SIEMENS

Data sheet

3RT2025-1AP00



power contactor, AC-3e/AC-3, 17 A, 7.5 kW / 400 V, 3-pole, 230 V AC, 50 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	SO
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 	1.8 W
 at AC in hot operating state per pole 	0.6 W
 without load current share typical 	1.9 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	7,5g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,8g / 5 ms, 7,4g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Environmental footprint	

Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	74.2 kg
Global Warming Potential [CO2 eq] lotal Global Warming Potential [CO2 eq] during manufacturing	14.2 kg
Global Warming Potential [CO2 eq] during manufacturing Global Warming Potential [CO2 eq] during operation	72.4 kg
Global Warming Potential [CO2 eq] after end of life	-0.117 kg
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 	40 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	40 A
— up to 690 V at ambient temperature 60 °C rated value	35 A
• at AC-3	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
— at 690 V rated value	13 A
• at AC-3e	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
- at 690 V rated value	13 A
at AC-4 at 400 V rated value	15.5 A
at AC-5a up to 690 V rated value	35.2 A
• at AC-5b up to 400 V rated value	14.1 A
 at AC-6a up to 230 V for current peak value n=20 rated value 	11.4 A
	11.4 A 11.4 A
 — up to 400 V for current peak value n=20 rated value — up to 500 V for current peak value n=20 rated value 	11.4 A
— up to 690 V for current peak value n=20 rated value	11.3 A
• at AC-6a	
up to 230 V for current peak value n=30 rated value	7.6 A
— up to 400 V for current peak value n=30 rated value	7.6 A
— up to 500 V for current peak value n=30 rated value	7.6 A
— up to 690 V for current peak value n=30 rated value	7.6 A
minimum cross-section in main circuit at maximum AC-1 rated	10 mm ²
value operational current for approx. 200000 operating cycles at	
AC-4	
at 400 V rated value	7.7 A
at 690 V rated value	7.7 A
operational current	
at 1 current path at DC-1	25.4
- at 24 V rated value	35 A
— at 60 V rated value — at 110 V rated value	20 A 4.5 A
— at 110 V rated value — at 220 V rated value	4.5 A 1 A
— at 440 V rated value	0.4 A
— at 440 V rated value	0.25 A
with 2 current paths in series at DC-1	
- at 24 V rated value	35 A
— at 60 V rated value	35 A 35 A
— at 100 V rated value	35 A
— at 220 V rated value	5 A
— at 440 V rated value	1A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1	
· · · · · · · · · · · · · · · · · · ·	

— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
• at AC-3	
— at 230 V rated value	4 kW
— at 400 V rated value	7.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
• at AC-3e	
— at 230 V rated value	4 kW
— at 400 V rated value	7.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
operating power for approx. 200000 operating cycles at AC- 4	
at 400 V rated value	3.5 kW
at 690 V rated value	6 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	4.5 kVA
 up to 400 V for current peak value n=20 rated value 	7.8 KVA
 up to 500 V for current peak value n=20 rated value 	9.9 kVA
 up to 690 V for current peak value n=20 rated value 	13.6 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	3 kVA
 up to 400 V for current peak value n=30 rated value 	5.2 kVA
 up to 500 V for current peak value n=30 rated value 	6.6 kVA
 up to 690 V for current peak value n=30 rated value 	9.1 kVA
short-time withstand current in cold operating state up to	
40 °C	
Imited to 1 s switching at zero current maximum	225 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 5 s switching at zero current maximum	225 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 10 s switching at zero current maximum	189 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 30 s switching at zero current maximum	140 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 60 s switching at zero current maximum	115 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	5 000 1/b
at AC	5 000 1/h
operating frequency	

