SIEMENS

Data sheet 3RT2017-1AV02



Power contactor, AC-3 12 A, 5.5 kW / 400 V 1 NC, 400 V AC, 50 / 60 Hz 3-pole, Size S00 screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S00
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	1.5 W
 at AC in hot operating state per pole 	0.5 W
 without load current share typical 	5.7 W
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
 of main circuit rated value 	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7,3g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (switching cycles)	
 of contactor typical 	30 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

Main circuit	
number of poles for main current circuit	3
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 value 	22 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	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 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 value operational current for approx. 200000 operating	4 mm ²
cycles at AC-4	
at 400 V rated value	4.1 A
at 690 V rated value	3.3 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
	0.0 A
with 2 current paths in series at DC-1 at 24 V rated value.	20.4
— at 24 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.7 A
 with 3 current paths in series at DC-1 	

— at 24 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1 A
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	0.1 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	0.35 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	1.5 A
— at 440 V rated value	0.2 A
— at 600 V rated value	0.2 A
operating power	
at AC-2 at 400 V rated value	5.5 kW
• at AC-3	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— 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
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
operating power for approx. 200000 operating cycles	
at AC-4	
 at 400 V rated value 	2 kW
 at 690 V rated value 	2.5 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	2.8 kVA
 up to 400 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 690 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
• 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	
 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 	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 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
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 cumply voltage at AC	
control supply voltage at AC	400 V
• 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	37 VA
● at 60 Hz	33 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.8
● at 60 Hz	0.75
apparent holding power of magnet coil at AC	
● at 50 Hz	5.7 VA
● at 60 Hz	4.4 VA
inductive power factor with the holding power of the	
coil	
● at 50 Hz	0.25
● at 60 Hz	0.25
closing delay	
• at AC	9 35 ms
opening delay	
• at AC	7 13 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	1
instantaneous contact	40.4
operational current at AC-12 maximum	10 A
operational current at AC-15	40.4
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	1 A
operational current at DC-12	40.4
• 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 at 125 V rated value	3 A
at 125 V rated value at 220 V rated value	2 A
at 220 V rated value at 600 V rated value	1 A
at 600 V rated value approximately properties at DC 42	0.15 A
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 at 60 V rated value	2 A 2 A
at 60 V rated value at 110 V rated value	
at 110 V rated value at 125 V rated value	1 A 0.9 A
at 125 V rated valueat 220 V rated value	0.9 A 0.3 A
at 600 V rated value	0.3 A 0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	Tradity Switching per 100 million (17 V, 1 mz)
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	11 A
at 400 V rated value 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	2 119
♥ IUI 3-DHASE MC IIIUUI	

