SIEMENS

Data sheet 3RT2016-1AP01



Power contactor, AC-3 9 A, 4 kW / 400 V 1 NO, 230 V AC, 50 / 60 Hz 3-pole, Size S00 screw terminal

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	2.1 W
• per pole	0.7 W
power loss [W] for rated value of the current without load current share typical	4.2 W
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 acc. 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 acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009
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 acc. 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
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-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-3b up to 400 v rated value at AC-6a	1.77
— 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 • at AC-6a	5 A
— 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 mm ²
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	
— 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
— 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 	
— 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	

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— 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	00.4
— 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
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 kV·A
 up to 400 V for current peak value n=20 rated value 	3.6 kV·A
• up to 500 V for current peak value n=20 rated value	4.6 kV·A
• up to 690 V for current peak value n=20 rated value	5.9 kV·A
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	1.3 kV·A
• up to 400 V for current peak value n=30 rated value	2.4 kV·A
up to 500 V for current peak value n=30 rated value	3.1 kV·A
up to 690 V for current peak value n=30 rated value	4 kV·A
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
 limited 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-4 maximum	250 1/h
Control circuit/ Control	
	AC
type of voltage of the control supply voltage	AO .
control supply voltage at AC • at 50 Hz rated value	230 V
at 50 Hz rated value at 60 Hz rated value	230 V 230 V
	200 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 V·A
● at 60 Hz	24.3 V·A
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	
● at 50 Hz	4.2 V·A
● at 60 Hz	3.3 V·A
inductive power factor with the holding power of the	

