SIEMENS

Data sheet 3RT2016-1AB01



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 24 V AC, 50/60 Hz, auxiliary contacts: 1 NO, screw terminal, size: S00

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	1.1 W
type of calculation of power loss depending on pole	quadratic
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 protective separation 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 (operating 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 %
Environmental footprint	

Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	39.6 kg
Global Warming Potential [CO2 eq] total Global Warming Potential [CO2 eq] during manufacturing	1.18 kg
Global Warming Potential [CO2 eq] during manufacturing Global Warming Potential [CO2 eq] during operation	38.5 kg
Global Warming Potential [CO2 eq] after end of life	-0.155 kg
Main circuit	0.100 kg
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 $^{\circ}\text{C}$ rated value	22 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ 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	9 A
— at 400 V rated value	7.7 A
— at 500 V rated value — 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	4 mm²
operational current for approx. 200000 operating 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	20.4
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value — at 220 V rated value	2.1 A 0.8 A
— at 440 V rated value	0.6 A
— at 440 V rated value — at 600 V rated value	0.6 A
with 2 current paths in series at DC-1	0.071
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	12 A
— 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	
<u> </u>	

	at 24 V rated value	20 A
	— at 24 V rated value	
• at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 610		
		1 A
	-	
with 2 current paths in series at DC-3 at DC-5	— at 24 V rated value	
- with 2 current paths in series at DC-3 at DC-5 at 24 V rated value 5 A at 10 V rated value 5 A at 110 V rated value 20 A at 110 V rated value 20 A at 22 V rated value 20 A at 24 V rated value 20 A at 26 V rated value 20 A at 27 V rated value 20 A at 28 V rated value 20 A at 40 V rated value 20 A at 28 V rated value 40 A at 28 V rated value 40 A at 28 V rated value 41 A at 40 V rated value 5 S RW at 400 V rated value 5 S RW at 400 V rated value 5 S RW at 280 V rated value 5 S RW at 400 V rated value 4 RW at 680 V rated value 4 RW at 680 V rated value 5 S RW at 400 V rated value 4 RW at 680 V rated value 4 RW at 680 V rated value 5 S RW at 400 V rated value 4 RW at 680 V rated value 4 RW at 680 V rated value 5 S RW at 400 V rated value 4 RW at 680 V rated value 5 S RW at 400 V rated value 4 RW at 680 V rated value 5 S RW at 400 V rated value 5 S RW at 400 V rated value 6 RW at 680 V rated value 7 RW at 680 V rated value	— at 60 V rated value	0.5 A
al 24 V rated value at 110 V rated value at 20 A at 80 V rated value at 220 V rated value at 220 V rated value at 40 V rated value at 40 V rated value at 800 V rated value at 900 V for current peak value n=20 rated value at 900 V rated value at 900 V for current peak value n=80 rated value at 900 V for current peak value n=80 rated value at 900 V for current peak value n=80 rated value at 900 V for current peak value n=80 rated value at 900 V for 900	— at 110 V rated value	0.15 A
	 with 2 current paths in series at DC-3 at DC-5 	
■ at 110 V rated value ■ with 3 current paths in series at DC-3 at DC-5 ■ at 24 V rated value ■ at 60 V rated value ■ at 10 V rated value ■ at 220 V rated value ■ at 220 V rated value ■ at 440 V rated value ■ at 440 V rated value ■ at 440 V rated value ■ at 400 V rated value ■ at 600 V rated value ■ at 230 V rated value ■ at 230 V rated value ■ at 230 V rated value ■ at 900 V rated value ■ at 230 V rated value ■ at 400 V rated value ■ at 900 V rated value ■ at 900 V rated value ■ at 900 V rated value ■ at 400 V rated value ■ at 900 V rated value ■ at 400 V rated value ■ at 900 V for current peak value n=20 rated value ■ up to 500 V for current peak value n=30 rated value ■ up to 500 V for current peak value n=30 rated value ■ up to 500 V for current peak value n=30 rated value ■ up to 500 V for current peak value n=30 rated value ■ up to 500 V for current peak value n=30 rated value ■ up to 500 V for current peak value n=30 rated value ■ up to 500 V for current peak value n=30 rated value ■ up to 500 V for current peak value n=30 rated value ■ at 900 v for 000 v for 00	— at 24 V rated value	20 A
with 3 current paths in series at DC-3 at DC-5	— at 60 V rated value	5 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 220 V rated value	— at 60 V rated value	20 A
	— at 110 V rated value	20 A
Departing power Fig. 2 Department De	— at 220 V rated value	1.5 A
at AC-3	— at 440 V rated value	0.2 A
at 230 V rated value at 400 V rated value at 1500 V rated value at 250 V rated value at 250 V rated value at 260 V rated value at 260 V rated value at 270 V rated value n=20 rated value at 270 V rated value n=20 rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=30 v rated value au 170 V rated value n=3	— at 600 V rated value	0.2 A
- at 230 V rated value	operating power	
at 400 V rated value	• at AC-3	
- at 500 V rated value	— at 230 V rated value	2.2 kW
- at 890 V rated value • at AC-3e — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value • at 400 V rated value • at 690 V rated value • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 400 V for current peak value n=20 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 ra	— at 400 V rated value	4 kW
