

Overload relay 62...73 A Thermal For motor protection Size S2,
Class 10A Contactor mounting Main circuit: Screw Auxiliary circuit:
Screw Manual-Automatic-Reset



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] for rated value of the current	
• at AC in hot operating state	17.1 W
• at AC in hot operating state per pole	5.7 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	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 • of the terminal	IP20 IP00
Shock resistance	
• acc. to IEC 60068-2-27	8g / 11 ms
Recovery time	
• after overload trip with automatic reset typical • after overload trip with remote-reset • after overload trip with manual reset	10 min 10 min 10 min
Type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
Certificate of suitability according to ATEX directive 2014/34/EU	DMT 98 ATEX G 001
Reference code acc. to DIN EN 81346-2	F

Ambient conditions

Installation altitude at height above sea level	
• maximum	2 000 m
Ambient temperature	
• during operation • during storage • during transport	-40 ... +70 °C -55 ... +80 °C -55 ... +80 °C
Temperature compensation	-40 ... +60 °C
Relative humidity during operation	10 ... 95 %

Main circuit

Number of poles for main current circuit	3
Adjustable pick-up value current of the current-dependent overload release	62 ... 73 A
Operating voltage	
• rated value • at AC-3 rated value maximum	690 V 690 V
Operating frequency rated value	50 ... 60 Hz
Operating current rated value	73 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	3 A
• at 230 V	2 A
• at 400 V	1 A
Operating current of auxiliary contacts at DC-13	
• at 24 V	2 A
• at 60 V	0.3 A
• at 110 V	0.22 A
• at 125 V	0.22 A
• at 220 V	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 10A
Design of the overload release	thermal
UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	73 A
• at 600 V rated value	73 A
Short-circuit protection	
Design of the fuse link	
• for short-circuit protection of the auxiliary switch required	fuse gG: 6 A, quick: 10 A
Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	Contactors mounting
Height	90 mm
Width	55 mm
Depth	105 mm
Required spacing	
• with side-by-side mounting	
— forwards	10 mm
— Backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm

- for grounded parts
 - forwards 10 mm
 - Backwards 0 mm
 - upwards 10 mm
 - at the side 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 - finely stranded with core end processing - at 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-sections	
- for auxiliary contacts - single or multi-stranded - finely stranded with core end processing - at 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	
- 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	Diameter 5 ... 6 mm
Size of the screwdriver tip	Pozidriv PZ 2
Design of the thread of the connection screw	
- 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	Slide switch
• for switching status	

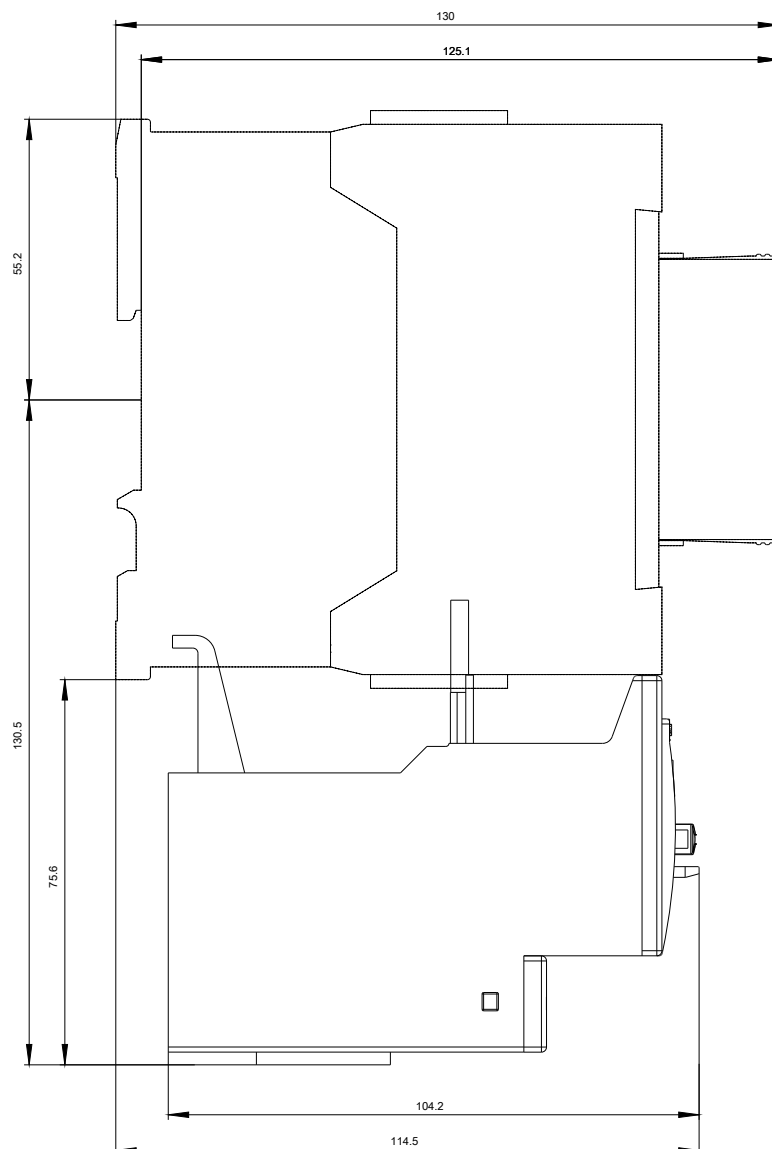
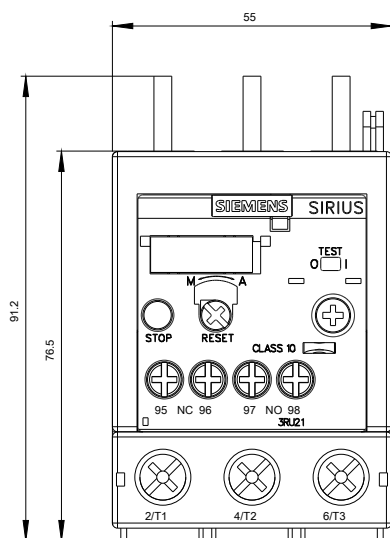
Certificates/ approvals		
General Product Approval		
 CCC	 CSA	 UL
 EAC	 ATEX	 IECEX

