## SIEMENS

## Data sheet

## 3RT2017-2JB41-Z X95



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 24 V DC, 0.7-1.25\* Us, with integrated diode, auxiliary contacts: 1 NO, spring-loaded terminal, size: S00, suitable for PLC outputs, not expandable with auxiliary switch , reusable packaging, pack = 120 units

product brand name	SIRIUS
product designation	Coupling 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	1.5 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.5 W
without load current share typical	2.8 W
type of calculation of power loss depending on pole	quadratic
surge voltage resistance	
of main circuit rated value	6 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	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 DC	7.3g / 5 ms, 4.7g / 10 ms
shock resistance with sine pulse	
• at DC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (operating cycles)	
<ul> <li>of contactor typical</li> </ul>	30 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Weight	0.316 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V

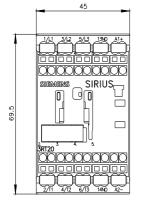
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operational current	030 V
at AC-1 at 400 V at ambient temperature 40 °C rated	22 A
value	22 7
● at AC-1	
— up to 690 V at ambient temperature 40 °C rated	22 A
value	
<ul> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul>	20 A
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 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	9.9 A
• at AC-6a	
up to 230 V for current peak value n=20 rated value	7.2 A
— up to 400 V for current peak value n=20 rated value	7.2 A
— up to 500 V for current peak value n=20 rated value	7.2 A
— up to 690 V for current peak value n=20 rated value	6.7 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	4.8 A
— up to 400 V for current peak value n=30 rated value	4.8 A
— up to 500 V for current peak value n=30 rated value	4.8 A
— up to 690 V for current peak value n=30 rated value	4.8 A
minimum cross-section in main circuit at maximum AC-1 rated	4 mm <sup>2</sup>
value	
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	4.1 A
at 400 V rated value     at 690 V rated value	3.3 A
operational current	5.5 A
• at 1 current path at DC-1	
- at 24 V rated value	20 A
— at 60 V rated value	20 A 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
	0.6 A
<ul> <li>— at 600 V rated value</li> <li>with 2 current paths in series at DC-1</li> </ul>	0.0 A
- at 24 V rated value	20 A
— at 60 V rated value	20 A 20 A
— at 10 V rated value — at 110 V rated value	20 A 12 A
— at 220 V rated value	12 A 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	
with 3 current paths in series at DC-1     — at 24 V rated value	20 A
— at 60 V rated value	20 A 20 A
— at 100 V rated value — at 110 V rated value	20 A 20 A
— at 220 V rated value	20 A 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	20.4
— at 24 V rated value	20 A
— at 60 V rated value	0.5 A
— at 110 V rated value	0.15 A

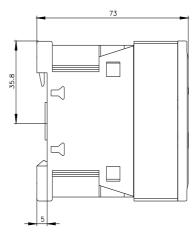
- all 60 Y miles value     5 A       - all 24 Y raties value     03 A       - all 24 Y raties value     20 A       - all 240 Y raties value     5.5 KW       - all 240 Y raties value     5.5 KW       - all 240 Y raties value     5.5 KW       - all 250 Y raties value     5.5 KW       - all 250 Y raties value     5.5 KW       - all 250 Y raties value     2.5 KW       - all 250 Y raties value<	• with 2 current paths in series at DC-3 at DC-5	
• with 3 current path is series at DC-3 at DC-5		
- at 24 Y rated value     20 Å       - at 26 Y rated value     20 Å       - at 22 V rated value     20 Å       - at 22 V rated value     1.5 Å       - at 22 V rated value     0.2 Å       - at 20 V rated value     0.2 Å       - at 22 V rated value     0.2 Å       - at 22 V rated value     0.2 Å       - at 220 V rated value     5.5 W       - at 230 V rated value     5.5 W       - at 630 V rated value     2.5 W       operating power for approx. 200000 operating cycles at AC-5     5.5 W       - at 630 V rated value     2.8 WA       - at 630 V rated value     2.8 WA       - at 630 V frated value     3.8 W       - at 630 V frated value     3.8 W       - at 630 V frated value     3.8 W       - at 630 V frate value     7.0 W       - at 630 V frated value     3		0.35 A
	<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
	— at 24 V rated value	20 A
	— at 60 V rated value	20 A
