50  |                      |    |    |     |       |     |     |       |     |     |   |
| 63                                      |     |                      |    |    |     |       |     |     |       |     |     |   |

| Upstream side →                         |    | FAZ Characteristic D |    |    |     |       |     |     |       |     |     |
|---|----|----------------------|----|----|-----|-------|-----|-----|-------|-----|-----|
| Type B rated current $I_n$ [A]          |    | 2                    | 4  | 6  | 10  | 13    | 16  | 20  | 25    | 32  | 40  |
| Selectivity limiting current $I_s$ [A]  |    | 21                   | 42 | 63 | 105 | 136.5 | 168 | 210 | 262.5 | 336 | 420 |
| Downstream side<br>FAZ Characteristic D | 2  |                      | x  | x  | x   | x     | x   | x   | x     | x   | x   |
|   | 4  |                      |    | x  | x   | x     | x   | x   | x     | x   | x   |
|   | 6  |                      |    |    | x   | x     | x   | x   | x     | x   | x   |
|   | 10 |                      |    |    |     | x     | x   | x   | x     | x   | x   |
|   | 13 |                      |    |    |     |       | x   | x   | x     | x   | x   |
|   | 16 |                      |    |    |     |       |     | x   | x     | x   | x   |
|   | 20 |                      |    |    |     |       |     |     | x     | x   | x   |
|   | 25 |                      |    |    |     |       |     |     |       | x   | x   |
|   | 32 |                      |    |    |     |       |     |     |       |     | x   |
|   | 40 |                      |    |    |     |       |     |     |       |     |     |

# FAZ | Specifications

## Overload Selectivity

### FAZ-B(C)(D) to PLHT-B



Upstream side PLHT, Characteristic B  
Downstream side FAZ, Characteristic B, C, D

x ... Selectivity range (i.e. only the downstream switch drops in case  $I < I_s$ )

| Upstream side →                         |    | PLHT Characteristic B |    |     |     |     |     |     |     |     |   |
|---|----|-----------------------|----|-----|-----|-----|-----|-----|-----|-----|---|
| Type B rated current $I_n$ [A]          |    | 20                    | 25 | 32  | 40  | 50  | 63  | 80  | 100 | 125 |   |
| Selectivity limiting current $I_s$ [A]  |    | 65                    | 81 | 104 | 130 | 163 | 205 | 260 | 325 | 406 |   |
| Downstream side<br>FAZ Characteristic B | 2  | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 3  | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 4  | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 6  | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 10 | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 13 | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 16 | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 20 |                       | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 25 |                       |    | x   | x   | x   | x   | x   | x   | x   | x |
|   | 32 |                       |    |     | x   | x   | x   | x   | x   | x   | x |
|   | 40 |                       |    |     |     | x   | x   | x   | x   | x   | x |
|   | 50 |                       |    |     |     |     | x   | x   | x   | x   | x |
|   | 63 |                       |    |     |     |     |     | x   | x   | x   | x |

| Upstream side →                         |     | PLHT Characteristic B |    |     |     |     |     |     |     |     |   |
|---|-----|-----------------------|----|-----|-----|-----|-----|-----|-----|-----|---|
| Type B rated current $I_n$ [A]          |     | 20                    | 25 | 32  | 40  | 50  | 63  | 80  | 100 | 125 |   |
| Selectivity limiting current $I_s$ [A]  |     | 65                    | 81 | 104 | 130 | 163 | 205 | 260 | 325 | 406 |   |
| Downstream side<br>FAZ Characteristic C | 0.5 | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 1   | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 2   | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 3   | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 4   | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 6   | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 8   | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 10  | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 13  |                       | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 16  |                       |    | x   | x   | x   | x   | x   | x   | x   | x |
|   | 20  |                       |    |     | x   | x   | x   | x   | x   | x   | x |
|   | 25  |                       |    |     |     | x   | x   | x   | x   | x   | x |
|   | 32  |                       |    |     |     |     | x   | x   | x   | x   | x |
|   | 40  |                       |    |     |     |     |     | x   | x   | x   | x |
|   | 50  |                       |    |     |     |     |     |     | x   | x   | x |
| 63                                      |     |                       |    |     |     |     |     |     | x   | x   |   |

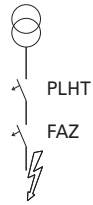
| Upstream side →                         |    | PLHT Characteristic B |    |     |     |     |     |     |     |     |   |
|---|----|-----------------------|----|-----|-----|-----|-----|-----|-----|-----|---|
| Type B rated current $I_n$ [A]          |    | 20                    | 25 | 32  | 40  | 50  | 63  | 80  | 100 | 125 |   |
| Selectivity limiting current $I_s$ [A]  |    | 65                    | 81 | 104 | 130 | 163 | 205 | 260 | 325 | 406 |   |
| Downstream side<br>FAZ Characteristic D | 2  | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 4  | x                     | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 6  |                       | x  | x   | x   | x   | x   | x   | x   | x   | x |
|   | 10 |                       |    |     | x   | x   | x   | x   | x   | x   | x |
|   | 13 |                       |    |     |     | x   | x   | x   | x   | x   | x |
|   | 16 |                       |    |     |     |     | x   | x   | x   | x   | x |
|   | 20 |                       |    |     |     |     |     | x   | x   | x   | x |
|   | 25 |                       |    |     |     |     |     |     | x   | x   | x |
| 32                                      |    |                       |    |     |     |     |     |     | x   | x   |   |
| 40                                      |    |                       |    |     |     |     |     |     |     | x   |   |



# FAZ | Specifications

## Overload Selectivity

### FAZ-B(C)(D) to PLHT-C



Upstream side PLHT, Characteristic C  
Downstream side FAZ, Characteristic B, C, D

x ... Selectivity range (i.e. only the downstream switch drops in case  $I < I_s$ )

| Upstream side →                         |    | PLHT Characteristic C |     |     |     |     |     |     |     |     |   |
|---|----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|---|
| Type B rated current $I_n$ [A]          |    | 20                    | 25  | 32  | 40  | 50  | 63  | 80  | 100 | 125 |   |
| Selectivity limiting current $I_s$ [A]  |    | 130                   | 163 | 208 | 260 | 325 | 410 | 520 | 650 | 813 |   |
| Downstream side<br>FAZ Characteristic B | 2  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 3  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 4  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 6  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 10 | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 13 | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 16 | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 20 |                       | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 25 |                       |     | x   | x   | x   | x   | x   | x   | x   | x |
|   | 32 |                       |     |     | x   | x   | x   | x   | x   | x   | x |
|   | 40 |                       |     |     |     | x   | x   | x   | x   | x   | x |
|   | 50 |                       |     |     |     |     | x   | x   | x   | x   | x |
|   | 63 |                       |     |     |     |     |     | x   | x   | x   | x |

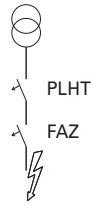
| Upstream side →                         |     | PLHT Characteristic C |     |     |     |     |     |     |     |     |   |
|---|-----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|---|
| Type B rated current $I_n$ [A]          |     | 20                    | 25  | 32  | 40  | 50  | 63  | 80  | 100 | 125 |   |
| Selectivity limiting current $I_s$ [A]  |     | 130                   | 163 | 208 | 260 | 325 | 410 | 520 | 650 | 813 |   |
| Downstream side<br>FAZ Characteristic C | 0.5 | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 1   | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 2   | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 3   | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 4   | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 6   | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 8   | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 10  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 13  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 16  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 20  |                       | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 25  |                       |     | x   | x   | x   | x   | x   | x   | x   | x |
|   | 32  |                       |     |     | x   | x   | x   | x   | x   | x   | x |
|   | 40  |                       |     |     |     | x   | x   | x   | x   | x   | x |
|   | 50  |                       |     |     |     |     | x   | x   | x   | x   | x |
| 63                                      |     |                       |     |     |     |     | x   | x   | x   | x   |   |

| Upstream side →                         |    | PLHT Characteristic C |     |     |     |     |     |     |     |     |   |
|---|----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|---|
| Type B rated current $I_n$ [A]          |    | 20                    | 25  | 32  | 40  | 50  | 63  | 80  | 100 | 125 |   |
| Selectivity limiting current $I_s$ [A]  |    | 130                   | 163 | 208 | 260 | 325 | 410 | 520 | 650 | 813 |   |
| Downstream side<br>FAZ Characteristic D | 2  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 4  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 6  | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 10 | x                     | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 13 |                       | x   | x   | x   | x   | x   | x   | x   | x   | x |
|   | 16 |                       |     | x   | x   | x   | x   | x   | x   | x   | x |
|   | 20 |                       |     |     | x   | x   | x   | x   | x   | x   | x |
|   | 25 |                       |     |     |     | x   | x   | x   | x   | x   | x |
|   | 32 |                       |     |     |     |     | x   | x   | x   | x   | x |
| 40                                      |    |                       |     |     |     |     | x   | x   | x   | x   |   |

# FAZ | Specifications

## Overload Selectivity

### FAZ-B(C)(D) to PLHT-D



Upstream side PLHT, Characteristic D  
Downstream side FAZ, Characteristic B, C, D

x ... Selectivity range (i.e. only the downstream switch drops in case  $I < I_s$ )

| Upstream side →                         |    | PLHT Characteristic D |     |     |     |     |     |     |      |
|---|----|-----------------------|-----|-----|-----|-----|-----|-----|------|
| Type B rated current $I_n$ [A]          |    | 20                    | 25  | 32  | 40  | 50  | 63  | 80  | 100  |
| Selectivity limiting current $I_s$ [A]  |    | 230                   | 285 | 365 | 450 | 550 | 680 | 850 | 1020 |
| Downstream side<br>FAZ Characteristic B | 2  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 3  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 4  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 6  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 10 | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 13 | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 16 | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 20 |                       | x   | x   | x   | x   | x   | x   | x    |
|   | 25 |                       |     | x   | x   | x   | x   | x   | x    |
|   | 32 |                       |     |     | x   | x   | x   | x   | x    |
|   | 40 |                       |     |     |     | x   | x   | x   | x    |
|   | 50 |                       |     |     |     |     | x   | x   | x    |
|   | 63 |                       |     |     |     |     |     | x   | x    |

| Upstream side →                         |     | PLHT Characteristic D |     |     |     |     |     |     |      |
|---|-----|-----------------------|-----|-----|-----|-----|-----|-----|------|
| Type B rated current $I_n$ [A]          |     | 20                    | 25  | 32  | 40  | 50  | 63  | 80  | 100  |
| Selectivity limiting current $I_s$ [A]  |     | 230                   | 285 | 365 | 450 | 550 | 680 | 850 | 1020 |
| Downstream side<br>FAZ Characteristic C | 0.5 | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 1   | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 2   | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 3   | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 4   | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 6   | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 8   | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 10  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 13  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 16  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 20  |                       | x   | x   | x   | x   | x   | x   | x    |
|   | 25  |                       |     | x   | x   | x   | x   | x   | x    |
|   | 32  |                       |     |     | x   | x   | x   | x   | x    |
|   | 40  |                       |     |     |     | x   | x   | x   | x    |
| 50                                      |     |                       |     |     |     | x   | x   | x   |      |
| 63                                      |     |                       |     |     |     |     | x   | x   |      |

| Upstream side →                         |    | PLHT Characteristic D |     |     |     |     |     |     |      |
|---|----|-----------------------|-----|-----|-----|-----|-----|-----|------|
| Type B rated current $I_n$ [A]          |    | 20                    | 25  | 32  | 40  | 50  | 63  | 80  | 100  |
| Selectivity limiting current $I_s$ [A]  |    | 230                   | 285 | 365 | 450 | 550 | 680 | 850 | 1020 |
| Downstream side<br>FAZ Characteristic D | 2  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 4  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 6  | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 10 | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 13 | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 16 | x                     | x   | x   | x   | x   | x   | x   | x    |
|   | 20 |                       | x   | x   | x   | x   | x   | x   | x    |
|   | 25 |                       |     | x   | x   | x   | x   | x   | x    |
| 32                                      |    |                       |     | x   | x   | x   | x   | x   |      |
| 40                                      |    |                       |     |     | x   | x   | x   | x   |      |

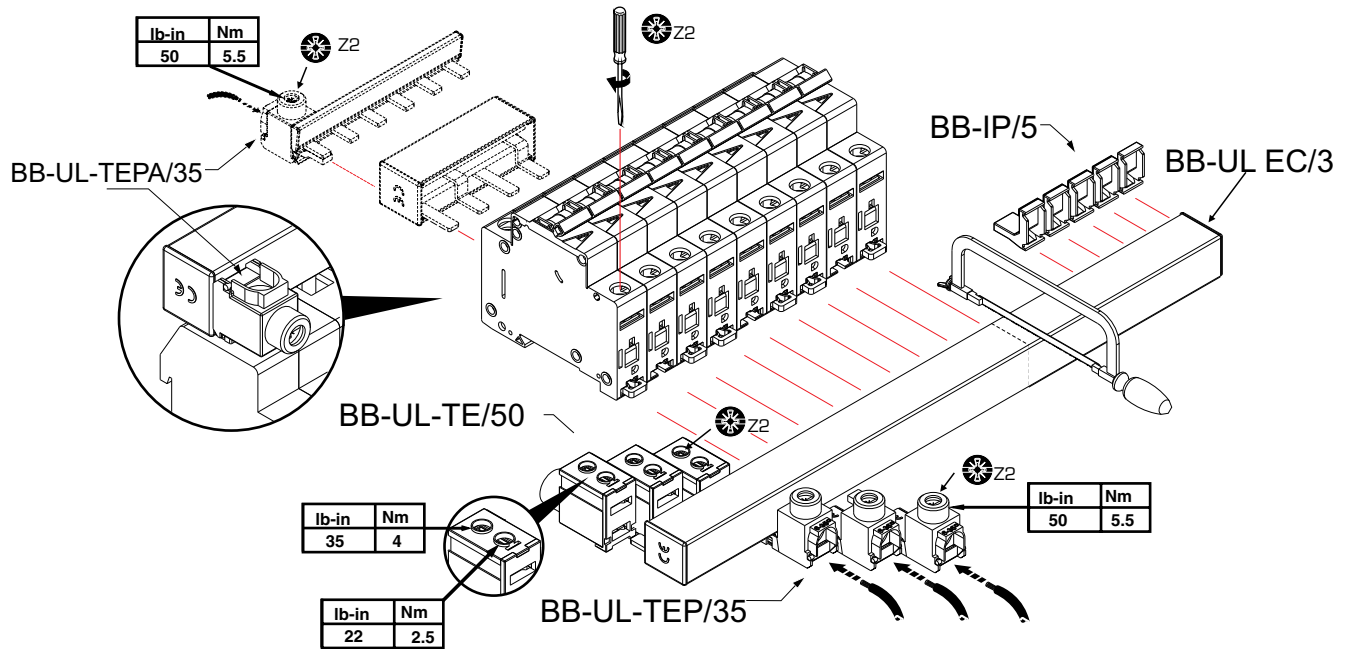
# FAZ | Specifications




## Influence of the Line Frequency

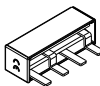
On the Instantaneous Tripping Current  $I_{MA}$

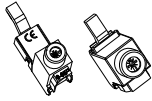


|                                     | Line Frequency f [Hz] |     |     |     |     |     |     |
|-------------------------------------|-----------------------|-----|-----|-----|-----|-----|-----|
|                                     | $16\frac{2}{3}$       | 50  | 60  | 100 | 200 | 300 | 400 |
| $I_{MA}(f)/I_{MA}(50\text{Hz})$ [%] | 91                    | 100 | 101 | 106 | 115 | 134 | 141 |

## UL508 Busbars for FAZ



| BB-UL-TE/50   |                         |                              |
|---|-------------------------|------------------------------|
|  | <b>UL508</b>            | <b>EN/IEC 60947-2</b>        |
| $U_e$   | 480 V AC                | 240/690V AC                  |
| $f$   | 50/60 Hz                | 50/60 Hz                     |
| $I_e$   | 115 A @ 40°C            | 160 A @ 30°C                 |
|  | #1-14 AWG<br>60/75°C Cu | 1.5–50 mm <sup>2</sup><br>Cu |
|  | 0.56 in                 | 14 mm                        |

| BB-UL  |                   |                       |
|--|-------------------|-----------------------|
|  | <b>UL508</b>      | <b>EN/IEC 60947-2</b> |
| $U_e$  | 480 V AC          | 690V AC               |
| $f$  | 50/60 Hz          |                       |
| $I_{pk}$   | 10kA              | 15kA                  |
| $I_e$  | 18mm <sup>2</sup> | 25mm <sup>2</sup>     |
| Infeed at the start of the busbar  | 80A @ 40 °C       | 100A @ 30°C           |
| Infeed at the center of the busbar   | 160A @ 40°C       | 200A @ 30°C           |






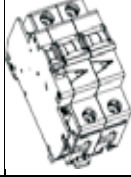
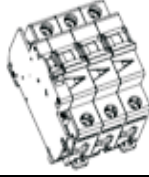
| BB-UL-TEP/35 / BB-UL-TEPA/35  |                         |                              |
|---|-------------------------|------------------------------|
|  | <b>UL508</b>            | <b>EN/IEC 60947-2</b>        |
| $U_e$   | 480 V AC                | 240/690V AC                  |
| $f$   | 50/60 Hz                | 50/60 Hz                     |
| $I_e$   | 115 A @ 40°C            | 80 A @ 30°C                  |
|  | #2-14 AWG<br>60/75°C Cu | 2.5–35 mm <sup>2</sup><br>Cu |
|  | 0.56 in                 | 14 mm                        |

### \*-UL508 SHORT CIRCUIT RATINGS

- SUITABLE FOR USE ON A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN 10,000 RMS SYMETRICAL AMPERES, 600 VOLTS MAXIMUM.
- SUITABLE FOR USE ON A CIRCUIT CAPABLE OF DELIVERING NOT MORE THAN 100,000 RMS SYMETRICAL AMPERES, 600 VOLTS MAXIMUM WHEN PROTECTED BY A CLASS J FUSE RATED 175A.


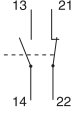

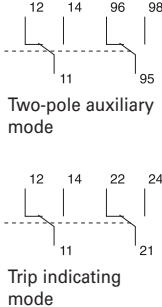

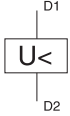

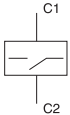
# FAZ | Busbars

## BB Busbars

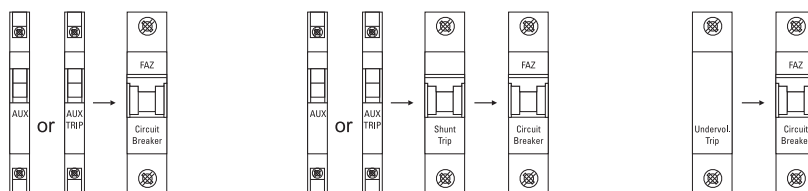
| Article No. |  |  |  |  |  |  |  |
|-------------|---|---|---|--|---|---|---|
| 121981      | BB-UL-18/1P-1M/57   | 57  | -   | -  | -   | -   | -   |
| 121982      | BB-UL-18/2P-2M/56   | -   | 28  | -  | -   | -   | -   |
| 121983      | BB-UL-18/3P-3M/57   | -   | -   | 19   | -   | -   | -   |
| 121984      | BB-UL-18/1P-1,5M/37   | -   | -   | -  | 37  | -   | -   |
| 121987      | BB-UL-18/2P+AS-2,5M/46  | -   | -   | -  | -   | 23  | -   |
| 121988      | BB-UL-18/3P+AS-3,5M/48  | -   | -   | -  | -   | -   | 16  |
| 121989      | BB-UL-25/1P-1M/57   | 57  | -   | -  | -   | -   | -   |
| 121990      | BB-UL-25/2P-2M/56   | -   | 28  | -  | -   | -   | -   |
| 121991      | BB-UL-25/3P-3M/57   | -   | -   | 19   | -   | -   | -   |
| 121992      | BB-UL-25/1P-1,5M/37   | -   | -   | -  | 37  | -   | -   |
| 121995      | BB-UL-25/2P+AS-2,5M/46  | -   | -   | -  | -   | 23  | -   |
| 121996      | BB-UL-25/3P+AS-3,5M/48  | -   | -   | -  | -   | -   | 16  |
| 121997      | BB-UL-TEP/35  | -   | -   | -  | -   | -   | -   |
| in prep.    | BB-UL-TEPA/35   | -   | -   | -  | -   | -   | -   |
| 121998      | BB-UL-TE/50   | -   | -   | -  | -   | -   | -   |
| 121999      | BB-IP/5   | -   | -   | -  | -   | -   | -   |
| 122000      | BB-UL-EC/1  | -   | -   | -  | -   | -   | -   |
| 122001      | BB-UL-EC/3  | -   | -   | -  | -   | -   | -   |

# FAZ | Accessories for FAZ-MCBs

## Auxiliary Contacts and Voltage Trips

|   | Circuit Diagram   | Description  | Rated Operational Voltage                             | Type Designation                                      | Article No.                | Units per package |
|---|---|--|---|---|----------------------------|-------------------|
|    |    | <b>Standard Auxiliary Contact</b> <ul style="list-style-type: none"> <li>• 1NO/1NC</li> <li>• Installs on left side of FAZ or shunt trip</li> <li>• Max. one per FAZ (1077) device</li> <li>• Switches when FAZ is tripped electrically or manually</li> </ul>   | 230 Vac   | FAZ-XHIN11  | 286054                     | 1                 |
|    |    | <b>Auxiliary/Trip Indicating Contact</b> <ul style="list-style-type: none"> <li>• Small selector screw changes mode</li> <li>• Two Form C (changeover) contacts</li> <li>• Installs on left side of FAZ or shunt trip</li> <li>• Auxiliary contacts switch when FAZ is tripped electrically or manually</li> <li>• Trip indicating contact switches only when FAZ is tripped electrically</li> </ul> | 230 Vac   | FAZ-XAM002  | 262414                     | 1                 |
|  |  | <b>Undervoltage Trip</b> <ul style="list-style-type: none"> <li>• Prevents FAZ from operating unless voltage is present</li> <li>• Installs on left side of FAZ</li> <li>• Includes test button</li> </ul>   | 115 Vac<br>230 Vac<br>400 Vac                         | FAZ-XUA(115VAC)<br>FAZ-XUA(230VAC)<br>FAZ-XUA(400VAC) | 212049<br>212051<br>212053 | 1<br>1<br>1       |
|  |  | <b>Shunt Trip</b> <ul style="list-style-type: none"> <li>• Allows remote trip of FAZ</li> <li>• Installs on left side of FAZ</li> </ul>  | 12–110 Vac<br>12–60 Vdc<br>110–415 Vac<br>110–230 Vdc | FAZ-XAA-C-12-110VAC<br>FAZ-XAA-C-110-415VAC           | 278518<br>278519           | 1<br>1            |
|   |   | <b>Padlock Hasp (for all FAZ)</b> <ul style="list-style-type: none"> <li>• Prevents reactivation of the device during maintenance</li> <li>• Holds one padlock</li> </ul>  |   | IS/SPE-ITE  | 101911                     | 1                 |

