SIEMENS

Data sheet 3RT2016-2AV02



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 400 V AC, 50/60 Hz, auxiliary contacts: 1 NC, 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	
 at AC in hot operating state 	0.9 W
 at AC in hot operating state per pole 	0.3 W
without load current share typical	1.1 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
of main circuit rated value	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	30 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	
Weight	0.251 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 %

Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	39.6 kg
Global Warming Potential [CO2 eq] during manufacturing	1.18 kg
Global Warming Potential [CO2 eq] during managed mining Global Warming Potential [CO2 eq] during operation	38.5 kg
Global Warming Potential [CO2 eq] after end of life	-0.155 kg
Main circuit	0.100 Ng
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	•
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	22 A
 at AC-1 up to 690 V at ambient temperature 40 °C rated 	22 A
value	
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-3	0.0
— at 400 V rated value	9 A
— at 500 V rated value— at 690 V rated value	7.7 A 6.7 A
at AC-3e	U.1 A
— 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	
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 roted value.	20.4
— at 24 V rated value	20 A
— at 60 V rated value — at 110 V rated value	20 A 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

 with 3 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	20 A
— at 220 V rated value	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 60 V rated value	0.5 A
— at 110 V rated value	0.15 A
• with 2 current paths in series at DC-3 at DC-5	0.1071
— at 24 V rated value	20 A
— 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	0.00 A
— 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-2 at 400 V rated value	4 kW
• 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	5.5 kW
operating power for approx. 200000 operating cycles at AC-	
4	0.111
at 400 V rated value	2 kW
at 690 V rated value	2.5 kW
operating apparent power at AC-6a	0.174
• up to 230 V for current peak value n=20 rated value	2 kVA
up to 400 V for current peak value n=20 rated value	3.6 kVA
up to 500 V for current peak value n=20 rated value	4.6 kVA
• up to 690 V for current peak value n=20 rated value	5.9 kVA
operating apparent power at AC-6a	1.2 14/4
up to 230 V for current peak value n=30 rated value	1.3 kVA
up to 400 V for current peak value n=30 rated value	2.4 kVA
up to 500 V for current peak value n=30 rated value	3.1 kVA
up to 690 V for current peak value n=30 rated value Short time withstand surrent in cold energing state up to	4 kVA
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	155 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	111 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	86 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	66 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	55 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	10 000 1/h
operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
 at AC-3 maximum 	750 1/h

a at AC 2a mayimum	750 4/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	400 V
at 60 Hz rated value	400 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 NC 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
at 500 V rated value	2 A
at 690 V rated value	1A
operational current at DC-12	
at 24 V rated value	10 A
at 24 V rated value at 48 V rated value	6 A
at 40 V rated value at 60 V rated value	6 A
at 60 V rated value at 110 V rated value	3 A
at 110 V rated value at 125 V rated value	2 A
at 125 V rated value at 220 V rated value	1.4
	0.15 A
at 600 V rated value operational current at DC-13	υ.10 Λ
operational current at DC-13	10.4
at 24 V rated value at 48 V rated value	10 A 2 A
at 48 V rated value	2 A
at 60 V rated value at 110 V rated value	
at 110 V rated valueat 125 V rated value	1.4
at 125 V rated value at 220 V rated value	0.9 A
	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	70.4
• at 480 V rated value	7.6 A
at 600 V rated value	9 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	

