SIEMENS

Data sheet

3RT1056-6SF36



Power contactor, AC-3 185 A, 90 kW / 400 V Coil AC 50/60 Hz and DC 96-127 V x (0.8-1.1) F-PLC input 24 V DC 3-pole size S6 Auxiliary contacts 2 NO + 2 NC Main circuit: Busbar Control and auxiliary circuit: screw terminal

product designation Power contactor product type designation SR11 General technical data S6 product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 39 W • at AC in hot operating state per pole 13 W • at AC in hot operating state per pole 1000 V • of main circuit with degree of pollution 3 rated value 6 fw anilary circuit ated value • of main circuit with degree of pollution 3 rated value 6 kV • of main circuit vith degree of pollution 3 rated value 6 kV • of main circuit vith degree of pollution 3 rated value 6 kV • of main circuit vith degree of pollution 3 rated value 6 kV • of auxiliary circuit ated value 8 kV • of auxiliary circuit ated value 8 kV • of auxiliary circuit ated value 8 kV • at AC 8.5g / 5 ms, 4.2g / 10 ms • at AC 13.4g / 5 ms, 6.5g / 10 ms • at AC 13.4g / 5 ms, 6.5g / 10 ms • at AC 10 0000 000 • at AC	product brand name	SIRIUS	
Size of contactor S6 product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 39 W • at AC in hot operating state per pole 13 W • of main circuit with degree of pollution 3 rated value 1 000 V • of auxiliary circuit with degree of pollution 3 rated value 1 000 V • of auxiliary circuit with degree of pollution 3 rated value 6 W • of main circuit rated value 6 KV maximum permissible voltage for safe isolation between coll and main contacts according to EN 60947-1 680 V • at AC 8,5g / 5 ms, 4,2g / 10 ms • at AC 8,5g / 5 ms, 4,2g / 10 ms • at AC 13,4g / 5 ms, 6,5g / 10 ms • at AC 1000 000 • at AC 1000 000 • at AC 1000 000 • at AC 10000 000 • at AC 10000 000 • at AC 10000 000 • at DC 10000 000 • at DC 10000 000 • at AC 0 000 000 • at DC 10000 000 • at DC	product designation	Power contactor	
size of contactor S6 product extension No • at unction module for communication No • at AC in hot operating state 39 W • at AC in hot operating state proje 13 W • of main circuit with degree of pollution 3 rated value 1000 V • of main circuit with degree of pollution 3 rated value 1000 V • of main circuit with degree of pollution 3 rated value 600 V • of main circuit with degree of pollution 500 V 500 V • of main circuit with degree of pollution 500 V 600 V • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 600 V • at AC 8.5g / 5 ms, 4.2g / 10 ms • at AC 13.4g / 5 ms, 6.5g / 10 ms • at DC 13.4g / 5 ms, 6.5g / 10 ms • at DC 10.000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10.000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10.000 000 • of the contactor with added auxiliary switch block typical 10.000 000 • of the contactor with added auxiliary switch block typical 10.000 000 • of the contactor with added auxiliary switch block typical 10.000 000 • of the co	product type designation	3RT1	
product extension No • function module for communication Yes • auxiliary switch Yes power loss [W] for rated value of the current 39 W • at AC in hot operating state per pole 13 W • at AC in hot operating state per pole 13 W • of main circuit with degree of pollution 3 rated value 1 000 V • of main circuit with degree of pollution 3 rated value 1 000 V • of main circuit rated value 6 kV • of main circuit rated value 8 kV • of auxiliary circuit rated value 8 kV • of main chrcuit proble voltage for safe isolation between coll and main contacts according to EN 60947-1 690 V shock resistance at rectangular impulse 8.5g / 5 ms, 4.2g / 10 ms • at AC 8.5g / 5 ms, 4.2g / 10 ms • at AC 13.4g / 5 ms, 6.5g / 10 ms • at AC 10 000 000 • at AC 10 000 000 • at AC 10 000 000 • at DC 5000	General technical data		
• function module for communicationNo• auxiliary switchYespower loss [W] for rated value of the current39 W• at AC in hot operating state39 W• at AC in hot operating state per pole13 W• of main circuit with degree of pollution 3 rated value0 V• of auxiliary circuit with degree of pollution 3 rated value1000 V• of auxiliary circuit with degree of pollution 3 rated value500 V• of main circuit with degree of pollution 3 rated value6 kV• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value8 style• of auxiliary circuit rated value8 style• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value8 style• at AC8,5g / 5 ms, 4,2g / 10 ms• at AC8,5g / 5 ms, 4,2g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 ms• at DC10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical2 000 mmistallation attude at	size of contactor	S6	
• auxiliary switchYespower loss [VI] for rated value of the current	product extension		
