SIEMENS

Data sheet

3RT1054-1AB36



power contactor, AC-3 115 A, 55 kW / 400 V AC (50-60 Hz) / DC operation 23-26 V AC/DC auxiliary contacts 2 NO + 2 NC 3-pole, frame size S6 with box terminals drive: conventional screw terminal

size of contactor S6 product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current ************************************	product brand name	SIRIUS
Seneral technical data size of contactor 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 21 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 8 kV • of main circuit rated value 8 kV • of main circuit rated value 8 kV • of maximum permissible voltage for safe isolation between coll and main contacts according to EN 60947.1 8 kV shock resistance at rectangular impulse 8.5g / 5 ms, 4.2g / 10 ms • at AC 13.4g / 5 ms, 6.5g / 10 ms • at DC 10 000 000 • at AC 10 000 000 • of the contactor with added duxiliary 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 s	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 • without load current share typical 5.2 • of main circuit with degree of pollution 3 rated value 1000 V • of main circuit with degree of pollution 3 rated value 500 V • of main circuit rated value 8 kV • of auxillary circuit rated value 6 kV • of auxillary circuit rated value 8 kV • of auxillary sitcin block functing to EV 8097-1 600 V stock resistance at rectangular impulse 8 kg / 5 ms, 4.2g / 10 ms • at DC 8,5g / 5 ms, 4.2g / 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 t	product type designation	3RT1
product extension No • function module for communication Yes • auxiliary switch 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 5.2 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 6 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 13.4g / 5 ms, 6.5g / 10 ms • at AC 10 000 000 • at DC 5000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000	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 typical5.2 Winsulation voltage1000 V• of main circuit with degree of pollution 3 rated value1000 V• of auxiliary circuit with degree of pollution 3 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 DC10 000 000• at DC10 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 aux	size of contactor	S6
• auxiliary switchYespower loss [W] for rated value of the current21 W• at AC in hot operating state prope21 W• at AC in hot operating state prope7 W• at AC in hot operating state prope5.2 W• without load current share typical1000 V• of main circuit with degree of pollution 3 rated value1000 V• of main circuit rated value6 S00 V• of main circuit rated value8 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value8 kV• of auxiliary circuit rated value9 of 0 v• at AC8 (Sg / 5 ms, 4.2g / 10 ms• at AC8 (Sg / 5 ms, 4.2g / 10 ms• at AC13 (4g / 5 ms, 6.5g / 10 ms• at AC10 000 000• at AC10 000 000• at DC10 000 000• of the contactor with added electronically optimized10 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 swi	product extension	
power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole without load current share typical 5.2 W insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value at AC at DC at AC bock resistance with sine pulse at AC at AC at AC bock resistance with added electronically optimized auxilary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with a	 function module for communication 	No
• at AC in hot operating state21 W• at AC in hot operating state per pole7 W• without load current share typical5.2 W insulation voltage 1000 V• of main circuit with degree of pollution 3 rated value1000 V• of auxiliary circuit with degree of pollution 3 rated value1000 V• of main circuit rated value6 KV• of auxiliary circuit rated value8 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value6 8 V• of auxiliary circuit rated value8 kg / 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 DC10 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 typical05/01/2012Ambient conditions2000 mInstallation altitude at height above sea level maximum2000 m• autiliary operation2000 m	auxiliary switch	Yes
• at AC in hot operating state per pole7 W• without load current share typical5.2 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 value8 kV (and the state sta	power loss [W] for rated value of the current	
• without load current share typical5.2 Winsulation voltageof 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 value8 kV• of main circuit rated value6 kV• of auxiliary circuit rated value8 kV• at AC8,5g / 5 ms, 4,2g / 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 typical10 000 000• of the contactor with added auxiliary switch block typical05/01/2012Ambient conditions2 000 mInstallation altitude at height above sea level maximum2 000 m• ambient temperature4 00 °C• during operation-25 +60 °C	 at AC in hot operating state 	21 W
insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated 500 V surge voltage resistance of main circuit rated value of auxiliary circuit rated value b kV of auxiliary circuit rated value b kV b contacts according to EN 60947-1 b contactor typical of contactor typical of contactor typical of contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of of he contactor with added auxiliary switch block typical of objoint conditions of objoint conditions of the contactor with added auxiliary switch block typical of objoint conditions of the contactor with added auxiliary switch block typical of objoint conditions contactor with addee auxiliary switch block typical of the contactor with addee auxiliary switch block typical of the contactor with addee auxiliary switch block typ	 at AC in hot operating state per pole 	7 W
• of main circuit with degree of pollution 3 rated value1 000 V• of auxillary circuit with degree of pollution 3 rated value500 Vsurge voltage resistance500 V• of main circuit rated value8 kV• of auxillary 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 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 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 typical5000 200• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical00 000• of condactor with added auxiliary switch block typical2 000 mmethanic conditions2 000 minstallation altitude at height above sea level maximum e uturig operation2 000 m	 without load current share typical 	5.2 W
• of auxiliary circuit with degree of pollution 3 rated value500 Vsurge voltage resistance6 kV• of main circuit rated value6 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 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 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 typical0• of the contactor with added auxiliary switch block typical05/01/2012• of the contactor by EX 81346-2QSubstance Prohibitance (Date)02 000 mambient conditions2 000 mambient conditions2 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 coll and main contacts according to EN 60947-1 600 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 AC 10 000 000 • 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 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 000 for 12012 • of the contactor with added auxiliary switch block typic	 of main circuit with degree of pollution 3 rated value 	1 000 V
• of main circuit rated value8 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1690 Vshock resistance at rectangular impulse500 V• 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 AC13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC1000 000• at DC1000 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 typical0reference code according to IEC 81346-2QSubstance Prohibitance (Date)0501/2012Ambient 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 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• 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 typical05000 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	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 DC8,5g / 5 ms, 4,2g / 10 msshock resistance with sine pulse • at AC • at DC13,4g / 5 ms, 6,5g / 10 msat DC13,4g / 5 ms, 6,5g / 10 msshock resistance 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	 of main circuit rated value 	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)05/01/2012Ambient conditions2 000 mambient temperature • during operation2 000 m	 of auxiliary circuit rated value 	6 kV
• at AC8,5g / 5 ms, 4,2g / 10 ms• at DC8,5g / 5 ms, 4,2g / 10 msshock resistance with sine pulse13,4g / 5 ms, 6,5g / 10 ms• at AC13,4g / 5 ms, 6,5g / 10 ms• at DC13,4g / 5 ms, 6,5g / 10 ms• 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 typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxi		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 electronically optimized auxiliary switch block typical000 000• of the contactor with added auxiliary switch block typicalQreference code according to IEC 81346-2QSubstance Prohibitance (Date)05/01/2012Installation altitude at height above sea level maximum e during operation2 000 m	shock resistance at rectangular impulse	
shock resistance with sine pulse intervention • 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) 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 0 000 000 • of the contactor block typical 0 000 000 • of the contactor block typical 0 000 000 • of the contactor block typical 0 000 000 • of the contactor block typical 0 000 000 • of the contactor block typical 0 000 000 • of the contactor block typical 0 000 000 • of the contactor block typical 0 000 000 • of the contactor block typical 0 000 000 • of the contactor block typical 0 000 000 • of the contactor block typical 0 000 000 • for the contactor block typical 0 000 000 • for the contactor block typical 0 000 000 • for the contactor 0 000 000	• 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 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 typical05/01/2012• of the contactor with added auxiliary switch block typical000 m• of the contactor with added auxiliary switch block typi	• at DC	8,5g / 5 ms, 4,2g / 10 ms
• at DC13,4g / 5 ms, 6,5g / 10 msmechanical service life (switching cycles)10 000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block 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 typical05/01/2012• ambient conditions2 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 • of the contactor with added auxiliary switch block 000 000 • of the contactor with added auxiliary switch block 000000 • of the contactor with added auxiliary switch block 0000 000 • of the contactor with added auxiliary switch block 000000 • of the contactor 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 typical I0 000 000 of the contactor with added auxiliary switch block typical I0 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 05/01/2012 Ambient conditions 2 000 m ambient temperature 2 000 m • during operation -25 +60 °C	 of contactor typical 	10 000 000
typical Image: constraint of the second se		5 000 000
Substance Prohibitance (Date) 05/01/2012 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)	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 -55 +80 °C	 during operation 	-25 +60 °C
	 during storage 	-55 +80 °C

relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	1 000 V
at AC-3e rated value maximum	1 000 V
operational current	1000 V
•	160.4
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	160 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C	160 A
rated value	100 A
— 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	
— 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
• at AC-4 at 400 V rated value	97 A
• at AC-5a up to 690 V rated value	140 A
• at AC-5b up to 400 V rated value	95 A
● at AC-6a	
— up to 230 V for current peak value n=20 rated	115 A
value	445.4
 — up to 400 V for current peak value n=20 rated value 	115 A
— up to 500 V for current peak value n=20 rated	115 A
value	137
— up to 690 V for current peak value n=20 rated	115 A
value	
— 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	
 up to 500 V for current peak value n=30 rated 	98 A
value	00.4
 — up to 690 V for current peak value n=30 rated value 	98 A
— up to 1000 V for current peak value n=30 rated	53 A
value	
minimum cross-section in main circuit at maximum AC-1	70 mm ²
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 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
 with 3 current paths in series at DC-1 	
— at 24 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	160 A
— at 440 V rated value	11.5 A
— at 600 V rated value	4 A
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	160 A
— at 110 V rated value	2.5 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.17 A
— at 600 V rated value	0.12 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	2.5 A
— at 440 V rated value	0.65 A
— at 600 V rated value	0.37 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	160 A
— at 440 V rated value	1.4 A
— at 600 V rated value	0.75 A
operating power	
• at AC-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 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
• 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 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 000 V for current peak value n=20 rated value up to 1000 V for current peak value n=20 rated value 	90 000 VA
operating apparent power at AC-6a	
 up to 230 V for current peak value n=30 rated value 	30 000 VA

