SIEMENS

Product data sheet 3RU1136-4GB0



OVERLOAD RELAY, 36...45 A, 1NO+1NC, SIZE S2, CLASS 10, FOR CONTACTOR MOUNTING

General technical details:		
product brand name		SIRIUS
product designation		thermal overload relay
Protection class IP / on the front		IP20
Insulation voltage / with degree of pollution 3 / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
during operating	°C	-20 +70
during storage	°C	-55 +80
during transport	°C	-55 +80
Relative humidity / during operating phase / maximum	%	100
Resistance against shock		8g / 10 ms
Impulse voltage resistance / rated value	kV	6
Active power loss / total / typical	W	9
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	А	100
Trip class		CLASS 10

Main circuit: Second Sec	Type of assignement		2	
Size of overload relay Size of the contactor / can be combined / company-specific Protection against electrical shock Main circuit: Number of poles / for main current circuit Operating voltage / at AC-3 / rated value			DMT 98 ATEX G 001	
Size of the contactor / can be combined / company-specific protection against electrical shock finger-safe Main circuit: Number of poles / for main current circuit 3 Operating voltage / at AC-3 / rated value - maximum V 690 Service power / at AC-3 - at 400 V KW 22 Adjustable response current - of the current-dependent overload release A 36 45 Auxiliary circuit: Contact reliability / of the auxiliary contacts I 1 Number of NC contacts Number of NC contacts Number of Change-over switches Operating current / of the auxiliary contacts / at AC-15 - at 24 V A 3 - at 120 V A 3 - at 24 V A 1 - at 110 V A 2 - at 32 V A 1 - at 110 V A 2 - at 32 V A 1 - at 110 V A 2 - at 22 V A 1 - at 110 V A 2 - at 22 V A 1 - at 110 V A 2 - at 22 V A 1 - at 110 V A 2 - at 22 V A 1 - at 110 V A 2 - at 22 V A 1 - at 110 V A 0.22 - at 22 V A 0.11 Short-circuit: Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Built in orientation			S2	
Protection against electrical shock Main circuit: Number of poles / for main current circuit Operating voltage / at AC-3 / rated value • maximum V 690 Service power / at AC-3 • at 400 V kW 22 Adjustable response current • of the current-dependent overload release A 36 45 Auxiliary circuit: Contact reliability / of the auxiliary contacts Number of NC contacts Number of NC contacts Number of change-over switches Operating current / of the auxiliary contacts / at AC-15 • at 24 V A 3 • at 120 V A 3 • at 120 V A 3 • at 120 V A 3 • at 230 V A 2 • at 230 V A 2 • at 240 V A 3 • at 240 V A 3 • at 220 V A 1 Short-circuit contacts / at DC-13 • at 24 V A 10 • at 125 V A 2 • at 220 V A 10 Short-circuit contacts / at DC-13 • at 24 V A 10 • at 125 V A 2 • at 220 V A 0.11 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 surf			S2	
Number of poles / for main current circuit Operating voltage / at AC-3 / rated value *maximum V 690 Service power / at AC-3 *at 400 V kW 22 Adjustable response current *of the current-dependent overload release A 36 45 Auxiliary circuit: Contact reliability / of the auxiliary contacts Number of NC contacts Number of NC contacts Number of NC contacts Number of change-over switches 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 220 V A 3 *at 230 V A 2 *at 400 V A 1 Operating current / of the auxiliary contacts / at DC-13 *at 24 V A 1 *at 120 V A 2 *at 200 V A 2 *at 230 V A 2 *at 230 V A 2 *at 230 V A 2 *at 24 V A 1 *at 25 V A 3 *at 22 V A 3 *at 22 V A 3 *at 22 V A 3 *at 24 V A 1 *at 25 V A 2 *at 22 V A 3 *at 24 V A 1 *at 25 V A 2 *at 22 V A 3 *at 22 V A 3 *at 24 V A 1 *at 25 V A 2 *at 220 V A 0.11 Short-circuit: Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Bullt in orientation with vertical mounting surface +/-135* rotatable, with vertical mounting surface +/-135* rotatable, with vertical mounting surface +/-45* tiltable to the front and back			finger-safe	
Number of poles / for main current circuit Operating voltage / at AC-3 / rated value *maximum V 690 Service power / at AC-3 * at 400 V kW 22 Adjustable response current * of the current-dependent overload release A 36 45 Auxiliary circuit: Contact reliability / of the auxiliary contacts Number of NC contacts 1 Number of NC contacts Number of AD contacts 1 Operating current / of the auxiliary contacts / at AC-15 * at 24 V A 3 * at 120 V A 3 * at 120 V A 3 * at 230 V A 2 * at 230 V A 2 * at 24 V A 1 * at 25 V A 2 * at 22 V A 1 * at 24 V A 2 * at 25 V A 3 * at 22 V A 1 * at 22 V A 1 * at 110 V A 2 * at 125 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 Installation/mounting/dimensions: Built in orientation with vertical mounting surface +/-135* rotatable, with vertical mounting surface +/-135* rotatable, with vertical mounting surface +/-45* tiltable to the front and back			Ü	
