SIEMENS

Product data sheet 3RU2116-0CB1



OVERLOAD RELAY 0.18...0.25 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	4.1
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	Α	0.25	
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	0.12	
Adjustable response current			
of the current-dependent overload release	Α	0.18 0.25	
Operating current / of the fuse link / rated value	Α	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	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
		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

coc



ROSTEST



 $\frac{\mathsf{DEKRA}\;\mathsf{EXAM},}{\mathsf{DMT}}$

Manufacturer

Shipping Approval







GL







Shipping Approval

other



Manufacturer

UL/CSA ratings:		
Contact rating designation / for auxiliary contacts / according to UL		B600 / R300
Reliability figures:		
Mean time to failure (MTTF) / with high demand rate	2	2 280

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:

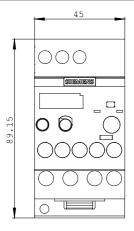
http://www.siemens.com/cax

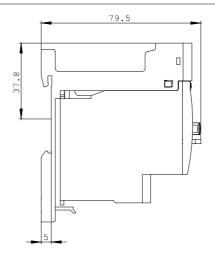
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

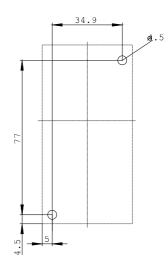
http://support.automation.siemens.com/WW/view/en/3RU2116-0CB1/all

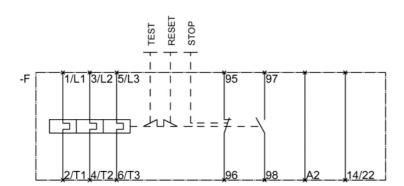
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-0CB1









last change: Oct 24, 2011