SIEMENS

Data sheet

3RT2024-1BB40-0CC0



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 24 V DC, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0, communication-capable

product brand name SIRIUS product designation Power contactor Power contactor SIRT2 Central tochnical data Size of contactor size of contactor S0 product type designation Yes - function module for communication Yes - auxiliary switch Ves - at AC in hot operating state 0.5 W - at AC in hot operating state per pole 0.3 W - of main circuit with degree of pollution 3 rated value 690 V - of main circuit with degree of pollution 3 rated value 690 V - of main circuit rated value 6 k/V - of main circuit rated value 6 k/V - of main circuit rated value 6 k/V - of anain circuit rated value 6 k/V - of anain circuit rated value 6 k/V - of anain circuit rated value 100 V - of anain circuit rated value 6 k/V - of anain circuit rated value 100 V - of anain circuit rated value 100 V - of anain circuit rated value 10 000 V - of anain circuit value 10 000	9/13	
product type designation 3RT2 General technical data	product brand name	SIRIUS
General technical data S0 size of contactor S0 product extension • function module for communication Yes • auxiliary switch Yes power loss [W] for rated value of the current • 0.9 W • at AC in hot operating state 0.9 W • at AC in hot operating state 0.9 W • of main circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit rated value 690 V • of auxiliary circuit rated value 64 KV • of main circuit rated value 64 KV • of auxiliary circuit rated value 64 KV • of auxiliary circuit rated value 64 KV • of auxiliary circuit rated value 64 KV • of contactor trates according to EN 60947-1 400 V stock resistance at rectangular impulse 10g / 5 ms, 7,5g / 10 ms • at DC 10g / 5 ms, 7,5g / 10 ms • at DC 10g / 5 ms, 10g / 10 ms mechanical service life (operating cycles) 10 000 000 <th>product designation</th> <th>Power contactor</th>	product designation	Power contactor
size of contactor S0 product extension • function module for communication Yes • auxiliary switch Yes power loss [W] for rated value of the current • at AC in hot operating state per pole 0.9 W • at AC in hot operating state per pole 0.3 W • of main circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 680 V • of auxiliary circuit rated value 64 kV • of auxiliary sinch block typical 100 V • of outactor with aine pulse 10g / 5 ms, 7,5g / 10 ms • at DC 15g / 5 ms, 10g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohib	product type designation	3RT2
product extension Yes • function module for communication Yes • auxiliary switch Yes • at AC in hot operating state 0.9 W • at AC in hot operating state pole 0.3 W • without load current share typical 5.9 W Insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 640 V • of main circuit rated value 6 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • at DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse 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 </th <th>General technical data</th> <th></th>	General technical data	
• function module for communicationYes• auxiliary switchYespower loss [W] for rated value of the current	size of contactor	SO
• auxiliary switchYespower loss [W] for rated value of the current	product extension	
power loss [W] for rated value of the current 0.9 W et AC in hot operating state per pole 0.3 W et AC in hot operating state per pole 0.3 W witthoot load current share typical 5.9 W insulation voltage 690 V of main circuit with degree of pollution 3 rated value 690 V of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 6 kV of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between ol and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 10g / 5 ms, 7.5g / 10 ms e at DC 15g / 5 ms, 10g / 10 ms mechanical service life (operating cycles) 10000 000 of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 of the contactor with added auxiliary switch block typical	 function module for communication 	Yes
• at AC in hot operating state per pole0.9 W• at AC in hot operating state per pole0.3 W• without load current share typical0.9 W• of main circuit with degree of pollution 3 rated value690 V• of main circuit rated value690 V• of main circuit rated value690 V• of main circuit rated value68V• of main circuit rated value6 kV• of main circuit rated value6 kV• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• of main circuit rated value6 kV• of main circuit rated value6 kV• of auxiliary circuit rated value100 V• of the contactor typical100 00 000• of the contactor with added electronically optimized auxiliary switch block typical1000 000• of the contactor with added auxiliary switch block typical1001/2009Aubient conditions2000 mInstaltation altitude at height above sea level maximum2000 mambient temperature • during storage-25 +60 °C• during operation-25 +60 °C• during storage-25 +60 °C• during storage-55 +80 °C </th <th>auxiliary switch</th> <th>Yes</th>	auxiliary switch	Yes
• at AC in hot operating state per pole0.3 W• without load current share typical5.9 Winsulation voltage690 V• of main circuit with degree of pollution 3 rated value690 V• of axiliary circuit with degree of pollution 3 rated value690 Vsurge voltage resistance6 kV• of axiliary circuit with degree of pollution 3 rated value6 kV• of axiliary circuit rated value6 kV• at DC10g / 5 ms, 7,5g / 10 ms• at DC10g / 5 ms, 10g / 10 ms• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added added axiliary switch block typical10 000 000• of the contactor with added axiliary switch block typical0• of the contactor with added axiliary switch block typical10 000 000• of the contactor with added axiliary switch block typical0• of uning operation2 000 mambient conditions-25 +60 °C• during operation-25 +60 °C• during storage-55	power loss [W] for rated value of the current	
• without load current share typical 5.9 W insulation voltage 600 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of main circuit rated value 6 kV • of main circuit rated value 6 kV • of auxiliary corting to EN 60947-11 400 V shock resistance at rectangular impulse 10g / 5 ms, 7,5g / 10 ms • at DC 10g / 5 ms, 10g / 10 ms • at DC 1000 0000 • of contactor 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 reference code according to EC 81346-2	 at AC in hot operating state 	0.9 W
Insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 690 V • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • at DC 100 V • at DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse 100 000 000 • 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 reference code according to IEC 81346-2 Q <	 at AC in hot operating state per pole 	0.3 W
• of main circuit with degree of pollution 3 rated value690 V• of auxiliary circuit with degree of pollution 3 rated value690 V• surge voltage resistance•• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1400 V• shock resistance at rectangular impulse • at DC10g / 5 ms, 7,5g / 10 ms• at DC10g / 5 ms, 7,5g / 10 ms• 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 typical10 000 000• of the contactor with added auxiliary switch block typical0 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 <th> without load current share typical </th> <th>5.9 W</th>	 without load current share typical 	5.9 W
