SIEMENS

Data sheet

3RT2016-4AR62



Power contactor, AC-3 9 A, 4 kW / 400 V 1 NC, 400 V AC, 50 Hz 400-440 V, 60 Hz, 3-pole, Size S00, ring cable lug connection

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
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 	0.9 W
 at AC in hot operating state per pole 	0.3 W
 without load current share typical 	4.8 W
insulation voltage	
 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	
 of main circuit rated value 	6 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (switching cycles)	
 of contactor typical 	30 000 000
 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
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
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 	690 V
 at AC-3e rated value maximum 	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	22 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	22 A
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-3	
— at 400 V rated value	9 A
— at 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
● at AC-3e	
— at 400 V rated value	9 A
— at 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
• at AC-4 at 400 V rated value	8.5 A
 at AC-5a up to 690 V rated value 	19.4 A
• at AC-5b up to 400 V rated value	7.4 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	5.3 A
 up to 400 V for current peak value n=20 rated value 	5.3 A
— up to 500 V for current peak value n=20 rated value	5.3 A
 up to 690 V for current peak value n=20 rated value 	5 A
 at AC-6a up to 230 V for current peak value n=30 rated value 	3.5 A
 — up to 400 V for current peak value n=30 rated value 	3.5 A
 — up to 500 V for current peak value n=30 rated value 	3.6 A
— up to 690 V for current peak value n=30 rated value	3.3 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating	4 mm ²
cycles at AC-4	
at 400 V rated value	4.1 A
• at 690 V rated value	3.3 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
with 2 current paths in series at DC-1	
- at 24 V rated value	20 A
	20 A 12 A
— at 110 V rated value	
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.7 A
 with 3 current paths in series at DC-1 	

— at 24 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1 A
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	0.1 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	0.35 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	1.5 A
— at 440 V rated value	0.2 A
— at 600 V rated value	0.2 A
operating power	-
• at AC-3	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5 kW
operating power for approx. 200000 operating cycles	-
at AC-4	
 at 400 V rated value 	2 kW
• at 690 V rated value	2.5 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	2 kVA
 up to 400 V for current peak value n=20 rated value 	3.6 kVA
 up to 500 V for current peak value n=20 rated value 	4.6 kVA
 up to 690 V for current peak value n=20 rated value 	5.9 kVA
operating apparent power at AC-6a	
 up to 230 V for current peak value n=30 rated value 	1.3 kVA
 up to 400 V for current peak value n=30 rated value 	2.4 kVA
 up to 500 V for current peak value n=30 rated value 	3.1 kVA
 up to 690 V for current peak value n=30 rated value 	4 kVA
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	155 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	111 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	86 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	66 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 60 s switching at zero current maximum	55 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	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	