## Allowable Combinations of Accessories



# FAZ | Accessories for FAZ-MCBs

## Specifications

### Technical Data

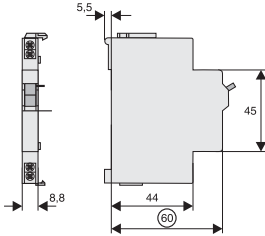
|   | FAZ-XHIN<br>FAZ-XAM002                       | FAZ-XAA-C                                    | FAZ-XUA                                      |
|---|--|--|--|
| <b>Electrical</b>   |  |  |  |
| Contact function  | 1A + 1B<br>2 C/O                             | —  | —  |
| Rated operational voltage $U_n$                           | 250 Vac                                      | —  | 115 Vac<br>230 Vac<br>400 Vac                |
| Voltage range   | —  | 12–110 Vac<br>12–60 Vdc                      | —  |
| Voltage range   | —  | 110–415 Vac<br>110–230 Vdc                   | —  |
| Closing threshold [ $\times U_n$ ]                        | —  | —  | 0.8  |
| Tripping threshold [ $\times U_n$ ]                       | —  | —  | 0.5  |
| Rated frequency $f$                                       | 50/60 Hz                                     | 50/60 Hz                                     | 50/60 Hz                                     |
| General use (UL/CSA)                                      |  |  |  |
| AC—230/240 Vac  | 2/2A   | —  | —  |
| DC—110/120 Vdc  | 0.5/0.5A                                     | —  | —  |
| Pilot duty  | A600/Q600                                    | —  | —  |
| Conventional free air thermal current $I_{th}$            | 4A   | —  | —  |
| Rated operational current                                 |  |  |  |
| AC-13 $I_e$   | 3A (250 Vac)                                 | —  | —  |
| AC-15 $I_e$   | 2A (250 Vac)                                 | —  | —  |
| DC-13 $I_e$   | 0.5A (110 Vdc)                               | —  | —  |
| Rated insulation voltage $U_i$                            | 250 Vac                                      | —  | —  |
| Minimum operating voltage per contract $U_{min}$          | 5 Vdc  | —  | —  |
| Rated impulse withstand voltage (1.2/50 $\mu$ ) $U_{imp}$ | 2.5 kV                                       | —  | —  |
| Rated conditional short-circuit current                   |  |  |  |
| with 6A back-up fuse $I_{SC}$                             | 1 kA   | —  | —  |
| Max. admissible back-up fuse                              | 4A gL  | —  | —  |
| <b>Mechanical</b>   |  |  |  |
| Standard front dimension                                  | 45 mm  | 45 mm  | 45 mm  |
| Device height   | 80 mm  | 80 mm  | 80 mm  |
| Mounting width  | 8.8 mm                                       | 17.6 mm                                      | 17.8 mm                                      |
| Degree of protection enclosed                             | IP40   | IP40   | IP40   |
| Terminal protection                                       | Protection against electric shock to IEC 536 | Protection against electric shock to IEC 536 | Protection against electric shock to IEC 536 |
| Terminals   | Lift terminals                               | Twin-purpose terminals                       | Twin-purpose terminals                       |
| Terminal capacity [mm <sup>2</sup> ]                      |  |  |  |
| Solid   | 0.5–2.5                                      | 1–2.5  | 2 x (1–2.5)                                  |
| Flexible  | 0.5–2.5                                      | 1–2.5  | 2 x (1–2.5)                                  |
| Tightening torque of terminal screws                      | 0.8–1.0 Nm (7–9 lb-in)                       | 2.4 Nm (21 lb-in)                            | 0.8 Nm (7 lb-in)                             |

# FAZ | Accessories for FAZ-MCBs

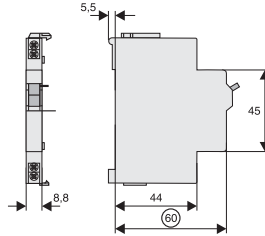
## Dimensions (mm) Accessories

### Auxiliary Contacts

FAZ-XHI11

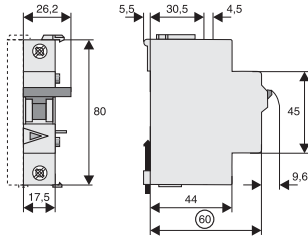


FAZ-XAM002



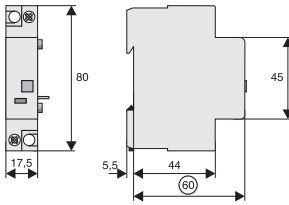
### Shunt Releases

FAZ-XAA



### Undervoltage Releases

FAZ-XUA





# FAZ-T | Characteristic B

## FAZ-T Miniature Circuit Breakers (MCBs) Characteristic B

|                 | Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60898-1<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60898-1<br>(kA) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|-----------------|----------------------------|---|---|---|---|---------------------|-------------|-------------------------|
| <b>1-pole</b>   |                            |   |   |   |   |                     |             |                         |
| 1               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B1/1           | 240770      | 12/120                  |
| 2               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B2/1           | 240771      | 12/120                  |
| 3               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B3/1           | 240772      | 12/120                  |
| 4               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B4/1           | 240777      | 12/120                  |
| 6               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B6/1           | 240782      | 12/120                  |
| 10              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B10/1          | 240787      | 12/120                  |
| 12              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B12/1          | 240792      | 12/120                  |
| 13              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B13/1          | 240793      | 12/120                  |
| 15              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B15/1          | 240794      | 12/120                  |
| 16              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B16/1          | 240795      | 12/120                  |
| 20              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B20/1          | 240796      | 12/120                  |
| 25              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-B25/1          | 240797      | 12/120                  |
| 32              | 240/415                    | 10  | 240   | 20  | 240   | FAZT-B32/1          | 141907      | 12/120                  |
| 40              | 240/415                    | 10  | 240   | 20  | 240   | FAZT-B40/1          | 141908      | 12/120                  |
| <b>1+N-pole</b> |                            |   |   |   |   |                     |             |                         |
| 1               | 240                        | 15  | 240   | 25  | 240   | FAZT-B1/1N          | 240994      | 1/60                    |
| 2               | 240                        | 15  | 240   | 25  | 240   | FAZT-B2/1N          | 240995      | 1/60                    |
| 3               | 240                        | 15  | 240   | 25  | 240   | FAZT-B3/1N          | 240996      | 1/60                    |
| 4               | 240                        | 15  | 240   | 25  | 240   | FAZT-B4/1N          | 240997      | 1/60                    |
| 6               | 240                        | 15  | 240   | 25  | 240   | FAZT-B6/1N          | 240998      | 1/60                    |
| 10              | 240                        | 15  | 240   | 25  | 240   | FAZT-B10/1N         | 240999      | 1/60                    |
| 12              | 240                        | 15  | 240   | 25  | 240   | FAZT-B12/1N         | 241000      | 1/60                    |
| 13              | 240                        | 15  | 240   | 25  | 240   | FAZT-B13/1N         | 241001      | 1/60                    |
| 15              | 240                        | 15  | 240   | 25  | 240   | FAZT-B15/1N         | 241005      | 1/60                    |
| 16              | 240                        | 15  | 240   | 25  | 240   | FAZT-B16/1N         | 241009      | 1/60                    |
| 20              | 240                        | 15  | 240   | 25  | 240   | FAZT-B20/1N         | 241015      | 1/60                    |
| 25              | 240                        | 15  | 240   | 25  | 240   | FAZT-B25/1N         | 241019      | 1/60                    |
| 32              | 240                        | 10  | 240   | 20  | 240   | FAZT-B32/1N         | 142509      | 1/60                    |
| 40              | 240                        | 10  | 240   | 20  | 240   | FAZT-B40/1N         | 142510      | 1/60                    |
| <b>2-pole</b>   |                            |   |   |   |   |                     |             |                         |
| 1               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B1/2           | 240820      | 1/60                    |
| 2               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B2/2           | 240821      | 1/60                    |
| 3               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B3/2           | 240822      | 1/60                    |
| 4               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B4/2           | 240823      | 1/60                    |
| 6               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B6/2           | 240824      | 1/60                    |
| 10              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B10/2          | 240825      | 1/60                    |
| 12              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B12/2          | 240826      | 1/60                    |
| 13              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B13/2          | 240827      | 1/60                    |
| 15              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B15/2          | 240828      | 1/60                    |
| 16              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B16/2          | 240829      | 1/60                    |
| 20              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B20/2          | 240830      | 1/60                    |
| 25              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-B25/2          | 240831      | 1/60                    |
| 32              | 415                        | 10  | 240/415   | 20  | 240   | FAZT-B32/2          | 142485      | 1/60                    |
| 40              | 415                        | 10  | 240/415   | 20  | 240   | FAZT-B40/2          | 142486      | 1/60                    |

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# FAZ-T | Characteristic B

SG13011



| Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60898-1<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60898-1<br>(kA) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|---|---|---|---|---------------------|-------------|-------------------------|
|----------------------------|---|---|---|---|---------------------|-------------|-------------------------|

## 3-pole

|    |     |    |         |    |            |        |      |
|----|-----|----|---------|----|------------|--------|------|
| 1  | 415 | 15 | 240/415 | 25 | FAZT-B1/3  | 240874 | 1/40 |
| 2  | 415 | 15 | 240/415 | 25 | FAZT-B2/3  | 240875 | 1/40 |
| 3  | 415 | 15 | 240/415 | 25 | FAZT-B3/3  | 240876 | 1/40 |
| 4  | 415 | 15 | 240/415 | 25 | FAZT-B4/3  | 240877 | 1/40 |
| 6  | 415 | 15 | 240/415 | 25 | FAZT-B6/3  | 240878 | 1/40 |
| 10 | 415 | 15 | 240/415 | 25 | FAZT-B10/3 | 240879 | 1/40 |
| 12 | 415 | 15 | 240/415 | 25 | FAZT-B12/3 | 240880 | 1/40 |
| 13 | 415 | 15 | 240/415 | 25 | FAZT-B13/3 | 240881 | 1/40 |
| 15 | 415 | 15 | 240/415 | 25 | FAZT-B15/3 | 240882 | 1/40 |
| 16 | 415 | 15 | 240/415 | 25 | FAZT-B16/3 | 240883 | 1/40 |
| 20 | 415 | 15 | 240/415 | 25 | FAZT-B20/3 | 240884 | 1/40 |
| 25 | 415 | 15 | 240/415 | 25 | FAZT-B25/3 | 240885 | 1/40 |
| 32 | 415 | 10 | 240/415 | 20 | FAZT-B32/3 | 142493 | 1/40 |
| 40 | 415 | 10 | 240/415 | 20 | FAZT-B40/3 | 142494 | 1/40 |

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## 3+N-pole

|    |     |    |         |    |             |        |      |
|----|-----|----|---------|----|-------------|--------|------|
| 1  | 415 | 15 | 240/415 | 25 | FAZT-B1/3N  | 241060 | 1/30 |
| 2  | 415 | 15 | 240/415 | 25 | FAZT-B2/3N  | 241065 | 1/30 |
| 3  | 415 | 15 | 240/415 | 25 | FAZT-B3/3N  | 241070 | 1/30 |
| 4  | 415 | 15 | 240/415 | 25 | FAZT-B4/3N  | 241075 | 1/30 |
| 6  | 415 | 15 | 240/415 | 25 | FAZT-B6/3N  | 241080 | 1/30 |
| 10 | 415 | 15 | 240/415 | 25 | FAZT-B10/3N | 241085 | 1/30 |
| 12 | 415 | 15 | 240/415 | 25 | FAZT-B12/3N | 241090 | 1/30 |
| 13 | 415 | 15 | 240/415 | 25 | FAZT-B13/3N | 241095 | 1/30 |
| 15 | 415 | 15 | 240/415 | 25 | FAZT-B15/3N | 241100 | 1/30 |
| 16 | 415 | 15 | 240/415 | 25 | FAZT-B16/3N | 241105 | 1/30 |
| 20 | 415 | 15 | 240/415 | 25 | FAZT-B20/3N | 241110 | 1/30 |
| 25 | 415 | 15 | 240/415 | 25 | FAZT-B25/3N | 241115 | 1/30 |
| 32 | 415 | 10 | 240/415 | 20 | FAZT-B32/3N | 142517 | 1/30 |
| 40 | 415 | 10 | 240/415 | 20 | FAZT-B40/3N | 142518 | 1/30 |

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## 4-pole

|    |     |    |         |    |            |        |      |
|----|-----|----|---------|----|------------|--------|------|
| 1  | 415 | 15 | 240/415 | 25 | FAZT-B1/4  | 240922 | 1/30 |
| 2  | 415 | 15 | 240/415 | 25 | FAZT-B2/4  | 240927 | 1/30 |
| 3  | 415 | 15 | 240/415 | 25 | FAZT-B3/4  | 240930 | 1/30 |
| 4  | 415 | 15 | 240/415 | 25 | FAZT-B4/4  | 240931 | 1/30 |
| 6  | 415 | 15 | 240/415 | 25 | FAZT-B6/4  | 240932 | 1/30 |
| 10 | 415 | 15 | 240/415 | 25 | FAZT-B10/4 | 240933 | 1/30 |
| 12 | 415 | 15 | 240/415 | 25 | FAZT-B12/4 | 240934 | 1/30 |
| 13 | 415 | 15 | 240/415 | 25 | FAZT-B13/4 | 240935 | 1/30 |
| 15 | 415 | 15 | 240/415 | 25 | FAZT-B15/4 | 240936 | 1/30 |
| 16 | 415 | 15 | 240/415 | 25 | FAZT-B16/4 | 240937 | 1/30 |
| 20 | 415 | 15 | 240/415 | 25 | FAZT-B20/4 | 240938 | 1/30 |
| 25 | 415 | 15 | 240/415 | 25 | FAZT-B25/4 | 240939 | 1/30 |
| 32 | 415 | 10 | 240/415 | 20 | FAZT-B32/4 | 142501 | 1/30 |
| 40 | 415 | 10 | 240/415 | 20 | FAZT-B40/4 | 142502 | 1/30 |

# FAZ-T | Characteristic C

## FAZ-T Miniature Circuit Breakers (MCBs) Characteristic C

|                 | Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60898-1<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60898-1<br>(kA) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|-----------------|----------------------------|---|---|---|---|---------------------|-------------|-------------------------|
| <b>1-pole</b>   |                            |   |   |   |   |                     |             |                         |
| 1               | 240/415                    | 15  | 240   | 25  |   | FAZT-C1/1           | 240798      | 12/120                  |
| 2               | 240/415                    | 15  | 240   | 25  |   | FAZT-C2/1           | 240799      | 12/120                  |
| 3               | 240/415                    | 15  | 240   | 25  |   | FAZT-C3/1           | 240800      | 12/120                  |
| 4               | 240/415                    | 15  | 240   | 25  |   | FAZT-C4/1           | 240801      | 12/120                  |
| 6               | 240/415                    | 15  | 240   | 25  |   | FAZT-C6/1           | 240802      | 12/120                  |
| 10              | 240/415                    | 15  | 240   | 25  |   | FAZT-C10/1          | 240803      | 12/120                  |
| 12              | 240/415                    | 15  | 240   | 25  |   | FAZT-C12/1          | 240804      | 12/120                  |
| 13              | 240/415                    | 15  | 240   | 25  |   | FAZT-C13/1          | 240805      | 12/120                  |
| 15              | 240/415                    | 15  | 240   | 25  |   | FAZT-C15/1          | 240806      | 12/120                  |
| 16              | 240/415                    | 15  | 240   | 25  |   | FAZT-C16/1          | 240807      | 12/120                  |
| 20              | 240/415                    | 15  | 240   | 25  |   | FAZT-C20/1          | 240808      | 12/120                  |
| 25              | 240/415                    | 15  | 240   | 25  |   | FAZT-C25/1          | 240809      | 12/120                  |
| 32              | 240/415                    | 10  | 240   | 20  |   | FAZT-C32/1          | 141909      | 12/120                  |
| 40              | 240/415                    | 10  | 240   | 20  |   | FAZT-C40/1          | 142480      | 12/120                  |
| <b>1+N-pole</b> |                            |   |   |   |   |                     |             |                         |
| 1               | 240                        | 15  | 240   | 25  |   | FAZT-C1/1N          | 241022      | 1/60                    |
| 2               | 240                        | 15  | 240   | 25  |   | FAZT-C2/1N          | 241023      | 1/60                    |
| 3               | 240                        | 15  | 240   | 25  |   | FAZT-C3/1N          | 241024      | 1/60                    |
| 4               | 240                        | 15  | 240   | 25  |   | FAZT-C4/1N          | 241025      | 1/60                    |
| 6               | 240                        | 15  | 240   | 25  |   | FAZT-C6/1N          | 241026      | 1/60                    |
| 10              | 240                        | 15  | 240   | 25  |   | FAZT-C10/1N         | 241027      | 1/60                    |
| 12              | 240                        | 15  | 240   | 25  |   | FAZT-C12/1N         | 241028      | 1/60                    |
| 13              | 240                        | 15  | 240   | 25  |   | FAZT-C13/1N         | 241029      | 1/60                    |
| 15              | 240                        | 15  | 240   | 25  |   | FAZT-C15/1N         | 241030      | 1/60                    |
| 16              | 240                        | 15  | 240   | 25  |   | FAZT-C16/1N         | 241034      | 1/60                    |
| 20              | 240                        | 15  | 240   | 25  |   | FAZT-C20/1N         | 241038      | 1/60                    |
| 25              | 240                        | 15  | 240   | 25  |   | FAZT-C25/1N         | 241044      | 1/60                    |
| 32              | 240                        | 10  | 240   | 20  |   | FAZT-C32/1N         | 142511      | 1/60                    |
| 40              | 240                        | 10  | 240   | 20  |   | FAZT-C40/1N         | 142512      | 1/60                    |
| <b>2-pole</b>   |                            |   |   |   |   |                     |             |                         |
| 1               | 415                        | 15  | 240/415   | 25  |   | FAZT-C1/2           | 240832      | 1/60                    |
| 2               | 415                        | 15  | 240/415   | 25  |   | FAZT-C2/2           | 240833      | 1/60                    |
| 3               | 415                        | 15  | 240/415   | 25  |   | FAZT-C3/2           | 240838      | 1/60                    |
| 4               | 415                        | 15  | 240/415   | 25  |   | FAZT-C4/2           | 240843      | 1/60                    |
| 6               | 415                        | 15  | 240/415   | 25  |   | FAZT-C6/2           | 240850      | 1/60                    |
| 10              | 415                        | 15  | 240/415   | 25  |   | FAZT-C10/2          | 240855      | 1/60                    |
| 12              | 415                        | 15  | 240/415   | 25  |   | FAZT-C12/2          | 240858      | 1/60                    |
| 13              | 415                        | 15  | 240/415   | 25  |   | FAZT-C13/2          | 240859      | 1/60                    |
| 15              | 415                        | 15  | 240/415   | 25  |   | FAZT-C15/2          | 240860      | 1/60                    |
| 16              | 415                        | 15  | 240/415   | 25  |   | FAZT-C16/2          | 240861      | 1/60                    |
| 20              | 415                        | 15  | 240/415   | 25  |   | FAZT-C20/2          | 240862      | 1/60                    |
| 25              | 415                        | 15  | 240/415   | 25  |   | FAZT-C25/2          | 240863      | 1/60                    |
| 32              | 415                        | 10  | 240/415   | 20  |   | FAZT-C32/2          | 142487      | 1/60                    |
| 40              | 415                        | 10  | 240/415   | 20  |   | FAZT-C40/2          | 142488      | 1/60                    |

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SG12711



SG12811



# FAZ-T | Characteristic C

SG13011



| Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60898-1<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60898-1<br>(kA) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|---|---|---|---|---------------------|-------------|-------------------------|
|----------------------------|---|---|---|---|---------------------|-------------|-------------------------|

### 3-pole

|    |     |    |         |    |            |        |      |
|----|-----|----|---------|----|------------|--------|------|
| 1  | 415 | 15 | 240/415 | 25 | FAZT-C1/3  | 240886 | 1/40 |
| 2  | 415 | 15 | 240/415 | 25 | FAZT-C2/3  | 240887 | 1/40 |
| 3  | 415 | 15 | 240/415 | 25 | FAZT-C3/3  | 240888 | 1/40 |
| 4  | 415 | 15 | 240/415 | 25 | FAZT-C4/3  | 240889 | 1/40 |
| 6  | 415 | 15 | 240/415 | 25 | FAZT-C6/3  | 240890 | 1/40 |
| 10 | 415 | 15 | 240/415 | 25 | FAZT-C10/3 | 240891 | 1/40 |
| 12 | 415 | 15 | 240/415 | 25 | FAZT-C12/3 | 240892 | 1/40 |
| 13 | 415 | 15 | 240/415 | 25 | FAZT-C13/3 | 240893 | 1/40 |
| 15 | 415 | 15 | 240/415 | 25 | FAZT-C15/3 | 240894 | 1/40 |
| 16 | 415 | 15 | 240/415 | 25 | FAZT-C16/3 | 240895 | 1/40 |
| 20 | 415 | 15 | 240/415 | 25 | FAZT-C20/3 | 240896 | 1/40 |
| 25 | 415 | 15 | 240/415 | 25 | FAZT-C25/3 | 240897 | 1/40 |
| 32 | 415 | 10 | 240/415 | 20 | FAZT-C32/3 | 142495 | 1/40 |
| 40 | 415 | 10 | 240/415 | 20 | FAZT-C40/3 | 142496 | 1/40 |

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### 3+N-pole

|    |     |    |         |    |             |        |      |
|----|-----|----|---------|----|-------------|--------|------|
| 1  | 415 | 15 | 240/415 | 25 | FAZT-C1/3N  | 241120 | 1/30 |
| 2  | 415 | 15 | 240/415 | 25 | FAZT-C2/3N  | 241125 | 1/30 |
| 3  | 415 | 15 | 240/415 | 25 | FAZT-C3/3N  | 241130 | 1/30 |
| 4  | 415 | 15 | 240/415 | 25 | FAZT-C4/3N  | 241135 | 1/30 |
| 6  | 415 | 15 | 240/415 | 25 | FAZT-C6/3N  | 241140 | 1/30 |
| 10 | 415 | 15 | 240/415 | 25 | FAZT-C10/3N | 241145 | 1/30 |
| 12 | 415 | 15 | 240/415 | 25 | FAZT-C12/3N | 241150 | 1/30 |
| 13 | 415 | 15 | 240/415 | 25 | FAZT-C13/3N | 241155 | 1/30 |
| 15 | 415 | 15 | 240/415 | 25 | FAZT-C15/3N | 241160 | 1/30 |
| 16 | 415 | 15 | 240/415 | 25 | FAZT-C16/3N | 241165 | 1/30 |
| 20 | 415 | 15 | 240/415 | 25 | FAZT-C20/3N | 241170 | 1/30 |
| 25 | 415 | 15 | 240/415 | 25 | FAZT-C25/3N | 241175 | 1/30 |
| 32 | 415 | 10 | 240/415 | 20 | FAZT-C32/3N | 142519 | 1/30 |
| 40 | 415 | 10 | 240/415 | 20 | FAZT-C40/3N | 142520 | 1/30 |