of auxiliary circuit with degree of pollution 3 rated value690 Vsurge voltage resistance-of main circuit rated value6 kVof an circuit rated value6 kVof auxiliary circuit rated value6 kVcol auxiliary circuit rated value600 Vcol auxiliary circuit rated value600 Vshock resistance at rectangular impulse400 Vshock resistance at rectangular impulse10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse15g / 5 ms, 10g / 10 msat DC15g / 5 ms, 10g / 10 msmechanical service life (operating cycles)10 000 000of contactor typical10 000 000of the contactor with added electronically optimized5000 000auxiliary switch block 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 81346-2QQuotage000 mainambient temperature2 000 meinstallation altitude at height above sea level maximum2 000 mambient temperature-25 +60 °Ceiduring operation-25 +80 °Crelative humidity at 55 °C according to IEC 60068-2-3095 %	insulation voltage	
surge voltage resistance 6 • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • at DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse • at DC • at DC 15g / 5 ms, 10g / 10 ms mechanical service life (operating cycles) 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 10/01/2009 Ambient conditions 2 000 m ambient conditions 2 000 m ambient conditions -25 +60 °C • during sporage -55 +80 °C	 of main circuit with degree of pollution 3 rated value 	690 V
• of main circuit rated value6 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse400 V• at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse • at DC10g / 5 ms, 7,5g / 10 ms• at DC15g / 5 ms, 10g / 10 msmechanical service life (operating cycles) • 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 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 typical10 000 000• of the contactor with addee lauxiliary switch block typical10 000 000• of the contactor with addee lauxiliary switch block typical10 000 000• of the contactor with addee lauxiliary switch block typical10 000 000• of the contactor with addee lauxiliary switch block typical10 000 000• of the contactor with addee lauxiliary switch block typical10 000 000• of the contactor with addee lauxiliary switch block typical10 000 000• of the contactor with addee lauxiliary switch block typical2000 m• of the contactor with addee lauxiliary switch block typical2000 m• of the contactor with addee leuxiliary switch block typical2000 m	 of auxiliary circuit with degree of pollution 3 rated value 	690 V
• of auxiliary circuit rated value6 kVmaximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse10g / 5 ms, 7,5g / 10 ms• at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse10g / 5 ms, 7,5g / 10 ms• at DC15g / 5 ms, 10g / 10 msmechanical service life (operating 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 typical0 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical2 000 m• of the contactor with addee auximum2 000 mauxiliary auxing aperation-25 +60 °C• during operation-25 +60 °C• during storage-55 +80 °C• relative humidity minimum10 %perlative humidity at 55 °C according to IEC 60068-2-3095 %	surge voltage resistance	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse • at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse • at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse • at DC10g / 5 ms, 10g / 10 msmechanical service life (operating cycles) • 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 typical2000 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 go to EC 81346-2 • Out of the contactor block typicalQ• of the contactor go to EC 81346-2 • of the contactor (Date)000 000• of the contactor go to EC 81346-2 • of the contactor (Date)000 000• of the contactor go to EC 81346-2 • of the contactor (Date)000 m• of the contactor go to EC 81346-2 • of the contactor (Date)000 m• of the contactor (Date)0 °C• installation altitude at height above sea level	 of main circuit rated value 	6 kV
coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse 15g / 5 ms, 10g / 10 ms • at DC 15g / 5 ms, 10g / 10 ms mechanical service life (operating cycles) 5 000 000 • of the contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C • during storage -55 +80 °C • relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 %	 of auxiliary circuit rated value 	6 kV
• at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse • at DC15g / 5 ms, 10g / 10 msmechanical service life (operating cycles) • of contactor typical10 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 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 typical2000 m• of the contactor with added auxiliary switch block typical10/01/2009• of the contactor with added auxiliary switch block typical2 000 m• of the contactor with addee auxiliary switch block typical10/01/2009• ambient conditions2 000 m• ambient temperature • during operation-25 +60 °C• during operation • during storage-25 +80 °C• during storage-55 +80 °C• relative humidity minimum10 %• relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %		400 V
shock resistance with sine pulse 15g / 5 ms, 10g / 10 ms mechanical service life (operating 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 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 %	shock resistance at rectangular impulse	
• at DC15g / 5 ms, 10g / 10 msmechanical service life (operating 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 typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical0• of the contactor with added 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 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 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 with added auxiliary switch block typical0• of the contactor with added auxiliary switch block typical2• of the contactor with added auxiliary switch block typical2• of the contactor with added auxiliary switch block typical-25 +60	• at DC	10g / 5 ms, 7,5g / 10 ms
mechanical service life (operating cycles) 10 000 000 • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 5 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m aubient temperature -25 +60 °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 95 %	shock resistance with sine pulse	
• 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)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature • during operation-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	• at DC	15g / 5 ms, 10g / 10 ms
 of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -25 +60 °C stallative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 	mechanical service life (operating cycles)	
auxiliary switch block typicalI0 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature-25 +60 °C• during operation-25 +80 °C• during storage-55 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	 of contactor typical 	10 000 000
reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature • during operation • during storage-25 +60 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %		5 000 000
Substance Prohibitance (Date) 10/01/2009 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °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 %	 of the contactor with added auxiliary switch block typical 	10 000 000
Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °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 %	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °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 %	Substance Prohibitance (Date)	10/01/2009
ambient temperature -25 • during operation -25 • during storage -55 relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 %	Ambient conditions	
• 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 %	installation altitude at height above sea level maximum	2 000 m
• during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 %	ambient temperature	
relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum 95 %	 during operation 	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % 95 %	during storage	-55 +80 °C
maximum	relative humidity minimum	10 %
Main circuit		95 %
	Main circuit	
number of poles for main current circuit 3	number of poles for main current circuit	3

