SIEMENS

Product data sheet

3RU1116-1JB0



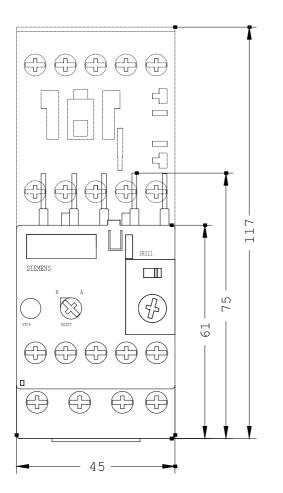
OVERLOAD RELAY, 7...10 A, 1NO+1NC, SIZE S00, CLASS 10, FOR CONTACTOR MOUNTING

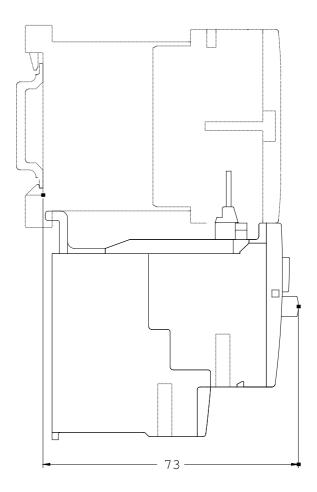
General technical details:		
Product brand name		SIRIUS
Product designation		thermal overload relay
Protection class IP / frontal/front side		IP20
Insulation voltage / with degree of pollution 3 / rated value	V	690
Altitude of installation site / at a height over sea level / maximum	m	2,000
Ambient temperature		
 during the operating phase 	°C	-20 70
during storage	°C	-55 80
during transport	°C	-55 80
Relative humidity / during the operating phase / maximum	%	100
Resistance against shock		8g / 10 ms
Impulse voltage resistance / rated value	kV	6
Real loss power / total / typical	W	6.6
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		F
according to DIN EN 61346-2		F
Operating current / of the fuse link / rated value	A	35
Trip class		CLASS 10