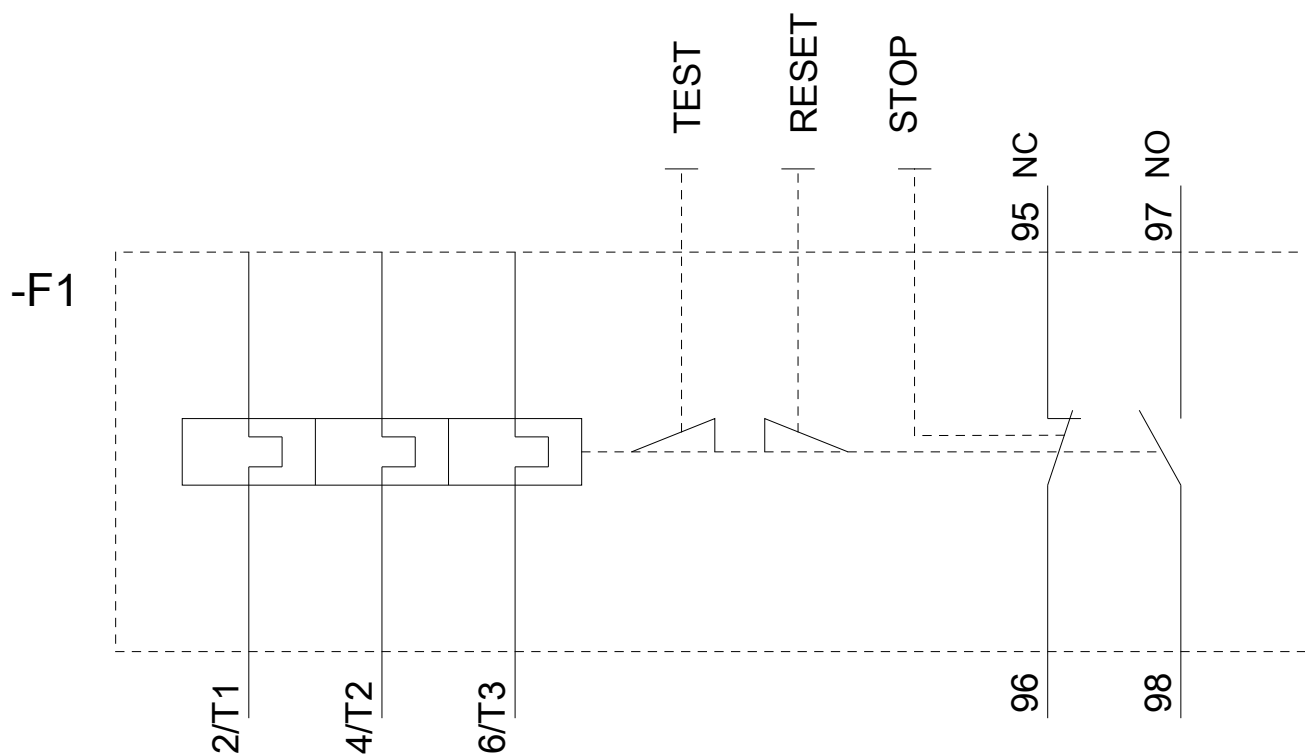
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Marine / Shipping	other
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Information- and Downloadcenter (Catalogs, Brochures,...) www.siemens.com/ic10
Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2136-4KB0
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Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4KB0&objecttype=14&gridview=view1





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