type of voltage of the control supply voltage	AC
control supply voltage at AC	

 at 60 hz rated value 40 0 V at 60 hz rated value 40 V operating range factor control supply voltage rated value of magnet coll at AC at 60 hz at 60		
operating range factor control supply voltage rated value of magnetic coll at AC 0.81.1 at 80 Hz 0.81.1 apparent pick-up power of magnet coll at AC 28.4 VA at 80 Hz 0.81.1 at 80 Hz 0.8.1 at 80 Hz 0.81.1 at 80 Hz 0.81 at 80 Hz 0.8.1 at 80 Hz 0.8.1 at 80 Hz 0.24 at 80 Hz 0		
value of magnet coll at AC 0.811 • at 60 hz 0.81 eparent pick-up power of magnet coll at AC 24.VA • at 60 hz 0.81 • at 60 hz 0.24 • at 60 hz 0.25 • at 60 hz 0.25 • at 60 hz 0.25 • at 60 hz 0.25 <td></td> <td>440 V</td>		440 V
• at 50 Fiz 0.81.1 • at 50 Fiz 0.851.1 • at 50 Fiz 26.4 VA • at 00 Fiz 23.7 VA Inductive power factor with closing power of the coil 0.81 • at 00 Fiz 0.81 • at 00 Fiz 0.81 • at 00 Fiz 0.81 • at 50 Fiz 0.24 • at 50 Fiz 0.25 closing delay 0.25 • at AC 9 35 ms • at AC 7 13 ms • at 30 V rated value 10 A • at 30 V rated	operating range factor control supply voltage rated	
• e1 60 Hz 0.55 1.1 apparent pickup power of magnet coil at AC • at 50 Hz • at 50 Hz 0.61 • at 50 Hz 0.81 apparent pickup 0.24 • at 50 Hz 0.24 • at 50 Hz 0.24 • at 60 Hz 0.25 closing delay 0.5 • at 60 Hz 0.24 • at 60 Hz 0.15 ms control version of the switch operating mechanism Standard A1 - A2 Auxillary circuit 10 number of NC contacts for auxillary contacts 1 operational current at AC-12 10 A • at 300 Yradid value 2A • at 300 Yradid value 2A • at 300 Yradid value 2A • at 500 Yradid value 1A opera	-	0.0 1.1
apparent pick-up power of magnet coll at AC 26 4 VA • at 50 Hz 31.7 VA Inductive power factor with closing power of the coll 0.81 • at 50 Hz 0.81 • at 50 Hz 0.81 • at 50 Hz 4.8 VA • at 50 Hz 4.8 VA Inductive power factor with the holding power of the coll 0.24 • at 50 Hz 0.25 closing delay - • at 30 Hz 0.24 • at 30 Hz 0.25 closing delay - • at AC 7 13 ms accing time 10 15 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary activative 10 A operational current at AC-12 maximum 10 A • at 600 V rated value 1A		
e if 50 Hz 26.4 VA inductive power factor with closing power of the coll 0.61 • at 50 Hz 0.81 apparent holding power of magnet coll at AC 0.81 • at 50 Hz 4.4 VA • at 50 Hz 0.24 • at 60 Hz 0.25 closing delay 0.25 • at AC 935 ms • at AC 1015 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 1015 ms number of NC contacts for sunliary contacts 1 • at 300 V rated value 10 A • at 300 V rated v		0.85 1.1
• at 80 H2 31.7 VA inductive power factor with closing power of the coil 0.81 • at 80 H2 0.81 • at 80 H2 44 VA • at 80 H2 0.24 • at 80 H2 1 • at 80 V rated value 10 A • at 800 V rated value 10 A <td></td> <td>22.434</td>		22.434
inductive power factor with closing power of the coll 0.81 • at 50 Hz 0.81 • at 50 Hz 0.81 • at 50 Hz 44 VA • at 50 Hz 4.8 VA • at 50 Hz 4.8 VA • at 50 Hz 4.8 VA • at 50 Hz 0.24 • at 60 Hz 0.25 closing delay 9 35 ms • at AC 7 13 ms accing time 10 15 ms control version of the switch oparating mechanism 10 15 ms Awalinary circuit 10 A operational current at AC-12 maximum 10 A operational current at AC-12 10 A ot 50 V rated value 6 A • at 50 V rated value 1 A operational current at		
• at 50 Hz 0.81 • at 60 Hz 0.81 • at 50 Hz 4.4 VA • at 50 Hz 4.8 VA Inductive power factor with the holding power of the coil 0.24 • at 50 Hz 0.25 closing delay 0.25 closing delay 9 35 ms • at AC 7 13 ms • at AC 7 13 ms • at AC 7 13 ms • at AC 10.4 Ms • opening delay 10 15 ms • at AC 1 • opening delay 10 41 ms • at AC 7 13 ms • at AC 7 13 ms • at AC 1 • opening delay 1 • at AC • 13 ms • at AC • 140 ms • at AC vrade value 10.A • at 40 V rated value 10.A • at 40 V rated value 10.A • at 60 V rate		31.7 VA
