SIEMENS

Data sheet

3RT1056-6SP36-3PA0



power contactor, AC-3e/AC-3 185 A, 90 kW / 400 V AC (50-60 Hz) / DC Uc: 200-277 V x (0.8-1.1) F-PLC input 24 V DC 3-pole, auxiliary contacts 2 NO + 2 NC permanently mounted drive: electronic main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT1
General technical data	
size of contactor	S6
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	39 W
 at AC in hot operating state per pole 	13 W
 without load current share typical 	2.8 W
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	1 000 V
 of auxiliary circuit with degree of pollution 3 rated value 	500 V
surge voltage resistance	
 of main circuit rated value 	8 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	690 V
shock resistance at rectangular impulse	
• at AC	8,5g / 5 ms, 4,2g / 10 ms
• at DC	8,5g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	13,4g / 5 ms, 6,5g / 10 ms
• at DC	13,4g / 5 ms, 6,5g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	03/01/2017
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 2-Methyl-1-(4-methylthiophenyl)-2-morpho - 71868-10-5 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7 Perfluorbutansulfonsäure (PFBS) und ihre
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	

during operation	-25 +60 °C
during operation orge	-25 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30	95 %
maximum	
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
 at AC-3 rated value maximum 	1 000 V
at AC-3e rated value maximum	1 000 V
operational current	
at AC-1 at 400 V at ambient temperature 40 °C rated value	215 A
• at AC-1	245 A
— up to 690 V at ambient temperature 40 °C rated value	215 A
— up to 690 V at ambient temperature 60 °C rated value	185 A
— up to 1000 V at ambient temperature 40 $^\circ \text{C}$ rated value	100 A
 — up to 1000 V at ambient temperature 60 °C rated value at AC-3 	100 A
• at 400 V rated value	185 A
— at 500 V rated value	185 A
— at 690 V rated value	170 A
— at 1000 V rated value	65 A
• at AC-3e	05 A
- at 400 V rated value	185 A
— at 500 V rated value	185 A
— at 690 V rated value	170 A
— at 1000 V rated value	65 A
• at AC-4 at 400 V rated value	160 A
• at AC-5a up to 690 V rated value	189 A
 at AC-5b up to 400 V rated value 	153 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	157 A
— up to 400 V for current peak value n=20 rated value	157 A
— up to 500 V for current peak value n=20 rated value	157 A
— up to 690 V for current peak value n=20 rated value	157 A
— up to 1000 V for current peak value n=20 rated value value	65 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	105 A
— up to 400 V for current peak value n=30 rated value	105 A
— up to 500 V for current peak value n=30 rated value	105 A
— up to 690 V for current peak value n=30 rated value	105 A
 up to 1000 V for current peak value n=30 rated value 	65 A
minimum cross-section in main circuit at maximum AC-1 rated value	95 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	81 A
• at 690 V rated value	65 A
operational current	
 at 1 current path at DC-1 	
— at 24 V rated value	160 A
— at 60 V rated value	160 A
— at 110 V rated value	18 A
— at 220 V rated value	3.4 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.5 A

 with 2 current paths in series at DC-1 	
— at 24 V rated value	160 A
— at 60 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	20 A
— at 440 V rated value	3.2 A
— at 600 V rated value	1.6 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	160 A
— at 60 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	160 A
— at 440 V rated value	11.5 A
— at 600 V rated value	4 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	160 A
— at 60 V rated value	7.5 A
— at 110 V rated value	2.5 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.17 A
— at 600 V rated value	0.12 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	160 A