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 1000 V • of auxiliary circuit with degree of pollution 3 rated value 1000 V • of main circuit with degree of pollution 3 rated value 6 kV surge voltage resistance 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for safe isolation between coll and main contacts according to EN 60947-1 8.5g / 5 ms, 4.2g / 10 ms shock resistance at rectangular impulse 8.5g / 5 ms, 4.2g / 10 ms • at AC 8.5g / 5 ms, 6.5g / 10 ms • at AC 13.4g / 5 ms, 6.5g / 10 ms • at AC 13.4g / 5 ms, 6.5g / 10 ms • at AC 10.000 000 • at AC 10.000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical <t< td=""><td> function module for communication </td><td>No</td></t<>	 function module for communication 	No	
• 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 1 000 V • of main circuit with degree of pollution 3 rated value 1 000 V • of main circuit with degree of pollution 3 rated value 500 V • of main circuit rated value 8 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 8 kV • at AC 8.5g / 5 ms, 4.2g / 10 ms • at AC 13.4g / 5 ms, 6.5g / 10 ms • at AC 13.4g / 5 ms, 6.5g / 10 ms • at AC 10 000 000 • at DC 13.4g / 5 ms, 6.5g / 10 ms • at DC 10 000 000 • at DC 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 000 000 o	auxiliary switch	Yes	
• at AC in hot operating state per pole13 W• without load current share typical2.8 Winsulation voltage1 000 V• of main circuit with degree of pollution 3 rated value1 000 V• of auxiliary circuit with degree of pollution 3 rated value500 V• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• at AC8,5g / 5 ms, 4,2g / 10 ms• at AC8,5g / 5 ms, 4,2g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC10 000 000• at AC10 000 000• at DC10 000 000• at AC500 000• at AC10 000 000• at DC10 000 000• at AC10 000 000• at AC10 000 000• at DC10 000 000• at AC00 00	power loss [W] for rated value of the current		
• without load current share typical2.8 Winsulation voltage1000 V• of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value1000 Vsurge voltage resistance500 V• of main circuit rated value8 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse8,5g / 5 ms, 4,2g / 10 ms• at AC8,5g / 5 ms, 4,2g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 ms• at AC10,000 000• at DC10,000 000shock resistance with sine pulse10,000 000• at AC10,000 000• at AC10,000 000• at DC10,000 000• at DC5000 000• at DC10,000 000• at DC200 mauxiliary switch block typical2000 minstallation altitude at height above sea level maximum • during operation2000 m	 at AC in hot operating state 	39 W	
insulation voltage 0 • 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 • of main circuit with degree of pollution 3 rated value 500 V • of main circuit rated value 8 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 680 V shock resistance at rectangular impulse 8,5g / 5 ms, 4,2g / 10 ms • at AC 8,5g / 5 ms, 4,2g / 10 ms • at DC 13,4g / 5 ms, 6,5g / 10 ms • at DC 13,4g / 5 ms, 6,5g / 10 ms • at DC 10 000 000 • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 03/01/2017 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Amblent conditions 2 000 m <td> at AC in hot operating state per pole </td> <td>13 W</td>	 at AC in hot operating state per pole 	13 W	
• of main circuit with degree of pollution 3 rated value1 000 V• of auxiliary circuit with degree of pollution 3 rated value500 Vsurge voltage resistance500 V• of main circuit rated value8 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse6,5g / 5 ms, 4,2g / 10 ms• at AC8,5g / 5 ms, 4,2g / 10 ms• at AC8,5g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 ms• at DC10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical0 QSubstance Prohibitance (Date)0 QSubstance Prohibitance (Date)2 000 mambient conditions2 000 mambient temperature • during operation2 000 m	 without load current share typical 	2.8 W	
• of auxiliary circuit with degree of pollution 3 rated value500 Vsurge voltage resistance8 kV• of main circuit rated value8 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse68,5g / 5 ms, 4,2g / 10 ms• at AC8,5g / 5 ms, 4,2g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical03/01/2017Ambient conditions2 000 mInstallation altitude at height above sea level maximum e during operation2 000 m	insulation voltage		
value value surge voltage resistance 8 kV • of main circuit rated value 8 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for safe isolation between 690 V coil and main contacts according to EN 60947-1 690 V shock resistance at rectangular impulse 6,5g / 5 ms, 4,2g / 10 ms • at AC 8,5g / 5 ms, 4,2g / 10 ms • at AC 13,4g / 5 ms, 6,5g / 10 ms • at AC 13,4g / 5 ms, 6,5g / 10 ms • at AC 13,4g / 5 ms, 6,5g / 10 ms • at AC 13,4g / 5 ms, 6,5g / 10 ms • at DC 5000 000 • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 5000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 200 000 • of the contactor with added auxiliary switch block typical 2000 m installation altitude at height above sea level maximum 2000 m ambient conditions 225 +60 °C	 of main circuit with degree of pollution 3 rated value 	1 000 V	
