## SIEMENS

## Data sheet

## 3RT1054-6NB36



power contactor, AC-3 115 A, 55 kW / 400 V AC (50-60 Hz) / DC operation 21-27 AC/DC, 3 V auxiliary contacts 2 NO + 2 NC 3-pole, frame size S6 busbar connections drive: electronic with PLC interface 24 V DC screw terminal

size of contactor         S6           product extension         No           • function module for communication         No           • auxilary switch         Yes           power loss [W] for rated value of the current         ************************************	product brand name	SIRIUS	
Size of contactor       S6         product extension       No         • function module for communication       No         • auxillary switch       Yes         power loss [W] for rated value of the current       1 W         • at AC in hot operating state per pole       7 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 with degree of pollution 3 rated value       1 000 V         • 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         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       10.00 000         • at AC       10.000 000         • at DC       0.500 100 ms </td <td>product designation</td> <td>Power contactor</td>	product designation	Power contactor	
size of contactor         S6           product extension         No           • function module for communication         No           • auxilary switch         Yes           power loss [W] for rated value of the current         ************************************	product type designation	3RT1	
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       21 W         • at AC in hot operating state per pole       7 W         • without load current share typical       2.8 W         insulation voltage       0 of main circuit with degree of pollution 3 rated value         • of main circuit with degree of pollution 3 rated value       1000 V         • of main circuit rated value       6 kV         • of main circuit rated value       8 kV         • of main circuit rated value       6 kV         • of main 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 DC       8.6g / 5 ms, 6.5g / 10 ms         • at DC       10 000 000         • at AC       10 000 000         • at DC       5000 000         • of the contactor with added electronically optimiz	General technical data		
• function module for communicationNo• auxiliary switchYespower loss [W] for rated value of the current• 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 value6 KV• of main circuit rated value6 kV• of auxiliary circuit rated value8 kV• of auxiliary circuit rated value8 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 typical000	size of contactor	S6	
• auxiliary switchYespower loss [W] for rated value of the current//////////////////////////////	product extension		
power loss [W] for rated value of the current <ul> <li>at AC in hot operating state</li> <li>at AC in hot operating state per pole</li> <li>without load current share typical</li> <li>at AC in hot operating state per pole</li> <li>without load current share typical</li> <li>at AC in hot operating state per pole</li> <li>of main circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>of main circuit rated value</li> <li>of auxiliary circuit rated value</li> <li>block resistance at rectangular impulse</li> <li>at AC</li> <li>at DC</li> <li>at AC</li> <li>block resistance with sine pulse</li> <li>at AC</li> <li>at DC</li> <li>at AC</li> <li>block resistance with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>blostance Prohibitance (Date)</li> <li>block transcience (Date)</li></ul>	<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 W <b>insulation voltage</b> 1000 V• of main circuit with degree of pollution 3 rated value1000 V• of auxiliary circuit with degree of pollution 3 rated value500 V• of main circuit rated value8 kV• of auxiliary circuit rated value6 kV• of main circuit rated value8 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value8 kV• of auxiliary circuit rated value10 00 V• of auxiliary circuit rated value8 kV• at AC8.5g / 5 ms. 4.2g / 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 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 typical2000 m <td>auxiliary switch</td> <td>Yes</td>	auxiliary switch	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 axiliary circuit with degree of pollution 3 rated value1 000 Vsurge voltage resistance500 V• of main circuit rated value6 kV• of axiliary 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 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 typical2000 momistallation altitude at height above sea level maximum2 000 mambient conditions2000 m	power loss [W] for rated value of the current		
without load current share typical2.8 Winsulation voltageof main circuit with degree of pollution 3 rated value1 000 Vof auxiliary circuit with degree of pollution 3 rated value500 Vsurge voltage resistance500 Vof main circuit rated value8 kVof auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse.• at AC8,5g / 5 ms, 4,2g / 10 ms• 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 AC10,000 000• 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 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)2,000 mAmbient conditions2,000 minstallation altitude at height above sea level maximum • during operation2,000 m	<ul> <li>at AC in hot operating state</li> </ul>	21 W	
insultation voltage <ul> <li>of main circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> <li>of main circuit rated value</li> <li>of main circuit rated value</li> <li>of auxiliary circuit rated value</li> <li>blow of auxiliary switch blow typical</li> <li>of contactor with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of oblow of auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor w</li></ul>	<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 Vsurge voltage resistance500 Vof main circuit rated value8 kVof main circuit rated value8 kVof auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coll and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse6,5g / 5 ms, 4,2g / 10 msat AC8,5g / 5 ms, 4,2g / 10 msat DC8,5g / 5 ms, 6,5g / 10 msat DC13,4g / 5 ms, 6,5g / 10 msat DC13,4g / 5 ms, 6,5g / 10 msat DC10 000 000at DC10 000 000of contactor typical10 000 000of the contactor with added auxiliary switch block typical10 000 000of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)2 000 mambient conditions2 000 mambient temperature e 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 resistance• 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, 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 typical0• of the contactor with added auxiliary switch block typical0• of the contactor with added auxiliary switch block typical0• of the contactor bypical0• of the contactor with added auxiliary switch block typical0• of the contactor with added auxiliary switch block typical0• of the contactor bypical0• of the contactor with added auxiliary switch block typical0• of the contactor with added auxiliary switch block typical </td <td>insulation voltage</td> <td></td>	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 coll and main contacts according to EN 60947-1         690 V           shock resistance at rectangular impulse         659 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         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         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         10 000 000           • of the contactor with added auxiliary switch block typical         Q           reference code according to IEC 81346-2         Q           Substance Prohibitance (Date)         2000 m           ambient temperature         2000 m           enduring operation         2000 m	<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	1 000 V	
