



OVERLOAD RELAY 27...32 A FOR MOTOR PROTECTION SZ S0, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

product brand name	SIRIUS
Product designation	3RU2 thermal overload relay
General technical data:	
Active power loss total typical	6.9 W
Insulation voltage	690 V
• with degree of pollution 3 Rated value	
Surge voltage resistance Rated value	6 kV
Temperature compensation	-40 ... +60 °C
Size of contactor can be combined company-specific	S0
Type of assignment	2
Protection class IP	IP20
• on the front	
• of the terminal	IP20
Type of protection	DMT 98 ATEX G 001
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	27 ... 32 A
Operating voltage	690 V
• Rated value	
• at AC-3 Rated value maximum	690 V
Operating frequency Rated value	50 ... 60 Hz
Operating current Rated value	32 A

Operating current	
<ul style="list-style-type: none"> • at AC-3 — at 400 V Rated value 	32 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 • at 400 V 	3 A 3 A 3 A 3 A 2 A 1 A
Operating current of the auxiliary contacts at DC-13	
<ul style="list-style-type: none"> • at 24 V • at 110 V • at 125 V • at 220 V 	2 A 0.22 A 0.22 A 0.11 A

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	
<ul style="list-style-type: none"> • at 480 V Rated value • at 600 V Rated value 	32 A 32 A
Contact rating of the auxiliary contacts acc. to UL	B600 / R300

Installation/ mounting/ dimensions:

mounting position	any
Mounting type	direct mounting
Height	85 mm
Width	45 mm
Depth	85 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting 	

— forwards	0 mm
— Backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	6 mm
— downwards	6 mm
— at the side	6 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-section	
• for main contacts	
— single or multi-stranded	2x (1 ... 2,5 mm ²), 2x (2,5 ... 10 mm ²)
— finely stranded with core end processing	2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
• for AWG conductors for main contacts	2x (16 ... 12), 2x (14 ... 8)
• 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)
• for AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14)
Design of screwdriver shaft	5 to 6 mm diameter
Design of the thread of the connection screw	
• for main contacts	M4
• 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 %
MTTF with high demand rate	2 280 y
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Protection against electrical shock	finger-safe

Mechanical data:	
Size of overload relay	S0

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
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



Test Certificates

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Shipping Approval



other
[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

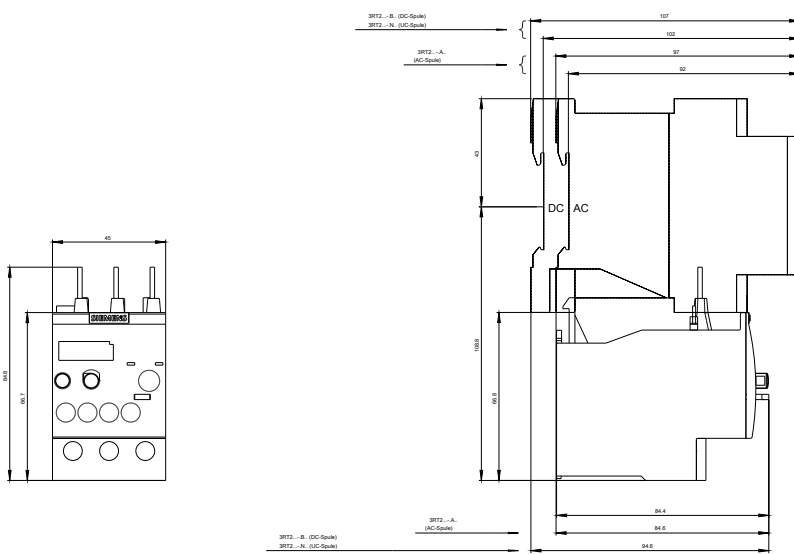
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RU21264EB0>

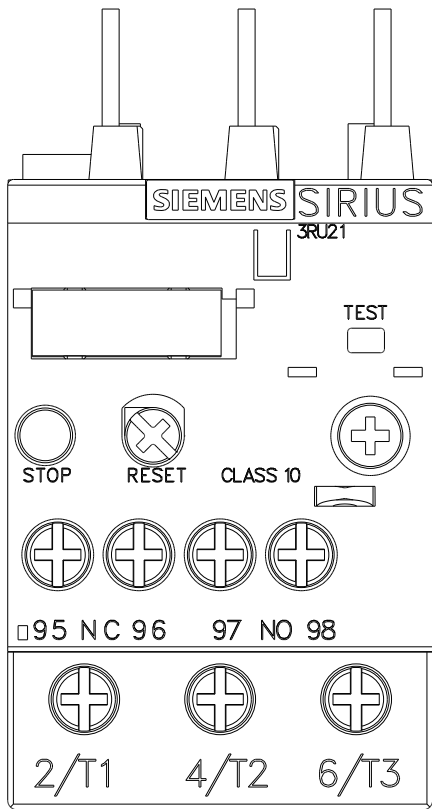
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RU21264EB0>

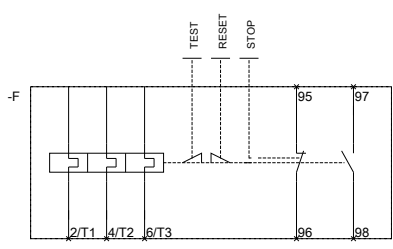
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RU21264EB0&lang=en





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