• of main circuit rated value8 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse690 V• at AC8,5g / 5 ms, 4,2g / 10 ms• at AC8,5g / 5 ms, 4,2g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 ms• at DC10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typicalQsubstance Prohibitance (Date)03/01/2017Ambient conditions2 000 minstallation altitude at height above sea level maximum • during operation2 000 m	, , , , , , , , , , , , , , , , , , , ,	500 V	
• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse6 kJ / 5 ms, 4,2g / 10 ms• at AC8,5g / 5 ms, 4,2g / 10 ms• at DC3bock resistance with sine pulse• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 ms• at DC10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical03/01/2017methence (Date)03/01/2017Amblent conditions2 000 minstallation altitude at height above sea level maximum • during operation2 000 m	surge voltage resistance		
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse • at AC • at DC8,5g / 5 ms, 4,2g / 10 ms 8,5g / 5 ms, 4,2g / 10 msshock resistance with sine pulse • at AC • at DC13,4g / 5 ms, 6,5g / 10 msshock resistance with sine pulse • at AC • at DC13,4g / 5 ms, 6,5g / 10 msmechanical service life (switching cycles) • of contactor typical10 000 000of the contactor with added electronically optimized auxiliary switch block typical10 000 000reference code according to IEC 81346-2 Substance Prohibitance (Date)QMethanical service1200 mambient temperature • during operation2 000 m	 of main circuit rated value 	8 kV	
coil and main contacts according to EN 60947-1shock resistance at rectangular impulse• at AC• at DC• at DC• at AC• at AC• at AC• at AC• at AC• at AC• at DC• at	 of auxiliary circuit rated value 	6 kV	
• at AC8,5g / 5 ms, 4,2g / 10 ms• at DC8,5g / 5 ms, 4,2g / 10 msshock resistance with sine pulse13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 ms• at DC10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical0 000 000• of the contactor with added auxiliary switch block typical0 000 000• of the contactor with added auxiliary switch block typical0 000 000• of the contactor with added auxiliary switch block typical0 000 000• of the contactor with added auxiliary switch block typical2 000 000• of the contactor with addee auxiliary switch block typical2 000 m• during operation2 000 m		690 V	
at DC8,5g / 5 ms, 4,2g / 10 msshock resistance with sine pulse8,5g / 5 ms, 4,2g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 msmechanical service life (switching cycles)0000000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical000000000000000000000000000000000	shock resistance at rectangular impulse		
shock resistance with sine pulse i3,4g / 5 ms, 6,5g / 10 ms • at AC 13,4g / 5 ms, 6,5g / 10 ms • at DC 13,4g / 5 ms, 6,5g / 10 ms mechanical service life (switching cycles) i0 000 000 • of the contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 0 000 000 installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C	• at AC	8,5g / 5 ms, 4,2g / 10 ms	
• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 msmechanical service life (switching cycles)10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor block typical0000 000• of the contactor block typical03/01/2017Ambient conditions2 000 minstallation altitude at height above sea level maximum • during operation2 000 m	• at DC	8,5g / 5 ms, 4,2g / 10 ms	
• at DC13,4g / 5 ms, 6,5g / 10 msmechanical service life (switching cycles)10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor wit	shock resistance with sine pulse		
mechanical service life (switching cycles) 10 000 000 • 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 • 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 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C	• at AC	13,4g / 5 ms, 6,5g / 10 ms	
• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)03/01/2017Ambient conditions2 000 minstallation altitude at height above sea level maximum • during operation2 000 m	• at DC	13,4g / 5 ms, 6,5g / 10 ms	
• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)03/01/2017Ambient conditions2 000 minstallation altitude at height above sea level maximum • during operation2 000 m	mechanical service life (switching cycles)		
auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)03/01/2017Ambient conditions2 000 minstallation altitude at height above sea level maximum • during operation2 000 m	 of contactor typical 	10 000 000	
typical Image: constraint of the con		5 000 000	
Substance Prohibitance (Date) 03/01/2017 Ambient conditions installation altitude at height above sea level maximum ambient temperature 2 000 m • during operation -25 +60 °C		10 000 000	
Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation -25 +60 °C	reference code according to IEC 81346-2	Q	
installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C	Substance Prohibitance (Date)	03/01/2017	
ambient temperature • during operation -25 +60 °C	Ambient conditions		
• during operation -25 +60 °C	installation altitude at height above sea level maximum	2 000 m	
	ambient temperature		
• during storage -55 +80 °C	 during operation 	-25 +60 °C	
	during storage	-55 +80 °C	

relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
maximum Nain circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
	5
operating voltage • at AC-3 rated value maximum	1 000 V
at AC-3 rated value maximum at AC-3e rated value maximum	1 000 V
	1000 V
operational current	215 A
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	215 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C	215 A
rated value	
— up to 690 V at ambient temperature 60 °C	185 A
rated value	
— up to 1000 V at ambient temperature 40 °C	100 A
rated value	
— up to 1000 V at ambient temperature 60 °C rated value	100 A
at AC-3	
at AC-3 — at 400 V rated value	185 A
	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	405.4
— 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 	157 A
value	167 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	157 A
value	
— up to 690 V for current peak value n=20 rated	157 A
value	
— up to 1000 V for current peak value n=20 rated	65 A
value	
• at AC-6a	
 — up to 230 V for current peak value n=30 rated value 	105 A
	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	105 A
value	
— up to 690 V for current peak value n=30 rated	105 A
value	
— up to 1000 V for current peak value n=30 rated	65 A
value	
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 400 V rated value	65 A
operational current	
• · · · · · · · · · · · · · · · · · · ·	

— at 24 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 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 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 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 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 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	00.000 13/4
• 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 	110 000 VA		
value			
short-time withstand current in cold operating state up to 40 °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	800 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	96 127 V		
at 60 Hz rated value	96 127 V		
control supply voltage at DC			
rated value	96 127 V		
type of PLC-control input according to IEC 60947-1	Туре 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		
operating range factor control supply voltage rated			
value of magnet coil at DC	0.0		
 initial value full-scale value 	0.8 1.1		
• run-scale value operating range factor control supply voltage rated	1.1		
value of magnet coil at AC • at 50 Hz	0.8 1.1		
• at 60 Hz	0.8 1.1		
design of the surge suppressor	with varistor		
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 of magnet coil at AC			
• at 50 Hz	4.4 VA		
• at 60 Hz	4.4 VA		
inductive power factor with the holding power of the coil			
• at 50 Hz	0.5		
• at 60 Hz	0.5		
closing power of magnet coil at DC	320 W		
holding power of magnet coil at DC	2.8 W		
closing delay			
• at AC	60 75 ms		
• at DC	60 75 ms		

