

OVERLOAD RELAY 2.8...4.0 A FOR MOTOR PROTECTION SZ
S00, CLASS 10, STAND-ALONE INSTALLATION MAIN CIRCUIT:
SPRING TERMINAL AUX. CIRCUIT: SPRING TERMINAL MANUAL-
AUTOMATIC-RESET



product brandname	SIRIUS
Product designation	thermal overload relay
Product type designation	3RU2
General technical data	
Size of overload relay	S00
Size of contactor can be combined company-specific	S00
Power loss [W] total typical	5.4 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	440 V
• in networks with grounded star point between auxiliary and auxiliary circuit	440 V
• in networks with grounded star point between main and auxiliary circuit	440 V
• in networks with grounded star point between main and auxiliary circuit	440 V
Protection class IP	

• on the front	IP20
• of the terminal	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	
• during operation	-40 ... +70 °C
• during storage	-55 ... +80 °C
• during transport	-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	2.8 ... 4 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	4 A
Operating power at AC-3	
• at 400 V rated value	1.5 kW
• at 500 V rated value	2.2 kW
• at 690 V rated value	3 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
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	4 A
• at 600 V rated value	4 A
Contact rating of auxiliary contacts according to UL	B600 / R300
Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	stand-alone installation
Height	102 mm
Width	45 mm
Depth	79 mm
Required spacing	
• 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 - 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 - finely stranded with core end processing - finely stranded without core end processing - at AWG conductors for auxiliary contacts	2x (0,5 ... 2,5 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²) 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	
 CCC	 CSA	 UL		 ATEX	 IECEX

Declaration of Conformity	Test Certificates	Shipping Approval			
 EG-Konf.	Typprüfbescheinigung/Werkszeugnis	 ABS	 BUREAU VERITAS	 LRS	 PRS

Shipping Approval	other	Railway	
 RINA	 RMRS	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=3RU2116-1EC1>

Cax online generator

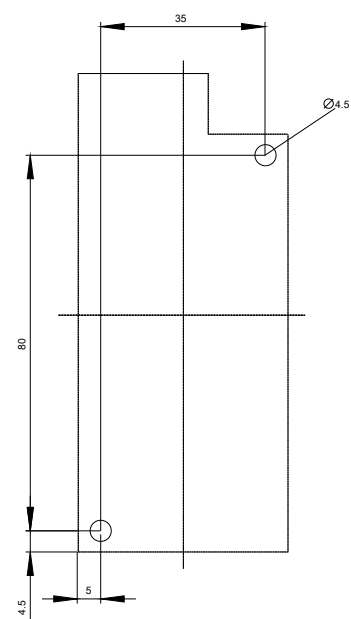
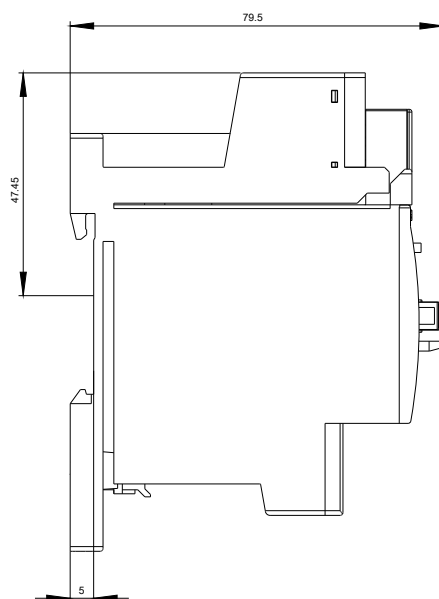
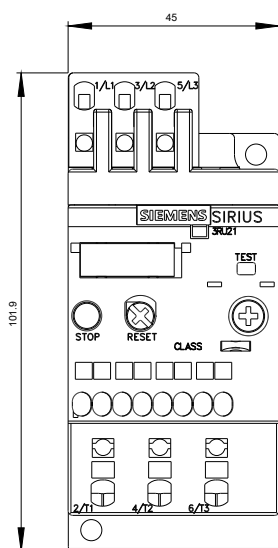
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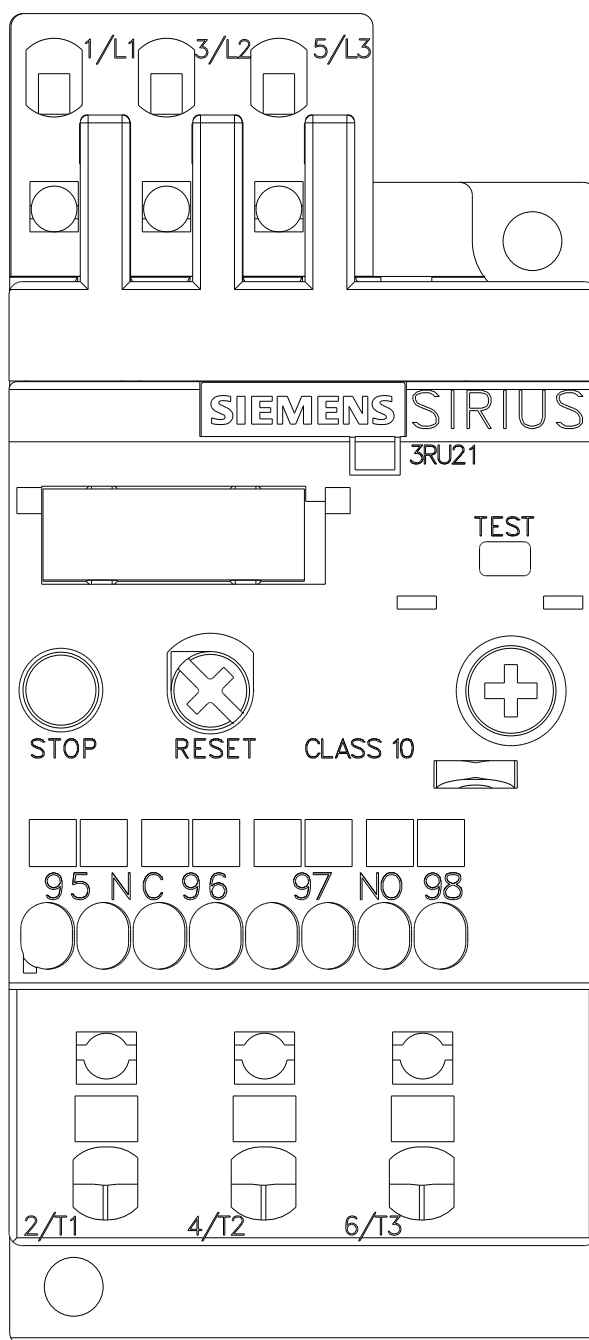
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

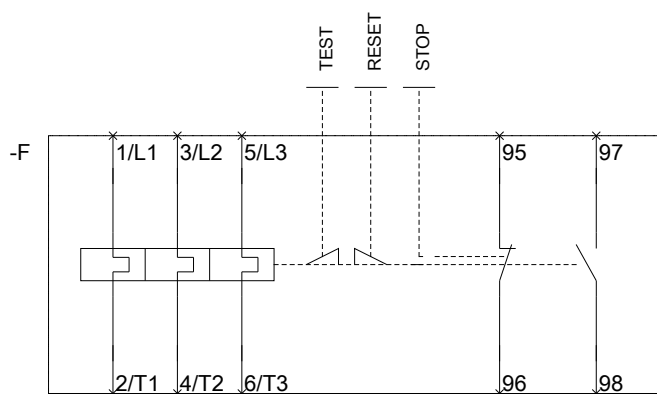
<https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1EC1>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-1EC1&lang=en







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