## **SIEMENS**

Product data sheet 3RU2116-0FB0



OVERLOAD RELAY 0.35...0.50 A FOR MOTOR PROTECTION SZ S00, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT:

MANUAL-AUTOMATIC-RESET

SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL

General technical data:			
Product brand name		SIRIUS	
product designation		3RU2 thermal overload relay	
Protection class IP / on the front		IP20	
Insulation voltage / with degree of pollution 3			
• rated value	V	690	
Installation altitude / at a height over sea level / maximum	m	2,000	
Ambient temperature			
during transport	°C	-55 80	
during storage	°C	-55 80	
during operating	°C	-40 70	
Relative humidity			
during operating phase	/ %	90	
Resistance against shock		8g / 10 ms	
Impulse voltage resistance / rated value	kV 6		
Active power loss / total / typical	W	4.2	
Item designation			
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		F	
according to DIN EN 61346-2		F	

Trip class	CLASS 10
Type of assignement	2
Size of overload relay	S00
Size of the contactor / can be combined	
• company-specific	S00

Main circuit:				
Number of poles / for main current circuit		3		
Operating voltage / at AC-3 / rated value				
• maximum	V	690		
Operating current / at AC-3 / at 400 V				
• rated value	Α	0.5		
Service power / at AC-3				
• at 400 V / rated value	kW	0.12		
• at 500 V / rated value	kW	0.18		
• at 690 V / rated value	kW	0.25		
Adjustable response current				
of the current-dependent overload release	Α	0.35 0.5		
Operating current / of the fuse link / rated value	Α	2		

Auxiliary circuit:				
Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles		
Number of NC contacts / for auxiliary contacts		1		
Number of NO contacts / for auxiliary contacts		1		
Number of change-over switches / for auxiliary contacts		0		
Operating current / of the auxiliary contacts				
• at AC-15				
• at 24 V	Α	3		
• at 110 V	Α	3		
• at 120 V	Α	3		
• at 125 V	Α	3		
• at 230 V	Α	2		
• at 400 V	Α	1		
• at DC-13				
• at 24 V	Α	1		
• at 110 V	Α	0.22		
• at 125 V	Α	0.22		
• at 220 V	Α	0.11		

## Short-circuit:

Design of the fuse link / for short-circuit protection of the	
auxiliary switch / required	

fuse gG: 10 A

Installation/mounting/dimensions:		
Built in orientation		vertical
Type of mounting		direct mounting
Width	mm	45
Height	mm	87
Depth	mm	73
Distance, to be maintained, to the ranks assembly		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6
Distance, to be maintained, to earthed part		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6
Distance, to be maintained, conductive elements		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6
Connections:		
Design of the electrical connection		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
Product function / removable terminal for auxiliary and control circuit		No
Type of the connectable conductor cross-section		
• for main contacts		
• solid		2 x (0.5 1.5 mm2), 2 x (0.75 2.5 mm2), 2 x (0.5

stranded

• finely stranded

• with conductor end processing

 $2x\ (0.5\ ...\ 1.5\ mm2),\ 2x\ (0.75\ ...\ 2.5\ mm2),\ 2x\ 0.5$ 

2x (0.5 ... 1.5 mm2), 2x (0.75 ... 2.5 mm2)

4 mm2)

mm2 ... 2x 4 mm2

• for AWG conductors / for main contacts	2x (20 16), 2x (18 14)
• for auxiliary contacts	
• solid	2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)
• finely stranded	
<ul> <li>with conductor end processing</li> </ul>	2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)
for AWG conductors / for auxiliary contacts	2x (20 16), 2x (18 14)

Certificates/approvals:						
Verification of sui	itability			CE / U	L/CSA	
• ATEX				No		
General Product	t Approval				For use in hazardous locations	Test Certificates
coc	<b>S</b>	ROSTEST			DEKRA EXAM, DMT	Manufacturer
Shipping Approv	val					













**Shipping Approval** 

other



Manufacturer

Reliability figures:				
Mean time to failure (MTTF) / with high demand rate	а	2,280		
Proportion of dangerous failures				
with low demand rate / according to SN 31920	%	50		
with high demand rate / according to SN 31920	%	50		
Failure rate (FIT value) / with low demand rate				
according to SN 31920	FIT	50		
T1 value / for proof test interval or service life				
according to IEC 61508	а	20		
Protection against electrical shock		finger-safe		

## Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

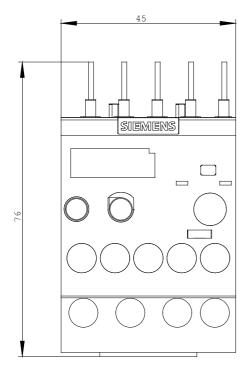
http://www.siemens.com/industrial-controls/mall

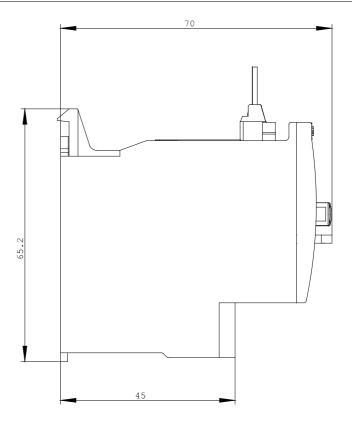
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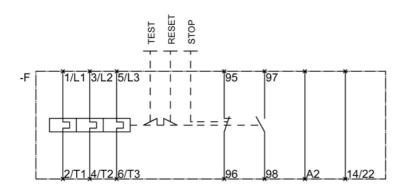
http://www.siemens.com/cax

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RU2116-0FB0







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