



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
Size of overload relay		S0
Number of poles / for main current circuit		3
Product function / removable terminal for auxiliary and control circuit		Yes
Product function		
• overload protection		Yes
• phase disturbance recognition		Yes
• short-circuit to earth recognition		Yes
Product component		
• auxiliary switch		Yes
• trip indicator		Yes
Insulation voltage / with degree of pollution 3 / rated value	V	690
Impulse voltage resistance / rated value	kV	6
Protection class IP		
• of the terminal		IP20
• on the front		IP20
Protection against electrical shock		finger-safe

Installation altitude / at a height over sea level / maximum	m	2,000
Resistance against vibration		1-6 Hz, 15 mm; 6-500 Hz, 20 m/s²; 10 cycles
Ambient temperature		
• during transport	°C	-40 ... +80
• during storage	°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)
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		2 kV (line to earth) corresponds to degree of severity 3
Conductor-bound parasitic coupling conductor-conductor SURGE		1 kV (line to line) corresponds to degree of severity 3
Type of protection		PTB 09 ATEX 3001 Ex II (2) G [Ex e] [Ex d] [Ex px] D [Ex tj] [Ex p]
Active power loss / total / typical	W	0.1
Size of the contactor / can be combined / company-specific		S0

Main circuit:

Operating current		
• at AC-3 / at 400 V / rated value	A	4
• 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
Type of assignment		2

Control circuit/ Control:

Type of voltage supply / via input/ output link master		No
Voltage type / for auxiliary and control circuit		AC/DC

Auxiliary circuit:		
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

Protective and monitoring functions:		
Trip class		CLASS 5, 10, 20 and 30 adjustable
Adjustable response current		
• of the current-dependent overload release	A	1 ... 4

Installation/ mounting/ dimensions:		
Mounting type		direct mounting
mounting position		any
Depth	mm	85
Height	mm	109
Width	mm	45
Arrangement of electrical connectors / for main current circuit		Top and bottom

Connections/ terminals:		
Design of the electrical connection		
• for main current circuit		spring-loaded terminals
• for auxiliary and control current circuit		spring-loaded terminals
Type of the connectable conductor cross-section		
• for main contacts		
• solid or multi-stranded		1x (1 ... 10 mm ²)
• finely stranded		
• without conductor final cutting		1x (1 ... 6 mm ²)
• with conductor end processing		1x (1 ... 6 mm ²)
• for AWG conductors / for main contacts		1x (18 ... 8)
• for auxiliary contacts		
• solid or multi-stranded		1x (0,5 ... 1,5 mm ²), 2x (0,5 ... 1,5 mm ²)
• finely stranded		
• without conductor final cutting		1x (0.25 ... 1.5 mm ²), 2x (0.25 ... 1.5 mm ²)
• with conductor end processing		1x (0.25 ... 1.5 mm ²), 2x (0.25 ... 1.5 mm ²)
• for AWG conductors / for auxiliary contacts		1x (24 ... 16), 2x (24 ... 16)

UL/CSA ratings:

Contact rating designation / for auxiliary contacts / according to UL

B300 / R300

Certificates/ approvals:

General Product Approval

EMC

For use in
hazardous
locations



CCC



CSA



UL



C-TICK



ATEX

Test Certificates

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ABS



BUREAU
VERITAS



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LRS



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Further information:

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

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

Industry Mall (Online ordering system)

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

Cax online generator

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

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

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

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB3123-4PE0