• at 60 Hz 0.81 apparent holding power of magnet coll at AC 4.4 V/A • at 80 Hz 4.8 V/A i at 80 Hz 4.8 V/A i at 80 Hz 4.8 V/A i at 80 Hz 0.24 • at 80 Hz 0.25 closing delay 0.25 • at AC 9		
appearent holding power of magnet coll at AC 4.4 VA • at 50 Hz 4.4 VA • at 50 Hz 4.8 VA Inductive power factor with the holding power of the coll 0.24 • at 60 Hz 0.25 closing delay 0.25 • at AC 9 35 ms • at AC 9 35 ms • at AC 9 35 ms • at AC 9 13 ms • at AC 7 13 ms acting time 10 15 ms control version of the switch oparating mechanism Maxiliary directit number of NC contacts for auxiliary contacts 1 instantaneous contact 10 A operational current at AC-12 maximum 10 A operational current at AC-15 0 A • at 260 V rated value 3 A • at 600 V rated value 1 A operational current at DC-12 0 A • at 60 V rated value 6 A • at 20 V rated value 6 A • at 20 V rated value 1 A • at 20 V rated value 2 A • at 400 V rated value 6 A • at 20 V rated value 2 A <td></td> <td></td>		
a it 50 Hz 44 VA a it 60 Hz 48 VA Inductive power factor with the holding power of the coll 024 a it 60 Hz 0.25 closing dolay 0.25 • at AC 935 ms opening delay 013 ms • at AC 713 ms arcing time 1015 ms control version of the switch operating mechanism Standard A1 - A2 Axxiliary circuit 1015 ms number of NC contacts for auxiliary contacts 1 instantaneous contact 1 operational current at AC-12 maximum 10.A operational current at AC-145 1015 ms • at 200 V rated value 10		0.81
• at 60 Hz 4.8 VA Inductive power factor with the holding power of the coll 0.24 • at 60 Hz 0.25 closing delay 935 ms • at AC 713 ms • at AC 713 ms • at AC 713 ms arcing time 1015 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 10 A operational current at AC-15 1 • at 230 V rated value 3 A • at 60 V rated value 3 A • at 60 V rated value 1 A operational current at AC-15 1 • at 40 V rated value 3 A • at 60 V rated value 1 A operational current at DC-12 0 A • at 60 V rated value 6 A • at 60 V rated value 6 A • at 60 V rated value 6 A • at 80 V rated value 7 A • at 80 V rated value 0		
inductive power factor with the holding power of the coll 0.24 • at 50 Hz 0.25 closing delay • at AC • at AC 9 35 ms opening delay • at AC • at AC 7 13 ms arcing time 10 15 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 10 15 ms number of NC contacts for auxiliary contacts 1 instantaneous contact 1 operational current at AC-12 maximum 10.A operational current at DC-12 at 300 V rated value • at 600 V rated value 1A operational current at DC-12 at 430 V rated value • at 420 V rated value 10.A • at 600 V rated value 1A operational current at DC-12 at 30.V rated value • at 420 V rated value 1A • at 600 V rated value 1A • at 210 V rated value 1A • at 220 V		
coli • at 50 Hz 0.24 • at 60 Hz 0.25 closing dalay • at AC 9 35 ms opening delay • at AC 7 13 ms arcing time 10 15 ms 10 15 ms control version of the switch operating mechanism Standard A1 - A2 AxMilary dictott 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at DC-12 1 at 600 V rated value 3 A • at 500 V rated value 1 A operational current at DC-12 1 • at 60 V rated value 6 A • at 60 V rated value 6 A • at 60 V rated value 6 A • at 20 V rated value 1 A • at 20 V rated value 1 A • at 20 V rated value 2 A • at 20 V rated value 1 A • at 60 V rated val		4.8 VA
