

OVERLOAD RELAY 1.8...2.5 A FOR MOTOR PROTECTION SZ S00, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: RING CABLE LUG AUX. CIRCUIT: RING CABLE LUG MANUAL-AUTOMATIC-RESET

product brand name	SIRIUS
Product designation	3RU2 thermal overload relay

General technical data:

Active power loss total typical	W	5.1
Insulation voltage	V	690
• with degree of pollution 3 Rated value		
Shock resistance		8g / 11 ms
• acc. to IEC 60068-2-27		
Surge voltage resistance Rated value	kV	6
Temperature compensation	°C	-40 ... +60
Size of contactor can be combined company-specific		S00
Type of assignment		2
Protection class IP		IP20
• on the front		
• of the terminal		IP20
Equipment marking		F
• acc. to DIN EN 81346-2		

Main circuit:

Number of poles for main current circuit		3
Adjustable response value current of the current-dependent overload release	A	1.8 ... 2.5
Operating voltage	V	690
• Rated value		
• at AC-3 Rated value maximum	V	690
Operating frequency Rated value	Hz	50 ... 60

Operating current Rated value	A	2.5
Operating current		
• at AC-3		
— at 400 V Rated value	A	2.5

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	3
• at 110 V	A	3
• at 120 V	A	3
• at 125 V	A	3
• at 230 V	A	2
• at 400 V	A	1
Operating current of the auxiliary contacts at DC-13		
• at 24 V	A	2
• at 110 V	A	0.22
• at 125 V	A	0.22
• at 220 V	A	0.11

Protective and monitoring functions:

Trip class		CLASS 10
Design of the overload circuit breaker		thermal

UL/CSA ratings:

Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	A	2.5
• at 600 V Rated value	A	2.5
Contact rating of the auxiliary contacts acc. to UL		B600 / R300

Installation/ mounting/ dimensions:

mounting position		any
Mounting type		direct mounting
Height	mm	76
Width	mm	45
Depth	mm	70
Required spacing		

• with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	6
— at the side	mm	6
— downwards	mm	6
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	6
— downwards	mm	6
— at the side	mm	6

Connections/ Terminals:

Type of electrical connection		
• for main current circuit		ring cable connection
• for auxiliary and control current circuit		ring cable connection
Arrangement of electrical connectors for main current circuit		Top and bottom
Product function		
• removable terminal for auxiliary and control circuit		No
Tightening torque		
• for ring cable lug		
— for main contacts	N·m	1.2 ... 0.8
— for auxiliary contacts	N·m	0.8 ... 1.2
Outer diameter of the usable ring cable lug maximum	mm	7.5
Design of screwdriver shaft		5 to 6 mm diameter
Design of the thread of the connection screw		
• for main contacts		M3
• of the auxiliary and control contacts		M3

Safety related data:

Proportion of dangerous failures		
• with low demand rate acc. to SN 31920	%	50
• with high demand rate acc. to SN 31920	%	50

Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	50
MTTF with high demand rate	y	2 280
T1 value for proof test interval or service life acc. to IEC 61508	y	20
Protection against electrical shock		finger-safe

Mechanical data:

Size of overload relay		S00
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Ambient conditions:

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

Display:

Display version		Slide switch
• for switching status		

Certificates/ approvals:

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

[Special Test Certificate](#)



Shipping Approval	other
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[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

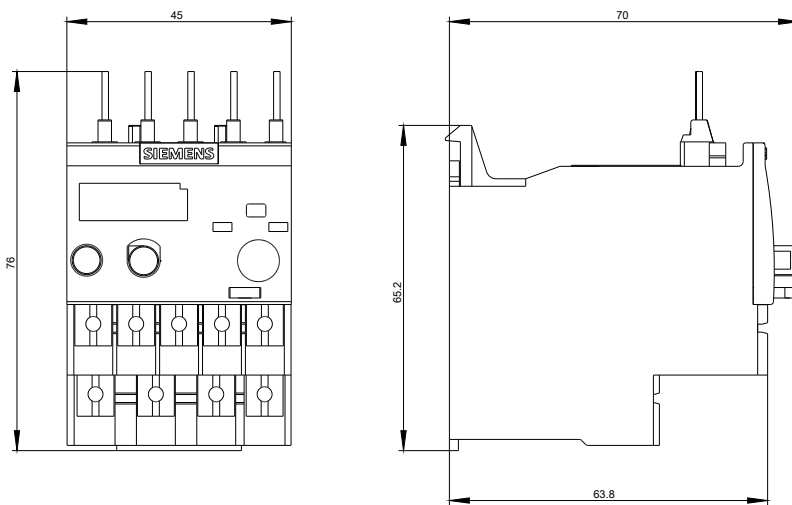
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RU21161CJ0>

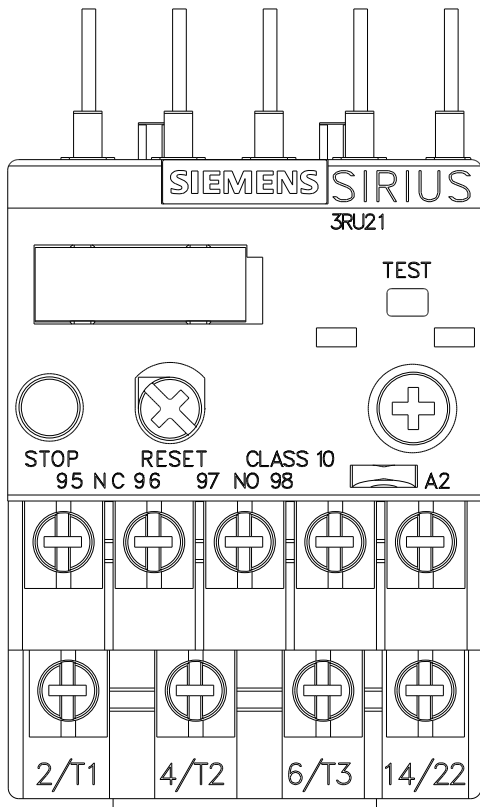
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RU21161CJ0/all>

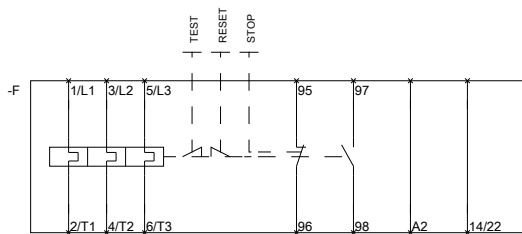
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RU21161CJ0&lang=en





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