

OVERLOAD RELAY 9.0...12.5 A FOR MOTOR  
 PROTECTION BGR S00,  
 CLASS 10 STAND-ALONE INSTALLATION MAIN CIRCUIT:  
 SPRING-LOADED

**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> <ul style="list-style-type: none"> <li>• rated value</li> </ul>	V	690
<b>Altitude of installation site / at a height over sea level / maximum</b>	m	2,000
<b>Ambient temperature</b> <ul style="list-style-type: none"> <li>• during transport</li> <li>• during storage</li> <li>• during the operating phase</li> </ul>	°C	-55 ... 80
	°C	-55 ... 80
	°C	-40 ... 70
<b>Relative humidity</b> <ul style="list-style-type: none"> <li>• during the operating phase</li> </ul>	/ %	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> <ul style="list-style-type: none"> <li>• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> <li>• according to DIN EN 61346-2</li> </ul>		F
		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> <ul style="list-style-type: none"> <li>• company-specific</li> </ul>		S00

**Main circuit:**

<b>Number of poles / for main current circuit</b>		3
<b>Operating voltage / at 3 AC / rated value</b> <ul style="list-style-type: none"> <li>• maximum</li> </ul>	V	690
<b>Operating current / at AC-3 / at 400 V</b> <ul style="list-style-type: none"> <li>• rated value</li> </ul>	A	12.5

<b>Service power / at AC-3</b>		
• at 400 V / rated value	kW	5.5
• at 500 V / rated value	kW	7.5
• at 690 V / rated value	W	7,500
<b>Adjustable response current</b>		
• of the current-dependent overload release	A	9 ... 12.5
<b>Operating current / of the fuse link / rated value</b>	A	35

#### 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
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#### 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		spring-loaded terminals
• for auxiliary and control current circuit		spring-loaded 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		2x (0.5 ... 4 mm <sup>2</sup> )
• stranded wire		2x (0.5 ... 4 mm <sup>2</sup> )
• stranded wire		
• with conductor end processing		2 x (0.5 ... 2.5 mm <sup>2</sup> )
• without conductor final cutting		2x (0.5 ... 2.5 mm <sup>2</sup> )
• at AWG-conductors / for main contacts		1x (20 ... 12)
• for auxiliary contacts		
• solid		2x (0.5 ... 2.5 mm <sup>2</sup> )
• finely stranded		
• with wire end processing		2x (0.5 ... 1.5 mm <sup>2</sup> )
• without conductor final cutting		2 x (0.5 ... 1.5 mm <sup>2</sup> )
• for AWG conductors / for auxiliary contacts		2x (20 ... 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 • with high demand rate / according to SN 31920	% %	50 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)**

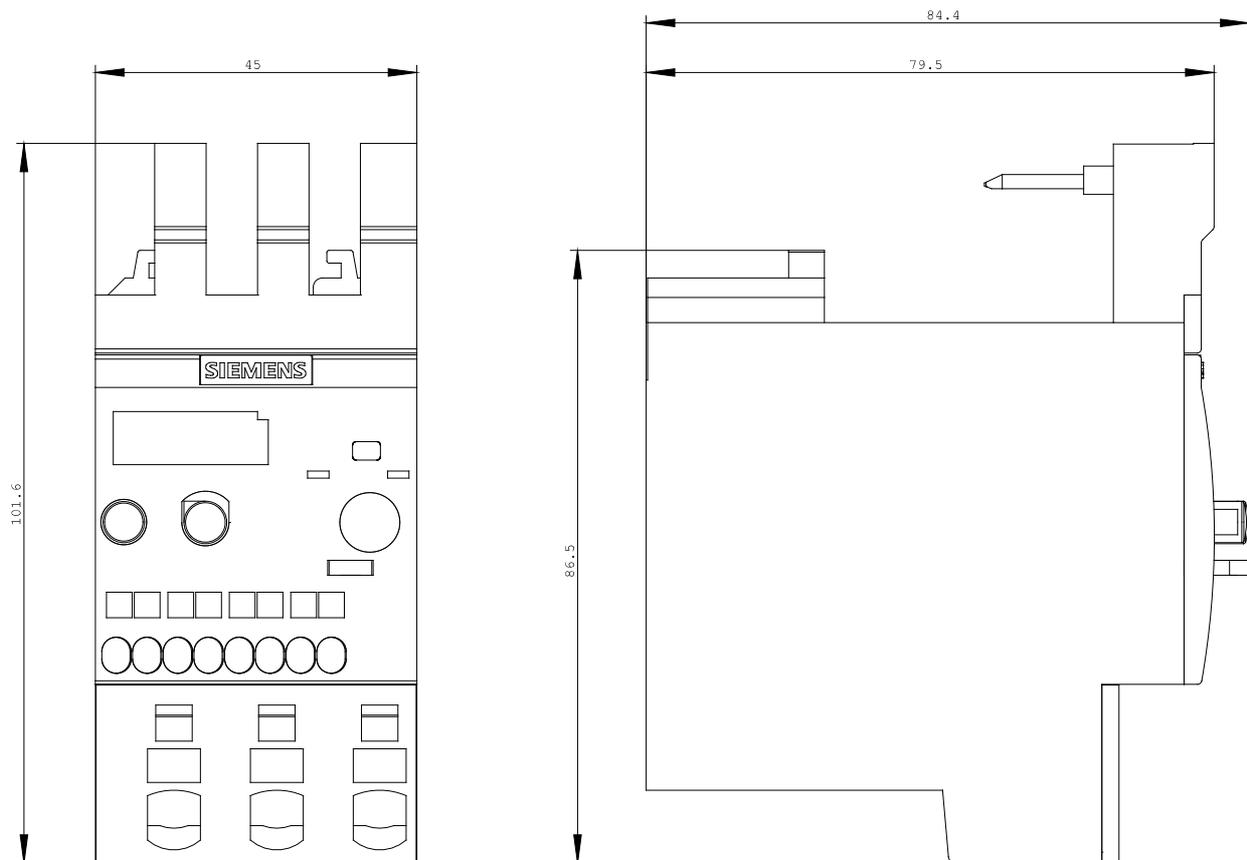
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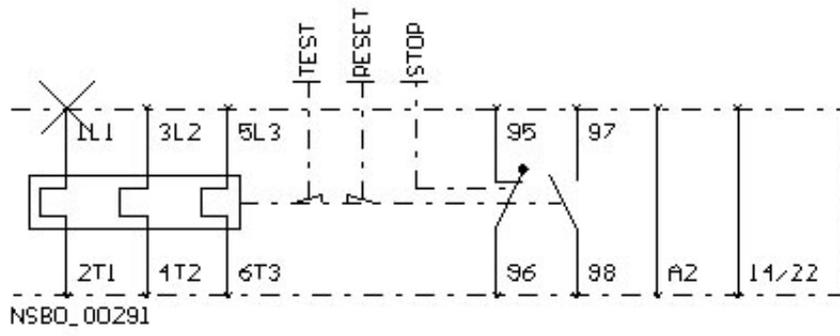
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<http://support.automation.siemens.com/WW/view/en/3RU2116-1KC0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RU2116-1KC0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-1KC0)





last change:

Apr 26, 2010