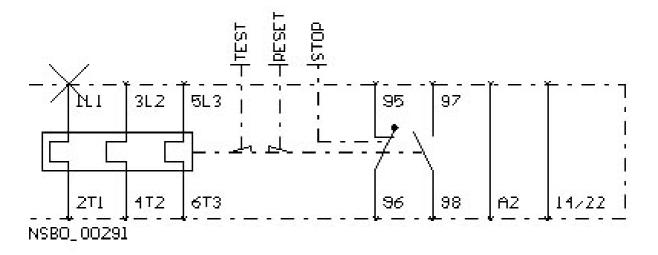
Type of predectionDMT 98 ATEX G 001Size of verioad relayS00Size of the contactor / can be combined / company-specificS00Protection against electrical shockS00Main circuit:S00Mumber of poles / for main current circuit3Operating voltage / at 3 AC / rated value3• maximumV• end 00 /KW• end 00 /KW• end 00 /KW• do 0 /• do 0 /KW• do 0 /KW• do 0 /KW• do 0 /KW• do 0 /A• do 0 /KW• do 0 /A• do 0 /A• do 0 /A• do 0 /A• do 0 /ANumber of NC contacts1• at 24 /A• at 120 /A• at 120 /A• at 400 /A• at 24 /A• at 25 /A• at 26 /A• at 26 /A• at 27 /A• at 28 /A• at 29 /A	Type of assignement		2
Size of overlead relay S00 Size of the contactor / can be combined / company-specific S00 Protection against electrical shock inger-safe Main circuit: Imager-safe Number of poles / for main current circuit V 800 Operating workage / at 3 AC / rated value V 800 • inaximum V 800 Service power / at AC-3 V 800 • at 400 V KW 4 Adjustable response current A 7 10 • of the current-dependent overload release A 7 10 Number of NC contacts I 1 Number of Contacts I 1 Number of Contacts I 1 Number of Contacts I I • at 24 V A 3 • at 10 V A 3 • at 120 V A 3 • at 24 V A 3 • at 24 V A 3 • at 20 V A 3 • at 20 V A 3 • at 24 V A 3 • at 10 V A 2 • at 10 V A 3 • at 10 V A 3 • at 24 V <th>Type of protection</th> <th></th> <th>DMT 98 ATEX G 001</th>	Type of protection		DMT 98 ATEX G 001
Protection against electrical shock Imger-safe Main circuit: 3 Number of poles / for main current circuit 3 Operating voltage / at 3 AC / rated value 4 • maximum V 690 Service power / at AC-3 - • at 400 V KW 4 Adjustable response current - - • of the current-dependent overload release A 7 10 Auxiliary circuit: - - Contact reliability / of the auxiliary contacts acceptability for PLC control (17 V, 5 mA) Number of NC contacts 1 - Number of NC contacts 0 0 Number of NC contacts - - val 24 V A 3 • at 10 V AA 3 • at 24 V A 2 • at 24 V A 2 • at 24 V A 2		_	S00
Name of poles / for main current circuit 3 Operating voltage / at 3 AC / rated value - • maximum V 680 Service power / at AC-3 - • at 400 V KW 4 Adjustable response current - - • of the current-dependent overload release A 7 10 Auxilary circuit: - - Number of NC contacts - 1 Number of NC contacts - 1 Number of NC contacts - 0 Number of NC contacts - 0 • at 24 V A 3 - • at 24 V A 3 - • at 24 V A 3 - • at 20 V AA 3 - • at 20 V AA 3 - • at 24 V A 0	Size of the contactor / can be combined / company-specific	_	S00
Number of poles / for main current circuit 3 Operating voltage / at 3 AC / rated value V 690 • maximum V 690 Service power / at AC-3 KW 4 • al 400 V KW 4 Adjustable response current KW 4 • of the current-dependent overload release A 7 10 Auxiliary circuit: acceptability for PLC control (17 V. 5 mA) Number of NC contacts 1 1 Number of Change-over switches 0 0 Operating current / of the auxiliary contacts / at AC-15 1 1 • at 24 V AA 3 - • at 110 V AA 3 - • at 120 V AA 1 - • at 120 V AA 1 - • at 120 V AA 1 - • at 120 V	Protection against electrical shock		finger-safe
Operating voltage / at 3 AC / rated value V 650 • maximum V 650 Service power / at AC-3 KW 4 • at 400 V KW 4 Adjustable response current KW 4 • of the current-dependent overload release A 7 10 Auxiliary circuit: acceptability for PLC control (17 V, 5 mA) Number of NC contacts 1 1 Number of NC contacts 0 0 Operating current / of the auxiliary contacts / at AC-15 0 0 operating current / of the auxiliary contacts / at AC-15 0 0 operating current / of the auxiliary contacts / at AC-15 0 0 operating current / of the auxiliary contacts / at AC-15 0 0 operating current / of the auxiliary contacts / at AC-15 0 0 operating current / of the auxiliary contacts / at AC-15 0 0 operating current / of the auxiliary contacts / at AC-15 0 0 • at 120 V A 3 1 • at 125 V A 1 1 <	Main circuit:		
• maximumV690Service power / at AC-3 • at 400 VKW4Adjustable response current • of the current-dependent overload releaseA7Adjustable response current • of the current-dependent overload releaseA7Contact reliability / of the auxiliary contactsAacceptability for PLC control (17 V, 5 mA)Number of NC contactsI1Number of NC contactsI0Operating current / of the auxiliary contacts / at AC-15 • at 24 VA3• at 100 VAA33• at 120 VAA33• at 230 VAA33• at 24 VAA33• at 230 VAA11• at 24 VAA33• at 25 VAA33• at 220 VAA12• at 220 VAA1• at 220 VAA0.22• at 220 VA0.11Strict-circuitIsse gL/GS: 6 A, quick: 10 AStrict-circuitIsse gL/GS: 6 A, quick: 10 AInstallator/mounting/dimensions:Isse gL/GS: 6 A, quick: 10 AInstallator mounting surface +/-135° rotatable, with vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-455° rotatable, with vertical mounting rotace +/	Number of poles / for main current circuit		3
Service power / at AC-3 Mean • at 400 V KW 4 Adjustable response current A 7 • of the current-dependent overload release A 7 Outsiliary circuit: Contact reliability / of the auxiliary contacts A acceptability for PLC control (17 V, 5 mA) Number of NC contacts 1 1 Number of NC contacts 1 0 Operating current / of the auxiliary contacts / at AC-15 I 0 • at 24 V A 3 - • at 25 V A 3 - • at 20 V A 1 - • at 20 V A 2 - • at 20 V A 1 - • at 20 V A 1 - • at 20 V A 1 -	Operating voltage / at 3 AC / rated value		