- at 400 V rade value     0.2 A       operating power     5.5 kW       - at 400 V rade value     5.5 kW       - at 220 V rade value     3.1 kW       - at 400 V rade value     5.5 kW       - at 600 V rade value     5.5 kW       - at 600 V rade value     2.5 kW       0 portating power for approx. 20000 operating cycles at AC-8     100 V rade value       • up to 400 V for current pack value n=20 rate value     4.9 kVA       • up to 600 V for current pack value n=20 rate value     4.9 kVA       • up to 600 V for current pack value n=30 rate value     5.1 kW       • up to 600 V for current pack value n=30 rate value     5.1 kW       • up to 600 V for current pack value n=30 rate value     5.1 kW       • up to 600 V for current pack value n=30 rate value     5.1 kW       • up to 600 V for current pack value n=30 rate va	— at 110 V rated value	20 A
	— at 220 V rated value	1.5 A
operating power         5.5 kW           • at AC-2 at 400 V rated value         5.5 kW           - at 230 V rated value         5.5 kW           - at 630 V rated value         5.5 kW           operating power for approx. 200000 operating cycles at AC-4         2.5 kW           - at 630 V rated value         2.5 kW           opt 5400 V b cruemt peak value ->20 rated value         2.4 kVA           - up 5400 V for current peak value ->20 rated value         2.4 kVA           - up 5400 V for current peak value ->20 rated value         1.9 kVA           - up 5400 V for current peak value ->30 rated value         3.4	— at 440 V rated value	0.2 A
• at AC-3     5.5 kW       • at 420 V rated value     5.5 kW       • at 400 V rated value     5.5 kW       • at 400 V rated value     5.5 kW       • at 600 V rated value     2.5 kW       • operating papers to rower at AC-6a     2.8 kWA       • up b 500 V for current pack value n=20 rated value     6.2 kVA       • up b 500 V for current pack value n=20 rated value     5.3 kVA       • up b 500 V for current pack value n=30 rated value     5.3 kVA       • up b 500 V for current pack value n=30 rated value     5.3 kVA       • up b 500 V for current pack value n=30 rated value     5.3 kVA       • up b 500 V for current pack value n=30 rated value     5.3 kVA       • up b 500 V for current pack value n=30 rated value     5.3 kVA       • up b 500 V for current pack value	— at 600 V rated value	0.2 A
• alt AC-3     > KW       - at 230 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 5 KW       - at 600 V rited value     > 6 KW       - at 600 V rited value     > 6 KVA       - at 600 V rited value - 20 rited value     > 6 KVA       - up to 600 V for current pack value -> 20 rited value     > 1 8 KVA       - at po 2 30 V for current pack value -> 20 rited value     > 1 8 KVA       - up to 600 V for current pack value -> 20 rited value     > 1 8 KVA       - up to 500 V for current pack value -> 20 rited value     > 1 8 KVA       - up to 500 V for current pack value	operating power	
	<ul> <li>at AC-2 at 400 V rated value</li> </ul>	5.5 kW
	• at AC-3	
	— at 230 V rated value	3 kW
	— at 400 V rated value	5.5 kW
• at AC-3e> at 230 V rated value3 kW at 500 V rated value5.5 kW at 500 V rated value5.5 kW at 680 V rated value5.5 kWoperating power for approx. 20000 operating cycles at AC at 400 V rated value2 kW- at 680 V rated value2 kW- op to 230 V for current peak value n=20 rated value2 kWA- up to 500 V for current peak value n=20 rated value2 kWA- up to 500 V for current peak value n=20 rated value2 kWA- up to 500 V for current peak value n=20 rated value2 kWA- up to 500 V for current peak value n=20 rated value2 kWA- up to 500 V for current peak value n=20 rated value1 kWA- up to 500 V for current peak value n=30 rated value3 kVA- up to 500 V for current peak value n=30 rated value3 kVA- up to 500 V for current peak value n=30 rated value5 r. WA- up to 500 V for current peak value n=30 rated value5 r. WA- up to 500 V for current peak value n=30 rated value5 r. WA- up to 500 V for current peak value n=30 rated value5 r. WA- up to 500 V for current peak value n=30 rated value5 r. WA- up to 500 V for current peak value n=30 rated value5 r. WA- up to 500 V for current peak value n=30 rated value5 r. WA- up to 500 V for current peak value n=30 rated value5 r. WA- initiet to 5 s switching at zero current maximum	— at 500 V rated value	5.5 kW
	— at 690 V rated value	5.5 kW
	• at AC-3e	
	— at 230 V rated value	3 kW
	— at 400 V rated value	5.5 kW
