SIEMENS

Product data sheet

3RU2116-0BB1



OVERLOAD RELAY 0.14...0.20 A FOR MOTOR PROTECTION SZ S00, CLASS 10, STAND-ALONE INSTALLATION MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW 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	4.3
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	0.2
Service power / at AC-3		
• at 400 V / rated value	kW	0.06
• at 500 V / rated value	kW	0.09
• at 690 V / rated value	kW	0.09
Adjustable response current		
• of the current-dependent overload release	А	0.14 0.2
Operating current / of the fuse link / rated value	А	1

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
Built in orientation		vertical
Type of mounting		stand-alone installation
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 4 mm2)
• stranded		2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2), 2x 0.5 mm2 2x 4 mm2
finely stranded		
with conductor end processing		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

				locations	
coc	CSA	ROSTEST		DEKRA EXAM, DMT	Manufacturer
Shipping Approval					
ABS	ĴÅ DNV DNV	GL	Llovd's Register	PRS	RINA
Shipping Approval	other				
Contras.	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)

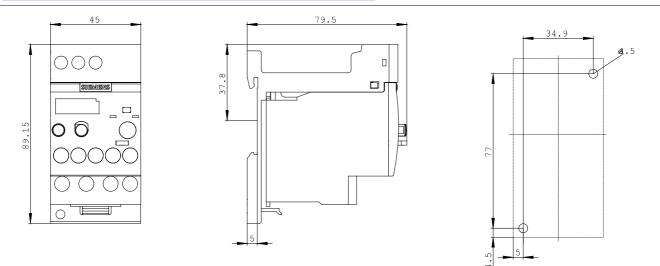
http://www.siemens.com/industrial-controls/mall

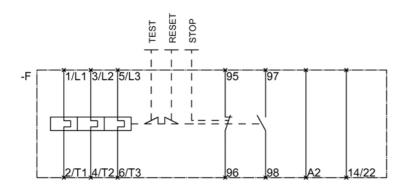
Cax online generator:

http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RU2116-0BB1/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-0BB1





last change:

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