

### THERM. OVERLOAD RELAY 1.1 - 1.6 A

#### General technical data:

<b>Product brand name</b>		SIRIUS
<b>Protection class IP / frontal/front side</b>		IP20
<b>Insulation voltage / with degree of pollution 3</b>		
• rated value	V	690
<b>Altitude of installation site / 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 the operating phase	°C	-40 ... 70
<b>Relative humidity</b>		
• during the operating phase	/ %	90
<b>Resistance against shock</b>		8g / 10 ms
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Real loss power / total / typical</b>	W	3.9
<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

#### Main circuit:

<b>Number of poles / for main current circuit</b>		3
<b>Operating voltage / at 3 AC / rated value</b>		
• maximum	V	690
<b>Operating current / at AC-3 / at 400 V</b>		
• rated value	A	1.6
<b>Service power / at AC-3</b>		
• at 400 V / rated value	kW	0.55

• at 500 V / rated value	kW	0.75
• at 690 V / rated value	W	1,100
<b>Adjustable response current</b>		
• of the current-dependent overload release	A	1.1 ... 1.6
<b>Operating current / of the fuse link / rated value</b>	A	6

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

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

Installation/mounting/dimensions:		
<b>built in orientation</b>		vertical
<b>Type of fixing/fixation</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		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		
• unifilar		2 x (0.5 ... 1.5 mm <sup>2</sup> ), 2 x (0.75 ... 2.5 mm <sup>2</sup> ), 2 x (0.5 ... 4 mm <sup>2</sup> )
• stranded wire		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 0.5 mm <sup>2</sup> ... 2x 4 mm <sup>2</sup>
• stranded wire		
• with conductor end processing		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• at AWG-conductors / for main contacts		2x (20 ... 16), 2x (18 ... 14)
• for auxiliary contacts		
• solid		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• finely stranded		
• with wire end processing		2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
• for AWG conductors / for auxiliary contacts		2x (20 ... 16), 2x (18 ... 14)

#### Certificates/approvals:

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

#### Safety:

<b>Mean time to failure (MTTF) / with high demand rate</b>		
• according to SN 31920	a	2,280
<b>Proportion of dangerous failures</b>		

• with low demand rate / according to SN 31920	%	50
• with high demand rate / according to SN 31920	%	50
<b>Failure rate (FIT value) / with low demand rate</b>		
• according to SN 31920	FIT	50
<b>T1 value / for proof test interval or service life</b>		
• according to IEC 61508	a	20
<b>Protection against electrical shock</b>		finger-safe

#### Further information:

##### Information- and Downloadcenter (Catalogs, Brochures,...)

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

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

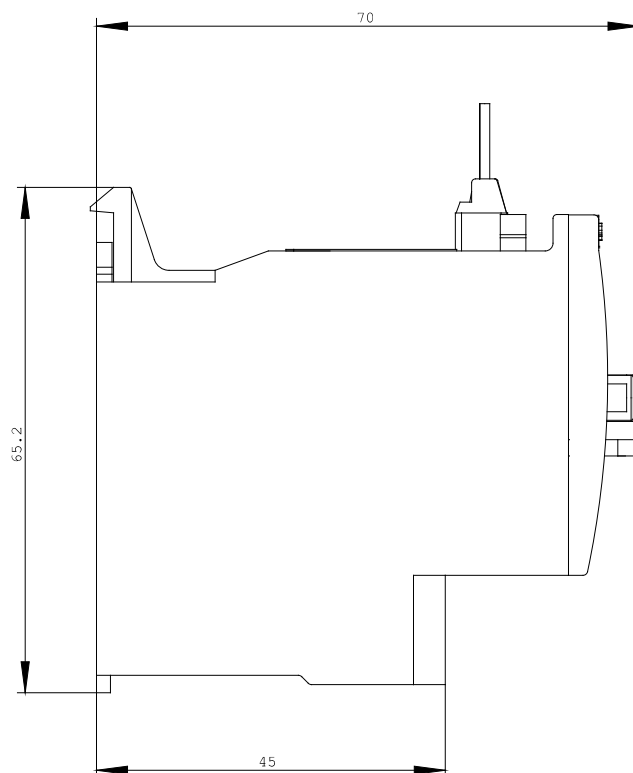
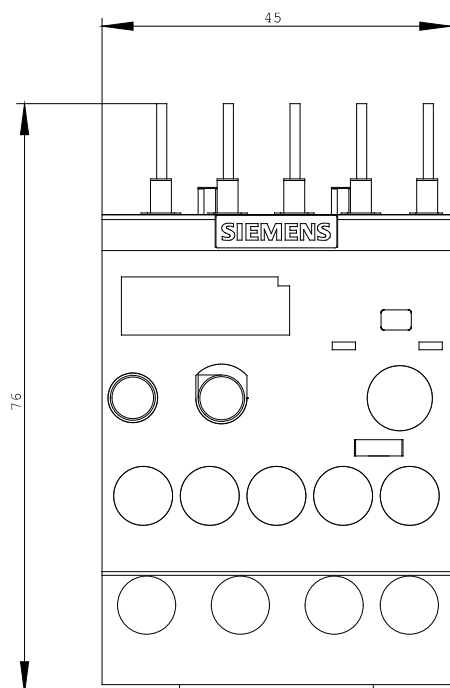
<http://www.siemens.com/industrial-controls/mall>

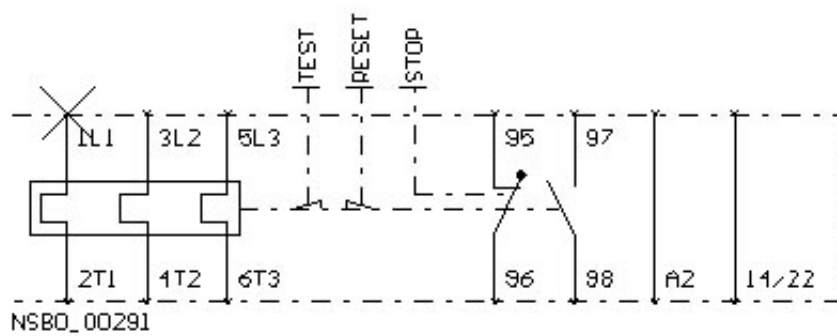
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RU2116-1AB0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RU2116-1AB0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-1AB0)





last change:

Apr 26, 2010