— at 60 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	2.5 A
— at 440 V rated value	0.65 A
— at 600 V rated value	0.37 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	160 A
— at 60 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	160 A
— at 440 V rated value	1.4 A
— at 600 V rated value	0.75 A
operating power	
• at AC-2 at 400 V rated value	90 kW
• at AC-3	
— at 230 V rated value	55 kW
— at 400 V rated value	90 kW
— at 500 V rated value	132 kW
— at 690 V rated value	160 kW
— at 1000 V rated value	90 kW
● at AC-3e	
— at 230 V rated value	55 kW
— at 400 V rated value	90 kW
— at 500 V rated value	132 kW
— at 690 V rated value	160 kW
— at 1000 V rated value	90 kW
operating power for approx. 200000 operating cycles at AC- 4	
at 400 V rated value	45 kW
• at 690 V rated value	65 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	60 000 kVA
 up to 400 V for current peak value n=20 rated value 	100 000 VA
 up to 500 V for current peak value n=20 rated value 	130 000 VA
 up to 690 V for current peak value n=20 rated value 	180 000 VA
 up to 1000 V for current peak value n=20 rated value 	110 000 VA
operating apparent power at AC-6a	
 up to 230 V for current peak value n=30 rated value 	40 000 VA

 up to 400 V for current peak value n=30 rated value 	70 000 VA
 up to 500 V for current peak value n=30 rated value 	90 000 VA
 up to 690 V for current peak value n=30 rated value 	120 000 VA
 up to 1000 V for current peak value n=30 rated value 	110 000 VA
short-time withstand current in cold operating state up to 40 $^{\circ}\mathrm{C}$	
 limited to 1 s switching at zero current maximum 	2 900 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	2 084 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	1 480 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	968 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	801 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	1 000 1/h
• at DC	1 000 1/h
operating frequency	
• at AC-1 maximum	750 1/h
• at AC-2 maximum	300 1/h
• at AC-3 maximum	750 1/h
• at AC-3e maximum	750 1/h
• at AC-4 maximum	130 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
• at 50 Hz rated value	200 277 V
• at 60 Hz rated value	200 277 V
control supply voltage at DC	
rated value	200 277 V
operating range factor control supply voltage rated value of magnet coil at DC	
initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.8 1.1
type of PLC-control input according to IEC 60947-1	Type 1
consumed current at PLC-control input according to IEC 60947-1 maximum	14 mA
voltage at PLC-control input rated value	24 V
operating range factor of the voltage at PLC-control input	0.8 1.1
design of the surge suppressor	with varistor
apparent pick-up power	
 at minimum rated control supply voltage at AC 	
— at 50 Hz	190 VA
— at 60 Hz	190 VA
at maximum rated control supply voltage at AC	
— at 60 Hz	280 VA
— at 50 Hz	280 VA
apparent pick-up power of magnet coil at AC	
• at 50 Hz	280 VA
• at 60 Hz	280 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.8
• at 60 Hz	0.8
apparent holding power	2.4.1/4
at minimum rated control supply voltage at DC	2.1 VA
at maximum rated control supply voltage at DC	2.8 VA
apparent holding power	
at minimum rated control supply voltage at AC	0.51/4
— at 50 Hz	3.5 VA
— at 60 Hz	3.5 VA
 at maximum rated control supply voltage at AC 	

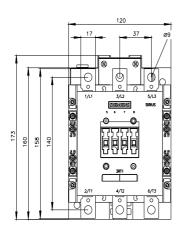
	— at 50 Hz	4.8 VA
apper holding powe of magnet cell at AC#• ± 50 Hz4.8 VA• ± 50 Hz4.8 VA• ± 50 Hz0.6• ± 50 Hz0.6• ± 50 Hz0.6• ± 60 Hz0.6Cosing power of magnet cell at DC2.2 W• ± 10 Hz0.7 Sm S• ± 10 Hz0.7 Sm S• ± 10 C0.7 Sm S• ± 10 C0.1 Sm S• ± 10 C155 130 mS• ± 10 C10 15 mS		
