

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	thermal overload relay
Product type designation	3RU2
General technical data	
Size of overload relay	S2
Size of contactor can be combined company-specific	S2
Power loss [W] total typical	11 W
Insulation voltage with degree of pollution 3 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	415 V
• in networks with grounded star point between auxiliary and auxiliary circuit	415 V
• in networks with grounded star point between main and auxiliary circuit	690 V

• in networks with grounded star point between main and auxiliary circuit	690 V
Protection class IP	
• on the front	IP20
• of the terminal	IP00
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 protection	Ex e
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

Ambient temperature	
• during operation	-40 ... +70 °C
• during storage	-55 ... +80 °C
• during transport	-55 ... +80 °C
Temperature compensation	-40 ... +60 °C

Main circuit

Number of poles for main current circuit	3
Adjustable pick-up 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 auxiliary contacts at AC-15	
• at 24 V	3 A
• at 110 V	3 A
• at 120 V	3 A

• at 125 V • at 230 V • at 400 V	3 A 2 A 1 A
Operating current of auxiliary contacts at DC-13 • at 24 V • at 110 V • at 125 V • at 220 V	2 A 0.22 A 0.22 A 0.11 A
Design of the miniature circuit breaker • for short-circuit protection of the auxiliary switch required	6A (SCC less than equal to 0.5 kA; U less than equal to 260V)
Contact rating of auxiliary contacts according to UL	B600 / R300

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 • at 480 V rated value • at 600 V rated value	57 A 57 A
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Short-circuit protection

Design of the fuse link • for short-circuit protection of the auxiliary switch required	fuse gG: 6 A, quick: 10 A
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Installation/ mounting/ dimensions

Mounting position	any
Mounting type	direct mounting
Height	90 mm
Width	55 mm
Depth	105 mm
Required spacing • with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards — Backwards — upwards — at the side	10 mm 0 mm 10 mm 10 mm 10 mm 10 mm 0 mm 10 mm 10 mm

— downwards	10 mm
• for live parts	
— forwards	10 mm
— Backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm

Connections/Terminals

Product function	
• removable terminal for auxiliary and control circuit	No
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
Type of connectable conductor cross-sections	
• for main contacts	
— single or multi-stranded	2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²)
— finely stranded with core end processing	2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²)
• at AWG conductors for main contacts	2x (18 ... 2), 1x (18 ... 1)
Type of connectable conductor cross-sections	
• for auxiliary contacts	
— single or multi-stranded	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
— finely stranded with core end processing	2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²)
• at AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 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 ... 6 mm

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	
• for switching status	Slide switch

Certificates/approvals

General Product Approval	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other
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[Environmental Confirmations](#)

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Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2136-4QB0>