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### 4-pole

|    |     |    |         |    |            |        |      |
|----|-----|----|---------|----|------------|--------|------|
| 1  | 415 | 15 | 240/415 | 25 | FAZT-C1/4  | 240940 | 1/30 |
| 2  | 415 | 15 | 240/415 | 25 | FAZT-C2/4  | 240941 | 1/30 |
| 3  | 415 | 15 | 240/415 | 25 | FAZT-C3/4  | 240945 | 1/30 |
| 4  | 415 | 15 | 240/415 | 25 | FAZT-C4/4  | 240949 | 1/30 |
| 6  | 415 | 15 | 240/415 | 25 | FAZT-C6/4  | 240955 | 1/30 |
| 10 | 415 | 15 | 240/415 | 25 | FAZT-C10/4 | 240959 | 1/30 |
| 12 | 415 | 15 | 240/415 | 25 | FAZT-C12/4 | 240962 | 1/30 |
| 13 | 415 | 15 | 240/415 | 25 | FAZT-C13/4 | 240963 | 1/30 |
| 15 | 415 | 15 | 240/415 | 25 | FAZT-C15/4 | 240964 | 1/30 |
| 16 | 415 | 15 | 240/415 | 25 | FAZT-C16/4 | 240965 | 1/30 |
| 20 | 415 | 15 | 240/415 | 25 | FAZT-C20/4 | 240966 | 1/30 |
| 25 | 415 | 15 | 240/415 | 25 | FAZT-C25/4 | 240967 | 1/30 |
| 32 | 415 | 10 | 240/415 | 20 | FAZT-C32/4 | 142503 | 1/30 |
| 40 | 415 | 10 | 240/415 | 20 | FAZT-C40/4 | 142504 | 1/30 |

# FAZ-T | Characteristic D

## FAZ-T Miniature Circuit Breakers (MCBs) Characteristic D

|                 | Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60898-1<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60898-1<br>(kA) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|-----------------|----------------------------|---|---|---|---|---------------------|-------------|-------------------------|
| <b>1-pole</b>   |                            |   |   |   |   |                     |             |                         |
| 1               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-D1/1           | 240810      | 12/120                  |
| 2               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-D2/1           | 240811      | 12/120                  |
| 3               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-D3/1           | 240812      | 12/120                  |
| 4               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-D4/1           | 240813      | 12/120                  |
| 6               | 240/415                    | 15  | 240   | 25  | 240   | FAZT-D6/1           | 240814      | 12/120                  |
| 10              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-D10/1          | 240815      | 12/120                  |
| 12              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-D12/1          | 240816      | 12/120                  |
| 13              | 240/415                    | 15  | 240   | 25  | 240   | FAZT-D13/1          | 240817      | 12/120                  |
| 15              | 240/415                    | 15  | 240   | 20  | 240   | FAZT-D15/1          | 240818      | 12/120                  |
| 16              | 240/415                    | 15  | 240   | 20  | 240   | FAZT-D16/1          | 240819      | 12/120                  |
| 20              | 240/415                    | 10  | 240   | 20  | 240   | FAZT-D20/1          | 142481      | 12/120                  |
| 25              | 240/415                    | 10  | 240   | 15  | 240   | FAZT-D25/1          | 142482      | 12/120                  |
| 32              | 240/415                    | 10  | 240   | 15  | 240   | FAZT-D32/1          | 142483      | 12/120                  |
| 40              | 240/415                    | 10  | 240   | 15  | 240   | FAZT-D40/1          | 142484      | 12/120                  |
| <b>1+N-pole</b> |                            |   |   |   |   |                     |             |                         |
| 1               | 240                        | 15  | 240   | 25  | 240   | FAZT-D1/1N          | 241048      | 1/60                    |
| 2               | 240                        | 15  | 240   | 25  | 240   | FAZT-D2/1N          | 241051      | 1/60                    |
| 3               | 240                        | 15  | 240   | 25  | 240   | FAZT-D3/1N          | 241052      | 1/60                    |
| 4               | 240                        | 15  | 240   | 25  | 240   | FAZT-D4/1N          | 241053      | 1/60                    |
| 6               | 240                        | 15  | 240   | 25  | 240   | FAZT-D6/1N          | 241054      | 1/60                    |
| 10              | 240                        | 15  | 240   | 25  | 240   | FAZT-D10/1N         | 241055      | 1/60                    |
| 12              | 240                        | 15  | 240   | 25  | 240   | FAZT-D12/1N         | 241056      | 1/60                    |
| 13              | 240                        | 15  | 240   | 25  | 240   | FAZT-D13/1N         | 241057      | 1/60                    |
| 15              | 240                        | 15  | 240   | 20  | 240   | FAZT-D15/1N         | 241058      | 1/60                    |
| 16              | 240                        | 15  | 240   | 20  | 240   | FAZT-D16/1N         | 241059      | 1/60                    |
| 20              | 240                        | 10  | 240   | 20  | 240   | FAZT-D20/1N         | 142513      | 1/60                    |
| 25              | 240                        | 10  | 240   | 15  | 240   | FAZT-D25/1N         | 142514      | 1/60                    |
| 32              | 240                        | 10  | 240   | 15  | 240   | FAZT-D32/1N         | 142515      | 1/60                    |
| 40              | 240                        | 10  | 240   | 15  | 240   | FAZT-D40/1N         | 142516      | 1/60                    |
| <b>2-pole</b>   |                            |   |   |   |   |                     |             |                         |
| 1               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-D1/2           | 240864      | 1/60                    |
| 2               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-D2/2           | 240865      | 1/60                    |
| 3               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-D3/2           | 240866      | 1/60                    |
| 4               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-D4/2           | 240867      | 1/60                    |
| 6               | 415                        | 15  | 240/415   | 25  | 240   | FAZT-D6/2           | 240868      | 1/60                    |
| 10              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-D10/2          | 240869      | 1/60                    |
| 12              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-D12/2          | 240870      | 1/60                    |
| 13              | 415                        | 15  | 240/415   | 25  | 240   | FAZT-D13/2          | 240871      | 1/60                    |
| 15              | 415                        | 15  | 240/415   | 20  | 240   | FAZT-D15/2          | 240872      | 1/60                    |
| 16              | 415                        | 15  | 240/415   | 20  | 240   | FAZT-D16/2          | 240873      | 1/60                    |
| 20              | 415                        | 10  | 240/415   | 20  | 240   | FAZT-D20/2          | 142489      | 1/60                    |
| 25              | 415                        | 10  | 240/415   | 15  | 240   | FAZT-D25/2          | 142490      | 1/60                    |
| 32              | 415                        | 10  | 240/415   | 15  | 240   | FAZT-D32/2          | 142491      | 1/60                    |
| 40              | 415                        | 10  | 240/415   | 15  | 240   | FAZT-D40/2          | 142492      | 1/60                    |

SG12411



SG12711



SG12811



# FAZ-T | Characteristic D

SG13011



| Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60898-1<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60898-1<br>(kA) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|---|---|---|---|---------------------|-------------|-------------------------|
|----------------------------|---|---|---|---|---------------------|-------------|-------------------------|

### 3-pole

|    |     |    |         |    |            |        |      |
|----|-----|----|---------|----|------------|--------|------|
| 1  | 415 | 15 | 240/415 | 25 | FAZT-D1/3  | 240898 | 1/40 |
| 2  | 415 | 15 | 240/415 | 25 | FAZT-D2/3  | 240899 | 1/40 |
| 3  | 415 | 15 | 240/415 | 25 | FAZT-D3/3  | 240900 | 1/40 |
| 4  | 415 | 15 | 240/415 | 25 | FAZT-D4/3  | 240901 | 1/40 |
| 6  | 415 | 15 | 240/415 | 25 | FAZT-D6/3  | 240902 | 1/40 |
| 10 | 415 | 15 | 240/415 | 25 | FAZT-D10/3 | 240903 | 1/40 |
| 12 | 415 | 15 | 240/415 | 25 | FAZT-D12/3 | 240904 | 1/40 |
| 13 | 415 | 15 | 240/415 | 25 | FAZT-D13/3 | 240905 | 1/40 |
| 15 | 415 | 15 | 240/415 | 25 | FAZT-D15/3 | 240910 | 1/40 |
| 16 | 415 | 15 | 240/415 | 25 | FAZT-D16/3 | 240915 | 1/40 |
| 20 | 415 | 10 | 240/415 | 20 | FAZT-D20/3 | 142497 | 1/40 |
| 25 | 415 | 10 | 240/415 | 15 | FAZT-D25/3 | 142498 | 1/40 |
| 32 | 415 | 10 | 240/415 | 15 | FAZT-D32/3 | 142499 | 1/40 |
| 40 | 415 | 10 | 240/415 | 15 | FAZT-D40/3 | 142500 | 1/40 |

SG13211



### 3+N-pole

|    |     |    |         |    |             |        |      |
|----|-----|----|---------|----|-------------|--------|------|
| 1  | 415 | 15 | 240/415 | 25 | FAZT-D1/3N  | 241180 | 1/30 |
| 2  | 415 | 15 | 240/415 | 25 | FAZT-D2/3N  | 241181 | 1/30 |
| 3  | 415 | 15 | 240/415 | 25 | FAZT-D3/3N  | 241182 | 1/30 |
| 4  | 415 | 15 | 240/415 | 25 | FAZT-D4/3N  | 241183 | 1/30 |
| 6  | 415 | 15 | 240/415 | 25 | FAZT-D6/3N  | 241184 | 1/30 |
| 10 | 415 | 15 | 240/415 | 25 | FAZT-D10/3N | 241185 | 1/30 |
| 12 | 415 | 15 | 240/415 | 25 | FAZT-D12/3N | 241186 | 1/30 |
| 13 | 415 | 15 | 240/415 | 25 | FAZT-D13/3N | 241187 | 1/30 |
| 15 | 415 | 15 | 240/415 | 25 | FAZT-D15/3N | 241188 | 1/30 |
| 16 | 415 | 15 | 240/415 | 25 | FAZT-D16/3N | 241189 | 1/30 |
| 20 | 415 | 10 | 240/415 | 20 | FAZT-D20/3N | 142521 | 1/30 |
| 25 | 415 | 10 | 240/415 | 15 | FAZT-D25/3N | 142522 | 1/30 |
| 32 | 415 | 10 | 240/415 | 15 | FAZT-D32/3N | 142523 | 1/30 |
| 40 | 415 | 10 | 240/415 | 15 | FAZT-D40/3N | 142524 | 1/30 |

SG13111



### 4-pole

|    |     |    |         |    |            |        |      |
|----|-----|----|---------|----|------------|--------|------|
| 1  | 415 | 15 | 240/415 | 25 | FAZT-D1/4  | 240968 | 1/30 |
| 2  | 415 | 15 | 240/415 | 25 | FAZT-D2/4  | 240969 | 1/30 |
| 3  | 415 | 15 | 240/415 | 25 | FAZT-D3/4  | 240970 | 1/30 |
| 4  | 415 | 15 | 240/415 | 25 | FAZT-D4/4  | 240971 | 1/30 |
| 6  | 415 | 15 | 240/415 | 25 | FAZT-D6/4  | 240975 | 1/30 |
| 10 | 415 | 15 | 240/415 | 25 | FAZT-D10/4 | 240979 | 1/30 |
| 12 | 415 | 15 | 240/415 | 25 | FAZT-D12/4 | 240985 | 1/30 |
| 13 | 415 | 15 | 240/415 | 25 | FAZT-D13/4 | 240989 | 1/30 |
| 15 | 415 | 15 | 240/415 | 25 | FAZT-D15/4 | 240992 | 1/30 |
| 16 | 415 | 15 | 240/415 | 25 | FAZT-D16/4 | 240993 | 1/30 |
| 20 | 415 | 10 | 240/415 | 20 | FAZT-D20/4 | 142505 | 1/30 |
| 25 | 415 | 10 | 240/415 | 15 | FAZT-D25/4 | 142506 | 1/30 |
| 32 | 415 | 10 | 240/415 | 15 | FAZT-D32/4 | 142507 | 1/30 |
| 40 | 415 | 10 | 240/415 | 15 | FAZT-D40/4 | 142508 | 1/30 |

# FAZ-T | Specifications

## Specifications

### Technical data

|                 | FAZ-T                            |
|-----------------|----------------------------------|
| Productstandard | IEC/EN 60947-2<br>IEC/EN 60898-1 |
| Number of poles | 1, 1p+N, 2, 3, 3p+N, 4           |

### Mechanical specifications

|   |   |
|---|---|
| Device width                                | 17.7 mm (1p), 27 mm (1p+N), 36 mm (2p), 54 mm (3p), 72mm (3p+N), 72 mm (4p) |
| Frame size                                  | 45 mm   |
| Socket size                                 | 80 mm   |
| Device depth                                | 60 mm   |
| Terminals                                   | lift terminal   |
| Terminal capacity rigid solid/stranded wire | 1-25 mm <sup>2</sup>  |
| Terminal screw                              | M5 (with slotted screw acc. to EN ISO 4757-Z2, PZ2)                         |
| Terminal torque                             | max. 2.4 Nm   |
| Snap on fixing                              | tristable (on DIN rail acc. to EN 50022)                                    |
| Finger proof                                | acc.to VBG4, ÖVE EN-6   |
| Degree of Protection (DIN VDE 0470)         |   |
| Surface mounted                             | IP 20   |
| Built-in behind panel                       | IP 40   |
| Contact position indicator                  | red / green   |

### Electrical specifications

|                                 |           |   |
|---------------------------------|-----------|---|
| Rated voltage                   | $U_n$     | 240/415 V   |
| Rated current                   | $I_n$     | Type B, C, D: 1, 2, 3, 4, 6, 10, 12, 13, 15, 16, 20, 25, 32, 40 A |
| Rated insulation voltage        | $U_i$     | 440 V   |
| Rated impulse withstand voltage | $U_{imp}$ | 4 kV (1.2/50) $\mu$ sec   |

### Tripping characteristic

|                                   |          |  |
|-----------------------------------|----------|--|
| Conventional non-tripping current | $I_{nt}$ | $I_{nt} = 1.13 I_n$  |
| Conventional tripping current     | $I_t$    | $I_t = 1.45 I_n$   |
| Reference temperature             |          | 30 °C  |
| Temperature factor                |          | 0.4% /K  |
| Instantaneous tripping current    | $I_{mt}$ | type B: $3 I_n < I_{mt} = 5 I_n$ ; t ( $I_{mt}$ ) < 0,1 sec<br>type C: $5 I_n < I_{mt} = 10 I_n$ ; t ( $I_{mt}$ ) < 0,1 sec<br>type D: $10 I_n < I_{mt} = 20 I_n$ ; t ( $I_{mt}$ ) < 0,1 sec |

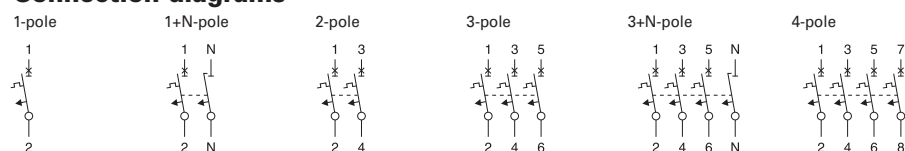
|   |  |  |
|---|--|--|
| Rated ultimate short-circuit braking capacity $I_{cu}$ (IEC/EN 60947-2) |  | type B 1-25 A: 25 kA, 32-40 A: 20 kA<br>type C 1-25 A: 25 kA, 32-40 A: 20 kA<br>type D 1p/1p+N/2p - 1-13 A: 25 kA, 15-20 A: 20 kA, 25-40 A: 15 kA<br>3p/3p+N/4p - 1-16 A: 25 kA, 20 A: 20 kA, 25-40 A: 15 kA |
|---|--|--|

|  |  |  |
|--|--|--|
| Rated service short-circuit braking capacity $I_{cs}$ (IEC/EN 60947-2) |  | for $I_{cu} = 25$ kA --> $I_{cs} = 12.5$ kA<br>for $I_{cu} = 20$ kA --> $I_{cs} = 10$ kA<br>for $I_{cu} = 15$ kA --> $I_{cs} = 7.5$ kA |
|--|--|--|

|  |  |  |
|--|--|--|
| Rated short-circuit braking capacity $I_{cn}$ (IEC/EN 60898-1) |  | type B 1-25 A: 15 kA, 32-40 A: 10 kA<br>type C 1-25 A: 15 kA, 32-40 A: 10 kA<br>type D 1-16 A: 15 kA, 20-40 A: 10 kA |
|--|--|--|

|                                 |  |  |
|---------------------------------|--|--|
| Selectivity class               |  | 3 (acc. to EN 60898)                     |
| Number of electrical operations |  | > 4000 (IEC/EN 60898)                    |
| Number of mechanical operations |  | > 10000 (IEC/EN 60947)                   |
| Climatic conditions             |  | acc. to IEC 68-2 (25..55°C / 90..95% RH) |

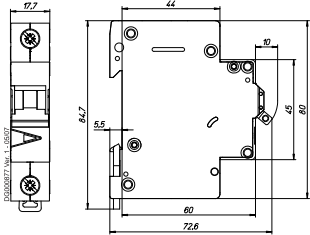
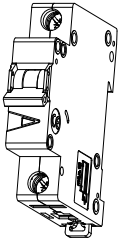
### Connection diagrams



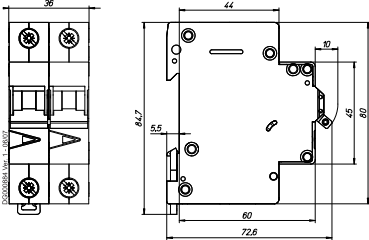
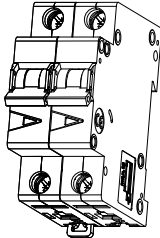
# FAZ-T | Specifications

## Dimensions (mm) FAZ-T

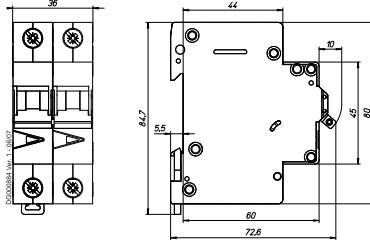
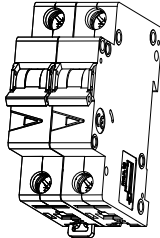
1-pole



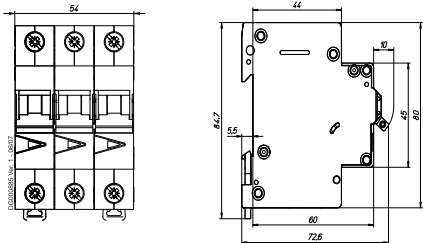
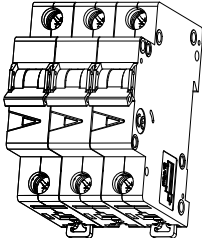
1+N-pole



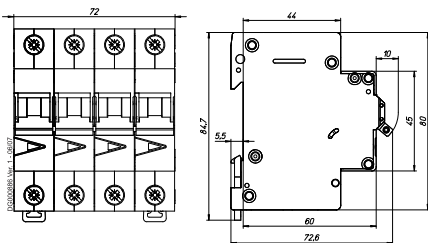
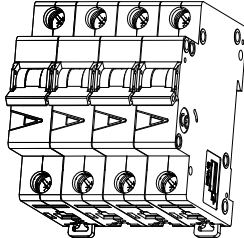
2-pole



3-pole



3+N-pole, 4-pole

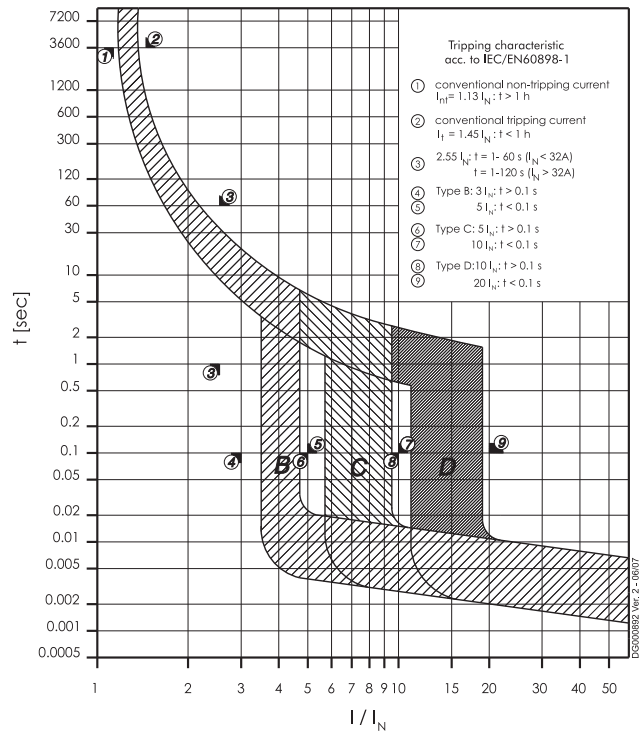




# FAZ-T | Specifications

## Tripping Characteristic FAZ-T

### Characteristics B, C and D - EN60898



# FAZ-T | Specifications

## Power Loss at $I_n$ FAZ-T

### Type B

| $I_n$ [A] | 1p    | 1pN   | 2p    | 3p    | 3pN*  | 4p    |
|-----------|-------|-------|-------|-------|-------|-------|
|           | P [W] | P [W] | P [W] | P [W] | P [W] | P [W] |
| 1         | 1.6   | 1.7   | 3.1   | 4.7   | 4.8   | 6.3   |
| 2         | 1.4   | 1.5   | 2.8   | 4.1   | 4.3   | 5.5   |
| 3         | 2.5   | 2.7   | 5.0   | 7.6   | 7.8   | 10.1  |
| 4         | 1.4   | 1.6   | 2.9   | 4.4   | 4.5   | 5.8   |
| 6         | 1.8   | 2.0   | 3.6   | 5.5   | 5.6   | 7.3   |
| 10        | 1.9   | 2.1   | 3.9   | 5.9   | 6.1   | 7.8   |
| 12        | 2.8   | 3.2   | 5.9   | 8.7   | 9.0   | 11.5  |
| 13        | 2.5   | 2.9   | 5.3   | 7.8   | 8.1   | 10.3  |
| 15        | 2.1   | 2.4   | 4.4   | 6.5   | 6.7   | 8.6   |
| 16        | 2.2   | 2.6   | 4.7   | 6.9   | 7.2   | 9.1   |
| 20        | 3.2   | 3.6   | 6.6   | 9.8   | 10.1  | 13.0  |
| 25        | 3.0   | 3.5   | 6.4   | 9.4   | 9.7   | 12.4  |
| 32        | 3.7   | 4.4   | 8.1   | 12.1  | 12.5  | 15.8  |
| 40        | 3.4   | 4.1   | 7.5   | 11.2  | 11.5  | 14.6  |

\*symmetrical load

### Type C

| $I_n$ [A] | 1p    | 1pN   | 2p    | 3p    | 3pN*  | 4p    |
|-----------|-------|-------|-------|-------|-------|-------|
|           | P [W] | P [W] | P [W] | P [W] | P [W] | P [W] |
| 1         | 1.6   | 1.7   | 3.1   | 4.7   | 4.8   | 6.3   |
| 2         | 1.4   | 1.5   | 2.8   | 4.1   | 4.3   | 5.5   |
| 3         | 1.2   | 1.3   | 2.4   | 3.6   | 3.7   | 4.8   |
| 4         | 1.4   | 1.6   | 2.9   | 4.4   | 4.5   | 5.8   |
| 6         | 1.5   | 1.6   | 2.9   | 4.4   | 4.6   | 5.9   |
| 10        | 1.5   | 1.7   | 3.0   | 4.6   | 4.7   | 6.1   |
| 12        | 2.1   | 2.4   | 4.4   | 6.5   | 6.8   | 8.6   |
| 13        | 2.5   | 2.9   | 5.3   | 7.8   | 8.1   | 10.3  |
| 15        | 2.1   | 2.4   | 4.4   | 6.5   | 6.7   | 8.6   |
| 16        | 2.2   | 2.6   | 4.7   | 6.9   | 7.2   | 9.1   |
| 20        | 3.2   | 3.6   | 6.6   | 9.8   | 10.1  | 13.0  |
| 25        | 3.0   | 3.5   | 6.4   | 9.4   | 9.7   | 12.4  |
| 32        | 3.7   | 4.4   | 8.1   | 12.1  | 12.5  | 15.8  |
| 40        | 3.4   | 4.1   | 7.5   | 11.2  | 11.5  | 14.6  |

