## **SIEMENS**

Data sheet 3RB3036-1UD0



OVERLOAD RELAY 12.5...50 A FOR MOTOR
PROTECTION SIZE S2, CLASS 10E 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	1.8
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		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- dependent overload release  Operating voltage  Rated value  A 12.5 50  V 690  A 12.5 50  Hz 50 60	
Operating voltage  ● Rated value  • at AC-3 Rated value maximum  V 690  V 690	
<ul> <li>Rated value</li> <li>at AC-3 Rated value maximum</li> <li>V</li> <li>690</li> <li>V</li> <li>690</li> </ul>	
- 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		
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>		fuse gG: 6 A		

nstallation/ mounting/ dimensions:				
mounting position		any		
Mounting type		direct mounting		
Height	mm	99		
Width	mm	55		
Depth	mm	104		
Required spacing				
<ul><li>with side-by-side mounting</li></ul>				
— 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		
<ul> <li>for auxiliary and control current circuit</li> </ul>		spring-loaded terminals		
Arrangement of electrical connectors for main current circuit		Top and bottom		
Product function				
<ul> <li>removable terminal for auxiliary and control</li> </ul>		Yes		
circuit				
Type of connectable conductor cross-section				

• for main contacts		
<ul> <li>single or multi-stranded</li> </ul>		1x (1 50 mm²), 2x (1 35 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		1x (1 35 mm²), 2x (1 25 mm²)
<ul> <li>for AWG conductors for main contacts</li> </ul>		2x (18 2), 1x (18 1)
• for auxiliary contacts		
<ul> <li>single or multi-stranded</li> </ul>		1x (0,25 1,5 mm²), 2x (0,25 1,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²)
<ul> <li>finely stranded without core end</li> </ul>		1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²)
processing		
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		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		
IO-Link protocol		No
Type of voltage supply via input/output link master		No
Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-25 <b>+</b> 60
during storage	°C	-40 <b>+</b> 80
during transport	°C	-40 +80
Relative humidity during operation	%	0 95
Electromagnetic compatibility:		
Electromagnetic compatibility:  EMC emitted interference		
		CISPR 11, environment B (residential area)
EMC emitted interference		CISPR 11, environment B (residential area) corresponds to degree of severity 3
EMC emitted interference  ● acc. to IEC 60947-1		
EMC emitted interference  • acc. to IEC 60947-1  EMI immunity acc. to IEC 60947-1		corresponds to degree of severity 3

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:

		For use in hazardous locations	Test Certificates	other	
(D	ГПГ	(C.)	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/3RB30361UD0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RB30361UD0&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RB30361UD0&lang=en</a>



