SIEMENS

Product data sheet 3RU2116-1HB1



OVERLOAD RELAY 5.5...8.0 A FOR MOTOR
PROTECTION SZ S00,
CLASS 10,
STAND-ALONE INSTALLATION MAIN CIRCUIT: SCREW
TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUALAUTOMATIC-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		6	
Active power loss / total / typical	W	6	
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	8		
Service power / at AC-3				
• at 400 V / rated value	kW	3		
• at 500 V / rated value	kW	4		
• at 690 V / rated value	kW	5.5		
Adjustable response current				
of the current-dependent overload release	Α	5.5 8		
Operating current / of the fuse link / rated value	Α	25		

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	fuse gG: 10 A
auxiliary switch / required	

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)

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Certificates/app	provals:					
Verification of su	iitability			CE / U	L/CSA	
• ATEX				No		
General Produc	et Approval				For use in hazardous locations	Test Certificates
coc	S	ROSTEST	UL		DEKRA EXAM, DMT	Manufacturer
Shipping Appro	oval					

GL

ABS 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	high demand rate / according to SN 31920 %			
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

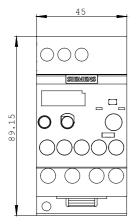
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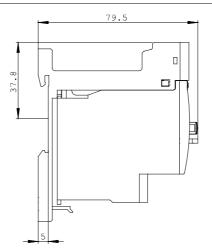
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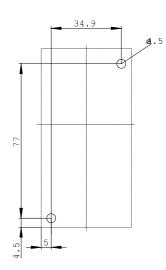
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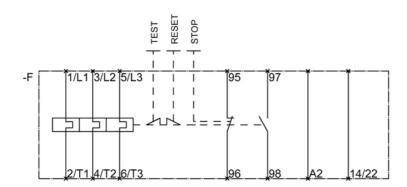
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-1HB1









last change: Oct 17, 2011