



OVERLOAD RELAY 25...100 A FOR MOTOR  
PROTECTION SIZE S3,  
CLASS 5...30 STAND-ALONE INSTALLATION MAIN  
CIRCUIT: THROUGH TRANSF. AUX. CIRCUIT:  
SPRINGLOAD. TERM. MANUAL-AUTOMATIC-RESET INT.  
EARTH FAULT DETECTION

### General technical data:

|                                                                         |    |                                             |
|-------------------------------------------------------------------------|----|---------------------------------------------|
| product brand name                                                      |    | SIRIUS                                      |
| Product designation                                                     |    | solid-state overload relay                  |
| Size of overload relay                                                  |    | S3                                          |
| Number of poles / for main current circuit                              |    | 3                                           |
| Product function / removable terminal for auxiliary and control circuit |    | Yes                                         |
| Impulse voltage resistance / rated value                                | kV | 8                                           |
| Protection class IP                                                     |    | IP20                                        |
| Protection class IP / on the front                                      |    | IP20                                        |
| Protection against electrical shock                                     |    | finger-safe                                 |
| Installation altitude / at a height over sea level / maximum            | m  | 2,000                                       |
| Resistance against shock                                                |    | 15g / 11 ms                                 |
| Ambient temperature                                                     |    |                                             |
| • during transport                                                      | °C | -40 ... +80                                 |
| • during storage                                                        | °C | -40 ... +80                                 |
| • during operating                                                      | °C | -25 ... +60                                 |
| Relative humidity / during operating phase / maximum                    | %  | 100                                         |
| Electrostatic discharge / according to IEC 61000-4-2                    |    | 6 kV contact discharge / 8 kV air discharge |
| Field-bound parasitic coupling / according to IEC 61000-4-3             |    | 10 V/m                                      |

|                                                                                           |   |                                                                             |
|-------------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------|
| Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4                     |   | 2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3 |
| Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5     |   | 2 kV (line to earth) corresponds to degree of severity 3                    |
| Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5 |   | 1 kV (line to line) corresponds to degree of severity 3                     |
| Type of protection                                                                        |   | PTB 06 ATEX 3001 Ex II (2) GD                                               |
| Active power loss / total / typical                                                       | W | 0.05                                                                        |
| Size of the contactor / can be combined / company-specific                                |   | S3                                                                          |

|                                                    |   |     |
|----------------------------------------------------|---|-----|
| <b>Main circuit:</b>                               |   |     |
| Operating current / of the fuse link / rated value | A | 315 |
| Type of assignment                                 |   | 2   |

|                                                                                           |   |                 |
|-------------------------------------------------------------------------------------------|---|-----------------|
| <b>Auxiliary circuit:</b>                                                                 |   |                 |
| Number of NC contacts / for auxiliary contacts                                            |   | 1               |
| Number of NO contacts / for auxiliary contacts                                            |   | 1               |
| Number of changeover contacts / for auxiliary contacts                                    |   | 0               |
| Design of the fuse link / for short-circuit protection of the auxiliary switch / required |   | fuse gL/gG: 6 A |
| Operating current / of the auxiliary contacts                                             |   |                 |
| • at AC-15                                                                                |   |                 |
| • at 24 V                                                                                 | A | 4               |
| • at 110 V                                                                                | A | 4               |
| • at 120 V                                                                                | A | 4               |
| • at 125 V                                                                                | A | 4               |
| • at 230 V                                                                                | A | 3               |
| • at DC-13                                                                                |   |                 |
| • at 24 V                                                                                 | A | 2               |
| • at 60 V                                                                                 | A | 0.55            |
| • at 110 V                                                                                | A | 0.3             |
| • at 125 V                                                                                | A | 0.3             |
| • at 220 V                                                                                | A | 0.11            |

|                                                                         |   |                                   |
|-------------------------------------------------------------------------|---|-----------------------------------|
| <b>Protective and monitoring functions:</b>                             |   |                                   |
| Trip class                                                              |   | CLASS 5, 10, 20 and 30 adjustable |
| Adjustable response current / of the current-dependent overload release | A | 25 ... 100                        |

|                                            |    |                          |
|--------------------------------------------|----|--------------------------|
| <b>Installation/ mounting/ dimensions:</b> |    |                          |
| Mounting type                              |    | stand-alone installation |
| mounting position                          |    | any                      |
| Depth                                      | mm | 124                      |

|        |    |     |
|--------|----|-----|
| Height | mm | 106 |
| Width  | mm | 70  |