• at 50 Hz 0.24 • at 60 Hz 0.25 • et AC 9 35 ms • opening delay • at AC • at AC 7 13 ms arcing time 10 15 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 10 number of NC contacts for auxiliary contacts 1 instantaneous contact 10 A operational current at AC-12 maximum 10 A operational current at AC-15 1 • at 200 V rated value 3 A • at 600 V rated value 2 A • at 600 V rated value 6 A • at 600 V rated value 6 A • at 20 V rated value 1 A • at 600 V rated value 2 A • at 600 V rated value 1 A • at 600 V rated value 1 A • at 600 V rated value 1 A • at 20 V rated value 1 A • at 20 V rated value 1 A • at 20 V rated value 2 A • at 20 V rated value 2 A • at 20 V rated value 2 A • at 20 V rated value 1 A • at 600 V rated value 2 A • at 20 V rated value 2 A • at 20 V rated value 3		
• at 80 Hz 0.25 closing delay 935 ms • at AC 713 ms arcing time 1015 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 10.A operational current at AC-12 maximum 10.A operational current at AC-15 1 • at 230 V rated value 10.A • at 400 V rated value 3.A • at 600 V rated value 1.A • at 600 V rated value 6.A • at 600 V rated value 6.A • at 220 V rated value 1.A • at 600 V rated value 2.A • at 220 V rated value 1.A • at 600 V rated value 2.A • at 600 V rated value 0.15 A • at 600 V rated value 0.16 A <td< td=""><td></td><td>0.24</td></td<>		0.24
closing delay 935 ms opening delay 935 ms ext AC 713 ms arcing time 1015 ms control version of the switch operating mechanism Standard A1 - A2 Axxillary circuit 1 number of NC contacts for auxiliary contacts 1 operational current at AC-12 maximum 10 A operational current at AC-15 0 • at 230 V rated value 2 A • at 600 V rated value 2 A • at 600 V rated value 1 A operational current at AC-12 0 A • at 240 V rated value 1 A operational current at AC-12 0 A • at 600 V rated value 2 A • at 600 V rated value 6 A • at 24 V rated value 6 A • at 20 V rated value 1 A operational current at DC-12 0 A • at 220 V rated value 1 A operational current at DC-13 0 A • at 200 V rated value 1 A • at 200 V rated value 2 A • at 220 V rated value 2 A • at 24 V rated value 0 A<		
• et AC 935 ms opening delay 713 ms arcting time 1015 ms contol version of the switch operating mechanism Standard A1 - A2 Number of NC contacts for auxiliary contacts 1 instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at AC-15 1 • et 200 V rated value 10 A • at 500 V rated value 10 A • at 600 V rated value 1 A operational current at DC-12 0 A • at 600 V rated value 1 A operational current at DC-12 0 A • at 600 V rated value 6 A • at 10 V rated value 10 A • at 22 V rated value 10 A • at 10 V rated value 6 A • at 110 V rated value 6 A • at 122 V rated value 1 A • at 124 V rated value 1 A • at 24 V rated value 2 A • at 110 V rated value 2 A • at 22 V rated value 1 A • at 24 V rated value 0.15 A operational current at DC-13 0.15 A • at 60 V rated value 2 A • at 60 V rated value 0.4 A • at 60 V rated value 0.4 A <td></td> <td>0.20</td>		0.20
opening delay 713 ms arcing time 1015 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 10 A operational current at AC-15 10 A • at 230 V rated value 2 A • at 600 V rated value 2 A • at 600 V rated value 10 A operational current at DC-12 • at 48 V rated value • at 60 V rated value 10 A operational current at DC-12 • at 48 V rated value • at 10 V rated value 10 A • at 60 V rated value 6 A • at 110 V rated value 10 A • at 48 V rated value 10 A • at 48 V rated value 10 A • at 60 V rated value 10 A • at 40 V rated value 10 A • at 22 V rated value 10 A • at 40 V rated value 10 A • at 60 V rated value 10 A • at 60 V rated value 10 A • at 125 V rated value 10 A • at 60 V r		0. 25 mg