• • • • 00 hz48 VA• • • • 00 hz48 VA• • • • 00 hz48 VA• • • 00 hz48 VA• • • 00 hz08• • • 00 hz08• • • 00 hz08• • • 00 hz08 V• • 00 hz00 V• • 00 hz115 130 ms• • 00 hz115 130 ms• • 00 hz01 hz• • • 00 hz01 hz• • 00 hz01 hz• • 01 hz01 hz <tr< td=""><td></td><td></td></tr<>		
• #180 Hg48 VAInductive power fact with the holding power of the cell8• #180 Hg0.8• #180 Hg0.8• #180 Hg28 W• #180 Hg0.75 m is• #180 Hg0.75 m is• #180 Hg0.75 m is• #180 Hg155130 ms• #180 Hg165150 mg• #180 Hg164150 mg• #180 Hg164		4.8.1/4
Inductive power factor with the holding power of the coll0.8• # 100 Hz0.8Cleasing power of magnet coll at DC28 WCleasing power of magnet coll at DC28 Wcleasing power of magnet coll at DC28 Wcleasing delay0 75 ms• # 1.4 C00 75 ms• # 1.4 C115 130 ms• # 1.4 C115 130 ms• # 1.4 C115 130 ms• # 1.4 C12 S• # 1.4 C12 S• # 1.4 C12 S• # 1.4 C13 ms• # 1.4 C13 ms• # 1.4 C13 ms• # 1.4 C13 ms• # 1.4 C14 S• # 1.4 C10 15 msControl version of the switch operating mechanism2Power factor version of the version operation current at AC-12 maxim10 Aoperational current at DC-13-• # 12 V rated value10 A• # 13 V rated value10 A• # 14 V rated value <td></td> <td></td>		
• • # 50 Hz0.6• • # 50 Hz0.6 No.• • # 50 Hz0.6 No.• • # 50 Hz0.2 N W• • # AC0 75 ms• • # AC15 130 ms• # IAC15 130 ms• # IAC10 15 ms• # IAC10 15 ms• # IAC I Notabels for auxiliary contacts instantaneous2• # IAC I Notabel Value0.A• # IAC I Valed Val		4.0 VA
• #18 Hz0.6closing powr of magnet coil a DC28 Wclosing deay0• #1AC0• #1AC0• #1AC115 130 ms• #1BC115 130 ms• #1DC115 130 ms• #1DC115 130 ms• #1DC115 130 ms• #1DC10 15 ms• #1DC *		
closing power of magnet coll at DC 320 W holding power of magnet coll at DC 2.8 W closing datay 075 ms • at DC 6075 ms opaning datay 15130 ms • at DC 1615 ms control varian of the switch operating mechanism 2 Auxiliary circum 10.A. oparational current at AC-15 2 • at 300 V rated value 6 A • at 300 V rated value 10 A • at 300 V rated value 6 A • at 300 V rated value 10 A • at 300 V rated value 6 A • at 300 V rated value 10 A		
holding power of mignet coil at DC 2.8 W closing delay 0075 ms • iL DC 0175 ms • iL DC 115 130 ms • iL DC 115 130 ms • at DC 115 130 ms cortory trains after power failure typical 2.8 arcing time 10 15 ms control version of the switch operating mechanism Pailaber LC input (F.PLC.IN) Appling circuit 2 control version of the switch operating mechanism 2 portational current at AC-12 maximum 10 A operational current at AC-12 maximum 3 • • it 300 V rated value 6 A • • it 300 V rated value 6 A • • it 300 V rated value 0 A • • it 300 V rated value 0 A • • it 300 V rated value 0 A • • it 300 V rated value 0 A • • it 300 V rated value 0 A • • it 300 V rated value 0 A • • it		
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• e1 DC6075 msopening delay15130 ms• e1 AC115130 ms• e1 AC15130 ms• e1 CC15130 msencore ytim after power failure typical28.3arcing time18.1ade Pt.C. input (F-PLC-N)Auxiliary ercture2purcher of NC contects for auxiliary contacts instantaneous contact2operational current at AC-150.0.4• e1230 V trater value6.4• e1230 V trater value6.4• e1230 V trater value0.4• e1230 V trater value6.4• e1230 V trater value0.4• e1230 V trater value6.4• e1230 V trater value0.4• e1230 V trater value0.4• e1230 V trater value0.4• e1240 V trater value0.3A• e1240 V trater value0.3A• e1240 V trater value0.3A• e1240 V trater value0.3A• e1250 V trater value0.3A• e1260 V trater value1.4<		
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Auxiliary circuit 2 number of NC contacts for auxiliary contacts instantaneous contact 2 operational current at AC-12 maximum 10 A operational current at AC-12 maximum 6 A • at 230 V rated value 6 A • at 230 V rated value 6 A • at 230 V rated value 6 A • at 300 V rated value 6 A • at 800 V rated value 0.15 A operational current at DC-13		
