SIEMENS

Product data sheet 3RB3016-1NB0



OVERLOAD RELAY 0.32...1.25 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		
Size of overload relay		S00		
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		No		
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/s ² ; 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 t] [Ex p]
Active power loss / total / typical	W	0.1
Size of the contactor / can be combined / company-specific		S00

Main circuit:		
Operating current		
• at AC-3 / at 400 V / rated value	Α	1.25
of the auxiliary contacts		
• at AC-15		
• 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	0.55
• at 110 V	Α	0.3
• at 125 V	Α	0.3
• at 220 V	Α	0.11
Type of assignement		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 10
Adjustable response current		
of the current-dependent overload release	Α	0.32 1.25
Installation/ mounting/ dimensions:		
Mounting type		direct mounting
mounting position		any
Depth	mm	73
Height	mm	79
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		screw-type terminals
for auxiliary and control current circuit		screw-type terminals
Type of the connectable conductor cross-section		
• for main contacts		
solid or multi-stranded		1x (0,5 4 mm²), 2x (0,5 1,5 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 or multi-stranded		1x (0,5 4 mm²), 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
• finely stranded		
		4 (0 5 4 5 0) 0 (0 5 4 5 0) 1 (0 5 0

UL/CSA ratings:

• with conductor end processing

• for AWG conductors / for auxiliary contacts

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

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

Contact rating designation / for auxiliary contacts / according to UL

B600 / R300

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
ConformityEnvironmental
Confirmations

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

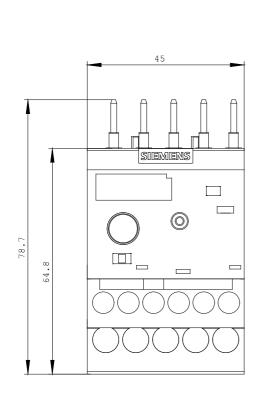
http://www.siemens.com/cax

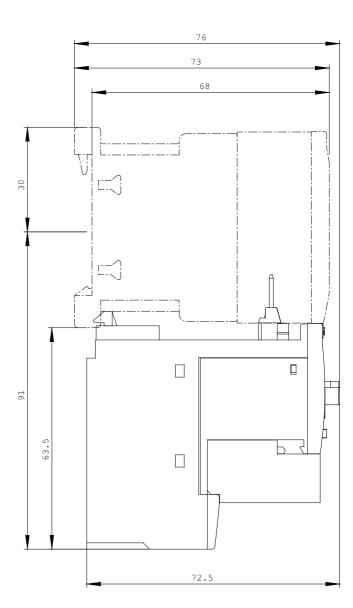
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

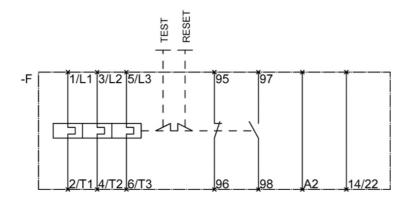
http://support.automation.siemens.com/WW/view/en/3RB3016-1NB0/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB3016-1NB0}$







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