* at 15 Pt2		_
■ at 60 Hz	coil	
Closing delay		
e at AC		0.25
opening delay at AC arcing time control version of the switch operating mechanism Auxiliary screut number of NO contacts for auxiliary contacts instantaneous contect operational current at AC-12 maximum oprational current at AC-12 maximum operational current at AC-13 maximum at 400 V rated value at 400 V rated value at 600 V rated value at 400 V rated value be at 400 V rated value at 400 V rated val		
■ at AC		9 35 ms
arcing time		
Control version of the switch operating mechanism Standard A1 - A2		
Auxiliary circuit		
number of NO contacts for auxiliary contacts instantaneous contact		Standard A1 - A2
instantaneous contact operational current at AC-12 maximum 10 A operational current at AC-15 ot 230 V rated value 3 A ot 230 V rated value 2 A ot 340 V rated value 2 A ot 340 V rated value 1 A operational current at DC-12 ot 24 V rated value 6 A ot 34 W rated value 6 A ot 34 W rated value 6 A ot 34 W rated value 0 A ot 3		
Operational current at AC-15		1
at 230 V rated value	operational current at AC-12 maximum	10 A
• at 400 V rated value • at 500 V rated value • at 600 V rated value • at 600 V rated value operational current at DC-12 • at 24 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 1220 V rated value • at 600 V rated value • a	operational current at AC-15	
• at 500 V rated value	 at 230 V rated value 	10 A
• at 690 V rated value	 at 400 V rated value 	3 A
at 24 V rated value	• at 500 V rated value	2 A
at 24 V rated value		1 A
• at 48 V rated value	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 600 V rated value	• at 125 V rated value	2 A
operational current at DC-13 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 10 V rated value • at 110 V rated value • at 110 V rated value • at 22 V rated value • at 25 V rated value • at 25 V rated value • at 25 V rated value • at 200 V rated value • at 600 V rated value • at 200 V rated value • at 250 V rated value • at 260 V rated value • at 27 bp - at 37 bf600 V rated value - at 480 V rated value - at 480 V rated value - at 480 V rated value - at 57 bp - at 57 bp - contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required - with type of assignment 2 required • for short-circuit protection of the auxiliary switch required 9G: 35A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) 9G: 10 A (500 V, 1 kA) gG: 10 A (500 V, 1 kA)	 at 220 V rated value 	1 A
at 24 V rated value at 48 V rated value 2 A at 60 V rated value 2 A at 110 V rated value 2 A at 110 V rated value 3 1 A at 220 V rated value 4 at 220 V rated value 5 at 60 V rated value 5 at 60 V rated value 6 at 220 V rated value 7 A 5 at 600 V rated value 7 A 5 at 600 V rated value 7 A 6 A at 800 V rated value 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A	at 600 V rated value	0.15 A
	operational current at DC-13	
at 10 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 480 V rated value at 480 V rated value at 480 V rated value at 480 V rated value at 600 V rated value befor single-phase AC motor - at 110/120 V rated value - at 230 V rated value - at 220/208 V rated value - at 220/230 V rated value - at 480480 V rated value - at 480480 V rated value - at 575/600 V rated va	 at 24 V rated value 	10 A
 at 110 V rated value at 125 V rated value at 220 V rated value at 3 A at 600 V rated value 1 faulty switching per 100 million (17 V, 1 mA) ULCSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 460/480 V rated value at 460/480 V rated value 5 hp at 460/480 V rated value 5 hp at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of assignment 2 required gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA) 	 at 48 V rated value 	2 A
at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value contact reliability of auxiliary contacts Ifaulty switching per 100 million (17 V, 1 mA) ILICSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value at 600 V rated value for single-phase AC motor - at 110/120 V rated value - at 230 V rated value af 607 3-phase AC motor - at 200/208 V rated value - at 220/230 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 460/480 V rated value - at 575/600 V rated value - at 575/600 V rated value - at 575/600 V rated value - at 680 MS0 V rated value - at 680 MS0 V rated value - at 680 V rated value - at 680 V rated value - at 680 MS0 V rated value - at 680 MS0 V rated value - at	 at 60 V rated value 	2 A
at 220 V rated value at 600 V rated value contact reliability of auxiliary contacts I 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 at 600 V rated value for single-phase AC motor - at 110/120 V rated value for 3-phase AC motor - at 230 V rated value for 3-phase AC motor - at 200/280 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 460/480 V rated value - at 575/600 V rated value - at 7.5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the main circuit - with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA)	 at 110 V rated value 	1 A
at 600 V rated value contact reliability of auxiliary contacts Infaulty 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 at 600 V rated value for single-phase AC motor at 110/120 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 460/480 V rated value at 575/600 V rated value at 575/600 V rated value at 575/600 V rated value with type of coordination 1 required with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required at 600 V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) at 600 V, 100kA), aGS: 10 A (500 V, 1 kA) at 600 V, 100kA), aGS: 10 A (500 V, 1 kA)	 at 125 V rated value 	0.9 A
contact reliability of auxiliary contacts I 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 • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required	 at 220 V rated value 	0.3 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 4575/600 V rated value — at 575/600 V rated value Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required	at 600 V rated value	0.1 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 9 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • at 480 V rated value 0.33 hp 1 hp 0.33 hp 1 hp 1 hp 0.33 hp 1 hp 1 hp 0.33 hp 1 hp 1 hp 1 hp 1 hp 1 hp 2 hp 2 hp 3 hp 4	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor	UL/CSA ratings	
at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value Contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) gG: 10 A (500 V, 1 kA)	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value **Contact rating of auxiliary contacts according to UL **Short-circuit protection** design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required 9G: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80k/80kA) • for short-circuit protection of the auxiliary switch required	 at 480 V rated value 	7.6 A
for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 230 V rated value — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 60/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — with ground training of auxiliary contacts according to UL Short-circuit protection design of the fuse link — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required of the for short-circuit protection of the auxiliary switch required of the fuse link of or short-circuit protection of the main circuit GG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80k/80kA) of or short-circuit protection of the auxiliary switch required	at 600 V rated value	9 A
- at 110/120 V rated value - at 230 V rated value • for 3-phase AC motor - at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value - at 600/480 V rated value - at 200/230 V rated value - at 200/	yielded mechanical performance [hp]	
- at 230 V rated value • 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 Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required	 for single-phase AC motor 	
 for 3-phase AC motor — at 200/208 V rated value — 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 Short-circuit protection design of the fuse link for short-circuit protection of the main circuit — with type of coordination 1 required with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required ge: 20A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) ge: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) ge: 10 A (500 V, 1 kA) 	— at 110/120 V rated value	0.33 hp
- at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value Contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required - with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required 2 hp 3 hp 4600 / 0600 A600 / Q600 Short-circuit protection Ges: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) Ges: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) Ges: 35A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) Ges: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) Ges: 35A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) Ges: 35A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) Ges: 35A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) Ges: 35A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) Ges: 35A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA)	— at 230 V rated value	1 hp
- at 220/230 V rated value - 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 Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required - with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required G: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) g: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) g: 10 A (500 V, 1 kA)	 for 3-phase AC motor 	
- at 460/480 V rated value - at 575/600 V rated value 7.5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required	— at 200/208 V rated value	2 hp
- at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link of or short-circuit protection of the main circuit - with type of coordination 1 required with type of assignment 2 required of or short-circuit protection of the auxiliary switch required of or short-circuit protection of the auxiliary switch required 7.5 hp A600 / Q600 Short-circuit protection A600 / Q600 G: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) of or short-circuit protection of the auxiliary switch required	— at 220/230 V rated value	3 hp
contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required G: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) g: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) g: 10 A (500 V, 1 kA)	— at 460/480 V rated value	5 hp
Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required GG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA)	— at 575/600 V rated value	7.5 hp
 design of the fuse link for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA) 		A600 / Q600
 for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA) 		
 — with type of coordination 1 required — with type of assignment 2 required ■ for short-circuit protection of the auxiliary switch required gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA) 	_	
 — 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) 		
80kA) ● for short-circuit protection of the auxiliary switch required 80kA) gG: 10 A (500 V, 1 kA)		gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
required	— with type of assignment 2 required	
·		gG: 10 A (500 V, 1 kA)
mountains, amountains	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
rasterning method	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
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	osten type terminale
• 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)
at 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 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	
B10 value with high demand rate acc. to SN 31920	1 000 000
proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	40 %
with high demand rate acc. to SN 31920	73 %
failure rate [FIT] with low demand rate acc. to SN 31920	100 FIT
T1 value for proof test interval or service life acc. to IEC 61508	20 y
protection class IP on the front acc. to IEC 60529	IP20

