

OVERLOAD RELAY 4.5...6.3 A FOR MOTOR PROTECTION SZ
S00, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN
CIRCUIT: SPRING TERMINAL AUX. CIRCUIT: SPRING TERMINAL
MANUAL-AUTOMATIC-RESET REUSABLE PACKAGING
PACKAGE = 56 ITEMS

product brandname	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	5.7 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	4.5 ... 6.3 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	6.3 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 110 V 0.22 A • at 125 V 0.22 A • at 220 V 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 6.3 A • at 600 V rated value 6.3 A
Contact rating of auxiliary contacts according to UL	B600 / R300

Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	direct mounting
Height	87 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	spring-loaded terminals spring-loaded 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 — finely stranded without core end processing • at AWG conductors for main contacts	1x (0,5 ... 4 mm ²) 1x (0.5 ... 2.5 mm ²) 1x (0.5 ... 2.5 mm ²) 1x (20 ... 12)
Type of connectable conductor cross-sections	

- for auxiliary contacts
 - single or multi-stranded 2x (0,5 ... 2,5 mm²)
 - finely stranded with core end processing 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
 - finely stranded without core end processing 2x (0.5 ... 1.5 mm²)
- at AWG conductors for auxiliary contacts 2x (20 ... 14)

Design of screwdriver shaft 5 ... 6 mm diameter

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

Certificates/approvals

General Product Approval

For use in
hazardous
locations

Declaration of
Conformity



Test Certificates	Shipping Approval	other	Railway
Typprüfbescheinigung/Werkszeugnis	 ABS	Umweltbestätigung	Bestätigungen
			Schwingen/Schocke n

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=3RU2116-1GC0-Z X95>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-1GC0-Z X95>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1GC0-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=3RU2116-1GC0-Z X95&lang=en

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