SIEMENS

Data sheet 3RB3036-1UB0



Overload relay 12.5...50 A Electronic For motor protection Size S2, Class 10E Contactor mounting Main circuit: Screw Auxiliary circuit: Screw Manual-Automatic-Reset

product brand name	SIRIUS			
product designation	solid-state overload relay			
product type designation	3RB3			
General technical data				
size of overload relay	S2			
size of contactor can be combined company-specific	S2			
power loss [W] for rated value of the current at AC in hot operating state	1.8 W			
• per pole	0.6 W			
insulation voltage with degree of pollution 3 at AC rated value	690 V			
surge voltage resistance rated value	6 kV			
maximum permissible voltage for safe isolation in networks with grounded star point				
 between auxiliary and auxiliary circuit 	300 V			
 between auxiliary and auxiliary circuit 	300 V			
 between main and auxiliary circuit 	600 V			
between main and auxiliary circuit	690 V			
shock resistance	15g / 11 ms			
• acc. to IEC 60068-2-27	15g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 8g / 11 ms			
vibration resistance	1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 10 cycles			
thermal current	50 A			
recovery time after overload trip				
 with automatic reset typical 	3 min			
with remote-reset	0 min			
with manual reset	0 min			
type of protection according to ATEX directive 2014/34/EU	Ex II (2) G [Ex e] [Ex d] [Ex px] ; Ex II (2) D [Ex t] [Ex p]			
certificate of suitability according to ATEX directive 2014/34/EU	PTB 09 ATEX 3001			
reference code acc. to IEC 81346-2	F			
Substance Prohibitance (Date)	15.10.2014 00:00:00			
Ambient conditions				
installation altitude at height above sea level maximum	2 000 m			
ambient temperature				
 during operation 	-25 +60 °C			
during storage	-40 +80 °C			
during transport	-40 +80 °C			
temperature compensation	-25 +60 °C			

	(0.000)
relative humidity during operation	10 95 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the	12.5 50 A
current-dependent overload release	
operating voltage	
rated value	690 V
 at AC-3 rated value maximum 	690 V
operating frequency rated value	50 60 Hz
operational current rated value	50 A
operating power	
	7.5 22 kW
• for 3-phase motors at 400 V at 50 Hz	
• for AC motors at 500 V at 50 Hz	11 30 kW
for AC motors at 690 V at 50 Hz	11 45 kW
Auxiliary circuit	
design of the auxiliary switch	integrated
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
operational current of auxiliary contacts at AC-15	
• at 24 V	4 A
• at 110 V	4 A
• at 120 V	4 A
• at 125 V	4 A
• at 230 V	3 A
operational current of auxiliary contacts at DC-13	
• at 24 V	2 A
● at 60 V	0.55 A
• at 110 V	0.3 A
• at 125 V	0.3 A
• at 220 V	0.11 A
Protective and monitoring functions	
trip class	CLASS 10E
design of the overload release	electronic
UL/CSA ratings	Ciccionio
full-load current (FLA) for 3-phase AC motor	FO. A
at 480 V rated value	50 A
at 600 V rated value	50 A
contact rating of auxiliary contacts according to UL	B600 / R300
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit 	
— with type of coordination 1 required	gG: 250 A
with type of assignment 2 required	gG: 200 A
 for short-circuit protection of the auxiliary switch 	fuse gG: 6 A
required	
Installation/ mounting/ dimensions	
mounting position	any
fastening method	Contactor mounting
height	99 mm
width	55 mm
depth	104 mm
Connections/ Terminals	
	Von
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	
type of electrical confliction	

for main current circuit	screw-type terminals				
for auxiliary and control circuit	screw-type terminals				
arrangement of electrical connectors for main current circuit	Top and bottom				
type of connectable conductor cross-sections					
for main contacts					
— solid	1x (1 50 mm²), 2x (1 35 mm²)				
— stranded	2x (10 35 mm²), 1x 50 mm²				
— solid or stranded	1x (1 50 mm²), 2x (1 35 mm²)				
 finely stranded with core end processing 	1x (1 35 mm²), 2x (1 25 mm²)				
 at AWG cables for main contacts 	2x (18 2), 1x (18 1)				
type of connectable conductor cross-sections					
 for auxiliary contacts 					
— solid	1x (0.5 4 mm²), 2x (0.5	2.5 mm²)			
— solid or 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)				
 at AWG cables for auxiliary contacts 	1x (20 14), 2x (20 14)				
tightening torque					
 for main contacts with screw-type terminals 	3 4.5 N·m				
 for auxiliary contacts with screw-type terminals 	0.8 1.2 N·m				
design of screwdriver shaft	Diameter 5 to 6 mm				
size of the screwdriver tip	Pozidriv PZ 2				
design of the thread of the connection screw					
 for main contacts 	M6				
 of the auxiliary and control contacts 	M3				
Safety related data					
protection class IP on the front acc. to IEC 60529	IP20				
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front				
Communication/ Protocol					
type of voltage supply via input/output link master	No				
Electromagnetic compatibility					
conducted interference					
• due to burst acc. to IEC 61000-4-4	2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3				
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV (line to earth) corresponds to degree of severity 3				
 due to conductor-conductor surge acc. to IEC 61000-4-5 	1 kV (line to line) corresponds to degree of severity 3				
• 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-based interference 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		EMC	For use in hazard- ous locations		













Declaration of Conformity

Test Certificates

Marine / Shipping

Miscellaneous



Type Test Certificates/Test Report

Special Test Certificate





Marine / Shipping other









Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RB3036-1UB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB3036-1UB0

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

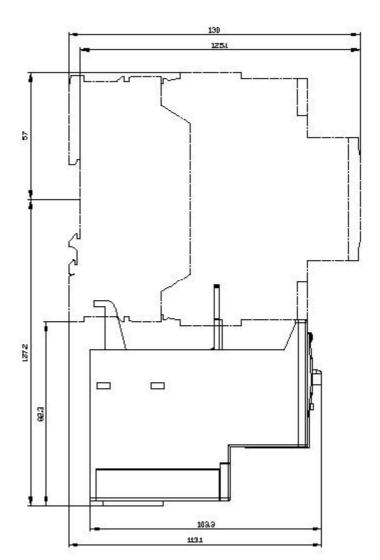
https://support.industry.siemens.com/cs/ww/en/ps/3RB3036-1UB0

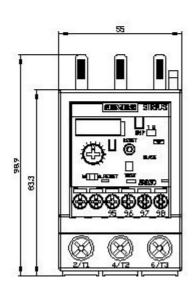
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB3036-1UB0&lang=en

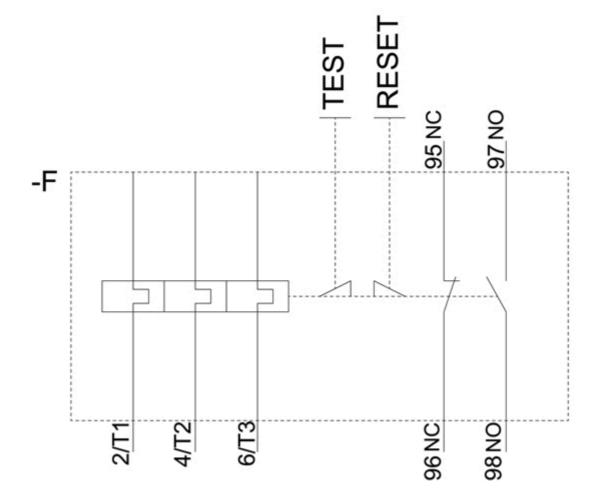
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RB3036-1UB0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB3036-1UB0&objecttype=14&gridview=view1







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