SIEMENS

Product data sheet

3RU2116-0AC1



OVERLOAD RELAY 0.11...0.16 A FOR MOTOR PROTECTION SZ S00, CLASS 10, STAND-ALONE INSTALLATION MAIN CIRCUIT: SPRING TERMINAL AUX. CIRCUIT: SPRING TERMINAL MANUAL-AUTOMATIC-RESET

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	4.5
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		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	A	0.16
Service power / at AC-3		
• at 400 V / rated value	kW	0.04
• at 500 V / rated value	kW	0.06
• at 690 V / rated value	kW	0.06
Adjustable response current		
• of the current-dependent overload release	A	0.11 0.16
Operating current / of the fuse link / rated value	А	0.5

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

Built in orientation		vertical
Type of mounting	_	stand-alone installation
Width		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		spring-loaded terminals
 for auxiliary and control current circuit 		spring-loaded terminals
Product function / removable terminal for auxiliary and control circuit		No

- for main contacts
 - solid
 - stranded
 - finely stranded
 - with conductor end processing 2 x (0.5 ... 2.5 mm2)
 - without conductor final cutting

2x (0.5 ... 4 mm2)

2x (0.5 ... 4 mm2)

2x (0.5 ... 2.5 mm2)

for AWG conductors / for main contacts	1x (20 12)
for auxiliary contacts	
• solid	2x (0.5 2.5 mm2)
finely stranded	
with conductor end processing	2x (0.5 1.5 mm2)
 without conductor final cutting 	2 x (0.5 1.5 mm2)
 for AWG conductors / for auxiliary contacts 	2x (20 14)

Certificates/approvals:

Certificates/approv	/als:				
Verification of suitab	ility			CE / UL / CSA	
• ATEX				No	
General Product Ap	proval			For use in hazardous locations	Test Certificates
coc	(SA)	<u>ROSTEST</u>		<u>DEKRA EXAM,</u> DMT	Manufacturer
Shipping Approval					
ABS	JÅ DNV DNV	G L C	Lloyd's Register Lrs	PRS	
Shipping Approval	other				
RMRS	<u>Manufacturer</u>				

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

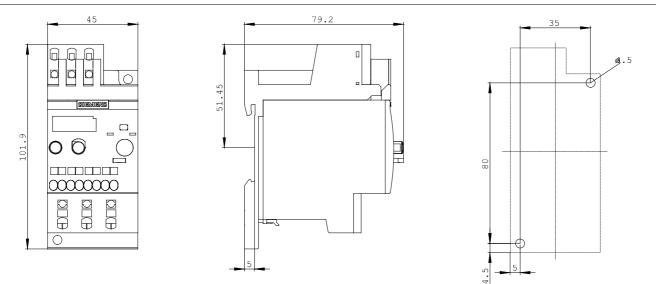
Industry Mall (Online ordering system)

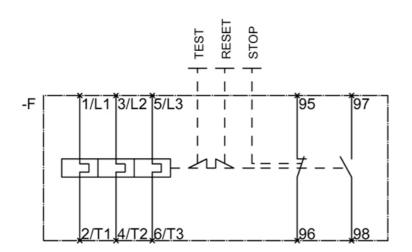
http://www.siemens.com/industrial-controls/mall

http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RU2116-0AC1/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-0AC1





last change:

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