SIEMENS

Product data sheet

3RU2116-1DC0



OVERLOAD RELAY 2.2...3.2 A FOR MOTOR PROTECTION SZ S00, CLASS 10, F. MOUNTING ONTO CONTACTOR 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	5.2	
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	3.2
Service power / at AC-3		
• at 400 V / rated value	kW	1.1
• at 500 V / rated value	kW	1.5
• at 690 V / rated value	kW	2.2
Adjustable response current		
• of the current-dependent overload release	А	2.2 3.2
Operating current / of the fuse link / rated value	А	10

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		
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:

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
Type of the connectable conductor cross-section	
for main contacts	
• solid	2x (0.5 4 mm2)
• stranded	2x (0.5 4 mm2)
finely stranded	
with conductor end processing	2 x (0.5 2.5 mm2)
without conductor final cutting	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 suitabi	lity			CE / UL	/ CSA	
• ATEX				No		
General Product Ap	proval				For use in hazardous locations	Test Certificates
coc	(SA)	ROSTEST			DEKRA EXAM, DMT	Manufacturer
Shipping Approval						
ABS		GL	Lloyd's Kegister Lrs		PRS	RINA
Shipping Approval	other					
RMRS	Manufacturer					

Reliability figures:			
Mean time to failure (MTTF) / with high demand rate		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

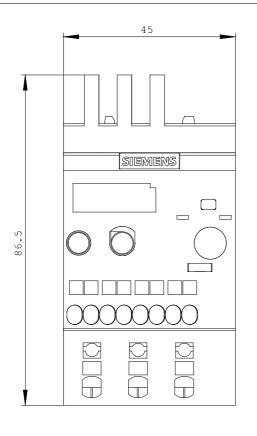
Industry Mall (Online ordering system)

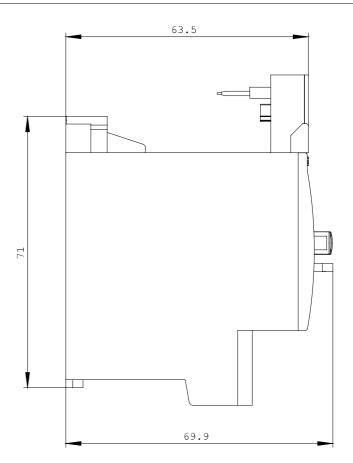
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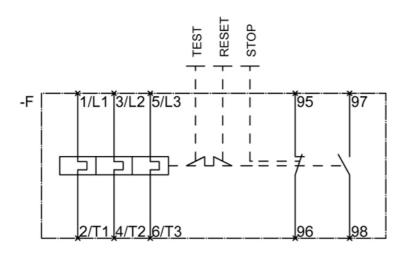
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RU2116-1DC0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-1DC0







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