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• at 230 V rated value 6 A • at 400 V rated value 3 A • at 650 V rated value 1A • at 650 V rated value 1A • at 650 V rated value 6 A • at 640 V rated value 6 A • at 64 V rated value 6 A • at 64 V rated value 6 A • at 60 V rated value 6 A • at 60 V rated value 2 A • at 60 V rated value 0 A </td <td>operational current at AC-12 maximum</td> <td>10 A</td>	operational current at AC-12 maximum	10 A
• at 230 V rated value 6 A • at 400 V rated value 3 A • at 650 V rated value 1A • at 650 V rated value 1A • at 650 V rated value 6 A • at 640 V rated value 6 A • at 64 V rated value 6 A • at 64 V rated value 6 A • at 60 V rated value 6 A • at 60 V rated value 2 A • at 60 V rated value 0 A </td <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td>	· · · · · · · · · · · · · · · · · · ·	
• at 500 V rated value2 A• at 6800 V rated value1A• operational current at DC-12·• at 24 V rated value10 A• at 24 V rated value6 A• at 460 V rated value6 A• at 60 V rated value3 A• at 110 V rated value2 A• at 125 V rated value1A• at 250 V rated value1A• at 250 V rated value2 A• at 200 V rated value10 A• at 200 V rated value2 A• at 24 V rated value2 A• at 24 V rated value2 A• at 45 V rated value2 A• at 46 V rated value2 A• at 24 V rated value0.9 A• at 25 V rated value0.9 A• at 250 V rated value0.1 A• at 250 V rated value0.1 A• at 250 V rated value180 A• at 600 V rated value180 A <trr>• at 600 V rat</trr>	at 230 V rated value	6 A
• at 680 V rated value1 Aoperational current at DC-12.• at 24 V rated value10 A• at 48 V rated value6 A• at 60 V rated value6 A• at 10 V rated value3 A• at 125 V rated value2 A• at 220 V rated value1 A• at 600 V rated value0.15 A• at 230 V rated value0.4• at 24 V rated value2 A• at 24 V rated value0.4• at 24 V rated value0.9 A• at 110 V rated value0.9 A• at 125 V rated value0.3 A• at 250 V rated value0.14• at 250 V rated value0.3 A• at 260 V rated value180 A• at 270 V rated value180 A• at 480 V rated value192 A• at 480 V rated value180 A• at 480 V rated value180 A• at 480 V rated value180 A• at 600 V rated value192 A• at 600 V rated value30 h p• at 200 V rated value60 h p• at 200 V rated value60 h p• at 200 V rated value150 h p• at 400480 V rated value150 h p• at 200200 V rated value150 h p• at 200200 V rated value150 h p• at 200200 V rated value150 h p• at 400480 V rated value150 h p• at 400480 V rated value150	 at 400 V rated value 	3 A
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• at 24 V rated value 10 A • at 48 V rated value 6 A • at 60 V rated value 6 A • at 60 V rated value 3 A • at 110 V rated value 2 A • at 220 V rated value 0.15 A • operational current at DC-13 0 • at 24 V rated value 10 A • at 60 V rated value 2 A • at 60 V rated value 0.9 A • at 220 V rated value 0.3 A • at 250 V rated value 0.3 A • at 600 V rated value 0.14 A • at 600 V rated value 180 A • at 600 V rated value 30 hp • at 600 V rated value 30 hp • at 220/200 V rated value 30 hp • at 220/200 V rated value 30 hp		
e at 48 V rated value6 A• at 60 V rated value6 A• at 10 V rated value3 A• at 125 V rated value2 A• at 125 V rated value1 A• at 600 V rated value0.15 A• operational current at DC-13-• at 44 V rated value2 A• at 44 V rated value2 A• at 45 V rated value2 A• at 46 V rated value2 A• at 46 V rated value2 A• at 46 V rated value2 A• at 60 V rated value2 A• at 60 V rated value0.9 A• at 110 V rated value0.1 A• at 220 V rated value0.1 A• at 220 V rated value0.1 A• at 220 V rated value0.1 A• at 600 V rated value10 A• at 600 V rated value10 A• at 600 V rated value0.1 A• at 600 V rated value180 A• at 600 V rated value192 A• at 600 V rated value100 A• at 600 V rated value30 hp• for single-phase AC motor at 220/208 V rated value30 hp• for 3-phase AC motor at 220/208 V rated value50 hp- at 220/208 V rated value50 hp- at 460/480 V rated value200 hp- at 460/480 V rated value200 hp- at 460/480 V rated value300 hp <td></td> <td>10 A</td>		10 A
