



UL98 switch-disconnector with rotary handle

Part no. **R9C3100U-DH**
 Catalog No. **191861**

Delivery program

| | | | |
|--------------------------------------|-------|---|--|
| Product range | | | Switch-disconnector Main switch maintenance switch UL98 |
| Part group reference | | | R9 With black rotary handle |
| Information about equipment supplied | | | Auxiliary contact or neutral conductor fitted by user. |
| Number of poles | | | 3 pole |
| Degree of Protection | | | IP20 |
| Design | | | service distribution board mounting |
| Contact sequence | | | |
| Rated uninterrupted current | I_u | A | 100 |

Technical data

General

| | | | |
|---|-----------|------|---------------------------------|
| Standards | | | IEC/EN 60947, VDE 0660, CSA, UL |
| Ambient temperature | | | |
| Open | | °C | -25 - +40 |
| Rated impulse withstand voltage | U_{imp} | V AC | 8000 |
| Mounting position | | | As required |
| Protection against direct contact when actuated from front (EN 50274) | | | Finger and back-of-hand proof |

Contacts

| | | | |
|---|-------|------|--|
| Mechanical variables | | | |
| Number of poles | | | 3 pole |
| Electrical characteristics | | | |
| Rated operational voltage | U_e | V AC | 690 |
| Rated uninterrupted current | I_u | A | 100 |
| Note on rated uninterrupted current I_u | | | Rated uninterrupted current I_u is specified for max. cross-section. |
| Rated conditional short-circuit current | I_q | kA | 12 |

Switching capacity

| | | | |
|---|-------------------|-------|--|
| AC | | | |
| AC-23A | | | |
| Motor rating AC-23A, 50 - 60 Hz | P | kW | |
| 400 V 415 V | P | kW | 45 |
| 690 V | P | kW | 45 |
| Control circuit reliability at 24 V DC, 10 mA | Fault probability | H_F | $< 10^{-5}$, < 1 fault in 100000 operations |

Terminal capacities

| | | | |
|-------------------|--|-----------------|--|
| Terminal capacity | | mm ² | 6 - 70 |
| Terminal screw | | | Inbus 4 |
| tightening torque | | N/m | 6 mm ² = 3.5 Nm 10 - 35 mm ² = 4 Nm 50 - 70 mm ² = 5 Nm |

Technical safety parameters:

| Notes | | | B10 _d values as per EN ISO 13849-1, table C1 |
|---------------------------------------|----------------|-------|---|
| Rating data for approved types | | | |
| Contacts | | | |
| Rated operational voltage | U _e | V AC | 600 |
| Rated uninterrupted current max. | | | |
| Main conducting paths | | | |
| General use | | A | 100 |
| Auxiliary contacts | | | |
| General Use | I _U | A | 10 |
| Pilot Duty | | | A 300 |
| Short Circuit Current Rating | | | |
| High fault rating | | SCCR | |
| | | kA | 100 (480 V) 25 (600 V) |
| max. Fuse | | A | 100, Class J |
| Terminal capacity | | | |
| Terminal capacity | | AWG | 10 - 2/0 |
| Terminal screw | | | Inbus 4 |
| tightening torque | | lb-in | 10 AWG = 31 lb.in 8 - 2 AWG = 35.4 lb.in 1 - 2/0 AWG = 44.3 lb.in |

Technical data ETIM 6.0

| | | | |
|--|--|----|--|
| Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216) | | | |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ec!@ss8.1-27-37-14-03 [AKF060010]) | | | |
| Version as main switch | | | Yes |
| Version as maintenance-/service switch | | | Yes |
| Version as safety switch | | | No |
| Version as emergency stop installation | | | No |
| Version as reversing switch | | | No |
| Max. rated operation voltage U _e AC | | V | 690 |
| Rated operating voltage | | V | 690 - 690 |
| Rated permanent current I _u | | A | 100 |
| Rated permanent current at AC-21, 400 V | | A | 0 |
| Rated operation power at AC-3, 400 V | | kW | 0 |
| Rated short-time withstand current I _{cw} | | kA | 0 |
| Rated operation power at AC-23, 400 V | | kW | 45 |
| Switching power at 400 V | | kW | 0 |
| Conditioned rated short-circuit current I _q | | kA | 0 |
| Number of poles | | | 3 |
| Number of auxiliary contacts as normally closed contact | | | 0 |
| Number of auxiliary contacts as normally open contact | | | 0 |
| Number of auxiliary contacts as change-over contact | | | 0 |
| Motor drive optional | | | No |
| Motor drive integrated | | | No |
| Voltage release optional | | | No |
| Device construction | | | Built-in device fixed built-in technique |
| Suitable for ground mounting | | | Yes |
| Suitable for front mounting 4-hole | | | No |
| Suitable for front mounting center | | | No |
| Suitable for distribution board installation | | | No |
| Suitable for intermediate mounting | | | Yes |
| Colour control element | | | Black |
| Type of control element | | | Turn button |
| Interlockable | | | Yes |
| Type of electrical connection of main circuit | | | Frame clamp |