• eIAC 713 ms arcing time 1015 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 1 number of NC contacts for auxiliary contacts 1 operational current at AC-12 maximum 10 A operational current at AC-15 • • et 230 V rated value 10 A • et 230 V rated value 2 A • et 600 V rated value 2 A • et 600 V rated value 1 A operational current at DC-12 • • et 200 V rated value 10 A • et 600 V rated value 6 A • et 610 V rated value 6 A • et 10 V rated value 10 A • et 20 V rated value 10 A • et 400 V rated value 6 A • et 10 V rated value 1 A • et 20 V rated value 1 A • et 20 V rated value 2 A • et 10 V rated value 2 A • et 400 V rated value 0.15 A operational current at DC-13 0 A • et 20 V rated value 2 A • et 100 V rated value 0.1 A • et 20 V rated value 0.4 A • et 20 V rated value 0.4 A • et 20 V rated value 0.9 A		9 00 IIIS
arcing time 10 15 ms control version of the switch operating mechanism Standard A1 - A2 AxXillary circuit 1 number of NC contacts for auxiliary contacts 1 instantaneous contact 0 operational current at AC-12 maximum 10 A operational current at AC-15 10 A • at 200 V rated value 3 A • at 600 V rated value 2 A • at 600 V rated value 10 A operational current at DC-12 0 • at 840 V rated value 6 A • at 840 V rated value 6 A • at 840 V rated value 10 A • at 82 V rated value 10 A • at 80 V rated value 10 A • at 80 V rated value 6 A • at 20 V rated value 10 A • at 20 V rated value 10 A • at 20 V rated value 10 A • at 80 V rated value 10 A • at 40 V rated value 10 A • at 60 V rated value 10 A • at 20 V rated value 10 A • at 20 V rated value 10 A • at 60 V rated value 10		7 12 mg
order Standard A1 - A2 Auxiliary circuit 1 number of NC contacts for auxiliary contacts instantaneous contact 1 operational current at AC-12 maximum 10 A operational current at AC-15 10 A e at 230 V rated value 10 A e at 600 V rated value 2 A e at 600 V rated value 10 A operational current at DC-12 10 A e at 600 V rated value 10 A e at 600 V rated value 6 A e at 600 V rated value 6 A e at 110 V rated value 6 A e at 122 V rated value 10 A e at 24 V rated value 10 A e at 20 V rated value 2 A e at 20 V rated value 2 A e at 20 V rated value 2 A e at 20 V rated value 0 A e at 20 V rated value 2 A e at 20 V rated value 2 A e at 20 V rated value 2 A e at 20 V rated value 0 A e at 20 V rated value 0 A e at 600 V rated value 0 A		
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 230 V rated value • at 600 V rated value • at 74 V rated value • at 75 V rated value • at 76 V rated value • at 76 V rated value • at 600 V rated value • at 710 V rated value • at 710 V rated value • at 710 V rated value • at 600 V rated value • at 710 V rated value • at 710 V rated value • at 710 V rated value		
number of NC contacts for auxiliary contacts 1 instantaneous contact 10 A operational current at AC-12 maximum 10 A • at 230 V rated value 3 A • at 400 V rated value 3 A • at 690 V rated value 1 A operational current at DC-12 1 A • at 44 V rated value 10 A • at 44 V rated value 6 A • at 40 V rated value 6 A • at 10 V rated value 10 A • at 40 V rated value 10 A • at 21 V rated value 10 A • at 40 V rated value 6 A • at 10 V rated value 1 A operational current at DC-12 3 A • at 22 V rated value 1 A • at 25 V rated value 1 A • at 60 V rated value 2 A • at 60 V rated value 0.15 A operational current at DC-13 0 A • at 42 V rated value 2 A • at 43 V rated value 2 A • at 44 V rated value 0.4 A • at 220 V rated value 0.3 A • at 220 V rated value 0.1 A <tr< td=""><td>·</td><td>Standard A1 - A2</td></tr<>	·	Standard A1 - A2