Cax online generator

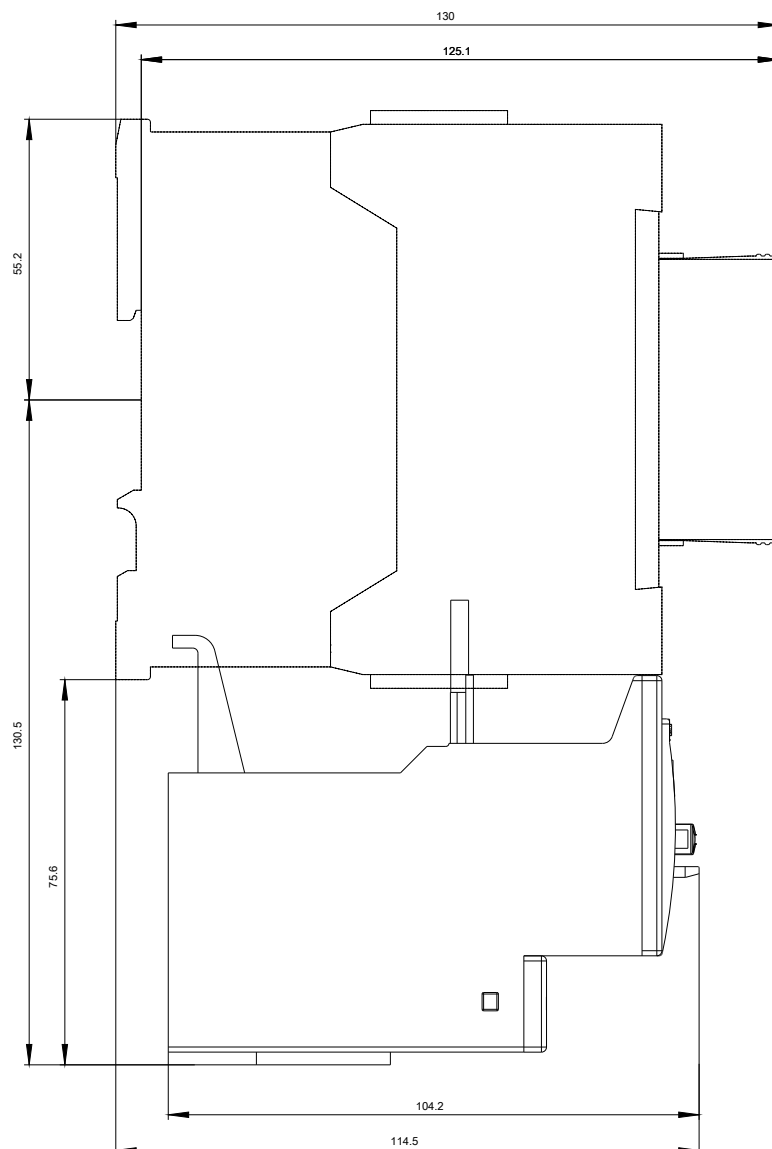
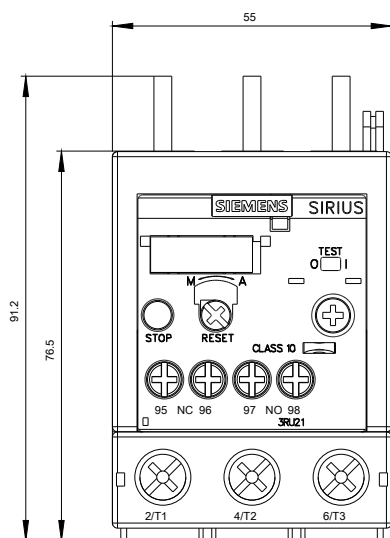
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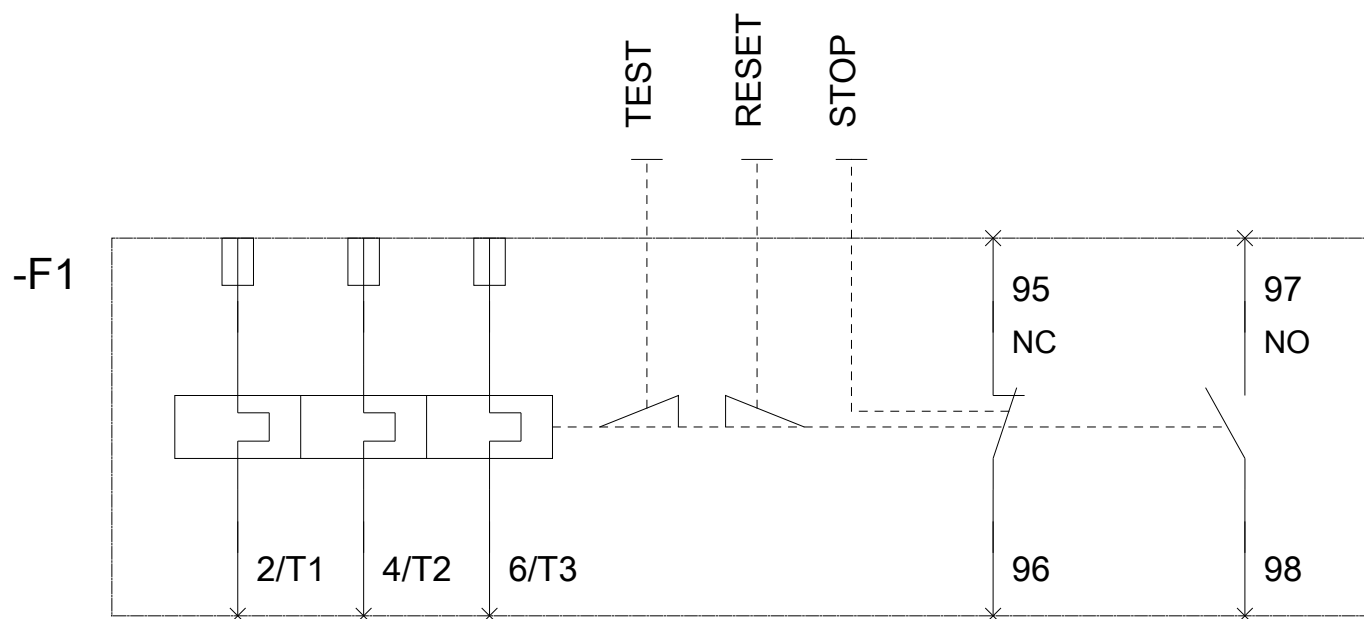
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4QB0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2136-4QB0&lang=en





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