SIEMENS

Data sheet

3RT2015-1BF41



power contactor, AC-3e/AC-3, 7 A, 3 kW / 400 V, 1 NO, 110 V DC 3-pole, frame size S00 screw terminal

size of contactor S00 product extension • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current • at AC in hot operating state 0.6 W • at AC in hot operating state 0.6 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 kV • of main circuit rated value 6 kV • of auxiliary switch block typical 30 000 V • at DC 10.5g / 5 ms, 4.2g / 10 ms • at DC 10.5g / 5 ms, 6.6g / 10 ms • 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 2000 m mistelation alitlitude at height above sea		
product type designation SRT2 Sensent technical data source stansion • function module for communication No • auxilary switch Yess power loss [V] for rated value of the current - • at AC in hot operating state per pole 0.6 W • at AC in hot operating state per pole 0.2 W • of main circuit with degree of pollution 3 rated value 690 V • of auxillary circuit ated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit ated value 6 KV • of main circuit with degree of pollution 3 rated value 6 KV • of auxillary circuit rated value 6 kV • of main circuit with degree of pollution 3 rated value 6 kV • of auxillary circuit rated value 6 kV • of auxillary circuit rated value 6 kV • of auxillary circuit rated value 0 kV • of contactor with	product brand name	SIRIUS
Deneral technical data size of contactor S00 product extension No • function module for communication No • auxiliary switch Yes power loss [M] for rated value of the current • at AC in hot operating state per pole 0.6 W • without load current share typical 4 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 auxillary circuit with degree of pollution 3 rated value 690 V • • of amain circuit rated value 6 kV • • • of auxillary circuit rated value 6 kV • • • of auxillary circuit rated value 6 kV • • • of auxillary circuit rated value 6 kV • • • of auxillary circuit rated value 6 kV • • • at DC 6.7g / 5 ms, 4.2g / 10 ms • • • at DC 10 000 000 <t< th=""><th>product designation</th><th>Power contactor</th></t<>	product designation	Power contactor
size of contactor S00 product extension • • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current • • at AC in hot operating state 0.6 W • at AC in hot operating state 0.6 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 6 kV • of auxiliary switch block typical 30 000 00 • at DC 10,5g / 5 ms, 6,6g / 10 ms • 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 2000 m • of the contactor with added auxiliary switch block typical 10 000 000 <th>product type designation</th> <th>3RT2</th>	product type designation	3RT2
product extensionImage: setting in the setting is a setting is setting is a setting is setting is setting is setting is a set if in the operating state per poleNoat AC in hot operating state per pole0.6 Wat AC in hot operating state per pole0.2 Wat AC in hot operating state per pole0.9 Wof main circuit with degree of pollution 3 rated value600 Vof daxiliary circuit with degree of pollution 3 rated value600 Vof axiliary circuit with degree of pollution 3 rated value600 Vof axiliary circuit rated value6 kVof a setting is for safe isolation between coil and main contacts according to EN 60947-16 kVstock resistance at rectangular impulse400 Vof a colliary circuit rated value6 kVof a colliary circuit rated value10.5g / 5 ms, 6.6g / 10 msat DC6 contactor with adde dectronically optimizedof ontactor with added auxiliary switch block10 000 000of the contactor with added auxiliary switch block10 000 000o	General technical data	
• function module for communicationNo• auxiliary switchYespower loss [W] for rated value of the current• at AC in hot operating state0.6 W• at AC in hot operating state per pole0.2 W• without load current share typical4 Winsulation voltage• of main circuit with degree of pollution 3 rated value690 V• of main circuit with degree of pollution 3 rated value690 V• of auxiliary circuit rated value680 V• of main circuit with degree of pollution 3 rated value690 V• of main circuit rated value6 kV• of contactor seconding to EN 60947-1shock resistance at rectangular impulse• at DC10,5g / 5 ms, 6,6g / 10 ms• at DC10,5g / 5 ms, 6,6g / 10 ms• of 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	size of contactor	S00
• auxiliary switchYespower loss [W] for rated value of the current	product extension	
power loss [W] for rated value of the current intervalue • at AC in hot operating state per pole 0.6 W • at AC in hot operating state per pole 0.2 W • without load current share typical 4 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 690 V • of auxiliary circuit rated value 6 kV • of tauxiliary circuit rated value 6 kV • of the contact with sine pulse 10.05g / 5	 function module for communication 	No
• at AC in bot operating state0.6 W• at AC in bot operating state per pole0.2 W• without load current share typical4 Winsulation voltage690 V• of main circuit with degree of pollution 3 rated value690 V• of auxiliary circuit with degree of pollution 3 rated value690 V• of main circuit rated value690 V• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• at DC6.7g / 5 ms, 4.2g / 10 ms• at DC6.7g / 5 ms, 6.6g / 10 ms• at DC10,5g / 5 ms, 6.6g / 10 ms• of contactor typical30 000 000• of the contactor with added electronically optimized• 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 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 added auxiliary switch block typical	 auxiliary switch 	Yes
