## Data sheet



CIRCUIT BREAKER 3VA2 IEC FRAME 100 BREAKING CAPACITY CLASS L ICU=150KA @ 415 V 3POLE, LINE PROTECTION ETU330, LIG, IN=63A OVERLOAD PROTECTION IR=25A ...63A SHORT CIRCUIT PROTECTION II=1,5...12 X IN GROUNDFAULTPROTECTION IG=0,2... 1 X IN, TG=0,1/0,3MS CABLE CONNECTION

Figure similar

| Model                                       |      |                                       |
|---|------|---------------------------------------|
| product brand name                          | SEN  | ITRON                                 |
| Product designation                         | Molo | ded case circuit breaker              |
| Design of the product                       | Line | protection                            |
| Product variations                          | Sele | ective Applications                   |
| Ground fault monitoring version             | Sum  | nmation current formation L-conductor |
| Design of the auxiliary release             | with | out auxiliaryrelease                  |
| Design of the auxiliary switch              | With | out                                   |
| Design of the operating mechanism           | togg | le handle                             |
| Type of the driving mechanism / motor drive | No   |                                       |
| Design of the overcurrent release           | ETU  | 330                                   |

| General technical data  |   |        |  |  |  |
|---|---|--------|--|--|--|
| Number of poles   |   | 3      |  |  |  |
| Trip class / of the L-trip / with I2t characteristic / initial value                        |   | 0.5    |  |  |  |
| Trip class / of the L-trip / with I2t characteristic / Full-scale value                     |   | 17     |  |  |  |
| Electrical endurance (switching cycles)   |   |        |  |  |  |
| ● at AC-1 / at 380/415 V / at 50/60 Hz  |   | 12 000 |  |  |  |
| Total disconnection time / for G-tripping / with standard characteristic / initial value    | S | 0.1    |  |  |  |
| Total disconnection time / for G-tripping / with standard characteristic / Full-scale value | S | 0.3    |  |  |  |
| circuit-breaker / Design  |   | 3VA    |  |  |  |
| Mechanical service life (switching cycles) / typical  |   | 20 000 |  |  |  |

| Voltage   |          |                   |
|---|----------|-------------------|
| Insulation voltage / Rated value  | V        | 800               |
| Protection class  |          |                   |
| Protection class IP   |          | IP40              |
| Protection class IP / on the front  |          | IP40              |
| Protective function of the overcurrent release  |          | LIG               |
| . 10100110 1111010110 11110 0101011111111   |          |                   |
| Switching capacity  |          |                   |
| Switching capacity class of the circuit breaker   |          | L                 |
| Dissipation   |          |                   |
| Active power loss   |          |                   |
| • maximum   | W        | 3                 |
| Floatricity   |          |                   |
| Electricity  Continuous current / Rated value / maximum                                       | A        | 100               |
| Continuous current / Rated value  | A        | 63                |
| Adjustable response value current / of the  | A        | 1.5               |
| instantaneous short-circuit release / initial value   |          |                   |
|   |          |                   |
| Main circuit Operating voltage  |          |                   |
| with AC / at 50/60 Hz / Rated value   | V        | 690               |
|   | V        | 030               |
| Operating current  • at 40 °C / Rated value   | Α        | 63                |
|   |          |                   |
| • at 50 °C / Rated value  | A        | 63                |
| ● at 60 °C / Rated value  | A        | 63                |
| ● at 65 °C / Rated value  | Α        | 63                |
| ● at 70 °C / Rated value  | Α        | 63                |
| Auxiliary circuit   |          |                   |
| Number of NC contacts / for auxiliary contacts  |          | 0                 |
| Number of NO contacts / for auxiliary contacts  |          | 0                 |
| Suitability   |          |                   |
| Suitability for use   |          | system protection |
| •   |          | ,                 |
| Adjustable parameters   |          |                   |
| Adjustable response value current   | <b>A</b> | 0.25              |
| <ul> <li>for G-tripping / with standard characteristic /<br/>initial value</li> </ul>         | Α        | 0.25              |
| <ul> <li>for G-tripping / with standard characteristic /<br/>Full-scale value</li> </ul>      | Α        | 1                 |
| • of I-trip / Full-scale value  | Α        | 12                |
| Adjustable response value current / of the current-dependent overload release / initial value | A        | 0.397             |
| dependent overload release / lilitial value   |          |                   |

