

OVERLOAD RELAY 11...16 A FOR MOTOR PROTECTION SZ S0,
CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT:
SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-
AUTOMATIC-RESET REUSABLE PACKAGING PACKAGE = 64
UNITS

product brand name	SIRIUS
Product designation	3RU2 thermal overload relay

General technical data

Size of overload relay	S00
Size of contactor can be combined company-specific	S00
Power loss [W] total typical	6.3 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 - 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 - on the front - of the terminal	IP20 IP20
Shock resistance acc. to IEC 60068-2-27	8g / 11 ms
Type of protection	Ex e
Certificate of suitability relating to ATEX	DMT 98 ATEX G 001
Protection against electrical shock	finger-safe
Equipment marking 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
Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current-dependent overload release	11 ... 16 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	16 A
Auxiliary circuit	
Design of the auxiliary switch	integrated
Number of NC contacts • for auxiliary contacts — Note	1 for contactor disconnection
Number of NO contacts • for auxiliary contacts — Note	1 for message "Tripped"
Number of CO contacts • for auxiliary contacts	0
Operating current of auxiliary contacts at AC-15 • 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 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
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	16 A 16 A
Contact rating of auxiliary contacts according to UL	B600 / R300

Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	direct mounting
Height	76 mm
Width	45 mm
Depth	70 mm
Required spacing	
• with side-by-side mounting — forwards — Backwards — upwards — downwards — at the side • for grounded parts — forwards — Backwards — upwards — at the side — downwards • for live parts — forwards — Backwards — upwards — downwards — at the side	0 mm 0 mm 6 mm 6 mm 6 mm 0 mm 0 mm 6 mm 6 mm 6 mm 0 mm 0 mm 6 mm 6 mm 6 mm
Connections/Terminals	
Product function	
• removable terminal for auxiliary and control circuit	No
Type of electrical connection	
• for main current circuit • for auxiliary and control current circuit	screw-type terminals 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 (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x 4 mm ² 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14), 2x 12
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 • 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 • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals	0.8 ... 1.2 N·m 0.8 ... 1.2 N·m
Design of screwdriver shaft	5 ... 6 mm diameter
Design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts	M3 M3

Safety related data

Failure rate [FIT] • 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 • for switching status	Slide switch
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Certificates/approvals

General Product Approval	For use in hazardous locations	Declaration of Conformity
 CCC	 EAC	 EG-Konf.
 CSA	 UL	 ATEX

Test Certificates	Shipping Approval	other	Railway
spezielle Prüfbescheinigungen	Typprüfbescheinigung/Werkszeugnis  ABS	Umweltbestätigung	Bestätigungen Schwingen/Schockprüfung

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=3RU2116-4AB0-Z X95>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-4AB0-Z X95>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-4AB0-Z X95>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-4AB0-Z X95&lang=en

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