 up to 400 V for current peak value n=30 rated value 	60 000 VA				
 up to 500 V for current peak value n=30 rated value 	80 000 VA				
 up to 690 V for current peak value n=30 rated value 	110 000 VA				
 up to 1000 V for current peak value n=30 rated 	90 000 VA				
value					
short-time withstand current in cold operating state up to 40 °C					
 limited to 1 s switching at zero current maximum 	2.565 A: Use minimum cross-section acc. to AC-1 rated value				
 limited to 1's switching at zero current maximum limited to 5 s switching at zero current maximum 	2 565 A; Use minimum cross-section acc. to AC-1 rated value 1 654 A; Use minimum cross-section acc. to AC-1 rated value				
 limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum 	1 170 A; Use minimum cross-section acc. to AC-1 rated value				
 limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum 	729 A; Use minimum cross-section acc. to AC-1 rated value				
 limited to 50 s switching at zero current maximum limited to 60 s switching at zero current maximum 	572 A; Use minimum cross-section acc. to AC-1 rated value				
no-load switching frequency	STZ A, Ose minimum closs-section acc. to AC-1 fated value				
• at AC	2 000 1/h				
• at DC	2 000 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	23 26 V				
• at 60 Hz rated value	23 26 V				
control supply voltage at DC					
rated value	23 26 V				
operating range factor control supply voltage rated					
value of magnet coil at DC					
initial value	0.8				
full-scale value	1.1				
operating range factor control supply voltage rated value of magnet coil at AC					
• at 50 Hz	0.8 1.1				
• at 50 Hz	0.8 1.1				
design of the surge suppressor	with varistor				
apparent pick-up power of magnet coil at AC	with valistor				
• at 50 Hz	300 VA				
• at 60 Hz	300 VA				
inductive power factor with closing power of the coil	500 VA				
• at 50 Hz	0.9				
• at 60 Hz	0.9				
apparent holding power of magnet coil at AC					
• at 50 Hz	5.8 VA				
• at 60 Hz	5.8 VA				
inductive power factor with the holding power of the					
coil					
• at 50 Hz	0.8				
• at 60 Hz	0.8				
closing power of magnet coil at DC	360 W				
holding power of magnet coil at DC	5.2 W				
closing delay					
• at AC	20 95 ms				
• at DC	20 95 ms				
opening delay • at AC	40 60 ms				
• at AC • at DC	40 60 ms 40 60 ms				
• at DC arcing time	40 60 ms 10 15 ms				
control version of the switch operating mechanism	Standard A1 - A2				
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			
• 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 60 V rated value 	6 A		
 at 110 V rated value 	3 A		
 at 125 V rated value 	2 A		
 at 220 V rated value 	1 A		
• at 600 V rated value	0.15 A		
operational current at DC-13			
• at 24 V rated value	10 A		
• at 48 V rated value	2 A		
 at 60 V rated value 	2 A		
• at 110 V rated value	1 A		
• at 125 V rated value	0.9 A		
at 220 V rated value	0.3 A		
at 600 V rated value	0.1 A		
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)		
UL/CSA ratings			
full-load current (FLA) for 3-phase AC motor			
• at 480 V rated value	124 A		
• at 600 V rated value	125 A		
yielded mechanical performance [hp]			
 for single-phase AC motor 			
— at 230 V rated value	25 hp		
 for 3-phase AC motor 			
— 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			
 for short-circuit protection of the main circuit 			
 — with type of coordination 1 required 	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)		
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)		
Installation/ mounting/ dimensions			
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting		
	surface +/- 22.5° tiltable to the front and back		
fastening method	screw fixing		
 side-by-side mounting 	Yes		
height	172 mm		
width	120 mm		
depth	170 mm		
required spacing			
 with side-by-side mounting 			
— forwards	20 mm		
— upwards	10 mm		
— downwards	10 mm		