| Product details  |                            |  |
|--|----------------------------|--|
| Product component  |                            |  |
| Trip indicator   |                            | No   |
| • display  |                            | No   |
| undervoltage release   |                            | No   |
| Product property   |                            |  |
| • of the circuit breaker with tripping unit / Tripping   |                            | Yes  |
| characteristic adjustable  |                            |  |
| • for neutral conductors /   |                            | No   |
| upgradeable/retrofittable / Short-circuit and<br>overload proof  |                            |  |
| Product expansion / optional / motor drive   |                            | Yes  |
| Troduct expansion / optional / motor drive   |                            | 100  |
| Product function   |                            |  |
| Product function   |                            |  |
| Intrinsic device protection  |                            | Yes  |
| communication function   |                            | No   |
| Phase failure detection  |                            | No   |
| <ul> <li>other measurement function</li> </ul>   |                            | No   |
| Accessories  |                            |  |
| Short circuit  |                            |  |
| Operational short-circuit current breaking capacity  |                            |  |
| (Ics)  • at 240 V / Rated value  | kA                         | 200  |
| at 415 V / Rated value   | kA                         | 150  |
|  | kA                         | 130  |
| at 440 V / Rated value   | $\Gamma \Gamma \Gamma$     | 150  |
|  | kΔ                         | 150  |
| at 500 V / Rated value  at 600 V / Rated value   | kA<br>kA                   | 100  |
| • at 690 V / Rated value   | kA<br>kA                   |  |
| • at 690 V / Rated value  Maximum short-circuit current breaking capacity (Icu)  | kA                         | 100<br>18  |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> </ul>  | kA<br>kA                   | 100<br>18<br>200   |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> </ul>  | kA<br>kA<br>kA             | 100<br>18<br>200<br>150  |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> </ul>  | kA<br>kA<br>kA             | 100<br>18<br>200<br>150<br>150                                   |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> </ul>  | kA<br>kA<br>kA<br>kA       | 100<br>18<br>200<br>150<br>150                                   |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul>  | kA<br>kA<br>kA             | 100<br>18<br>200<br>150<br>150                                   |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> <li>Short-circuit current making capacity (Icm)</li> </ul>   | kA<br>kA<br>kA<br>kA<br>kA | 100<br>18<br>200<br>150<br>150<br>100<br>24                      |
| at 690 V / Rated value  Maximum short-circuit current breaking capacity (Icu)     at 240 V / Rated value     at 415 V / Rated value     at 440 V / Rated value     at 500 V / Rated value     at 690 V / Rated value  Short-circuit current making capacity (Icm)     at 240 V / Rated value   | kA<br>kA<br>kA<br>kA<br>kA | 100<br>18<br>200<br>150<br>150<br>100<br>24                      |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> <li>Short-circuit current making capacity (Icm)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> </ul>   | kA<br>kA<br>kA<br>kA<br>kA | 100<br>18<br>200<br>150<br>150<br>100<br>24<br>440<br>330        |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> <li>Short-circuit current making capacity (Icm)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 440 V / Rated value</li> </ul> | kA kA kA kA kA kA kA       | 100<br>18<br>200<br>150<br>150<br>100<br>24<br>440<br>330<br>330 |
| <ul> <li>at 690 V / Rated value</li> <li>Maximum short-circuit current breaking capacity (Icu)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> <li>Short-circuit current making capacity (Icm)</li> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> </ul>   | kA<br>kA<br>kA<br>kA<br>kA | 100<br>18<br>200<br>150<br>150<br>100<br>24<br>440<br>330        |

| Connections  Arrangement of electrical connectors / for main current circuit | Front terminal  |
|--|-----------------|
| Type of connectable conductor cross-section                                  |                 |
| <ul> <li>of the round conductor terminal / stranded</li> </ul>               | 1 x (6-120 mm²) |
| Type of electrical connection / for main current circuit                     | Box terminal    |
| Mechanical Design  |                 |

| Mechanical Design |    |                |  |  |  |
|-------------------|----|----------------|--|--|--|
| Height            | mm | 181            |  |  |  |
| Width             | mm | 105            |  |  |  |
| Depth             | mm | 107            |  |  |  |
| Mounting type     |    | fixed mounting |  |  |  |

| Environmental conditions                       |    |     |  |  |
|--|----|-----|--|--|
| Ambient temperature                            |    |     |  |  |
| <ul><li>during operation / minimum</li></ul>   | °C | -25 |  |  |
| <ul> <li>during operation / maximum</li> </ul> | °C | 70  |  |  |
| <ul> <li>during storage / minimum</li> </ul>   | °C | -40 |  |  |
| <ul> <li>during storage / maximum</li> </ul>   | °C | 80  |  |  |

| Certificates |                          |  |   |                |      |  |
|--------------|--------------------------|--|---|----------------|------|--|
|              | Equipment marking        |  |   |                |      |  |
|              | • acc. to DIN EN 61346-2 |  | Q |                |      |  |
|              | ● acc. to DIN EN 81346-2 |  | Q |                |      |  |
|              | 0 10 1 14                |  | ^ | Daalanatian at | - 41 |  |

| General Prod | duct Approval | EMC       | Declaration of<br>Conformity | other |
|--------------|---------------|-----------|------------------------------|-------|
|              | ^             | <br>other |                              | other |







other

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA20638HM360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA20638HM360AA0/all

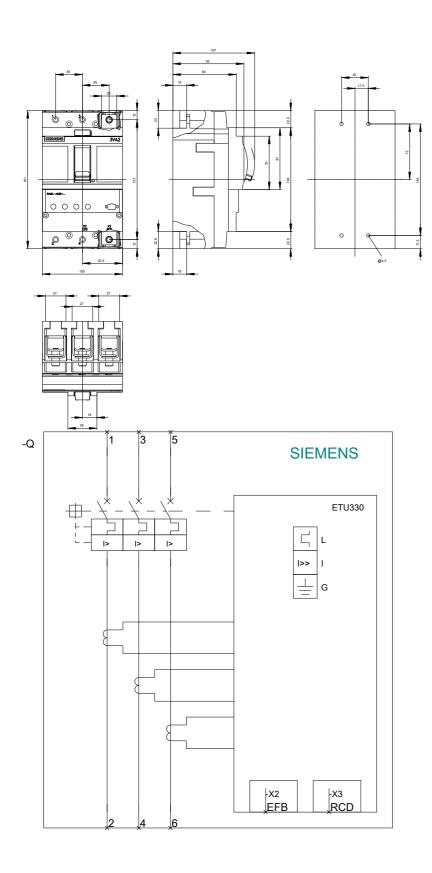
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA20638HM360AA0

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv



last modified: 11.03.2015