SIEMENS

Data sheet

3RB2056-1FC2



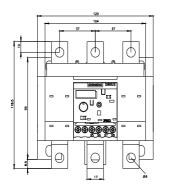
Overload relay 50...200 A for motor protection Size S6, Class 10E Contactor mounting/stand-alone installation Main circuit: busbar connection Auxiliary circuit: Screw terminal Manual-Automatic-Reset

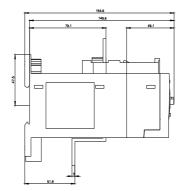
product brand name	SIRIUS
product designation	solid-state overload relay
product type designation	3RB2
General technical data	
size of overload relay	S6
size of contactor can be combined company-specific	S6
insulation voltage with degree of pollution 3 at AC rated value	1 000 V
surge voltage resistance rated value	8 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
thermal current	200 A
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	07/01/2006
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
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	50 200 A
operating voltage	
rated value	1 000 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

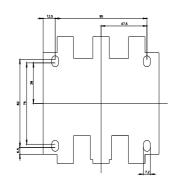
	20 420 1111		
for AC motors at 500 V at 50 Hz	30 132 kW		
for AC motors at 690 V at 50 Hz	55 160 kW		
Auxiliary circuit			
design of the auxiliary switch	integrated		
number of NC contacts for auxiliary contacts	1		
• note	for contactor disconnection		
number of NO contacts for auxiliary contacts	1		
• 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 10E		
design of the overload release	electronic		
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 circuit	busbar connection		
 for auxiliary and control circuit 	screw-type terminals		
arrangement of electrical connectors for main current circuit	Top and bottom		
type of connectable conductor cross-sections			
 for auxiliary contacts 			
— solid	1x (0.5 4 mm²), 2x (0.5 2.5 mm²)		
— solid or stranded	1x (0,5 4 mm²), 2x (0,5 2,5 mm²)		
 finely stranded with core end processing 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)		
 for AWG cables for auxiliary contacts 	2x (20 14)		
tightening torque			
 for main contacts with screw-type terminals 	10 12 N·m		
 for auxiliary contacts with screw-type terminals 	0.8 1.2 N·m		
design of the thread of the connection screw			
for main contacts	M8		
 of the auxiliary and control contacts 	M3		

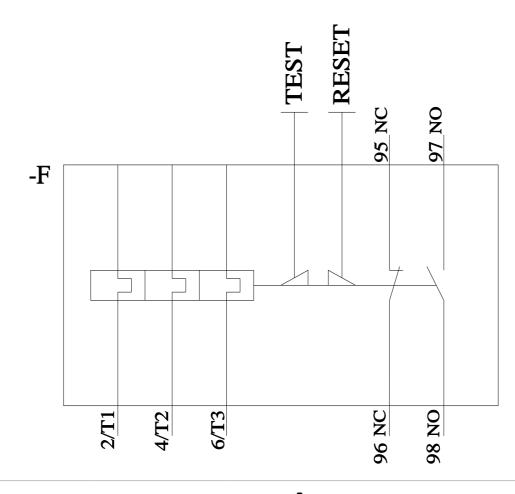
Electrical Safety							
•	the front according to IE	C 60529 IP00; IP20 with box terminal/cover					
touch protection on the	e front according to IEC	60529	finger-safe, for vertical contact from the front with box terminal/cover				
Communication/ Protoco	bl						
type of voltage supply via input/output link master			No				
Electromagnetic compat				_	_		
conducted interference			$2 \frac{1}{2}$	al nanta) as mass and a ta d	anne of coverity 2		
due to burst according to IEC 61000-4-4			2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3 2 kV (line to earth) corresponds to degree of severity 3				
 due to conductor-earth surge according to IEC 61000-4-5 due to conductor-conductor surge according to IEC 			1 kV (line to line) corresponds to degree of severity 3				
61000-4-5			10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz				
due to high-frequency radiation according to IEC 61000- 4-6							
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2			10 V/m 6 kV contact discharge / 8 kV air discharge				
bisplay display version for switch	ning status		Slide switch				
pprovals Certificates							
General Product Appro	oval						
(S) A	UK CA	CE EG-Konf.	Confirmation		U		
General Product Approval	EMV		For use in hazard- ous locations	Test Certificates			
EHC	RCM	KC	K ATEX	<u>Type Test Certific-</u> ates/Test Report	<u>Special Test Certific-</u> <u>ate</u>		
Marine / Shipping				other			
ABS		Hoyds Register LRS	RINA	<u>Confirmation</u>	<u>Miscellaneous</u>		
Environment							
Environmental Con- firmations							
urther information	leging						
Information- and Down	siemens.com/cs/ww/en/vie Iloadcenter (Catalogs, B						
https://www.siemens.cor Industry Mall (Online o https://mall.industry.siem Cax online generator		llog/product?mlfb=	=3RB2056-1FC2				
http://support.automation Service&Support (Man	uals, Certificates, Chara	cteristics, FAQs	<u>?lang=en&mlfb=3RB2056-1FC2</u> ,)				
Image database (produ	siemens.com/cs/ww/en/ps ict images, 2D dimensio iemens.com/bilddb/cax_d	n drawings, 3D ı	nodels, device circuit diagram	s, EPLAN macros,)			
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