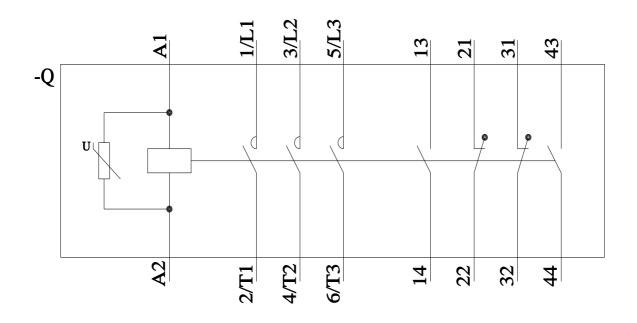
— at the side	0 mm		
 for grounded parts 			
— forwards	20 mm		
— upwards	10 mm		
— at the side	10 mm		
— downwards	10 mm		
 for live parts 			
— forwards	20 mm		
— upwards	10 mm		
— downwards	10 mm		
— at the side	10 mm		
Connections/ Terminals			
type of electrical connection			
for main current circuit	box terminal		
 for auxiliary and control circuit 	screw-type terminals		
 at contactor for auxiliary contacts 	Screw-type terminals		
of magnet coil	Screw-type terminals		
type of connectable conductor cross-sections			
for main contacts			
• for main contacts — stranded	$max_{1} x 50_{1} x 70_{1} mm^{2}$		
	max. 1x 50, 1x 70 mm ²		
— solid or stranded	max. 1x 50, 1x 70 mm ²		
 finely stranded with core end processing 	max. 1x 50, 1x 70 mm ²		
— finely stranded without core end processing	max. 1x 50, 1x 70 mm ²		
at AWG cables for main contacts	2x 1/0		
connectable conductor cross-section for main contacts			
	16 70 mm²		
stranded	16 70 mm ²		
finely stranded with core end processing			
finely stranded without core end processing	16 70 mm²		
connectable conductor cross-section for auxiliary contacts			
solid or stranded	0.5 4 mm²		
	0.5 2.5 mm ²		
finely stranded with core end processing	0.5 2.5 11111		
type of connectable conductor cross-sections			
for auxiliary contacts			
— solid	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²), max. 2x (0.75 4 mm ²)		
— solid or stranded	2x (0,5 1,5 mm ²), 2x (0,75 2,5 mm ²), max. 2x (0,75 4 mm ²)		
— finely stranded with core end processing	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)		
at AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 1x 12		
AWG number as coded connectable conductor cross section			
	19 14		
for auxiliary contacts	18 14		
Safety related data			
product function			
 mirror contact according to IEC 60947-4-1 	Yes		
 positively driven operation according to IEC 60947- 	No		
5-1			
Kill value with high domand rate according to SN 21020	4 000 000		
B10 value with high demand rate according to SN 31920	1 000 000		
protection class IP on the front according to IEC	1 000 000 IP20		
protection class IP on the front according to IEC 60529	IP20		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529			
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 Certificates/ approvals	IP20		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529	IP20		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 Certificates/ approvals General Product Approval	IP20 finger-safe, for vertical contact from the front		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 Certificates/ approvals	IP20 finger-safe, for vertical contact from the front		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 Certificates/ approvals General Product Approval	IP20 finger-safe, for vertical contact from the front		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 Certificates/ approvals General Product Approval	IP20 finger-safe, for vertical contact from the front		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 Certificates/ approvals General Product Approval	IP20 finger-safe, for vertical contact from the front		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 Certificates/ approvals General Product Approval	IP20 finger-safe, for vertical contact from the front		
protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 Certificates/ approvals General Product Approval Confirmation	IP20 finger-safe, for vertical contact from the front		

7/4/2022

Subject to change without notice © Copyright Siemens

	Safety/Safety of Machinery				
RCM	<u>Type Examination</u> <u>Certificate</u>		CE EG-Konf.	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate
Marine / Shipping					other
ABS	Llovd's Register urs	PRS	RMRS		<u>Miscellaneous</u>
other			Railway		
<u>Confirmation</u>	<u>Miscellaneous</u>	<u>Confirmation</u>	<u>Special Test Certific-</u> <u>ate</u>		
Further information Information- and Do https://www.siemens	ownloadcenter (Catalog: .com/ic10	s, Brochures,)			
Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1054-1AB36 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1054-1AB36 Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-1AB36 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1054-1AB36⟨=en					
https://support.indust	Characteristic: Tripping characteristics, I ² t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-1AB36/char				

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1054-1AB36&objecttype=14&gridview=view1



last modified:

3/24/2022 🖸