## SIEMENS

## Data sheet

## 3RB2056-1FC2

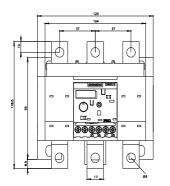


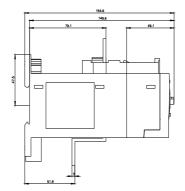
Overload relay 50...200 A for motor protection Size S6, Class 10E Contactor mounting/stand-alone installation Main circuit: busbar connection Auxiliary circuit: Screw terminal Manual-Automatic-Reset

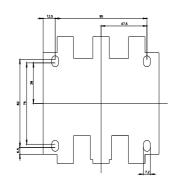
product brand name	SIRIUS
product designation	solid-state overload relay
product type designation	3RB2
General technical data	
size of overload relay	S6
size of contactor can be combined company-specific	S6
insulation voltage with degree of pollution 3 at AC rated value	1 000 V
surge voltage resistance rated value	8 kV
maximum permissible voltage for protective separation in networks with grounded star point	
<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
<ul> <li>according to IEC 60068-2-27</li> </ul>	15g / 11 ms
thermal current	200 A
type of protection according to ATEX directive 2014/34/EU	Ex II (2) G [Ex e] [Ex d] [Ex px] ; Ex II (2) D [Ex t] [Ex p]
certificate of suitability according to ATEX directive 2014/34/EU	PTB 06 ATEX 3001
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	07/01/2006
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 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
<ul> <li>during storage</li> </ul>	-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
<ul> <li>at AC-3e rated value maximum</li> </ul>	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

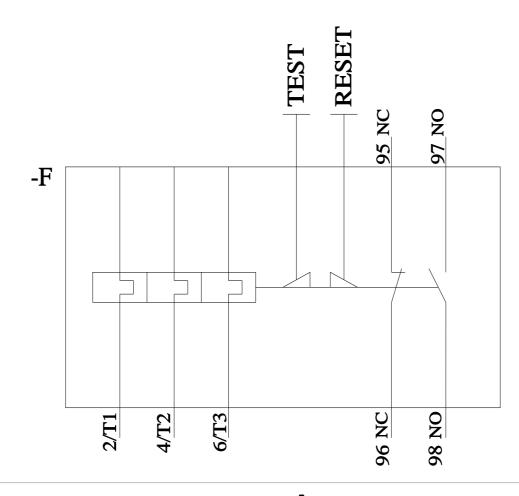
operating power	
• for 3-phase motors at 400 V at 50 Hz	30 90 kW
• for AC motors at 500 V at 50 Hz	30 132 kW
for AC motors at 690 V at 50 Hz	55 160 kW
Auxiliary circuit	
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts	1
note	for contactor disconnection
number of 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 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> </ul>	
<ul> <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>— with type of assignment 2 required</li> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 315 A fuse gG: 6 A
• for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	fuse gG: 6 A
• for short-circuit protection of the auxiliary switch required	fuse gG: 6 A any
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method	fuse gG: 6 A
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position	fuse gG: 6 A any Contactor mounting/stand-alone installation
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm Yes
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection     for main current circuit     for auxiliary and control circuit arrangement of electrical connectors for main current	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm Yes busbar connection
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm Yes busbar connection screw-type terminals
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm Yes busbar connection screw-type terminals
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm Yes busbar connection screw-type terminals Top and bottom
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm Yes busbar connection screw-type terminals Top and bottom 1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 155 mm Yes busbar connection screw-type terminals Top and bottom 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0,5 4 mm²), 2x (0,5 2,5 mm²)
<ul> <li>for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth</li> <li>Connections/ Terminals</li> <li>product component removable terminal for auxiliary and control circuit</li> <li>type of electrical connection         <ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> </ul> </li> <li>arrangement of electrical connectors for main current circuit</li> <li>type of connectable conductor cross-sections         <ul> <li>for auxiliary contacts</li> <li>solid</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> </ul> </li> </ul>	fuse gG: 6 A         any         Contactor mounting/stand-alone installation         119 mm         120 mm         120 mm         155 mm         Ves         Ves         Dusbar connection         screw-type terminals         Top and bottom         1x (0.5 4 mm²), 2x (0.5 2.5 mm²)         1x (0.5 4 mm²), 2x (0.5 2.5 mm²)         1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	fuse gG: 6 A any Contactor mounting/stand-alone installation 119 mm 120 mm 150 mm Yes Ves busbar connection screw-type terminals Top and bottom 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0,5 4 mm²), 2x (0,5 2,5 mm²)
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	fuse gG: 6 A         any         Contactor mounting/stand-alone installation         119 mm         120 mm         120 mm         155 mm         Ves         Ves         Dusbar connection         screw-type terminals         Top and bottom         1x (0.5 4 mm²), 2x (0.5 2.5 mm²)         1x (0.5 4 mm²), 2x (0.5 2.5 mm²)         1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
<ul> <li>for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth</li> <li>Connections/ Terminals product component removable terminal for auxiliary and control circuit</li> <li>type of electrical connection         <ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> </ul> </li> <li>arrangement of electrical connectors for main current circuit</li> <li>type of connectable conductor cross-sections         <ul> <li>for auxiliary contacts</li> <li>solid</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>for AWG cables for auxiliary contacts</li> </ul> </li> <li>tightening torque         <ul> <li>for main contacts with screw-type terminals</li> </ul> </li> </ul>	fuse gG: 6 A         any         Contactor mounting/stand-alone installation         119 mm         120 mm         155 mm         Ves         busbar connection         screw-type terminals         Top and bottom         1x (0.5 4 mm²), 2x (0.5 2.5 mm²)         1x (0.5 4 mm²), 2x (0.5 2.5 mm²)         1x (0.5 4 mm²), 2x (0.5 2.5 mm²)         1x (0.5 2 .5 mm²), 2x (0.5 1.5 mm²)         2x (20 14)         10 12 N·m
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	fuse gG: 6 A         any         Contactor mounting/stand-alone installation         119 mm         120 mm         155 mm         Yes         busbar connection         screw-type terminals         Top and bottom         1x (0.5 4 mm²), 2x (0.5 2.5 mm²)         1x (0.5 4 mm²), 2x (0.5 2.5 mm²)         1x (0.5 4 mm²), 2x (0.5 1.5 mm²)         2x (20 14)