• at 60 V rated value 6 A • at 110 V rated value 3 A • at 125 V rated value 2 A • at 220 V rated value 1 A • at 600 V rated value 0.15 A operational current at Dc-13 - • at 24 V rated value 10 A • at 48 V rated value 2 A • at 60 V rated value 0.9 A • at 100 V rated value 0.9 A • at 220 V rated value 0.1 A • at 250 V rated value 0.1 A • at 800 V rated value 180 A • at 800 V rated value 192 A • at 800 V rated value 30 hp • for 3-phase AC motor - - at 200 V rated value 30 hp • for 3-phase AC motor - -		
• at 110 V rated value3 Å• at 125 V rated value2 Å• at 20 V rated value1 Å• at 20 V rated value0.15 Åoperational current at DC-13-• at 24 V rated value10 Å• at 24 V rated value2 Å• at 48 V rated value2 Å• at 48 V rated value2 Å• at 10 V rated value0.9 Å• at 110 V rated value0.9 Å• at 125 V rated value0.9 Å• at 20 V rated value0.1 Å• at 20 V rated value1 fault switching per 100 million (17 V, 1 mÅ)U/CSA ratings-full-load current (FLA) for 3-phase AC motor180 Å• at 480 V rated value180 Å• at 600 V rated value30 hp• at 230 V rated value30 hp• at 230 V rated value30 hp• at 480 V rated value0.9 Å• at 480 V rated value180 Å• at 480 V rated value192 Å• at 480 V rated value30 hp• at 480 V rated value30 hp• at 230 V rated value60 hp- at 230 V rated value75 hp- at 200230 V rated value60 hp- at 200230 V rated value75 hp- at 48040 V rated value200 hp- at 575/600 V rated value200 hp- at 300 V rated value200 hp		
• at 125 V rated value2 A• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-13I• at 24 V rated value10 A• at 44 V rated value2 A• at 46 V rated value2 A• at 60 V rated value2 A• at 10 V rated value0.9 A• at 20 V rated value0.3 A• at 20 V rated value0.1 A• at 600 V rated value0.1 A• at 600 V rated value0.1 A• at 600 V rated value10 A• at 600 V rated value0.1 A• at 600 V rated value160 A• at 600 V rated value180 A• at 600 V rated value192 A• at 600 V rated value30 hp• for 3-phase AC motor at 200208 V rated value60 hp- at 200208 V rated value60 hp- at 200208 V rated value150 hp- at 460/480 V value150 hp- at 460/480 V rated value150 hp- at 460/480 V rated value150 hp- at 575/600 V rated value200 hp		
• at 220 V rated value 1 A • at 600 V rated value 0.15 A operational current at DC-13 - • at 24 V rated value 10 A • at 24 V rated value 2 A • at 48 V rated value 2 A • at 60 V rated value 0.9 A • at 125 V rated value 0.9 A • at 220 V rated value 0.3 A • at 200 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings		
• at 600 V rated value0.15 Aoperational current at DC-13I• at 24 V rated value10 A• at 45 V rated value2 A• at 46 V rated value2 A• at 60 V rated value0.9 A• at 125 V rated value0.9 A• at 220 V rated value0.1 A• otat 20 V rated value0.1 A• otat 00 V rated value0.1 A• at 600 V rated value1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingstul-load current (FLA) for 3-phase AC motor• at 480 V rated value180 A• at 480 V rated value192 A• of rasingle-phase AC motor192 A• at 480 V rated value30 hp• for 3-phase AC motor30 hp• at 22020 V rated value30 hp• at 22020 V rated value150 hp• at 4804 BV rated value150 hp• at 4804 BV rated value150 hp• at 4804 V rated		
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• at 24 V rated value 10 A • at 48 V rated value 2 A • at 60 V rated value 2 A • at 10 V rated value 1 A • at 125 V rated value 0.9 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) U/CSA ratings full-load current (FLA) for 3-phase AC motor 180 A • at 600 V rated value 180 A • at 600 V rated value 192 A yielded mechanical performance [hp] - • for single-phase AC motor - - at 200/208 V rated value 60 hp - at 200/208 V rated value 60 hp - at 200/208 V rated value 75 hp - at 460/480 V rated value 150 hp - at 460/480 V rated value 150 hp		