Operating voltage / at AC-3 / rated value	Main circuit:			
• maximum V 690 Service power / at AC-3 • at 400 V kW 22 Adjustable response current • of the current-dependent overload release A 36 45 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 Number of Anage-over switches 0 O Operating current / of the auxiliary contacts / at AC-15 4 3 • at 24 V A 3 3 • at 120 V A 3 3 • at 230 V A 2 3 • at 400 V A 1 1 Operating current / of the auxiliary contacts / at DC-13 A 1 • at 220 V A 1 1 Operating current / of the auxiliary contacts / at DC-13 A 1 • at 220 V A 0.22 A 0.22 • at 25 V A 0.22 A 0.11 Short-circuit: Installation/mounting/dimensions: Built in orientation with vertical mounting surface +/- 45° titable, with vertical mounting surface +/- 45° titable to the front and back	Number of poles / for main current circuit		3	
Service power / at AC-3	Operating voltage / at AC-3 / rated value			
• at 400 V kW 22 Adjustable response current • of the current-dependent overload release A 36 45 Auxiliary circuit: Contact reliability / of the auxiliary contacts Number of NC contacts 1 1 Number of NO contacts 1 0 Operating current / of the auxiliary contacts / at AC-15 4 3 3 4 3 3 4 3 3 4 3 4 3 3 4 3 4 3 4 3 4 4 3 4 3 4 3 4 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 <th colspan<="" th=""><th>• maximum</th><th>V</th><th>690</th></th>	<th>• maximum</th> <th>V</th> <th>690</th>	• maximum	V	690
Adjustable response current of the current-dependent overload release A 36 45 Auxiliary circuit: Contact reliability / of the auxiliary contacts Number of NC contacts Number of NO contacts Number of change-over switches Operating current / of the auxiliary contacts / at AC-15 • at 24 V • at 110 V • at 125 V • at 230 V • at 400 V Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 20 V • at 100 V Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 10 V • at 20 V • at 10 V A 1 Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 25 V • at 20 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 Installation/mounting/dimensions: Built in orientation with vertical mounting surface +/- 45° tiltable to the front and back	Service power / at AC-3			
Of the current-dependent overload release A 36 45 Auxiliary circuit: Contact reliability / of the auxiliary contacts Number of NC contacts Number of NC contacts 1 Number of NO contacts 1 Number of change-over switches Operating current / of the auxiliary contacts / at AC-15 - at 24 V - at 110 V - at 125 V - at 230 V - at 400 V Operating current / of the auxiliary contacts / at DC-13 - at 24 V - at 110 V - at 20 V - at 110 V - at 125 V - at 220 V - at	• at 400 V	kW	22	
Auxiliary circuit: Contact reliability / of the auxiliary contacts Number of NC contacts 1 Number of NC contacts 1 Number of NO contacts 1 Number of change-over switches Operating current / of the auxiliary contacts / at AC-15 - at 24 V - at 110 V - at 120 V - at 230 V - at 400 V Operating current / of the auxiliary contacts / at DC-13 - at 24 V - at 110 V - at 220 V - at 20 V - at 20 V - at 20 V - at 110 V - at 125 V - at 220	Adjustable response current			
Contact reliability / of the auxiliary contacts Number of NC contacts Number of NO contacts 1 Number of NO contacts 1 Number of change-over switches Operating current / of the auxiliary contacts / at AC-15 - at 24 V - at 110 V - at 120 V - at 125 V - at 400 V Operating current / of the auxiliary contacts / at DC-13 - at 24 V - at 110 V - at 230 V - at 400 V Operating current / of the auxiliary contacts / at DC-13 - at 24 V - at 110 V - at 20 V - at 22 V - at 220 V - at 220 V - at 220 V Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Built in orientation with vertical mounting surface +/- 45° tiltable to the front and back with vertical mounting surface +/- 45° tiltable to the front and back	of the current-dependent overload release	Α	36 45	
Number of NC contacts Number of NO contacts Number of change-over switches Operating current / of the auxiliary contacts / at AC-15 - at 24 V - at 110 V - at 120 V - at 230 V - at 230 V - at 400 V Operating current / of the auxiliary contacts / at DC-13 - at 24 V - at 110 V - at 25 V - at 20 V - at 10 V - at 110 V - at 20 V - at 125 V - at 110 V - at 125 V - at 110 V - at 125 V - at 110 V - at 125 V -	Auxiliary circuit:			