Dimensions

Handle Type S0

A

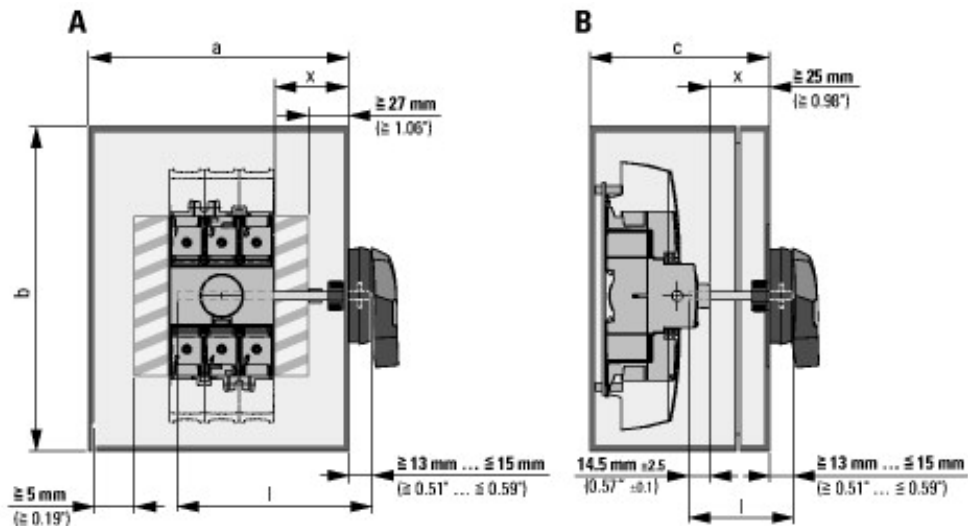
$$l = x + 94.5 \text{ mm}$$

$$(l = x + 3.72")$$

B

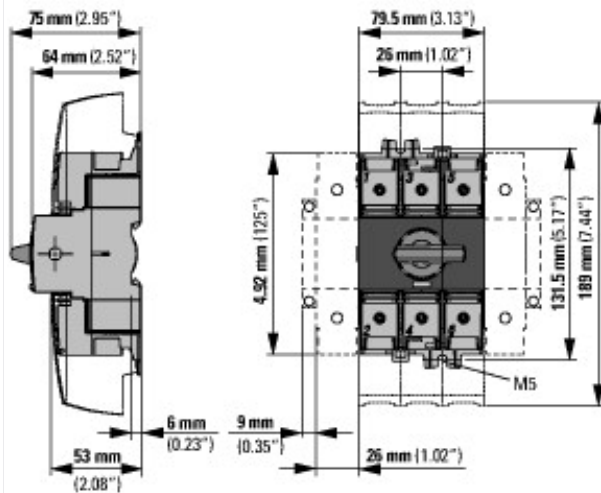
$$l = x + 32 \text{ mm}$$

$$(l = x + 1.26")$$



Minimum enclosure dimensions
Dimensions minimum des coffrets
Dimensiones minimas de las cajas
mm (in)

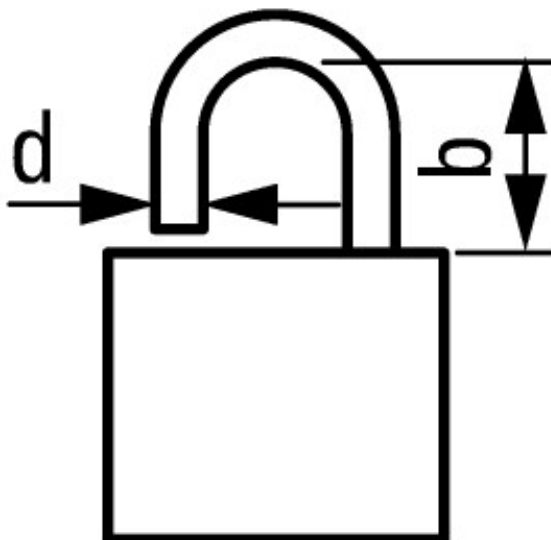
| UL standard | a | b | c |
|-------------|---------|----------|---------|
| R9C3030U | | 305 (12) | |
| R9C3060U | 203 (8) | 305 (12) | 153 (6) |
| R9C3100U | | 356 (14) | |



15 mm (0.59")



| | |
|--|-------------------|
| 6 mm ² AWG10 | 3.5 Nm (31 lb-in) |
| 10 - 35 mm ² AWG8 - AWG2 | 4 Nm (35.4 lb-in) |
| 50 - 70 mm ² AWG1 - AWG2/0 | 5 Nm (44.3 lb-in) |



$$d = 4 - 8 \text{ mm}$$

$$b + d \leq 47 \text{ mm}$$

$$d = 0.16 - 0.31"$$

$$b + d \leq 1.85"$$

1 padlock

Additional product information (links)

IL008047ZU Switch-disconnectors UL98

IL008047ZU Switch-disconnectors UL98

[ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL008047ZU2017_02.pdf](http://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL008047ZU2017_02.pdf)

MZ112002ZU Safety

| | |
|--|---|
| MZ112002ZU Safety | ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/MZ112002ZU.pdf |
| Technical overview cam switch, switch-disconnector | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2 |
| System overview cam switch T | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4 |
| System overview switch-disconnector P | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6 |
| Key to part numbers Cam switch | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8 |
| Key to part numbers Switch-disconnector | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8 |
| Switches for ATEX | http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html |