SIEMENS

Data sheet 3RB3113-4TE0



OVERLOAD RELAY 4...16 A FOR MOTOR
PROTECTION SIZE S00, CLASS 5...30 CONTACTOR
ASS. MAIN CIRCUIT: SPR.-LOAD.TERM.
AUX.CIRCUIT: SPR.-LOAD.TERM. MANUAL-AUTOM.RESET INT. GROUND FAULT DETECTION

product brand name	SIRIUS			
Product designation	solid-state overload relay			

General technical data:				
Active power loss total typical	W	1.1		
Insulation voltage				
 with degree of pollution 3 Rated value 	V	690		
Shock resistance				
• acc. to IEC 60068-2-27		15g / 11 ms		
Vibration resistance		1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 10 cycles		
Surge voltage resistance Rated value	kV	6		
Size of contactor can be combined company-specific		S00		
Type of assignment		2		
Protection class IP				
• on the front		IP20		
• of the terminal		IP20		
Type of protection		II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p]		
Equipment marking				
• acc. to DIN EN 61346-2		F		
• acc. to DIN EN 81346-2		F		

Main circuit:		
Number of poles for main current circuit		3
Adjustable response value current of the current-	Α	4 16
dependent overload release		
Operating voltage		
 for remote-reset function for DC 	V	24