\*symmetrical load

### Type D

| $I_n$ [A] | 1p    | 1pN   | 2p    | 3p    | 3pN*  | 4p    |
|-----------|-------|-------|-------|-------|-------|-------|
|           | P [W] | P [W] | P [W] | P [W] | P [W] | P [W] |
| 1         | 0.8   | 0.9   | 1.6   | 2.4   | 2.5   | 3.2   |
| 2         | 1.0   | 1.1   | 2.0   | 3.0   | 3.1   | 4.0   |
| 3         | 1.2   | 1.3   | 2.4   | 3.6   | 3.7   | 4.8   |
| 4         | 1.4   | 1.6   | 2.9   | 4.4   | 4.5   | 5.8   |
| 6         | 1.5   | 1.6   | 2.9   | 4.4   | 4.6   | 5.9   |
| 10        | 1.5   | 1.7   | 3.0   | 4.6   | 4.7   | 6.1   |
| 12        | 1.7   | 2.0   | 3.6   | 5.3   | 5.4   | 7.0   |
| 13        | 1.9   | 2.2   | 4.0   | 5.9   | 6.1   | 7.8   |
| 15        | 2.1   | 2.4   | 4.4   | 6.5   | 6.7   | 8.6   |
| 16        | 2.2   | 2.6   | 4.7   | 6.9   | 7.2   | 9.1   |
| 20        | 2.0   | 2.2   | 4.1   | 6.1   | 6.2   | 8.1   |
| 25        | 2.5   | 2.9   | 5.2   | 7.7   | 7.9   | 10.2  |
| 32        | 3.4   | 4.0   | 7.4   | 11.1  | 11.4  | 14.5  |
| 40        | 3.2   | 3.8   | 7.0   | 10.4  | 10.7  | 13.6  |

\*symmetrical load

# FAZ-T | Specifications

## Influence of Ambient Temperature FAZ-T

On Load Carrying Capacity (temperature derating)

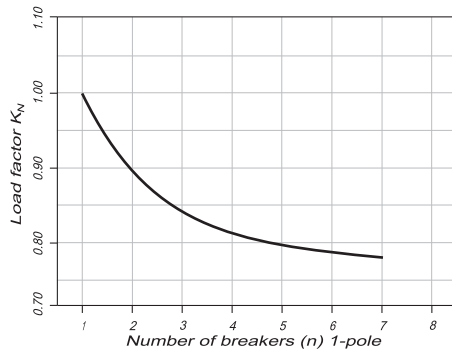
| $I_N$ [A] | Ambient temperature T [°C] |     |     |     |     |     |     |    |      |      |      |      |     |      |      |      |      |
|-----------|----------------------------|-----|-----|-----|-----|-----|-----|----|------|------|------|------|-----|------|------|------|------|
|           | -40                        | -30 | -20 | -10 | 0   | 10  | 20  | 30 | 35   | 40   | 45   | 50   | 55  | 60   | 65   | 70   | 75   |
| 1         | 1,3                        | 1,2 | 1,2 | 1,2 | 1,1 | 1,1 | 1   | 1  | 0,99 | 0,97 | 0,95 | 0,93 | 0,9 | 0,89 | 0,87 | 0,85 | 0,83 |
| 2         | 2,6                        | 2,5 | 2,4 | 2,3 | 2,2 | 2,2 | 2,1 | 2  | 2    | 1,9  | 1,9  | 1,9  | 1,8 | 1,8  | 1,7  | 1,7  | 1,7  |
| 3         | 3,8                        | 3,7 | 3,6 | 3,5 | 3,4 | 3,3 | 3,1 | 3  | 3    | 2,9  | 2,8  | 2,8  | 2,7 | 2,7  | 2,6  | 2,5  | 2,5  |
| 4         | 5,1                        | 5   | 4,8 | 4,7 | 4,5 | 4,3 | 4,2 | 4  | 3,9  | 3,9  | 3,8  | 3,7  | 3,6 | 3,5  | 3,5  | 3,4  | 3,3  |
| 6         | 7,7                        | 7,5 | 7,2 | 7   | 6,7 | 6,5 | 6,3 | 6  | 5,9  | 5,8  | 5,7  | 5,6  | 5,4 | 5,3  | 5,2  | 5,1  | 5    |
| 10        | 13                         | 12  | 12  | 12  | 11  | 11  | 10  | 10 | 9,9  | 9,7  | 9,5  | 9,3  | 9   | 8,9  | 8,7  | 8,5  | 8,3  |
| 12        | 15                         | 15  | 14  | 14  | 13  | 13  | 13  | 12 | 12   | 12   | 11   | 11   | 11  | 11   | 10   | 10   | 10   |
| 13        | 17                         | 16  | 16  | 15  | 15  | 14  | 14  | 13 | 13   | 13   | 12   | 12   | 12  | 12   | 11   | 11   | 11   |
| 15        | 19                         | 19  | 18  | 17  | 17  | 16  | 16  | 15 | 15   | 15   | 14   | 14   | 14  | 13   | 13   | 13   | 12   |
| 16        | 20                         | 20  | 19  | 19  | 18  | 17  | 17  | 16 | 16   | 15   | 15   | 15   | 14  | 14   | 14   | 14   | 13   |
| 20        | 26                         | 25  | 24  | 23  | 22  | 22  | 21  | 20 | 20   | 19   | 19   | 19   | 18  | 18   | 17   | 17   | 17   |
| 25        | 32                         | 31  | 30  | 29  | 28  | 27  | 26  | 25 | 25   | 24   | 24   | 23   | 23  | 22   | 22   | 21   | 21   |
| 32        | 41                         | 40  | 38  | 37  | 36  | 35  | 33  | 32 | 32   | 31   | 30   | 30   | 29  | 28   | 28   | 27   | 26   |
| 40        | 51                         | 50  | 48  | 47  | 45  | 43  | 42  | 40 | 39   | 39   | 38   | 37   | 36  | 35   | 35   | 34   | 33   |

## Influence of the Line Frequency

On the Instantaneous Tripping Current  $I_{MA}$

|                                     | Line Frequency f [Hz] |     |     |     |     |     |     |
|-------------------------------------|-----------------------|-----|-----|-----|-----|-----|-----|
|                                     | $16\frac{2}{3}$       | 50  | 60  | 100 | 200 | 300 | 400 |
| $I_{MA}(f)/I_{MA}(50\text{Hz})$ [%] | 91                    | 100 | 101 | 106 | 115 | 134 | 141 |

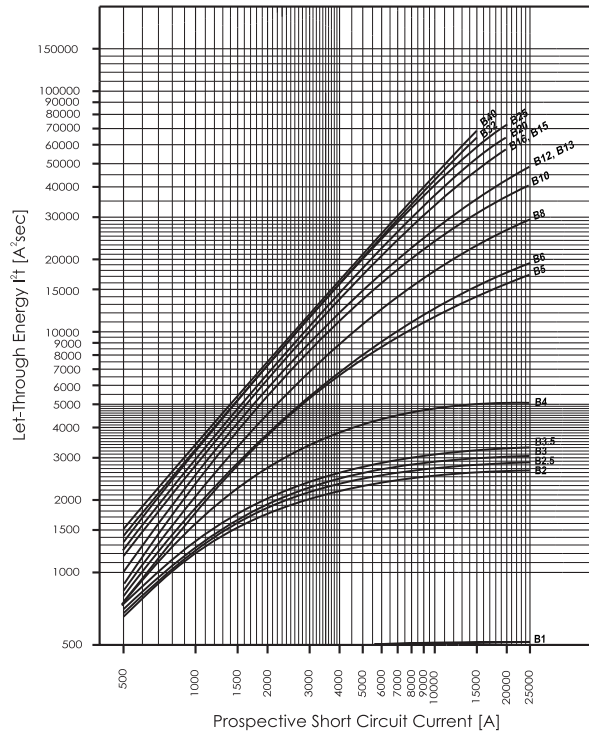
## Load rating in case of circuit breakers arranged one next to the other



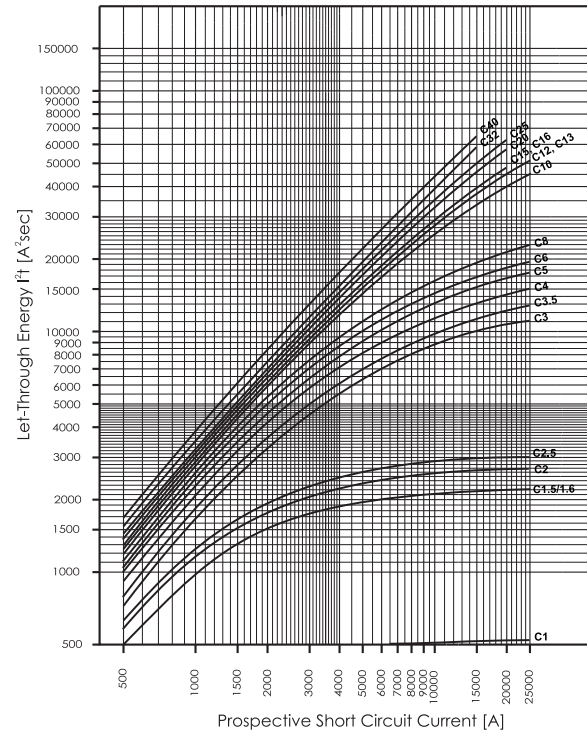
# FAZ-T | Specifications

## Maximum Let-Through Energy FAZ-T

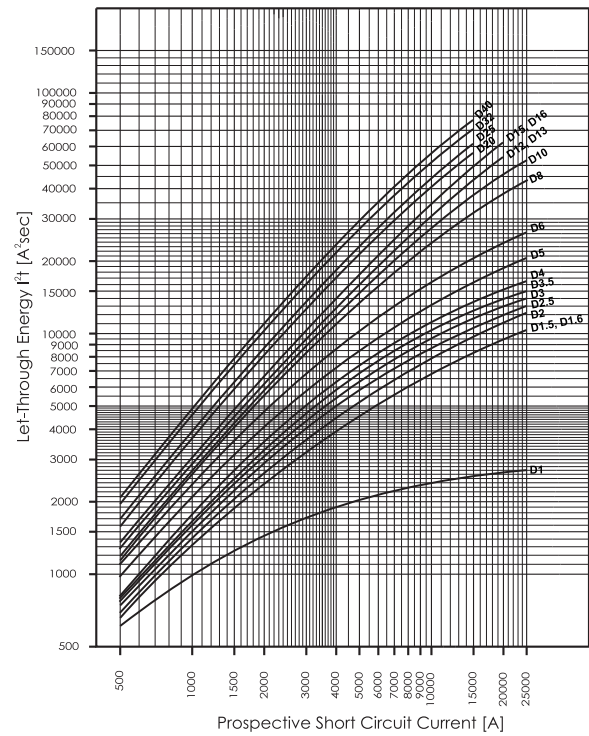
Type B



Type C



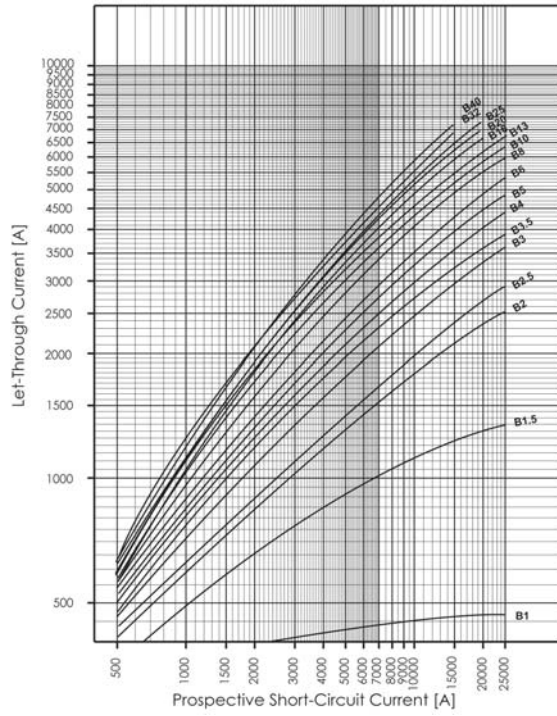
Type D



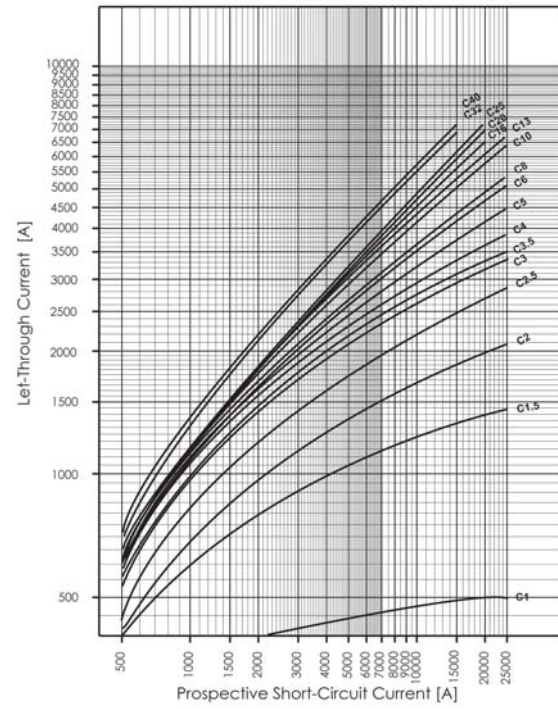
# FAZ-T | Specifications

## Maximum Let-Through Current FAZ-T

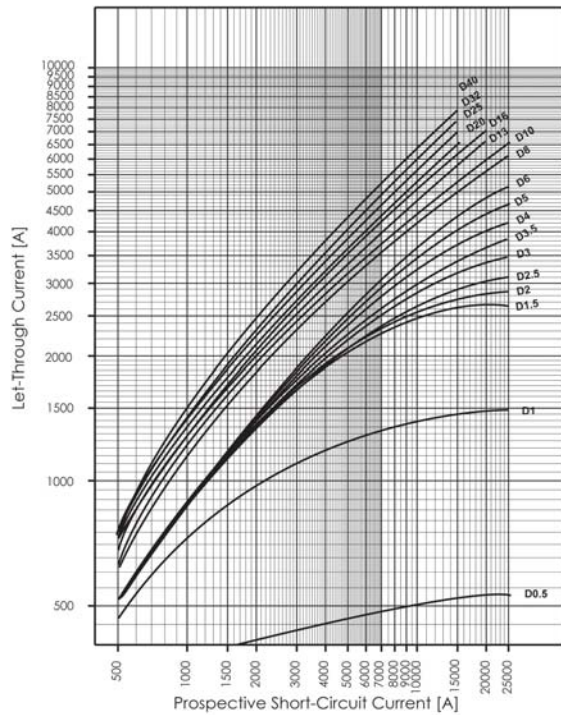
Type B



Type C





Type D



# FAZ-...-DC | Characteristic C

## FAZ-...-DC Miniature Circuit Breakers (MCBs) Characteristic C

|   | Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60947-2<br>(V DC) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Type<br>Designation | Article No. | Units<br>per<br>package |
|---|----------------------------|--|---|---------------------|-------------|-------------------------|
| <b>1-pole</b>   |                            |  |   |                     |             |                         |
|  | 2                          | 220  | 10  | FAZ-C2/1-DC         | 279122      | 12/120                  |
|   | 3                          | 250  | 10  | FAZ-C3/1-DC         | 279123      | 12/120                  |
|   | 4                          | 250  | 10  | FAZ-C4/1-DC         | 279124      | 12/120                  |
|   | 6                          | 250  | 10  | FAZ-C6/1-DC         | 279125      | 12/120                  |
|   | 10                         | 250  | 10  | FAZ-C10/1-DC        | 279126      | 12/120                  |
|   | 13                         | 250  | 10  | FAZ-C13/1-DC        | 279127      | 12/120                  |
|   | 16                         | 250  | 10  | FAZ-C16/1-DC        | 279128      | 12/120                  |
|   | 20                         | 250  | 10  | FAZ-C20/1-DC        | 279129      | 12/120                  |
|   | 25                         | 250  | 10  | FAZ-C25/1-DC        | 279130      | 12/120                  |
|   | 32                         | 250  | 10  | FAZ-C32/1-DC        | 279131      | 12/120                  |
|   | 40                         | 250  | 10  | FAZ-C40/1-DC        | 279132      | 12/120                  |
|   | 50                         | 250  | 10  | FAZ-C50/1-DC        | 279133      | 12/120                  |

|  |               |     |    |              |        |      |
|--|---------------|-----|----|--------------|--------|------|
|  | <b>2-pole</b> |     |    |              |        |      |
|  | 2             | 440 | 10 | FAZ-C2/2-DC  | 279134 | 1/60 |
|  | 3             | 500 | 10 | FAZ-C3/2-DC  | 279135 | 1/60 |
|  | 4             | 500 | 10 | FAZ-C4/2-DC  | 279136 | 1/60 |
|  | 6             | 500 | 10 | FAZ-C6/2-DC  | 279137 | 1/60 |
|  | 10            | 500 | 10 | FAZ-C10/2-DC | 279138 | 1/60 |
|  | 13            | 500 | 10 | FAZ-C13/2-DC | 279139 | 1/60 |
|  | 16            | 500 | 10 | FAZ-C16/2-DC | 279140 | 1/60 |
|  | 20            | 500 | 10 | FAZ-C20/2-DC | 279141 | 1/60 |
|  | 25            | 500 | 10 | FAZ-C25/2-DC | 279142 | 1/60 |
|  | 32            | 500 | 10 | FAZ-C32/2-DC | 279143 | 1/60 |
|  | 40            | 500 | 10 | FAZ-C40/2-DC | 279144 | 1/60 |
|  | 50            | 500 | 10 | FAZ-C50/2-DC | 279145 | 1/60 |

# FAZ-...-DC | Specifications

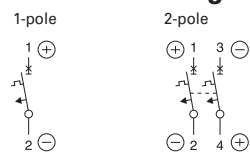
## Specifications

### Technical data

|   | FAZ-DC *)   |  |
|---|---|--|
| Productstandard                             | IEC/EN 60947-2                                      |  |
| Number of poles                             | 1, 2  |  |
| <b>Mechanical specifications</b>            |   |  |
| Device width                                | 17.7 mm (1p), 36 mm (2p)                            |  |
| Frame size                                  | 45 mm   |  |
| Socket size                                 | 80 mm   |  |
| Device depth                                | 60 mm   |  |
| Terminals                                   | lift terminal                                       |  |
| Terminal capacity rigid solid/stranded wire | 1-25 mm <sup>2</sup>                                |  |
| Terminal screw                              | M5 (with slotted screw acc. to EN ISO 4757-Z2, PZ2) |  |
| Terminal torque                             | max. 2.4 Nm   |  |
| Snap on fixing                              | tristable (on DIN rail acc. to EN 50022)            |  |
| Finger proof                                | acc.to VBG4, ÖVE EN-6                               |  |
| Degree of Protection (DIN VDE 0470)         |   |  |
| Surface mounted                             | IP 20   |  |
| Built-in behind panel                       | IP 40   |  |
| Contact position indicator                  | red / green   |  |
| <b>Electrical specifications</b>            |   |  |
| Rated voltage DC                            | $U_n$   | 2 A type: 220V (per pole)<br>3-50 A types: 250V (per pole)     |
| Rated current                               | $I_n$   | Type C: 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50 A           |
| Rated insulation voltage                    | $U_i$   | 440 V  |
| Rated impulse withstand voltage             | $U_{imp}$   | 4 kV (1.2/50)µsec  |
| <b>Tripping characteristic</b>              |   |  |
| Conventional non-tripping current           | $I_{nt}$  | $I_{nt} = 1.13 I_n$  |
| Conventional tripping current               | $I_t$   | $I_t = 1.45 I_n$   |
| Reference temperature                       |   | 30 °C  |
| Temperature factor                          |   | 0.4% /K  |
| Instantaneous tripping current              | $I_{mt}$  | type C: $7 I_n < I_{mt} = 15 I_n; t(I_{mt}) < 0,1 \text{ sec}$ |
| Rated short-circuit braking capacity        | $I_{cu}$  | 10 kA  |
| Selectivity class                           |   | 3  |
| Number of electrical operations             |   | > 4000   |
| Number of mechanical operations             |   | > 20000  |
| Climatic conditions                         |   | acc. to IEC 68-2 (25..55°C / 90..95% RH)                       |

\*) not for PV string protection!

