SIEMENS

Data sheet

3RB3113-4PB0



Overload relay 1...4 A Electronic For motor protection Size S00, Class 5...30 Contactor mounting Main circuit: Screw Auxiliary circuit: Screw Manual-Automatic-Reset Internal ground fault detection

product brand name	SIRIUS			
product designation	solid-state overload relay			
product type designation	3RB3			
General technical data				
size of overload relay	S00			
size of contactor can be combined company-specific	S00			
power loss [W] for rated value of the current at AC in hot operating state	0.1 W			
• per pole	0.03 W			
insulation voltage with degree of pollution 3 at AC rated value	690 V			
surge voltage resistance rated value	6 kV			
maximum permissible voltage for protective separation in networks with grounded star point				
 between auxiliary and auxiliary circuit 	300 V			
 between auxiliary and auxiliary circuit 	300 V			
 between main and auxiliary circuit 	600 V			
 between main and auxiliary circuit 	690 V			
shock resistance	15g / 11 ms			
 according to IEC 60068-2-27 	15g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms			
thermal current	4 A			
reference code according to IEC 81346-2	F			
Substance Prohibitance (Date)	10/01/2009			
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7			
Ambient conditions				
installation altitude at height above sea level maximum	2 000 m			
ambient temperature				
during operation	-25 +60 °C			
during storage	-40 +80 °C			
during transport	-40 +80 °C			
temperature compensation	-25 +60 °C			
relative humidity during operation	10 95 %			
Main circuit				
number of poles for main current circuit	3			
adjustable current response value current of the current- dependent overload release	1 4 A			
operating voltage				
rated value	690 V			
 for remote-reset function at DC 	24 V			
• at AC-3e rated value maximum	690 V			
operating frequency rated value	50 60 Hz			

energianal aurrant rated value				
operational current rated value	4 A			
operational current at AC-3e at 400 V rated value	4 A			
operating power	0.27 1.5 MM			
• for 3-phase motors at 400 V at 50 Hz	0.37 1.5 kW			
• for AC motors at 500 V at 50 Hz	0.37 2.2 kW			
for AC motors at 690 V at 50 Hz	0.55 3 kW			
Auxiliary circuit	integrated			
design of the auxiliary switch	integrated			
number of NC contacts for auxiliary contacts note 	1 for contactor disconnection			
number of NO contacts for auxiliary contacts				
note				
number of CO contacts for auxiliary contacts	for message "tripped" 0			
operational current of auxiliary contacts at AC-15				
• at 24 V	4 A			
• at 110 V	4 A 4 A			
• at 120 V	4 A 4 A			
• at 120 V				
• at 125 V • at 230 V	4 A 3 A			
• at 230 V operational current of auxiliary contacts at DC-13				
• at 24 V	2 A			
• at 24 V • at 60 V	0.55 A			
• at 110 V	0.3 A			
• at 125 V	0.3 A			
• at 125 V • at 220 V	0.11 A			
• at 220 v Protective and monitoring functions				
	CLASS SE 10E 20E and 20E adjustable			
trip class	CLASS 5E, 10E, 20E and 30E adjustable electronic			
design of the overload release response value current of the grounding protection minimum	0.75 x IMotor			
response time of the grounding protection in settled state	0.75 X IMotor 1 000 ms			
operating range of the grounding protection in settled state	1 000 HB			
current set value				
• minimum	IMotor > lower current setting value			
• maximum	IMotor < upper current setting value x 3.5			
UL/CSA ratings				
full-load current (FLA) for 3-phase AC motor				
• at 480 V rated value	4 A			
• at 600 V rated value	4 A			
contact rating of auxiliary contacts according to UL	B600 / R300			
Short-circuit protection				
design of the fuse link				
 for short-circuit protection of the main circuit 				
 — with type of coordination 1 required 	gG: 35 A, RK5: 15 A			
 — with type of assignment 2 required 	gG: 20 A			
 for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A			
Installation/ mounting/ dimensions				
mounting position	any			
fastening method	Contactor mounting			
height	79 mm			
width	45 mm			
depth	73 mm			
Connections/ Terminals				
product component removable terminal for auxiliary and control circuit	Yes			
type of electrical connection				
 for main current circuit 	screw-type terminals			
	screw-type terminals			
for auxiliary and control circuit	screw-type terminals screw-type terminals			
for auxiliary and control circuit arrangement of electrical connectors for main current	screw-type terminals			