number of NO contacts for main contacts	3
	3
 operating voltage at AC-3 rated value maximum 	690 V
at AC-3e rated value maximum	690 V
operational current	
at AC-1 at 400 V at ambient temperature 40 °C rated	40 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	40 A
value	
— up to 690 V at ambient temperature 60 °C rated value	35 A
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	12 A
— at 690 V rated value	9 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	12 A
— at 690 V rated value	9 A
at AC-4 at 400 V rated value	12.5 A
• at AC-5a up to 690 V rated value	35.2 A
• at AC-5b up to 400 V rated value	9.9 A
● at AC-6a	
— up to 230 V for current peak value n=20 rated value	11.4 A
— up to 400 V for current peak value n=20 rated value	11.4 A
— up to 500 V for current peak value n=20 rated value	11.3 A
— up to 690 V for current peak value n=20 rated value	9 A
● at AC-6a	
— up to 230 V for current peak value n=30 rated value	7.6 A
 — up to 400 V for current peak value n=30 rated value 	7.6 A
 — up to 500 V for current peak value n=30 rated value 	7.6 A
 — up to 690 V for current peak value n=30 rated value 	7.6 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm ²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	5.5 A
• at 690 V rated value	5.5 A
operational current	
 at 1 current path at DC-1 	
— at 24 V rated value	35 A
— at 60 V rated value	20 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
- at 110 V rated value	35 A
- at 220 V rated value	35 A
— at 440 V rated value	2.9 A
- at 600 V rated value	1.4 A
 at 1 current path at DC-3 at DC-5 	

— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
• at AC-3	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
operating power for approx. 200000 operating cycles at AC-	
4	
• at 400 V rated value	2.6 kW
• at 690 V rated value	4.6 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	4.5 kVA
 up to 400 V for current peak value n=20 rated value 	7.8 kVA
 up to 500 V for current peak value n=20 rated value 	9.8 kVA
 up to 690 V for current peak value n=20 rated value 	10.7 kVA
operating apparent power at AC-6a	
 up to 230 V for current peak value n=30 rated value 	3 kVA
 up to 400 V for current peak value n=30 rated value 	5.2 kVA
 up to 500 V for current peak value n=30 rated value 	6.5 kVA
 up to 690 V for current peak value n=30 rated value 	9 kVA
short-time withstand current in cold operating state up to	
40 °C	
Imited to 1 s switching at zero current maximum	210 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 5 s switching at zero current maximum	210 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 10 s switching at zero current maximum	170 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 30 s switching at zero current maximum	126 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 60 s switching at zero current maximum	105 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at DC	1 500 1/h
operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	1 000 1/h
• at AC-3 maximum	1 000 1/h
• at AC-3e maximum	1 000 1/h
• at AC-4 maximum	300 1/h
Control circuit/ Control	

type of voltage of the control supply voltage	DC
control supply voltage at DC	
rated value	24 V
operating range factor control supply voltage rated value of magnet coil at DC	
initial value	0.8
full-scale value	1.1
closing power of magnet coil at DC	5.9 W
holding power of magnet coil at DC	5.9 W
closing delay	
• at DC	50 170 ms
opening delay	
• at DC	15 18 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2, optionally via function module
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
• at 230 V rated value	10 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	11 A
• at 600 V rated value	11 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	1 hp
— at 230 V rated value	2 hp
• for 3-phase AC motor	
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	7.5 hp
— at 575/600 V rated value	10 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit 	
— with type of coordination 1 required	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)
··· ·	

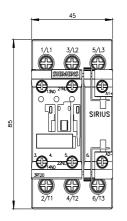
- with type of assignment 2 required

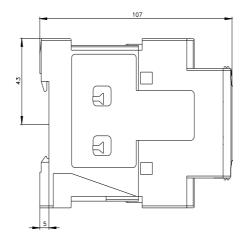
• for short-circuit protection of the auxiliary switch required