• at AC in hot operating state per pole0.2 W• without load current share typical4 Winsulation voltage6 main circuit with degree of pollution 3 rated value690 V• of main circuit with degree of pollution 3 rated value690 V• of main circuit with degree of pollution 3 rated value690 V• of main circuit rated value6 kV• of main circuit rated value6 kV• of auxiliary stricut rated value6 kV• at DC6.7g / 5 ms, 4.2g / 10 msmechanical service life (operating cycles)000000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical2 000 mambient conditions2 000 mreference cole according to IEC 60068-2-30 maximum <th>power loss [W] for rated value of the current</th> <th></th>	power loss [W] for rated value of the current	
without load current share typical4 Winsulation voltage690 Vof main circuit with degree of pollution 3 rated value690 Vof auxiliary circuit with degree of pollution 3 rated value690 Vsurge voltage resistance680 Vof main circuit rated value6 kVof anizing circuit rated value6 kVof auxiliary circuit rated value6 kVof and main contacts according to EN 60947-1shock resistance at rectangular impulseat DC6.7g / 5 ms, 4.2g / 10 msat DC10.5g / 5 ms, 6.6g / 10 msmechanical service life (operating cycles)of contactor typical30 000 000of the contactor with added electronically optimizedauxilary switch block typical10 000 000of the contactor with added auxiliary switch block10 000 000typical10/01/2009Anbient conditions2 000 mambient temperature-during operation-25 +60 °Cduring storage-55 +60 °Cduring storage-55 +60 °Coturing storage-55 +60 °Celative humidity at 55 °C according to IEC 60068-2-3095 %	 at AC in hot operating state 	0.6 W
insulation voltage• of main circuit with degree of pollution 3 rated value690 V• of auxiliary circuit with degree of pollution 3 rated value690 V• of auxiliary circuit with degree of pollution 3 rated value690 V• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• at DC6 xg / 5 ms, 4.2g / 10 ms• at DC10.5g / 5 ms, 6.6g / 10 ms• of the contactor with added electronically optimized30 000 000• of the contactor with added electronically optimized10 000 000• of the contactor with added auxiliary switch block10 000 000• typical10 000 000• of the contactor with added auxiliary switch block10 000 000• typical2 000 m• during operation2 000 m• during operation2 000 m• during operation-25 +60 °C• during operation-25 +60 °C• during stor	 at AC in hot operating state per pole 	0.2 W
• of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value690 V• of auxiliary circuit with degree of pollution 3 rated value690 Vsurge voltage resistance6 kV• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• at DC6 (5 / 5 ms, 4,2g / 10 ms• at DC10,5g / 5 ms, 6,6g / 10 ms• of the contactor with added electronically optimized auxiliary switch block typical30 000 000• of the contactor with added electronically optimized auxiliary switch block typical00 000• of the contactor with added auxiliary switch block typical00 0000reference code according to IEC 81346-2QSubstance Prohibitance (Date)2000 mambient temperature • during operation-25 +60 °C• during operation-25 +60 °C• during storage65 +80 °Crelative humidity minimum relative humidity minimum10 %• So C10 % </th <th> without load current share typical </th> <th>4 W</th>	 without load current share typical 	4 W
of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value of ontactor typical 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 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10 000 000 contactor with added auxiliary switch block typical auxiliary attribute at height above sea level maximum aubient temperature oduring operation -25 +60 °C oduring storage cot according to IEC 60068-2-30 maximum	insulation voltage	
valuevaluesurge voltage resistance6 kVof main circuit rated value6 kVof auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse6 /7g / 5 ms, 4,2g / 10 msat DC6 /7g / 5 ms, 6,6g / 10 msshock resistance with sine pulse10,5g / 5 ms, 6,6g / 10 mse at DC10,5g / 5 ms, 6,6g / 10 msmechanical service life (operating cycles)30 000 000of the contactor with added electronically optimized 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 metatild on attitude at height above sea level maximum e during operation-25 +60 °Cetative humidity at 55 °C according to IEC 60068-2-30 maximum10 %	 of main circuit with degree of pollution 3 rated value 	690 V
• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1400 V• at DC6,7g / 5 ms, 4,2g / 10 ms• at DC6,7g / 5 ms, 6,6g / 10 ms• at DC10,5g / 5 ms, 6,6g / 10 ms• at DC30 000 000• of contactor typical30 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 typical2000 mmabient conditions2 000 mInstallation altitude at height above sea level maximum ambient temperature • during storage-25 +60 °C• during storage-25 +60 °C• during storage-55 +80 °C• lative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	, , , , , , , , , , , , , , , , , , , ,	690 V
