3RT2018-2AP04-3MA0

Data sheet



power contactor, AC-3e/AC-3, 16 A, 7.5 kW / 400 V, 3-pole, 230 V AC, 50/60 Hz, auxiliary contacts: 2 NO + 2 NC, spring-loaded terminal, size: S00, captive auxiliary switch

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	No
power loss [W] for rated value of the current	
 at AC in hot operating state 	3 W
 at AC in hot operating state per pole 	1 W
without load current share typical	5.7 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 protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7,3g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
of the contactor with added auxiliary switch block typical	10 000 000
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

3	
690 V	
690 V	
22 A	
22 A	
20 A	
16 A	
12.4 A	
8.9 A	
16 A	
12.4 A	
8.9 A	
11.5 A	
19.4 A	
13.2 A	
9.6 A	
9.6 A	
9.6 A	
8.9 A	
6.6 A	
6.4 A	
6.4 A	
6.4 A	
4 mm²	
5.5 A	
4.4 A	
7.7 //	
20 A	
20 A	
2.1 A	
2.1 A 0.8 A	
2.1 A 0.8 A 0.6 A	
2.1 A 0.8 A	
2.1 A 0.8 A 0.6 A 0.6 A	
2.1 A 0.8 A 0.6 A 0.6 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A 0.8 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A 20 A 20 A 20 A 20 A	
2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A	