operating power for approx. 20000 operating cycles at AC-4       2 kW         • at 400 V rated value       2 kW         • at 600 V rated value       2 kW         operating apparent power at AC-6a       2 kVA         • up to 230 V for current peak value n=20 rated value       2 kVA         • up to 500 V for current peak value n=20 rated value       8 kVA         • up to 500 V for current peak value n=20 rated value       8 kVA         • up to 500 V for current peak value n=20 rated value       8 kVA         • up to 500 V for current peak value n=20 rated value       8 kVA         • up to 500 V for current peak value n=30 rated value       1.9 kVA         • up to 500 V for current peak value n=30 rated value       3 kVA         • up to 500 V for current peak value n=30 rated value       4.1 kVA         • up to 500 V for current peak value n=30 rated value       5.1 kVA         short-time withstand current in cold operating state up to       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       102 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       10 000 1/h         • at AC-1 maximum       10000 1/h         •	— at 500 V rated value	5.5 kW
	— at 690 V rated value	5.5 kW
• at 400 V rated value2 kW• at 690 V rated value2.5 kWoperating apparent power at AC-6a2.8 kVA• up to 230 V for current peak value n=20 rated value4.9 kVA• up to 500 V for current peak value n=20 rated value4.9 kVA• up to 500 V for current peak value n=20 rated value8.2 kVA• up to 500 V for current peak value n=30 rated value8.2 kVA• up to 500 V for current peak value n=30 rated value1.9 kVA• up to 500 V for current peak value n=30 rated value3.3 kVA• up to 500 V for current peak value n=30 rated value3.3 kVA• up to 500 V for current peak value n=30 rated value5.7 kVA• top to 500 V for current peak value n=30 rated value5.7 kVA• up to 500 V for current peak value n=30 rated value5.7 kVA• up to 500 V for current meak value n=30 rated value5.7 kVA• up to 500 V for current meak value n=30 rated value5.7 kVA• up to 500 V for current meak value n=30 rated value5.7 kVA• up to 500 V for current meak value n=30 rated value5.7 kVA• up to 500 V for current meak value n=30 rated value5.7 kVA• up to 500 V for current maximum102 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum14.2 kue minimum cross-section acc. to AC-1 rated value• limited to 50 s switching at zero current maximum14.2 kue minimum cross-section acc. to AC-1 rated value• limited to 50 s switching at zero current maximum14.2 kue minimum cross-section acc. to AC-1 rated value• limited to 50 s switching at zer		
• at 660 V rated value       2.5 kW         operating apparent power at AC-6a       2.8 kVA         • up to 230 V for current peak value n=20 rated value       4.9 kVA         • up to 500 V for current peak value n=20 rated value       6.2 kVA         • up to 500 V for current peak value n=20 rated value       8 kVA         • up to 500 V for current peak value n=20 rated value       8 kVA         • up to 500 V for current peak value n=30 rated value       1.9 kVA         • up to 500 V for current peak value n=30 rated value       3.3 kVA         • up to 600 V for current peak value n=30 rated value       3.8 kVA         • up to 600 V for current peak value n=30 rated value       4.1 kVA         • up to 600 V for current peak value n=30 rated value       5.7 kVA         • up to 600 V for current peak value n=30 rated value       5.7 kVA         • up to 600 V for current peak value n=30 rated value       5.7 kVA         • up to 600 V for current maximum       102 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       16 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 30 s switching at zero current maximum       16 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 30 s switching at zero current maximum       16 A; Use minimum cross-section acc. to AC-1 rated value         • at DC		
operating apparent power at AC-6a       2.8 kVA         • up to 230 V for current peak value n=20 rated value       4.9 kVA         • up to 500 V for current peak value n=20 rated value       6.2 kVA         • up to 500 V for current peak value n=20 rated value       8.4 kVA         • up to 500 V for current peak value n=20 rated value       8.kVA         oparting apparent power at AC-6a       8.kVA         • up to 500 V for current peak value n=30 rated value       3.3 kVA         • up to 500 V for current peak value n=30 rated value       5.7 kVA         • up to 500 V for current neak value n=30 rated value       5.7 kVA         • up to 500 V for current neak value n=30 rated value       5.7 kVA         • up to 500 V for current peak value n=30 rated value       5.7 kVA         • up to 600 V for current peak value n=30 rated value       5.7 kVA         • up to 600 V for current maximum       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1s switching at zero current maximum       123 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • at DC       10 000 1/h         operating frequency       • A; Use mi		