of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse6,7g / 5 ms, 4,2g / 10 ms• at DC6,7g / 5 ms, 4,2g / 10 ms• at DC10,5g / 5 ms, 6,6g / 10 ms• at DC10,5g / 5 ms, 6,6g / 10 ms• of contactor typical30 000 000• of the contactor with added electronically optimized auxiliary switch block typical30 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical2 000 m• of the contactor with added auxiliary switch block typical2 000 m• of the contactor with added auxiliary switch block typical2 000 m• during operation • during storage-25 +60 °C• during storage-55 +80 °C• during storage55 °C according to IEC 60068-2-30• maximum95 %	surge voltage resistance	
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 6,7g / 5 ms, 4,2g / 10 ms • at DC 6,7g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) 10,5g / 5 ms, 6,6g / 10 ms • of contactor typical 30 000 000 • 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 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Anbient conditions 2 000 m installation altitude at height above sea level maximum aubient temperature 2 000 m • during operation e during storage -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 %	 of main circuit rated value 	6 kV
coil and main contacts according to EN 60947-1shock resistance at rectangular impulse• at DC6,7g / 5 ms, 4,2g / 10 msshock resistance with sine pulse• at DC10,5g / 5 ms, 6,6g / 10 msmechanical service life (operating cycles)• of contactor typical30 000 000• of the contactor with added electronically optimized auxiliary switch block typical30 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical2000 m• of the contactor with added auxiliary switch block typical2 000 m• of the contactor with added auxiliary switch block typical2 000 m• during operation • during operation • during storage-55 +60 °C• during operation • during storage-55 +60 °C• relative humidity minimum maximum10 %• relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	 of auxiliary circuit rated value 	6 kV
• at DC6,7g / 5 ms, 4,2g / 10 msshock resistance with sine pulse10,5g / 5 ms, 6,6g / 10 ms• at DC10,5g / 5 ms, 6,6g / 10 msmechanical service life (operating cycles)30 000 000• of contactor typical30 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 81346-2 Substance Prohibitance (Date)QAmbient conditions2 000 m• during operation • during storage-25 +60 °C• during storage-25 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %		400 V
shock resistance with sine pulse 10,5g / 5 ms, 6,6g / 10 ms mechanical service life (operating cycles) 30 000 000 • of contactor typical 30 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 30 000 000 • 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 • 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 at rectangular impulse	
• at DC10,5g / 5 ms, 6,6g / 10 msmechanical service life (operating cycles).• of contactor typical30 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 000reference code according to IEC 81346-2 Substance Prohibitance (Date)QAmbient conditions10/01/2009Ambient temperature • during operation • during storage2 000 mrelative humidity minimum-25 +60 °C -55 +80 °Crelative humidity minimum10 %	• at DC	6,7g / 5 ms, 4,2g / 10 ms
mechanical service life (operating cycles)integret and trigget an	shock resistance with sine pulse	
 of contactor typical 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 reference code according to IEC 81346-2 Substance Prohibitance (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum during operation during storage eduring storage refative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 	● at DC	10,5g / 5 ms, 6,6g / 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 reference code according to IEC 81346-2 Substance Prohibitance (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during storage conditions relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum 	mechanical service life (operating cycles)	
auxiliary switch block typicalI 0 000 000• 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 maximum ambient temperature • during operation • during storage2 000 mrelative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum-25 +60 °C • 55 %	 of contactor typical 	30 000 000
typicalreference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 mambient temperature2 000 me during operation-25 +60 °Ce during storage-55 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-3095 %	5 1	5 000 000
Substance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum ambient temperature • during operation • during storage2 000 m-25 +60 °C -55 +80 °C-25 +60 °Crelative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	5	10 000 000
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 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 storage -25 +60 °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• during operation• during storage• during storagerelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum	Ambient conditions	
• during operation-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	installation altitude at height above sea level maximum	2 000 m
• during storage • during storage • during storage • failure 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 	
relative humidity at 55 °C according to IEC 60068-2-30 95 %	 during storage 	-55 +80 °C
maximum	relative humidity minimum	10 %
Main circuit		95 %
	Main circuit	