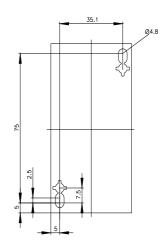
gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA) gG: 10 A (500 V, 1 kA)

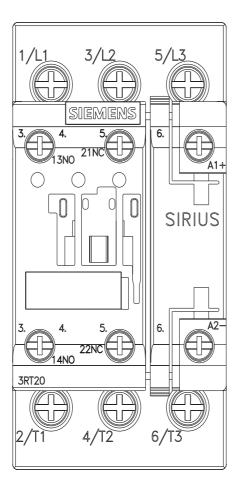
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
side-by-side mounting	Yes
height	85 mm
width	45 mm
depth	107 mm
required spacing	
 with side-by-side mounting 	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
 for grounded parts 	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
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	
• solid	2x (1 2.5 mm ²), 2x (2.5 10 mm ²)
solid or stranded	2x (1 2.5 mm ²), 2x (2.5 10 mm ²)
finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
connectable conductor cross-section for main contacts	4 402
• solid	1 10 mm ²
stranded	1 10 mm ²
finely stranded with core end processing	1 10 mm²
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm ²
 solid or stranded finally stranded with core and processing 	0.5 2.5 mm² 0.5 2.5 mm²
finely stranded with core end processing	0.0 2.0 mm ⁻
type of connectable conductor cross-sections • for auxiliary contacts	
for auxiliary contacts — solid or stranded	$2 v (0.5 - 1.5 mm^2) 2 v (0.75 - 2.5 mm^2)$
 — solid of stranded — finely stranded with core end processing 	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)
 Innery stranded with core and processing for AWG cables for auxiliary contacts 	2x (0.5 1.5 mm ⁻), 2x (0.75 2.5 mm ⁻) 2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross	2A (20 10), 2A (10 17)
section	
• for main contacts	16 8
 for auxiliary contacts 	20 14
Safety related data	
product function	
mirror contact according to IEC 60947-4-1	Yes
B10 value with high demand rate according to SN 31920	450 000
proportion of dangerous failures	
with low demand rate according to SN 31920	40 %
with high demand rate according to SN 31920	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
	100111