- all 220V raised value		2.20
Fig. 1	— at 110/120 V rated value	0.33 hp
all 200209 V raided value all 200209 V raided value all 400480 V raided value all 400480 V raided value all 575000 V risided value vill value of insite vill value of coordination of the main circuit vill value of coordination 1 required vill value of coordinations of coordinations vill value of coordinations vill value of coordinations vill		1 hp
	• for 3-phase AC motor	
	— at 200/208 V rated value	2 hp
	 at 220/230 V rated value 	3 hp
contact rating of auxiliary contacts according to UL A600 / O600 Soft scircul protection design of the fuse link	— at 460/480 V rated value	5 hp
Short-circul protection design of the fuse link	— at 575/600 V rated value	7.5 hp
	contact rating of auxiliary contacts according to UL	A600 / Q600
• for short-circuit protection of the main circuit — with type of assignment? required — with type of assignment? required — with type of assignment? required — for short-circuit protection of the auxiliary switch required Description ### Activation of the auxiliary switch required ### Activation of th	Short-circuit protection	
	design of the fuse link	
with type of assignment 2 required 6 for short-circuit protection of the auxiliary switch required installation mounting formensions	 for short-circuit protection of the main circuit 	
	 — with type of coordination 1 required 	gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
	— with type of assignment 2 required	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
#.180* reation posible on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and backward by 4+.22.5* on vertical mounting surface; can be tilted forward and surface; and surface; and surface; can be tilted forward and surface; a	• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
Seckward by +/- 225° on vertical mounting surface felight 70 mm width 45 mm deight 73 mm width 45 mm deight 73 mm ewith side-by-side mounting - (mowards - (mowards 10 mm - downwards 10 mm - (or grounded parts - (mowards - (or grounded parts 10 mm - (or grounded parts 10 mm - (or grounded parts 10 mm - (or low pards 10 mm - (or low pards 10 mm - (or low parts 5 mm - (or name contacts 5 pring-loaded terminals - (or auxiliary and control circuit 5 pring-loaded terminals - (or auxiliary and control circuit 5 pring-loaded terminals - (or main contacts) 2 (0.5 2	Installation/ mounting/ dimensions	
fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 holght 70 mm with 45 mm depth 73 mm required spacing ************************************	mounting position	
height 70 mm width 45 mm depth 73 mm required spacing ************************************		, o
width 45 mm depth 73 mm required spacing • with side-by-side mounting - forwards 10 mm - upwards 10 mm - downwards 10 mm - if or grounded parts 10 mm - forwards 10 mm - upwards 10 mm - downwards 10 mm - for like parts 10 mm - for vards 10 mm - forwards 10 mm - for wards 10 mm - downwards 10 mm - for vards 10 mm - forwards 10 mm - for wards 5 mm - for main current circuit spring-loaded terminals • for main current circuit spring-loaded terminals • for main current circuit spring-loaded terminals • for main current circuit spring-load	<u> </u>	
depth		
required spacing with side-by-side mounting - forwards - upwards - downwards - at the side - for grounded pants - forwards - upwards - forwards - for main current circuit - for auxiliary and control circuit - for auxiliary contacts - formain contacts - formain contacts - formain contacts - solid - solid or stranded - finely stranded with core end processing - for AWG cables for main contacts - solid - stranded - 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 with core end processing - finely stranded without core end processing - finely stranded with core		
	·	73 mm
forwards		
- upwards	-	
- downwards - at the side • for grounded parts - forwards - upwards - at the side • for minimum many many many many many many many man		
• for grounded parts - forwards - upwards - upwards - at the side - downwards 10 mm for live parts - forwards 10 mm • for live parts - forwards 10 mm • for live parts - forwards - upwards 10 mm • forwards - upwards 10 mm - upwards 10 mm - upwards - downwards 10 mm - at the side - downwards 10 mm - the side - downwards - to mm - upwards - to mm - upwards - to mm - to mm - to mm - to main current circuit • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil - solid - solid - solid - solid or stranded - finely stranded with core end processing - for AWG cables for main contacts • solid • stranded • innely stranded without core end processing • for AWG cables for main contacts • solid • stranded • innely stranded with core end processing • for inely stranded with ore end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded with core end processi	·	
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — to rowards — to many the side — downwards • for live parts — forwards — upwards — upwards — upwards — upwards — downwards — to mm — downwards — to mm — downwards — to mm — of many the side — for main current circuit — for rawiliary and control circuit — of or auxiliary and control circuit — of majnet coil — to for auxiliary and control crouss—sections • for main contacts — solid — solid or stranded — finely stranded with core end processing — finely stranded with core end processing • for AWG cables for main contacts — solid • stranded — finely stranded with core end processing • for fawG cables for main contacts — solid • stranded • finely stranded with core end processing • for fawG cables for main contacts — solid • stranded • finely stranded with core end processing • for fawG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded with core end processing • finely		
- forwards	— at the side	0 mm
- upwards - at the side - downwards 10 mm for live parts - forwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection for main current circuit at contactor for auxiliary contacts of magnet coil - solid - solid or stranded - finely stranded with core end processing finely stranded with core end processing - solid - stranded - finely stranded with core end processing - solid - stranded - solid - stranded - solid - stranded - finely stranded with core end processing - stranded - str	 for grounded parts 	
- at the side — downwards — 10 mm • for live parts — forwards — 10 mm — upwards — 10 mm — upwards — 10 mm — downwards — 10 mm — at the side — 6 mm Connections/ Torninals 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-loaded terminals • of magnet coil — spring-type terminals • of magnet coil — spring-type terminals • for main contacts — solid — solid — 2x (0,5 4 mm²) — finely stranded with core end processing — 2x (0,5 2,5 mm²) — finely stranded without core end processing — 2x (20 12) connectable conductor cross-section for main contacts • solid — solid — 0,5 4 mm² • finely stranded with core end processing — 5.5 2,5 mm² • for AWG cables for main contacts • solid — solid — 0,5 4 mm² • finely stranded with core end processing — 5.5 2,5 mm² • finely stranded with core end processing — 5.5 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 — 6.5 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 • 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	— forwards	10 mm
− downwards • for live parts − forwards − upwards − upwards − downwards − downwards − at the side − domnections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil − solid − solid or stranded − finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • for finely stranded with core end processing • finely stranded without core end processing • finely stranded withou	— upwards	10 mm