Operating expending current • at AC-3 — at 400 V Rated value A 16 Auxiliary circuit: Number of NC contacts • for auxiliary contacts at AC-15 • at 24 V • at 110 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 110 V • at 125 V • at 220 V A 0.3 • at 110 V • at 125 V • at 220	 at AC-3 Rated value maximum 	V	690
at AC-3 — at 400 V Rated value A 16 Auxiliary circuit: Number of NC contacts • for auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 60 V • at 110 V • at 125 V • at 125 V • at 125 V • at 120 V • at 125 V • at 220 V A 0.3 • at 125 V • at 220 V A 0.3 • at 125 V • at 220 V A 0.3 • at 125 V • at 220 V A 0.3 • at 125 V • at 220 V A 0.3 • at 125 V • at 220 V A 0.3 • at 125 V • at 220 V Rrolective and monitoring functions: Trip class Design of the overload circuit breaker Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL B300 / R300 Short-circuit: — required Installation/ mounting/ dimensions:	Operating frequency Rated value	Hz	50 60
Auxiliary circuit: Number of NC contacts • for auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 60 V • at 60 V • at 125 V • at 60 V • at 110 V • at 125 V • at 125 V • at 220 V •	Operating current		
Auxiliary circuit: Number of NC contacts • for auxiliary contacts — Note Number of NO contacts • for auxiliary contacts — Note Number of CO contacts • for auxiliary contacts — Note Number of CO contacts • for auxiliary contacts • for auxiliary switch Operating current of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 125 V • at 20 V • at 110 V A A Coperating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 125 V • at 20 V • at 110 V A Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V A Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V A O,3 • at 125 V • at 220 V • at 110 V • at 125 V • at 20 V • at 100 V • at 125 V • at 20 V • at 100	• at AC-3		
Number of NC contacts • for auxiliary contacts — Note Number of NO contacts • for auxiliary contacts — Note Number of CO contacts • for auxiliary contacts — Note Number of CO contacts • for auxiliary contacts Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 125 V • at 20 V • at 125 V • at 20 V • at 110 V • at 20 V • at 20 V • at 20 V • at 30 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 125 V • at 220 V • at 125 V • at 20 V •	— at 400 V Rated value	Α	16
Note Number of NO contacts • for auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 110 V • at 125 V			
Number of NO contacts • for auxiliary switch Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 24 U • at 125 V • at 24 V • at 20 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 110 V • at 110 V • at 125 V • at 110 V • at 10 V • at 110 V • at 125 V • at 110 V • at 110 V • at 125 V • at 110 V • at 125 V • at 120 V A Outli Protective and monitoring functions: Trip class Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL B300 / R300 Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:	Number of NC contacts		
Number of NO contacts • for auxiliary contacts — Note Number of CO contacts • for auxiliary contacts • for auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 125 V • at 230 V A Operating current of the auxiliary contacts at DC-13 • at 24 V • at 25 V • at 27 V • at 28 V • at 60 V • at 110 V • at 1	• for auxiliary contacts		1
Note Number of CO contacts	— Note		for contactor disconnection
Number of CO contacts • for auxiliary contacts • for auxiliary switch Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 125 V • at 125 V • at 20 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 125 V • at 10 V • at 110 V • at 125 V • at 20 V • at 110 V • at 125 V • at 20 V • at 100 V	Number of NO contacts		
Number of CO contacts • for auxiliary contacts Design of the auxillary switch Operating current of the auxillary contacts at AC-15 • at 24 V • at 110 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 10 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 125 V • at 20 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 10 V • at 110 V • at 125 V • at 110 V • at 125 V • at 100 V • at 125 V • at 20 V Operating current of the auxiliary contacts at DC-13 • at 20 V • at 10 V • at 20 V • at 10 V • at 1	• for auxiliary contacts		1
• for auxiliary contacts Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 100 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 10 V • at	— Note		for message "tripped"
Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 10 V • at 10 V • at 10 V • at 10 V • at 20 V • at 20 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 10 V •	Number of CO contacts		
Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 25 V • at 20 V • at 20 V • at 60 V • at 110 V • at 125 V • at 110 V • at 20 V • at 110 V • at 10 V • at 110 V • at 125 V • at 110 V • at 110 V • at 125 V • at 110 V • at 125 V • at 110 V • at 125 V • at 10 U • at 125 V • at 10 U • at 125 V • at 125 V • at 10 U • at	• for auxiliary contacts		0
at 24 V at 110 V at 120 V A at 125 V A at 230 V Operating current of the auxiliary contacts at DC-13 at 24 V at 60 V at 100 V A A A A A A A A A A A A A A A A A A A			integrated
at 110 V at 120 V at 125 V at 230 V Operating current of the auxiliary contacts at DC-13 at 24 V at 60 V at 100 V at 110 V at 125 V at 220 V A 0.3 at 125 V at 110 V A 0.3 at 220 V A 0.3 at 220 V A 0.11 Protective and monitoring functions: Trip class	Operating current of the auxiliary contacts at AC-15		
at 120 V at 125 V at 125 V at 230 V Operating current of the auxiliary contacts at DC-13 at 24 V at 60 V at 110 V at 110 V at 125 V beta to 20 V Outper time to the auxiliary contacts at DC-13 CLASS 5, 10, 20 and 30 adjustable electronic UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link for short-circuit protection of the main circuit required for short-circuit protection of the auxiliary switch required fuse gG: 50 A fuse gG: 6 A Installation/ mounting/ dimensions:	● at 24 V	Α	4
at 125 V at 230 V Operating current of the auxiliary contacts at DC-13 at 24 V at 60 V at 110 V at 110 V at 125 V at 125 V at 125 V at 125 V be at 220 V A O.3 Protective and monitoring functions: Trip class Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link for short-circuit protection of the main circuit — required for short-circuit protection of the auxiliary switch required fuse gG: 50 A fuse gG: 6 A Installation/ mounting/ dimensions:	• at 110 V	Α	4
otal 230 V Operating current of the auxiliary contacts at DC-13 otal 24 V otal 60 V otal 110 V otal 125 V otal 220 V Protective and monitoring functions: Trip class Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL B300 / R300 Short-circuit: Design of the fuse link of or short-circuit protection of the main circuit	• at 120 V	Α	4
Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 125 V • at 125 V • at 220 V A 0.3 • at 220 V Protective and monitoring functions: Trip class Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:	● at 125 V	Α	4
at 24 V at 60 V at 10 V at 110 V at 1125 V at 125 V at 220 V A Protective and monitoring functions: Trip class Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL B300 / R300 Short-circuit: Design of the fuse link for short-circuit protection of the main circuit — required for short-circuit protection of the auxiliary switch required fuse gG: 50 A fuse gG: 6 A Installation/ mounting/ dimensions:	● at 230 V	Α	3
at 10 V at 110 V A 0.3 at 125 V A 0.3 at 220 V A 0.11 Protective and monitoring functions: Trip class CLASS 5, 10, 20 and 30 adjustable electronic UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link for short-circuit protection of the main circuit required fuse gG: 50 A fuse gG: 6 A Installation/ mounting/ dimensions:	Operating current of the auxiliary contacts at DC-13		
at 110 V at 125 V A 0.3 at 220 V A 0.11 Protective and monitoring functions: Trip class Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link for short-circuit protection of the main circuit required fuse gG: 50 A fuse gG: 6 A Installation/ mounting/ dimensions:	● at 24 V	Α	2
at 125 V at 220 V A 0.3 at 220 V A 0.11 Protective and monitoring functions: Trip class CLASS 5, 10, 20 and 30 adjustable Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL B300 / R300 Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:	● at 60 V	Α	0.55
at 220 V A 0.11 Protective and monitoring functions: Trip class CLASS 5, 10, 20 and 30 adjustable Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:	● at 110 V	Α	0.3
Protective and monitoring functions: Trip class Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL B300 / R300 Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:	● at 125 V	Α	0.3
Trip class Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:	● at 220 V	Α	0.11
Design of the overload circuit breaker UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL B300 / R300 Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:	Protective and monitoring functions:		
UL/CSA ratings: Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:			CLASS 5, 10, 20 and 30 adjustable
Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:	Design of the overload circuit breaker		electronic
Contact rating of the auxiliary contacts acc. to UL Short-circuit: Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:	UL/CSA ratings:		
Design of the fuse link • for short-circuit protection of the main circuit — required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions:			B300 / R300
 for short-circuit protection of the main circuit required for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions: 			
— required Fuse gG: 50 A • for short-circuit protection of the auxiliary switch required fuse gG: 6 A Installation/ mounting/ dimensions:	Design of the fuse link		
• for short-circuit protection of the auxiliary switch required fuse gG: 6 A Installation/ mounting/ dimensions:	• for short-circuit protection of the main circuit		
Installation/ mounting/ dimensions:	— required		Fuse gG: 50 A
			fuse gG: 6 A
mounting position any	-		
	mounting position		any