		_						
 solid or stranded 			1x (0,5 4 mm²), 2x (0,5 1,5 mm²), 2x (0,75 4 mm²)					
 finely stranded with core end processing 				1x (0.5 2.5 mm²), 2x (0.5 2.5 mm²)				
type of connectable co	onductor cross-sections							
 for auxiliary containing 	acts							
— solid			1x (0.	5 4 mm²), 2x (0.5 2.5	5 mm²)			
— solid or stra	— solid or stranded			5 4 mm²), 2x (0,5 2,5	5 mm²)			
 finely strand 	 finely stranded with core end processing 		1x (0.	5 2.5 mm²), 2x (0.5 ²	1.5 mm²)			
 for AWG cables for auxiliary contacts 			1x (20 14), 2x (20 14)					
tightening torque								
• for main contacts with screw-type terminals			0.8 1.2 N·m					
 for auxiliary contacts with screw-type terminals 			0.8 1.2 N·m					
design of screwdriver	design of screwdriver shaft			Diameter 5 to 6 mm				
size of the screwdriver tip			Pozidriv PZ 2					
design of the thread of the connection screw								
 for main contacts 	for main contacts			M3				
 of the auxiliary ar 	nd control contacts		M3					
Electrical Safety								
	the front according to IE	C 60529	IP20					
-	e front according to IEC			-safe, for vertical contact	from the front			
Communication/ Protoc	÷	00323	iniger					
		atau .	Na					
	via input/output link ma	ster	No					
Electromagnetic compa			-					
conducted interferenc								
 due to burst according to IEC 61000-4-4 			2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3					
 due to conductor-earth surge according to IEC 61000-4-5 				(line to earth) corresponds				
 due to conductor-conductor surge according to IEC 61000-4-5 		1 kV (line to line) corresponds to degree of severity 3						
 due to high-frequency radiation according to IEC 61000- 4-6 		10 V in frequency range 0.15 to 80 MHz, modulation 80 $\%$ AM with 1 kHz						
	ce according to IEC 6100	D-4-3	10 V/	m				
	field-based interference according to IEC 61000-4-3							
-	electrostatic discharge according to IEC 61000-4-2			6 kV contact discharge / 8 kV air discharge				
Display								
	display version for switching status			Slide switch				
Approvals Certificates		_						
General Product Appr	oval							
	uи				<u>Confirmation</u>	\sim		
(SP)	UK	CE		(\mathbf{m})		(Ui)		
CSA		EG-Konf.		ccc		UL		
General Product Ap-	EMV			For use in hazard-	Test Certificates			
proval				ous locations				
	•	<u>KC</u>			Type Test Certific-	Special Test Certific-		
гог	k a la l			(c.)	ates/Test Report	<u>ate</u>		
r M I	<u></u>			$\langle cx \rangle$				
F11P	RCM			ATEX				
Marine / Shipping								
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and a		Φ		Register	(28)	(()))		
ARS	1893	DNV		LRS	PRS	RINA		
100	VERITAS	5117		210	110			
othor	Environment							
other	Environment							
Confirmation	Environmental Con-							
	firmations							

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...) https://www.siemens.com/ic10

Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RB3113-4PB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB3113-4PB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RB3113-4PB0

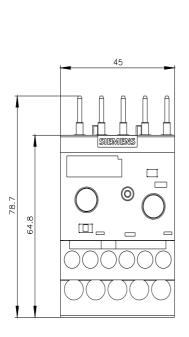
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

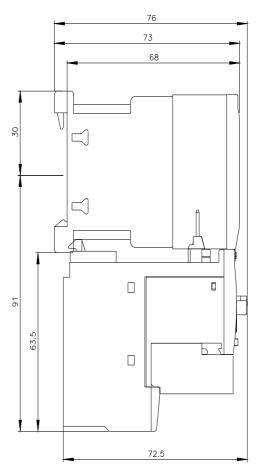
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB3113-4PB0&lang=en

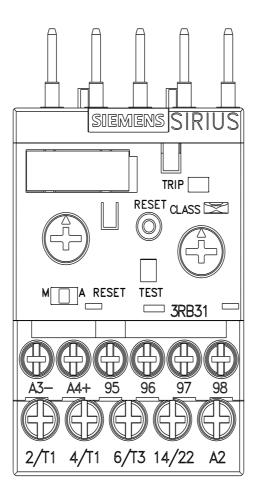
Characteristic: Tripping characteristics, I2t, Let-through current

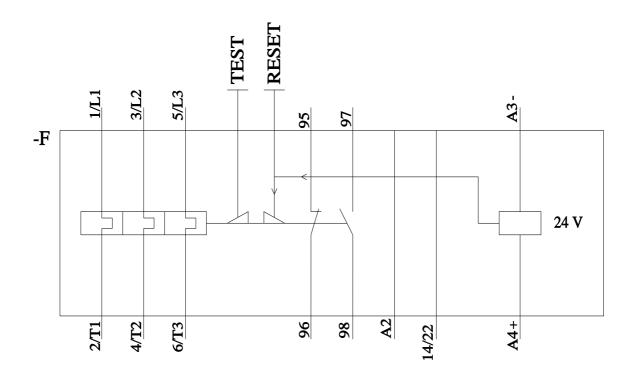
https://support.industry.siemens.com/cs/ww/en/ps/3RB3113-4PB0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB3113-4PB0&objecttype=14&gridview=view1









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