of main circuit rated value8 kVof auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coll and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse690 V• at AC8,5g / 5 ms, 4,2g / 10 ms• at DC8,5g / 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 DC10 000 000• at DC10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical000 000• of the contactor with added auxiliary switch block typical0 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)05/01/2012Ambient conditions2 000 minstallation altitude at height above sea level maximum e 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 kV• at AC8,5g / 5 ms, 4,2g / 10 ms• at DC3,5g / 5 ms, 4,2g / 10 msshock resistance with sine pulse7• at AC13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC10 000 000• 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 typical0 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)05/01/2012Installation altitude at height above sea level maximum e 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 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 000of the contactor with added auxiliary switch block typical000 000reference code according to IEC 81346-2 Substance Prohibitance (Date)QAmbient conditions2 000 minstallation altitude at height above sea level maximum • during operation2 000 m	<ul> <li>of main circuit rated value</li> </ul>	8 kV	
coil and main contacts according to EN 60947-1       shock resistance at rectangular impulse         • at AC       8,5g / 5 ms, 4,2g / 10 ms         • at DC       8,5g / 5 ms, 4,2g / 10 ms         shock resistance with sine pulse       -         • at AC       13,4g / 5 ms, 6,5g / 10 ms         • at DC       13,4g / 5 ms, 6,5g / 10 ms         • 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       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 contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block       10 000 000         • of the contactor with added auxiliary switch block       10 000 000         • of the contactor with added auxiliary switch block       05/01/2012         ADE       2000 m         ambient conditions       2000 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 pulse-• 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 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		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 typical5 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 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)05/01/2012Ambient conditions2 000 mambient temperature • during operation-25 +60 °C	shock resistance at rectangular impulse		
shock resistance with sine pulse       13,4g / 5 ms, 6,5g / 10 ms         • at DC       13,4g / 5 ms, 6,5g / 10 ms         mechanical service life (switching cycles)       13,4g / 5 ms, 6,5g / 10 ms         • 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       10 000 000         • of the contactor with added auxiliary switch block typical       0 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       0 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       0 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       0 000 000         • of the contactor with added auxiliary switch block typical       0 000 000         • of the contactor with added auxiliary switch block typical       0 000 000         • of the contactor with added auxiliary switch block typical       0 000 000         • of the contactor with added auxiliary switch block typical       0 000 000         • of the contactor with added	• 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 typicalQreference code according to IEC 81346-2QSubstance Prohibitance (Date)05/01/2012Ambient conditions2 000 minstallation altitude at height above sea level maximum e 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).• 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 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 block typical000 000• of the contactor block typical000 000• of the contactor block typical05/01/2012• during operation2 000 m• during operation-25 +60 °C	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         • of the contactor with added auxiliary switch block typical       000 000         • of the contactor with added auxiliary switch block typical       000 000         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       05/01/2012         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)05/01/2012Ambient conditions2 000 minstallation altitude at height above sea level maximum e 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)05/01/2012Ambient conditions2 000 minstallation altitude at height above sea level maximum e 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)05/01/2012Ambient conditions2 000 minstallation altitude at height above sea level maximum e during operation2 000 m	<ul> <li>of contactor typical</li> </ul>	10 000 000	
typical     Image: constraint of the con		5 000 000	
Substance Prohibitance (Date)       05/01/2012         Ambient conditions       1000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -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)	05/01/2012	
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	<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	44E 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	445.4
<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	
— up to 400 V for current peak value n=30 rated	98 A
value	
<ul> <li>— up to 500 V for current peak value n=30 rated</li> </ul>	98 A
value	
— up to 690 V for current peak value n=30 rated	98 A
value	
<ul> <li>up to 1000 V for current peak value n=30 rated</li> </ul>	53 A
value	70 mm <sup>2</sup>
minimum cross-section in main circuit at maximum AC-1 rated value	70 mm <sup>2</sup>
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	

