



| Product designation   |      |        | Motor protection<br>circuit breaker |
|---|------|--------|-------------------------------------|
| Product type designation  |      |        | SM1RT                               |
| Electrical features   |      |        | <u>^</u>                            |
| Number of poles   |      | Nr.    | 3                                   |
| Magnetic protection   |      |        | yes                                 |
| Thermal protection  |      |        | yes                                 |
| Phase failure detection   |      |        | yes                                 |
| Rated insulation voltage Ui IEC/EN                              |      | V      | 690                                 |
| Rated impulse withstand voltage Uimp                            |      | kV     | 6                                   |
| Rated frequency   |      | Hz     | 50/60                               |
| Thermal trip adjustment range                                   |      |        | 1723                                |
| Rated current (In)  |      | A      | 23                                  |
| Magnetic tripping   |      |        | 16 x ln                             |
| Power dissipation per pole                                      |      |        |                                     |
|   | min  | W      | 1.86                                |
|   | max  | W      | 3.41                                |
| Operational short-circuit current breaking capacity (Ics) at AC |      |        |                                     |
|   | 230V | kA     | 100                                 |
|   | 400V | kA     | 25                                  |
|   | 440V | kA     | 5                                   |
|   | 500V | kA     | 5                                   |
|   | 690V | kA     | 2                                   |
| Maximum short-circuit current breaking capacity (Icu) at AC     |      |        |                                     |
|   | 230V | kA     | 100                                 |
|   | 400V | kA     | 50                                  |
|   | 440V | kA     | 10                                  |
|   | 500V | kA     | 10                                  |
|   | 690V | kA     | 4                                   |
| Tripping class  |      |        | 10A                                 |
| IEC Utilization category  |      |        | А                                   |
| Operations  |      |        |                                     |
| Mechanical life   |      | cycles | 100000                              |
| Electrical life   |      | cycles | 100000                              |
| Mechanical features   |      |        |                                     |
| Tightening torque for terminals                                 |      |        |                                     |
|   | min  | Nm     | 2.5                                 |
|   | max  | Nm     | 3                                   |
|   | min  | lbin   | 22                                  |
|   | max  | lbin   | 26.5                                |
| Max number of wires simultaneously connectable                  |      | Nr.    | 2                                   |
| Conductor section   |      |        |                                     |
| AWG/Kcmil   |      |        |                                     |
|   | min  |        | 16                                  |
|   | max  |        | 8                                   |



