



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

Figure similar

product brand name	SIRIUS
Product designation	solid-state overload relay
General technical data:	
Active power loss total typical	1.8 W
Insulation voltage	690 V
<ul style="list-style-type: none"> with degree of pollution 3 Rated value 	
Vibration resistance	1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 10 cycles
Surge voltage resistance Rated value	6 kV
Temperature compensation	60 ... -25 °C
Recovery time	
<ul style="list-style-type: none"> after overload trip with automatic reset typical 	3 min
<ul style="list-style-type: none"> after overload trip with remote-reset 	0 min
<ul style="list-style-type: none"> after overload trip with manual reset 	0 min
Size of contactor can be combined company-specific	S2
Type of assignment	2
Protection class IP	
<ul style="list-style-type: none"> on the front 	IP20
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> 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	12.5 ... 50 A

Operating voltage	
<ul style="list-style-type: none"> • Rated value • at AC-3 Rated value maximum 	690 V 690 V
Operating frequency Rated value	50 ... 60 Hz
Operating current	
<ul style="list-style-type: none"> • at AC-3 — at 400 V Rated value 	50 A

Auxiliary circuit:

Number of NC contacts	
<ul style="list-style-type: none"> • for auxiliary contacts — Note 	1 for contactor disconnection
Number of NO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts — Note 	1 for message "tripped"
Number of CO contacts	
<ul style="list-style-type: none"> • for auxiliary contacts 	0
Design of the auxiliary switch	integrated
Operating current of the auxiliary contacts at AC-15	
<ul style="list-style-type: none"> • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V 	4 A 4 A 4 A 4 A 3 A
Operating current of the auxiliary contacts at DC-13	
<ul style="list-style-type: none"> • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V 	2 A 0.55 A 0.3 A 0.3 A 0.11 A

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	1 000 ms

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor	
<ul style="list-style-type: none"> • at 480 V Rated value • at 600 V Rated value 	50 A 50 A
Contact rating of the auxiliary contacts acc. to UL	B600 / R300

Short-circuit:

Design of the fuse link	
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- for short-circuit protection of the main circuit
 - required
- for short-circuit protection of the auxiliary switch required

Fuse gG: 200 A
fuse gG: 6 A

Installation/ mounting/ dimensions:

mounting position	any
Mounting type	direct mounting
Height	99 mm
Width	55 mm
Depth	104 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 0 mm — downwards 10 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 10 mm — Backwards 0 mm — upwards 10 mm — at the side 10 mm — downwards 10 mm • for live parts <ul style="list-style-type: none"> — forwards 10 mm — Backwards 0 mm — upwards 10 mm — downwards 10 mm — at the side 10 mm 	

Connections/ Terminals:

Product function	Yes
<ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit 	
Type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit 	screw-type terminals screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-section	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded 	1x (1 ... 50 mm ²), 2x (1 ... 35 mm ²)

<ul style="list-style-type: none"> — finely stranded with core end processing • for AWG conductors for main contacts • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • for AWG conductors for auxiliary contacts 	1x (1 ... 35 mm ²), 2x (1 ... 25 mm ²) 2x (18 ... 2), 1x (18 ... 1) 1x (0,5 ... 4 mm ²), 2x (0,5 ... 2,5 mm ²) 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²) 1x (20 ... 14), 2x (20 ... 14)
Design of screwdriver shaft	Diameter 5 to 6 mm
Design of the thread of the connection screw	
<ul style="list-style-type: none"> • for main contacts • of the auxiliary and control contacts 	M6 M3

Safety related data:

Proportion of dangerous failures	
<ul style="list-style-type: none"> • 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
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Communication/ Protocol:

Protocol is supported	
<ul style="list-style-type: none"> • IO-Link protocol 	No
Type of voltage supply via input/output link master	No

Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	-25 ... +60 °C -40 ... +80 °C -40 ... +80 °C
Relative humidity during operation	0 ... 95 %

Electromagnetic compatibility:

EMC emitted interference	
<ul style="list-style-type: none"> • 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	Declaration of Conformity	Test Certificates		
 CSA		 UL	 ATEX	 EG-Konf.	Type Test Certificates/Test Report

other

[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

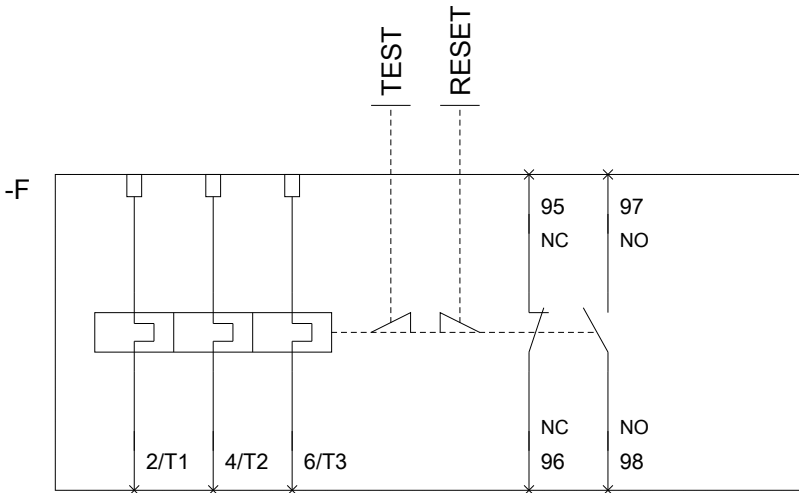
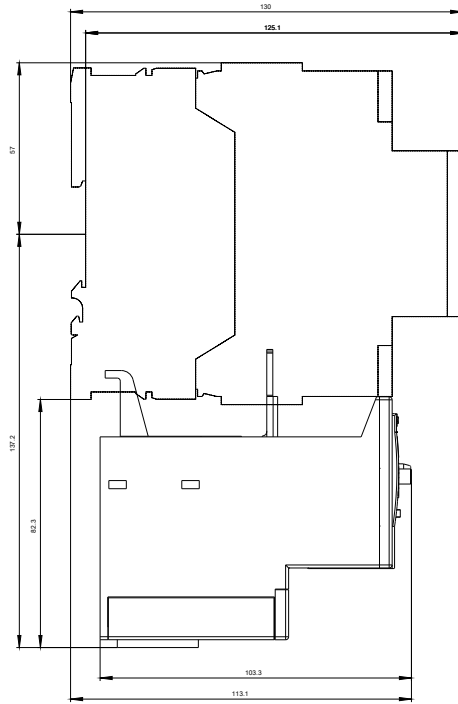
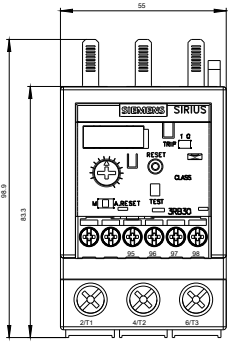
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB30361UB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RB30361UB0>

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



last modified:

14.05.2015