operating frequency

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 at AC-1 maximum 	1 000 1/h
• at AC-2 maximum	1 000 1/h
• at AC-3 maximum	1 000 1/h
• at AC-3e maximum	1 000 1/h
• at AC-4 maximum	300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
at 50 Hz rated value	230 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	65 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.82
 apparent holding power of magnet coil at AC at 50 Hz 	7.6 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
closing delay	
• at AC	8 40 ms
opening delay	
• at AC	4 16 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	1
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
• at 500 V rated value	2 A
• at 690 V rated value	1 A
operational current at DC-12	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
operational current at DC-13	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
● at 110 V rated value	1 A
• at 125 V rated value	0.9 A
• at 220 V rated value	0.3 A
• at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	14 A
• at 600 V rated value	17 A
yielded mechanical performance [hp]	
Jielded meenamen performance [np]	
for single-phase AC motor	
	1 hp

		2 hz		
	— at 230 V rated value	3 hp		
 		2 hz		
 				
control rating of auxiliary contacts according to UL AB00 / F600 Starticitizatily production of the main circuit				
Start-focul protection design of the face link - with type of condination 1 required - with type of assignment 2 required (or short-circul protection of the auxiliary switch required (or short-circul protection (or short-circul protection (or short-circul protection (or swith) <td></td> <td></td>				
design of the fue link • for short-circul protocol of the main circuit		A600 / P600		
- for short-circuit protection of the main circuit - with type of assignment 2 required ger 63A (690V, 100(A), abit 32A (690V, 100(A), BS88 63A (415V, 80(A) ger 72A (45V, 80(A)				
 with type of coordination 1 required of shy (690/, 100kA), abl: 32A (680/, 100kA), BSB8: 63A (415V, 80kA) of shy (690/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) of shy (690/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (680/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (690/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (690/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (690/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (690/, 100kA), BSB8: 25A (415V, 80kA) vetation 1000, abl: 32A (600, 100kA), BSB8: 25A (415V, 80kA) <l< td=""><td></td><td></td></l<>				
- with type of assignment 2 required of a stand-circuit protection of the auxiliary switch required g: 10 A (560 V, 16A), abt. 20A (580 V, 16A), BSS8. 25A (415V.80KA) g: 10 A (560 V, 16A), abt. 20A (580 V, 16A), mounting position backwards by 4:22 Stand mounting surface, can be tilted forward and backwards by 4:22 Stand mounting surface, can be tilted forward and backwards by 4:22 Stand mounting surface, can be tilted forward and backwards by 4:22 Stand mounting surface. Fastening method backwards by 4:22 Stand mounting surface. Fastening method by 5:25 Stand mounting surface. Fasten	-			
• for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 KA) instantiation (mounting dimensions				
Installation/mounting/dimensions +/:180**rotation possible on vertical mounting surface, can be tilted forward and bedward by -/:225* on vertical mounting surface. fastening method screw and samp-on mounting onto 25* mm DIN rail according to DIN EN 60715 height 85 mm width 45 mm width sub-by-side mounting 0 mm - wards 10 mm - forwards 10 mm - wards 10 mm				
mounting position +/180° relation possible on vertical mounting surface: screw and snap-on mounting auface festening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 65 mm width 45 mm depth 97 mm required spacing • • with side-by-side mounting - - chowards 10 mm - upwards 10 mm - downwards		gG: 10 A (500 V, 1 kA)		
backward by vf-22.5' on vertical mounting sintace fastering method score wand snap-on mounting onto 35 mm DNN rail according to DNN EN 60715 height 45 mm with 45 mm dopth 97 mm required spacing 0 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm	Installation/ mounting/ dimensions			