• at 400 VKW4Adjustable response current • of the current-dependent overload releaseA7 10Auxillary circult:acceptability for PLC control (17 V, 5 mA)acceptability for PLC control (17 V, 5 mA)Number of NC contacts11Number of NC contacts10Operating current / of the auxiliary contacts / at AC-151• at 24 VA3• at 10 VA3• at 10 VA3• at 25 VA3• at 20 VA2• at 20 VA2• at 20 VA1• at 20 VA3• at 20 VA1• at 20 VA1• at 20 VA2• at 20 VA1• at 20 VA0.22• at 20 VA0.22• at 20 VA0.22• at 20 VA0.11• at 20 VA1• at 20 VA1• at 20 VA1• at 20 VA1• at 20 VA0.22• at 20 VA0.21• at 20 VA0.22• at 20 VA0.11• at 20 VA0.22 <th>• maximum</th> <th>V</th> <th>690</th>	• maximum	V	690
Adjustable response current • of the current-dependent overload releaseA7 10Auxillary circuit:acceptability for PLC control (17 V, 5 mA)Contact reliability / of the auxiliary contacts1Number of NC contacts1Number of NC contacts0Operating current / of the auxiliary contacts / at AC-150• at 24 VA3• at 10 VA3• at 25 VA3• at 230 VA2• at 24 VA3• at 100 VA3• at 125 VA3• at 24 VA3• at 125 VA3• at 220 VA1Operating current / of the auxiliary contacts / at DC-13	Service power / at AC-3		
A of the current-dependent overload releaseA7 10Auxiliary circuit:acceptability for PLC control (17 V, 5 mA)Number of NC contacts1Number of NC contacts1Number of NG contacts0Operating current / of the auxiliary contacts / at AC-15-• at 24 VA3• at 120 VA3• at 25 VA3• at 24 VA3• at 20 VA3• at 25 VA3• at 24 VA3• at 25 VA3• at 24 VA3• at 25 VA3• at 24 VA1• at 25 VA3• at 25 VA3• at 24 VA1• at 24 VA1• at 24 VA1• at 25 VA0.22• at 24 VA1• at 25 VA0.22• at 24 VA1• at 25 VA0.22• at 25 VA0.24• at 25 VA0.24• at 25 VA <th< th=""><th>• at 400 V</th><th>kW</th><th>4</th></th<>	• at 400 V	kW	4
Auxiliary circuit: Contact reliability / of the auxiliary contacts acceptability for PLC control (17 V, 5 mA) Number of NC contacts 1 Number of NO contacts 1 Number of Anage-over switches 0 Operating current / of the auxiliary contacts / at AC-15 - • at 24 V A 3 • at 10 V A 3 • at 120 V A 3 • at 230 V A 3 • at 24 V A 1 • at 25 V A 1 • at 20 V A 1 • at 20 V A 1 • at 25 V A 1 • at 20 V A 0.22 • at 210 V A 0.22 • at 22 V A 0.11 Short-circuit Itse gL/gG: 6 A, quick: 10 A • auxiliary switch / required Itse gL/gG: 6 A, quick: 10 A	Adjustable response current		
Contact reliability / of the auxiliary contactsacceptability for PLC control (17 V, 5 mA)Number of NC contacts1Number of NO contacts0Operating current / of the auxiliary contacts / at AC-150• at 24 VA3• at 10 VA3• at 120 VA3• at 230 VA2• at 24 VA1• at 20 VA0.22• at 20 VA0.22• at 20 VA0.11• at 20 VA0.11 </td <td>• of the current-dependent overload release</td> <td>А</td> <td>7 10</td>	• of the current-dependent overload release	А	7 10
Number of NC contactsINumber of NO contactsINumber of change-over switches0Operating current / of the auxiliary contacts / at AC-15I• at 24 \/A3• at 10 \/A3• at 120 \/A3• at 120 \/A3• at 24 \/A3• at 20 \/A1• at 20 \/A1• at 20 \/A1• at 20 \/A0.22• at 20 \/A0.22• at 24 \/A0.11• at 25 \/A0.22• at 20 \/A0.11Short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:Installation/mounting/dimensions:Listallation/mounting surface +/-135° rotatable, with vertical mounting surface +/-145° tittable to the front and back	Auxiliary circuit:		
Number of NO contacts1Number of change-over switches0Operating current / of the auxiliary contacts / at AC-15-• at 24 VA3• at 10 VA3• at 120 VA3• at 125 VA3• at 230 VA2• at 00 VA1Operating current / of the auxiliary contacts / at DC-13-• at 24 VA1• at 25 VA0.22• at 24 VA1• at 24 VA0.22• at 25 VA0.22• at 24 VA0.22• at 25 VA0.22• at 25 VA0.11Short-circuitDesign of the fuse link / for short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:built in orientationbuilt in orientationwith vertical mounting surface +/- 45° tiltable to the front and back	Contact reliability / of the auxiliary contacts		acceptability for PLC control (17 V, 5 mA)
Number of change-over switches0Operating current / of the auxiliary contacts / at AC-15-• at 24 VA• at 24 VA• at 110 VA• at 120 VA• at 125 VA• at 230 VA• at 400 VA• at 24 VA• at 230 VA• at 24 VA• at 25 VA• at 20 VA• at 20 VA• at 24 VA• at 24 VA• at 25 VA• at 24 VA• at 25 VA• at 220 VAOperating current / of the auxiliary contacts / at DC-13• at 220 VAShort-circuit:Design of the fuse link / for short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:built in orientationbuilt in orientation	Number of NC contacts		1
Operating current / of the auxiliary contacts / at AC-15A3• at 24 VA3• at 110 VA3• at 120 VA3• at 125 VA3• at 230 VA2• at 400 VA1Operating current / of the auxiliary contacts / at DC-13• at 24 VA1• at 210 VA0.22• at 24 VA0.22• at 210 VA0.22• at 210 VA0.11Short-circuitInstallation/mounting/dimensions:Installation/mounting/dimensions:built in orientationwith vertical mounting surface +/-45° tiltable to the front and back	Number of NO contacts		1