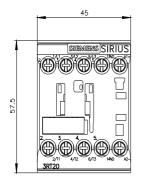
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
 at AC-3 rated value maximum 	690 V
 at AC-3e rated value maximum 	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C 	18 A
rated value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C	18 A
rated value	
— up to 690 V at ambient temperature 60 °C	16 A
rated value ● at AC-3	
	7 4
— at 400 V rated value	7 A
— at 500 V rated value	6 A
— at 690 V rated value	4.9 A
• at AC-3e	7 4
— at 400 V rated value	7 A
— at 500 V rated value	6 A
— at 690 V rated value	4.9 A
at AC-4 at 400 V rated value	6.5 A
• at AC-5a up to 690 V rated value	15.8 A
• at AC-5b up to 400 V rated value	5.8 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated 	4 A
value	
 — up to 400 V for current peak value n=20 rated value 	4 A
— up to 500 V for current peak value n=20 rated	3.8 A
value	3.0 A
— up to 690 V for current peak value n=20 rated	3.6 A
value	0.071
● at AC-6a	
— up to 230 V for current peak value n=30 rated	2.7 A
value	
 — up to 400 V for current peak value n=30 rated 	2.7 A
value	
— up to 500 V for current peak value n=30 rated	2.5 A
value	0.4.4
 — up to 690 V for current peak value n=30 rated value 	2.4 A
minimum cross-section in main circuit at maximum AC-1	2.5 mm ²
rated value	2.0 11111
operational current for approx. 200000 operating	
cycles at AC-4	
 at 400 V rated value 	2.6 A
 at 690 V rated value 	1.8 A
operational current	
 at 1 current path at DC-1 	
— at 24 V rated value	15 A
— at 110 V rated value	1.5 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.42 A
— at 600 V rated value	0.42 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	15 A
— at 110 V rated value	8.4 A
— at 220 V rated value	1.2 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.5 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	15 A
— at 110 V rated value	15 A
— at 220 V rated value	15 A
— at 440 V rated value	0.9 A
	0.07