• up to 230 V for current peak value =20 rated value       2.8 kVA         • up to 400 V for current peak value =20 rated value       4.9 kVA         • up to 500 V for current peak value =20 rated value       6.2 kVA         • up to 500 V for current peak value =20 rated value       8 kVA         operating apparent power at AC-6a       8 kVA         • up to 500 V for current peak value =30 rated value       3.3 kVA         • up to 500 V for current peak value =30 rated value       3.3 kVA         • up to 500 V for current peak value =30 rated value       3.3 kVA         • up to 500 V for current peak value =30 rated value       3.7 kVA         • up to 500 V for current peak value =30 rated value       5.7 kVA         • up to 500 V for current peak value =30 rated value       5.7 kVA         • up to 500 V for current neak value =30 rated value       5.7 kVA         • up to 500 V for current neak value =30 rated value       5.7 kVA         • up to 500 V for current neak value =30 rated value       5.7 kVA         • limited to 1 s switching at zero current maximum       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       74 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 50 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • at AC-2 maximum	at 690 V rated value	2.5 kW
up to 400 V for current peak value n=20 rated value <ul> <li>up to 500 V for current peak value n=20 rated value</li> <li>2 KVA</li> <li>up to 690 V for current peak value n=20 rated value</li> <li>8 KVA</li> </ul> <li>operating apparent power at AC-6a</li> <li>up to 500 V for current peak value n=30 rated value</li> <li>3 KVA</li> <li>up to 500 V for current peak value n=30 rated value</li> <li>3 KVA</li> <li>up to 500 V for current peak value n=30 rated value</li> <li>3 KVA</li> <li>up to 500 V for current peak value n=30 rated value</li> <li>5 KVA</li> <li>short-time withstand current in cold operating state up to 40 °C</li> <li>ilmited to 1 s switching at zero current maximum</li> <li>ilmited to 1 s switching at zero current maximum</li> <ul> <li>12 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>3 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>ilmited to 3 s switching at zero current maximum</li> <li>ilmited to 3 s switching at zero current maximum</li> <li>ilmited to 3 s switching at zero current maximum</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> <li>ilmited to 8 s switching at zero current maximum</li> <li>A; Use minimum cross-section acc. to AC-1 rated value</li> </ul> <ul> <li>at DC</li> <li>at DC</li> <li>at DC</li> <li>at OC</li> <li>at OC</li> <li>at OC-3 maximum</li> <li>at AC-3 maximum</li></ul>	operating apparent power at AC-6a	
• up to 500 V for current peak value n=20 rated value     • up to 590 V for current peak value n=20 rated value     8 kVA  operating apparent power at AC-6a      • up to 230 V for current peak value n=30 rated value     1.9 kVA     3.3 kVA     • up to 500 V for current peak value n=30 rated value     4.1 kVA     • up to 500 V for current peak value n=30 rated value     4.1 kVA     • up to 690 V for current peak value n=30 rated value     4.1 kVA     • up to 690 V for current peak value n=30 rated value     5.7 kVA     • up to 690 V for current peak value n=30 rated value     4.1 kVA     • up to 690 V for current peak value n=30 rated value     5.7 kVA     • up to 690 V for current maximum     10 switching at zero current maximum     10 imited to 1 s switching at zero current maximum     10 imited to 1 s switching at zero current maximum     10 imited to 10 s switching at zero current maximum     10 imited to 10 s switching at zero current maximum     10 imited to 10 s switching at zero current maximum     10 A · Use minimum cross-section acc. to AC-1 rated value     10 to 00 s switching at zero current maximum     10 A · Use minimum cross-section acc. to AC-1 rated value     10 noloa switching at zero current maximum     10 A · Use minimum cross-section acc. to AC-1 rated value     10 nol 1/h     10 a AC-1 maximum     10 000 1/h     10 A C-2 maximum     10 001 1/h     10 A C-3 maximum     10 A C-3 maximum     10 001 1/h     10 A C-3 maximum     10 A		2.8 kVA