control contacts		M8 M3			
e front according to IEC	C 60529	IP00; IP20 with box terminal/co	over		
ront according to IEC 6	60529	finger-safe, for vertical contact from the front with box terminal/cover			
<u> </u>	ter	No			
ility					
ng to IEC 61000 4 4		2 k / (now or north) 1 k / (night	l porto) correcencedo to d	agree of equarity 2	
0	C 61000-4-5				
		1 kV (line to line) corresponds to degree of severity 3			
		10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz			
			air discharge		
ng status		Slide switch			
-					
al				EMC	
<b>Confirmation</b>	m	Ē	гпг	A	
	(m)	(VL)	FHI	<u>/@</u> \	
	CCC	Ŭ.	LIIL	RCM	
Declaration of Conform	itv	Test Certificates		Marine / Shipping	
				indiano / ompping	
UK	()	<u>Type Test Certific-</u> ates/Test Report	special Test Certific- ate	Saw 3	
CA	EG-Konf.		ulu	ABS	
CA	EG-Konf.	other		ABS	
CA	EG-Konf.	other		ABS	
CA	EG-Konf.		Miscellaneous	ABS	
CA	EG-Konf.	other		ABS	
	EG-Konf.	other		ABS	
	DNV-GL	other		ABS	
	DNV-GL	other		ABS	
	DNVGL	other		ABS	
CA withe Russian marke	t (see here).	other Confirmation		ABS	
CA with the Russian marke (global/en/pressrelease/s) he renewal of the currer	t (see here). siemens-wind-dor nt EAC certifica	other Confirmation wn-russian-business tes.	Miscellaneous	ABS	
CA	t (see here). siemens-wind-dor nt EAC certificar itus of validity of f	other <u>Confirmation</u> wn-russian-business tes. the EAC certification if you intend	Miscellaneous	ABS	
CA with the Russian marke (global/en/pressrelease/s the renewal of the current Siemens office on the state or than the sanctioned EA	t (see here). siemens-wind-dor nt EAC certificar itus of validity of f	other <u>Confirmation</u> wn-russian-business tes. the EAC certification if you intend	Miscellaneous	ABS	
CA with the Russian marke (global/en/pressrelease/s the renewal of the current Siemens office on the state or than the sanctioned EA aging mens.com/cs/ww/en/view	t (see here). siemens-wind-dor nt EAC certificat tus of validity of fi EU member stat	other <u>Confirmation</u> wn-russian-business tes. the EAC certification if you intend	Miscellaneous	Ply these products to an	
CA	t (see here). siemens-wind-dor nt EAC certificat tus of validity of fi EU member stat	other <u>Confirmation</u> wn-russian-business tes. the EAC certification if you intend	Miscellaneous	Ply these products to an	
CA exit the Russian marke (global/en/pressrelease/s he renewal of the current Siemens office on the state or than the sanctioned EA aging mens.com/cs/ww/en/view adcenter (Catalogs, Bruist) liceton lic	t (see here). siemens-wind-downt EAC certificar tus of validity of to kEU member statt w/109813875 ochures,)	other Confirmation wn-russian-business tes. the EAC certification if you intend tes Russia or Belarus).	Miscellaneous	ply these products to an	
CA	t (see here). siemens-wind-downt EAC certificar tus of validity of to kEU member statt w/109813875 ochures,)	other Confirmation wn-russian-business tes. the EAC certification if you intend tes Russia or Belarus).	Miscellaneous	ply these products to an	
CA exit the Russian marke /global/en/pressrelease/s he renewal of the currer Siemens office on the sta r than the sanctioned EA ing mens.com/cs/ww/en/view adcenter (Catalogs, Bruicit) ins.com/mall/en/en/Catalog	t (see here). siemens-wind-dor nt EAC certificar tus of validity of f KEU member stat w/109813875 ochures,)	other Confirmation wn-russian-business tes. the EAC certification if you intend tes Russia or Belarus).	Miscellaneous	ply these products to an	
EA	t (see here). siemens-wind-dor nt EAC certificar tus of validity of f EU member stat w/109813875 ochures,) pg/product?mlfb= rder/default.aspx' steristics, FAQs,	other         Confirmation         wn-russian-business         tes.         the EAC certification if you intendies Russia or Belarus).         :3RB2056-1FC2         ?lang=en&mlfb=3RB2056-1FC2	Miscellaneous	ply these products to an	