### Connection diagrams

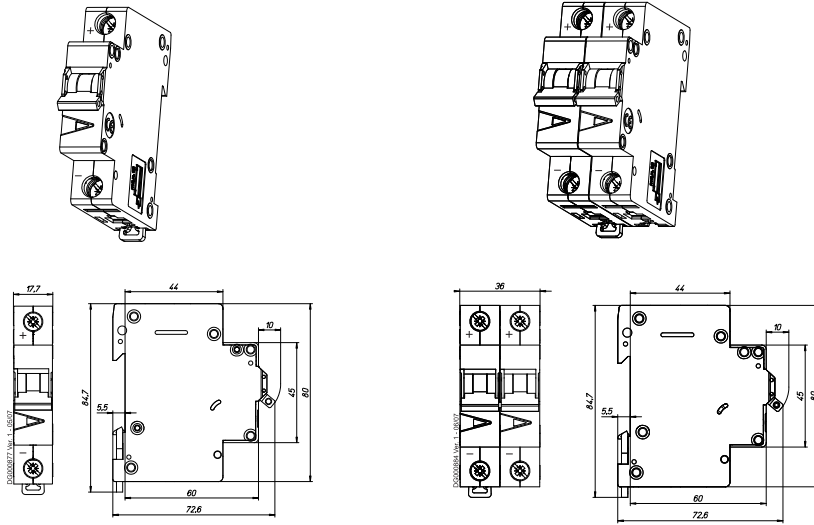


# FAZ-...-DC | Specifications

## Dimensions (mm) FAZ-...-DC

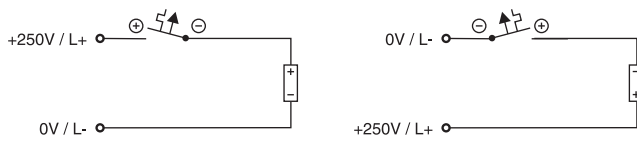
1-pole

2-pole

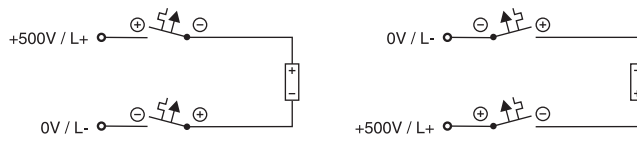


## Connection examples FAZ-...-DC

Connection example at 250V=, 1-pole

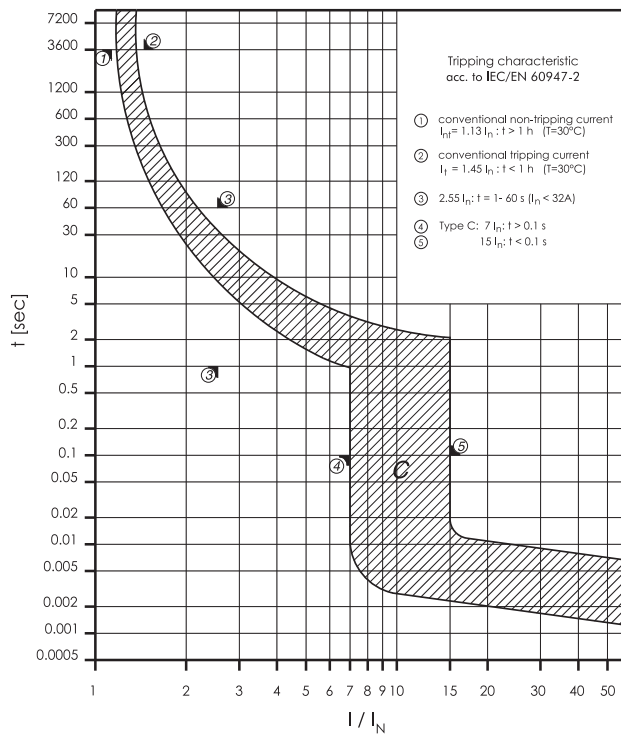


Connection example at 500V=, 2-pole



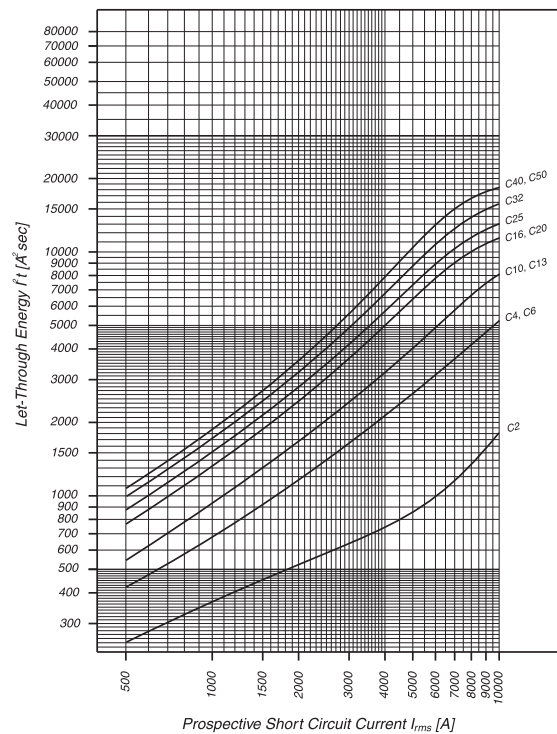
## Tripping Characteristic FAZ-...-DC

Characteristics C - IEC/EN 60947-2



## Maximum Let-Through Energy FAZ-...-DC

Type C





# FAZ-...-NA | Characteristic B

## FAZ-...-NA Miniature Circuit Breakers (MCBs) Characteristic B

SG09011



| Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL489<br>(V) | Breaking capacity<br>acc. to<br>UL489<br>(kA) | SWD | NFPA 79 | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|---|---|-------------------------------|---|-----|---------|---------------------|-------------|-------------------------|
|----------------------------|---|---|-------------------------------|---|-----|---------|---------------------|-------------|-------------------------|

### 1-pole

|     |         |    |     |    |     |        |               |        |        |
|-----|---------|----|-----|----|-----|--------|---------------|--------|--------|
| 1   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B1/1-NA   | 132414 | 12/120 |
| 1,5 | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B1,5/1-NA | 132415 | 12/120 |
| 2   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B2/1-NA   | 132416 | 12/120 |
| 3   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B3/1-NA   | 132417 | 12/120 |
| 4   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B4/1-NA   | 132418 | 12/120 |
| 5   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B5/1-NA   | 132419 | 12/120 |
| 6   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B6/1-NA   | 132680 | 12/120 |
| 7   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B7/1-NA   | 132681 | 12/120 |
| 8   | 240/415 | 15 | 277 | 10 | SWD | AWG 16 | FAZ-B8/1-NA   | 132682 | 12/120 |
| 10  | 240/415 | 15 | 277 | 10 | SWD | AWG 16 | FAZ-B10/1-NA  | 132683 | 12/120 |
| 13  | 240/415 | 15 | 277 | 10 | SWD |        | FAZ-B13/1-NA  | 132684 | 12/120 |
| 15  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-B15/1-NA  | 132685 | 12/120 |
| 16  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-B16/1-NA  | 132686 | 12/120 |
| 20  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-B20/1-NA  | 132687 | 12/120 |
| 25  | 240/415 | 15 | 277 | 14 |     |        | FAZ-B25/1-NA  | 132688 | 12/120 |
| 30  | 240/415 | 15 | 277 | 10 |     |        | FAZ-B30/1-NA  | 132689 | 12/120 |
| 32  | 240/415 | 15 | 277 | 10 |     |        | FAZ-B32/1-NA  | 132690 | 12/120 |
| 35  | 240/415 | 15 | 240 | 10 |     |        | FAZ-B35/1-NA  | 132691 | 12/120 |
| 40  | 240/415 | 15 | 240 | 10 |     |        | FAZ-B40/1-NA  | 132692 | 12/120 |

SG09111



### 2-pole

|     |     |    |          |    |     |        |               |        |      |
|-----|-----|----|----------|----|-----|--------|---------------|--------|------|
| 1   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B1/2-NA   | 132693 | 1/60 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B1,5/2-NA | 132694 | 1/60 |
| 2   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B2/2-NA   | 132695 | 1/60 |
| 3   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B3/2-NA   | 132696 | 1/60 |
| 4   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B4/2-NA   | 132697 | 1/60 |
| 5   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B5/2-NA   | 132698 | 1/60 |
| 6   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B6/2-NA   | 132699 | 1/60 |
| 7   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B7/2-NA   | 132700 | 1/60 |
| 8   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-B8/2-NA   | 132701 | 1/60 |
| 10  | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-B10/2-NA  | 132702 | 1/60 |
| 13  | 415 | 15 | 480Y/277 | 10 | SWD |        | FAZ-B13/2-NA  | 132703 | 1/60 |
| 15  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B15/2-NA  | 132704 | 1/60 |
| 16  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B16/2-NA  | 132705 | 1/60 |
| 20  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B20/2-NA  | 132706 | 1/60 |
| 25  | 415 | 15 | 480Y/277 | 14 |     |        | FAZ-B25/2-NA  | 132707 | 1/60 |
| 30  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-B30/2-NA  | 132708 | 1/60 |
| 32  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-B32/2-NA  | 132709 | 1/60 |
| 35  | 415 | 15 | 240      | 10 |     |        | FAZ-B35/2-NA  | 132710 | 1/60 |
| 40  | 415 | 15 | 240      | 10 |     |        | FAZ-B40/2-NA  | 132711 | 1/60 |

SG09211






### 3-pole

|     |     |    |          |    |     |        |               |        |      |
|-----|-----|----|----------|----|-----|--------|---------------|--------|------|
| 1   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B1/3-NA   | 132712 | 1/40 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B1,5/3-NA | 132713 | 1/40 |
| 2   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B2/3-NA   | 132714 | 1/40 |
| 3   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B3/3-NA   | 132715 | 1/40 |
| 4   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B4/3-NA   | 132716 | 1/40 |
| 5   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B5/3-NA   | 132717 | 1/40 |
| 6   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B6/3-NA   | 132718 | 1/40 |
| 7   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B7/3-NA   | 132719 | 1/40 |
| 8   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-B8/3-NA   | 132720 | 1/40 |
| 10  | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-B10/3-NA  | 132721 | 1/40 |
| 13  | 415 | 15 | 480Y/277 | 10 | SWD |        | FAZ-B13/3-NA  | 132722 | 1/40 |
| 15  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B15/3-NA  | 132723 | 1/40 |
| 16  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B16/3-NA  | 132724 | 1/40 |
| 20  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B20/3-NA  | 132725 | 1/40 |
| 25  | 415 | 15 | 480Y/277 | 14 |     |        | FAZ-B25/3-NA  | 132726 | 1/40 |
| 30  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-B30/3-NA  | 132727 | 1/40 |
| 32  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-B32/3-NA  | 132728 | 1/40 |
| 35  | 415 | 15 | 240      | 10 |     |        | FAZ-B35/3-NA  | 132729 | 1/40 |
| 40  | 415 | 15 | 240      | 10 |     |        | FAZ-B40/3-NA  | 132730 | 1/40 |

# FAZ-...-NA | Characteristic C

## FAZ-...-NA Miniature Circuit Breakers (MCBs) Characteristic C

|  | Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL489<br>(V) | Breaking capacity<br>acc. to<br>UL489<br>(kA) | SWD | NFPA 79      | Type<br>Designation | Article No. | Units<br>per<br>package |
|--|----------------------------|---|---|-------------------------------|---|-----|--------------|---------------------|-------------|-------------------------|
| <b>1-pole</b>  |                            |   |   |                               |   |     |              |                     |             |                         |
| SG09011<br>   | 0,5                        | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C0,5/1-NA       | 102077      | 12/120                  |
|  | 1                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C1/1-NA         | 102078      | 12/120                  |
|  | 1,5                        | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C1,5/1-NA       | 102079      | 12/120                  |
|  | 2                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C2/1-NA         | 102080      | 12/120                  |
|  | 3                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C3/1-NA         | 102081      | 12/120                  |
|  | 4                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C4/1-NA         | 102082      | 12/120                  |
|  | 5                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C5/1-NA         | 102083      | 12/120                  |
|  | 6                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C6/1-NA         | 102084      | 12/120                  |
|  | 7                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C7/1-NA         | 102085      | 12/120                  |
|  | 8                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 16       | FAZ-C8/1-NA         | 102086      | 12/120                  |
|  | 10                         | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 16       | FAZ-C10/1-NA        | 102087      | 12/120                  |
|  | 13                         | 240/415                                   | 15  | 277                           | 10  | SWD |              | FAZ-C13/1-NA        | 102088      | 12/120                  |
|  | 15                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-C15/1-NA        | 102089      | 12/120                  |
|  | 16                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-C16/1-NA        | 102090      | 12/120                  |
|  | 20                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-C20/1-NA        | 102091      | 12/120                  |
|  | 25                         | 240/415                                   | 15  | 277                           | 14  |     |              | FAZ-C25/1-NA        | 102092      | 12/120                  |
| 30   | 240/415                    | 15  | 277   | 10                            |   |     | FAZ-C30/1-NA | 102093              | 12/120      |                         |
| 32   | 240/415                    | 15  | 277   | 10                            |   |     | FAZ-C32/1-NA | 102094              | 12/120      |                         |
| 35   | 240/415                    | 15  | 240   | 10                            |   |     | FAZ-C35/1-NA | 102095              | 12/120      |                         |
| 40   | 240/415                    | 15  | 240   | 10                            |   |     | FAZ-C40/1-NA | 102096              | 12/120      |                         |
| <b>2-pole</b>  |                            |   |   |                               |   |     |              |                     |             |                         |
| SG09111<br> | 0,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C0,5/2-NA       | 102157      | 1/60                    |
|  | 1                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C1/2-NA         | 102158      | 1/60                    |
|  | 1,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C1,5/2-NA       | 102159      | 1/60                    |
|  | 2                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C2/2-NA         | 102160      | 1/60                    |
|  | 3                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C3/2-NA         | 102161      | 1/60                    |
|  | 4                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C4/2-NA         | 102162      | 1/60                    |
|  | 5                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C5/2-NA         | 102163      | 1/60                    |
|  | 6                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C6/2-NA         | 102164      | 1/60                    |
|  | 7                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C7/2-NA         | 102165      | 1/60                    |
|  | 8                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-C8/2-NA         | 102166      | 1/60                    |
|  | 10                         | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-C10/2-NA        | 102167      | 1/60                    |
|  | 13                         | 415                                       | 15  | 480Y/277                      | 10  | SWD |              | FAZ-C13/2-NA        | 102168      | 1/60                    |
|  | 15                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C15/2-NA        | 102169      | 1/60                    |
|  | 16                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C16/2-NA        | 102170      | 1/60                    |
|  | 20                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C20/2-NA        | 102171      | 1/60                    |
|  | 25                         | 415                                       | 15  | 480Y/277                      | 14  |     |              | FAZ-C25/2-NA        | 102172      | 1/60                    |
| 30   | 415                        | 15  | 480Y/277  | 10                            |   |     | FAZ-C30/2-NA | 102173              | 1/60        |                         |
| 32   | 415                        | 15  | 480Y/277  | 10                            |   |     | FAZ-C32/2-NA | 102174              | 1/60        |                         |
| 35   | 415                        | 15  | 240   | 10                            |   |     | FAZ-C35/2-NA | 102175              | 1/60        |                         |
| 40   | 415                        | 15  | 240   | 10                            |   |     | FAZ-C40/2-NA | 102176              | 1/60        |                         |
| <b>3-pole</b>  |                            |   |   |                               |   |     |              |                     |             |                         |
| SG09211<br> | 0,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C0,5/3-NA       | 102237      | 1/40                    |
|  | 1                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C1/3-NA         | 102238      | 1/40                    |
|  | 1,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C1,5/3-NA       | 102239      | 1/40                    |
|  | 2                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C2/3-NA         | 102240      | 1/40                    |
|  | 3                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C3/3-NA         | 102241      | 1/40                    |
|  | 4                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C4/3-NA         | 102242      | 1/40                    |
|  | 5                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C5/3-NA         | 102243      | 1/40                    |
|  | 6                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C6/3-NA         | 102244      | 1/40                    |
|  | 7                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C7/3-NA         | 102245      | 1/40                    |
|  | 8                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-C8/3-NA         | 102246      | 1/40                    |
|  | 10                         | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-C10/3-NA        | 102247      | 1/40                    |
|  | 13                         | 415                                       | 15  | 480Y/277                      | 10  | SWD |              | FAZ-C13/3-NA        | 102248      | 1/40                    |
|  | 15                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C15/3-NA        | 102249      | 1/40                    |
|  | 16                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C16/3-NA        | 102250      | 1/40                    |
|  | 20                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C20/3-NA        | 102251      | 1/40                    |
|  | 25                         | 415                                       | 15  | 480Y/277                      | 14  |     |              | FAZ-C25/3-NA        | 102252      | 1/40                    |
| 30   | 415                        | 15  | 480Y/277  | 10                            |   |     | FAZ-C30/3-NA | 102253              | 1/40        |                         |
| 32   | 415                        | 15  | 480Y/277  | 10                            |   |     | FAZ-C32/3-NA | 102254              | 1/40        |                         |
| 35   | 415                        | 15  | 240   | 10                            |   |     | FAZ-C35/3-NA | 102255              | 1/40        |                         |
| 40   | 415                        | 15  | 240   | 10                            |   |     | FAZ-C40/3-NA | 102256              | 1/40        |                         |

# FAZ-...-NA | Characteristic D

## FAZ-...-NA Miniature Circuit Breakers (MCBs) Characteristic D

SG09011



| Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL489<br>(V) | Breaking capacity<br>acc. to<br>UL489<br>(kA) | SWD | NFPA 79 | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|---|---|-------------------------------|---|-----|---------|---------------------|-------------|-------------------------|
|----------------------------|---|---|-------------------------------|---|-----|---------|---------------------|-------------|-------------------------|

### 1-pole

|     |         |    |     |    |     |        |               |        |        |
|-----|---------|----|-----|----|-----|--------|---------------|--------|--------|
| 0,5 | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-D0,5/1-NA | 102097 | 12/120 |
| 1   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-D1/1-NA   | 102098 | 12/120 |
| 1,5 | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-D1,5/1-NA | 102099 | 12/120 |
| 2   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-D2/1-NA   | 102100 | 12/120 |
| 3   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-D3/1-NA   | 102101 | 12/120 |
| 4   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-D4/1-NA   | 102102 | 12/120 |
| 5   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-D5/1-NA   | 102103 | 12/120 |
| 6   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-D6/1-NA   | 102104 | 12/120 |
| 7   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-D7/1-NA   | 102105 | 12/120 |
| 8   | 240/415 | 15 | 277 | 10 | SWD | AWG 16 | FAZ-D8/1-NA   | 102106 | 12/120 |
| 10  | 240/415 | 15 | 277 | 10 | SWD | AWG 16 | FAZ-D10/1-NA  | 102107 | 12/120 |
| 13  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-D13/1-NA  | 102108 | 12/120 |
| 15  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-D15/1-NA  | 102109 | 12/120 |
| 16  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-D16/1-NA  | 102110 | 12/120 |
| 20  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-D20/1-NA  | 102111 | 12/120 |
| 25  | 240/415 | 15 | 277 | 10 |     |        | FAZ-D25/1-NA  | 102112 | 12/120 |
| 30  | 240/415 | 15 | 277 | 10 |     |        | FAZ-D30/1-NA  | 102113 | 12/120 |
| 32  | 240/415 | 15 | 277 | 10 |     |        | FAZ-D32/1-NA  | 102114 | 12/120 |
| 35  | 240/415 | 15 | 240 | 10 |     |        | FAZ-D35/1-NA  | 102115 | 12/120 |
| 40  | 240/415 | 15 | 240 | 10 |     |        | FAZ-D40/1-NA  | 102116 | 12/120 |

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### 2-pole

|     |     |    |          |    |     |        |               |        |      |
|-----|-----|----|----------|----|-----|--------|---------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D0,5/2-NA | 102177 | 1/60 |
| 1   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D1/2-NA   | 102178 | 1/60 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D1,5/2-NA | 102179 | 1/60 |
| 2   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D2/2-NA   | 102180 | 1/60 |
| 3   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D3/2-NA   | 102181 | 1/60 |
| 4   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D4/2-NA   | 102182 | 1/60 |
| 5   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D5/2-NA   | 102183 | 1/60 |
| 6   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D6/2-NA   | 102184 | 1/60 |
| 7   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D7/2-NA   | 102185 | 1/60 |
| 8   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-D8/2-NA   | 102186 | 1/60 |
| 10  | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-D10/2-NA  | 102187 | 1/60 |
| 13  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-D13/2-NA  | 102188 | 1/60 |
| 15  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-D15/2-NA  | 102189 | 1/60 |
| 16  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-D16/2-NA  | 102190 | 1/60 |
| 20  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-D20/2-NA  | 102191 | 1/60 |
| 25  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-D25/2-NA  | 102192 | 1/60 |
| 30  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-D30/2-NA  | 102193 | 1/60 |
| 32  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-D32/2-NA  | 102194 | 1/60 |
| 35  | 415 | 15 | 240      | 10 |     |        | FAZ-D35/2-NA  | 102195 | 1/60 |
| 40  | 415 | 15 | 240      | 10 |     |        | FAZ-D40/2-NA  | 102196 | 1/60 |

SG09211



### 3-pole

|     |     |    |          |    |     |        |               |        |      |
|-----|-----|----|----------|----|-----|--------|---------------|--------|------|
| 0,5 | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D0,5/3-NA | 102257 | 1/40 |
| 1   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D1/3-NA   | 102258 | 1/40 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D1,5/3-NA | 102259 | 1/40 |
| 2   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D2/3-NA   | 102260 | 1/40 |
| 3   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D3/3-NA   | 102261 | 1/40 |
| 4   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D4/3-NA   | 102262 | 1/40 |
| 5   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D5/3-NA   | 102263 | 1/40 |
| 6   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D6/3-NA   | 102264 | 1/40 |
| 7   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-D7/3-NA   | 102265 | 1/40 |
| 8   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-D8/3-NA   | 102266 | 1/40 |
| 10  | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-D10/3-NA  | 102267 | 1/40 |
| 13  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-D13/3-NA  | 102268 | 1/40 |
| 15  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-D15/3-NA  | 102269 | 1/40 |
| 16  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-D16/3-NA  | 102270 | 1/40 |
| 20  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-D20/3-NA  | 102271 | 1/40 |
| 25  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-D25/3-NA  | 102272 | 1/40 |
| 30  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-D30/3-NA  | 102273 | 1/40 |
| 32  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-D32/3-NA  | 102274 | 1/40 |
| 35  | 415 | 15 | 240      | 10 |     |        | FAZ-D35/3-NA  | 102275 | 1/40 |
| 40  | 415 | 15 | 240      | 10 |     |        | FAZ-D40/3-NA  | 102276 | 1/40 |

# FAZ-...-NA-DC | Characteristic C

## FAZ-...-NA-DC Miniature Circuit Breakers (MCBs) Characteristic C

SG09011



| Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60947-2<br>(V DC) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL489<br>(V) | Breaking capacity<br>acc. to<br>UL489<br>(kA) | SWD | NFPA 79 | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|--|---|-------------------------------|---|-----|---------|---------------------|-------------|-------------------------|
|----------------------------|--|---|-------------------------------|---|-----|---------|---------------------|-------------|-------------------------|

### 1-pole

|    |     |    |     |    |  |  |                 |        |        |
|----|-----|----|-----|----|--|--|-----------------|--------|--------|
| 2  | 220 | 10 | 125 | 10 |  |  | FAZ-C2/1-NA-DC  | 113752 | 12/120 |
| 3  | 250 | 10 | 125 | 10 |  |  | FAZ-C3/1-NA-DC  | 113753 | 12/120 |
| 4  | 250 | 10 | 125 | 10 |  |  | FAZ-C4/1-NA-DC  | 113754 | 12/120 |
| 5  | 250 | 10 | 125 | 10 |  |  | FAZ-C5/1-NA-DC  | 113755 | 12/120 |
| 6  | 250 | 10 | 125 | 10 |  |  | FAZ-C6/1-NA-DC  | 113756 | 12/120 |
| 7  | 250 | 10 | 125 | 10 |  |  | FAZ-C7/1-NA-DC  | 113757 | 12/120 |
| 8  | 250 | 10 | 125 | 10 |  |  | FAZ-C8/1-NA-DC  | 113758 | 12/120 |
| 10 | 250 | 10 | 125 | 10 |  |  | FAZ-C10/1-NA-DC | 113759 | 12/120 |
| 13 | 250 | 10 | 125 | 10 |  |  | FAZ-C13/1-NA-DC | 113760 | 12/120 |
| 15 | 250 | 10 | 125 | 10 |  |  | FAZ-C15/1-NA-DC | 113761 | 12/120 |
| 16 | 250 | 10 | 125 | 10 |  |  | FAZ-C16/1-NA-DC | 113762 | 12/120 |
| 20 | 250 | 10 | 125 | 10 |  |  | FAZ-C20/1-NA-DC | 113763 | 12/120 |
| 25 | 250 | 10 | 125 | 10 |  |  | FAZ-C25/1-NA-DC | 113764 | 12/120 |
| 30 | 250 | 10 | 125 | 10 |  |  | FAZ-C30/1-NA-DC | 113765 | 12/120 |
| 32 | 250 | 10 | 125 | 10 |  |  | FAZ-C32/1-NA-DC | 113766 | 12/120 |
| 35 | 250 | 10 | 125 | 10 |  |  | FAZ-C35/1-NA-DC | 113767 | 12/120 |
| 40 | 250 | 10 | 125 | 10 |  |  | FAZ-C40/1-NA-DC | 113768 | 12/120 |