instantaneous contact 10 A operational current at AC-12 maximum 10 A • at 230 V rated value 10 A • at 230 V rated value 3 A • at 500 V rated value 2 A • at 500 V rated value 1 A operational current at DC-12 10 A • at 490 V rated value 6 A • at 49 V rated value 6 A • at 49 V rated value 6 A • at 49 V rated value 6 A • at 20 V rated value 1 A operational current at DC-12 10 A • at 49 V rated value 6 A • at 20 V rated value 1 A • at 210 V rated value 2 A • at 220 V rated value 1 A • at 220 V rated value 0.15 A operational current at DC-13 0 + 2 A • at 48 V rated value 2 A • at 49 V rated value 2 A • at 49 V rated value 2 A • at 100 V rated value 0.15 A operational current at DC-13 1 + 1 A • at 60 V rated value 0.1 A • at 40 V rated value 0.9 A		
operational current at AC-15 10 A • at 230 V rated value 3 A • at 500 V rated value 3 A • at 690 V rated value 1 A operational current at DC-12 1 A • at 42 V rated value 6 A • at 24 V rated value 6 A • at 25 V rated value 1 A • at 25 V rated value 1 A • at 20 V rated value 1 A • at 20 V rated value 1 A • at 25 V rated value 2 A • at 20 V rated value 1 A • at 20 V rated value 1 A • at 20 V rated value 1 A • at 24 V rated value 10 A • at 24 V rated value 10 A • at 80 V rated value 2 A • at 10 V rated value 1 A • at 10 V rated value 1 A • at 20 V rated value 0.3 A • at 20 V rated value 0.1 A • at 20 V rated value 0.1 A • at 600 V rated value 0.1 A • at 20 V rated value 0.3 A • at 40 V rated value 9 A • at 600 V rated value 9 A		1
• at 230 V rated value 10 A • at 400 V rated value 3 A • at 650 V rated value 2 A • at 660 V rated value 10 A operational current at DC-12 10 A • at 24 V rated value 6 A • at 60 V rated value 6 A • at 60 V rated value 6 A • at 25 V rated value 6 A • at 10 V rated value 10 A • at 25 V rated value 10 A • at 25 V rated value 10 A • at 26 V rated value 10 A • at 600 V rated value 10 A • at 600 V rated value 10 A • at 60 V rated value 10 A • at 60 V rated value 10 A • at 60 V rated value 10 A • at 20 V rated value 10 A • at 20 V rated value 10 A • at 20 V rated value 10 A • at 60 V rated value 10 A • at 60 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings 9 A	operational current at AC-12 maximum	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 0 A • at 24 V rated value 10 A • at 48 V rated value 6 A • at 60 V rated value 6 A • at 10 V rated value 6 A • at 10 V rated value 2 A • at 20 V rated value 2 A • at 20 V rated value 2 A • at 20 V rated value 1 A • at 600 V rated value 1 A • at 600 V rated value 0.15 A operational current at DC-13 0.15 A • at 600 V rated value 2 A • at 40 V rated value 0 A • at 60 V rated value 2 A • at 60 V rated value 0.9 A • at 20 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UUCSA ratings 9 A yielded mechanical performance [h] 9 A • at 600 V rated value 9 A • at 600 V rated value 9 A • at 600 V rated value	operational current at AC-15	
• at 690 V rated value 2 A • at 690 V rated value 1 A operational current at DC-12 10 A • at 24 V rated value 6 A • at 48 V rated value 6 A • at 60 V rated value 6 A • at 10 V rated value 6 A • at 22 V rated value 1 A • at 22 V rated value 2 A • at 22 V rated value 1 A • at 22 V rated value 0.15 A operational current at DC-13 0 A • at 24 V rated value 10 A • at 48 V rated value 2 A • at 60 V rated value 2 A • at 10 V rated value 0.9 A • at 220 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UUCSA ratings 7.6 A • at 600 V rated value 9 A • yielded mechanical performance [hp] • for single-phase AC motor - at 230 V rated value 0.33 hp - at 230 V	 at 230 V rated value 	10 A
• at 680 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 220 V rated value 1 A • at 600 V rated value 1 A • at 600 V rated value 1 A • at 220 V rated value 10 A • at 220 V rated value 1 A • at 600 V rated value 1 A • at 24 V rated value 10 A • at 24 V rated value 10 A • at 24 V rated value 2 A • at 24 V rated value 2 A • at 25 V rated value 2 A • at 220 V rated value 0.9 A • at 220 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 800 V rated value 7.6 A • at 800 V rated value <t< td=""><td> at 400 V rated value </td><td>3 A</td></t<>	 at 400 V rated value 	3 A