at 200/230 V rised value at 460/480 V rated value at 575/000 V rised value with type of coordination 1 required with type of 200 (890V,100KA), alx 20A (890V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V, 100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), BS88: 35A (415V,80KA) gG: 20A (890V,100KA), alx 20A (690V,100KA), alx		
at 490/480 V related value		
contact rating of auxillary contacts according to UL Short-circuit protection design of the fuse link		·
Short-circuit protection design of the fuse link - for short-circuit protection of the main circuit - with type of coordination 1 required gis 20A (690V,100kA), alb: 20A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (690V,100kA), BS88: 35A (415V,80kA) gis 20A (690V,100kA), alb: 16A (69		·
design of the fuse link * for short-circuit protection of the main circuit		A600 / Q600
• for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required — sfor short-circuit protection of the auxiliary switch • for short-circuit protection of the auxiliary contacts • sided or stranded • for short-circuit contacts	Short-circuit protection	
with type of coordination 1 required with type of assignment 2 required with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit switch and short switch an	•	
- with type of assignment 2 required 80kA) * for short-circuit protection of the auxiliary switch required required mounting position mounting position fastening method * side-by-side mounting height * side-by-side mounting * with side-by-side mounting - forwards - upwards - at the side - at the side - downwards - or formards - upwards - or formards - upwards - or formards - upwards - or forwards - or forwards - or forwards - upwards - or forwards - or forwards - or forwards - upwards - or forwards		
For short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA)		
required final flation/mounting/ dimensions mounting position		
mounting position +i150" rotation possible on vertical mounting surface; can be tilted forward and backward by +i-22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 yes		gG: 10 A (500 V, 1 kA)
forward and backward by 4+ 22.5° on vertical mounting surface side-by-side mounting side-by-side mounting 4	Installation/ mounting/ dimensions	
side-by-side mounting height width depth 73 mm required spacing with side-by-side mounting —forwards — upwards — upwards — of more mounting — for grounded parts — for grounded parts — of more mounting — at the side — downwards — upwards — 10 mm — for grounded parts — forwards — upwards — 10 mm — of mine mounting — of mine — of mine mounting — of mine — of or main current circuit — of or auxiliary and control circuit — of or main currents — of main currents — of main current circuit — of or main currents — solid — solid or stranded — finely stranded with core end processing — at AWG cables for main contacts — solid — solid or stranded — finely stranded with core end processing — solid or stranded — solid or stranded — solid or stranded — solid or stranded — solid or strand	mounting position	
height width 45 mm depth 73 mm required spacing • with side-by-side mounting - forwards 10 mm - downwards 10 mm - downwards 10 mm • for grounded parts - forwards 10 mm • for grounded parts - forwards 10 mm • for grounded parts - forwards 10 mm • for grounded parts - downwards 10 mm • for live parts - forwards 10 mm • for wards 10 mm • for auxiliary and control circuit soft auxiliary and control circuit soft main contacts • of magnet coil Screw-type terminals • screw-type terminals • type of connectable conductor cross-sections • for main contacts - solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75	fastening method	
width depth 73 mm required spacing with side-by-side mounting	side-by-side mounting	Yes
required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — to mm — for grounded parts — forwards — upwards — upwards — to mm — at the side — downwards — to mm — at the side — downwards — for live parts — forwards — to mm — downwards — to mm — upwards — to mm — upwards — to mm —	height	58 mm
required spacing with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — 10 mm — upwards — 10 mm — upwards — the side — downwards — 10 mm — upwards — the side — downwards — 10 mm — upwards — forwards — forwards — forwards — forwards — 10 mm — downwards — 10 mm — downwards — upwards — 10 mm — downwards — upwards — 10 mm — downwards — upwards — 10 mm — downwards — to fire parts — forwards — upwards — upwards — to mm — downwards — to mm — at the side Connections/ Terminals Type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit • a can contact 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 • at AWG cables for main contacts • solid • stranded • finely stranded with core end processing	width	45 mm
with side-by-side mounting - forwards - upwards - downwards - at the side of grounded parts - forwards - upwards - at the side of or grounded parts - forwards - upwards - at the side - downwards - at the side - downwards - for live parts - for live parts - for live parts - for live parts - forwards - upwards - upwards - upwards - upwards - upwards - upwards - downwards - downwards - at the side - domnoutions/Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts - at contactor for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing • stranded • finely stranded with core end processing type of connectable conductor cross-section for auxillary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections	depth	73 mm
forwards upwards upwards downwards at the side downwards at the side downwards forwards forwards upwards upwards upwards upwards downwards upwards downwards downwards downwards downwards upwards upwards upwards upwards downwards upwards downwards upwards downwards upwards downwards at the side downwards at the side downwards downwards at the side		
- upwards - downwards - 10 mm		
- downwards - at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards - downwards - for live parts - forwards - upwards - forwards - upwards - forwards - upwards - downwards - upwards - downwards - for auxiliary and control circuit - for auxiliary and control circuit - for auxiliary and control circuit - for auxiliary contacts - of magnet coil - solid - solid or stranded - finely stranded with core end processing - stranded	— forwards	10 mm
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards - forwards - forwards - forwards - forwards - forwards - upwards - upwards - upwards - upwards - downwards - downwards - at the side - formal current circuit • for anain current circuit • for anain current circuit • for anain current circuit • for main current circuit • at contactor for auxiliary contacts • for main contacts • for main contacts - solid - solid or stranded - finely stranded with core end processing • at A LWG cables for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections	·	
• for grounded parts	— downwards	10 mm
- forwards 10 mm 1		0 mm
- upwards - at the side - downwards • for live parts - forwards - upwards - upwards - upwards - upwards - downwards - at the side - downwards - upwards - the side - 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 • at AWG cables for main contacts - solid • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • 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 • solid or 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 • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections		
- at the side	— forwards	
- downwards • for live parts - forwards - upwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil - solid - solid or stranded - finely stranded with core end processing • forlid or stranded • finely stranded with core end processing • solid or stranded • finely 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 type of connectable conductor cross-sections	— upwards	10 mm
• for live parts — forwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary and control circuit • 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 • finely stranded with core end processing • solid or 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 • solid ostranded • finely stranded with core end processing • solid ostranded • finely stranded with core end processing • solid ostranded • finely stranded with core end processing • solid ostranded • finely stranded with core end processing • solid ostranded • finely stranded with core end processing • solid ostranded • finely stranded with core end processing • solid ostranded • finely stranded with core end processing • solid or 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 • solid or 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 • solid or 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 • solid or stranded • finely stranded with core end processing	— at the side	6 mm
