## **SIEMENS**

Data sheet 3RT2016-2AB01



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

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S00
product extension	
• function module for communication	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	0.9 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.3 W
<ul> <li>without load current share typical</li> </ul>	4.2 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
• of auxiliary circuit with degree of pollution 3 rated value	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	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 AC	6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (operating cycles)	
<ul> <li>of contactor typical</li> </ul>	30 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	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	
<ul> <li>during operation</li> </ul>	-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
at AC-3e rated value maximum	690 V
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated</li> </ul>	22 A
value	
• at AC-1	
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	22 A
— up to 690 V at ambient temperature 60 °C rated	20 A
value	2071
• at AC-3	
— at 400 V rated value	9 A
— at 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	9 A
— at 500 V rated value	7.7 A
— at 690 V rated value	6.7 A
• at AC-4 at 400 V rated value	8.5 A
• at AC-5a up to 690 V rated value	19.4 A
• at AC-5b up to 400 V rated value	7.4 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	5.3 A
— up to 400 V for current peak value n=20 rated value	5.3 A
— up to 500 V for current peak value n=20 rated value	5.3 A
— up to 690 V for current peak value n=20 rated value	5 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	3.5 A
— up to 400 V for current peak value n=30 rated value	3.5 A
— up to 500 V for current peak value n=30 rated value	3.6 A
— up to 690 V for current peak value n=30 rated value	3.3 A
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm²
operational current for approx. 200000 operating cycles at	
AC-4	44.0
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 60 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 60 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.7 A
<ul><li>with 3 current paths in series at DC-1</li></ul>	
— at 24 V rated value	20 A
— at 60 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
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	

— at 24 V rated value	20 A
— at 60 V rated value	0.5 A
— at 110 V rated value	0.15 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	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 110 V rated value	20 A
— at 220 V rated value	1.5 A
— at 440 V rated value	0.2 A
— at 600 V rated value	0.2 A
operating power	
• at AC-3	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5 kW
operating power for approx. 200000 operating cycles at AC-	
4	
<ul> <li>at 400 V rated value</li> </ul>	2 kW
at 690 V rated value	2.5 kW
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	2 kVA
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	3.6 kVA
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	4.6 kVA
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	5.9 kVA
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	1.3 kVA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	2.4 kVA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	3.1 kVA
• up to 690 V for current peak value n=30 rated value	4 kVA
short-time withstand current in cold operating state up to	
40 °C	
Iimited to 1 s switching at zero current maximum	155 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	111 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	86 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	66 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum	55 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	10 000 1/h
operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
• at AC-3e maximum	750 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	24 V
at 60 Hz rated value	24 V
operating range factor control supply voltage rated value of	
magnet coil at AC	
● at 50 Hz	0.8 1.1

● at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	27 VA
● at 60 Hz	24.3 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.8
• at 60 Hz	0.75
apparent holding power of magnet coil at AC	
● at 50 Hz	4.2 VA
● at 60 Hz	3.3 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	
• at AC	4 15 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
• at 230 V rated value	10 A
• at 400 V rated value	3 A
<ul> <li>at 500 V rated value</li> </ul>	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
<ul> <li>at 60 V rated value</li> </ul>	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	1 A
• at 125 V rated value	0.9 A
• at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	7.6 A
at 600 V rated value	9 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	0.33 hp
— at 230 V rated value	1 hp
• for 3-phase AC motor	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	7.5 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	

