## **SIEMENS**

## Data sheet

## 3RU2116-1JJ0



OVERLOAD RELAY 7.0...10 A FOR MOTOR PROTECTION SZ S00, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: RING CABLE LUG AUX. CIRCUIT: RING CABLE LUG MANUAL-AUTOMATIC-RESET

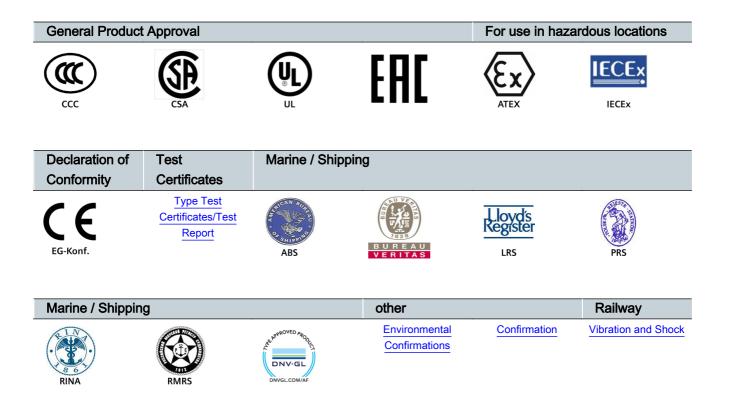
Product brand name	SIRIUS
Product designation	thermal overload relay
Product type designation	3RU2
General technical data	
Size of overload relay	S00
Size of contactor can be combined company-specific	S00
Power loss [W] total typical	6.1 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>in networks with grounded star point between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>in networks with grounded star point between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	440 V
<ul> <li>in networks with grounded star point between main and auxiliary circuit</li> </ul>	440 V
Protection class IP	

	1700	
• on the front	IP20	
• of the terminal	IP20	
Type of protection	Exe	
Protection against electrical shock	finger-safe	
Equipment marking acc. to DIN EN 81346-2	F	
Ambient conditions		
Ambient temperature		
<ul> <li>during operation</li> </ul>	-40 +70 °C	
<ul> <li>during storage</li> </ul>	-55 +80 °C	
<ul> <li>during transport</li> </ul>	-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-	7 10 A	
dependent overload release		
Operating voltage		
• rated value	690 V	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V	
Operating frequency rated value	50 60 Hz	
Operating current rated value	10 A	
Operating power at AC-3		
• at 400 V rated value	4 kW	
• at 500 V rated value	5.5 kW	
• at 690 V rated value	7.5 kW	
Auxiliary circuit		
Design of the auxiliary switch	integrated	
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>	1	
— Note	for contactor disconnection	
Number of NO contacts		
<ul> <li>for auxiliary contacts</li> </ul>	1	
— Note	for message "Tripped"	
Number of CO contacts		
<ul> <li>for auxiliary contacts</li> </ul>	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	
JL/CSA ratings		
Full-load current (FLA) for three-phase AC motor		
• at 480 V rated value	10 A	
• at 600 V rated value	10 A	
nstallation/ mounting/ dimensions		
Mounting position	any	
Mounting type	direct mounting	
Height	76 mm	
Width	45 mm	
Depth	70 mm	
Required spacing		
<ul> <li>with side-by-side mounting</li> </ul>		
— forwards	0 mm	
— Backwards	0 mm	
— upwards	6 mm	
— downwards	6 mm	
— at the side	6 mm	
<ul> <li>for grounded parts</li> </ul>		
— 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

<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	No
Type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	ring cable connection
<ul> <li>for auxiliary and control current circuit</li> </ul>	ring cable connection
Arrangement of electrical connectors for main current circuit	Top and bottom
Tightening torque	
• for ring cable lug	
— for main contacts	1.2 0.8 N·m
— for auxiliary contacts	0.8 1.2 N·m
Outer diameter of the usable ring cable lug maximum	7.5 mm
Design of screwdriver shaft	Diameter 5 6 mm
Safety related data	
Failure rate [FIT]	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 FIT
MTTF with high demand rate	2 280 у
T1 value for proof test interval or service life acc. to IEC 61508	20 у
Display	
Display version	
• for switching status	Slide switch
Certificates/approvals	



## Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

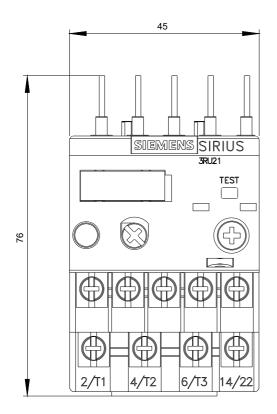
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2116-1JJ0

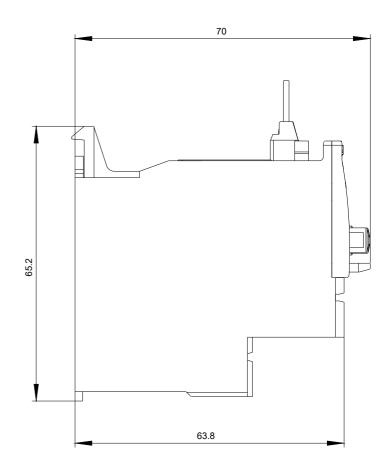
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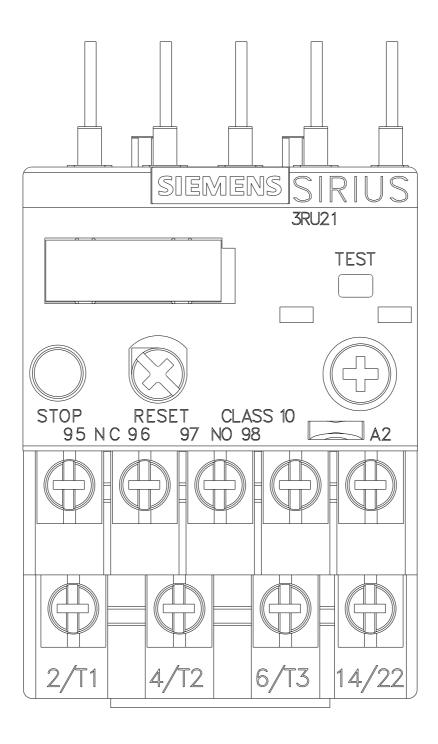
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-1JJ0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1JJ0

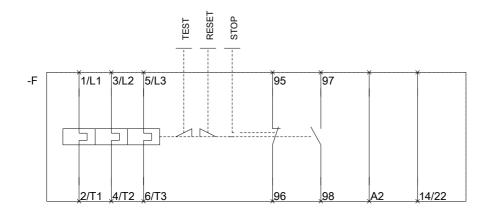
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2116-1JJ0&lang=en







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