SIEMENS

Data sheet 3RB3036-2WD0



OVERLOAD RELAY 20...80 A FOR MOTOR
PROTECTION SIZE S2, CLASS 20E FOR MOUNTING
ONTO CONTACTORS MAIN CIRCUIT: SCREW
TERMINAL AUX. CIRCUIT: SPRING-T. TERM.
MANUAL-AUTOMATIC-RESET

Figure similar

product brand name	SIRIUS
Product designation	solid-state overload relay

General technical data:				
Active power loss total typical	W	4.6		
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/s ² ; 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 		IP00		
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	_	20 80
Adjustable response value current of the current- dependent overload release	Α	20 00
Operating voltage	_	
Rated value	V	690
at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 60
Operating current		
• at AC-3		
— at 400 V Rated value	Α	80
Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		1
— Note		for contactor disconnection
Number of NO contacts		
• for auxiliary contacts		1
— 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	Α	4
● at 110 V	Α	4
● at 120 V	Α	4
● at 125 V	Α	4
● at 230 V	Α	3
Operating current of the auxiliary contacts 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
Protective and monitoring functions:		
Trip class		CLASS 20E
Design of the overload circuit breaker		electronic
Response time of the ground fault protection in settled state	ms	1 000
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
at 480 V Rated value	Α	80
• at 600 V Rated value	Α	80
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: 250 A
 for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A

Installation/ mounting/ dimensions:		
mounting position		any
Mounting type		direct mounting
Height	mm	99
Width	mm	55
Depth	mm	104
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		screw-type terminals	
 for auxiliary and control current circuit 		spring-loaded 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 main contacts 		
— single or multi-stranded		1x (1 50 mm²), 2x (1 35 mm²)
finely stranded with core end processing		1x (1 35 mm²), 2x (1 25 mm²)
for AWG conductors for main contacts		2x (18 2), 1x (18 1)
for auxiliary contacts		, , , , , , , , , , , , , , , , , , ,
— single or multi-stranded		1x (0,25 1,5 mm²), 2x (0,25 1,5 mm²)
finely stranded with core end processing		1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²)
finely stranded without core end		1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²)
processing		(* * * * * * * * * * * * * * * * * * *
• for AWG conductors for auxiliary contacts		1x (24 16), 2x (24 16)
Tightening torque		
• for main contacts with screw-type terminals	N·m	3 4.5
Design of screwdriver shaft		Diameter 5 to 6 mm
Design of the thread of the connection screw		
• for main contacts		M6
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		
		No
IO-Link protocol		NO
IO-Link protocol Type of voltage supply via input/output link master		No
<u> </u>		
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level	m	
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum	m	No
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature		No 2 000
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation	°C	2 000 -25 +60
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation • during storage	°C °C	No 2 000 -25 +60 -40 +80
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation • during storage • during transport	°C °C	No 2 000 -25 +60 -40 +80 -40 +80
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation • during storage	°C °C	No 2 000 -25 +60 -40 +80
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation • during storage • during transport Relative humidity during operation Electromagnetic compatibility:	°C °C	No 2 000 -25 +60 -40 +80 -40 +80
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation • during storage • during transport Relative humidity during operation Electromagnetic compatibility: EMC emitted interference	°C °C	2 000 -25 +60 -40 +80 -40 +80 0 95
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation • during storage • during transport Relative humidity during operation Electromagnetic compatibility: EMC emitted interference • acc. to IEC 60947-1	°C °C	2 000 -25 +60 -40 +80 -40 +80 0 95 CISPR 11, environment B (residential area)
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation • during storage • during transport Relative humidity during operation Electromagnetic compatibility: EMC emitted interference • acc. to IEC 60947-1 EMI immunity acc. to IEC 60947-1	°C °C	2 000 -25 +60 -40 +80 -40 +80 0 95 CISPR 11, environment B (residential area) corresponds to degree of severity 3
Type of voltage supply via input/output link master Ambient conditions: Installation altitude at height above sea level maximum Ambient temperature • during operation • during storage • during transport Relative humidity during operation Electromagnetic compatibility: EMC emitted interference • acc. to IEC 60947-1	°C °C	2 000 -25 +60 -40 +80 -40 +80 0 95 CISPR 11, environment B (residential area)

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 Pro	duct Approval	For use in hazardous locations	Test Certificates	other	
(AZ)	COL	(Ex)	Type Test Certificates/Test	Confirmation	Environmental Confirmations







Report

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

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

http://support.automation.siemens.com/WW/view/en/3RB30362WD0/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=3RB30362WD0&lang=en