at 24 M rated value	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
• 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
<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-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 at AC-4	
at 400 V rated value	29 kW
at 400 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
• up to 400 V for current peak value n=20 rated value	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
<ul> <li>up to 000 V for current peak value n=20 rated value</li> <li>up to 1000 V for current peak value n=20 rated value</li> </ul>	90 000 VA
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

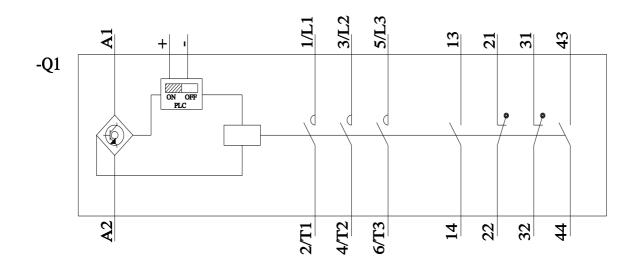
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	60 000 VA		
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	80 000 VA		
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	110 000 VA		
<ul> <li>up to 1000 V for current peak value n=30 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 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	21 27.3 V		
• at 60 Hz rated value	21 27.3 V		
control supply voltage at DC			
rated value	21 27.3 V		
type of PLC-control input according to IEC 60947-1	Type 2		
consumed current at PLC-control input according to	20 mA		
IEC 60947-1 maximum			
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 60 Hz	0.8 1.1		
design of the surge suppressor	with varistor		
apparent pick-up power of magnet coil at AC	222.1/4		
• at 50 Hz	280 VA		
• at 60 Hz	280 VA		
inductive power factor with closing power of the coil	0.0		
• at 50 Hz	0.8		
• at 60 Hz	0.8		
apparent holding power of magnet coil at AC	4.4.1/0		
• at 50 Hz	4.4 VA		
at 60 Hz     inductive power factor with the holding power of the	4.4 VA		
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	35 75 ms		
• at DC	35 75 ms		
opening delay			

• at AC	80 90 ms			
	80 90 ms 80 90 ms			
• at DC	_ 80 90 ms 10 15 ms			
arcing time				
control version of the switch operating mechanism	PLC-IN or Standard A1 - A2 (adjustable)			
Auxiliary circuit				
number of NC contacts for auxiliary contacts instantaneous contact	2			
number of NO contacts for auxiliary contacts instantaneous contact	2			
operational current at AC-12 maximum	10 A			
operational current at AC-15				
<ul> <li>at 230 V rated value</li> </ul>	6 A			
<ul> <li>at 400 V rated value</li> </ul>	3 A			
<ul> <li>at 500 V rated value</li> </ul>	2 A			
at 690 V rated value	1 A			
operational current at DC-12				
<ul> <li>at 24 V rated value</li> </ul>	10 A			
<ul> <li>at 48 V rated value</li> </ul>	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>	124 A			
at 600 V rated value	125 A			
yielded mechanical performance [hp]				
<ul> <li>for single-phase AC motor</li> </ul>				
— at 230 V rated value	25 hp			
<ul> <li>for 3-phase AC motor</li> </ul>				
— at 200/208 V rated value	40 hp			
— at 220/230 V rated value	50 hp			
— at 460/480 V rated value	100 hp			
— at 575/600 V rated value	125 hp			
contact rating of auxiliary contacts according to UL	A600 / Q600			
Short-circuit protection				
design of the fuse link				
<ul> <li>for short-circuit protection of the main circuit</li> </ul>				
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 355 A (690 V, 100 kA)			
— with type of assignment 2 required	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	
<ul> <li>with side-by-side mounting</li> </ul>	
— 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
	10 11111
Connections/ Terminals	
type of electrical connection	
• for main current circuit	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
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	
<ul> <li>at AWG cables for main contacts</li> </ul>	4 250 kcmil
connectable conductor cross-section for main contacts	
<ul> <li>stranded</li> </ul>	25 120 mm²
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	
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 <sup>2</sup> ), 2x (0.75 2,5 mm <sup>2</sup> ), max. 2x (0.75 4 mm <sup>2</sup> )
— finely stranded with core end processing	2x (0,5 1,5 mm <sup>2</sup> ), 2x (0,75 2,5 mm <sup>2</sup> )
at AWG cables for auxiliary contacts	2x (0.5 1.5 mm), 2x (0.75 2.5 mm) 2x (20 16), 2x (18 14), 1x 12
AWG number as coded connectable conductor cross	2^ (20 10), 2^ (10 14), 1A 12
section	
for auxiliary contacts	18 14
Safety related data	
product function	
	Voc
mirror contact according to IEC 60947-4-1	Yes
positively driven operation according to IEC 60947- 5-1	No
B10 value with high demand rate according to SN 31920	1 000 000
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover
suitability for use	
<ul> <li>safety-related switching OFF</li> </ul>	Yes
• Salety-related switching of r	

S.	CCC	<u>Confirmation</u>		<u>KC</u>	EAC
EMC	Functional Safety/Safety of Machinery	Declaration of Con	formity	Test Certificates	
RCM	<u>Type Examination</u> <u>Certificate</u>	CE EG-Konf.	UK CA	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certific-</u> ates/Test Report
Marine / Shipping					other
ABS	Llovd's Register urs	PRS	RMRS RMRS	DIVI-GL Division	<u>Miscellaneous</u>
other			Railway		
<u>Confirmation</u>	<u>Confirmation</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=3RT1054-6NB36
Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1054-6NB36
Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-6NB36
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1054-6NB36⟨=en
Characteristic: Tripping characteristics, I <sup>2</sup> t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-6NB36/char
Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1054-6NB36&objecttype=14&gridview=view1



last modified:

3/24/2022 🖸