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• at 125 V rated value0.9 A• at 220 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsUL/CSA ratings180 Aout at 480 V rated value192 A• at 480 V rated value30 hp• at 600 V rated value30 hp• for single-phase AC motor60 hp- at 230 V rated value60 hp• for 3-phase AC motor75 hp• at 200/208 V rated value60 hp• at 200/208 V rated value150 hp• at 460/480 V rated value200 hp		
• at 220 V rated value0.3 A• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value180 A• at 600 V rated value192 A• at 600 V rated value30 hp• for single-phase AC motor30 hp- at 230 V rated value30 hp• for 3-phase AC motor30 hp- at 200/208 V rated value60 hp- at 200/208 V rated value55 hp- at 460/480 V rated value150 hp- at 575/600 V rated value200 hp		
• at 600 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratingsfull-load current (FLA) for 3-phase AC motor180 A• at 480 V rated value180 A• at 600 V rated value30 A• at 600 V rated value30 hp• for single-phase AC motor30 hp• for single-phase AC motor60 hp• at 230 V rated value60 hp• for 3-phase AC motor75 hp• at 220/230 V rated value150 hp• at 460/480 V rated value200 hp• at 575/600 V rated valueA600 / P600		
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UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value 192 A yielded mechanical performance [hp] • for single-phase AC motor - at 230 V rated value 30 hp • for 3-phase AC motor - at 200/208 V rated value 60 hp - at 220/230 V rated value 60 hp - at 460/480 V rated value 150 hp - at 575/600 V rated value 200 hp		
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• at 480 V rated value 180 A • at 600 V rated value 192 A yielded mechanical performance [hp] - • for single-phase AC motor - - at 230 V rated value 30 hp • for 3-phase AC motor - - at 200/208 V rated value 60 hp - at 200/208 V rated value 75 hp - at 200/208 V rated value 150 hp - at 460/480 V rated value 150 hp - at 575/600 V rated value 200 hp		
• at 600 V rated value192 Ayielded mechanical performance [hp]192 A• for single-phase AC motor30 hp- at 230 V rated value30 hp• for 3-phase AC motor at 200/208 V rated value60 hp- at 220/230 V rated value50 hp- at 220/230 V rated value150 hp- at 575/600 V rated value200 hpContact rating of auxiliary contacts according to ULA600 / P600		190 A
yielded mechanical performance [hp]• for single-phase AC motor30 hp- at 230 V rated value30 hp• for 3-phase AC motor at 200/208 V rated value60 hp- at 220/230 V rated value75 hp- at 460/480 V rated value150 hp- at 575/600 V rated value200 hp		
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- at 230 V rated value30 hp• for 3-phase AC motor at 200/208 V rated value60 hp- at 220/230 V rated value75 hp- at 460/480 V rated value150 hp- at 575/600 V rated value200 hpcontact rating of auxiliary contacts according to ULA600 / P600		
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- at 200/208 V rated value 60 hp - at 220/230 V rated value 75 hp - at 460/480 V rated value 150 hp - at 575/600 V rated value 200 hp contact rating of auxiliary contacts according to UL A600 / P600		3∪ np
— at 575/600 V rated value 200 hp contact rating of auxiliary contacts according to UL A600 / P600		
contact rating of auxiliary contacts according to UL A600 / P600	— at 460/480 V rated value	
		200 hp
Short-circuit protection		A600 / P600
	Short-circuit protection	

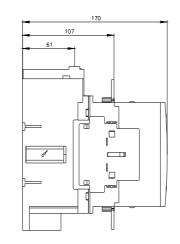
design of the fuse link		
design of the fuse link		
 for short-circuit protection of the main circuit with type of accrdination 1 required 	aC: 255 A (600)/ 100 (A)	
— with type of coordination 1 required	gG: 355 A (690 V, 100 kA)	
 — with type of assignment 2 required 	gG: 315 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 315 A (415 V, 50 kA)	
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)	
Installation/ mounting/ dimensions		
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back	