for live parts — forwards — upwards — upwards — downwards — at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit • for main current circuit • at contactor for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil	— at the side	6 mm
- forwards	— downwards	10 mm
- upwards - 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 • for main contacts • for main contacts • solid 2x (0.5 4 mm²) - solid or stranded with core end processing 2x (0.5 2.5 mm²) • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing	• for live parts	
- downwards - at the side Connections/ Terminals 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 • for AWC cables for main contacts • stranded • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid • stranded • stranded • finely stranded with core end processing • finely stranded without core end processing • solid • stranded • finely stranded without core end processing	— forwards	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 • stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing	— upwards	10 mm
type of electrical connection • for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts • of magnet coil Spring-type terminals • for main contacts • for main contacts • for main contacts - solid - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for AWG cables for main contacts • solid • 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 • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing	— downwards	10 mm
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coll type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • 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 • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing	— at the side	6 mm
 for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Spring-type terminals of magnet coil Spring-type terminals for main contacts for main contacts solid solid or stranded finely stranded with core end processing for AWG cables for main contacts solid of prawing tranded with core end processing for AWG cables for main contacts solid stranded finely stranded with core end processing finely stranded with core end processing of stranded finely stranded with core end processing of stranded finely stranded without core end processing of inely stranded without core end processing finely stranded without core end processing of inely stranded without core end processing of inely stranded with core end processing finely stranded with core end processing of inely stranded with core end processing finely stranded with core end processing of inely stranded without core end processing<td>Connections/ Terminals</td><td></td>	Connections/ Terminals	
 for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Spring-type terminals for main contacts solid solid or stranded finely stranded with core end processing for A Hum² solid 10.5 4 mm² 2x (0.5 4 mm²) x (0.5 2.5 mm²) x (0.5 4 mm²) x (0.5 2.5 mm²) x (0.5 4 mm²) x (0.5 2.5 mm²) x (0.5	type of electrical connection	
 at contactor for auxiliary contacts of magnet coil Spring-type 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 — for AWG cables for main contacts • solid • solid • solid • stranded • stranded • finely stranded with 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 • solid or stranded • solid or stranded • solid or stranded • finely stranded with core end processing • finely stranded without core end proces	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 • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • 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 • solid or stranded • finely stranded with core end processing • finely stranded without core end processing	 for auxiliary and control circuit 	spring-loaded terminals
type of connectable conductor cross-sections • for main contacts — solid — solid	at contactor for auxiliary contacts	Spring-type terminals
type of connectable conductor cross-sections	of magnet coil	Spring-type terminals
- solid 2x (0.5 4 mm²) - 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) - for AWG cables for main contacts 2x (20 12) connectable conductor cross-section for main contacts • solid • stranded • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without 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 • solid or 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	type of connectable conductor cross-sections	
- 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 main contacts • solid • stranded • 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 • solid • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing	• for main contacts	
 — finely stranded with core end processing — finely stranded without core end processing • for AWG cables 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 without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing 	— solid	2x (0.5 4 mm²)
 — finely stranded with core end processing — finely stranded without core end processing • for AWG cables 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 without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing 	— solid or stranded	2x (0,5 4 mm²)
finely stranded without core end processing • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing	 finely stranded with core end processing 	
 for AWG cables for main contacts connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing finely connectable conductor cross-sections 		
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 with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely connectable conductor cross-sections	•	
 stranded finely stranded with core end processing finely stranded without core end processing 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 finely stranded without core end processing 2.5 mm² finely connectable conductor cross-sections 	connectable conductor cross-section for main contacts	
 stranded finely stranded with core end processing finely stranded without core end processing 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 finely stranded without core end processing 2.5 mm² finely connectable conductor cross-sections 	• solid	0.5 4 mm²
 finely stranded with core end processing 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 finely stranded without core end processing 2.5 mm² finely stranded without core end processing 2.5 mm² 	stranded	
• 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 • finely stranded without core end processing type of connectable conductor cross-sections 0.5 2.5 mm² 0.5 2.5 mm²		
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		
 solid or stranded finely stranded with core end processing finely stranded without core end processing type of connectable conductor cross-sections 0.5 2.5 mm² 0.5 2.5 mm²	· · · · · ·	
 finely stranded with core end processing finely stranded without core end processing type of connectable conductor cross-sections 		0.5 4 mm²
• finely stranded without core end processing 0.5 2.5 mm² type of connectable conductor cross-sections		
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 without core end processing 	2x (0.5 2.5 mm²)
 for AWG cables for auxiliary contacts 	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	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	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	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
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	Type A
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Approvals Certificates	