- with type of assignment 2 required	• for short-circuit protection of the main circuit	
# or short-incul protection of the auxiliary switch required mounting position  # available for incurrency of (incursion) in a 1/180° (relation, possible on vertical mounting surface; can be sitled forward and backward by 4-22.25 mm vertical mounting surface; can be sitled forward and backward by 4-22.25 mm vertical mounting surface; can be sitled forward and surface by 3-30 mm on the sitled specing of the	— with type of coordination 1 required	gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
mounting position mounting position salekower by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward and backward and backward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward and backward and backward and backward and backward by vf-2.25" on vertical mounting surface; can be filled forward and backward	<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)
Satisfing method   Series and snap-on mounting orto 35 mm DIN rail according to DIN EN 60715   Vea	Installation/ mounting/ dimensions	
* side-by-side mounting	mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Neight   Width   45 mm   6 mm   6 mm   73 mm	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
width depth 73 mm required spacing • with side-by-wide mounting — forwards — upwards — downwards — the side • for grounded parts — forwards — upwards — 10 mm  • for grounded parts — forwards — upwards — 10 mm — upwards — odwnwards • for live parts — forwards — 10 mm  • for live parts — forwards — 10 mm — upwards — the side — downwards • for live parts — forwards — upwards — 10 mm — upwards — upwards — upwards — the side — downwards • for live parts — forwards — upwards — upwards — upwards — upwards — upwards — the side — downwards — the side  Connection's Tormanis  type of electrical connection • for main current circuit • of an upiliary and control circuit • at contactor for auxiliary contacts • solid or stranded • inely stranded with core end processing • finely stranded with core en	side-by-side mounting	Yes
depth required spacing  - with side-by-side mounting  - forwards - Upwards - downwards - downwards - at the side - or grounded parts - upwards - downwards - downwards - downwards - upwards - upwards - downwards - downwards - downwards - downwards - downwards - downwards - forwards - forwards - downwards - downwards - forwards - downwards - at the side - formal content circuit - for audilary and control circuit - for fave for audilary contacts - solid - side of stranded - finely stranded with core end processing - finely stranded with core end p		
required spacing  • with side-by-side mounting  — forwards — upwards — downwards — 10 mm — downwards — 10 mm — of grounded parts — for grounded parts — for grounded parts — forwards — upwards — 10 mm — upwards — 10 mm — upwards — 10 mm — downwards — 10 mm — downwards — 10 mm — forwards — forwards — forwards — 10 mm — downwards — forwards — upwards — upwards — upwards — upwards — forwards — 10 mm — downwards — upwards — upwards — upwards — upwards — ownwards — 10 mm — ownwards — o		
with side-by-side mounting	·	73 mm
forwards upwards upwards 10 mm		
upwards	-	40 mm
downwards at the side at the side for grounded parts forwards upwards upwards at the side downwards at the side downwards for wards forwards downwards downwards downwards at the side downwards at the side forwards forwa		
- at the side   • for grounded parts   - for grounded parts   - for grounded parts   - to yowards   - at the side   - downwards   • for live parts   - downwards   - upwards   - for live parts   - where side   - downwards   - downwards   - upwards   - downwards   - downwards   - downwards   - downwards   - downwards   - at the side   - for man current circuit   • for auxiliary and control circuit   • for auxiliary and control circuit   • for auxiliary and control circuit   • for fine parts   • of man current circuit   • for auxiliary and control circuit   • for fine parts   • of magnet coil    Vippe of connectable conductor cross-sections for main contacts   • solid or stranded   • solid or stranded without core end processing   • finely stranded without core end processing   • for auxiliary contacts   • solid or stranded   • finely stranded without core end processing   • for auxiliary contacts   • for auxiliary cont	·	
for grounded parts		
- forwards - upwards - 10 mm -		
- upwards - at the side - 6 mm	·	10 mm
- at the side — downwards — 10 mm — 10		
- downwards • for live parts - forwards - upwards - downwards - do	·	
for live parts     forwards      for main current circuit     for auxiliary and control circuit     for auxiliary and control circuit     for auxiliary contacts     forwards     forw		
forwards upwards upwards downwards downwards at the side		
- downwards — 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 • of magnet coil Spring-type terminals • solid solid conductor cross-sections for main contacts • solid • solid or stranded 2x (0.5 4 mm²) • finely stranded with core end processing 2x (0.5 2.5 mm²)  connectable conductor cross-section for main contacts • solid 0.5 4 mm² • finely stranded without core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded without core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded without core end processing 0.5 2.5 mm² • finely stranded without core end processing 0.5 2.5 mm² • for auxiliary contacts  - solid or stranded - finely stranded with core end processing 2x (0.5 2.5 mm²) • for for survilary contacts  - solid or stranded - finely stranded with core end processing 2x (0.5 2.5 mm²) • for fawiliary contacts  - solid or stranded - finely stranded without core end processing 0.5 2.5 mm²) • for fawiliary contacts  - solid or stranded - finely stranded without core end processing 0.5 2.5 mm²) • for fawiliary contacts  - solid or stranded without core end processing 0.5 2.5 mm²) • for fawiliary contacts  - solid or stranded without core end processing 0.5 2.5 mm²) • for fawiliary contacts  - solid or stranded without core end processing 0.5 2.5 mm²)	•	10 mm