- at 110 V rated value	— at 24 V rated value	20 A
** with 2 current paths in series at DC-3 at DC-5 - at 24 V rated value - at 10 V rated value - at 10 V rated value - at 25 V rated value - at 26 V rated value - at 20 V rated value - at 310 V rated value - at 40 V rated value - at 500 V rated value - at	— at 60 V rated value	0.5 A
		0.15 A
	 with 2 current paths in series at DC-3 at DC-5 	
	— 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 60 V rated value	20 A
	— at 110 V rated value	20 A
operating power at AC3 — at 230 V rated value — at 900 V rated value — at 230 V rated value — at 230 V rated value — at 900 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=20 rated value — up to 400 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 400 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 600 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 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 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 rated value — up to 600 V for current peak value n=30 rated value — up to 600 V for current peak value n=30 rat	— at 220 V rated value	1.5 A
operating power at AC-3 at 2:30 V rated value at 4:00 V rated value at 2:30 V rated value at 8:90 V rated value at 2:30 V rated value at 8:90 V rated value at 8:90 V rated value at 9:90 V rated value 2:5 kW coparating power for approx. 200000 operating cycles at AC-4 at 4:00 V rated value at 9:90 V rated va	— at 440 V rated value	0.2 A
at AC-3 at 230 V rated value at 400 V rated value at 500 V rated value at 800 V for current peak value n=20 rated value au 10 to 400 V for current peak value n=20 rated value au 10 to 400 V for current peak value n=20 rated value au 10 to 800 V for current peak value n=20 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=30 rated value au 10 to 800 V for current peak value n=40 rated value au 10 to 800 V for current peak value n=50 rated value au 10 to 800 V for current peak value n=80 rated value au 10 to 800 V for current peak value n=80 rated value au 10 to 800 V for current peak valu	— at 600 V rated value	0.2 A
- at 230 V rated value - at 460 V rated value - at 400 V rated value - at 500 V rated value - 7.5 kW - at 800 V rated value - 7.5 kW - at 980 V rated value - 4 kC-3e - at 230 V rated value - 2.5 kW - at 900 V rated value - 2.5 kW - at 980 V rated value - 7.5 kW - at 980 V rated value - 7.5 kW - at 980 V rated value - 7.5 kW - at 980 V rated value - 7.5 kW - at 980 V rated value - 7.5 kW - at 980 V rated value - 2.5 kW - at 980 V rated value - 2.5 kW - at 980 V rated value - 2.5 kW - at 690 V rated value - 2.5 kW - at 690 V rated value - 2.5 kW - at 690 V rated value - 2.5 kW - at 690 V rated value - 2.5 kW - at 900 V for current peak value n-20 rated value - 2.5 kW - at 900 V for current peak value n-20 rated value - 10.6 kW - at 900 V for current peak value n-20 rated value - 10.6 kW - at 900 V for current peak value n-30 rated value - 10.6 kW - at 900 V for current peak va	operating power	
	• at AC-3	
- at 500 V rated value	— at 230 V rated value	4 kW
- at 500 V rated value	— at 400 V rated value	
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• 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 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 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 • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 5 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 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 • l	operating apparent power at AC-6a	
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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 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 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 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 • at AC-3 maximum • at AC-4 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-3 maximum • at AC-4 maximum • at AC-4 maximum • at AC-3 maximum • at AC-4 maximum • at AC-4 maximum • at AC-3 maximum • at AC-4 maximum • at AC-3 maximum • at AC-4 maximum	 up to 400 V for current peak value n=20 rated value 	6.6 kVA
operating apparent power at AC-6a • up to 230 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 **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 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum 74 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum no-load switching frequency • at AC 10 000 1/h operating frequency • at AC-2 maximum • at AC-2 maximum • at AC-3 maximum 750 1/h • at AC-3 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 50 Hz rated value • at 60 Hz rated value • at 60 Hz rated value • at 60 Hz rated value of magnet coll at AC	 up to 500 V for current peak value n=20 rated value 	8.3 kVA
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 tup 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 limited to 5 s switching at zero current maximum limited to 10 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 at limited to 60 s switching at zero current maximum shipped to 60 s switching at zero current maximum at AC-1 maximum limited to 60 s switching at zero current maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum at AC-3 maximum at AC-4 maximum at AC-5 maximum at AC-6 maximum at AC-7 maximum at AC-7 maximum at AC-8 maximum at AC-9 maximum at AC-9 maximum at AC-1 maximum at AC-4 maximum at AC-4 maximum at AC-4 maximum at AC-4 maximum at AC-5 maximum at AC-6 maximum at AC-7 maximum at AC-8 maximum at AC-9 maximum at	 up to 690 V for current peak value n=20 rated value 	10.6 kVA
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 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 ship in the switching frequency at AC 10 000 1/h operating frequency at AC-1 maximum 1000 1/h at AC-2 maximum 1000 1/h at AC-3 maximum 1000 1/h at AC-3 maximum 1000 1/h at AC-3 maximum 250 1/h at AC-4 maximum 250 1/h at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC orange frequency at 60 Hz rated value 230 V operating range factor control supply voltage rated value of magnet coil at AC orange frequency at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC orange frequency at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC orange frequency at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC	operating apparent power at AC-6a	
up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value in the standard 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 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 ro-load switching frequency at AC 10 000 1/h operating frequency at AC-1 maximum 1000 1/h at AC-2 maximum 750 1/h at AC-3 maximum 750 1/h at AC-3 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage at 60 Hz rated value operating range factor control supply voltage rated value of magnet coll at AC or magnet coll at AC short or current pax value in the total value of magnet coll at AC 10 000 1/h 1	 up to 230 V for current peak value n=30 rated value 	2.5 kVA
up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C ilmitted to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum ilmited to 10 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 at AC-1 rated value limited to 60 s switching at zero current maximum no-load switching frequency at AC perating 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-3 maximum 750 1/h at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage at 60 Hz rated value 230 V operating range factor control supply voltage rated value of magnet coil at AC maximum range factor control supply voltage rated value of magnet coil at AC at AC-1 current maximum 300 A; Use minimum cross-section acc. to AC-1 rated value 109 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h 10 000	 up to 400 V for current peak value n=30 rated value 	4.4 kVA
up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C ilmitted 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 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 ro-load switching frequency at AC 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-3 maximum 750 1/h at AC-4 maximum 750 1/h at AC-4 maximum 750 1/h AC-4 maximum 250 1/h control circuit/ Control type of voltage of the control supply voltage at 60 Hz rated value 230 V operating range factor control supply voltage rated value of magnet coil at AC operating range factor control supply voltage rated value of magnet coil at AC	 up to 500 V for current peak value n=30 rated value 	5.5 kVA