SG09111



### 2-pole

|    |     |    |     |    |  |  |                 |        |      |
|----|-----|----|-----|----|--|--|-----------------|--------|------|
| 2  | 440 | 10 | 250 | 10 |  |  | FAZ-C2/2-NA-DC  | 137239 | 1/60 |
| 3  | 500 | 10 | 250 | 10 |  |  | FAZ-C3/2-NA-DC  | 137250 | 1/60 |
| 4  | 500 | 10 | 250 | 10 |  |  | FAZ-C4/2-NA-DC  | 137251 | 1/60 |
| 5  | 500 | 10 | 250 | 10 |  |  | FAZ-C5/2-NA-DC  | 137252 | 1/60 |
| 6  | 500 | 10 | 250 | 10 |  |  | FAZ-C6/2-NA-DC  | 120638 | 1/60 |
| 7  | 500 | 10 | 250 | 10 |  |  | FAZ-C7/2-NA-DC  | 120639 | 1/60 |
| 8  | 500 | 10 | 250 | 10 |  |  | FAZ-C8/2-NA-DC  | 120640 | 1/60 |
| 10 | 500 | 10 | 250 | 10 |  |  | FAZ-C10/2-NA-DC | 120641 | 1/60 |
| 13 | 500 | 10 | 250 | 10 |  |  | FAZ-C13/2-NA-DC | 120642 | 1/60 |
| 15 | 500 | 10 | 250 | 10 |  |  | FAZ-C15/2-NA-DC | 120643 | 1/60 |
| 16 | 500 | 10 | 250 | 10 |  |  | FAZ-C16/2-NA-DC | 120644 | 1/60 |
| 20 | 500 | 10 | 250 | 10 |  |  | FAZ-C20/2-NA-DC | 120645 | 1/60 |
| 25 | 500 | 10 | 250 | 10 |  |  | FAZ-C25/2-NA-DC | 120646 | 1/60 |
| 30 | 500 | 10 | 250 | 10 |  |  | FAZ-C30/2-NA-DC | 120647 | 1/60 |
| 32 | 500 | 10 | 250 | 10 |  |  | FAZ-C32/2-NA-DC | 120648 | 1/60 |
| 35 | 500 | 10 | 250 | 10 |  |  | FAZ-C35/2-NA-DC | 120649 | 1/60 |
| 40 | 500 | 10 | 250 | 10 |  |  | FAZ-C40/2-NA-DC | 120650 | 1/60 |

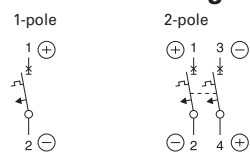
# FAZ-...-NA-DC | Specifications

## Specifications

### Technical data

|   |   | FAZ-NA-DC  |
|---|---|--|
| Productstandard                             | UL 489, CSA C22.2 No 5-02                                       |  |
| Number of poles                             | 1, 2  |  |
| <b>Mechanical specifications</b>            |   |  |
| Device width                                | 1 pole = 0.697 inch, 2 poles = 1.394 inch                       |  |
| Frame size                                  | 1.772 inch  |  |
| Socket size                                 | 4.134 inch  |  |
| Device depth                                | 2.362 inch  |  |
| Terminals                                   | lift terminal / ring-tongue                                     |  |
| Terminal capacity rigid solid/stranded wire | 1 Wire: AWG 18-6 (Cu only)<br>2 Wires: AWG 18-10 (Cu only)      |  |
| Terminal screw                              | M5 (with slotted screw Pozidriv PZ2)                            |  |
| Terminal torque                             | #18-12 AWG: 21 lb-in<br>#10-8 AWG: 25 lb-in<br>#6 AWG: 36 lb-in |  |
| Snap on fixing                              | tristable (on DIN Rail acc. to IEC/EN 60715)                    |  |
| Finger proof                                | acc.to VBG4, ÖVE EN-6   |  |
| Contact position indicator                  | red / green   |  |
| <b>Electrical specifications</b>            |   |  |
| Rated voltage DC                            | $U_n$   | 125 V d.c. (1p)<br>250 V d.c. (2p)                           |
| Rated current                               | $I_n$   | 6, 7, 8, 10, 13, 15, 16, 20, 25, 30, 32, 35, 40 A            |
| Rated impulse withstand voltage             | $U_{imp}$   | 4 kV (1.2/50) $\mu$ sec                                      |
| <b>Tripping characteristic</b>              |   |  |
| Conventional non-tripping current           | $I_{nt}$  | $I_{nt}=1.0 I_n$   |
| Conventional tripping current               | $I_t$   | $I_t=1.35 I_n$   |
| Reference temperature                       | 40 °C   |  |
| Temperature factor                          | 0.5% /K   |  |
| Instantaneous tripping current              | $I_{mt}$  | $7 I_n < I_{mt} = 15 I_n \cdot t (I_{mt}) < 0,1 \text{ sec}$ |
| Current interrupting rating                 | 10 kA   |  |
| Number of electrical operating cycles       | 6000  |  |
| Number of mechanical operating cycles       | 10000   |  |
| Climatic conditions                         | acc. to IEC 68-2 (25..55°C / 90..95% RH)                        |  |

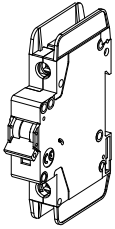
### Connection diagrams



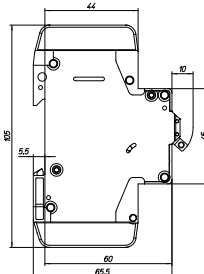
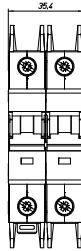
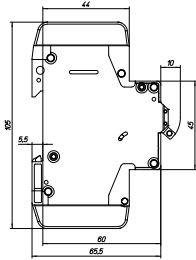
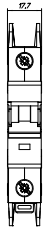
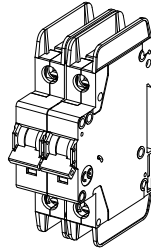
# FAZ-...-NA-DC | Specifications

## Dimensions (mm) FAZ-NA-DC

1-pole

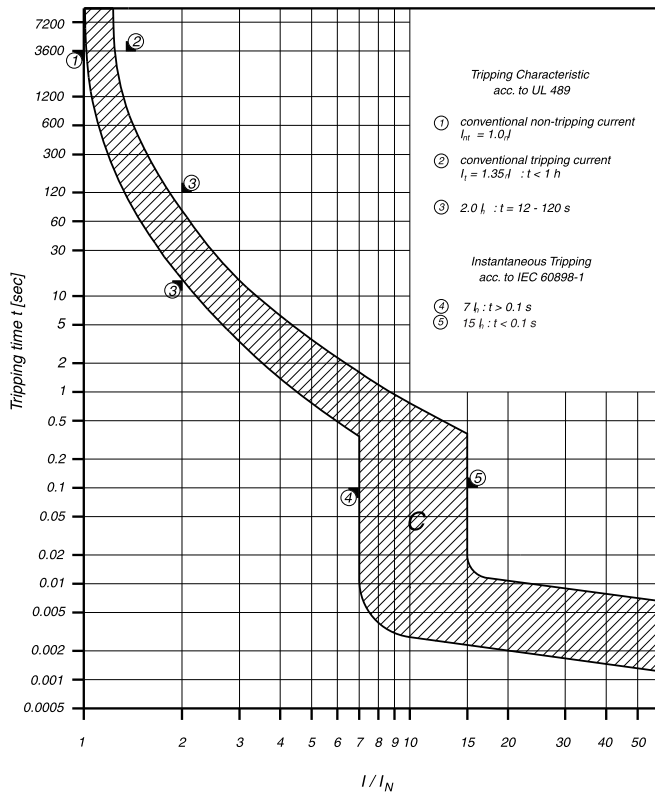


2-pole



## Tripping Characteristic FAZ-NA-DC

### Characteristics C - UL 489



# FAZ-...-RT | Characteristic B

## FAZ-...-RT Miniature Circuit Breakers (MCBs) Characteristic B

SG09011



| Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL489<br>(V) | Breaking capacity<br>acc. to<br>UL489<br>(kA) | SWD | NFPA 79 | Type<br>Designation | Article No. | Units<br>per<br>package |
|----------------------------|---|---|-------------------------------|---|-----|---------|---------------------|-------------|-------------------------|
|----------------------------|---|---|-------------------------------|---|-----|---------|---------------------|-------------|-------------------------|

### 1-pole

|     |         |    |     |    |     |        |               |        |        |
|-----|---------|----|-----|----|-----|--------|---------------|--------|--------|
| 1   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B1/1-RT   | 132731 | 12/120 |
| 1,5 | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B1,5/1-RT | 132732 | 12/120 |
| 2   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B2/1-RT   | 132733 | 12/120 |
| 3   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B3/1-RT   | 132734 | 12/120 |
| 4   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B4/1-RT   | 132735 | 12/120 |
| 5   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B5/1-RT   | 132736 | 12/120 |
| 6   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B6/1-RT   | 132737 | 12/120 |
| 7   | 240/415 | 15 | 277 | 10 | SWD | AWG 18 | FAZ-B7/1-RT   | 132738 | 12/120 |
| 8   | 240/415 | 15 | 277 | 10 | SWD | AWG 16 | FAZ-B8/1-RT   | 132739 | 12/120 |
| 10  | 240/415 | 15 | 277 | 10 | SWD | AWG 16 | FAZ-B10/1-RT  | 132740 | 12/120 |
| 13  | 240/415 | 15 | 277 | 10 | SWD |        | FAZ-B13/1-RT  | 132741 | 12/120 |
| 15  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-B15/1-RT  | 132742 | 12/120 |
| 16  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-B16/1-RT  | 132743 | 12/120 |
| 20  | 240/415 | 15 | 277 | 14 | SWD |        | FAZ-B20/1-RT  | 132744 | 12/120 |
| 25  | 240/415 | 15 | 277 | 14 |     |        | FAZ-B25/1-RT  | 132745 | 12/120 |
| 30  | 240/415 | 15 | 277 | 10 |     |        | FAZ-B30/1-RT  | 132746 | 12/120 |
| 32  | 240/415 | 15 | 277 | 10 |     |        | FAZ-B32/1-RT  | 132747 | 12/120 |
| 35  | 240/415 | 15 | 240 | 10 |     |        | FAZ-B35/1-RT  | 132748 | 12/120 |
| 40  | 240/415 | 15 | 240 | 10 |     |        | FAZ-B40/1-RT  | 132749 | 12/120 |

SG09111



### 2-pole

|     |     |    |          |    |     |        |               |        |      |
|-----|-----|----|----------|----|-----|--------|---------------|--------|------|
| 1   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B1/2-RT   | 132750 | 1/60 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B1,5/2-RT | 132751 | 1/60 |
| 2   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B2/2-RT   | 132752 | 1/60 |
| 3   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B3/2-RT   | 132753 | 1/60 |
| 4   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B4/2-RT   | 132754 | 1/60 |
| 5   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B5/2-RT   | 132755 | 1/60 |
| 6   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B6/2-RT   | 132756 | 1/60 |
| 7   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B7/2-RT   | 132757 | 1/60 |
| 8   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-B8/2-RT   | 132758 | 1/60 |
| 10  | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-B10/2-RT  | 132759 | 1/60 |
| 13  | 415 | 15 | 480Y/277 | 10 | SWD |        | FAZ-B13/2-RT  | 132760 | 1/60 |
| 15  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B15/2-RT  | 132761 | 1/60 |
| 16  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B16/2-RT  | 132762 | 1/60 |
| 20  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B20/2-RT  | 132763 | 1/60 |
| 25  | 415 | 15 | 480Y/277 | 14 |     |        | FAZ-B25/2-RT  | 132764 | 1/60 |
| 30  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-B30/2-RT  | 132765 | 1/60 |
| 32  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-B32/2-RT  | 132766 | 1/60 |
| 35  | 415 | 15 | 240      | 10 |     |        | FAZ-B35/2-RT  | 132767 | 1/60 |
| 40  | 415 | 15 | 240      | 10 |     |        | FAZ-B40/2-RT  | 132768 | 1/60 |

SG09211






### 3-pole

|     |     |    |          |    |     |        |               |        |      |
|-----|-----|----|----------|----|-----|--------|---------------|--------|------|
| 1   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B1/3-RT   | 132769 | 1/40 |
| 1,5 | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B1,5/3-RT | 132770 | 1/40 |
| 2   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B2/3-RT   | 132771 | 1/40 |
| 3   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B3/3-RT   | 132772 | 1/40 |
| 4   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B4/3-RT   | 132773 | 1/40 |
| 5   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B5/3-RT   | 132774 | 1/40 |
| 6   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B6/3-RT   | 132775 | 1/40 |
| 7   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 18 | FAZ-B7/3-RT   | 132776 | 1/40 |
| 8   | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-B8/3-RT   | 132777 | 1/40 |
| 10  | 415 | 15 | 480Y/277 | 10 | SWD | AWG 16 | FAZ-B10/3-RT  | 132778 | 1/40 |
| 13  | 415 | 15 | 480Y/277 | 10 | SWD |        | FAZ-B13/3-RT  | 132779 | 1/40 |
| 15  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B15/3-RT  | 132780 | 1/40 |
| 16  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B16/3-RT  | 132781 | 1/40 |
| 20  | 415 | 15 | 480Y/277 | 14 | SWD |        | FAZ-B20/3-RT  | 132782 | 1/40 |
| 25  | 415 | 15 | 480Y/277 | 14 |     |        | FAZ-B25/3-RT  | 132783 | 1/40 |
| 30  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-B30/3-RT  | 132784 | 1/40 |
| 32  | 415 | 15 | 480Y/277 | 10 |     |        | FAZ-B32/3-RT  | 132785 | 1/40 |
| 35  | 415 | 15 | 240      | 10 |     |        | FAZ-B35/3-RT  | 132786 | 1/40 |
| 40  | 415 | 15 | 240      | 10 |     |        | FAZ-B40/3-RT  | 132787 | 1/40 |

# FAZ-...-RT | Characteristic C




## FAZ-...-RT Miniature Circuit Breakers (MCBs) Characteristic C

|  | Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL489<br>(V) | Breaking capacity<br>acc. to<br>UL489<br>(kA) | SWD | NFPA 79      | Type<br>Designation | Article No. | Units<br>per<br>package |
|--|----------------------------|---|---|-------------------------------|---|-----|--------------|---------------------|-------------|-------------------------|
| <b>1-pole</b>  |                            |   |   |                               |   |     |              |                     |             |                         |
| SG09011<br>   | 0,5                        | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C0,5/1-RT       | 102117      | 12/120                  |
|  | 1                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C1/1-RT         | 102118      | 12/120                  |
|  | 1,5                        | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C1,5/1-RT       | 102119      | 12/120                  |
|  | 2                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C2/1-RT         | 102120      | 12/120                  |
|  | 3                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C3/1-RT         | 102121      | 12/120                  |
|  | 4                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C4/1-RT         | 102122      | 12/120                  |
|  | 5                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C5/1-RT         | 102123      | 12/120                  |
|  | 6                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C6/1-RT         | 102124      | 12/120                  |
|  | 7                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-C7/1-RT         | 102125      | 12/120                  |
|  | 8                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 16       | FAZ-C8/1-RT         | 102126      | 12/120                  |
|  | 10                         | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 16       | FAZ-C10/1-RT        | 102127      | 12/120                  |
|  | 13                         | 240/415                                   | 15  | 277                           | 10  | SWD |              | FAZ-C13/1-RT        | 102128      | 12/120                  |
|  | 15                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-C15/1-RT        | 102129      | 12/120                  |
|  | 16                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-C16/1-RT        | 102130      | 12/120                  |
|  | 20                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-C20/1-RT        | 102131      | 12/120                  |
|  | 25                         | 240/415                                   | 15  | 277                           | 14  |     |              | FAZ-C25/1-RT        | 102132      | 12/120                  |
| 30   | 240/415                    | 15  | 277   | 10                            |   |     | FAZ-C30/1-RT | 102133              | 12/120      |                         |
| 32   | 240/415                    | 15  | 277   | 10                            |   |     | FAZ-C32/1-RT | 102134              | 12/120      |                         |
| 35   | 240/415                    | 15  | 240   | 10                            |   |     | FAZ-C35/1-RT | 102135              | 12/120      |                         |
| 40   | 240/415                    | 15  | 240   | 10                            |   |     | FAZ-C40/1-RT | 102136              | 12/120      |                         |
| <b>2-pole</b>  |                            |   |   |                               |   |     |              |                     |             |                         |
| SG09111<br> | 0,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C0,5/2-RT       | 102197      | 1/60                    |
|  | 1                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C1/2-RT         | 102198      | 1/60                    |
|  | 1,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C1,5/2-RT       | 102199      | 1/60                    |
|  | 2                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C2/2-RT         | 102200      | 1/60                    |
|  | 3                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C3/2-RT         | 102201      | 1/60                    |
|  | 4                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C4/2-RT         | 102202      | 1/60                    |
|  | 5                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C5/2-RT         | 102203      | 1/60                    |
|  | 6                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C6/2-RT         | 102204      | 1/60                    |
|  | 7                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C7/2-RT         | 102205      | 1/60                    |
|  | 8                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-C8/2-RT         | 102206      | 1/60                    |
|  | 10                         | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-C10/2-RT        | 102207      | 1/60                    |
|  | 13                         | 415                                       | 15  | 480Y/277                      | 10  | SWD |              | FAZ-C13/2-RT        | 102208      | 1/60                    |
|  | 15                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C15/2-RT        | 102209      | 1/60                    |
|  | 16                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C16/2-RT        | 102210      | 1/60                    |
|  | 20                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C20/2-RT        | 102211      | 1/60                    |
|  | 25                         | 415                                       | 15  | 480Y/277                      | 14  |     |              | FAZ-C25/2-RT        | 102212      | 1/60                    |
| 30   | 415                        | 15  | 480Y/277  | 10                            |   |     | FAZ-C30/2-RT | 102213              | 1/60        |                         |
| 32   | 415                        | 15  | 480Y/277  | 10                            |   |     | FAZ-C32/2-RT | 102214              | 1/60        |                         |
| 35   | 415                        | 15  | 240   | 10                            |   |     | FAZ-C35/2-RT | 102215              | 1/60        |                         |
| 40   | 415                        | 15  | 240   | 10                            |   |     | FAZ-C40/2-RT | 102216              | 1/60        |                         |
| <b>3-pole</b>  |                            |   |   |                               |   |     |              |                     |             |                         |
| SG09211<br> | 0,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C0,5/3-RT       | 102277      | 1/40                    |
|  | 1                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C1/3-RT         | 102278      | 1/40                    |
|  | 1,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C1,5/3-RT       | 102279      | 1/40                    |
|  | 2                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C2/3-RT         | 102280      | 1/40                    |
|  | 3                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C3/3-RT         | 102281      | 1/40                    |
|  | 4                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C4/3-RT         | 102282      | 1/40                    |
|  | 5                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C5/3-RT         | 102283      | 1/40                    |
|  | 6                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C6/3-RT         | 102284      | 1/40                    |
|  | 7                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-C7/3-RT         | 102285      | 1/40                    |
|  | 8                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-C8/3-RT         | 102286      | 1/40                    |
|  | 10                         | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-C10/3-RT        | 102287      | 1/40                    |
|  | 13                         | 415                                       | 15  | 480Y/277                      | 10  | SWD |              | FAZ-C13/3-RT        | 102288      | 1/40                    |
|  | 15                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C15/3-RT        | 102289      | 1/40                    |
|  | 16                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C16/3-RT        | 102290      | 1/40                    |
|  | 20                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-C20/3-RT        | 102291      | 1/40                    |
|  | 25                         | 415                                       | 15  | 480Y/277                      | 14  |     |              | FAZ-C25/3-RT        | 102292      | 1/40                    |
| 30   | 415                        | 15  | 480Y/277  | 10                            |   |     | FAZ-C30/3-RT | 102293              | 1/40        |                         |
| 32   | 415                        | 15  | 480Y/277  | 10                            |   |     | FAZ-C32/3-RT | 102294              | 1/40        |                         |
| 35   | 415                        | 15  | 240   | 10                            |   |     | FAZ-C35/3-RT | 102295              | 1/40        |                         |
| 40   | 415                        | 15  | 240   | 10                            |   |     | FAZ-C40/3-RT | 102296              | 1/40        |                         |



# FAZ-...-RT | Characteristic D

## FAZ-...-RT Miniature Circuit Breakers (MCBs) Characteristic D

|   | Rated current<br>$I_n$ (A) | Rated voltage<br>IEC/EN<br>60947-2<br>(V) | Breaking capacity<br>acc. to<br>IEC/EN<br>60947-2<br>(kA) | Rated voltage<br>UL489<br>(V) | Breaking capacity<br>acc. to<br>UL489<br>(kA) | SWD | NFPA 79      | Type<br>Designation | Article No. | Units<br>per<br>package |
|---|----------------------------|---|---|-------------------------------|---|-----|--------------|---------------------|-------------|-------------------------|
| <b>1-pole</b>   |                            |   |   |                               |   |     |              |                     |             |                         |
|    | 0,5                        | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-D0,5/1-RT       | 102137      | 12/120                  |
|   | 1                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-D1/1-RT         | 102138      | 12/120                  |
|   | 1,5                        | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-D1,5/1-RT       | 102139      | 12/120                  |
|   | 2                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-D2/1-RT         | 102140      | 12/120                  |
|   | 3                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-D3/1-RT         | 102141      | 12/120                  |
|   | 4                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-D4/1-RT         | 102142      | 12/120                  |
|   | 5                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-D5/1-RT         | 102143      | 12/120                  |
|   | 6                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-D6/1-RT         | 102144      | 12/120                  |
|   | 7                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 18       | FAZ-D7/1-RT         | 102145      | 12/120                  |
|   | 8                          | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 16       | FAZ-D8/1-RT         | 102146      | 12/120                  |
|   | 10                         | 240/415                                   | 15  | 277                           | 10  | SWD | AWG 16       | FAZ-D10/1-RT        | 102147      | 12/120                  |
|   | 13                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-D13/1-RT        | 102148      | 12/120                  |
|   | 15                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-D15/1-RT        | 102149      | 12/120                  |
|   | 16                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-D16/1-RT        | 102150      | 12/120                  |
|   | 20                         | 240/415                                   | 15  | 277                           | 14  | SWD |              | FAZ-D20/1-RT        | 102151      | 12/120                  |
|   | 25                         | 240/415                                   | 15  | 277                           | 10  |     |              | FAZ-D25/1-RT        | 102152      | 12/120                  |
|   | 30                         | 240/415                                   | 15  | 277                           | 10  |     |              | FAZ-D30/1-RT        | 102153      | 12/120                  |
|   | 32                         | 240/415                                   | 15  | 277                           | 10  |     |              | FAZ-D32/1-RT        | 102154      | 12/120                  |
|   | 35                         | 240/415                                   | 15  | 240                           | 10  |     |              | FAZ-D35/1-RT        | 102155      | 12/120                  |
| 40  | 240/415                    | 15  | 240   | 10                            |   |     | FAZ-D40/1-RT | 102156              | 12/120      |                         |
| <b>2-pole</b>   |                            |   |   |                               |   |     |              |                     |             |                         |
|  | 0,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D0,5/2-RT       | 102217      | 1/60                    |
|   | 1                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D1/2-RT         | 102218      | 1/60                    |
|   | 1,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D1,5/2-RT       | 102219      | 1/60                    |
|   | 2                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D2/2-RT         | 102220      | 1/60                    |
|   | 3                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D3/2-RT         | 102221      | 1/60                    |
|   | 4                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D4/2-RT         | 102222      | 1/60                    |
|   | 5                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D5/2-RT         | 102223      | 1/60                    |
|   | 6                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D6/2-RT         | 102224      | 1/60                    |
|   | 7                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D7/2-RT         | 102225      | 1/60                    |
|   | 8                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-D8/2-RT         | 102226      | 1/60                    |
|   | 10                         | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-D10/2-RT        | 102227      | 1/60                    |
|   | 13                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-D13/2-RT        | 102228      | 1/60                    |
|   | 15                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-D15/2-RT        | 102229      | 1/60                    |
|   | 16                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-D16/2-RT        | 102230      | 1/60                    |
|   | 20                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-D20/2-RT        | 102231      | 1/60                    |
|   | 25                         | 415                                       | 15  | 480Y/277                      | 10  |     |              | FAZ-D25/2-RT        | 102232      | 1/60                    |
|   | 30                         | 415                                       | 15  | 480Y/277                      | 10  |     |              | FAZ-D30/2-RT        | 102233      | 1/60                    |
|   | 32                         | 415                                       | 15  | 480Y/277                      | 10  |     |              | FAZ-D32/2-RT        | 102234      | 1/60                    |
|   | 35                         | 415                                       | 15  | 240                           | 10  |     |              | FAZ-D35/2-RT        | 102235      | 1/60                    |
| 40  | 415                        | 15  | 240   | 10                            |   |     | FAZ-D40/2-RT | 102236              | 1/60        |                         |
| <b>3-pole</b>   |                            |   |   |                               |   |     |              |                     |             |                         |
|  | 0,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D0,5/3-RT       | 102297      | 1/40                    |
|   | 1                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D1/3-RT         | 102298      | 1/40                    |
|   | 1,5                        | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D1,5/3-RT       | 102299      | 1/40                    |
|   | 2                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D2/3-RT         | 102300      | 1/40                    |
|   | 3                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D3/3-RT         | 102301      | 1/40                    |
|   | 4                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D4/3-RT         | 102302      | 1/40                    |
|   | 5                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D5/3-RT         | 102303      | 1/40                    |
|   | 6                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D6/3-RT         | 102304      | 1/40                    |
|   | 7                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 18       | FAZ-D7/3-RT         | 102305      | 1/40                    |
|   | 8                          | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-D8/3-RT         | 102306      | 1/40                    |
|   | 10                         | 415                                       | 15  | 480Y/277                      | 10  | SWD | AWG 16       | FAZ-D10/3-RT        | 102307      | 1/40                    |
|   | 13                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-D13/3-RT        | 102308      | 1/40                    |
|   | 15                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-D15/3-RT        | 102309      | 1/40                    |
|   | 16                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-D16/3-RT        | 102310      | 1/40                    |
|   | 20                         | 415                                       | 15  | 480Y/277                      | 14  | SWD |              | FAZ-D20/3-RT        | 102311      | 1/40                    |
|   | 25                         | 415                                       | 15  | 480Y/277                      | 10  |     |              | FAZ-D25/3-RT        | 102312      | 1/40                    |
|   | 30                         | 415                                       | 15  | 480Y/277                      | 10  |     |              | FAZ-D30/3-RT        | 102313      | 1/40                    |
|   | 32                         | 415                                       | 15  | 480Y/277                      | 10  |     |              | FAZ-D32/3-RT        | 102314      | 1/40                    |
|   | 35                         | 415                                       | 15  | 240                           | 10  |     |              | FAZ-D35/3-RT        | 102315      | 1/40                    |
| 40  | 415                        | 15  | 240   | 10                            |   |     | FAZ-D40/3-RT | 102316              | 1/40        |                         |