operational current at DC-12• at 24 V rated value10 A• at 48 V rated value6 A• at 60 V rated value6 A• at 110 V rated value3 A• at 125 V rated value2 A• at 220 V rated value1 A• at 220 V rated value0.15 Aoperational current at DC-130 A• at 24 V rated value10 A• at 24 V rated value2 A• at 24 V rated value10 A• at 24 V rated value0.15 Aoperational current at DC-130 A• at 24 V rated value2 A• at 60 V rated value2 A• at 10 V rated value0.9 A• at 220 V rated value0.3 A• at 220 V rated value0.1 Acontact reliability of auxiliary contacts1 faulty switching per 100 million (17 V, 1 mA)UL/CSA ratings7.6 Afull-load current (FLA) for 3-phase AC motor7.6 A• at 480 V rated value9 A• yielded mechanical performance [hp]9 A• for single-phase AC motor0.33 hp- at 230 V rated value0.33 hp- at 230 V rated value0.33 hp- at 230 V rated value0.33 hp- at 230 V rated value1 hp	 at 500 V rated value 	2 A
• at 24 V rated value10 A• at 48 V rated value6 A• at 60 V rated value6 A• at 10 V rated value3 A• at 125 V rated value2 A• at 220 V rated value0.15 Aoperational current at DC-1310 A• at 20 V rated value2 A• at 24 V rated value0.15 Aoperational current at DC-1310 A• at 48 V rated value2 A• at 60 V rated value2 A• at 60 V rated value2 A• at 60 V rated value2 A• at 10 V rated value0.9 A• at 125 V rated value0.3 A• at 200 V rated value0.14 A• at 800 V rated value0.14 A• at 800 V rated value0.14 A• at 600 V rated value0.14 A• at 600 V rated value0.15 A• at 600 V rated value0.16 A• at 600 V rated value0.16 A• at 600 V rated value0.17 A• at 600 V rated value0.18 A• at 600 V rated value0.18 A• at 600 V rated value7.6 A• at 600 V rated value9 A• yielded mechanical performance [hp]• for single-phase AC motor• at 110/120 V rated value0.33 hp• at 230 V rated value0.33 hp• at 230 V rated value0.33 hp• at 230 V rated value1 hp• for 3-phase AC motor1 hp	• at 690 V rated value	1 A
• at 48 V rated value6 A• at 60 V rated value6 A• at 110 V rated value3 A• at 125 V rated value2 A• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-13	operational current at DC-12	
• at 60 V rated value6 A• at 110 V rated value3 A• at 125 V rated value2 A• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-13	 at 24 V rated value 	10 A
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• at 220 V rated value1 A• at 600 V rated value0.15 Aoperational current at DC-13• at 24 V rated value10 A• at 48 V rated value2 A• at 60 V rated value2 A• at 60 V rated value1 A• at 110 V rated value0.9 A• at 220 V rated value0.3 A• at 600 V rated value0.1 A• at 600 V rated value0.3 A• at 600 V rated value0.33 hp• at 600 V rated value0.33 hp• at 200 V rated value0.33 hp• at 200 V rated value1 hp• for 3-phase AC motor1 hp	 at 110 V rated value 	3 A
• at 600 V rated value 0.15 A operational current at DC-13 10 A • at 24 V rated value 2 A • at 48 V rated value 2 A • at 60 V rated value 2 A • at 10 V rated value 1 A • at 125 V rated value 0.9 A • at 220 V rated value 0.1 A • at 600 V rated value 9 A • yielded mechanical performance [hp] 9 A • for single-phase AC motor - at 110/120 V rated value - at 230 V rated value 0.33 hp - at 230 V rated value 1 hp	 at 125 V rated value 	2 A