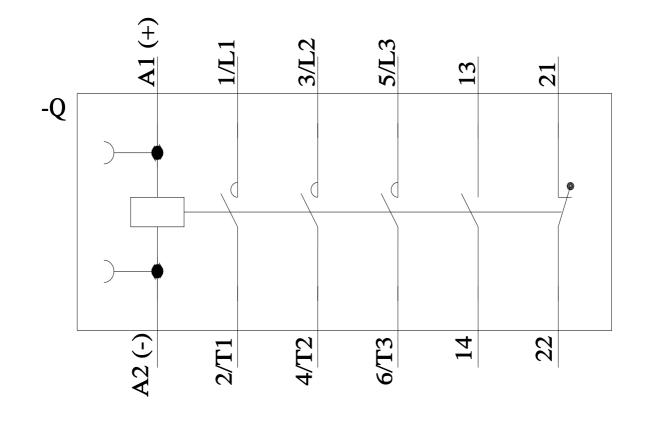
protection class IP	on the front according to I	EC 60529 IP20			
touch protection or	n the front according to IEC	60529 finge	r-safe, for vertical contact	from the front	
suitability for use					
 safety-related 	switching OFF	Yes			
ertificates/ approva	ls				
General Product A	pproval				
() E	CCC	<u>Confirmation</u>		KC	EAC
EMC	Functional Safety/Safety of Ma- chinery	Declaration of Confor	rmity	Test Certificates	
RCM	<u>Type Examination Cer-</u> <u>tificate</u>	CE EG-Konf.	UK CA	<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific ates/Test Report
Marine / Shipping					
ABS	BUREAU VERITAS		Lloyd's Register uis	RINA	RMRS
other		Railway	Dangerous Good	Environment	
<u>Confirmation</u>	VDE	Vibration and Shock	Transport Information	Environmental Con- firmations	
Siemens has decid	led to exit the Russian mark				
Siemens has decidenttps://press.siemens	s.com/global/en/pressrelease	siemens-wind-down-rus	sian-business		
Siemens has decide https://press.siemens Siemens is working Please contact your	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s	extrimeted by the second secon	C certification if you intend	l to import or offer to suppl	ly these products to
Siemens has decide https://press.siemens Siemens is working Please contact your EAC relevant market	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned B	extrimeted by the second secon	C certification if you intend	I to import or offer to suppl	ly these products to
Siemens has decid https://press.siemens Siemens is working Please contact your EAC relevant market nformation on the	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned B	ersteinsteinsteinsteinsteinsteinsteinstein	C certification if you intend	I to import or offer to suppl	ly these products to
Siemens has decid https://press.siemens Siemens is working Please contact your EAC relevant market nformation on the https://support.indust nformation- and Do	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned E packaging try.siemens.com/cs/ww/en/vi ownloadcenter (Catalogs, E	evisionens-wind-down-rus ent EAC certificates. tatus of validity of the EA EAEU member states Rus ew/109813875	C certification if you intend	I to import or offer to suppl	ly these products to
Siemens has decid ttps://press.siemens Siemens is working Please contact your EAC relevant market nformation on the ttps://support.indust nformation- and Do ttps://www.siemens	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned E packaging stry.siemens.com/cs/ww/en/vi ownloadcenter (Catalogs, E s.com/ic10	evisionens-wind-down-rus ent EAC certificates. tatus of validity of the EA EAEU member states Rus ew/109813875	C certification if you intend	I to import or offer to suppl	ly these products to
Siemens has decid https://press.siemens Siemens is working Please contact your EAC relevant market nformation on the https://support.indusi nformation- and Do https://www.siemens ndustry Mall (Onlin	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned E packaging stry.siemens.com/cs/ww/en/vi ownloadcenter (Catalogs, E s.com/ic10 ne ordering system)	ersteinens-wind-down-rus ent EAC certificates. tatus of validity of the EA EAEU member states Rus ew/109813875 Brochures,)	C certification if you intenc ssia or Belarus).	I to import or offer to suppl	ly these products to
Siemens has decid https://press.siemens Siemens is working Please contact your EAC relevant market nformation on the https://support.indusi nformation- and Do https://www.siemens ndustry Mall (Onlin https://mall.industry.s Cax online generato	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned E packaging stry.siemens.com/cs/ww/en/vi ownloadcenter (Catalogs, E s.com/ic10 ne ordering system) siemens.com/mall/en/en/Cata	Asignmens-wind-down-rus ent EAC certificates. tatus of validity of the EA EAEU member states Rus ew/109813875 Brochures,)	C certification if you intend ssia or Belarus). 024-1BB40-0CC0		ly these products to a