Connectations/ Terminals  type of electrical connection  • for main current circuit  • at contactor for auxiliary and control circuit  • at contactor for auxiliary contacts  • of magnet coil  type of connectable conductor cross-sections for main contacts  • solid or stranded  • finely stranded without core end processing  • for auxiliary contacts  • solid or stranded  — finely stranded without core end processing  • for auxiliary contacts  • for auxiliary contacts  • for finely stranded with core end processing  • for AWG cables for auxiliary contacts  • for or auxiliary contacts  • for or auxiliary contacts  • for auxiliary contacts  • for or auxiliary contacts  • for for auxiliary contacts  • for or auxiliary contacts  • for auxiliary contacts  • for auxiliary contacts  • for auxiliary contacts	— upwards	10 mm
Connections/ Terminals       type of electrical connection     spring-loaded terminals       • for main current 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       • solid or stranded     2x (0.5 4 mm²)       • finely stranded with 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     0.5 2.5 mm²       connectable conductor cross-section for auxiliary contacts     • solid or stranded       • finely stranded with core end processing     0.5 2.5 mm²       connectable conductor cross-section for auxiliary contacts     0.5 2.5 mm²       • finely stranded with core end processing     0.5 2.5 mm²       type of connectable conductor cross-sections     0.5 2.5 mm²       • for auxiliary contacts     2x (0.5 2.5 mm²)       - solid or stranded     2x (0.5 2.5 mm²)       - finely stranded with core end processing     0.5 2.5 mm²       • for auxiliary contacts     2x (0.5 2.5 mm²)	— downwards	10 mm
type of electrical connection  • for main current circuit  • for auxiliary and control circuit  • at contactor for auxiliary contacts  • of magnet coil  type of connectable conductor cross-sections for main contacts  • solid  • solid or stranded  • finely stranded with core end processing  • finely stranded without core end processing  • for auxiliary contacts  • for auxiliary contacts  • for AWG cables for auxiliary contacts  • for for main contacts  • for main contacts  • for main contacts  • for main contacts  • for auxiliary contacts  20 12  Safety related data  product function	— at the side	6 mm
• for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil  type of connectable conductor cross-sections for main contacts • solid • solid ostranded • finely stranded with core end processing • solid • stranded without core end processing • finely stranded with core end processing • solid • stranded • finely stranded without core end processing • finely stranded without core end processing • solid • stranded • finely stranded without core end processing • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • for auxiliary contacts  - solid or stranded - finely stranded with core end processing • for auxiliary contacts  - solid or stranded - finely stranded without core end processing • for auxiliary contacts  - solid or stranded - finely stranded without core end processing • for auxiliary contacts  - solid or stranded - finely stranded without core end processing - finely stranded without core end processing - for auxiliary contacts  - for auxiliary contacts  - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts	Connections/ Terminals	
• for auxiliary and control circuit     • at contactor for auxiliary contacts     • of magnet coil  type of connectable conductor cross-sections for main contacts     • solid     • solid or stranded     • finely stranded with core end processing     • connectable conductor cross-section for main contacts     • solid     • stranded     • finely stranded with core end processing     • finely stranded with core end processing     • finely stranded with core end processing     • finely stranded without core end processing     • finely stranded without core end processing     • finely stranded with core end processing     • finely stranded with core end processing     • finely stranded with core end processing     • finely stranded without core end processing     • finely stranded without core end processing     • for auxiliary contacts     • solid or stranded     — finely stranded with core end processing     • for auxiliary contacts  AWG number as coded connectable conductor cross section     • for for AWG cables for auxiliary contacts     • for main contacts     • for auxiliary contacts	type of electrical connection	
at contactor for auxiliary contacts of magnet coil  type of connectable conductor cross-sections for main contacts osolid solid or stranded of finely stranded without core end processing of finely stranded without core end processing of finely stranded with core end processing of finely stranded without core end processing of finely stranded without core end processing of finely stranded with core end processing of finely stranded with core end processing of finely stranded with core end processing of finely stranded without core end processing of or auxiliary contacts of finely stranded without core end processing of or auxiliary contacts of or auxiliary contacts of or auxiliary contacts of or auxiliary contacts of or finely stranded without core end processing of or AWG cables for auxiliary contacts of or auxiliary contacts	• for main current circuit	spring-loaded terminals