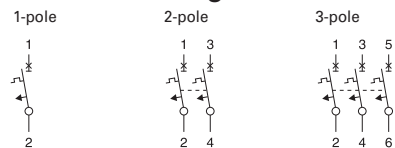
# FAZ-...-NA, -RT | Specifications IEC/EN

## Specifications

### Technical data IEC/EN

|   |           | FAZ-...-NA, -RT   |
|---|-----------|---|
| Productstandard                             |           | IEC/EN 60947-2  |
| Number of poles                             |           | 1, 2, 3   |
| <b>Mechanical specifications</b>            |           |   |
| Device width                                |           | 17.7mm (1-pole), 35.4 mm (2-poles), 53.1 mm (3-poles)   |
| Frame size                                  |           | 45 mm   |
| Socket size                                 |           | 105 mm  |
| Device depth                                |           | 60 mm   |
| Terminals                                   |           | lift terminal / ring-tongue   |
| Terminal capacity rigid solid/stranded wire |           | 1-25 mm <sup>2</sup>  |
| Terminal screw                              |           | M5 (with slotted screw Pozidriv PZ2)  |
| Terminal torque                             |           | max. 2.4 Nm   |
| Snap on fixing                              |           | tristable (on DIN Rail acc. to IEC/EN 60715)  |
| Degree of Protection (DIN VDE 0470)         |           |   |
| Surface mounted                             |           | IP 20   |
| Built-in behind panel                       |           | IP 40   |
| Contact position indicator                  |           | red / green   |
| <b>Electrical specifications</b>            |           |   |
| Rated voltage                               | $U_n$     | 240/415 V AC  |
| Rated current                               | $I_n$     | 0.5, 1, 1.5, 2, 3, 4, 5, 6, 7, 8, 10, 13, 15, 16, 20, 25, 30, 32, 35, 40 A  |
| Rated insulation voltage                    | $U_i$     | 440 V AC  |
| Rated impulse withstand voltage             | $U_{imp}$ | 4 kV (1.2/50)μsec   |
| <b>Tripping characteristic</b>              |           |   |
| Conventional non-tripping current           |           | $I_{nt}=1.05 I_n$   |
| Conventional tripping current               |           | $I_t=1.30 I_n$  |
| Reference temperature                       |           | 30 °C   |
| Temperature factor                          |           | 0.5% /K   |
| Instantaneous tripping current              | $I_{mt}$  | type B: $3 I_n < I_{mt} = 5 I_n; t(I_{mt}) < 0,1 \text{ sec}$ (IEC/EN 60898-1)<br>type C: $5 I_n < I_{mt} = 10 I_n; t(I_{mt}) < 0,1 \text{ sec}$ (IEC/EN 60898-1)<br>type D: $10 I_n < I_{mt} = 20 I_n; t(I_{mt}) < 0,1 \text{ sec}$ (IEC/EN 60898-1) |
| Rated short-circuit braking capacity        | $I_{cu}$  | 15 kA   |
| Service short circuit capacity              | $I_{cs}$  | 7.5 kA  |
| Selectivity class                           |           | 3 (acc. to EN 60898)  |
| Number of electrical operations             |           | > 1500  |
| Number of mechanical operations             |           | > 10000   |
| Climatic conditions                         |           | acc. to IEC 68-2 (25..55°C / 90..95% RH)  |

### Connection diagrams



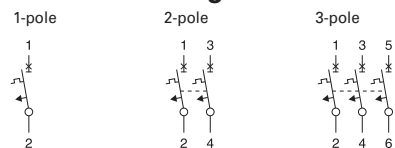
# FAZ-...-NA, -RT | Specifications UL

## Specifications

### Technical data UL

|  |          | FAZ-...-NA, -RT   |
|--|----------|---|
| Productstandard                        |          | UL 489 CSA C22.2 No. 5-02   |
| Number of poles                        |          | 1, 2, 3   |
| <b>Mechanical specifications</b>       |          |   |
| Device width                           |          | 0.697 in. (1-pole), 1.394 in. (2-poles), 2.090 in. (3-poles)  |
| Frame size                             |          | 1.772 in.   |
| Socket size                            |          | 4.134 in.   |
| Device depth                           |          | 2.362 in.   |
| Terminals                              |          | lift terminal / ring-tongue   |
| Terminal capacity                      |          | 1 Wire: #18-6 AWG (Cu only)<br>2 Wires: #18-10 AWG (Cu only)  |
| Terminal screw                         |          | M5 (with slotted screw Pozidriv PZ2)  |
| Terminal torque                        |          | #18-12 AWG: 21 lb-in<br>#10-8 AWG: 25 lb-in<br>#6 AWG: 36 lb-in   |
| Snap on fixing                         |          | tristable (on DIN Rail acc. to IEC/EN 60715)  |
| Contact position indicator             |          | red / green   |
| <b>Electrical specifications</b>       |          |   |
| Rated voltage                          | $U_n$    | 0.5-32 A: 480Y/277 V AC, 35-40 A: 240 V AC  |
| Rated current                          | $I_n$    | 0.5, 1, 1.5, 2, 3, 4, 5, 6, 7, 8, 10, 13, 15, 16, 20, 25, 30, 32, 35, 40 A  |
| <b>Tripping characteristic</b>         |          |   |
| Conventional non-tripping current      |          | $I_{nt}=1.00 I_n$   |
| Conventional tripping current          |          | $I_t=1.35 I_n$  |
| Reference temperature                  |          | 40 °C   |
| Temperature factor                     |          | 0.5% /K   |
| Instantaneous tripping current         | $I_{mt}$ | type C: $5 I_n < I_{mt} = 10 I_n$ ; $t(I_{mt}) < 0,1$ sec<br>type D: $10 I_n < I_{mt} = 20 I_n$ ; $t(I_{mt}) < 0,1$ sec |
| Current interrupting rating            |          | 10 kA, 14 kA (types D13, B/C/D15, 16, 20, B/C25 A)  |
| Current-Limiting at 240 V / 10 kA      |          | 1p, 2p, 3p to $I^2t = 43 \text{ kA}^2\text{s}$ and $I_{peak} = 6.2 \text{ kA}$  |
| Current-Limiting at 480Y/277 V / 10 kA |          | 1p, 2p, 3p to $I^2t = 60 \text{ kA}^2\text{s}$ and $I_{peak} = 6.2 \text{ kA}$  |
| Current-Limiting at 480Y/277 V / 14 kA |          | 1p, 2p, 3p to $I^2t = 65 \text{ kA}^2\text{s}$ and $I_{peak} = 7.5 \text{ kA}$  |
| Selectivity class                      |          | 3 (acc. to EN 60898)  |
| Number of electrical operations        |          | 6000  |
| Number of mechanical operations        |          | 10000   |
| Climatic conditions                    |          | acc. to IEC 68-2 (25..55°C / 90..95% RH)  |

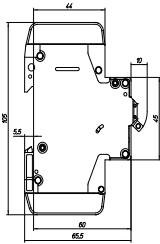
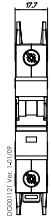
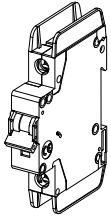
### Connection diagrams



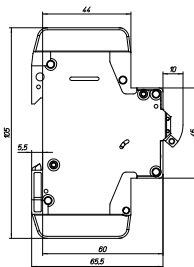
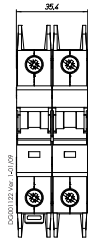
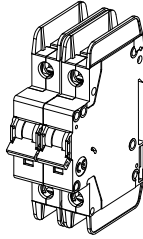
# FAZ-...-NA, -RT | Specifications

## Dimensions (mm) FAZ-...-NA, -RT

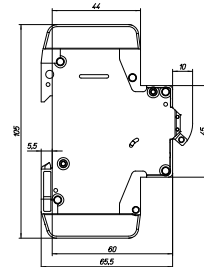
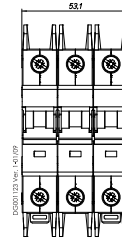
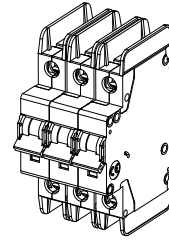
1-pole



2-pole

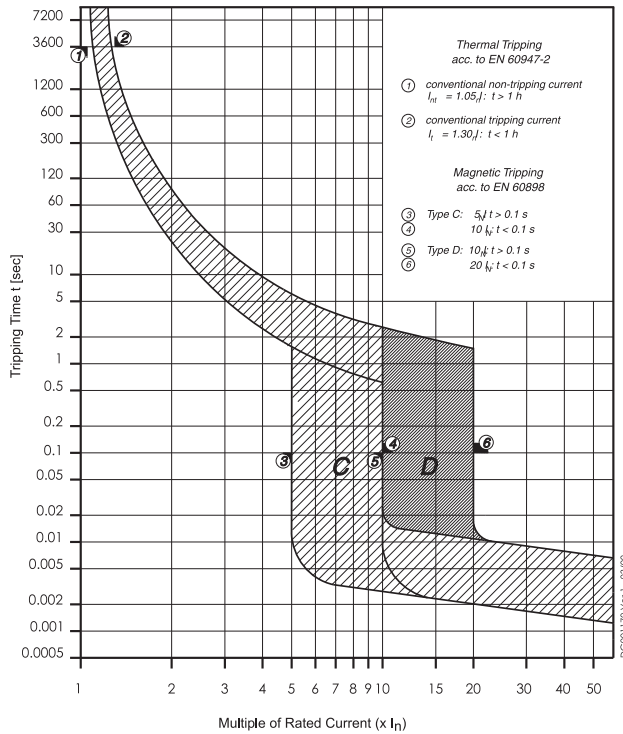


3-pole

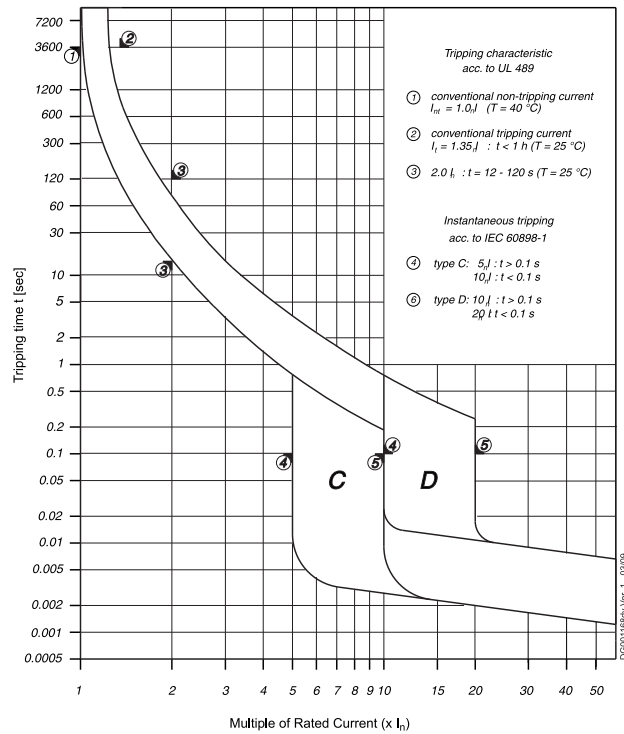


## Tripping Characteristic FAZ-...-NA, -RT

### Characteristics C and D - EN/IEC 60947-2



### Characteristics C and D - UL 489



# FAZ-...-NA, -RT | Specifications

## Internal Resistance FAZ-...-NA, -RT

### Type C

At room temperature (single pole)

| In [A] | Z* [mΩ] | R [mΩ] |
|--------|---------|--------|
| 0.5    | 6400    | 6300   |
| 1      | 1100    | 1080   |
| 1.5    | 560     | 550    |
| 2      | 340     | 330    |
| 3      | 132     | 130    |
| 4      | 86      | 85     |
| 5      | 70      | 69     |
| 6      | 31      | 30     |
| 7      | 28      | 27     |
| 8      | 20      | 19.6   |
| 10     | 15.8    | 15.5   |
| 13     | 12.3    | 12.1   |
| 15     | 7.1     | 7.0    |
| 16     | 7.1     | 7.0    |
| 20     | 6.0     | 5.9    |
| 25     | 4.1     | 4.0    |
| 30     | 2.8     | 2.7    |
| 32     | 2.8     | 2.7    |
| 35     | 2.5     | 2.5    |
| 40     | 2.1     | 2.1    |

\* 50Hz

### Type D

At room temperature (single pole)

| In [A] | Z* [mΩ] | R [mΩ] |
|--------|---------|--------|
| 0.5    | 6400    | 6300   |
| 1      | 770     | 755    |
| 1.5    | 460     | 450    |
| 2      | 250     | 245    |
| 3      | 132     | 130    |
| 4      | 86      | 85     |
| 5      | 57      | 56     |
| 6      | 31      | 30     |
| 7      | 28      | 27     |
| 8      | 18      | 17.6   |
| 10     | 13.5    | 13.2   |
| 13     | 10.5    | 10.3   |
| 15     | 5.9     | 5.8    |
| 16     | 5.9     | 5.8    |
| 20     | 4.0     | 3.9    |
| 25     | 3.4     | 3.3    |
| 30     | 2.5     | 2.5    |
| 32     | 2.5     | 2.5    |
| 35     | 2.5     | 2.5    |
| 40     | 2.0     | 2.0    |

\* 50Hz

## Power Loss at I<sub>n</sub> FAZ-...-NA, -RT

### Type C

| In [A] | 1p     | 2p     | 3p     |
|--------|--------|--------|--------|
|        | P* [W] | P* [W] | P* [W] |
| 0.5    | 1.6    | 3.2    | 4.7    |
| 1      | 1.1    | 2.2    | 3.4    |
| 1.5    | 1.3    | 2.6    | 3.9    |
| 2      | 1.4    | 2.8    | 4.3    |
| 3      | 1.2    | 2.4    | 3.6    |
| 4      | 1.4    | 2.9    | 4.3    |
| 5      | 1.9    | 3.7    | 5.6    |
| 6      | 1.2    | 2.3    | 3.5    |
| 7      | 1.4    | 2.8    | 4.3    |
| 8      | 1.4    | 2.8    | 4.2    |
| 10     | 1.8    | 3.6    | 5.3    |
| 13     | 2.4    | 4.7    | 7.1    |
| 15     | 1.9    | 3.8    | 5.6    |
| 16     | 2.1    | 4.3    | 6.4    |
| 20     | 2.9    | 5.8    | 8.7    |
| 25     | 3.1    | 6.2    | 9.3    |
| 30     | 3.0    | 6.0    | 9.0    |
| 32     | 3.4    | 6.8    | 10.2   |
| 35     | 3.7    | 7.4    | 11.0   |
| 40     | 4.0    | 8.1    | 12.1   |

\*50Hz

### Type D

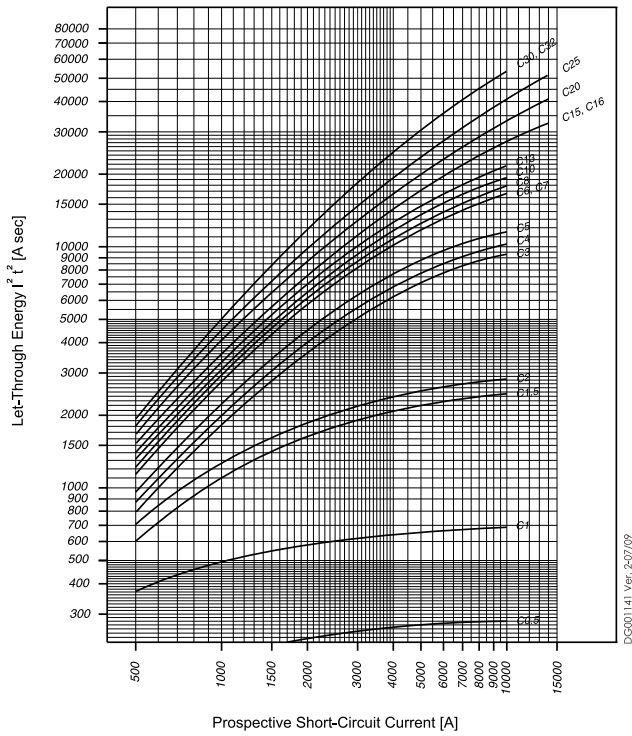
| In [A] | 1p     | 2p     | 3p     |
|--------|--------|--------|--------|
|        | P* [W] | P* [W] | P* [W] |
| 0.5    | 1.6    | 3.2    | 4.8    |
| 1      | 0.8    | 1.5    | 2.3    |
| 1.5    | 1.0    | 2.1    | 3.1    |
| 2      | 1.0    | 2.1    | 3.1    |
| 3      | 1.2    | 2.4    | 3.6    |
| 4      | 1.4    | 2.9    | 4.3    |
| 5      | 1.5    | 2.9    | 4.4    |
| 6      | 1.2    | 2.3    | 3.5    |
| 7      | 1.4    | 2.8    | 4.3    |
| 8      | 1.2    | 2.4    | 3.7    |
| 10     | 1.5    | 3.0    | 4.5    |
| 13     | 2.0    | 4.1    | 6.1    |
| 15     | 1.5    | 3.1    | 4.6    |
| 16     | 1.7    | 3.5    | 5.2    |
| 20     | 1.8    | 3.7    | 5.5    |
| 25     | 2.6    | 5.1    | 7.7    |
| 30     | 2.7    | 5.4    | 8.1    |
| 32     | 3.1    | 6.2    | 9.3    |
| 35     | 3.8    | 7.6    | 11.3   |
| 40     | 3.9    | 7.8    | 11.6   |