Number of NO contacts Number of change-over switches Operating current / of the auxiliary contacts / at AC-15 • at 24 V • at 110 V • at 125 V • at 230 V • at 400 V Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V A 3 A 2 • at 400 V Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 110 V A 0.22 • at 125 V • at 220 V 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 +/- 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 switches Operating current / of the auxiliary contacts / at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V • at 400 V Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 125 V • at 220 V • at 220 V • at 230 V • at 24 V • at 110 V • at 125 V • at 220 V Installation/mounting/dimensions: Built in orientation with vertical mounting surface +/- 45° tiltable to the front and back	Number of NC contacts		1	
Operating current / of the auxiliary contacts / at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V • at 400 V Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 110 V • at 125 V • at 20 V • at 20 V • at 20 V • at 20 V • at 110 V • at 110 V • at 110 V • at 125 V • at 220 V • at 220 V • at 220 V • at 220 V A Output 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 +/- 45° tiltable to the front and back	Number of NO contacts		1	
• at 24 V • at 110 V • at 120 V • at 125 V • at 230 V • at 400 V Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 110 V • at 125 V • at 220 V A A 1 Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 110 V • at 125 V • at 220 V A O.22 • at 220 V A O.11 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 +/- 45° titable to the front and back	Number of change-over switches		0	
at 110 V at 120 V at 125 V A 3 at 230 V at 400 V A 1 Operating current / of the auxiliary contacts / at DC-13 at 24 V at 110 V A 0.22 at 125 V at 125 V at 125 V at 125 V at 220 V at 220 V bosign 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 +/-145° tiltable to the front and back	Operating current / of the auxiliary contacts / at AC-15			
• at 120 V • at 125 V • at 230 V • at 400 V A Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 110 V • at 125 V • at 220 V A O .22 • at 220 V A O .11 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 24 V	Α	3	
• at 125 V • at 230 V • at 400 V A 1 Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 125 V • at 125 V • at 220 V A 0.22 • at 220 V 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 110 V	Α	3	
• at 230 V • at 400 V Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 125 V • at 220 V A 0.22 • at 220 V Short-circuit: Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Built in orientation A 1 0.22 A 0.11 Short-circuit: With vertical mounting surface +/-135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back	• at 120 V	Α	3	
at 400 V A 1 Operating current / of the auxiliary contacts / 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 Installation/mounting/dimensions: Built in orientation with vertical mounting surface +/- 45° tiltable to the front and back	• at 125 V	Α	3	
Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 125 V • at 220 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 Installation/mounting/dimensions: Built in orientation with vertical mounting surface +/- 45° tiltable to the front and back	• at 230 V	Α	2	
at 24 V at 110 V A 0.22 at 125 V at 220 V 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 400 V	Α	1	
at 110 V at 125 V at 220 V 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	Operating current / of the auxiliary contacts / at DC-13			
• at 125 V • at 220 V 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 24 V	Α	1	
• at 220 V 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 110 V	Α	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 +/- 45° tiltable to the front and back	• at 125 V	Α	0.22	
Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Built in orientation with vertical mounting surface +/- 45° tiltable to the front and back	• at 220 V	А	0.11	
Installation/mounting/dimensions: Built in orientation with vertical mounting surface +/-135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back	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 mounting direct mounting	Built in orientation		vertical mounting surface +/- 45° tiltable to the front	
	Type of mounting		direct mounting	

