

OVERLOAD RELAY 20...25 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	thermal overload relay
Product type designation	3RU2

General technical data

Size of overload relay	S0
Size of contactor can be combined company-specific	S0
Power loss [W] total typical	6.2 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 <ul style="list-style-type: none"> • in networks with grounded star point between auxiliary and auxiliary circuit • in networks with grounded star point between auxiliary and auxiliary circuit • in networks with grounded star point between main and auxiliary circuit • in networks with grounded star point between main and auxiliary circuit 	440 V 440 V 440 V 440 V
Protection class IP <ul style="list-style-type: none"> • on the front • of the terminal 	IP20 IP20
Type of protection	Ex e
Protection against electrical shock	finger-safe
Equipment marking acc. to DIN EN 81346-2	F

Ambient conditions

Ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport 	-40 ... +70 °C -55 ... +80 °C -55 ... +80 °C
Temperature compensation	-40 ... +60 °C

Main circuit

Number of poles for main current circuit	3
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Adjustable pick-up value current of the current-dependent overload release	20 ... 25 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	25 A
Operating power at AC-3	
• at 400 V rated value	11 kW
• at 500 V rated value	15 kW
• at 690 V rated value	22 kW

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 110 V	0.22 A
• at 125 V	0.22 A
• at 220 V	0.11 A
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	25 A
• at 600 V rated value	25 A

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 <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 6 mm — downwards 6 mm — at the side 6 mm • for grounded parts <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 6 mm — at the side 6 mm — downwards 6 mm • for live parts <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 6 mm — downwards 6 mm — at the side 6 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 	<p>screw-type terminals</p> <p>screw-type terminals</p>
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded 2x (1 ... 2,5 mm²), 2x (2,5 ... 10 mm²) — finely stranded with core end processing 2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm² • at AWG conductors for main contacts 2x (16 ... 12), 2x (14 ... 8) 	
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²) 	

<ul style="list-style-type: none"> — 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 (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 	2 ... 2.5 N·m 0.8 ... 1.2 N·m
Design of screwdriver shaft	Diameter 5 ... 6 mm

Safety related data

Failure rate [FIT] <ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 	50 FIT
MTTF with high demand rate	2 280 y
T1 value for proof test interval or service life acc. to IEC 61508	20 y

Display

Display version <ul style="list-style-type: none"> • for switching status 	Slide switch
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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](#)



Marine / Shipping	other	Railway
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[Environmental Confirmations](#)

[Confirmation](#)

[Vibration and Shock](#)

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=3RU2126-4DB0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4DB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4DB0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-4DB0&lang=en

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