at 24 VA3• at 110 VA3• at 120 VA3• at 125 VA3• at 230 VA2• at 400 VA1Operating current / of the auxiliary contacts / at DC-13• at 24 VA1• at 210 VA0.22• at 110 VA0.22• at 125 VA0.11• at 220 VA0.11Short-circuitDesign of the fuse link / for short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:built in orientationbuilt in orientationwith vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-45° tiltable to the front and back	Number of change-over switches		0
• at 110 VA3• at 120 VA3• at 125 VA3• at 230 VA2• at 200 VA1• at 400 VA1Operating current / of the auxiliary contacts / at DC-13• at 24 VA1• at 110 VA0.22• at 125 VA0.22• at 125 VA0.22• at 220 VA0.11Short-circuitDesign of the fuse link / for short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:built in orientationwith vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-145° tiltable to the front and back	Operating current / of the auxiliary contacts / at AC-15		
• at 120 VA3• at 125 VA3• at 230 VA2• at 230 VA1• at 400 VA1Operating current / of the auxiliary contacts / at DC-13• at 24 VA1• at 24 VA0.22• at 110 VA0.22• at 125 VA0.22• at 220 VA0.11Short-circuitDesign of the fuse link / for short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:Unstallation/mounting/dimensions:built in orientationwith vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-45° tiltable to the front and back	• at 24 V	А	3
• at 125 VA3• at 230 VA2• at 230 VA1• at 400 VA1Operating current / of the auxiliary contacts / at DC-13• at 24 VA1• at 24 VA0.22• at 110 VA0.22• at 125 VA0.22• at 220 VA0.11Short-circuitDesign of the fuse link / for short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:built in orientationwith vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-145° tiltable to the front and back	• at 110 V	А	3
• at 230 VA2• at 400 VA1Operating current / of the auxiliary contacts / at DC-13-• at 24 VA1• at 24 VA0.22• at 110 VA0.22• at 125 VA0.22• at 220 VA0.11Short-circuitDesign of the fuse link / for short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:built in orientationwith vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-45° tiltable to the front and back	• at 120 V	А	3
• at 400 VA1Operating current / of the auxiliary contacts / at DC-13• at 24 VA1• at 110 VA0.22• at 125 VA0.22• at 220 VA0.11Short-circuitDesign of the fuse link / for short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:Duilt in orientationbuilt in orientationIwith vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-45° tiltable to the front and back	• at 125 V	А	3
Operating current / of the auxiliary contacts / at DC-13A1• at 24 VA1• at 10 VA0.22• at 125 VA0.22• at 220 VA0.11Short-circuit:Design of the fuse link / for short-circuit protection of the auxiliary switch / requiredfuse gL/gG: 6 A, quick: 10 AInstallation/mounting/dimensions:built in orientationwith vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-45° tiltable to the front and back	• at 230 V	А	2
• at 24 VA1• at 110 VA0.22• at 125 VA0.22• at 220 VA0.11Short-circuit:The sign of the fuse link / for short-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:Installation/mounting/dimensions:built in orientationwith vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-45° tiltable to the front and back	• at 400 V	А	1
• at 110 VA0.22• at 125 VA0.22• at 220 VA0.11Short-circuitShort-circuit protection of the auxiliary switch / requiredInstallation/mounting/dimensions:VVInstallation/mounting/dimensions:VWith vertical mounting surface +/-135° rotatable, with vertical mounting surface +/-45° tiltable to the front and back	Operating current / of the auxiliary contacts / at DC-13		
• at 125 V • at 220 VA 0.22 0.11Short-circuit:VDesign of the fuse link / for short-circuit protection of the auxiliary switch / requiredIsse gL/gG: 6 A, quick: 10 AInstallation/mounting/dimensions:Vbuilt in orientationVith vertical mounting surface +/- 135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back	• at 24 V	А	1
• at 220 VA0.11Short-circuit:Design of the fuse link / for short-circuit protection of the auxiliary switch / requiredImage: Short-circuit protection of the suiliary switch / requiredInstallation/mounting/dimensions:Image: Short-circuit protection of the suilit in orientationbuilt in orientationImage: Short-circuit protection of the front and back	• at 110 V	А	0.22
Short-circuit: Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: built in orientation with vertical mounting surface +/- 135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back	• at 125 V	А	0.22
Design of the fuse link / for short-circuit protection of the auxiliary switch / required fuse gL/gG: 6 A, quick: 10 A Installation/mounting/dimensions:	• at 220 V	А	0.11
auxiliary switch / required Installation/mounting/dimensions: built in orientation built in o	Short-circuit:		
built in orientation with vertical mounting surface +/-135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back			fuse gL/gG: 6 A, quick: 10 A
vertical mounting surface +/- 45° tiltable to the front and back	Installation/mounting/dimensions:		
Type of fixing/fixation direct mounting	built in orientation		vertical mounting surface +/- 45° tiltable to the front
	Type of fixing/fixation		direct mounting