- forwards - upwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxillary and control circuit • for auxillary and control circuit • for main current circuit • for main 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 • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid o.5 4 mm² • finely stranded with core end processing • solid o.5 2.5 mm² connectable conductor cross-section for auxiliary contacts • solid or 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 • solid or 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 • solid or 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 • solid or 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 • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded		10 mm
- upwards - 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 • 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 • solid • stranded • finely stranded with core end processing • solid of stranded • finely stranded with core end processing • solid of stranded • finely stranded with core end processing • solid of stranded • finely stranded with core end processing • solid of 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 • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections	•	
- 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 ostranded - finely stranded with core end processing • stranded • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid ostranded - solid		
Type of electrical connection of or main current circuit of or auxiliary and control circuit of magnet coil type of connectable conductor cross-sections of main contacts o		
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of main contacts • for main contacts • for main contacts • of main contacts • rolid - solid - solid - solid - solid or stranded - finely stranded with core end processing • stranded • stranded • stranded • stranded • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections		
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 • stranded • stranded • stranded • finely stranded with core end processing • solid or stranded • stranded • stranded • stranded • finely stranded with core end processing • solid • solid • solid • stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • 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 • solid or 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 • solid or 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 • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing		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 or stranded — finely stranded with core end processing • stranded • stranded • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • finely stranded with core end processing • solid or 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 • solid or 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 • solid or 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 • solid or stranded • finely stranded with core end processing • solid or stranded		
• 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 • 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 • solid or 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 • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections		
 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 at AWG cables for main contacts — solid — finely stranded with core end processing at AWG cables for main contacts at AWG cables for main contacts at a finely stranded with core end processing at AWG cables for main contacts at AWG cables for main co		**
• of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • solid • 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 • solid or 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 type of connectable conductor cross-sections		**
type of connectable conductor cross-sections • for main contacts — solid — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • stranded • stranded • stranded • stranded • sinely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections	•	
 for main contacts — solid — solid or stranded — solid or stranded — finely stranded with core end processing at AWG cables for main contacts at AWG cables for main contacts solid stranded stranded finely stranded with core end processing 2x (20 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (20 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14), 2x 12 connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded conductor cross-sections 		Screw-type terminals
 — solid — solid or stranded — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • solid or stran		
 — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid or stranded with core end processing • finely stranded with core end processing • solid or stranded • solid or stranded with core end processing • solid or stranded on stranded on		Ov (0.5 4.5 mm²) Ov (0.75 0.5 mm²) Ov (
 — finely stranded with core end processing ♦ at AWG cables for main contacts Connectable conductor cross-section for main contacts ♦ solid ♦ stranded ♦ finely stranded with core end processing Connectable conductor cross-section for auxiliary contacts ♦ solid or stranded ♦ solid or stranded ♦ finely stranded with core end processing O.5 4 mm² O.5 2.5 mm² O.5 4 mm² O.5 2.5 mm² 		
 at AWG cables for main contacts connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing 0.5 4 mm² connectable conductor cross-section for auxiliary contacts finely stranded with core end processing 0.5 4 mm² finely stranded with core end processing 0.5 2.5 mm² 		
connectable conductor cross-section for main contacts • solid • stranded • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing 0.5 4 mm² 0.5 4 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections		
ontacts output stranded output stranded with core end processing output connectable conductor cross-section for auxiliary contacts output stranded output st		ZX (ZU 16), ZX (18 14), ZX 1Z
stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing type of connectable conductor cross-sections 0.5 4 mm² 0.5 4 mm² 0.5 2.5 mm² type of connectable conductor cross-sections	contacts	
• finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with 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 type of connectable conductor cross-sections 0.5 4 mm² 0.5 2.5 mm²		
 ◆ solid or stranded ◆ finely stranded with core end processing type of connectable conductor cross-sections 	connectable conductor cross-section for auxiliary	
● finely stranded with core end processing type of connectable conductor cross-sections 0.5 2.5 mm²		0.5 4 mm ²
type of connectable conductor cross-sections		
		0.5 2.5 IIIIIF
	for auxiliary contacts	

— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 at AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14), 2x 12
AWG number as coded connectable conductor cross section	
 for main contacts 	20 12
 for auxiliary contacts 	20 12
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 y
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
 safety-related switching OFF 	Yes

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>



Functional
EMC Safety/Safety of Declaration of Conformity Test Certificates
Machinery



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













Marine / Shipping

other



Confirmation



Confirmation

Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2017-1AV02

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1AV02

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

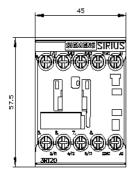
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AV02

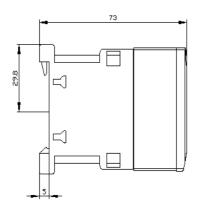
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1AV02&lang=en

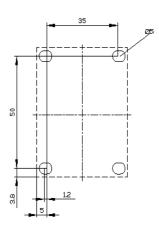
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AV02/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-1AV02&objecttype=14&gridview=view1







last modified:

6/2/2022