Ilimited to 1 s switching at zero current maximum Ilimited to 1 s switching at zero current maximum Ilimited to 1 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 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 Ino-load switching frequency Ino-load switching at zero current maximum Ino-load switch	 up to 690 V for current peak value n=30 rated value 	7.6 kVA
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 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 Ilimited to 60 s switching at zero current maximum Ino-load switching frequency Ilimited to 60 s switching at zero current maximum Ino-load switching frequency Ilimited to 60 s switching at zero current maximum Ino-load switching at zero current maximum Ino-load switching frequency Ilimited to 60 s switching at zero current maximum Ino-load swit	short-time withstand current in cold operating state up to	
Imited to 5 s switching at zero current maximum Inited to 10 s switching at zero current maximum Inited to 10 s switching at zero current maximum Inited to 30 s switching at zero current maximum Inited to 30 s switching at zero current maximum Inited to 60 s switching at zero curr		
Imitted to 10 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 Ino-load switching frequency Ino-load switching frequency Illustrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated to 60 s switching at zero current maximum Industrated value In	 limited to 1 s switching at zero current maximum 	300 A; Use minimum cross-section acc. to AC-1 rated value
Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum Inoload switching frequency Inoload sw	 limited to 5 s switching at zero current maximum 	169 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 60 s switching at zero current maximum 74 A; Use minimum cross-section acc. to AC-1 rated value no-load switching frequency • at AC	 limited to 10 s switching at zero current maximum 	128 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency • at AC operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 e maximum • at AC-4 maximum • at AC-4 maximum control circuit/ Control type of voltage of the control supply voltage • at 50 Hz rated value • at 60 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC	 limited to 30 s switching at zero current maximum 	92 A; Use minimum cross-section acc. to AC-1 rated value
 at AC operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum at AC-3e maximum at AC-4 maximum at AC-4 maximum at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage at 50 Hz rated value at 60 Hz rated value at 60 Hz rated value at 60 Hz rated value of magnet coil at AC 	 limited to 60 s switching at zero current maximum 	74 A; Use minimum cross-section acc. to AC-1 rated value
operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-4 maximum • at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC	no-load switching frequency	
 at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum at AC-3e maximum at AC-4 maximum at AC-4 maximum 250 1/h Control circuit/ Control type of voltage of the control supply voltage at 50 Hz rated value at 50 Hz rated value at 60 Hz rated value of magnet coil at AC 	• at AC	10 000 1/h
 at AC-2 maximum at AC-3 maximum at AC-3e maximum at AC-4e maximum 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 50 Hz rated value at 60 Hz rated value at 60 Hz rated value at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC The control supply voltage rated value of magnet coil at AC The control supply voltage rated value of magnet coil at AC The control supply voltage rated value of magnet coil at AC The control supply voltage rated value of magnet coil at AC The control supply voltage rated value of magnet coil at AC	operating frequency	
 at AC-3 maximum at AC-3e maximum 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 50 Hz rated value at 60 Hz rated value at 60 Hz rated value at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC	• at AC-1 maximum	1 000 1/h
 at AC-3e maximum 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 50 Hz rated value at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC 	• at AC-2 maximum	750 1/h
at AC-4 maximum Control circuit/ Control type of voltage of the control supply voltage AC control supply voltage at AC at 50 Hz rated value at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC 250 1/h AC 230 V	• at AC-3 maximum	750 1/h
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC	• at AC-3e maximum	750 1/h
type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value 230 V operating range factor control supply voltage rated value of magnet coil at AC	• at AC-4 maximum	250 1/h
control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value 230 V operating range factor control supply voltage rated value of magnet coil at AC	Control circuit/ Control	
at 50 Hz rated value at 60 Hz rated value at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC 230 V 230 V	type of voltage of the control supply voltage	AC
at 50 Hz rated value at 60 Hz rated value at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC 230 V 230 V		
• at 60 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC		230 V
operating range factor control supply voltage rated value of magnet coil at AC		
magnet coil at AC		
• at 50 Hz 0.8 1.1		
	● 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	37 VA		
● at 60 Hz	33 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			
• at 50 Hz	5.7 VA		
● at 60 Hz	4.4 VA		
inductive power factor with the holding power of the coil			
• at 50 Hz	0.25		
● at 60 Hz	0.25		
closing delay			
• at AC	9 35 ms		
opening delay	5 55 Hilb		
• at AC	4 15 ms		
arcing time	10 15 ms		
control version of the switch operating mechanism	Standard A1 - A2		
	Olandard AT - AZ		
Auxiliary circuit			
number of NC contacts for auxiliary contacts instantaneous contact	2		
number of NO contacts for auxiliary contacts instantaneous	2		
contact			
operational current at AC-12 maximum	10 A		
operational current at AC-15			
at 230 V rated value	6 A		
at 400 V rated value	3 A		
at 500 V rated value	2 A		
at 690 V rated value	1 A		
operational current at DC-12			
at 24 V rated value	10 A		
at 48 V rated value	6 A		
at 40 V rated value at 60 V rated value	6 A		
at 110 V rated value at 110 V rated value	3 A		
	2 A		
• at 125 V rated value			
at 220 V rated value	1 A		
at 600 V rated value	0.15 A		
operational current at DC-13			
at 24 V rated value	6 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	14 A		
at 600 V rated value	11 A		
yielded mechanical performance [hp]			
for single-phase AC motor			
— at 110/120 V rated value	1 hp		
— at 230 V rated value	2 hp		
• for 3-phase AC motor	- 1		
— at 200/208 V rated value	3 hp		
— at 200/200 V rated value — at 220/230 V rated value	5 hp		
— at 460/480 V rated value	10 hp		
— at 575/600 V rated value	10 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: 50A (690V,100kA), aM: 25A (690V,100kA), BS88: 50A (415V,80kA)	
with type of assignment 2 required	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)	
for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)	
Installation/ mounting/ dimensions	go. 1077 (000 V, 110 V)	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and	
	backward by +/- 22.5° on vertical mounting surface	
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	
side-by-side mounting	Yes	
height	70 mm	
width	45 mm	
depth	121 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	40	
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	6 mm	
Connections/ Terminals type of electrical connection		
for main current circuit	caring leaded terminals	
	spring-loaded terminals	
for auxiliary and control circuitat contactor for auxiliary contacts	spring-loaded terminals	
of magnet coil	Spring-type terminals	
type of connectable conductor cross-sections for main contacts	Spring-type terminals	
solid	2x (0.5 4 mm²)	
solid solid or stranded		
finely stranded with core end processing	2x (0,5 4 mm²) 2x (0.5 2.5 mm²)	
finely stranded with core end processing finely stranded without core end processing	2x (0.5 2.5 mm²)	
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	
finely stranded with core end processing finely stranded without 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	
finely stranded with core and processing finely stranded without core end processing	0.5 2.5 mm²	
type of connectable conductor cross-sections		
for auxiliary contacts		
— solid or stranded	2x (0,5 4 mm²)	
finely stranded with core end processing	2x (0.5 2.5 mm²)	
finely stranded with our core end processing	2x (0.5 2.5 mm²)	
for AWG cables for auxiliary contacts	2x (0.5 2.5 mm²) 2x (20 12)	
AWG number as coded connectable conductor cross section		
• for main contacts	20 12	
for main contactsfor auxiliary contacts	20 12 20 12	

