## SIEMENS

## Data sheet

## 3RB2056-1FF2

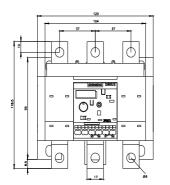


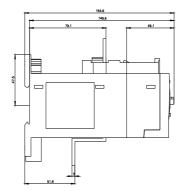
Overload relay 50...200 A for motor protection Size S6, Class 10E Contactor mounting/stand-alone installation Main circuit: busbar connection Auxiliary circuit: Spring-type terminal Manual-Automatic-Reset

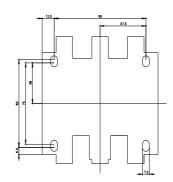
product brand name	SIRIUS				
product designation	solid-state overload relay				
product type designation	3RB2				
General technical data					
size of overload relay	S6				
size of contactor can be combined company-specific	S6				
insulation voltage with degree of pollution 3 at AC rated value	1 000 V				
surge voltage resistance rated value	8 kV				
maximum permissible voltage for protective separation in networks with grounded star point					
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	300 V				
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	300 V				
<ul> <li>between main and auxiliary circuit</li> </ul>	600 V				
<ul> <li>between main and auxiliary circuit</li> </ul>	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					
<ul> <li>during operation</li> </ul>	-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					
<ul> <li>for 3-phase motors at 400 V at 50 Hz</li> </ul>	30 90 kW				

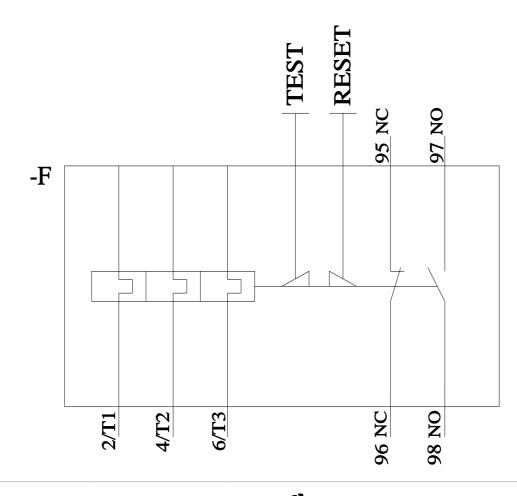
• for AC motors at 500 V at 50 Hz	30 132 kW		
for AC motors at 500 V at 50 Hz	55 160 kW		
Auxiliary circuit			
design of the auxiliary switch	integrated		
number of NC contacts for auxiliary contacts	1		
note	for contactor disconnection		
number of NO contacts for auxiliary contacts			
• note	for message "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			
<ul> <li>for short-circuit protection of the main circuit</li> <li>— with type of coordination 1 required</li> </ul>	gG: 355 A, Class L: 601 A		
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 315 A		
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	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	Yes		
control circuit			
type of electrical connection			
• for main current circuit	busbar connection		
for auxiliary and control circuit	spring-loaded terminals		
arrangement of electrical connectors for main current circuit	Top and bottom		
type of connectable conductor cross-sections			
<ul> <li>for auxiliary contacts</li> </ul>			
— solid	2x (0.25 1.5 mm <sup>2</sup> )		
— solid or stranded	2x (0,25 1,5 mm²)		
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm <sup>2</sup> )		
— finely stranded without core end processing	2x (0.25 1.5 mm <sup>2</sup> )		
for AWG cables for auxiliary contacts	2x (24 16)		
tightening torque	10 12 N m		
for main contacts with screw-type terminals	10 12 N·m		
design of the thread of the connection screw	MR		
for main contacts     Electrical Safety	M8		

protection class IP on t	he front according to I	EC 60529	IP00; IP20 with box terminal/c	over		
touch protection on the front according to IEC 60529		finger-safe, for vertical contac	t from the front with box te	rminal/cover		
Communication/ Protoco						
type of voltage supply v		aster	No			
Electromagnetic compati						
conducted interference						
• 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			2 kV (line to earth) corresponds to degree of severity 3			
due to conductor-conductor surge according to IEC     61000-4-5		1 kV (line to line) corresponds to degree of severity 3				
<ul> <li>due to high-frequency radiation according to IEC 61000- 4-6</li> </ul>		10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz				
field-based interference according to IEC 61000-4-3		10 V/m				
electrostatic discharge according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge				
Display	ing status		Clide quiteb			
display version for switch Approvals Certificates	ing status		Slide switch			
General Product Appro	vai					
SP.	CE EG-Konf.	UK CA		<u>Confirmation</u>	<b>U</b>	
General Product Ap- proval	EMV		For use in hazard- ous locations	Test Certificates		
EHC	RCM	KC	(Ex) ATEX	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate	
Marine / Shipping				other		
ABS		Lloyds Register urs	RINA	<u>Miscellaneous</u>	<u>Confirmation</u>	
Environment						
Environmental Con- firmations						
Further information						
Information on the pack	kaging					
https://support.industry.si	emens.com/cs/ww/en/v oadcenter (Catalogs,					
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http://www.automation.sig	emens.com/bilddb/cax_	de.aspx?mlfb=3RE	2056-1FF2⟨=en			









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