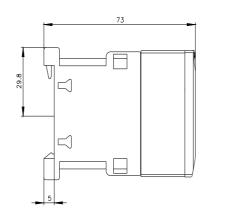
— at 600 V rated value	0.7 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	15 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 110 V rated value	0.25 A
 with 3 current paths in series at DC-3 at DC-5 — at 24 V rated value 	15 A
	15 A 15 A
— at 110 V rated value — at 220 V rated value	1.2 A
— at 440 V rated value	0.14 A
— at 600 V rated value	0.14 A
operating power	0.14 A
• at AC-3	
- at 230 V rated value	1.5 kW
— at 200 V rated value	3 kW
— at 500 V rated value	3 kW
— at 690 V rated value	4 kW
• at AC-3e	
— at 230 V rated value	1.5 kW
— at 400 V rated value	3 kW
— at 500 V rated value	3 kW
— at 690 V rated value	4 kW
operating power for approx. 200000 operating cycles	
at AC-4	
at 400 V rated value	1.15 kW
at 690 V rated value	1.15 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	1.5 kVA
• up to 400 V for current peak value n=20 rated value	2.7 kVA
• up to 500 V for current peak value n=20 rated value	3.3 kVA
 up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a 	4.3 kVA
• up to 230 V for current peak value n=30 rated value	1 kVA
 up to 200 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value 	1.8 kVA
• up to 500 V for current peak value n=30 rated value	2.2 kVA
• up to 690 V for current peak value n=30 rated value	2.9 kVA
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	120 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	86 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	67 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	52 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	43 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
● at DC	10 000 1/h
operating frequency	
 at AC-1 maximum 	1 000 1/h
at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
at AC-3e maximum	750 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	20
type of voltage of the control supply voltage	DC
control supply voltage at DC	110.1/
rated value operating range factor control supply voltage rated	110 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	4 W
holding power of magnet coil at DC	4 W
closing delay	
• at DC	30 100 ms

