SIEMENS

Product data sheet 3RB2016-1PB0

OVERLOAD RELAY 1...4 A FOR MOTOR PROTECTION SIZE S00,

CLASS 10 FOR MOUNTING ONTO CONT. MAIN CIRCUIT: SCREW CONNECTION AUX. CIRCUIT: SCREW CONNECTION MANUAL-AUTOMATIC-RESET

General technical data:			
product brand name		SIRIUS	
product designation		solid-state overload relay	
Size of overload relay		S00	
Number of poles / for main current circuit		3	
Product function / removable terminal for auxiliary and control circuit		Yes	
Impulse voltage resistance / rated value	kV	6	
Protection class IP		IP20	
Protection class IP / on the front		IP20	
Protection against electrical shock		finger-safe	
Installation altitude / at a height over sea level / maximum	m	2,000	
Resistance against shock		15g / 11 ms	
Ambient temperature			
during transport	°C	-40 +80	
during storage	°C	-40 + 80	
during operating	°C	-25 +60	
Relative humidity / during operating phase / maximum	%	100	
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 / 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	
type of protection		PTB 06 ATEX 3001 Ex II (2) GD	
Active power loss / total / typical	W	0.05	
Size of the contactor / can be combined / company-specific		S00	
Main circuit:			
	А	10	

