



OVERLOAD RELAY 3...12 A FOR MOTOR PROTECTION
 SIZE S0,
 CLASS 5...30 CONTACTOR ASS. MAIN CIRCUIT: SCREW
 CONN. AUX.CIRCUIT: SCREW CONN. 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
Conductor-bound parasitic coupling conductor-conductor SURGE		
• according to IEC 61000-4-5		1 kV (line to line) corresponds to degree of severity 3
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
Resistance against shock		15g / 11 ms
Impulse voltage resistance / rated value	kV	6
Active power loss / total / typical	W	0.05
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F
Size of overload relay		S0
Size of the contactor / can be combined / company-specific		S0
type of protection		PTB 09 ATEX 3001 Ex II (2) GD
Type of assignment		2
Trip class		CLASS 5, 10, 20 and 30 adjustable

Main circuit:

Number of poles / for main current circuit		3
Operating voltage / at AC-3 / rated value		
• maximum	V	690
Operating current / at AC-3 / at 400 V		
• rated value	A	12
Adjustable response current		
• of the current-dependent overload release	A	3 ... 12
Service power / for three-phase servomotors / at 400 V / at 50 Hz		
• for AC three-phase	kW	1.1 ... 5.5
Operating current / of the fuse link		
• rated value	A	25

Auxiliary circuit:

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

69.7

Depth

mm

83.5

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

screw-type terminals

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

1x (1 ... 10 mm²), 2x (1 ... 10 mm²)

1x (1 ... 10 mm²), 2x (1 ... 10 mm²)

1x (1 ... 6 mm²), 2 x (1 ... 6 mm²), 1x 10 mm²

1x (16 ... 8), 2x (16 ... 8)

1x (0.5 ... 4 mm²), 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

1x (0.5 ... 1.5 mm²), 2x (0.5 ... 1.5 mm²), 1x (0.5 ... 2.5 mm²)

1x (20 ... 14), 2x (20 ... 14)

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:

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/3RB3123-4SB0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB3123-4SB0