touch protection on the front acc. to IEC 60529

finger-safe, for vertical contact from the front

suitability for use

· safety-related switching OFF

Yes

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination
Certificate



UK Declaration of Conformity

Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













Marine / Shipping

other



Confirmation



Confirmation

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=3RT2016-1AP01

Cax online generator

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-1AP01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

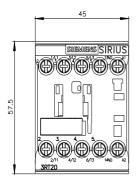
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2016-1AP01&lang=en

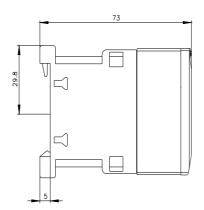
Characteristic: Tripping characteristics, I^2t , Let-through current

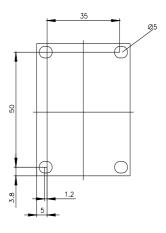
https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-1AP01/char

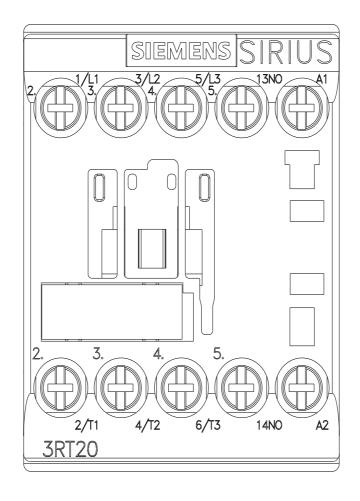
Further characteristics (e.g. electrical endurance, switching frequency)

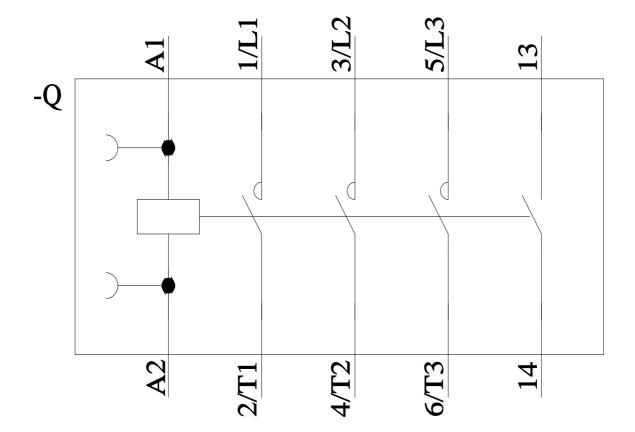
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-1AP01&objecttype=14&gridview=view1











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