SIEMENS

Product data sheet 3RU2116-1BC0

THERM. OVERLOAD RELAY 1.4 - 2.0 A

General technical data:		
Product brand name		SIRIUS
Protection class IP / frontal/front side		IP20
Insulation voltage / with degree of pollution 3		
• rated value	V	690
Altitude of installation site / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during transport	°C	-55 … 80
• during storage	°C	-55 … 80
• during the operating phase	°C	-40 … 70
Relative humidity		
• during the operating phase	/ %	90
Resistance against shock		8g / 10 ms
Impulse voltage resistance / rated value	kV	6
Real loss power / total / typical	W	3.9
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		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 3 AC / rated value		
• maximum	V	690
Operating current / at AC-3 / at 400 V		
• rated value	A	2
Service power / at AC-3		
• at 400 V / rated value	kW	0.75

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• at 500 V / rated value	kW	0.75
• at 690 V / rated value	W	1,100
Adjustable response current		
• of the current-dependent overload release	A	1.4 … 2
Operating current / of the fuse link / rated value	A	6

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles
Number of NC contacts / for auxiliary contact		1
Number of NO contacts / for auxiliary contact		1
Number of change-over switches / for auxiliary contact		0
Operating current / of the auxiliary contacts		
• 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:		
Design of the fuse link / for short-circuit protection of the auxiliary switch / required		fuse gG: 10 A

Installation/mounting/dimensions:		
built in orientation		vertical
Type of fixing/fixation		direct mounting
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

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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		spring-loaded terminals
• for auxiliary and control current circuit		spring-loaded terminals
Product function / removable terminal for auxiliary and control circuit		No
Type of the connectable conductor cross-section		
• for main contacts		
• unifilar		2x (0.5 ... 4 mm2)
• stranded wire		2x (0.5 ... 4 mm2)
• stranded wire		
• with conductor end processing		2 x (0.5 ... 2.5 mm2)
• without conductor final cutting		2x (0.5 ... 2.5 mm2)
• at AWG-conductors / for main contacts		1x (20 ... 12)
• for auxiliary contacts		
• solid		2x (0.5 ... 2.5 mm2)
• finely stranded		
• with wire end processing		2x (0.5 ... 1.5 mm2)
• without conductor final cutting		2 x (0.5 ... 1.5 mm2)
• for AWG conductors / for auxiliary contacts		2x (20 ... 14)

Certificates/approvals:

verification of suitability		CE / UL / CSA
• ATEX		No

Safety:

Mean time to failure (MTTF) / with high demand rate		
• according to SN 31920	a	2,280

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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

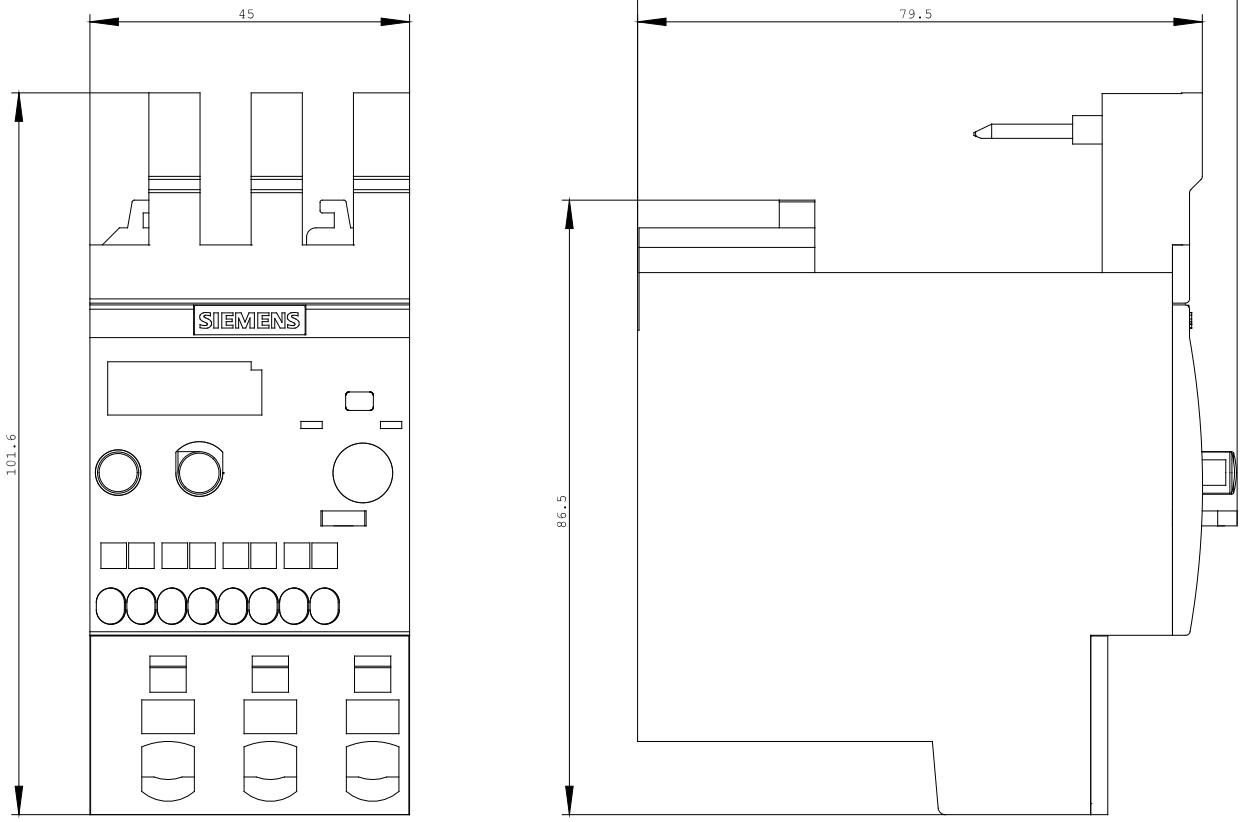
Further information:

Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

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/3RU2116-1BC0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-1BC0



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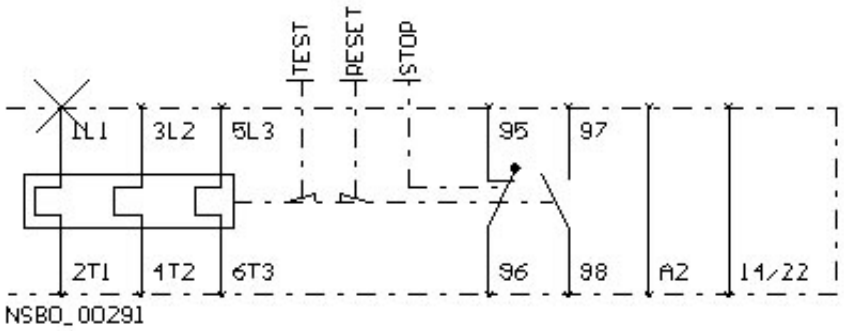

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