\*50Hz

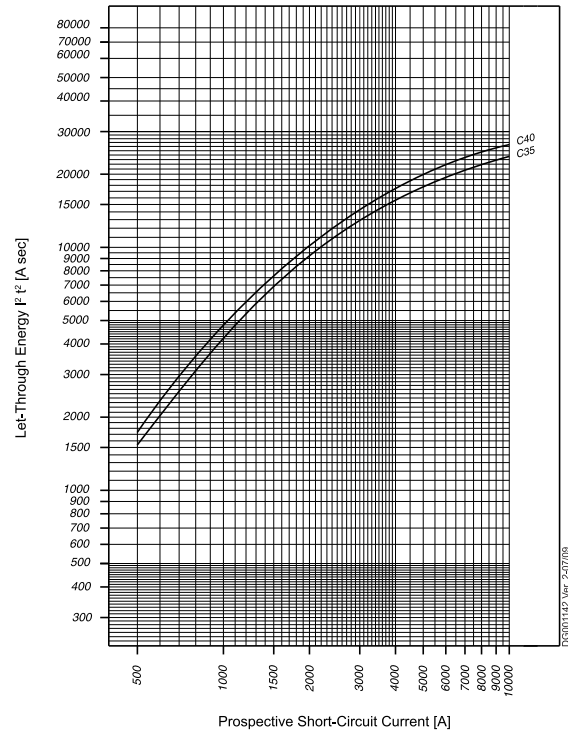
# FAZ-...-NA, -RT | Specifications

## Maximum Let-Through Energy FAZ-...-NA, -RT

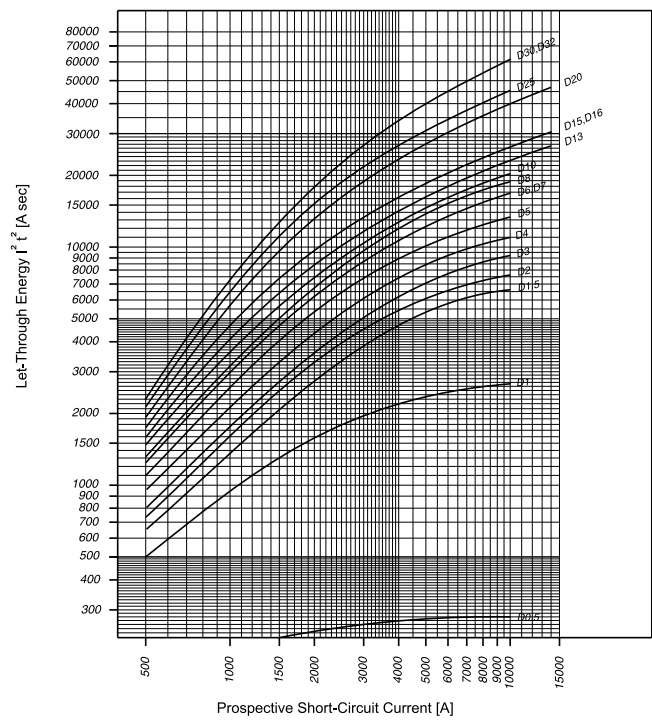
Type C (0.5 - 32 A), 277 V



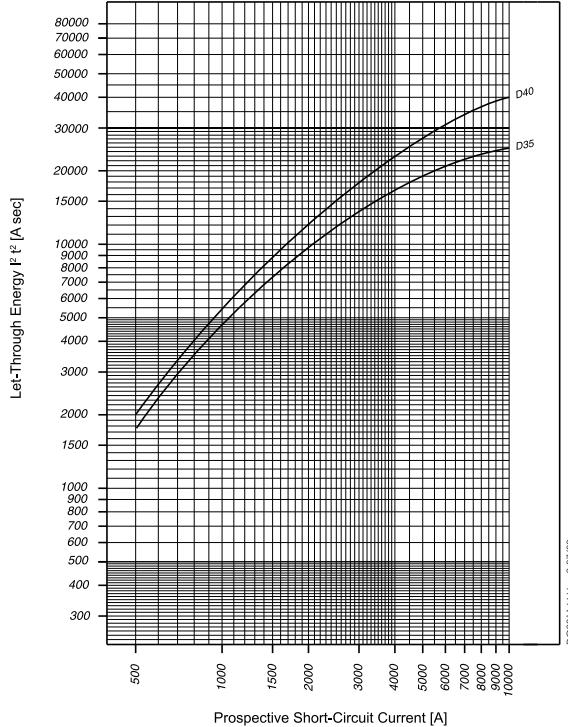
Type C (35 - 40 A), 240 V



Type D (0.5 - 32 A), 277 V



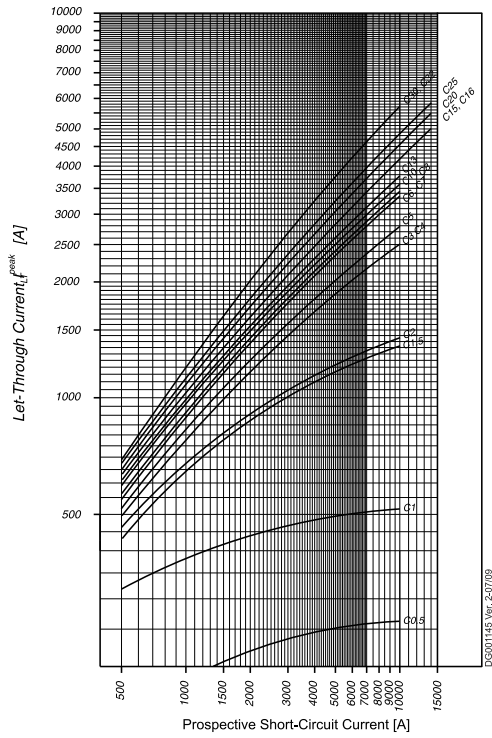
Type D (35 - 40 A), 240 V



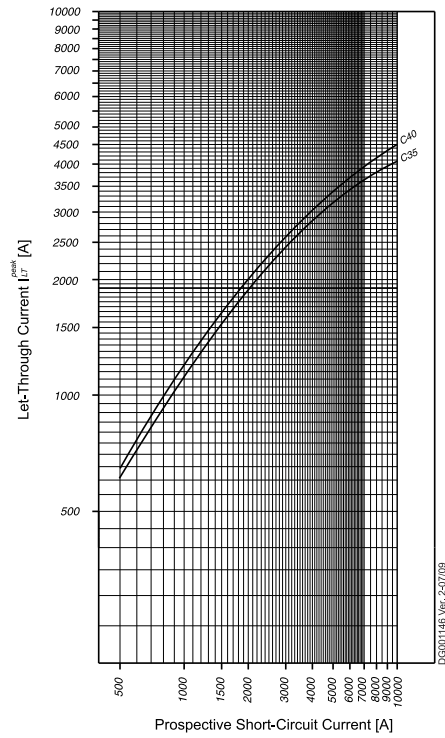
# FAZ-...-NA, -RT | Specifications

## Maximum Let-Through Current FAZ-...-NA, -RT

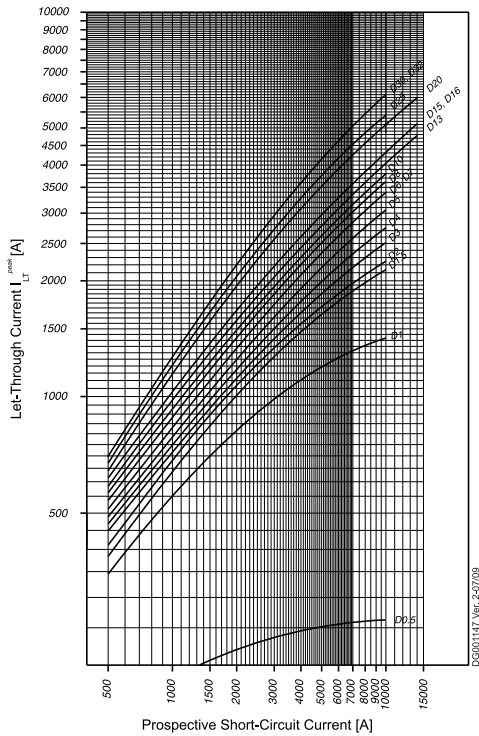
Type C (0.5 - 32 A), 277 V



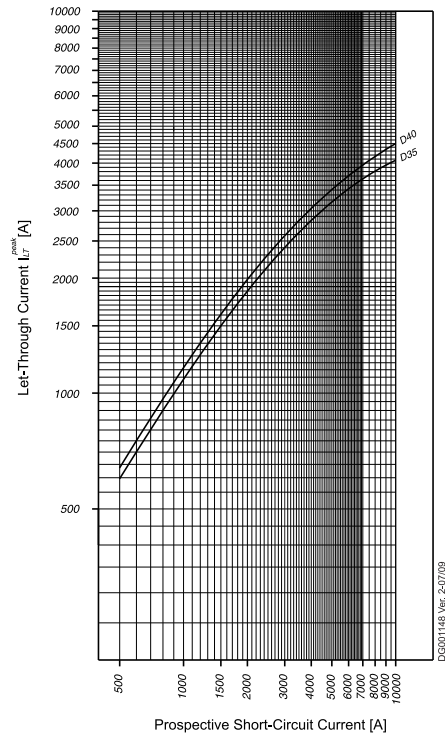
Type C (35 - 40 A), 240 V



Type D (0.5 - 32 A), 277 V



Type D (35 - 40 A), 240 V



# FAZ-...-NA | Busbars

## Z-SV/UL-16 Busbars



**ATTENTION:** Maximum of 3 commoning links allowed. Any combination of same pole configuration.

**ATTENTION:** 3 liaisons communes autorisées au maximum. Toute combinaison de configurations de polarité identiques.

**ACHTUNG:** Maximal 3 Schienenblöcke. Beliebige Kombination gleichpoliger Konfigurationen.

**ATTENZIONE:** Sono consentiti al massimo 3 pettini di collegamento in qualsiasi combinazione della stessa configurazione di poli.

**ATENCIÓN:** Se permite un máximo de 3 enlaces comunes. Cualquier combinación del mismo tipo de configuración de polo



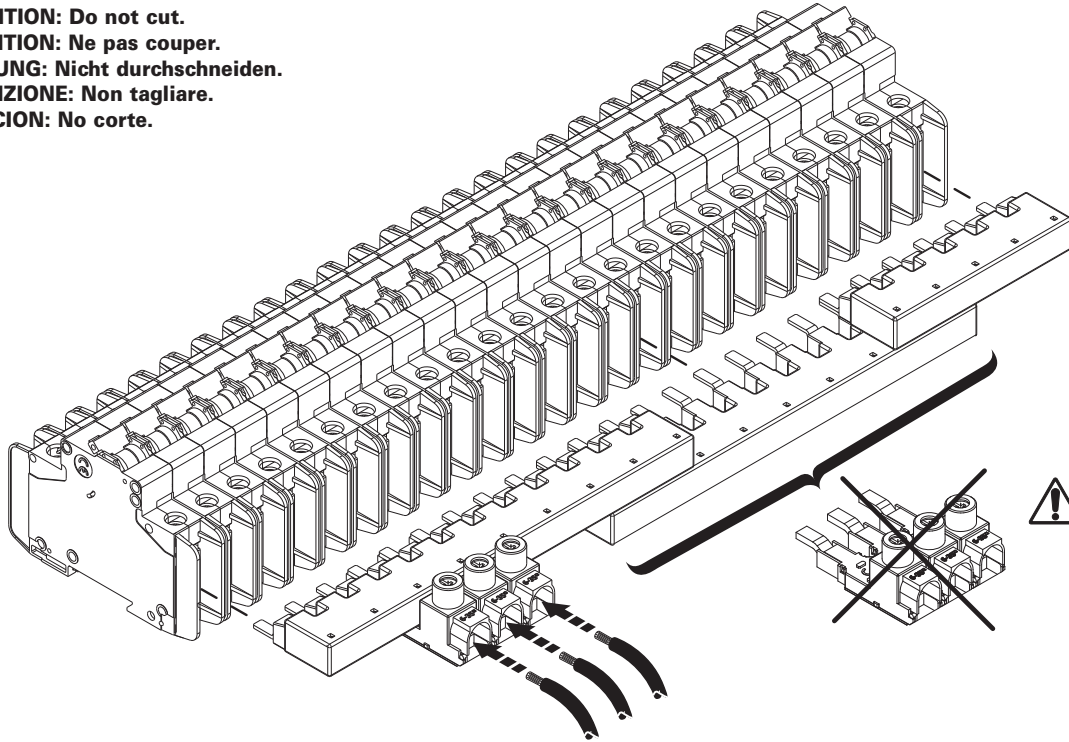
**ATTENTION:** Do not cut.

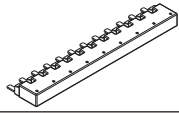
**ATTENTION:** Ne pas couper.




**ACHTUNG:** Nicht durchschneiden.

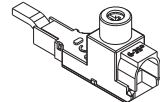


**ATTENZIONE:** Non tagliare.

**ATENCIÓN:** No corte.



|   |             |         |                    |
|---|-------------|---------|--------------------|
|  | UL489       |         | EN/IEC<br>00947-2  |
| $U_e$   | 480 V AC    | 96 V DC | 240/415 V AC       |
| $f$   | 50/60 Hz    | -----   | 50/60 Hz           |
| $U_{imp}$   | -----       |         | 9.5 kV             |
| $I_e$   | 80 A @ 40°C |         | 80 A @ 30°C        |
| Gross section   | -----       |         | 16 mm <sup>2</sup> |

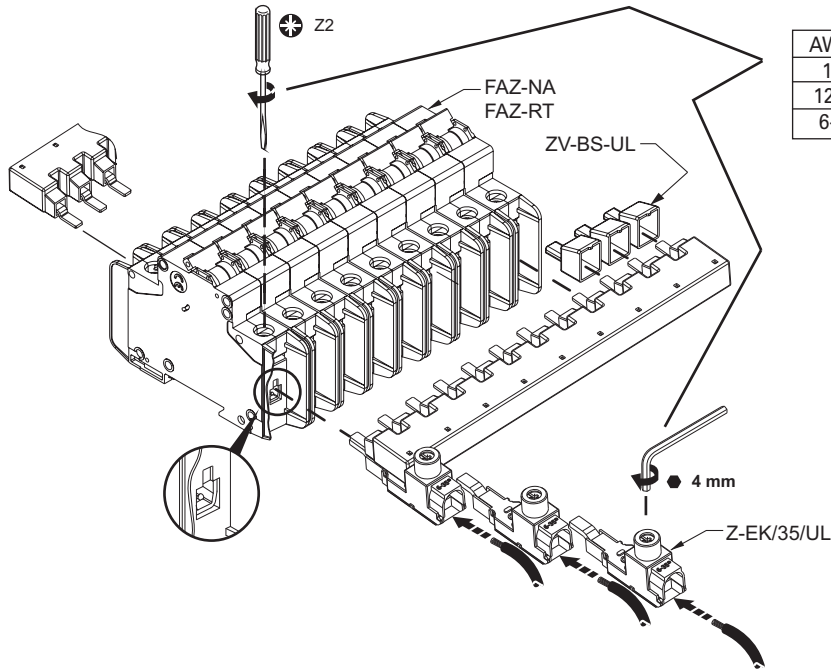
|   |                         |                              |                   |
|---|-------------------------|------------------------------|-------------------|
|  | UL489                   |                              | EN/IEC<br>00947-2 |
| $U_e$   | 480 V AC                | 96 V DC                      | 240/415 V AC      |
| $f$   | 50/60 Hz                | -----                        | 50/60 Hz          |
| $U_{imp}$   | -----                   |                              | 9.5 kV            |
| $I_e$   | 115 A @ 40°C            |                              | 160 A @ 30°C      |
|  | #1-14 AWG<br>60/75°C Cu | 1.5-50 mm <sup>2</sup><br>Cu |                   |
|  | 0.56 in                 |                              | 14 mm             |

|  |                         |                              |                   |
|--|-------------------------|------------------------------|-------------------|
|  | UL489                   |                              | EN/IEC<br>00947-2 |
| $U_e$  | 480 V AC                | 96 V DC                      | 240/415 V AC      |
| $f$  | 50/60 Hz                | -----                        | 50/60 Hz          |
| $U_{imp}$  | -----                   |                              | 9.5 kV            |
| $I_e$  | 80 A @ 40°C             |                              | 80 A @ 30°C       |
|  | #2-14 AWG<br>60/75°C Cu | 2.5-35 mm <sup>2</sup><br>Cu |                   |
|  | 0.56 in                 |                              | 14 mm             |




# FAZ-...-NA | Busbars

## Z-SV/UL-16 Busbars

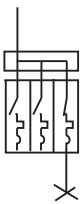


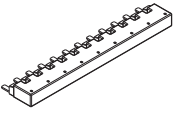
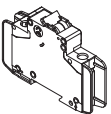
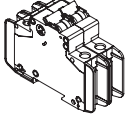
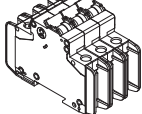
| AWG  | lb-in | Nm  |
|------|-------|-----|
| 14   | 21    | 2.3 |
| 12-8 | 25    | 2.8 |
| 6-2  | 36    | 4.0 |

### IEC/EN 60947-2 Icc

|  | Ue<br>VAC   | Z-SV/UL<br>Icc Amps |
|--|-------------|---------------------|
|  | 240/<br>415 | 15000               |


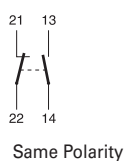

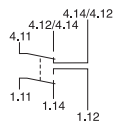

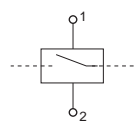
### UL SCCR

|  | FAZ-NA<br>FAZ-RT<br>In<br>Amps | Ue<br>VAC    | Z-SV/UL<br>SCCR RMS<br>Sym Amps |
|---|--------------------------------|--------------|---------------------------------|
|   | 0.5-32                         | 480Y/<br>277 | 10000                           |
| 35-40   | 240                            | 10000        |                                 |

| Article No. |  |  |  |  |
|-------------|---|---|---|--|
| 104892      | Z-SV/UL-16/1P-1TE/6   | 6   | -   | -  |
| 104893      | Z-SV/UL-16/1P-1TE/12  | 12  | -   | -  |
| 104894      | Z-SV/UL-16/1P-1TE/18  | 18  | -   | -  |
| 104895      | Z-SV/UL-16/2P-2TE/6   | -   | 3   | -  |
| 104896      | Z-SV/UL-16/2P-2TE/12  | -   | 6   | -  |
| 104897      | Z-SV/UL-16/2P-2TE/18  | -   | 9   | -  |
| 104898      | Z-SV/UL-16/3P-3TE/6   | -   | -   | 2  |
| 104899      | Z-SV/UL-16/3P-3TE/12  | -   | -   | 4  |
| 104900      | Z-SV/UL-16/3P-3TE/18  | -   | -   | 6  |
| 104901      | Z-EK/35/UL  | -   | -   | -  |
| 104902      | Z-EB/50/UL  | -   | -   | -  |
| 104904      | ZV-BS-UL  | -   | -   | -  |

# FAZ-...-NA, -RT | Accessories

## Auxiliary Contacts and Voltage Trips

|   | Circuit Diagram   | Description   | Rated Operational Voltage | Type Designation                            | Article No.      | Units per package |
|---|---|---|---------------------------|---|------------------|-------------------|
|    |    | <b>Auxiliary contact</b> <ul style="list-style-type: none"> <li>• Design according to IEC/EN 60947-5-1, IEC/EN 62019</li> <li>• Field installable</li> <li>• The specified minimum voltages are per contact—take into account particularly in case of series connection</li> <li>• Self-cleaning contacts</li> <li>• Contact material and design particularly suitable for extra low voltage</li> <li>• Tripping signal contact transmits message of electric tripping, not mechanical switch-off</li> <li>• Test key for contact function “electrical tripping”</li> <li>• Will allow for &gt; 480Y/277 Vac rating</li> </ul>  | 250 Vac                   | Z-IHK-NA                                    | 113895           | 1                 |
|   |    | <b>Two-pole auxiliary contact/trip indicating contact *)</b> <ul style="list-style-type: none"> <li>• Design according to IEC/EN 60947-5-1, IEC/EN 62019</li> <li>• Field installable</li> <li>• The specified minimum voltages are per contact—take into account particularly in case of series connection</li> <li>• Self-cleaning contacts</li> <li>• Contact material and design particularly suitable for extra low voltage</li> <li>• Tripping signal contact transmits message of electric tripping, not mechanical switch-off</li> <li>• Test key for contact function “electrical tripping”</li> <li>• The function of one of the two change-over contacts can be switched from “auxiliary switch” to “tripping signal switch”</li> </ul> <p>*) Voltage of FAZ-NA circuit breaker is limited to 300V with this auxiliary contact installed</p> | 250 Vac                   | Z-NHK                                       | 248434           | 1                 |
|  |  | <b>Shunt Trip</b> <ul style="list-style-type: none"> <li>• Remote release for subsequent mounting onto FAZ-NA</li> <li>• Additional installation of standard auxiliary switch is possible</li> <li>• Position indicator red–green</li> </ul>  | 12–110 Vac<br>12–60 Vdc   | FAZ-XAA-NA12-110VAC<br>FAZ-XAA-NA110-415VAC | 102037<br>102036 | 1<br>1            |
|   |   | <b>Padlock Hasp (for all FAZ)</b> <ul style="list-style-type: none"> <li>• Prevents reactivation of the device during maintenance</li> <li>• Holds one padlock</li> </ul>   |                           | IS/SPE-1TE                                  | 101911           | 1                 |

# FAZ-...-NA, -RT | Accessories

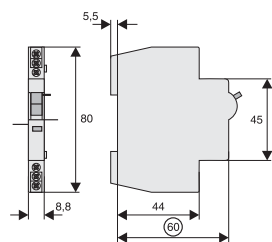
## Specifications

### Technical Data

|  | Z-NHK  | Z-IHK-NA   |
|--|--|--|
| <b>Electrical</b>                                      |  |  |
| Contact function                                       | 2CO  | 1NO + 1NC  |
| Rated voltage  | 230V   | 250V   |
| Rated current  | 2A   | 6A   |
| Rated thermal current $I_{th}$                         | 2A   | 6A   |
| Utilization category AC13                              |  |  |
| Rated operational current $I_e$                        | 3A/250 Vac   | 3A/250 Vac   |
| Utilization category AC15                              |  |  |
| Rated operational current $I_e$                        | 2A/250 Vac   | 2A/250 Vac   |
| Utilization category DC12                              |  |  |
| Rated operational current $I_e$                        | 0.5A/110 Vdc   | 0.5A/110 Vdc<br>0.25A/220 Vdc                            |
| Rated insulation voltage $U_i$                         | 250 Vac  | 250 Vac  |
| Minimum operational voltage per contact $U_{min}$      | 5 Vdc  | 5 Vdc  |
| Minimum operational current $I_{min}$                  | 10 mA DC   | 10 mA AC/DC  |
| Rated peak withstand voltage $U_{imp}$ (1.2/50 $\mu$ ) | 2.5 kV   | 4 kV   |
| Conditional short circuit current $I_k$                |  |  |
| with Back-Up Fuse 6A                                   | 1 kA   | 1 kA   |
| Max. back-up fuse, overload and short circuit          | 6A gL  | —  |
| <b>Mechanical</b>                                      |  |  |
| Tripping indicator "electrical tripping"               | Blue/white   | —  |
| Frame size   | 45 mm  | 45 mm  |
| Device height  | 80 mm  | 80 mm  |
| Device width   | 8.8 mm (0.5MU)   | 8.8 mm (0.5MU)   |
| Mounting   | Onto switching device                                    | —  |
| Degree of protection, built-in                         | IP40   | IP40   |
| Terminal protection                                    | Finger and hand touch safe according to BGV A3, ÖVE-EN 6 | Finger and hand touch safe according to BGV A3, ÖVE-EN 6 |
| Terminals  | Lift terminals   | Lift terminals   |
| Terminal capacity                                      | 20–14 AWG  | 0.5–2.5 mm <sup>2</sup>                                  |
| Terminal screws  | M3 (Pozidrive Z0)  | M3 (Pozidrive Z0)  |
| Tightening torque of terminal screws                   | 7 lb-in  | max. 1.2 Nm  |

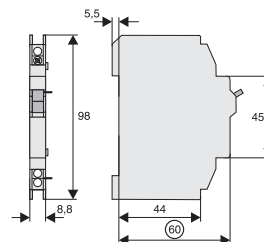
### Two-pole auxiliary contact/trip indicating contact

Z-NHK



### Auxiliary contact

Z-IHK-NA



# FAZ-...-NA, -RT | Accessories

## Technical Data

|                                      | <b>FAZ-XAA-NA12-110VAC</b>                               | <b>FAZ-XAA-NA110-415VAC</b>                              |
|--------------------------------------|--|--|
| <b>Electrical</b>                    |  |  |
| Can be mounted onto                  | FAZ-NA / FAZ-NA-DC / FAZ-RT                              | FAZ-NA / FAZ-NA-DC / FAZ-RT                              |
| Operational voltage range            | 12–110 Vac<br>12–60 Vdc                                  | 110–415 Vac<br>110–230 Vdc                               |
| Frequency                            | 50/60 Hz   | 50/60 Hz   |
| <b>Mechanical</b>                    |  |  |
| Frame size                           | 45 mm  | 45 mm  |
| Device height                        | 105 mm   | 105 mm   |
| Device width                         | 17.5 mm  | 17.5 mm  |
| Mounting                             | Quick fastening with two lock-in positions on EN 50022   |  |
| Degree of protection, built-in       | IP40   | IP40   |
| Terminal protection                  | Finger and hand touch safe according to BGV A3, ÖVE-EN 6 | Finger and hand touch safe according to BGV A3, ÖVE-EN 6 |
| Terminals                            | Open mouthed/lift  | Open mouthed/lift  |
| Terminal capacity, one and two wires | 18–10 AWG  | 18–10 AWG  |

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