SIEMENS

Product data sheet 3RU2116-4AB1



OVERLOAD RELAY 11...16 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	6.3		
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	Α	16		
Service power / at AC-3				
• at 400 V / rated value	kW	7.5		
• at 500 V / rated value	kW	7.5		
at 690 V / rated value	kW	11		
Adjustable response current				
of the current-dependent overload release	Α	11 16		
Operating current / of the fuse link / rated value	Α	40		

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		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 suitab	oility			CE / UI	L/CSA	
• ATEX				No		
General Product Ap	pproval				For use in hazardous locations	Test Certificates
APS)		ROSTEST			DEKRA EXAM,	Manufacturer

Shipping Approval







GL





DMT



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,...)

 $\underline{\text{http://www.siemens.com/industrial-controls/catalogs}}$

Industry Mall (Online ordering system)

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

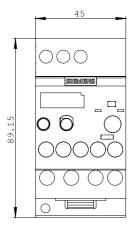
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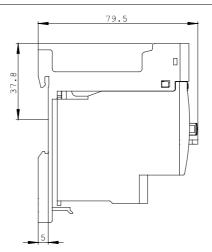
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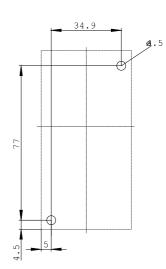
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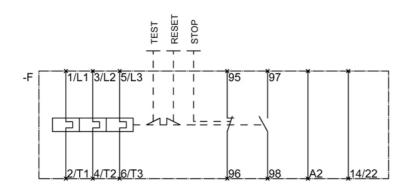
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-4AB1









last change: Oct 17, 2011