# SIEMENS

### **Product data sheet**

#### 3RU2116-1FB0



OVERLOAD RELAY 3.5...5.0 A FOR MOTOR PROTECTION SZ S00, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

6	lon	or	 00	hn	ica	l d	ata:

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	6.1
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	А	5
Service power / at AC-3		
• at 400 V / rated value	kW	1.5
• at 500 V / rated value	kW	2.2
• at 690 V / rated value	kW	4
Adjustable response current		
• of the current-dependent overload release	А	3.5 5
Operating current / of the fuse link / rated value	А	20

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	А	3		
• at 110 V	А	3		
• at 120 V	А	3		
• at 125 V	А	3		
• at 230 V	А	2		
• at 400 V	А	1		
• at DC-13				
• at 24 V	А	1		
• at 110 V	А	0.22		
• at 125 V	А	0.22		
• at 220 V	А	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:

	screw-type terminals		
	screw-type terminals		
	No		
	2 x (0.5 1.5 mm2), 2 x (0.75 2.5 mm2), 2 x (0.5 4 mm2)		
	2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2), 2x 0.5 mm2 2x 4 mm2		
	2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)		
-	-		

<ul> <li>for AWG conductors / for main contacts</li> </ul>		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)			
<ul> <li>for AWG conductors / for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14)			
Certificates/approvals:					
Verification of suitability		CE / UL / CSA			
• ATEX No		No	)		
General Product Approval			For use in hazardous locations	Test Certificates	

DEKRA EXAM,

DMT

Manufacturer

ROSTEST

GL

GL

ADS
Shipping

cqc

**Shipping Approval** 



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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		

LRS

Further information:

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

#### Industry Mall (Online ordering system)

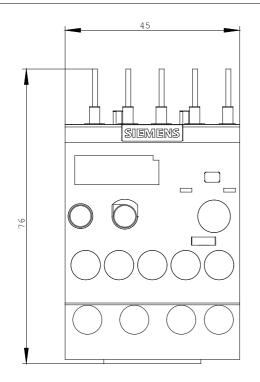
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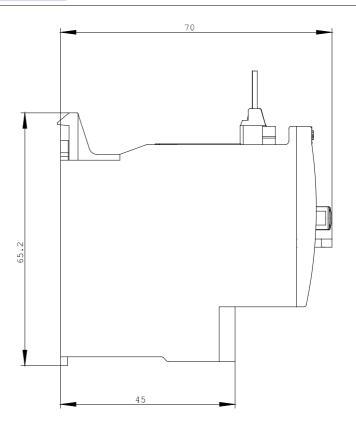
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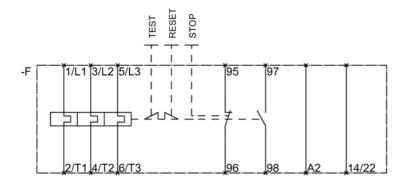
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RU2116-1FB0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RU2116-1FB0







last change:

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