fastening method	screw fixing	
side-by-side mounting	Yes	
height	172 mm	
width	120 mm	
depth	170 mm	
required spacing		
with side-by-side mounting		
— forwards	20 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	0 mm	
for grounded parts		
— forwards	20 mm	
— upwards	10 mm	
— at the side	10 mm	
— downwards	10 mm	
• for live parts		
— forwards	20 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	10 mm	
Connections/ Terminals		
type of electrical connection		
for main current circuit	Connection bar	
for auxiliary and control circuit	screw-type terminals	
at contactor for auxiliary contacts	Screw-type terminals	
of magnet coil	Screw-type terminals	
width of connection bar	17 mm	
thickness of connection bar	3 mm	
diameter of holes	9 mm	
number of holes	1	
connectable conductor cross-section for main contacts		
stranded	25 120 mm²	
connectable conductor cross-section for auxiliary contacts		
solid or stranded	0.5 4 mm²	
 finely stranded with core end processing 	0.5 2.5 mm ²	
type of connectable conductor cross-sections		
for auxiliary contacts		
- solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)	
— solid or stranded	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²), max. 2x (0.75 4 mm ²) 2x (0,5 1,5 mm ²), 2x (0,75 2,5 mm ²), max. 2x (0,75 4 mm ²)	
 — finely stranded with core end processing 	2x (0,5 1,5 mm ²), 2x (0,75 2,5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)	
 for AWG cables for auxiliary contacts 	2x (0.5 1.5 mm ⁻), 2x (0.75 2.5 mm ⁻) 2x (20 16), 2x (18 14), 1x 12	
AWG cables for auxiliary contacts AWG number as coded connectable conductor cross	2A (20 10), 2A (10 14), 1X 12	
section		
for auxiliary contacts	18 14	
Safety related data		
product function		
	Vaa	
 mirror contact according to IEC 60947-4-1 	Yes	
 mirror contact according to IEC 60947-4-1 positively driven operation according to IEC 60947-5-1 	No	
-		
• positively driven operation according to IEC 60947-5-1	No	

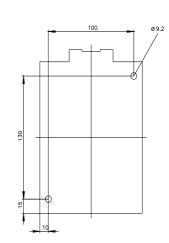
Safety Integrity Level	(SIL) according to IEC 6150	08	2		
SIL Claim Limit (sub	system) according to EN 6	62061	2		
performance level (Pl	L) according to EN ISO 1384	l9-1	С		
category according to	EN ISO 13849-1		2		
stop category accor	ding to EN 60204-1		0		
PFHD with high dema	and rate according to EN 620	061	4.5E-7 1/h		
failure rate [FIT] with	low demand rate according t	to SN 31920	100 FIT		
Safe failure fraction (SFF)		93 %			
PFDavg with low de	mand rate according to IE	C 61508	0.007		
MTBF		75 a			
hardware fault tolerance according to IEC 61508		0			
T1 value for proof tes 61508	t interval or service life acco	rding to IEC	20 a		
protection class IP on the front according to IEC 60529		EC 60529	IP00; IP20 with box terminal/	cover	
touch protection on the front according to IEC 60529		60529	finger-safe, for vertical contact	ct from the front with box ter	minal/cover
Certificates/ approval	s				
EMC	Functional Safety/Safety of Ma- chinery	Declaration of C	conformity	Test Certificates	
RCM	Type Examination Cer- tificate	UK CA	C C EG-Konf.	Special Test Certific- ate	<u>Type Test Certific-</u> ates/Test Report
other			Railway		
other Confirmation	Miscellaneous	Miscellaneous			

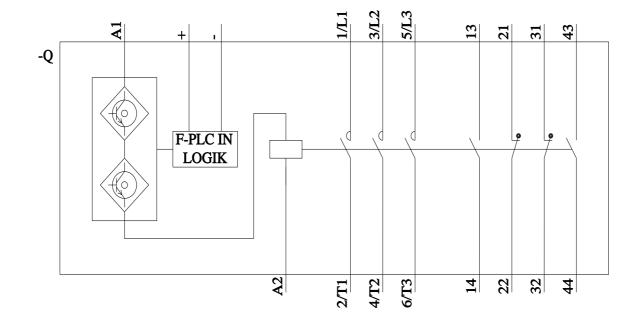
Further information

Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). 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=3RT1056-6SP36-3PA0 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1056-6SP36-3PA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1056-65 -3PA0&lang=en Characteristic: Tripping characteristics, I2t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT10 SP36-3PA0/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1056-6SP36-3PA0&objecttype=14&gridview=view1









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