## SIEMENS

## Data sheet

## 3RT1054-6SF36



Power contactor, AC-3 115 A, 55 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         Yes           • at AC in hot operating state per pole         7 W           • of auxiliary circuit with degree of pollution 3 rated value         1000 V           • of main circuit with degree of pollution 3 rated value         6 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 0000 000           • at AC	product brand name	SIRIUS
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     21 W       • at AC in hot operating state per pole     7 W     2.8 W       • of main circuit with degree of pollution 3 rated value     1 000 V     500 V       • of main circuit with degree of pollution 3 rated value     1 000 V     500 V       • of main circuit rated value     6 kV     600 V       surge voltage resistance     • of main circuit rated value     6 kV       • of main contacts according to EN 60947-1     500 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 DC     10.000 000 <th>product designation</th> <th>Power contactor</th>	product designation	Power contactor
size of contactor         S6           product extension         No           • function module for communication         No           • auxiliary switch         Yes           power loss [W] for rated value of the current         1           • at AC in hot operating state per pole         7 W           • at AC in hot operating state per pole         7 W           • of main circuit with degree of pollution 3 rated value         1           • of main circuit with degree of pollution 3 rated value         500 V           • surge voltage resistance         8 kV           • of main circuit rated value         6 kV           • of main coult rated value         6 kV           • of auxiliary circuit rated value         8 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         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	product type designation	3RT1
product extension       No         • function module for communication       Yes         • auxiliary switch       Yes         • at AC in hot operating state       21 W         • at AC in hot operating state per pole       7 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 auxiliary circuit rated value       6 kV         • of main circuit rated value       8 kV         • of main circuit rated value       6 kV         • of main circuit rated value       8 kV         • of auxiliary circuit rated value       6 kV         • 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       10 000 000         • of contactor with added lectronically optimized au	General technical data	
• function module for communicationNo• auxiliary switchYespower loss [W] for rated value of the current1• at AC in hot operating state21 W• at AC in hot operating state per pole7 W• without load current share typical2.8 Winsulation voltage1000 V• of main circuit with degree of pollution 3 rated value1000 V• of main circuit with degree of pollution 3 rated value500 V• of main circuit with degree of pollution 3 rated500 Vvalue6 kV• 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• of the contactor with added electronically optimized• 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 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 <td>size of contactor</td> <td>S6</td>	size of contactor	S6
• auxiliary switchYespower loss [VI] for rated value of the current• at AC in hot operating state21 W• at AC in hot operating state prople7 W• at AC in hot operating state prople2.8 W• of main circuit with degree of pollution 3 rated value1 000 V• of main circuit with degree of pollution 3 rated value1 000 V• of main circuit rated value6 kV• of main circuit rated value6 kV• of main circuit rated value6 kV• of auxiliary circuit impulse6 sy• 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 AC10,000 000• of contactor typical10,000 000• of the contactor with added electronically optimized10,000 000• of the contactor with added auxiliary switch block10,000 000• of the contactor with added auxiliary switch block10,000 000• of the contactor with added auxiliary switch block10,000 000• of the contactor with added auxiliary switch block10,000 000• of the contactor with added auxiliary switch block10,000 000• of the contactor with added auxiliary switch block10,000 000• of the contacto	product extension	
power loss [W] for rated value of the current     int AC in hot operating state     21 W       • at AC in hot operating state per pole     7 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       • 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 coil 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, 4.2g / 10 ms       • at DC     13.4g / 5 ms, 6.5g / 10 ms       • at AC     13.4g / 5 ms, 6.5g / 10 ms       • 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     03/01/2017       Amb	<ul> <li>function module for communication</li> </ul>	No
• at AC in hot operating state21 W• at AC in hot operating state per pole7 W• without load current share typical2.8 Winsulation voltage1000 V• of main circuit with degree of pollution 3 rated value1000 V• of main circuit with degree of pollution 3 rated value500 V• of main circuit rated value8 kV• of main circuit rated value6 kV• of main circuit rated value6 kV• of main contacts according to BK 0947-1690 Vshock resistance at rectangular impulse8.5g / 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 AC10.00 000• at AC10.00 000• at AC10.00 000• at DC10.000 000• at DC	<ul> <li>auxiliary switch</li> </ul>	Yes
• at AC in hot operating state per pole7 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 AC10 000 000• at AC10 000 000• at DC10 000 000• at DC10 000 000• at DC10 000 000• at DC5 000 000• at DC10 000 000• at DC03/01/2017Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature- 40 °C• during operation-25 +60 °C	power loss [W] for rated value of the current	