of magnet coil      type of connectable conductor cross-sections for main contacts         • solid             • solid             • solid or stranded             • finely stranded with core end processing             • finely stranded without core end processing             • finely stranded without core end processing             • (a.5	<ul> <li>for auxiliary and control circuit</li> </ul>	spring-loaded terminals
type of connectable conductor cross-sections for main contacts  • solid  • solid or stranded  • finely stranded with core end processing  • finely stranded without core end processing  connectable conductor cross-section for main contacts  • solid  • stranded  • finely stranded with core end processing  connectable conductor cross-section for main contacts  • solid  • stranded  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • finely stranded with core end processing  connectable conductor cross-section for auxiliary contacts  • solid or stranded  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • finely stranded without core end processing  • for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • for AWG cables for auxiliary contacts  • for finely stranded conductor cross-sections  • for AWG cables for auxiliary contacts  - for AWG number as coded connectable conductor cross-section  • for main contacts  • for auxiliary contacts  20 12  Safety related data  product function	<ul> <li>at contactor for auxiliary contacts</li> </ul>	Spring-type terminals
solid or stranded     solid or stranded     solid or stranded with core end processing     solid or stranded with core end processing     solid or stranded with core end processing     solid     onectable conductor cross-section for main contacts     solid     stranded     of inely stranded with core end processing     of inely stranded with core end processing     of inely stranded without core end processing     onectable conductor cross-section for auxiliary contacts     solid or stranded     of inely stranded with core end processing     of inely stranded without core end processing     of inely stranded without core end processing     of inely stranded without core end processing     of or auxiliary contacts     of or auxiliary contacts     of or auxiliary contacts     of new or auxiliary contacts     of or main contacts     of or main contacts     of or main contacts     of or auxiliary contacts     of or auxiliary contacts     of or auxiliary contacts     of or auxiliary contacts     ounce the conductor cross section     of or main contacts     of or auxiliary contacts     of or auxil	of magnet coil	Spring-type terminals
solid or stranded     finely stranded with core end processing     inely stranded without core end processing     inely stranded     inely stranded     inely stranded with core end processing     inely stranded without core end processing     inely stranded without core end processing     inely stranded with core end processing     inely stranded without core end processing     in for auxiliary contacts     inely stranded with core end processing     inely stranded with core end processing     infely stranded without	type of connectable conductor cross-sections for main contacts	
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>2x (0.5 2.5 mm²)</li> </ul> connectable conductor cross-section for main contacts <ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>finely stranded with core end processing</li> <li>2x (0.5 4 mm²)</li> <li>finely stranded without core end processing</li> <li>2x (0.5 2.5 mm²)</li> <li>for AWG cables for auxiliary contacts</li> <li>aux (20 12)</li> </ul> AWG number as coded connectable conductor cross section <ul> <li>for main contacts</li> <li>for main contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> </ul> Safety related data product function	• solid	
<ul> <li>finely stranded without core end processing</li> <li>connectable conductor cross-section for main contacts</li> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>of inely stranded without core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>2x (0,5 4 mm²)</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>finely stranded without core end processing</li> <li>for auxiliary contacts</li> <li>for AWG cables for auxiliary contacts</li> <li>for AWG cables for auxiliary contacts</li> <li>for main contacts</li> <li>for main contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>20 12</li> </ul> Safety related data product function	<ul> <li>solid or stranded</li> </ul>	
connectable conductor cross-section for main contacts  • solid  • stranded  • stranded  • finely stranded with core end processing  • finely stranded without core end processing  connectable conductor cross-section for auxiliary contacts  • solid or stranded  • finely stranded without core end processing  connectable conductor cross-section for auxiliary contacts  • solid or stranded  • finely stranded without core end processing  • finely stranded without core end processing  • finely stranded without core end processing  • for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • for auxiliary contacts  - solid or stranded  - finely stranded with core end processing  • for AWG cables for auxiliary contacts  • for AWG cables for auxiliary contacts  • for main contacts  • for main contacts  • for main contacts  • for auxiliary contacts  20 12  Safety related data  product function	•	
<ul> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>o.5 2.5 mm²</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>2x (0,5 4 mm²)</li> <li>finely stranded with core end processing</li> <li>2x (0,5 2.5 mm²)</li> <li>finely stranded without core end processing</li> <li>for AWG cables for auxiliary contacts</li> <li>for AWG cables for auxiliary contacts</li> <li>2x (20 12)</li> </ul> AWG number as coded connectable conductor cross section <ul> <li>for main contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>20 12</li> </ul> Safety related data product function		2x (0.5 2.5 mm²)
