SIEMENS

Product data sheet

3RU2116-1AB0



OVERLOAD RELAY 1.1...1.6 A FOR MOTOR PROTECTION SZ S00, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

General technical data

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	5.1
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	А	1.6
Service power / at AC-3		
• at 400 V / rated value	kW	0.55
• at 500 V / rated value	kW	0.75
• at 690 V / rated value	kW	1.1
Adjustable response current		
• of the current-dependent overload release	А	1.1 1.6
Operating current / of the fuse link / rated value	А	6

Contact reliability / of the auxiliary contactsI error per 100 million operating cyclesNumber of NC contacts / for auxiliary contactsINumber of NO contacts / for auxiliary contactsIOurse of change-over switches / for auxiliary contactsIOperating current / of the auxiliary contactsIof the auxiliary contactsIof at AC-15I• at AC-15I• at AC-15I• at 24 VIAA· at 210 VIAA· at 120 VIAA· at 230 VIAA· at 400 VIAA· at 400 VIAA· at 110 VIAA· at 110 VIAA· at 230 VIAA· at 125 VIAA· at 125 VIAA· at 120 VIAA· at 120 VIAA· at 120 VIAA· at 120 VIAA· at 230 VIAA· at 125 VIAA· at 120 VIAA· at 1	Auxiliary circuit:		
Number of NO contacts / for auxiliary contacts1Number of change-over switches / for auxiliary contacts0Operating current / of the auxiliary contacts-• at AC-15A• at AC-15A• at 24 VA• at 110 VA• at 120 VA• at 125 VA• at 230 VA• at 400 VA• at 24 VA• at 210 VA• at 230 VA• at 230 VA• at 230 VA• at 230 VA• at 100 VA• at 24 VA• at 25 VA• at 24 VA• at 24 VA• at 110 VA• at 125 VA <th>Contact reliability / of the auxiliary contacts</th> <th></th> <th>< 1 error per 100 million operating cycles</th>	Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles
Number of change-over switches / for auxiliary contacts0Operating current / of the auxiliary contactsImage: contact of the auxiliary contact of	Number of NC contacts / for auxiliary contacts	-	1
Operating current / of the auxiliary contacts Image: mail of the auxiliary contacts Image: mail of the auxiliary contacts • at AC-15 A 3 • at 24 V A 3 • at 10 V A 3 • at 120 V A 3 • at 125 V A 3 • at 230 V A 2 • at 400 V A 1 • at 24 V A 1 • at 25 V A 1 • at 230 V A 2 • at 400 V AA 1 • at 24 V A 1 • at 10 V A 0.22 • at 110 V A 0.22	Number of NO contacts / for auxiliary contacts		1
• at AC-15 Image: Constraint of the second seco	Number of change-over switches / for auxiliary contacts		0
• at 24 VA3• at 10 VAA3• at 120 VAA3• at 125 VAA3• at 230 VAA2• at 400 VAA1• at 24 VAA1• at 110 VAA0.22• at 125 VAA0.22	Operating current / of the auxiliary contacts	-	
• at 10 VA3• at 120 VA3• at 125 VA3• at 230 VA2• at 400 VAA1• at 24 VA1• at 110 VA1• at 125 VA0.22	• at AC-15		
• at 120 VA3• at 125 VA3• at 230 VA2• at 400 VA1• at DC-13• at 24 VA1• at 110 VA0.22• at 125 VA0.22	• at 24 V	А	3
• at 125 VA3• at 230 VA2• at 400 VA1• at DC-13• at 24 VA1• at 110 VA0.22• at 125 VA0.22	• at 110 V	А	3
・at 230 V A 2 ・at 400 V A 1 ・at DC-13 - - ・at 24 V A 1 ・at 110 V A 0.22 ・at 125 V A 0.22	• at 120 V	А	3
• at 400 V A 1 • at DC-13 A 1 • at 24 V A 1 • at 110 V A 0.22 • at 125 V A 0.22	• at 125 V	А	3
• at DC-13 A 1 • at 24 V A 1 • at 110 V A 0.22 • at 125 V A 0.22	• at 230 V	А	2
• at 24 V A 1 • at 110 V A 0.22 • at 125 V A 0.22	• at 400 V	А	1
• at 110 V A 0.22 • at 125 V A 0.22	• at DC-13		
• at 125 V A 0.22	• at 24 V	А	1
	• at 110 V	А	0.22
• at 220 V A 0.11	• 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)
-	-

 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				
 with conductor end processing 		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 suitability		CE / UL	/ CSA	
• ATEX	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)

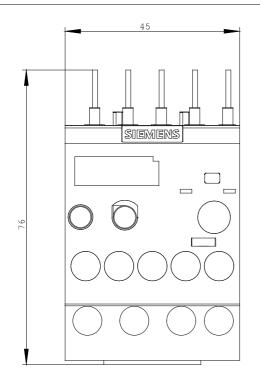
http://www.siemens.com/industrial-controls/mall

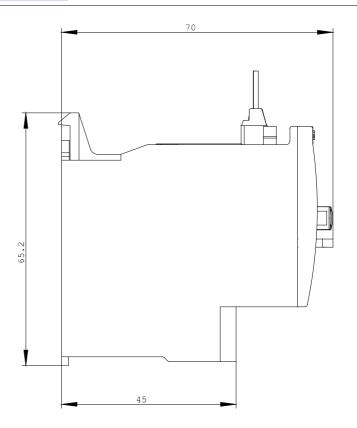
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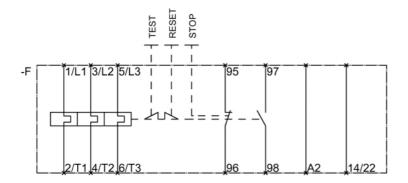
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RU2116-1AB0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-1AB0







last change:

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