

OVERLOAD RELAY 47...57 A FOR MOTOR PROTECTION SIZE S2, CLASS 10 FOR MOUNTING ONTO CONTACTORS MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET.



Figure similar

product brand name	SIRIUS
Product designation	3RU2 thermal overload relay
General technical data:	
Size of overload relay	S2
Size of contactor can be combined company-specific	S2
Active power loss total typical	11 W
Insulation voltage with degree of pollution 3 Rated value	690 V
Surge voltage resistance Rated value	6 kV
Protection class IP	
• on the front	IP20
• of the terminal	IP00
Shock resistance	
• acc. to IEC 60068-2-27	8g / 11 ms
Recovery time	
• after overload trip with automatic reset typical	10 min
• after overload trip with remote-reset	10 min
• after overload trip with manual reset	10 min
Type of assignment	2

Type of protection	Ex e
Certificate of suitability relating to ATEX	DMT 98 ATEX G 001
Protection against electrical shock	finger-safe when touched vertically from front acc. to IEC 60529
Equipment marking acc. to DIN EN 81346-2	F

Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-40 ... +70 °C
• during storage	-55 ... +80 °C
• during transport	-55 ... +80 °C
Temperature compensation	-40 ... +60 °C
Relative humidity during operation	0 ... 90 %

Main circuit:

Number of poles for main current circuit	3
Adjustable response value current of the current-dependent overload release	47 ... 57 A
Operating voltage	
• Rated value	690 V
• at AC-3 Rated value maximum	690 V
Operating frequency Rated value	50 ... 60 Hz
Operating current Rated value	57 A

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
Operating current of the auxiliary contacts at AC-15	
• at 24 V	3 A
• at 110 V	3 A
• at 120 V	3 A
• at 125 V	3 A
• at 230 V	2 A
• at 400 V	1 A
Operating current of the auxiliary contacts at DC-13	
• at 24 V	2 A

<ul style="list-style-type: none"> • at 110 V • at 125 V • at 220 V 	0.22 A 0.22 A 0.11 A
Design of the miniature circuit breaker <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required 	6A (SCC less than equal to 0.5 kA; U less than equal to 260V)

Protective and monitoring functions:	
Trip class	CLASS 10
Design of the overload release	thermal

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 	57 A 57 A
Contact rating of the auxiliary contacts acc. to UL	B600 / R300

Short-circuit protection	
Design of the fuse link <ul style="list-style-type: none"> • for short-circuit protection of the main circuit <ul style="list-style-type: none"> — required • for short-circuit protection of the auxiliary switch required 	Fuse gG: 100 A fuse gG: 6 A, quick: 10 A

Installation/ mounting/ dimensions:	
mounting position	any
Mounting type	direct mounting
Height	90 mm
Width	55 mm
Depth	105 mm
Required spacing <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards 	10 mm 0 mm 10 mm 10 mm 10 mm 10 mm 0 mm 10 mm 10 mm 10 mm 10 mm

— Backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm

Connections/ Terminals:

Product function	
<ul style="list-style-type: none"> removable terminal for auxiliary and control circuit 	No
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 finely stranded with core end processing for AWG conductors for main contacts 	2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²) 2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²) 2x (18 ... 2), 1x (18 ... 1)
Type of connectable conductor cross-section	
<ul style="list-style-type: none"> 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 	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14)
Tightening torque	
<ul style="list-style-type: none"> for main contacts with screw-type terminals for auxiliary contacts with screw-type terminals 	3 ... 4.5 N·m 0.8 ... 1.2 N·m
Design of screwdriver shaft	5 to 6 mm diameter
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:

T1 value for proof test interval or service life acc. to IEC 61508	20 y
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Display:

Display version	
<ul style="list-style-type: none"> for switching status 	Slide switch

Certificates/ approvals:

General Product Approval	For use in hazardous locations	Declaration of Conformity	Test Certificates
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Test Certificates	other
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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

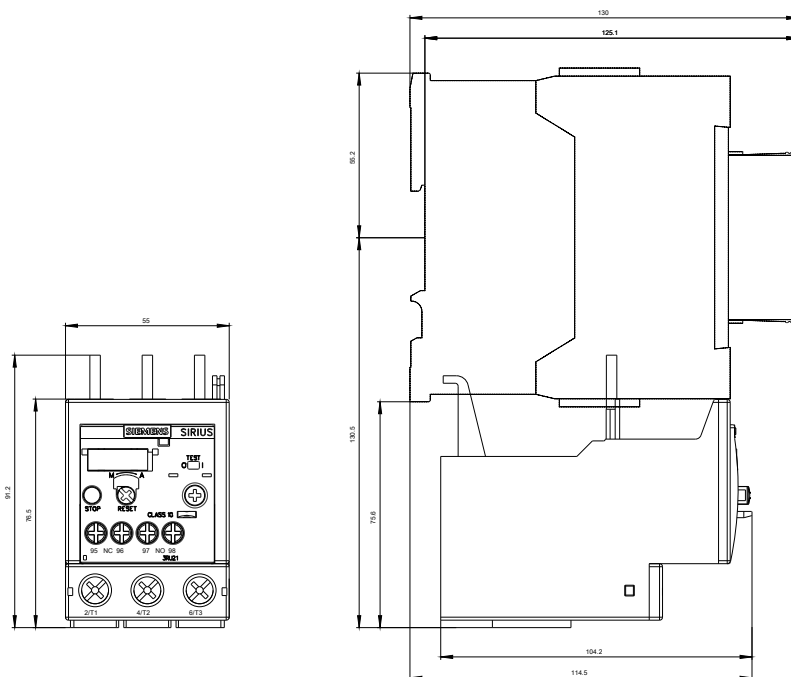
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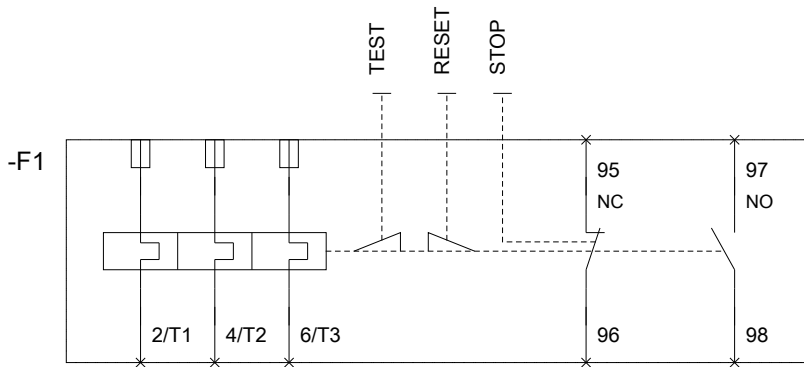
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RU21364QB0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU21364QB0&lang=en





last modified:

14.08.2015