SIEMENS

Data sheet 3RB3036-1UB0

Figure similar

OVERLOAD RELAY 12.5...50 A FOR MOTOR PROTECTION SIZE S2, CLASS 10E FOR MOUNTING ONTO CONTACTORS MAIN CIRCUIT: SCREW TERMINAL 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	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	60 ... -25
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	A	12.5 ... 50
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	A	50

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	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 settled state	ms	1 000

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		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	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Product function	
• removable terminal for auxiliary and control circuit	Yes
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 (0,5 ... 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)
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
• 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 maximum	m	2 000
Ambient temperature		
• 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	
CSA	EAC	ATEX	Type Test Certificates/Test Report	Confirmation	Environmental Confirmations

Further information

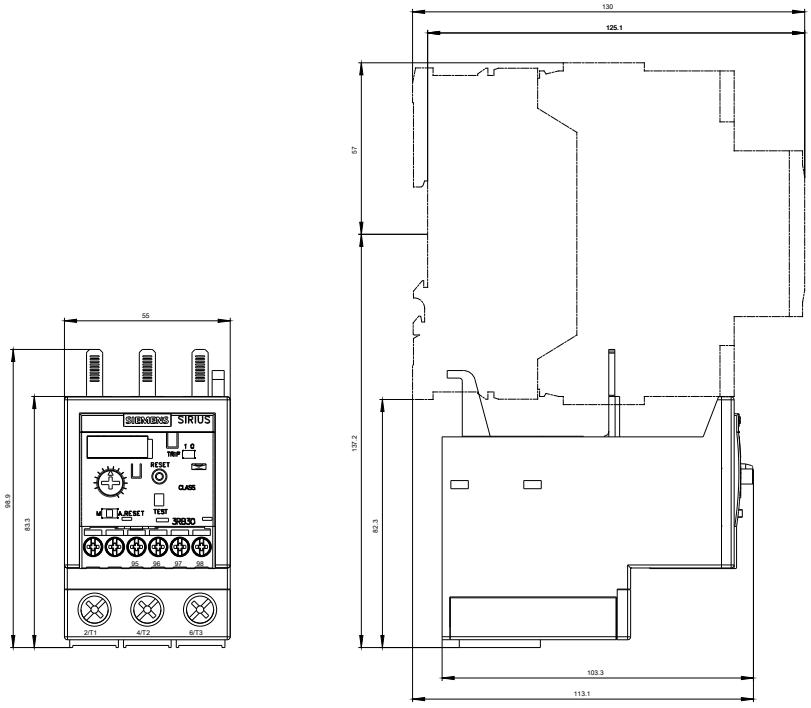
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

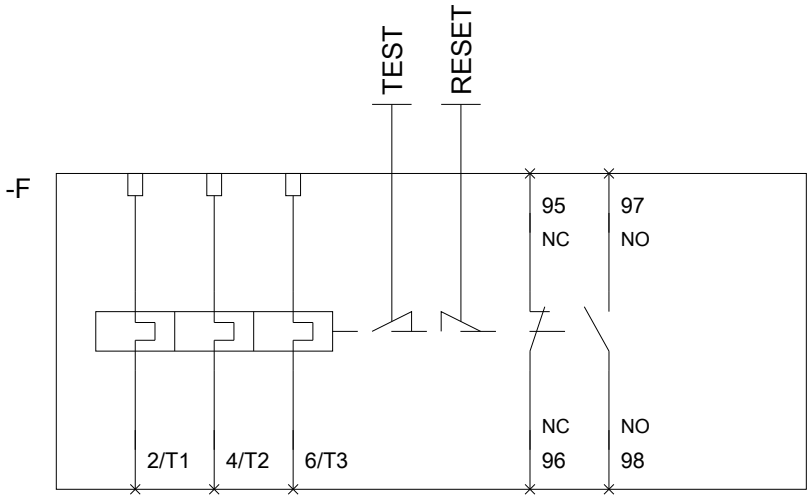
Industry Mall (Online ordering system)
http://www.siemens.com/industrymall

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB30361UB0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RB30361UB0/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=3RB30361UB0&lang=en





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