SIEMENS

Data sheet 3RB3036-1UW1



OVERLOAD RELAY 12.5...50 A FOR MOTOR PROTECTION SIZE S2, CLASS 10E STAND-ALONE INSTALLATION MAIN CIRCUIT: STR.-THR. TRANSF. AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

product brand name SIRIUS
Product designation solid-state overload relay

General technical data:		
Active power loss total typical	W	0.1
Insulation voltage		
 with degree of pollution 3 Rated value 	V	690
Shock resistance		
• acc. to IEC 60068-2-27		15g / 11 ms
Vibration resistance		1-6 Hz, 15 mm; 6-500 Hz, 20 m/s²; 10 cycles
Surge voltage resistance Rated value	kV	6
Temperature compensation	°C	6025
Recovery time		
 after overload trip with automatic reset typical 	min	3
 after overload trip with remote-reset 	min	0
 after overload trip with manual reset 	min	0
Size of contactor can be combined company-specific		S2
Type of assignment		2
Protection class IP		
• on the front		IP20
 of the terminal 		IP20
Type of protection		II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p]
Equipment marking		
• acc. to DIN EN 81346-2		F

Main circuit:	
Number of poles for main current circuit	3

Adjustable response value current of the current- dependent overload release Operating voltage • Rated value • at AC-3 Rated value maximum V 690 Operating frequency Rated value Hz 50 60	
Operating voltage ● Rated value • at AC-3 Rated value maximum V 690 V 690	
 Rated value at AC-3 Rated value maximum V 690 V 690 	
- p	
Operating current	
• at AC-3	
— at 400 V Rated value A 50	
Auxiliary circuit:	
Number of NC contacts	
• for auxiliary contacts	
— Note for contactor disconnection	
Number of NO contacts	
• for auxiliary contacts	
— Note for message "tripped"	
Number of CO contacts	
• for auxiliary contacts 0	
Design of the auxiliary switch integrated	
Operating current 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	
Operating current of the auxiliary contacts 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	
Protective and monitoring functions:	
Trip class CLASS 10E	
Design of the overload circuit breaker electronic	
Response time of the ground fault protection in ms 1 000 settled state	
UL/CSA ratings:	
Full-load current (FLA) for three-phase AC motor	
• at 480 V Rated value A 50	
• at 600 V Rated value A 50 Contact rating of the auxiliary contacts acc. to UL B600 / R300	

Short-circuit:	
Design of the fuse link	
• for short-circuit protection of the main circuit	
— required	Fuse gG: 200 A
 for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A

Installation/ mounting/ dimensions:			
mounting position		any	
Mounting type		stand-alone installation	
Height	mm	81	
Width	mm	55	
Depth	mm	109	
Required spacing			
with side-by-side mounting			
— forwards	mm	0	
— Backwards	mm	0	
— upwards	mm	0	
— downwards	mm	10	
— at the side	mm	0	
• for grounded parts			
— forwards	mm	10	
— Backwards	mm	0	
— upwards	mm	10	
— at the side	mm	10	
— downwards	mm	10	
• for live parts			
— forwards	mm	10	
— Backwards	mm	0	
— upwards	mm	10	
— downwards	mm	10	
— at the side	mm	10	

Connections/ Terminals:			
Type of electrical connection			
• for main current circuit		straight-through transformers	
 for auxiliary and control current circuit 		screw-type terminals	
Arrangement of electrical connectors for main current circuit		Top and bottom	
Product function			
 removable terminal for auxiliary and control 		Yes	
circuit			
Type of connectable conductor cross-section			

 for auxiliary contacts 		
 single or multi-stranded 	1x (0,5 4 mm²), 2x (0,5 2,5 mm²)	
 finely stranded with core end processing 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)	
 for AWG conductors for auxiliary contacts 		1x (20 14), 2x (20 14)
Design of screwdriver shaft		Diameter 5 to 6 mm
Design of the thread of the connection screw	-	
 of the auxiliary and control contacts 		M3
Safety related data:		
Proportion of dangerous failures		
 with low demand rate acc. to SN 31920 	%	35
Protection against electrical shock		finger-safe when touched vertically from front acc. to IEC 60529
Mechanical data:		
Size of overload relay		S2
Communication/ Protocol:		
Protocol is supported		
 IO-Link protocol 		No
Type of voltage supply via input/output link master		No
Ambient conditions:		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature	90	05
during operation	°C	-25 +60
during storage	°C	-40 +80
during transport	°C	-40 +80
Relative humidity during operation	%	0 95
Electromagnetic compatibility:		
EMC emitted interference		
• acc. to IEC 60947-1		CISPR 11, environment B (residential area)
EMI immunity acc. to IEC 60947-1		corresponds to degree of severity 3
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV (power ports), 1 kV (signal ports)
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV (line to ground)
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV (line to line)
Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6		10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Electrostatic discharge acc. to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Display:		

Display version

• for switching status

Slide switch

Certificates/ approvals:

General Product Approval	For use in hazardous locations	Test Certificates	other	







Type Test Certificates/Test Report

Confirmation

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/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB30361UW1

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RB30361UW1/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB30361UW1&lang=en