Auxiliary circuit: Number of NC contacts / for auxiliary contacts 1 Number of NC contacts / for auxiliary contacts Design of the fuse link / for short-circuit protection of the auxiliary switch / required Operating current / of the auxiliary contacts *at AC-15 *at 24 \ *at 110 \ *at 120 \ *at 230 \ *at 230 \ *at 240 \ *at 240 \ *at 250 \ *at 240 \ *at 250 \ *at 240 \ *at 125 \ *at 240 \ *at 100 \ *at 110 \ *at 125 \ *at 220 \ *at 110 \ *at 125 \ *at 220 \ *at 110 \ *at 125 \ *at 125 \ *at 110 \ *at 125 \ *at 125 \ *at 110 \ *at 110 \ *at 110 \ *at 125 \ *at 110 \	Type of assignement		2		
Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 1 Number of change-over switches / for auxiliary contacts 0 Design of the fuse link / for short-circuit protection of the auxiliary switch / required Operating current / of the auxiliary contacts * at AC-15 * at AC-15 * at 2V * at 110 V * at 125 V * at 230 V * at 230 V * at 60 V * at 60 V * at 110 V * at 125 V * at 60 V * at 110 V * at 125 V * at 220 V * A 0.3 * at 125 V * at 125					
Number of No contacts / for auxiliary contacts	Auxiliary circuit:				
Number of change-over switches / for auxiliary contacts 0	Number of NC contacts / for auxiliary contacts		1		
Design of the fuse link / for short-circuit protection of the auxiliary switch / required	Number of NO contacts / for auxiliary contacts		1		
A	Number of change-over switches / for auxiliary contacts		0		
• at AC-15 • at 24 V • at 110 V • at 1120 V • at 125 V • at 230 V • at 224 V • at 60 V • at 60 V • at 125 V • at 220 V • at 125 V • at 220 V • at 125 V • at 60 V • at 125 V • at 60 V • at 125 V • at 60 V • at 10 C-13 • at 125 V • at 60 V • at 10 C-13 • at 110 V • at 220 V • at 110 V • at 125 V • at 10 C • at 110 V • at 220 V V • at 20 V • at 220 V • at	Design of the fuse link / for short-circuit protection of the auxiliary switch / required		fuse gL/gG: 6 A		
- at 24 V - at 110 V - at 120 V - at 125 V - at 230 V - at 230 V - at 230 V - at 26 V - at 60 V - at 125 V - at 110 V - at 125 V - at 60 V - at 110 V - at 125 V - at 110 V - at 125 V - at 125 V - at 120 V - at 125 V - at 220 V - at 130 V - at 25 V - at 25 V - at 20 V - at 25 V - at 26 V - at 27 V - at 27 V - at 28 S TO Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting	Operating current / of the auxiliary contacts				
*at 110 V *at 120 V *at 125 V A 4 *at 230 V A 3 *at DC-13 *at 24 V *at 66 V A 0.55 *at 110 V A 0.3 *at 125 V A 0.3 *at 220 V A 0.31 *at 220 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting directions Type of mounting osition Dopth mm 73 Height Midth Type of the dectrical connection *for auxiliary and control current circuit *for auxiliary and control current circuit *for auxiliary and control current circuit *for main current circuit *for main contacts * solid 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	• at AC-15				
- at 120 V - at 125 V - at 230 V - at 230 V - at 230 V - at DC-13 - at 24 V - at 60 V - at 110 V - at 125 V - at 125 V - at 20 V - at 110 V - at 125 V - at 220 V - at 125 V - at 220 V - at 30 S - at 220 V - at	• at 24 V	Α	4		
- at 125 V - at 230 V - at 230 V - at 230 V - at 24 V - at 60 V - at 60 V - at 110 V - at 125 V - at 125 V - at 220 V - at 125 V - at 220 V - a	• at 110 V	Α	4		
• at 230 V • at DC-13 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V A 0.3 • at 220 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxillary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	• at 120 V	Α	4		
• at DC-13 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V A 0.3 • at 220 V A 0.3 A 0.11 Protection function: Trip class CLASS 10 Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxillary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	• at 125 V	Α	4		
• at 24 V • at 60 V • at 110 V • at 110 V • at 125 V • at 220 V A 0.31 • at 220 V A 0.11 Protection function: Trip class Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting mounting mounting mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	• at 230 V	Α	3		
• at 60 V • at 110 V • at 125 V • at 125 V • at 220 V A 0.3 A 0.11 Protection function: Trip class Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid A 0.3 A 0.3 A 0.11	• at DC-13				
• at 110 V • at 125 V • at 220 V A 0.3 A 0.11 Protection function: Trip class CLASS 10 Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting mounting mounting mounting mounting position Depth mm 73 Height mm 64 Width Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	• at 24 V	Α	2		
• at 125 V • at 220 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting mounting position Depth mm 73 Height mm 64 Width Midth Midth Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	• at 60 V	Α	0.55		
• at 220 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxillary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid A 0.11 CLASS 10 A 1 4 In 4	• at 110 V	Α	0.3		
Protection function: Trip class CLASS 10 Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting direct mounting any direct mounting mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid CLASS 10 A 1 4	• at 125 V	Α	0.3		
Trip class Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting mounting position Depth mm 73 Height Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid CLASS 10 1 4 CLASS 10 A 1 4 CLASS 10 A 1 4 CLASS 10 A 1 4 CLASS 10 A 1 4 CHANGE TRIP AND TRIP AN	• at 220 V	А	0.11		
Adjustable response current / of the current-dependent overload release Installation/mounting/dimensions: Type of mounting mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid A 1 4	Protection function:				
Installation/mounting/dimensions: Type of mounting mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Trip class		CLASS 10		
Type of mounting mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid direct mounting any direct mounting any 73 Connections: 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Adjustable response current / of the current-dependent overload release	А	1 4		
mounting position Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Installation/mounting/dimensions:				
Depth mm 73 Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit screw-type terminals • for auxiliary and control current circuit screw-type terminals • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Type of mounting		direct mounting		
Height mm 64 Width mm 45 Connections: Design of the electrical connection • for main current circuit screw-type terminals • for auxiliary and control current circuit screw-type terminals • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	mounting position		any		
Width mm 45 Connections: Design of the electrical connection • for main current circuit screw-type terminals • for auxiliary and control current circuit screw-type terminals Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Depth	mm	73		
Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Height	mm	64		
Pesign of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Width	mm	45		
• for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Connections:				
• for auxiliary and control current circuit Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Design of the electrical connection				
Type of the connectable conductor cross-section • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	for main current circuit		screw-type terminals		
• for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	for auxiliary and control current circuit		screw-type terminals		
• solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	Type of the connectable conductor cross-section				
	• for main contacts				
• finely stranded	• solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
	• 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

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

2x (18 ... 14)

0.5 ... 4 mm², 2x (0.5 ... 2.5 mm²)

0.5 ... 2.5 mm², 2x (0.5 ... 1.5 mm²)

2x (20 ... 14)

Certificates/approvals:

General Product Approval

EMC

For use in hazardous locations













Test Certificates

Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval











other

Declaration of Conformity

other

Environmental Confirmations

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:

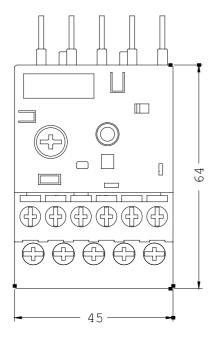
http://www.siemens.com/cax

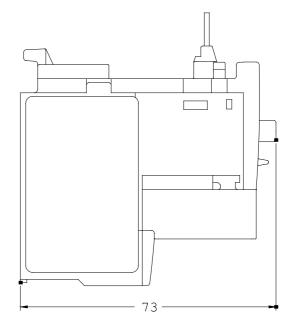
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RB2016-1PB0/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB2016-1PB0}$





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