#### Connections/ terminals:

##### Design of the electrical connection

- for main current circuit
- for auxiliary and control current circuit

straight-through transformers  
spring-loaded terminals

##### Type of the connectable conductor cross-section

- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (0.25 ... 1.5 mm<sup>2</sup>)  
  
2x (0.25 ... 1.5 mm<sup>2</sup>)  
  
2x (24 ... 16)

#### Certificates/ approvals:

##### General Product Approval

##### EMC

##### For use in hazardous locations



CCC



CSA



UL



C-TICK



ATEX

##### Test Certificates

##### Shipping Approval

[Type Test Certificates/Test Report](#)



ABS



DNV



GL



LRS



RINA

##### other

[Declaration of Conformity](#)

[other](#)

[Environmental Confirmations](#)

#### Further information:

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

<http://www.siemens.com/industrial-controls/catalogs>

##### Industry Mall (Online ordering system)

<http://www.siemens.com/industrial-controls/mall>

##### Cax online generator

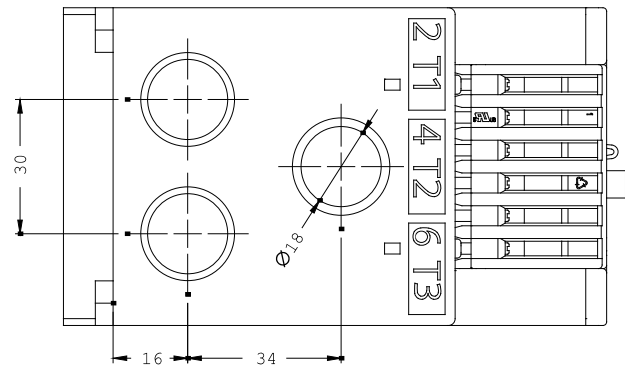
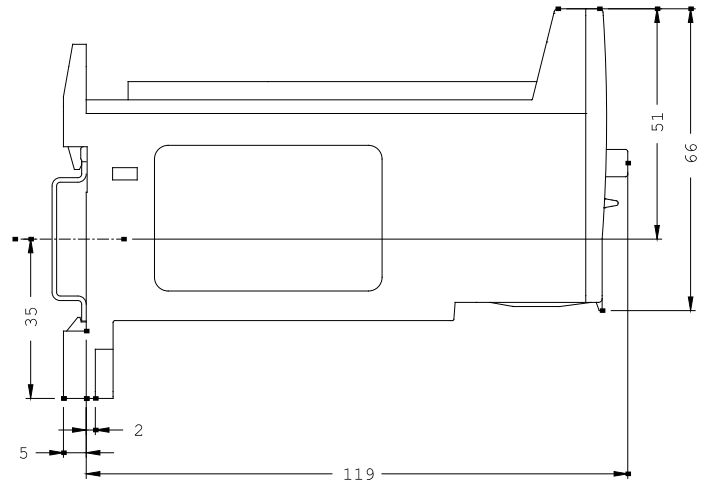
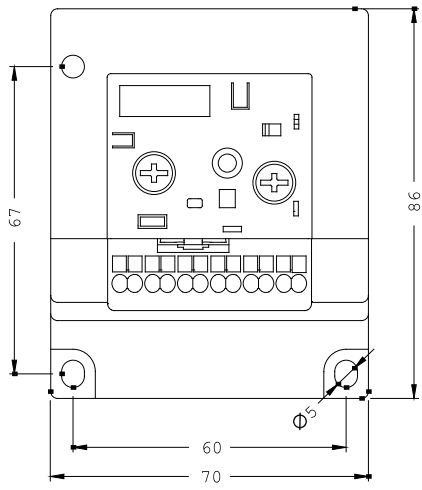
<http://www.siemens.com/cax>

##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RB2143-4EX1/all>

##### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RB2143-4EX1](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB2143-4EX1)



last change:

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