SIEMENS

Data sheet

3RB2153-4FW2



Overload relay 50...200 A for motor protection Size S6, CLASS 5...30E Contactor mounting/stand-alone installation Main circuit: straight-through transformer Auxiliary circuit: Screw terminal Manual-Automatic-Reset Internal ground fault detection

product designation solid-state overload relay product type designation 3RB2 size of overload relay S6 size of contactor can be combined company-specific S6 neutation voltage with degree of pollution 3 at AC rated 1 000 V aurge voltage resistance rated value 8 kV maximum permissible voltage for as fe isolation in networks with grounded star point 300 V • between auxiliary and auxiliary circuit 300 V • between main and auxiliary circuit 600 V • according to IEC 60068-2-27 15g / 11 ms • according to IEC 60068-2-27 15g / 11 ms • according to IEC 60068-2-27 10g / 11 ms • according to IEC 81346-2 F Substance Prohibitance (Date) 07/01/2006 Ambient conditions 2000 m installation altitude at height above sea level maximum 2000 C<	product brand name	SIRIUS			
General technical data S6 size of overload relay S6 size of contactor can be combined company-specific insulation voltage with degree of pollution 3 at AC rated value 1000 V surge voltage resistance rated value 8 kV maximum permissible voltage for safe isolation in networks with grounded star point 8 kV • between auxiliary and auxiliary circuit 300 V • between main and auxiliary circuit 300 V • between main and auxiliary circuit 690 V • between main and auxiliary circuit 600 V • between main and auxiliary circuit 200 A • uccording to IEC 60068-2-27 15g / 11 ms • according to IEC 60068-2-27 15g / 11 ms • according to ATEX directive 200 A Vibration resistance 16 Hz, 15 mm; 6-500 Hz, 20 m/s*; 10 cycles thermal current 200 A 2014/24/EU PTB 06 ATEX 3001 2014/24/EU 07/01/2006 Ambient conditions 2000 m installation altitude at height above sea level maximum	product designation	solid-state overload relay			
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adjustable current response value current of the current-dependent overload release 50 200 A operating voltage 1 000 V	Main circuit				
current-dependent overload release operating voltage • rated value 1 000 V	number of poles for main current circuit	3			
rated value 1 000 V		50 200 A			
	operating voltage				
• for remote-reset function at DC 24 V	 rated value 	1 000 V			
	 for remote-reset function at DC 	24 V			

 at AC-3e rated value maximum 	1 000 V				
operating frequency rated value	50 60 Hz				
operational current rated value	_ 200 A				
operational current at AC-3e at 400 V rated value	200 A				
operating power					
 for 3-phase motors at 400 V at 50 Hz 	30 90 kW				
 for AC motors at 500 V at 50 Hz 	30 132 kW				
 for AC motors at 690 V at 50 Hz 	55 160 kW				
Auxiliary circuit					
design of the auxiliary switch	integrated				
number of NC contacts for auxiliary contacts	1				
• note	for contactor disconnection				
number of NO contacts for auxiliary contacts	1				
• note	for message "tripped"				
number of CO contacts for auxiliary contacts	0				
operational current of auxiliary contacts at AC-15	-				
• at 24 V	4 A				
• at 110 V	4 A				
• at 120 V	4 A				
• at 125 V	4 A				
• at 230 V	3 A				
operational current of auxiliary contacts at DC-13					
• at 24 V	2 A				
• at 60 V	0.55 A				
• at 110 V	0.3 A				
• at 125 V	0.3 A				
• at 220 V	0.11 A				
Protective and monitoring functions					
trip class	CLASS 5E, 10E, 20E and 30E adjustable				
design of the overload release	electronic				
response value current of the grounding protection minimum	0.75 x IMotor				
response time of the grounding protection in settled state	1 000 ms				
operating range of the grounding protection relating to 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 	200 A				
at 600 V rated value	200 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: 355 A, Class L: 601 A				
 — with type of assignment 2 required 	gG: 315 A				
 for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A				
Installation/ mounting/ dimensions					
mounting position	any				
fastening method	Contactor mounting/stand-alone installation				
height	119 mm				
width	120 mm				
depth	155 mm				
Connections/ Terminals					
product component removable terminal for auxiliary and control circuit	Yes				
type of electrical connection					

 for main current 	t circuit		straio	ht-through transfo	ormers				
 for auxiliary and 			screw-type terminals						
-	arrangement of electrical connectors for main current				Top and bottom				
type of connectable	conductor cross-sec	tions							
 for auxiliary cor 	ntacts								
— solid			1x (0.	1x (0.5 4 mm²), 2x (0.5 2.5 mm²)					
— solid or str	anded		1x (0,5 4 mm ²), 2x (0,5 2,5 mm ²)						
— finely strar	nded with core end proc	essing		5 2.5 mm²), 2x					
	for auxiliary contacts	0	2x (20 14)						
tightening torque	,			,					
	ntacts with screw-type t	erminals	0.8 1.2 N·m						
	of the connection sc								
•	and control contacts		M3						
Safety related data									
	on the front according	to IEC	IP20			_			
60529	on the nonic according	IO IEC	IF20						
touch protection on	the front according to	DIEC 60529	finger	-safe, for vertical	contact from the f	ront			
Communication/ Prot	ocol								
	oly via input/output lin	k master	No						
Electromagnetic com									
conducted interfere						_			
	due to burst according to IEC 61000-4-4			(power ports), 1 k	V (signal ports) co	orresponds	to degree of severity		
 due to conducto 61000-4-5 	 due to conductor-earth surge according to IEC 61000-4-5 		3 2 kV	(line to earth) corr	esponds to degre	e of severi	ty 3		
 due to conductor-conductor surge according to IEC 61000-4-5 		1 kV	(line to line) corres	sponds to degree	of severity	3			
 due to high-frec 61000-4-6 	 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					
field-based interfere	nce according to IEC	61000-4-3	10 V/	m					
electrostatic dischar	rge according to IEC	61000-4-2	6 kV	contact discharge	/ 8 kV air dischar	ge			
Display									
display version for sw	itching status		Slide	switch					
Certificates/ approval	S								
General Product Ap	proval						EMC		
e en									
SA SA	<u>Confirmation</u>				EF][RCM		
For use in hazard-	Declaration of	Test Certifica	ates		Marine / S	Shipping			
ous locations	Conformity					11.5			
X ATEX	CE EG-Konf.	<u>Type Test Cer</u> ates/Test Re		Special Test Cerl ate	tific- AB	s	Lloyd's Register uis		
Marine / Shipping		other							
RINA		<u>Miscellaneo</u>	<u>ous</u>	<u>Confirmation</u>					
Further information	wnloadcenter (Catalo	gs, Brochures,.)						

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http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB2153-4FW2&objecttype=14&gridview=view1

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