stranded     finely stranded with core end processing     finely stranded without core end processing     o.5 2.5 mm²  connectable conductor cross-section for auxiliary contacts     solid or stranded     o.5 4 mm²      finely stranded with core end processing     o.5 2.5 mm²      ofinely stranded with core end processing     o.5 2.5 mm²      finely stranded without core end processing     o.5 2.5 mm²  type of connectable conductor cross-sections     of auxiliary contacts		
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>0.5 2.5 mm²</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>for auxiliary contacts</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>for main contacts</li> <li>for main contacts</li> <li>for auxiliary contacts</li> <li>20 12</li> <li>for auxiliary contacts</li> <li>auxiliary contacts</li> <li>20 12</li> </ul> Safety related data product function		
• finely stranded without core end processing     connectable conductor cross-section for auxiliary contacts     • solid or stranded     • finely stranded with core end processing     • finely stranded without core end processing     • for auxiliary contacts     — solid or stranded     — finely stranded with core end processing     • for auxiliary contacts     — solid or stranded     — finely stranded with core end processing     — finely stranded without core end processing     — finely stranded without core end processing     — finely stranded without core end processing     — for AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section     • for main contacts     • for auxiliary contacts  Safety related data  product function		
connectable conductor cross-section for auxiliary contacts  • solid or stranded • finely stranded with core end processing • finely stranded without core end processing  • finely stranded without core end processing  type of connectable conductor cross-sections • for auxiliary contacts  — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — finely stranded without core end processing — for AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts  20 12  • for auxiliary contacts  20 12  Safety related data  product function		
solid or stranded     finely stranded with core end processing     finely stranded without core end processing     finely stranded without core end processing     for auxiliary contacts     — solid or stranded     — finely stranded with core end processing     — finely stranded without core end processing     — finely stranded without core end processing     — for AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section     • for auxiliary contacts     20 12  Safety related data  product function		U.O Z.O IIIIII
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>type of connectable conductor cross-sections</li> <li>for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables for auxiliary contacts</li> <li>for nain contacts</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>20 12</li> <li>for auxiliary contacts</li> <li>for auxiliary contacts</li> <li>20 12</li> </ul> Safety related data product function	-	0.5 4 mm²
finely stranded without core end processing  type of connectable conductor cross-sections         of or auxiliary contacts		
type of connectable conductor cross-sections  • for auxiliary contacts  — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing • for AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section  • for main contacts • for auxiliary contacts  20 12  • for auxiliary contacts  20 12  Safety related data  product function		
<ul> <li>for auxiliary contacts         — solid or stranded         — finely stranded with core end processing         — finely stranded without core end processing         — finely stranded without core end processing         — for AWG cables for auxiliary contacts         — for auxiliary contacts         — for main contacts         — for auxiliary contacts         — for auxiliary contacts         — 20 12         — for auxiliary contacts         — solid or stranded         — x (0.5 4 mm²)         — x (0.5 2.5 mm²)         — x (20 12)         — x (20</li></ul>	·	
- solid or stranded - finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing - for AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section - for main contacts - for auxiliary contacts  20 12  Safety related data  product function		
finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing for AWG cables for auxiliary contacts for AWG number as coded connectable conductor cross section for main contacts for auxiliary contacts for auxiliar	•	2x (0,5 4 mm²)
finely stranded without core end processing  • for AWG cables for auxiliary contacts  2x (20 12)  AWG number as coded connectable conductor cross section  • for main contacts  • for auxiliary contacts  20 12  • for auxiliary contacts  20 12  Safety related data  product function		
e for main contacts  e for auxiliary contacts  20 12  e for auxiliary contacts  20 12  Safety related data  product function		
• for auxiliary contacts  20 12  Safety related data  product function	AWG number as coded connectable conductor cross	
• for auxiliary contacts  20 12  Safety related data  product function	• for main contacts	20 12
Safety related data product function	for auxiliary contacts	
	Safety related data	
• mirror contact according to IEC 60947-4-1 Yes; with 3RH29	product function	
•	<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes; with 3RH29

