



OVERLOAD RELAY 1...4 A FOR MOTOR PROTECTION  
SIZE S0,  
CLASS 5...30 CONTACTOR ASS. MAIN CIRCUIT: SPR.-  
LOAD.TERM. AUX.CIRCUIT: SPR.-LOAD.TERM. MANUAL-  
AUTOM.-RESET INT. GROUND FAULT DETECTION

General technical data:		
Product brand name		SIRIUS
product designation		solid-state overload relay
Protection class IP / on the front		IP20
Insulation voltage / with degree of pollution 3 / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-40 ... 80
• during transport	°C	-40 ... 80
• during operating	°C	-25 ... 60
Relative humidity		
• during operating phase	/ %	95
EMC immunity to interference		
• according to IEC 60947-1		corresponds to degree of severity 3
EMC emitted interference		
• according to IEC 60947-1		CISPR 11, environment B (residential area)
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
<b>Conductor-bound parasitic coupling conductor-conductor SURGE</b>		
• according to IEC 61000-4-5		1 kV (line to line) corresponds to degree of severity 3
<b>Electrostatic discharge</b>		
• according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
<b>Field-bound parasitic coupling</b>		
• according to IEC 61000-4-3		10 V/m
<b>Resistance against shock</b>		15g / 11 ms
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Active power loss / total / typical</b>	W	0.05
<b>Item designation</b>		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F
<b>Size of overload relay</b>		S0
<b>Size of the contactor / can be combined / company-specific</b>		S0
<b>type of protection</b>		PTB 09 ATEX 3001 Ex II (2) GD
<b>Type of assignment</b>		2
<b>Trip class</b>		CLASS 5, 10, 20 and 30 adjustable

#### Main circuit:

<b>Number of poles / for main current circuit</b>		3
<b>Operating voltage / at AC-3 / rated value</b>		
• maximum	V	690
<b>Operating current / at AC-3 / at 400 V</b>		
• rated value	A	4
<b>Adjustable response current</b>		
• of the current-dependent overload release	A	1 ... 4
<b>Service power / for three-phase servomotors / at 400 V / at 50 Hz</b>		
• for AC three-phase	kW	0.55 ... 1.5
<b>Operating current / of the fuse link</b>		
• rated value	A	20

#### Auxiliary circuit:

<b>Contact reliability / of the auxiliary contacts</b>		acceptability for PLC control (17 V, 5 mA)
<b>Number of NC contacts / for auxiliary contacts</b>		1
<b>Number of NO contacts / for auxiliary contacts</b>		1
<b>Number of change-over switches / for auxiliary contacts</b>		0
<b>Operating current / of the auxiliary contacts</b>		
• at AC-15		

- at 24 V
- at 110 V
- at 120 V
- at 125 V
- at 230 V
- at DC-13
  - at 24 V
  - at 60 V
  - at 110 V
  - at 125 V
  - at 220 V

A	4
A	4
A	4
A	4
A	3
A	2
A	1
A	0.3
A	0.3
A	1

#### Short-circuit:

Design of the fuse link / for short-circuit protection of the auxiliary switch / required

fuse gL/gG: 6 A

#### Installation/mounting/dimensions:

**Built in orientation**

any

**Type of mounting**

direct mounting

**Width**

mm

45

**Height**

mm

87.3

**Depth**

mm

84.5

**Distance, to be maintained, to the ranks assembly**

- forwards
- backwards
- upwards
- downwards
- sideways

mm  
mm  
mm  
mm  
mm

0  
0  
0  
0  
0

**Distance, to be maintained, to earthed part**

- forwards
- backwards
- upwards
- downwards
- sideways

mm  
mm  
mm  
mm  
mm

6  
0  
6  
6  
6

**Distance, to be maintained, conductive elements**

- forwards
- backwards
- upwards
- downwards
- sideways

mm  
mm  
mm  
mm  
mm

6  
0  
6  
6  
6

## Connections:

### Design of the electrical connection

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

spring-loaded terminals

spring-loaded terminals

### Product function / removable terminal for auxiliary and control circuit

Yes

### Type of the connectable conductor cross-section

- for main contacts
  - solid
  - stranded
  - finely stranded
    - with conductor end processing
    - without conductor final cutting
- for AWG conductors / for main contacts
- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
    - without conductor final cutting
- for AWG conductors / for auxiliary contacts

1x (1 ... 10 mm<sup>2</sup>)

1x (1 ... 10 mm<sup>2</sup>)

1x (1 ... 6 mm<sup>2</sup>)

1x (1 ... 6 mm<sup>2</sup>)

1x (18 ... 8)

1x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.5 ... 1.5 mm<sup>2</sup>)

1x (0.25 ... 1.5 mm<sup>2</sup>), 2x (0.25 ... 1.5 mm<sup>2</sup>)

1x (0.25 ... 1.5 mm<sup>2</sup>), 2x (0.25 ... 1.5 mm<sup>2</sup>)

1x (24 ... 16), 2x (24 ... 16)

## Certificates/approvals:

### Verification of suitability

- ATEX

UL / CSA

Yes

### General Product Approval

For use in  
hazardous  
locations

Test Certificates



CQC



CSA

[ROSTEST](#)



UL



PTB

[Manufacturer](#)

### Shipping Approval

other



ABS



GL



LRS



RMRS

[Manufacturer](#)

## UL/CSA ratings:

### Contact rating designation / for auxiliary contacts / according to UL

B300 / R300

## Reliability figures:

### Protection against electrical shock

finger-safe

## Further information:

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

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

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**Industry Mall (Online ordering system)**

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

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**Cax online generator:**

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

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

<http://support.automation.siemens.com/WW/view/en/3RB3123-4PE0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RB3123-4PE0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB3123-4PE0)

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