• without load current share typical2.8 Winsulation voltage • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value1 000 V• of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value500 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 60947-1800 Vshock resistance at rectangular impulse • at AC8,5g / 5 ms, 4,2g / 10 ms• at DC8,5g / 5 ms, 4,2g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC10 000 000• at DC10 000 000• at DC10 000 000• at AC000 000• at AC10 000 000• at DC10 000 000• at AC000 000• at AC10 000 000• at BC10 000 000 <td><ul> <li>at AC in hot operating state</li> </ul></td> <td>21 W</td>	<ul> <li>at AC in hot operating state</li> </ul>	21 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       500 V         • of main circuit rated value       8 kV         • of auxiliary circuit rated value       8 kV         • of auxiliary circuit rated value       6 kV         maximum permissible voltage for safe isolation between coil 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       13,4g / 5 ms, 6,5g / 10 ms         • at DC       10 000 000         • at DC       10 000 000         • at DC       10 000 000         • of 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       2000 m         motation stitude at height above sea level maximum       2 000 m         installation attitude at height above sea level maximum       2 000 m	<ul> <li>at AC in hot operating state per pole</li> </ul>	7 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 impulse8,5g / 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 000reference code according to EC 81346-2QQSubstance 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 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 kJ• 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 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 typical000 000• of the contactor with added auxiliary switch block typical000 000• of the contactor with added auxiliary switch block typical000 000• of the contactor with added auxiliary switch block typical000 000• of the contactor with added auxiliary switch block typical000 000• of the contactor with added auxiliary switch block typical000 000• of the contactor with added auxiliary switch block typical000 000• of the contactor with added auxiliary switch block typical000 000• of the contactor with addee auxiliary switch block typical000 000• of the contactor with addee auxiliary switch block typical000 000• of the contactor with addee auxiliary switch block typical0000 m<	insulation voltage	
value         value           surge voltage resistance         8 kV           o f main circuit rated value         8 kV           o f auxiliary circuit rated value         6 kV           maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1         690 V           shock resistance at rectangular impulse         659 / 5 ms, 4,2g / 10 ms           • at AC         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 DC         5000 000           • at AC         10 000 000           • at AC         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         Q           substance Prohibitance (Date)         Q           Substance Prohibitance (Date)         2000 m           ambient conditions         2000 m	<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 AC13,4g / 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 typicalQreference 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		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• at AC • at DC8,5g / 5 ms, 4,2g / 10 ms• at AC • at DC13,4g / 5 ms, 6,5g / 10 ms• at AC • at DC13,4g / 5 ms, 6,5g / 10 ms• at DC • at DC10 000 000• of contactor typical • 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 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 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 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<	<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 AC8,5g / 5 ms, 4,2g / 10 ms• at DC8,5g / 5 ms, 4,2g / 10 msshock resistance with sine pulse• 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 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	<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 typical000 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 typical2 000 000• of the contactor with addeve sea level maximum ambient temperature • 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)10 000 000• 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 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 block typical0 000 000 <tr< td=""><td>shock resistance at rectangular impulse</td><td></td></tr<>	shock resistance at rectangular impulse	
shock resistance with sine pulse       istight of my fught of	• 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 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 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 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 typical0 000 000• of the contactor with added auxiliary switch block typical0 000 000• of the contactor with added auxiliary switc	● 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         • of the contactor with added auxiliary switch block typical       0 000 000         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 second se		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       -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 %
lain 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	160 A
rated value	
● at AC-1	
— up to 690 V at ambient temperature 40 °C	160 A
rated value	
— up to 690 V at ambient temperature 60 °C	140 A
rated value	
— up to 1000 V at ambient temperature 40 °C	80 A
rated value	
— up to 1000 V at ambient temperature 60 °C	80 A
rated value	
• at AC-3	115 A
— at 400 V rated value	115 A
— at 500 V rated value	115 A
— at 690 V rated value	115 A
— at 1000 V rated value	53 A
• at AC-3e	
— at 400 V rated value	115 A
— at 500 V rated value	115 A
— at 690 V rated value	115 A
— at 1000 V rated value	53 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	97 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	140 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	95 A
● at AC-6a	
<ul> <li>— up to 230 V for current peak value n=20 rated</li> </ul>	115 A
value	
<ul> <li>— up to 400 V for current peak value n=20 rated</li> </ul>	115 A
value	
<ul> <li>up to 500 V for current peak value n=20 rated</li> </ul>	115 A
value	115 A
<ul> <li>— up to 690 V for current peak value n=20 rated value</li> </ul>	115 A
— up to 1000 V for current peak value n=20 rated	53 A
value	
• at AC-6a	
— up to 230 V for current peak value n=30 rated	98 A
value	
<ul> <li>— up to 400 V for current peak value n=30 rated</li> </ul>	98 A
value	
— up to 500 V for current peak value n=30 rated	98 A
value	
<ul> <li>up to 690 V for current peak value n=30 rated</li> </ul>	98 A
value	50 A
<ul> <li>— up to 1000 V for current peak value n=30 rated value</li> </ul>	53 A
minimum cross-section in main circuit at maximum AC-1	70 mm <sup>2</sup>
rated value	
operational current for approx. 200000 operating	
cycles at AC-4	
at 400 V rated value	54 A
at 690 V rated value	48 A
operational current	
at 1 current path at DC-1	

