## 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><ul> <li>function module for communication</li> </ul></td><td>No</td></t<>	<ul> <li>function module for communication</li> </ul>	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	<ul> <li>at AC in hot operating state</li> </ul>	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><ul> <li>at AC in hot operating state per pole</li> </ul></td> <td>13 W</td>	<ul> <li>at AC in hot operating state per pole</li> </ul>	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	<ul> <li>without load current share typical</li> </ul>	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	<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	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	
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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	<ul> <li>of main circuit rated value</li> </ul>	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	<ul> <li>of auxiliary circuit rated value</li> </ul>	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	
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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	
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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	<ul> <li>during operation</li> </ul>	-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
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	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
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	153 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated</li> </ul>	157 A
value	167 A
<ul> <li>— up to 400 V for current peak value n=20 rated value</li> </ul>	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	
<ul> <li>— up to 230 V for current peak value n=30 rated value</li> </ul>	105 A
	105 A
<ul> <li>— up to 400 V for current peak value n=30 rated value</li> </ul>	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
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— 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
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— 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
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
— 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
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— 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
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— 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	
<ul> <li>at AC-2 at 400 V rated value</li> </ul>	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
<ul> <li>up to 1000 V for current peak value n=20 rated value</li> </ul>	110 000 VA
operating apparent power at AC-6a	

<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	40 000 VA		
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	70 000 VA		
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	90 000 VA		
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	120 000 VA		
<ul> <li>up to 1000 V for current peak value n=30 rated</li> </ul>	110 000 VA		
value			
short-time withstand current in cold operating state up to 40 °C			
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	2 900 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	2 084 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	1 480 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	968 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	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		
<ul> <li>initial value</li> <li>full-scale value</li> </ul>	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		

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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	
<ul> <li>at 24 V rated value</li> </ul>	10 A
<ul> <li>at 48 V rated value</li> </ul>	2 A
<ul> <li>at 60 V rated value</li> </ul>	2 A
<ul> <li>at 110 V rated value</li> </ul>	1 A
<ul> <li>at 125 V rated value</li> </ul>	0.9 A
<ul> <li>at 220 V rated value</li> </ul>	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	
<ul> <li>at 480 V rated value</li> </ul>	180 A
<ul> <li>at 600 V rated value</li> </ul>	192 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 230 V rated value	30 hp
<ul> <li>for 3-phase AC motor</li> </ul>	
— 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	
<ul> <li>for short-circuit protection of the main circuit</li> <li>with type of coordination 1 required</li> </ul>	aC: 355 A (690 V 100 KA)
<ul> <li>— with type of coordination 1 required</li> <li>with type of assignment 2 required</li> </ul>	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)
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	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
<ul> <li>side-by-side mounting</li> </ul>	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				
<ul> <li>for grounded parts</li> </ul>					
— forwards	20 mm				
— upwards	10 mm				
— at the side	10 mm				
— downwards	10 mm				
<ul> <li>for live parts</li> </ul>					
— forwards	20 mm				
— upwards	10 mm				
— downwards	10 mm				
— at the side	10 mm				
Connections/ Terminals					
type of electrical connection					
<ul> <li>for main current circuit</li> </ul>	Connection bar				
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals				
<ul> <li>at contactor for auxiliary contacts</li> </ul>	Screw-type terminals				
<ul> <li>of magnet coil</li> </ul>	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					
<ul> <li>solid or stranded</li> </ul>	0.5 4 mm²				
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²				
type of connectable conductor cross-sections					
<ul> <li>for auxiliary contacts</li> </ul>					
— 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 <sup>2</sup> ), 2x (0,75 2,5 mm <sup>2</sup> ), max. 2x (0,75 4 mm <sup>2</sup> )				
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )				
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>	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				
<ul> <li>positively driven operation according to IEC 60947- 5-1</li> </ul>	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 <b>1508</b> 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					
<ul> <li>safety-related s</li> </ul>	witching on	No			
<ul> <li>safety-related s</li> </ul>	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, I<sup>2</sup>t, 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

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