Height	mm	105
Width	mm	55
Depth	mm	118
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	
• solid	2x (0.75 16 mm²)
• stranded	2x (0.75 25 mm²), 0.75 35 mm²
• finely stranded	
 with conductor end processing 	2x (0.75 16 mm²), 0.75 25 mm²
for auxiliary contacts	
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• finely stranded	
 with conductor end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• for AWG conductors	
• for main contacts	2x (18 3), 1x (18 1)

for auxiliary contacts		2x (20 16), 2x (18 14)
Conductor cross section that can be connected		
for main contacts		
• solid	mm²	0.75 16
• stranded	mm²	0.75 35
• stranded wire		
 with conductor end processing 	mm²	0.75 25
for auxiliary contact		
• solid	mm²	0.5 2.5
• stranded wire		
 with conductor end processing 	mm²	0.5 2.5
AWG number / as coded connectable conductor cross-section		
for main contacts / minimum		18
for auxiliary contact		20 14

CSA / UL / CC / GL / LRS / BV / DNV / RMRS / RINA /

PRS / ABS

Yes

Varification of suitability / ATEX

General Product Approval

For use in hazardous locations

Test Certificates



ROSTEST



 $\frac{\mathsf{DEKRA}\;\mathsf{EXAM,}}{\mathsf{DMT}}$

Manufacturer

Shipping Approval













Shipping Approval

other



Manufacturer

Further information:

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

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

Industry Mall (Online ordering system)

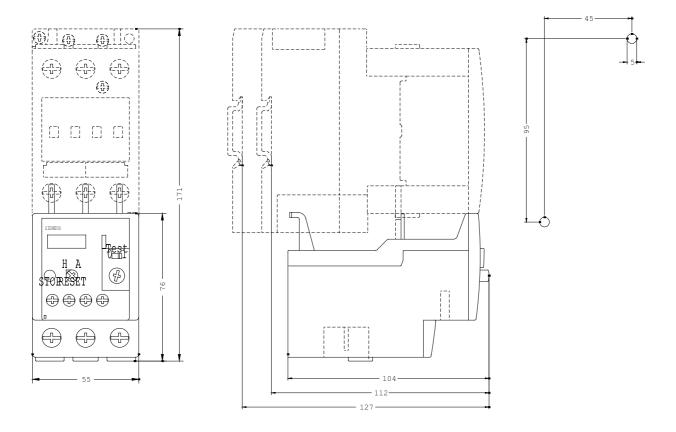
http://www.siemens.com/industrial-controls/mall

CAx-Online-Generator

http://www.siemens.com/cax

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

http://support.automation.siemens.com/WW/view/en/3RU1136-4GB0/all



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