Siemens has decid https://press.siemens Siemens is working Please contact your EAC relevant market nformation on the https://support.indust nformation- and Do https://www.siemens ndustry Mall (Onlin https://mall.industry.s Cax online generato http://support.automa	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned E packaging stry.siemens.com/cs/ww/en/vi ownloadcenter (Catalogs, E s.com/ic10 ne ordering system) siemens.com/mall/en/en/Cata for ation.siemens.com/WW/CAX	Asignmens-wind-down-rus ent EAC certificates. tatus of validity of the EA EAEU member states Rus ew/109813875 Brochures,) alog/product?mlfb=3RT20 order/default.aspx?lang=	C certification if you intend ssia or Belarus). 024-1BB40-0CC0		ly these products to
https://press.siemens Siemens is working Please contact your EAC relevant markel nformation on the https://support.indusi nformation- and Do https://www.siemens ndustry Mall (Onlin https://mall.industry.si Cax online generate http://support.automa Service&Support (M	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned E packaging stry.siemens.com/cs/ww/en/vi ownloadcenter (Catalogs, E s.com/ic10 ne ordering system) siemens.com/mall/en/en/Cata or ation.siemens.com/WW/CAX Manuals, Certificates, Chara	Asignmens-wind-down-rus ent EAC certificates. tatus of validity of the EA AEU member states Rus ew/109813875 Brochures,) alog/product?mlfb=3RT20 order/default.aspx?lang= acteristics, FAQs,)	C certification if you intend ssia or Belarus). 024-1BB40-0CC0 en&mlfb=3RT2024-1BB40		ly these products to
Siemens has decid https://press.siemens Siemens is working Please contact your EAC relevant market nformation on the https://support.indust nformation- and Do https://www.siemens ndustry Mall (Onlin ttps://mall.industry.s Cax online generate http://support.automas Service&Support (M	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned E packaging stry.siemens.com/cs/ww/en/vi ownloadcenter (Catalogs, E s.com/ic10 ne ordering system) siemens.com/mall/en/en/Cata for ation.siemens.com/WW/CAX	ent EAC certificates. tatus of validity of the EA AEU member states Rus ew/109813875 Brochures,) alog/product?mlfb=3RT20 order/default.aspx?lang= acteristics, FAQs,)	C certification if you intend ssia or Belarus). 024-1BB40-0CC0 en&mlfb=3RT2024-1BB40	- <u>0CC0</u>	ly these products to
Siemens has decid https://press.siemens Siemens is working Please contact your EAC relevant market nformation on the https://support.indust nformation- and Do https://www.siemens ndustry Mall (Onlin https://mall.industry.sc Cax online generato ttp://support.automatic Service&Support (M https://support.indust mage database (pr http://www.automatic Characteristic: Trip	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned E packaging try.siemens.com/cs/ww/en/vi ownloadcenter (Catalogs, E s.com/ic10 ne ordering system) siemens.com/mall/en/en/Cata tor ation.siemens.com/WW/CAX Manuals, Certificates, Chara try.siemens.com/cs/ww/en/ps roduct images, 2D dimensio on.siemens.com/bilddb/cax_co	Algorithmens-wind-down-rus ent EAC certificates. tatus of validity of the EA EAEU member states Rus ew/109813875 Brochures,) alog/product?mlfb=3RT20 order/default.aspx?lang= acteristics, FAQs,) s/3RT2024-1BB40-0CC0 on drawings, 3D models le.aspx?mlfb=3RT2024-1 t-through current	C certification if you intend ssia or Belarus). 024-1BB40-0CC0 en&mlfb=3RT2024-1BB40 s, device circuit diagrams BB40-0CC0⟨=en	- <u>0CC0</u>	ly these products to
Siemens has decid https://press.siemens Siemens is working Please contact your EAC relevant market nformation on the https://support.indust nformation- and Do https://www.siemens ndustry Mall (Onlir https://mall.industry.sc Cax online generato http://support.automation Service&Support (M https://support.indust mage database (pr http://www.automation Characteristic: Trip https://support.indust	s.com/global/en/pressrelease g on the renewal of the curr local Siemens office on the s t (other than the sanctioned E packaging try.siemens.com/cs/ww/en/vi ownloadcenter (Catalogs, E s.com/ic10 ne ordering system) siemens.com/mall/en/en/Cata or ation.siemens.com/WW/CAX Manuals, Certificates, Chara try.siemens.com/cs/ww/en/ps roduct images, 2D dimensio on.siemens.com/bilddb/cax_c	ent EAC certificates. tatus of validity of the EA AEU member states Rus ew/109813875 Brochures,) alog/product?mlfb=3RT20 order/default.aspx?lang= acteristics, FAQs,) s/3RT2024-1BB40-0CC0 on drawings, 3D models le.aspx?mlfb=3RT2024-1 t-through current s/3RT2024-1BB40-0CC0/	C certification if you intend ssia or Belarus). 024-1BB40-0CC0 en&mlfb=3RT2024-1BB40 s, device circuit diagrams BB40-0CC0⟨=en	- <u>0CC0</u>	ly these products to











last modified:

2/10/2023 🖸