SM1RT2300 MOTOR PROTECTION CIRCUIT BREAKER, TRANSFORMER PROTECTION, IEC BREAKING

CAPACITY ICU 50KA AT 400V, 17...23A

|                          | Flexible w/o lug conductor section          |              |      |                    |
|--------------------------|---|--------------|------|--------------------|
|                          |   | min          | mm²  | 1                  |
|                          |   | max          | mm²  | 10                 |
|                          | Flexible c/w lug conductor section          |              |      |                    |
|                          | 5   | min          | mm²  | 1                  |
|                          |   | max          | mm²  | 10                 |
|                          | Flexible with insulated spade lug conductor |              |      |                    |
|                          |   | min          | mm²  | 1                  |
|                          |   | max          | mm²  | 10                 |
| Screwdriver              |   | max          |      | PH2                |
|                          | tion appording to IEC/EN 60520              |              |      | IP20 on front      |
| -                        | tion according to IEC/EN 60529              |              |      | IP20 ON ITONI      |
| Cable stripping lenght   |   |              |      | 10                 |
|                          |   | main circuit | mm   | 12                 |
| Ambient conditions       |   |              |      |                    |
| Temperature              |   |              |      |                    |
|                          | Operating temperature                       |              |      |                    |
|                          |   | min          | °C   | -20                |
|                          |   | max          | °C   | +60                |
|                          | Storage temperature                         |              |      |                    |
|                          |   | min          | °C   | -50                |
|                          |   | max          | °C   | +80                |
|                          | Compensation temperature                    |              |      |                    |
|                          |   | min          | °C   | -20                |
|                          |   | max          | °C   | +50                |
| Max altitude             |   |              | m    | 3000               |
| Operating position       |   |              |      |                    |
| oporating poolitori      |   | normal       |      | Vertical plan      |
|                          |   | allowable    |      | Any                |
|                          |   | allowable    |      | Screw / DIN rail   |
| Fixing                   |   |              |      | 35mm               |
| Weight                   |   |              | a    | 340                |
| UL technical data        |   |              | g    | 340                |
|                          |   |              |      |                    |
| Motor Disconnect         |   |              | 1. 4 | 20                 |
|                          |   | at 480V      | kA   | 30<br>2004 slava l |
| <u> </u>                 |   | protection   |      | 200A class J       |
| Group Motor Installation | on  |              |      |                    |
|                          |   | at 480V      | kA   | 30                 |
|                          |   | protection   |      | 200A class J       |
| Tap Conductor Protec     | tion  |              |      |                    |
|                          |   | at 480Y/277V | kA   | 30                 |
| Maximum UL/CSA hor       | rsepower ratings single-phase               |              |      |                    |
|                          |   | 110V-120V    | HP   | 1.5                |
|                          |   | 220V-240V    | HP   | 3                  |
| Maximum UL/CSA hor       | rsepower ratings three-phase, 3-pole        |              |      |                    |
|                          |   | 200V-208V    | HP   | 5                  |
|                          |   | 220V-240V    | HP   | 7.5                |
|                          |   | 440V-480V    | HP   | 15                 |
| Dimensions [mm (in)]     |   |              |      | -                  |
|                          |   |              |      |                    |

SM1RT2300



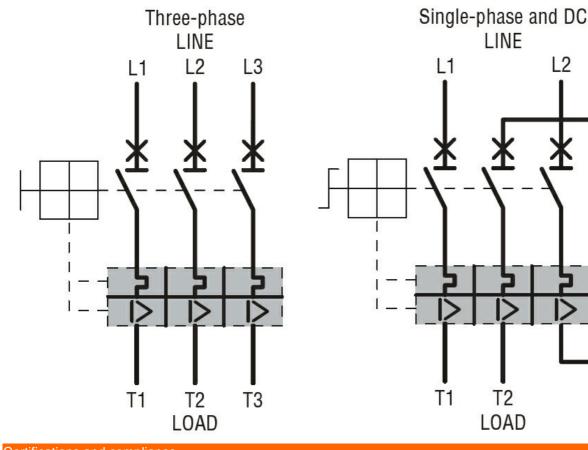
## MOTOR PROTECTION CIRCUIT BREAKER, TRANSFORMER PROTECTION, IEC BREAKING CAPACITY ICU 50KA AT 400V, 17...23A

SM1RT2300

-44 (1.73

80.8 (3.18") 9 18 (0.35") (0.71 0000 -----P 96.6 (3.92") 90 (3.54") 90 (3.54") -37.5-9 0 49 (1.93") 5.5 44.8 SM1X14... (0.22")74.5 (2.93) (1.76")SM1X15... SM1X16... - 85.6 (3.37") SM1X12... SM1X13...

Wiring diagrams



## Certifications and compliance

SM1RT2300

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



## Certifications

|                     | CSA C22.2 n° 60947-1   |            |
|---------------------|------------------------|------------|
|                     | CSA C22.2 n° 60947-4-1 |            |
|                     | IEC/EN/BS 60947-1      |            |
|                     | IEC/EN/BS 60947-2      |            |
|                     | IEC/EN/BS 60947-4-1    |            |
|                     | UL 60947-4-1           |            |
| Compliance          |                        |            |
|                     | cULus                  |            |
|                     | EAC                    |            |
| ETIM classification |                        |            |
|                     |                        | EC000074 - |

**ETIM 8.0** 

EC000074 -Motor protection circuit-breaker