• up to 690 V for current peak value n=20 rated value       8 kVA         operating apparent power at AC-6a       1.9 kVA         • up to 230 V for current peak value n=30 rated value       3.3 kVA         • up to 500 V for current peak value n=30 rated value       3.3 kVA         • up to 690 V for current peak value n=30 rated value       3.3 kVA         • up to 690 V for current peak value n=30 rated value       5.7 kVA         short-time withstand current in cold operating state up to 40 °C       5.7 kVA         • limited to 1 s switching at zero current maximum       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 5 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 60 s switching at zero current maximum       10 000 1/h         • at DC       10 000 1/h         • at AC-3 maximum       100 01 /h         • at AC-3 maximum       750 1/h         • at AC-3 maximum       750 1/h         • at AC-3 maximum       750 1/h         • at AC-3 maximum       250 1/h         • at AC-4 maximum       250 1/h <t< td=""><td></td><td>4.9 kVA</td></t<>		4.9 kVA
operating apparent power at AC-6a       1.9 kVA         • up to 230 V for current peak value n=30 rated value       1.9 kVA         • up to 500 V for current peak value n=30 rated value       3.3 kVA         • up to 500 V for current peak value n=30 rated value       4.1 kVA         • up to 500 V for current peak value n=30 rated value       5.7 kVA         short-time withstand current in cold operating state up to 40 °C       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       123 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • eit AC-1 maximum       100 00 1/h         • eit AC-2 maximum       750 1/h         • eit AC-3 maximum       750 1/h         • eit AC-3 maximum       750 1/h         • eit AC-3 maximum       250 1/h         • eit AC-3 maximum       250 1/h         • eit AC-4 maximum       260 1/h	<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	6.2 kVA
• up to 230 V for current peak value n=30 rated value       1.9 kVA         • up to 600 V for current peak value n=30 rated value       3.3 kVA         • up to 500 V for current peak value n=30 rated value       4.1 kVA         • up to 600 V for current peak value n=30 rated value       5.7 kVA         short-time withstand current in cold operating state up to 40 °C       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 5 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 60 s switching at zero current maximum       96 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         • at DC       10 000 1/h         operating frequency       1000 1/h         • at AC-3 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         Contro	<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	8 kVA
• up to 400 V for current peak value n=30 rated value       3.3 kVA         • up to 500 V for current peak value n=30 rated value       4.1 kVA         • up to 690 V for current peak value n=30 rated value       5.7 kVA         short-time withstand current in cold operating state up to 40 °C       700 Å; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       200 Å; Use minimum cross-section acc. to AC-1 rated value         • limited to 5 s switching at zero current maximum       64, Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 60 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • at DC       10 000 1/h         operating frequency       10000 1/h         • at AC-3 maximum       750 1/h         • at AC-3 maximum       250 1/h         • at AC-4 maximum       250 1/h         • at AC-3 maximum       250 1/h         • at AC-4 maximum       250 1/h         • at AC-3 maximum       250 1/h         • at AC-4 maximum       260 1/h	operating apparent power at AC-6a	
• up to 500 V for current peak value n=30 rated value       4.1 kVA         • up to 690 V for current peak value n=30 rated value       5.7 kVA         short-time withstand current in cold operating state up to 40 °C       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 60 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 60 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • at DC       10 000 1/h         operating frequency       10 000 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       Uc         type of voltage of the control supply voltage rated value of magnet coil at DC       0.7         • initial value       0.7         • initial value	<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	1.9 kVA