	_
opening delay	445 400
• at AC	115 130 ms
• at DC	115 130 ms
recovery time after power failure typical	2 s
arcing time	10 15 ms
control version of the switch operating mechanism	Fail-safe PLC input (F-PLC-IN)
Auxiliary circuit	
number of NC contacts for auxiliary contacts	2
instantaneous contact	
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	6 A
• at 400 V rated value	3 A
at 500 V rated value	2 A
	1 A
at 690 V rated value	
operational current at DC-12	40.4
• at 24 V rated value	10 A
at 48 V rated value	6 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 	2 A
 at 110 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)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
 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 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
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit with type of coordination 1 required 	aC: 355 A (690 V 100 KA)
 — with type of coordination 1 required with type of assignment 2 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
neight	17211011

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				
type of connectable conductor cross-sections					
at AWG cables for main contacts	2x 1/0				
connectable conductor cross-section for main					
contacts	25 120 mm²				
stranded	25 120 11111				
connectable conductor cross-section for auxiliary contacts					
 solid or stranded 	0.5 4 mm²				
 finely stranded with core end processing 	0.5 2.5 mm²				
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)				
 finely stranded with core end processing 	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)				
 at AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14), 1x 12				
AWG number as coded connectable conductor cross					
section					
for auxiliary contacts	18 14				
Safety related data					
product function					
• mirror contact according to IEC 60947-4-1	Yes				
 positively driven operation according to IEC 60947- 5-1 	No				
safety device type according to IEC 61508-2	Туре В				
B10 value with high demand rate according to SN 31920	1 000 000				
Safety Integrity Level (SIL) according to IEC 61508	2				
SIL Claim Limit (subsystem) according to EN 62061	2				
performance level (PL) according to EN ISO 13849-1	C				
category according to EN ISO 13849-1	2				
stop category according to EN 60204-1	0				
Safe failure fraction (SFF)	93 %				
failure rate [FIT] with low demand rate according to SN	100 FIT				
31920					

PFHD with high dema	and rate according to El	N 62061 0.0	0000045 1/h		
	mand rate according		07		
MTBF		75	у		
hardware fault tolera	ance according to IEC	6 1508 0			
T1 value for proof tes IEC 61508	t interval or service life	according to 20	y		
protection class IP o 60529	on the front according	to IEC IP0	0; IP20 with box termina	l/cover	
touch protection on	the front according to	DIEC 60529 fing	er-safe, for vertical cont	act from the front with bo	ox terminal/cover
suitability for use					
 safety-related s 	witching on	No			
 safety-related s 	witching OFF	Yes	3		
Certificates/ approval					
General Product Ap	proval				
					LHL
EMC	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates		other
RCM	<u>Type Examination</u> <u>Certificate</u>	CE EG-Konf.	Type Test Certific- ates/Test Report	Special Test Certific- ate	<u>Confirmation</u>
other		Railway			
<u>Miscellaneous</u>	<u>Miscellaneous</u>	Special Test Certific- ate	:		

Further information

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=3RT1056-6SF36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1056-6SF36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6SF36

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1056-6SF36&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6SF36/char

Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1056-6SF36&objecttype=14&gridview=view1

last modified:

3/24/2022 🖸