General Product Approval







Confirmation



<u>KC</u>

General Product Approval

EMV

Functional Saftey

Test Certificates

Marine / Shipping





Type Examination Certificate Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping







<u>ate</u>





Miscellaneous

other

other

Railway

Special Test Certific-

Environment

<u>Confirmation</u> <u>Confirmation</u>



Environmental Confirmations

Further information

Information on the packaging

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

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2016-2AV02

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-2AV02

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-2AV02

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

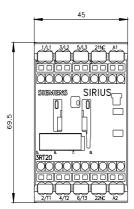
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2016-2AV02&lang=en

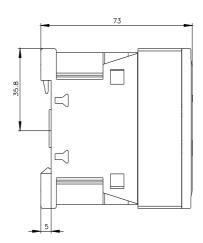
Characteristic: Tripping characteristics, I2t, Let-through current

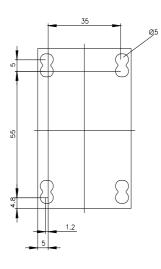
https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-2AV02/char

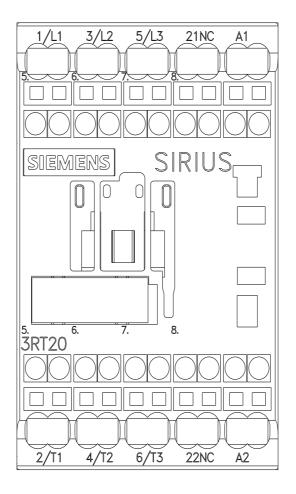
Further characteristics (e.g. electrical endurance, switching frequency)

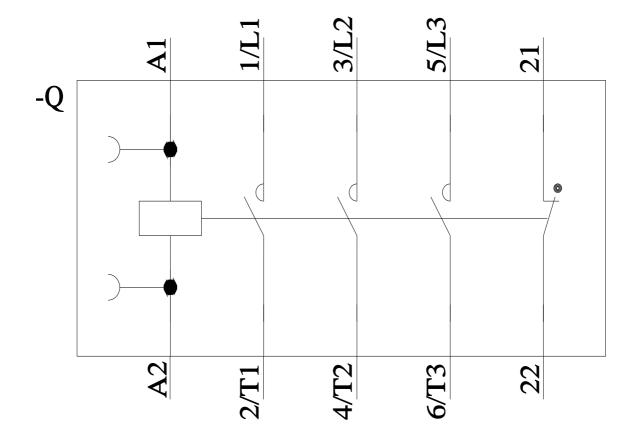
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-2AV02&objecttype=14&gridview=view1











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