

OVERLOAD RELAY 3.5...5.0 A FOR MOTOR  
PROTECTION SZ S00,  
CLASS 10,  
F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: RING  
CABLE LUG AUX. CIRCUIT: RING CABLE LUG MANUAL-  
AUTOMATIC-RESET

### General technical data:

<b>Product brand name</b>		SIRIUS
<b>product designation</b>		3RU2 thermal overload relay
<b>Protection class IP / on the front</b>		IP20
<b>Insulation voltage / with degree of pollution 3</b>		
• rated value	V	690
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Ambient temperature</b>		
• during transport	°C	-55 ... 80
• during storage	°C	-55 ... 80
• during operating	°C	-40 ... 70
<b>Relative humidity</b>		
• during operating phase	/ %	90
<b>Resistance against shock</b>		8g / 10 ms
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Active power loss / total / typical</b>	W	6.1
<b>Item designation</b>		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
• according to DIN EN 61346-2		F

<b>Trip class</b>		CLASS 10
<b>Type of assignment</b>		2
<b>Size of overload relay</b>		S00
<b>Size of the contactor / can be combined</b> • company-specific		S00

<b>Main circuit:</b>		
<b>Number of poles / for main current circuit</b>		3
<b>Operating voltage / at AC-3 / rated value</b> • maximum	V	690
<b>Operating current / at AC-3 / at 400 V</b> • rated value	A	5
<b>Service power / at AC-3</b> • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value	kW kW kW	1.5 2.2 4
<b>Adjustable response current</b> • of the current-dependent overload release	A	3.5 ... 5
<b>Operating current / of the fuse link / rated value</b>	A	20

<b>Auxiliary circuit:</b>		
<b>Contact reliability / of the auxiliary contacts</b>		< 1 error per 100 million operating cycles
<b>Number of NC contacts / for auxiliary contacts</b>		1
<b>Number of NO contacts / for auxiliary contacts</b>		1
<b>Number of change-over switches / for auxiliary contacts</b>		0
<b>Operating current / of the auxiliary contacts</b> • at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V • at 400 V • at DC-13 • at 24 V • at 110 V • at 125 V • at 220 V	A A A A A A A A A A A A A	3 3 3 3 2 1  1 0.22 0.22 0.11

<b>Short-circuit:</b>		
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<b>Design of the fuse link / for short-circuit protection of the auxiliary switch / required</b>		fuse gG: 10 A
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### Installation/mounting/dimensions:

<b>Built in orientation</b>		vertical
<b>Type of mounting</b>		direct mounting
<b>Width</b>	mm	45
<b>Height</b>	mm	87
<b>Depth</b>	mm	73
<b>Distance, to be maintained, to the ranks assembly</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
<b>Distance, to be maintained, to earthed part</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
<b>Distance, to be maintained, conductive elements</b>		
• forwards	mm	0
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6

### Connections:

<b>Design of the electrical connection</b>		
• for main current circuit		ring cable connection
• for auxiliary and control current circuit		ring cable connection
<b>Product function / removable terminal for auxiliary and control circuit</b>		No

### Certificates/approvals:

<b>Verification of suitability</b>		CE / UL / CSA
• ATEX		No

General Product Approval	For use in hazardous locations	Test Certificates
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CQC



CSA

[ROSTEST](#)



UL

[DEKRA EXAM, DMT](#)

[Manufacturer](#)

#### Shipping Approval



ABS



DNV



GL



LRS



PRS



RINA

#### Shipping Approval

other

[Manufacturer](#)



RMRS

#### Reliability figures:

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

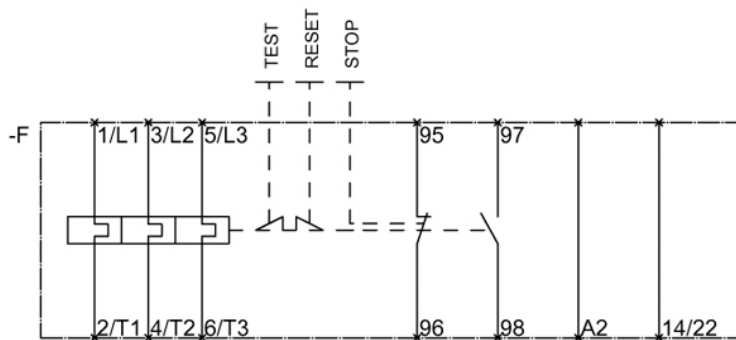
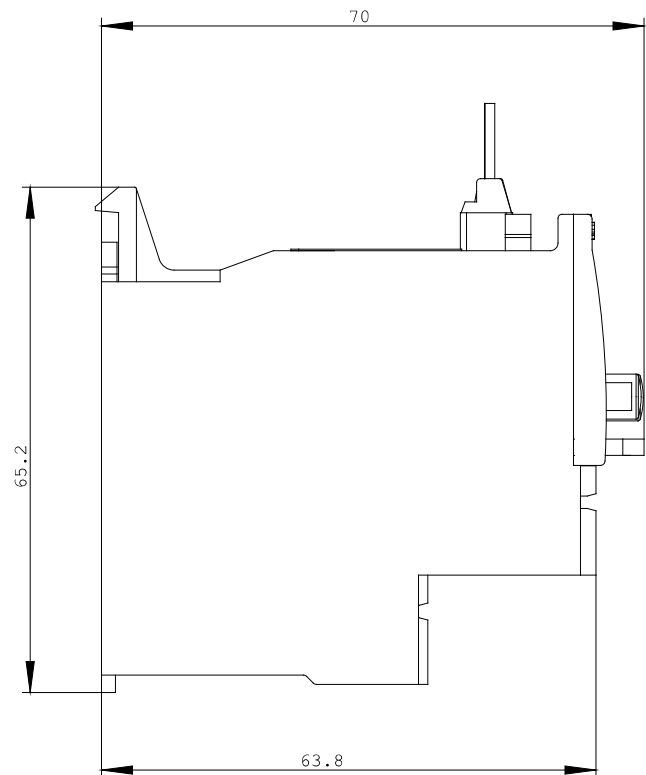
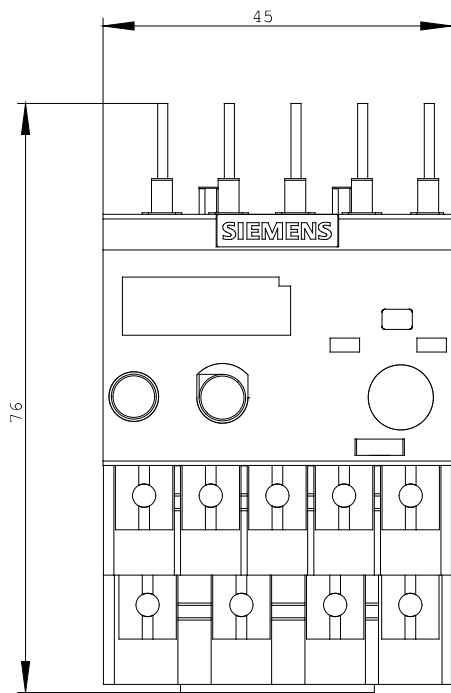
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RU2116-1FJ0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RU2116-1FJ0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-1FJ0)



last change:

Oct 17, 2011