• up to 690 V for current peak value n=30 rated value       5.7 kVA         short-time withstand current in cold operating state up to 40 °C       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 30 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       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 60 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 60 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • at AC-1 maximum       10 000 1/h         • at AC-1 maximum       10000 1/h         • at AC-3 maximum       750 1/h         • at AC-3 maximum       750 1/h         • at AC-4 maximum       250 1/h         • at AC-4 maximum       250 1/h         • ontol circuit/ Control       Up V         • operating range factor control supply voltage       DC         • ontol circuit/ Control       24 V         • operating range factor control supply voltage rated value of magnet c	<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	3.3 kVA
short-time withstand current in cold operating state up to 40 °C       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 1 s switching at zero current maximum       200 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 10 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 30 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       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 60 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • limited to 60 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         • at DC       10 000 1/h         • at AC-1 maximum       1 0000 1/h         • at AC-2 maximum       750 1/h         • at AC-3 maximum       750 1/h         • at AC-4 maximum       250 1/h         • at AC-4 maximum       250 1/h         • at AC-4 maximum       24 V         • operating range factor control supply voltage       DC         • control supply voltage at DC rated value       0.7         • initial value		4.1 kVA
40 °C       e limited to 1 s switching at zero current maximum       200 A; Use minimum cross-section acc. to AC-1 rated value         e limited to 1 s switching at zero current maximum       123 A; Use minimum cross-section acc. to AC-1 rated value         e limited to 3 s switching at zero current maximum       96 A; Use minimum cross-section acc. to AC-1 rated value         e limited to 3 s switching at zero current maximum       74 A; Use minimum cross-section acc. to AC-1 rated value         e limited to 60 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         no-load switching frequency       61 A; Use minimum cross-section acc. to AC-1 rated value         e at DC       10 000 1/h         operating frequency       1000 01/h         e at AC-1 maximum       750 1/h         e at AC-3 maximum       750 1/h         e at AC-3 maximum       750 1/h         e at AC-4 maximum       250 1/h         Control circuit/ Control       Upper of voltage of the control supply voltage         type of voltage of the control supply voltage rated value of magnet coil at DC       0.7         e initial value       0.7         e initial value       0.7         e full-scale value       1.25         design of the surge suppressor       diode         closing power of magnet coil at DC       2.8 W </td <td><ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul></td> <td>5.7 kVA</td>	<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	5.7 kVA
• limited to 1 s switching at zero current maximum200 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum96 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated value• at DC10 000 1/h• at DC10 000 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum250 1/h• at AC-4 maximum24 V• operating range factor control supply voltage rated value of magnet coil at DC• initial value0.7• initial value0.7• full-scale value1.25design of the surge suppressordiodeclosing power of magnet coil at DC2.8 W		
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• limited to 10 s switching at zero current maximum96 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated valueno-load switching frequency10 000 1/h• at DC10 000 1/hoperating frequency1000 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum0.7• at AC-4 maximum0.7• initial value0.7• initial value1.25• de	-	
• limited to 30 s switching at zero current maximum74 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum61 A; Use minimum cross-section acc. to AC-1 rated valueno-load switching frequency10 000 1/h• at DC10 000 1/hoperating frequency1 000 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum24 V• operating range factor control supply voltage rated value of magnet coil at DC0.7• initial value0.7• initial value1.25design of the surge suppressordiodeclosing power of magnet coil at DC2.8 W	-	