	400 A
— 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	
at AC-2 at 400 V rated value	55 kW
• at AC-3	
— at 230 V rated value	37 kW
— at 400 V rated value	55 kW
— at 500 V rated value	75 kW
— at 690 V rated value	110 kW
— at 1000 V rated value	75 kW
• at AC-3e	
— at 230 V rated value	37 kW
— at 400 V rated value	55 kW
— at 500 V rated value	75 kW
— at 690 V rated value	110 kW
— at 1000 V rated value	75 kW
operating power for approx. 200000 operating cycles	75 KVV
at AC-4	
• at 400 V rated value	29 kW
• at 690 V rated value	48 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	40 000 kVA
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	80 000 VA
• up to 500 V for current peak value n=20 rated value	100 000 VA
• up to 690 V for current peak value n=20 rated value	130 000 VA
• up to 1000 V for current peak value n=20 rated	90 000 VA
value	
operating apparent power at AC-6a	

<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	30 000 VA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	60 000 VA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	80 000 VA
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	110 000 VA
<ul> <li>up to 1000 V for current peak value n=30 rated</li> </ul>	90 000 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>	2 565 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	1 654 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	1 170 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> </ul>	729 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	572 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	400 1/h
• at AC-3 maximum	1 000 1/h
• at AC-3e maximum	1 000 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	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
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 50 Hz	0.8 1.1
e at 60 m2 design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	with variator
• at 50 Hz	280 VA
• at 60 Hz	280 VA 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	115 120 mg
• 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	
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
at 690 V rated value	1 A
operational current at DC-12	
at 24 V rated value	10 A
at 48 V rated value	6 A
at 40 V rated value	6 A
at 110 V rated value	3 A
• at 125 V rated value	2 A
at 220 V rated value	1A
at 600 V rated value	0.15 A
operational current at DC-13	0.13 A
at 24 V rated value	10 A
at 24 V rated value	2 A
at 40 V rated value	2 A
at 110 V rated value	1A
• 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	124 A
at 600 V rated value	124 A 125 A
<ul> <li>yielded mechanical performance [hp]</li> <li>for single-phase AC motor</li> </ul>	
- at 230 V rated value	25 hp
	25 hp
for 3-phase AC motor     at 200/208 \/ rated value	40 bp
- at 200/208 V rated value	40 hp
- at 220/230 V rated value	50 hp
— at 460/480 V rated value — at 575/600 V rated value	100 hp
	125 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> </ul>	-C: 255 A (COO)/ 400 HA)
— with type of coordination 1 required	gG: 355 A (690 V, 100 kA)
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 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
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
<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 dem	and rate according to El	N 62061 0.	00000045 1/h		
	emand rate according		007		
MTBF		75	ō y		
hardware fault toler	rance according to IEC	<b>61508</b> 0			
T1 value for proof tes IEC 61508	st interval or service life	according to 20	) у		
protection class IP 60529	on the front according	to IEC IP	00; IP20 with box terminal	/cover	
touch protection or	the front according to	<b>DIEC 60529</b> fir	nger-safe, for vertical conta	ct from the front with b	ox terminal/cover
suitability for use					
<ul> <li>safety-related</li> </ul>	switching on	N	C		
<ul> <li>safety-related</li> </ul>	switching OFF	Ye	es		
Certificates/ approva	ls				
General Product A	pproval				
	CCC	<u>Confirmation</u>		KC	EAC
EMC	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates		other
RCM	<u>Type Examination</u> <u>Certificate</u>	CE EG-Konf.	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certific-</u> ates/Test Report	<u>Miscellaneous</u>
other		Railway			
<b>Confirmation</b>	Miscellaneous	<u>Special Test Certifi</u> ate	<u>c-</u>		

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=3RT1054-6SF36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1054-6SF36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-6SF36

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <u>http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1054-6SF36&lang=en</u>

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-6SF36/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1054-6SF36&objecttype=14&gridview=view1

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