## **SIEMENS**

Product data sheet 3RU2116-1GB1



OVERLOAD RELAY 4.5...6.3 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	kV	6	
Active power loss / total / typical	W	5.7	
Item designation			
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		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	6.3	
Service power / at AC-3			
• at 400 V / rated value	kW	2.2	
• at 500 V / rated value	kW	3	
• at 690 V / rated value	kW	4	
Adjustable response current			
of the current-dependent overload release	Α	4.5 6.3	
Operating current / of the fuse link / rated value	Α	20	

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	

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	
<ul> <li>with conductor end processing</li> </ul>	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:		OF / ! !!	1,004	
Verification of suitability		CE / UI	L/CSA	
• ATEX		No		
General Product Approval			For use in hazardous locations	Test Certificates
(SP	ROSTEST		DEKRA EXAM, DMT	Manufacturer







GL







**Shipping Approval** 

other



Manufacturer

Reliability figures:			
а	2,280		
%	50		
%	50		
FIT	50		
а	20		
	finger-safe		
	% % FIT		

## 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

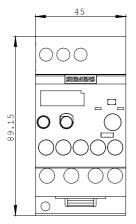
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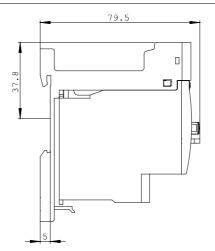
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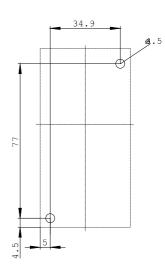
http://support.automation.siemens.com/WW/view/en/3RU2116-1GB1/all

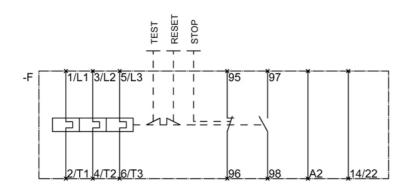
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$ 

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RU2116-1GB1









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