• limited to 60 s switching at zero current maximum       61 A; Use minimum cross-section acc. to AC-1 rated value         no-load switching frequency       10 000 1/h         • at DC       10 000 1/h         operating frequency       -         • at AC-1 maximum       1 000 1/h         • at AC-2 maximum       750 1/h         • at AC-3 maximum       750 1/h         • at AC-3 maximum       750 1/h         • at AC-3 maximum       750 1/h         • at AC-4 maximum       250 1/h         Control circuit/ Control       Experiment of the control supply voltage         type of voltage of the control supply voltage       DC         control supply voltage at DC rated value       24 V         operating range factor control supply voltage rated value of magnet coil at DC       0.7         • initial value       0.7         • full-scale value       1.25         design of the surge suppressor       diode         closing power of magnet coil at DC       2.8 W	-	
no-load switching frequency• at DC10 000 1/hoperating frequency• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/hControl circuit/ ControlDCtype of voltage of the control supply voltageDCcontrol supply voltage at DC rated value24 Voperating range factor control supply voltage rated value of magnet coil at DC0.7• initial value0.7• full-scale value1.25design of the surge suppressordiodeclosing power of magnet coil at DC2.8 W	-	
• at DC10 000 1/hoperating frequency1000 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3 maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/h• at AC-4 maximumDC• control circuit/ Control24 Voperating range factor control supply voltage rated value of magnet coil at DC0.7• initial value0.7• full-scale value1.25design of the surge suppressordiodeclosing power of magnet coil at DC2.8 W		
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• at AC-1 maximum1 000 1/h• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum24 V• operating range factor control supply voltage rated value of magnet coil at DC24 V• initial value0.7• full-scale value1.25design of the surge suppressordiodeclosing power of magnet coil at DC2.8 W		
• at AC-2 maximum750 1/h• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/h• at AC-4 maximum250 1/hControl circuit/ ControlDCcontrol supply voltage at DC rated value24 Voperating range factor control supply voltage rated value of magnet coil at DC0.7• initial value0.7• full-scale value1.25design of the surge suppressordiodeclosing power of magnet coil at DC2.8 W		1 000 1/h
• at AC-3 maximum750 1/h• at AC-3e maximum750 1/h• at AC-4 maximum250 1/hControl circuit/ Controltype of voltage of the control supply voltagetype of voltage of the control supply voltageDCcontrol supply voltage at DC rated value24 Voperating range factor control supply voltage rated value of magnet coil at DC0.7• initial value0.7• full-scale value1.25design of the surge suppressordiodeclosing power of magnet coil at DC2.8 W		
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Control circuit/ Control         type of voltage of the control supply voltage       DC         control supply voltage at DC rated value       24 V         operating range factor control supply voltage rated value of magnet coil at DC       0.7         • initial value       0.7         • full-scale value       1.25         design of the surge suppressor       diode         closing power of magnet coil at DC       2.8 W		
type of voltage of the control supply voltage       DC         control supply voltage at DC rated value       24 V         operating range factor control supply voltage rated value of magnet coil at DC       0.7         • initial value       0.7         • full-scale value       1.25         design of the surge suppressor       diode         closing power of magnet coil at DC       2.8 W		
control supply voltage at DC rated value       24 V         operating range factor control supply voltage rated value of magnet coil at DC       0.7         • initial value       0.7         • full-scale value       1.25         design of the surge suppressor       diode         closing power of magnet coil at DC       2.8 W		DC
operating range factor control supply voltage rated value of magnet coil at DC       0.7         • initial value       0.7         • full-scale value       1.25         design of the surge suppressor       diode         closing power of magnet coil at DC       2.8 W		