• at 600 V rated value 0.15 A operational current at DC-13 10 A • at 24 V rated value 2 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 0.1 A • at 600 V rated value 0.1 A • at 600 V rated value 0.1 A • ot 600 V rated value 0.1 A • at 600 V rated value 9 A • yielded mechanical performance [hp] 9 A • for single-phase AC motor 0.33 hp - at 230 V rated value 0.33 hp - at 230 V rated value 1 hp	at 220 V rated value	
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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 7.6 A • at 600 V rated value 9 A yielded mechanical performance [hp] • for single-phase AC motor - at 110/120 V rated value 0.33 hp - at 230 V rated value 1 hp		
UL/CSA ratings full-load current (FLA) for 3-phase AC motor 7.6 A • at 480 V rated value 9 A • at 600 V rated value 9 A yielded mechanical performance [hp] 9 A • for single-phase AC motor 0.33 hp - at 230 V rated value 1 hp • for 3-phase AC motor 1 hp		
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• at 600 V rated value9 Ayielded mechanical performance [hp]9 A• for single-phase AC motor- at 110/120 V rated value- at 110/120 V rated value0.33 hp- at 230 V rated value1 hp• for 3-phase AC motor- at 230 V rated value		7.0.4
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 0.33 hp — at 230 V rated value 1 hp • for 3-phase AC motor 1 hp		
 for single-phase AC motor — at 110/120 V rated value — at 230 V rated value for 3-phase AC motor 0.33 hp 1 hp 		9 A
- at 230 V rated value 1 hp		
• for 3-phase AC motor		
		1 hp
- at 200/208 V rated value 2 hp		
	— at 200/208 V rated value	2 hp

— at 220/230 V rated value	3 hn			
	3 hp			
- at 460/480 V rated value	5 hp			
at 575/600 V rated value contact rating of auxiliary contacts according to UL	7.5 hp A600 / Q600			
Short-circuit protection	A0007 Q000			
design of the fuse link				
 for short-circuit protection of the main circuit with type of apardination 1 required 	aC: 254 (600)/ 100k4) aM: 204 (600)/ 100k4) BS99: 254 (415)/ 90k4)			
— 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 standard mounting 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			
— 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			
	011111			
Connections/ Terminals				
type of electrical connection	Ding cohis his connection			
for main current circuit for ouviliant and control circuit	Ring cable lug connection			
for auxiliary and control circuit	ring terminal lug connection			
at contactor for auxiliary contacts	Ring cable lug connection			
of magnet coil	Ring cable lug connection			
Safety related data				
product function				
mirror contact according to IEC 60947-4-1	Yes			
B10 value with high demand rate according to SN 31920	1 000 000			
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			
T1 value for proof test interval or service life according to IEC 61508	20 у			
protection class IP on the front according to IEC 60529	IP00			
suitability for use	Von			
safety-related switching OFF	Yes			
Certificates/ approvals				
General Product Approval				

SP.		<u>Confirmation</u>		<u>KC</u>	EAC
EMC	Functional Safety/Safety of Machinery	Declaration of Conformity		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			Lloyd's Register uis	PRS	RINA
Marine / Shipping	other				
RMRS	<u>Confirmation</u>		<u>Confirmation</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=3RT2016-4AR62 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-4AR62 Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-4AR62 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2016-4AR62⟨=en Characteristic: Tripping characteristics, I ² t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-4AR62/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-4AR62&objecttype=14&gridview=view1					
last modified: 6/2/2022 C					