B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	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	
<ul> <li>safety-related switching OFF</li> </ul>	Yes
Cartificated approvals	

Certificates/ approvals

## **General Product Approval**



Confirmation





<u>KC</u>



**Functional EMC** Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

## Marine / Shipping













Marine / Shipping

other

Railway

**Environmental Con-**

**Environment** 



Confirmation



Confirmation

Vibration and Shock

**firmations** 

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=3RT2016-2AB01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-2AB01

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-2AB01

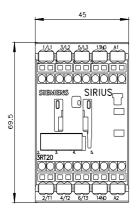
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

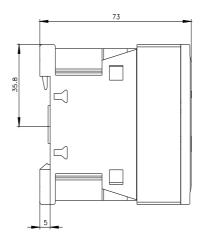
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2016-2AB01&lang=en

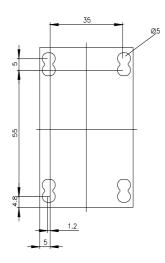
Characteristic: Tripping characteristics, I2t, Let-through current

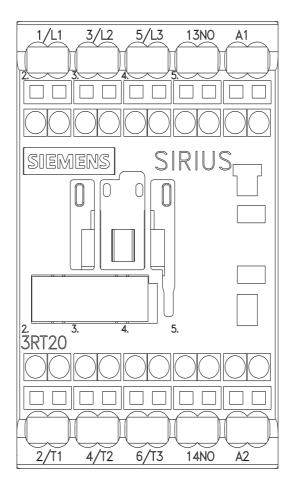
https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-2AB01/char

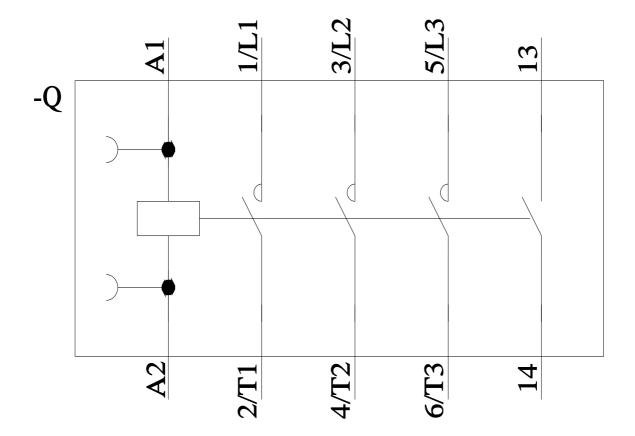
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-2AB01&objecttype=14&gridview=view1











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