



OVERLOAD RELAY 3.5...5.0 A FOR MOTOR  
PROTECTION SZ S0,  
CLASS 10,  
F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT:  
SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL  
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>		S0
<b>Size of the contactor / can be combined</b> • company-specific		S0

<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
<b>Installation/mounting/dimensions:</b>		
<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
<b>Connections:</b>		
<b>Design of the electrical connection</b>		
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		screw-type terminals
<b>Product function / removable terminal for auxiliary and control circuit</b>		No
<b>Type of the connectable conductor cross-section</b>		
• for main contacts		
• solid		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )
• stranded		2x (1.0 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )
• finely stranded		
• with conductor end processing		2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>
• for AWG conductors / for main contacts		2x (16 ... 12), 2x (14 ... 8)

- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14)

#### Certificates/approvals:

##### Verification of suitability

- ATEX

CE / UL / CSA

No

##### General Product Approval

For use in  
hazardous  
locations

##### Test Certificates



CQC



CSA

[ROSTEST](#)



UL

[DEKRA EXAM,](#)  
[DMT](#)

[Manufacturer](#)

##### Shipping Approval



ABS



DNV



GL



LRS



PRS



RINA

##### Shipping Approval

other



RMRS

[Manufacturer](#)

#### 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
- with high demand rate / according to SN 31920

%

50

%

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,...)

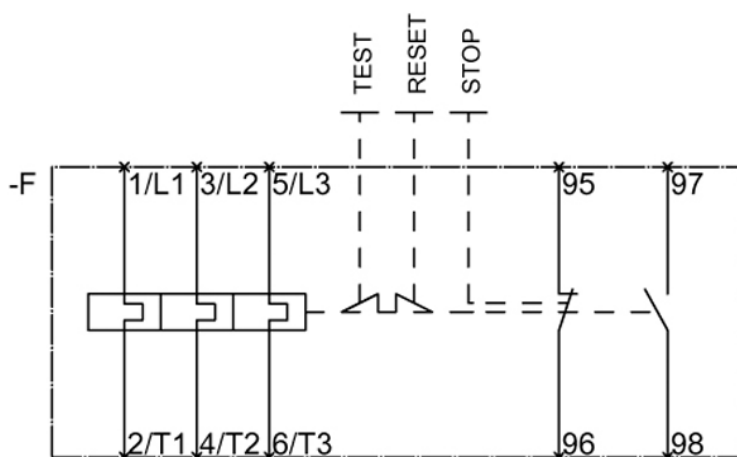
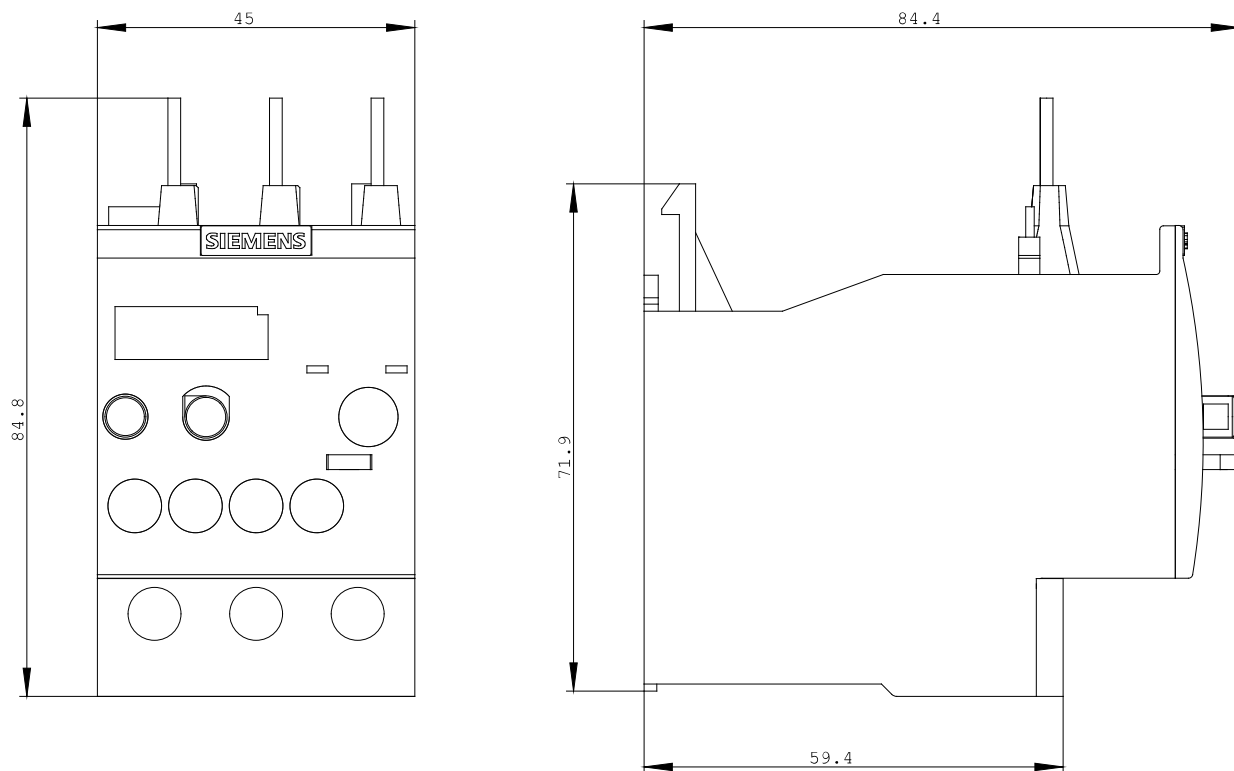
<http://www.siemens.com/industrial-controls/catalogs>

##### Industry Mall (Online ordering system)

<http://www.siemens.com/industrial-controls/mall>

##### Cax online generator:

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



last change:

Oct 17, 2011