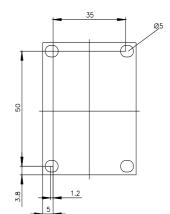
opening delay	
• at DC	7 13 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NO contacts for auxiliary contacts	1
instantaneous contact	
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	10 A
 at 400 V rated value at 500 V rated value 	3 A 2 A
at 500 V rated value at 690 V rated value	1 A
operational current at DC-12	1 A
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 	4.8 A
• at 600 V rated value	6.1 A
yielded mechanical performance [hp]	
for single-phase AC motor	0.05 hz
— at 110/120 V rated value — at 230 V rated value	0.25 hp 0.75 hp
• for 3-phase AC motor	0.75 hp
- at 200/208 V rated value	1.5 hp
— at 220/230 V rated value	2 hp
— at 460/480 V rated value	3 hp
— at 575/600 V rated value	5 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: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
— with type of assignment 2 required	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
 for short-circuit protection of the auxiliary switch required 	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	58 mm
width	45 mm
depth	73 mm
required spacing	
 with side-by-side mounting 	
— forwards	10 mm

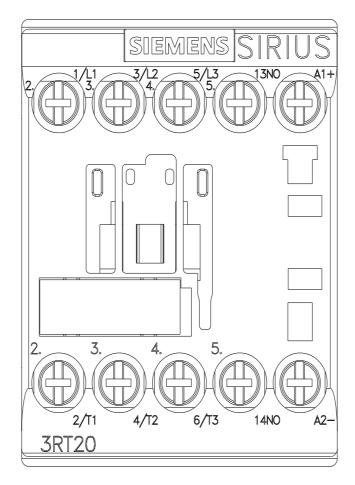
	40				
— upwards	10 mm				
— downwards	10 mm				
— at the side	0 mm				
 for grounded parts 					
— forwards	10 mm				
— upwards	10 mm				
— at the side	6 mm				
— downwards	10 mm				
for live parts					
— forwards	10 mm				
— upwards	10 mm				
— downwards	10 mm				
— at the side	6 mm				
Connections/ 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 (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²				
— solid or stranded	2x (0.5 1,5 mm²), 2x (0.75 2,5 mm²), 2x 4 mm²				
— finely stranded with core end processing	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)				
at AWG cables for main contacts	2x (20 16), 2x (18 14), 2x 12				
connectable conductor cross-section for main					
contacts	0.5 4 mm²				
• solid	0.5 4 mm ²				
• stranded	0.5 4 mm ²				
 finely stranded with core end processing 	0.5 2.5 mm ²				
connectable conductor cross-section for auxiliary					
contacts					
 solid or stranded 	0.5 4 mm ²				
 finely stranded with core end processing 	0.5 2.5 mm²				
type of connectable conductor cross-sections					
 for auxiliary contacts 					
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²				
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
 at AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14), 2x 12				
AWG number as coded connectable conductor cross					
section					
 for main contacts 	20 12				
 for auxiliary contacts 	20 12				
Safety related data					
product function					
•	Voc: with 2PH20				
mirror contact according to IEC 60947-4-1 P10 value with high demand rate according to SN 21020	Yes; with 3RH29				
B10 value with high demand rate according to SN 31920	1 000 000				
proportion of dangerous failures	10.04				
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	100 FIT				
31920	20				
T1 value for proof test interval or service life according to	20 у				
IEC 61508 protection class IP on the front according to IEC	IP20				
60529					
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front				
suitability for use					
 safety-related switching OFF 	Yes				
Certificates/ approvals					
General Product Approval					
outorul i loudot Appiotul					

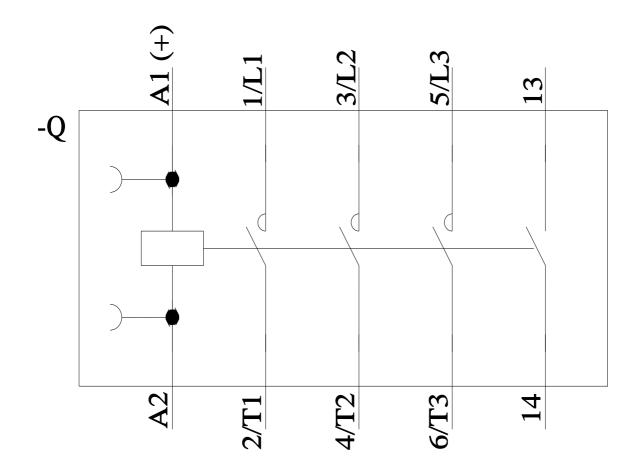
SF.	<u>Confirmation</u>	CCC	(UL) III	<u>KC</u>	EHC	
EMC	Functional Safety/Safety of Machinery	Declaration of Cont	formity	Test Certificates		
RCM	<u>Type Examination</u> <u>Certificate</u>	CE EG-Konf.	UK CA	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certific-</u> ates/Test Report	
Marine / Shipping						
ABS	B U REAU VERITAS		Lloyd's Register Lits	PRS	RINA	
Marine / Shipping	other		Railway	Dangerous Good		
RMRS	<u>Confirmation</u>	VDE	Vibration and Shock	<u>Transport Informa-</u> <u>tion</u>		
Further information						
Information- and Downloadcenter (Catalogs, Brochures,) https://www.siemens.com/ic10 Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2015-1BF41 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2015-1BF41 Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1BF41 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2015-1BF41⟨=en Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1BF41/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2015-1BF41&objecttype=14&gridview=view1						
http://www.automatio						











last modified:

11/21/2022 🖸