SIEMENS

Product data sheet 3RB3016-1TB0



OVERLOAD RELAY 4...16 A FOR MOTOR PROTECTION SIZE S00,

CLASS 10 CONTACTOR ASS. MAIN CIRCUIT: SCREW CONN. AUX.CIRCUIT: SCREW CONN. MANUAL-AUTOM.-RESET

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	0.1
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		S00
Size of the contactor / can be combined / company-specific		S00
type of protection		PTB 09 ATEX 3001 Ex II (2) GD
Type of assignement		2
Trip class		CLASS 10
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	Α	16
Adjustable response current		
of the current-dependent overload release	Α	4 16
Service power / for three-phase servomotors / at 400 V / at 50 Hz		
• for AC three-phase	kW	2.2 7.5
Operating current / of the fuse link		
rated value		
• rateu value	Α	25
Auxiliary circuit:	A	25
	A	acceptability for PLC control (17 V, 5 mA)
Auxiliary circuit:	A	
Auxiliary circuit: Contact reliability / of the auxiliary contacts	A	acceptability for PLC control (17 V, 5 mA)
Auxiliary circuit: Contact reliability / of the auxiliary contacts Number of NC contacts / for auxiliary contacts	A	acceptability for PLC control (17 V, 5 mA)
Auxiliary circuit: Contact reliability / of the auxiliary contacts Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts	A	acceptability for PLC control (17 V, 5 mA) 1

• at 24 V	Α	4
• at 110 V	Α	4
• at 120 V	Α	4
• at 125 V	Α	4
• at 230 V	Α	3
• at DC-13		
• at 24 V	Α	2
• at 60 V	Α	1
• at 110 V	Α	0.3
• at 125 V	Α	0.3
• at 220 V	Α	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	64.7
Depth	mm	72.5
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	0
• downwards	mm	0
• sidewards	mm	0
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	0
• downwards	mm	0
• sidewards	mm	6
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	0
• downwards	mm	0
• sidewards	mm	6

Connections:	
Design of the electrical connection	
• for main current circuit	screw-type terminals
• for auxiliary and control current circuit	screw-type terminals
Product function / removable terminal for auxiliary and control circuit	Yes
Type of the connectable conductor cross-section	
• for main contacts	
• solid	1x (0.5 4 mm²), 2x (0.5 1.5 mm²), 2x (0.75 4 mm²)
• stranded	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²), 1x (0.75 4 mm²), 2x (0.75 4 mm²)
• finely stranded	
 with conductor end processing 	1x (0.5 2.5 mm²), 2x (0.5 2.5 mm²)
• for AWG conductors / for main contacts	1x (20 12), 2x (20 12)
for auxiliary contacts	
• solid	1x (0.5 4 mm²), 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• finely stranded	
with conductor end processing	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²), 1x (0.5 2.5 mm²)
• for AWG conductors / for auxiliary contacts	1x (20 14), 2x (20 14)

Certificates/approvals:		
Verification of suitability	UL / CSA	
• ATEX	Yes	

General Product Approval

For use in hazardous locations

Test Certificates





ROSTEST



PIB

Manufacturer

Shipping Approval





GL



LRS



Manufacturer

other

UL/CSA ratings:

Contact rating designation / for auxiliary contacts / according to UL

B600 / 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:

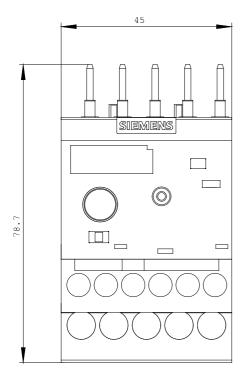
http://www.siemens.com/cax

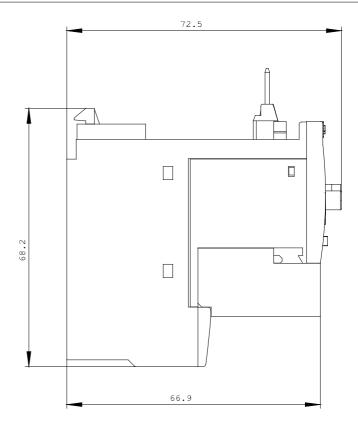
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

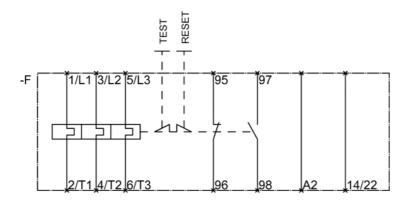
http://support.automation.siemens.com/WW/view/en/3RB3016-1TB0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB3016-1TB0







last change: Oct 24, 2011