• initial value       0.7         • full-scale value       1.25         design of the surge suppressor       diode         closing power of magnet coil at DC       2.8 W	operating range factor control supply voltage rated value of	
• full-scale value     1.25       design of the surge suppressor     diode       closing power of magnet coil at DC     2.8 W	-	0.7
design of the surge suppressor     diode       closing power of magnet coil at DC     2.8 W		
closing power of magnet coil at DC 2.8 W		

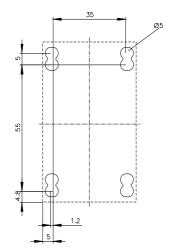
closing delay	
● at DC	25 130 ms
opening delay	
• at DC	38 65 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul> <li>at 230 V rated value</li> </ul>	10 A
<ul> <li>at 400 V rated value</li> </ul>	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 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
at 220 V rated value	1 A
• at 600 V rated value	0.15 A
operational current at DC-13	
at 24 V rated value	10 A
at 48 V rated value	2 A
• at 60 V rated value	2 A
at 110 V rated value	1A
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)
JL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	11 A
at 600 V rated value	11 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	
	2 hp
for 3-phase AC motor     at 200/208 V rated value	2 hp
- at 200/208 V rated value	3 hp
- at 220/230 V rated value	3 hp
- at 460/480 V rated value	7.5 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 miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V	C characteristic: 10 A; 0.4 kA
design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
<ul> <li>— with type of assignment 2 required</li> </ul>	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)
nstallation/ 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 side-by-side mounting	Yes
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	70 mm
width	45 mm

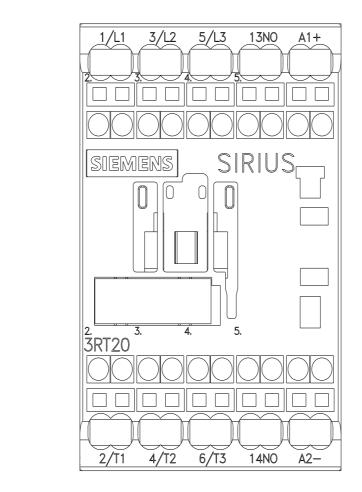
depth	73 mm
required spacing	
with side-by-side mounting	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	spring-loaded terminals
for auxiliary and control circuit	spring-loaded terminals
at contactor for auxiliary contacts	Spring-type terminals
of magnet coil	Spring-type terminals
type of connectable conductor cross-sections	
for main contacts	
— solid	2x (0.5 4 mm²)
— solid or stranded	2x (0,5 4 mm <sup>2</sup> )
- finely stranded with core end processing	2x (0.5 2.5 mm <sup>2</sup> )
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm <sup>2</sup> )
for AWG cables for main contacts	2x (20 12)
connectable conductor cross-section for main contacts	
• solid	0.5 4 mm²
stranded	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
connectable conductor cross-section for auxiliary contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
<ul> <li>finely stranded without core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid or stranded	2x (0,5 4 mm²)
- finely stranded with core end processing	2x (0.5 2.5 mm²)
- finely stranded without core end processing	2x (0.5 2.5 mm²)
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (20 12)
AWG number as coded connectable conductor cross	
section	
for main contacts	20 12
for auxiliary contacts	20 12
Safety related data	
product function	No
mirror contact according to IEC 60947-4-1	No
<ul> <li>positively driven operation according to IEC 60947-5-1</li> <li>suitable for sofety function</li> </ul>	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	40.94
with low demand rate according to SN 31920     with high demand rate according to SN 31920	40 % 73 %
with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920	1 000 000
Bio value with high defination rate according to 5N 51920	1 000 000

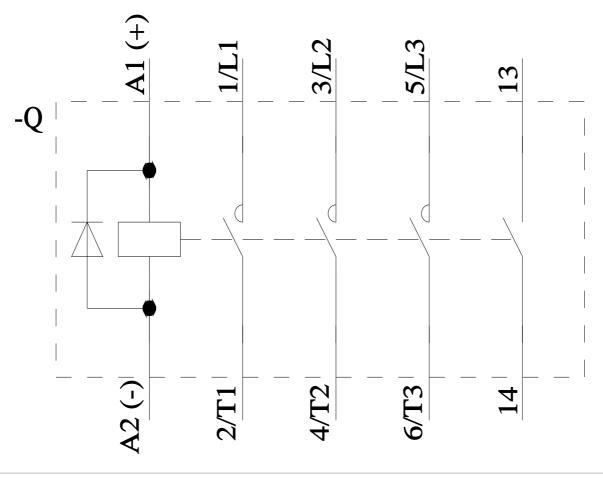
failure rate [FIT] with low demand rate according to SN 31920	100 FIT	
ISO 13849		
device type according to ISO 13849-1	3	
overdimensioning according to ISO 13849-2 necessary	Yes	
IEC 61508		
safety device type according to IEC 61508-2	Туре А	
Electrical Safety		
protection class IP on the front according to IEC 60529	IP20	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front	
Further information		
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=3RT2017-2JB41-Z X95 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-2JB41-Z X95 Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-2JB41-Z X95 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/cs/ww/en/ps/3RT2017-2JB41-Z X95⟨=en http://support.industry.siemens.com/cs/ww/en/ps/3RT2017-2JB41-Z X95⟨=en Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-2JB41-Z X95&objecttype=14&gridview=view1		











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