Mounting type		direct mounting
Height	mm	72
Width	mm	45
Depth	mm	90
Required spacing		
with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
• for grounded parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	0
— at the side	mm	6
— downwards	mm	0
• for live parts		
— forwards	mm	6
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	6

Connections/ Terminals:	
Type of electrical connection	
• for main current circuit	spring-loaded terminals
 for auxiliary and control current circuit 	spring-loaded terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Product function	
 removable terminal for auxiliary and control circuit 	Yes
Type of connectable conductor cross-section	
• for main contacts	
— single or multi-stranded	1x (0,5 4 mm²)
 finely stranded with core end processing 	1x (0.5 2.5 mm²)
 finely stranded without core end processing 	1x (0.5 2.5 mm²)
 for AWG conductors for main contacts 	1x (20 12)
for auxiliary contacts	
— single or multi-stranded	1x (0,5 1,5 mm²), 2x (0,5 1,5 mm²)
— finely stranded with core end processing	1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²)

— finely stranded without core end		1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²)
processingfor AWG conductors for auxiliary contacts		1x (24 16), 2x (24 16)
Safety related data:		
Protection against electrical shock		finger-safe
Mechanical data:		
Size of overload relay		S00
Communication/ Protocol:		
Protocol is supported		
IO-Link protocol		No
Type of voltage supply via input/output link master		No
Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
during operation	°C	-25 +60
during storage	°C	-40 +80
during transport	°C	-40 +80
Relative humidity during operation	%	95
Electromagnetic compatibility:		
EMC emitted interference		
● acc. to IEC 60947-1		CISPR 11, environment B (residential area)
EMI immunity acc. to IEC 60947-1		corresponds to degree of severity 3
Conducted interference due to burst acc. to IEC 61000-4-4		2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV (line to earth) corresponds to degree of severity 3
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV (line to line) corresponds to degree of severity 3
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Electrostatic discharge acc. to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Display:		
Display version		
• for switching status		Slide switch
Certificates/ approvals:		

General Product Approval EMC For use in hazardous















Declaration of Conformity	Test Certificates		Shipping App	oroval	
CE	Type Test Certificates/Test Report	Special Test Certificate	Or STORY	THE STATE OF THE S	GL
EG-Konf.			ABS	B U R E A U VERITAS	GL

Shi	ppina	ı Apr	oroval
	PPIIIŞ	, , , , , , ,	norai

other





Environmental Confirmations

Confirmation

Further information

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

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RB31134TE0}\\$

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

http://support.automation.siemens.com/WW/view/en/3RB31134TE0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB31134TE0&lang=en