at AC-3e — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value — 2 kW at 690 V rated value — 20 rated value — 4 kVA aup to 200 V for current peak value n=20 rated value — 4 k6 kVA — 4 up to 500 V for current peak value n=20 rated value — 5 k0 kVA operating apparent power at AC-6a — 4 up to 230 V for current peak value n=30 rated value — 4 k0 V for current peak value n=30 rated value — 4 kVA operating apparent power at AC-6a — 4 up to 500 V for current peak value n=30 rated value — 5 k0 k0 V for current peak value n=30 rated value — 6 k0 V for current peak value n=30 rated value — 1 k0 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 K0 V for current peak value n=30 rated value — 1 k0 K0 V for current peak value n=30 rated value — 1 k0 K0 V for current peak value n=30 rated value — 1 k0 K0 V for current peak value n=30 rated value — 1 k0 K0 V for current peak value n=30 rated value — 1 k0 K0 V for current peak value n=30 rated value — 1 k0 K0 V for current peak value n=30 rated value — 1 k0 K0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0 V for current peak value n=30 rated value — 1 k0	— at 500 V rated value	4 kW
- at 230 V rated value - at 400 V rated value - at 500 V rated value - at 690 V for current peak value n=20 rated value - at 690 V for current peak value n=20 rated value - at 690 V for current peak value n=20 rated value - at 690 V for current peak value n=20 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current for current maximum - at 690 V for current for current maximum - at 690 V for current for current maximum - at 690 V for current for current for current for	— at 690 V rated value	5.5 kW
- at 400 V rated value - at 500 V rated value - at 690 V rated value - 2 kW - at 690 V rated value - 2 kW - up to 230 V for current peak value n=20 rated value - up to 400 V for current peak value n=20 rated value - up to 500 V for current peak value n=20 rated value - up to 690 V for current peak value n=20 rated value - up to 690 V for current peak value n=20 rated value - up to 500 V for current peak value n=30 rated value - up	• at AC-3e	
- at 400 V rated value - at 500 V rated value - at 690 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 - up to 400 V for current peak value n=20 rated value - up to 500 V for current peak value n=20 rated value - up to 690 V for current peak value n=20 rated value - up to 690 V for current peak value n=30 rated value - up to 500 V for curr		2.2 kW
- at 500 V rated value - at 690 V rated value 5.5 kW operating power for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • limited to 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero		
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• up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at z	• up to 400 V for current peak value n=20 rated value	3.6 kVA
operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at	• up to 500 V for current peak value n=20 rated value	4.6 kVA
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up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C elimited to 1 s switching at zero current maximum elimited to 5 s switching at zero current maximum elimited to 10 s switching at zero current maximum elimited to 30 s switching at zero current maximum elimited to 30 s switching at zero current maximum elimited to 60 s switching at zero current maximum fof A; Use minimum cross-section acc. to AC-1 rated value elimited to 60 s switching at zero current maximum fof A; Use minimum cross-section acc. to AC-1 rated value for AC-2 rated value for AC-3 rated value		1.3 kVA
up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C ilimited to 1 s switching at zero current maximum ilimited to 5 s switching at zero current maximum ilimited to 10 s switching at zero current maximum ilimited to 30 s switching at zero current maximum ilimited to 30 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ino-load switching frequency at AC	·	
• up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching factor current maximum • limited to 60 s 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		
short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum 55 A; Use minimum cross-section acc. to AC-1 rated value 75 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h		
 limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum st AC 10 000 1/h Operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum 750 1/h 750 1/h 	short-time withstand current in cold operating state up to	
 limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum To 4 current maximum A; Use minimum cross-section acc. to AC-1 rated value A; Use minimum cross-section acc. to AC-1 rated value AC-1 rated value<td></td><td>155 A: Use minimum cross-section acc. to AC-1 rated value</td>		155 A: Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum no-load switching frequency at AC at AC-1 maximum at AC-2 maximum at AC-3 maximum 		
 limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum 155 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 at AC-2 maximum at AC-3 maximum at AC-3 maximum 750 1/h 750 1/h 		
 limited to 60 s switching at zero current maximum no-load switching frequency at AC 10 000 1/h operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum 750 1/h 750 1/h 	-	
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 operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum 750 1/h 	<u> </u>	OUT, OSC HIIIIIII GIOSS-SCOTION ACC. TO MO-1 FARCU VAIUE
operating frequency ● at AC-1 maximum 1 000 1/h ● at AC-2 maximum 750 1/h ● at AC-3 maximum 750 1/h		10 000 1/h
 at AC-1 maximum at AC-2 maximum at AC-3 maximum 750 1/h 750 1/h 		10 000 1/11
 at AC-2 maximum at AC-3 maximum 750 1/h 750 1/h 		1,000,1/b
• at AC-3 maximum 750 1/h		
• at AC-3e maximum 750 1/h		
• at AC-4 maximum 250 1/h	at AC-4 maximum	200 1/11

Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
operating range factor control supply voltage rated value of	
magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	27 VA
• at 60 Hz	24.3 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.8
• at 60 Hz	0.75
apparent holding power of magnet coil at AC	4.2.1/A
at 50 Hzat 60 Hz	4.2 VA 3.3 VA
	0.0 VA
inductive power factor with the holding power of the coil • at 50 Hz	0.25
• at 50 Hz	0.25
closing delay	0.20
• at AC	9 35 ms
opening delay	V VO 110
• at AC	4 15 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 instantaneous	1
contact	40.0
operational current at AC-12 maximum	10 A
operational current at AC-15	40.0
at 230 V rated value at 400 V rated value	10 A
at 400 V rated value at 500 V rated value	3 A
at 500 V rated valueat 690 V rated value	2 A 1 A
operational current at DC-12	
at 24 V rated value	10 A
at 48 V rated value at 48 V rated value	6 A
at 60 V rated value at 60 V rated value	6 A
at 110 V rated value	3 A
at 110 V rated value at 125 V rated value	2 A
at 220 V rated value at 220 V rated value	1A
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	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

• for 3-phase AC motor	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	7.5 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
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	40
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
• for live parts	10 mm
— forwards	10 mm
— upwards	10 mm
— downwards— at the side	10 mm 6 mm
— at the side Connections/ Terminals	O TIME
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 Screw-type terminals
of magnet coil	Screw-type terminals 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 mm²), 2x (0.75 2.5 mm²)
for AWG cables for main contacts	2x (20 16), 2x (18 14), 2x 12
connectable conductor cross-section for main contacts	
• solid	0.5 4 mm²
• stranded	0.5 4 mm²
• finely stranded with core end processing	0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
type of connectable conductor cross-sections	
- for audition, contacts	
 for auxiliary contacts 	
Tor auxiliary cornacts — solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
•	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— solid or stranded	

 for main contacts 	20 12
 for auxiliary contacts 	20 12
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes; with 3RH29
suitability for use safety-related switching OFF	Yes; applies only to contactor operating mechanism
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
IEC 61508	
T1 value	
 for proof test interval or service life according to IEC 61508 	20 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Approvals Certificates	

General Product Approval









Confirmation



General Product Approval EMV Functional Saftey Test Certificates

<u>KC</u>





Type Examination Certificate Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













Marine / Shipping other Railway Environment



Miscellaneous

Confirmation

Confirmation

Special Test Certificate



Environment

Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RT2016-1AB01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-1AB01

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

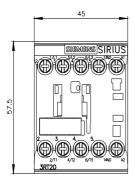
https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-1AB01

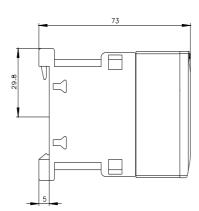
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2016-1AB01&lang=en

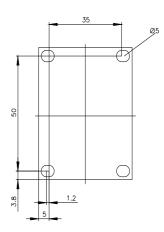
Characteristic: Tripping characteristics, I2t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-1AB01/char

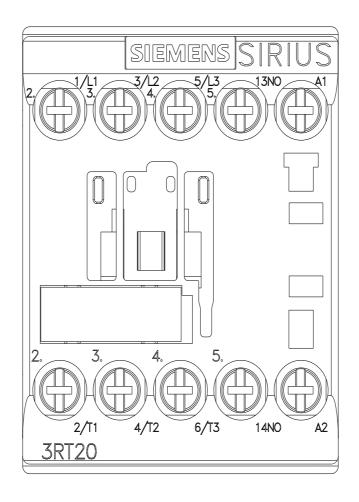
Further characteristics (e.g. electrical endurance, switching frequency)

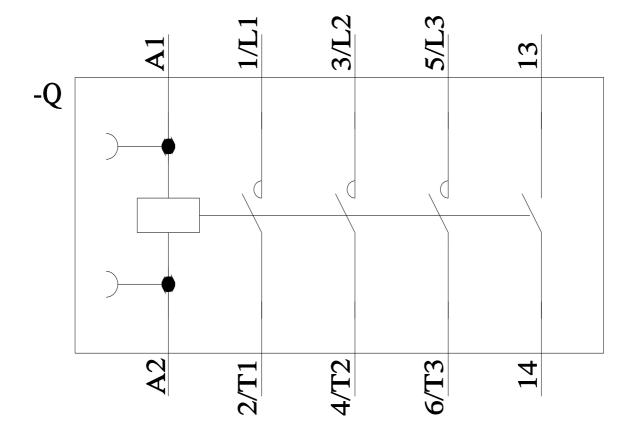
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-1AB01&objecttype=14&gridview=view1











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