Height	mm	87
Width	mm	45
Depth	mm	78
distance, to be maintained, to the ranks assembly		
• upwards	mm	0
downwards	mm	0
• forwards	mm	0
backwards	mm	0
• sidewards	mm	0
distance, to be maintained, to earthed part		
• upwards	mm	0
downwards	mm	0
• forwards	mm	0
backwards	mm	0
• sidewards	mm	6
distance, to be maintained, conductive elements		
• upwards	mm	0
downwards	mm	0
• forwards	mm	0
backwards	mm	0
• sidewards	mm	6
Connection type:		
Product function		
 removable terminal for auxiliary and control circuit 		No
design of the electrical connection		
for main current circuit		screw-type terminals
 for auxiliary and control current circuit 		screw-type terminals
Type of the connectable conductor cross-section		
• for main contacts		
• unifilar		2 x (0.5 1.5 mm2), 2 x (0.75 2.5 mm2), max. 2 x (1 4 mm2)
 stranded wire 		2 x (0.5 1.5 mm2), 2 x (0.75 2.5 mm2), max. 2 x (1 4 mm2)
• stranded wire		
with conductor end processing		2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)
 for auxiliary contacts 		
• solid		2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)
 finely stranded 		
with wire end processing		2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)
without conductor final cutting		2x (0,5 1,5 mm2), 2x (0,75 2,5 mm2)

at AWG-conductors				
• for main contacts		2x (18 14)		
for auxiliary contacts		2x (18 14)		
Conductor cross section that can be connected	-			
for main contacts				
• unifilar	mm²	0.5 4		
stranded wire	mm²	0.5 4		
stranded wire				
 with conductor end processing 	mm²	0.5 2.5		
for auxiliary contact				
• unifilar	mm²	0.5 2.5		
stranded wire				
with conductor end processing	mm²	0.5 2.5		
without conductor final cutting	mm²	0.5 2.5		
AWG number / as coded connectable conductor cross-section				
for main contacts / minimum		18		
• for auxiliary contact		18 14		
Certificates/approvals:				
verification of suitability		CSA / UL / CC / GL / LRS / BV / DNV / RMRS / RINA / PRS / ABS		
varification of suitability / ATEX	-	Yes		
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/3RU1116-1JB0/all				
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams,) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU1116-1JB0				







last change:

Jun 14, 2010