product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	No
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 a
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
suitability for use	
safety-related switching OFF	Yes

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



EMC	Functional Safety/Safety of Ma- chinery	Declaration of Conformity	Test Certificates
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Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping other Railway Environment



Confirmation



Confirmation

Vibration and Shock

Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RT2018-2AP04-3MA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2018-2AP04-3MA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2018-2AP04-3MA0

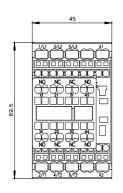
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

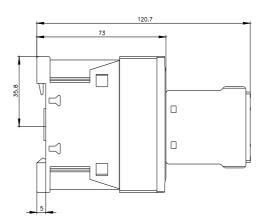
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2018-2AP04-3MA0&lang=en

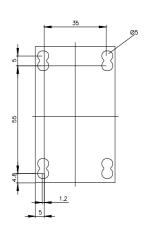
Characteristic: Tripping characteristics, I²t, Let-through current

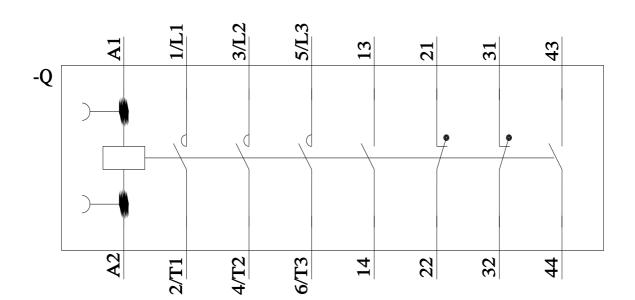
https://support.industry.siemens.com/cs/ww/en/ps/3RT2018-2AP04-3MA0/char

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









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