CA exit the Russian marke (global/en/pressrelease/s the renewal of the currer Siemens office on the sta ar than the sanctioned EA aging mens.com/cs/ww/en/view adcenter (Catalogs, Br ic10 lering system) ns.com/mall/en/en/Catalo siemens.com/WW/CAXor uls, Certificates, Characo mens.com/cs/ww/en/ps/ timages, 2D dimension	t (see here). siemens-wind-dor nt EAC certificat tus of validity of fi EU member stat w/109813875 ochures,) bg/product?mlfb= der/default.aspx steristics, FAQs, 3BB2056-1FC2 of drawings, 3D n	other         Confirmation         wm-russian-business         tes.         the EAC certification if you intendies Russia or Belarus).         BRB2056-1FC2         ?lang=en&mlfb=3RB2056-1FC2        )         nodels, device circuit diagram	Miscellaneous	ply these products to an	
EA	t (see here). siemens-wind-dor nt EAC certificar tus of validity of LEU member stat v/109813875 ochures,) bg/product?mlfb= der/default.aspx' teristics, FAQs, 3RB2056-1FC2 of awings, 3D n .aspx?mlfb=3RB	other         Confirmation         wn-russian-business         tes.         the EAC certification if you intenders         tes Russia or Belarus).         33RB2056-1FC2         ?lang=en&mlfb=3RB2056-1FC2        )         nodels, device circuit diagram: 2056-1FC2⟨=en	Miscellaneous	ply these products to an	
EA exit the Russian marke (global/en/pressrelease/s he renewal of the currer Siemens office on the sta er than the sanctioned EA inging mens.com/cs/ww/en/view adcenter (Catalogs, Br ic10 hering system) ns.com/mall/en/en/Catalo siemens.com/WW/CAXor hs, Certificates, Characo mens.com/cs/ww/en/ps/s t images, 2D dimension mens.com/bilddb/cax_de	t (see here). siemens-wind-dor nt EAC certifica tus of validity of fl EU member stat w/109813875 ochures,) pg/product?mlfb= der/default.aspx' steristics, FAQs, 3RB2056-1FC2 of drawings, 3D n .aspx?mlfb=3RB through current 3RB2056-1FC2/c	other         Confirmation         wm-russian-business         tes.         the EAC certification if you intendies         es Russia or Belarus).         Barbard Stress         :3RB2056-1FC2         ?lang=en&mlfb=3RB2056-1FC2        )         nodels, device circuit diagram:         2056-1FC2⟨=en         :         :         :         :         :	Miscellaneous	ply these products to an	
	a input/output link mass ility ng to IEC 61000-4-4 rth surge according to IE nductor surge according to cy radiation according to according to IEC 61000- cording to IEC 61000- ng status al Confirmation	a input/output link master ility Ing to IEC 61000-4-4 rth surge according to IEC 61000-4-5 nductor surge according to IEC 61000- according to IEC 61000-4-3 ccording to IEC 61000-4-2 Ing status al Confirmation Confirmation Confirmation	a input/output link master       No         ility       2 kV (power ports), 1 kV (signal 2 kV (line to earth) corresponds 2 kV (line to earth) corresponds 1 kV (line to line) corresponds 1 kV (line to line) corresponds 10 V in frequency range 0.15 to according to IEC 61000-4-3         cording to IEC 61000-4-3       10 V/m         according to IEC 61000-4-2       6 kV contact discharge / 8 kV at a fill to the second at the secon	a input/output link master       No         ility       2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3         ng to IEC 61000-4-4       2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3         nductor surge according to IEC 61000-       2 kV (line to earth) corresponds to degree of severity 3         nductor surge according to IEC 61000-       10 V in frequency range 0.15 to 80 MHz, modulation 80         according to IEC 61000-4-3       10 V/m         cording to IEC 61000-4-2       6 kV contact discharge / 8 kV air discharge         ng status       Slide switch         al       Confirmation         Confirmation       Confirmation         Confirmation       Conformity         Test Certificates       Continue to the top if it is to a contact to the top if it is to a contact to the top if it is to a contact to be if it is to a contact to contact to contact to a contact to a contact to a conta	









## last modified:

8/16/2023 🖸

Subject to change without notice © Copyright Siemens