# **SIEMENS**

Product data sheet 3RB3016-2TE0



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

CLASS 20 CONTACTOR ASS. MAIN CIRCUIT: SPR.-LOAD.TERM. AUX.CIRCUIT: SPR.-LOAD.TERM. 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				
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		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 20		
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	Δ.	4 16		
Service power / for three-phase servomotors / at 400 V / at 50 Hz	А	4 10		
	_ A	4 10		
<ul> <li>for AC three-phase</li> </ul>	kW	2.2 7.5		
• for AC three-phase  Operating current / of the fuse link				
• for AC three-phase  Operating current / of the fuse link  • rated value				
Operating current / of the fuse link  • rated value	kW	2.2 7.5		
Operating current / of the fuse link  • rated value  Auxiliary circuit:	kW	2.2 7.5 25		
Operating current / of the fuse link  • rated value  Auxiliary circuit:  Contact reliability / of the auxiliary contacts	kW	2.2 7.5  25  acceptability for PLC control (17 V, 5 mA)		
Operating current / of the fuse link  • rated value  Auxiliary circuit:  Contact reliability / of the auxiliary contacts  Number of NC contacts / for auxiliary contacts	kW	2.2 7.5 25		
Operating current / of the fuse link  • rated value  Auxiliary circuit:  Contact reliability / of the auxiliary contacts	kW	2.2 7.5  25  acceptability for PLC control (17 V, 5 mA)		
Operating current / of the fuse link  • rated value  Auxiliary circuit:  Contact reliability / of the auxiliary contacts  Number of NC contacts / for auxiliary contacts	kW	2.2 7.5  25  acceptability for PLC control (17 V, 5 mA)  1		
Operating current / of the fuse link  • rated value  Auxiliary circuit:  Contact reliability / of the auxiliary contacts  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts	kW	2.2 7.5  25  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	75.9	
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	6	
• backwards	mm	0	
• upwards	mm	0	
• downwards	mm	0	
• sidewards	mm	6	
Distance, to be maintained, conductive elements			
• forwards	mm	6	
• backwards	mm	0	
• upwards	mm	0	
• downwards	mm	0	
• sidewards	mm	6	

Connections:			
Design of the electrical connection			
for main current circuit	spring-loaded terminals		
for auxiliary and control current circuit	spring-loaded 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)		
• stranded	1x (0.5 4 mm2)		
• finely stranded			
with conductor end processing	1x (0.5 2.5 mm²)		
without conductor final cutting	1x (0.5 2.5 mm²)		
for AWG conductors / for main contacts	1x (20 12)		
for auxiliary contacts			
• solid	1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²)		
• finely stranded			
with conductor end processing	1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²)		
without conductor final cutting	1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²)		
for AWG conductors / for auxiliary contacts	1x (24 16), 2x (24 16)		

Certificates/approvals:				
Verification of suitability	UL / CSA			
• ATEX		Yes		
General Product Approval			For use in hazardous	Test Certificates

Cec



**ROSTEST** 





other

locations

Manufacturer

**Shipping Approval** 







LRS



Manufacturer

## **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:

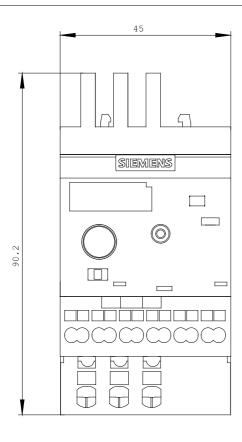
http://www.siemens.com/cax

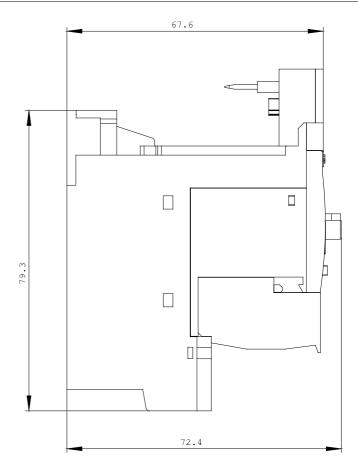
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

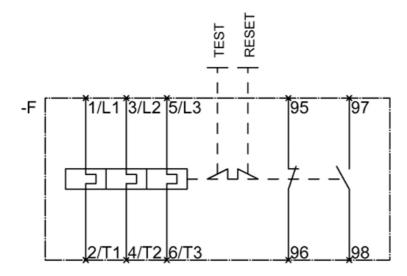
http://support.automation.siemens.com/WW/view/en/3RB3016-2TE0/all

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RB3016-2TE0







last change: Oct 24, 2011