height #5 mm with 45 mm depth 97 mm required spacing - • with side by-side mounting - - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 0 mm - downwards 10 mm - downwards 10 mm - at the side 0 mm - forwards 10 mm - upwards 10 mm - forwards 10 mm - upwards 10 mm - downwards 50 mm - downwards 50 mm - downwards 50 mm - downwards 50 mm - of rowards 50 mm - onwards 50 mm - downwards 50 mm	mounting position			
width 45 mm depth 97 mm required spacing 97 mm - forwards 10 mm - upwards 10 mm - downwards 10 mm - for auxiliary contacts	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715		
depth 97 mm required spacing	height	85 mm		
required spacing • with side-by-side mounting - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - for grounded parts 0 mm - forwards 10 mm - upwards 10 mm - downwards 10 mm - for awares	width	45 mm		
• with side-by-side mountingI0 mm forwards10 mm downwards10 mm downwards10 mm at the side0 mm at the side0 mm forwards10 mm upwards10 mm upwards10 mm upwards10 mm downwards10 mm downwards10 mm downwards10 mm downwards10 mm downwards10 mm upwards10 mm downwards0 mm downwards10 mm downwardsScrew-type terminals* for auxiliary contactsScrew-type terminals* of main contacts2x (1 25 mm²), 2x (25 10 mm²) solid2x (1 25 mm²), 2x (25 10 mm²) finely stranded with core end processing2x (1 25 mm²), 2x (25 10 mm²) finely stranded with core end processing2x (1 25 mm²), 2x (25 10 mm²) finely stranded with core end processing	depth	97 mm		
forwards10 mm upwards00 mm dowwards00 mm at the side0 mm at the side0 mm for yourds10 mm upwards10 mm upwards10 mm at the side6 mm dowwards10 mm dowwards10 mm dowwards10 mm forwards10 mm dowwards10 mm dowmards10 mm dowmardsScrew-type terminals for auxiliary contactsScrew-type terminals of main contactsScrew-type terminals solid2x (1 25 mm²), 2x (2.5 10 mm²) for AWG cables for main contacts2x (1 25 mm²), 2x (2.5 10 mm²) solid solid2x (1 25 mm²), 2x (2.5 10 mm²) for AWG cables for main contacts2x (1 25 mm²), 2x (2.5 10 mm²) solid solid1 10 mm² finely stranded with cor	required spacing			
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- downwards 10 mm - at the side 0 mm - forwards 10 mm - forwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm 6 main current circuit screw-type terminals • of auxiliary and control circuit screw-type terminals • of main contacts Screw-type terminals • for main	— forwards	10 mm		
at the side0 mm• for grounded parts0 mm forwards10 mm growards10 mm at the side6 mm downwards10 mm downwards10 mm forwards10 mm forwards10 mm upwards10 mm upwards10 mm downwards10 mm downwards10 mm downwards10 mm downwards10 mm downwards10 mm downwards5 mm downwards5 mm downwards10 mm downwards5 mm downwards5 mm downwards10 mm downwards6 mm downwards5 mm downwards6 mm downwards5 mm for auxiliary contacts2 x (1 25 mm²), 2 x (25 10 mm²) solid2 x (1 25 mm²), 2 x (25 10 mm²) for main contacts2 x (1 25 mm²), 2 x (25 10 mm²) for AWG cables for main contacts2 x (1 10 mm² for auxiliary contacts1 10 mm² solid1 10 mm² forley stranded with core end processing1 10 mm² finely stranded with core end processing5 25 mm²	— upwards	10 mm		
• for grounded parts	— downwards	10 mm		
- forwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - for live parts 10 mm - powards 10 mm - powards 10 mm - powards 10 mm - downwards 10 mm - at the side 6 mm Connections/Terminals 6 mm Connections/Terminals 5 crew-type terminals • for main current circuit screw-type terminals • of magnet coll Screw-type terminals <t< td=""><td>— at the side</td><td>0 mm</td></t<>	— at the side	0 mm		
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	— forwards	10 mm		
downwards10 mm• for live parts forwards10 mm upwards10 mm upwards10 mm downwards10 mm downwards10 mm at the side6 mmConnections/TerminalsConnection /• for main current circuitscrew-type terminals• for main current circuitscrew-type terminals• for auxiliary and control circuitScrew-type terminals• for auxiliary contactsScrew-type terminals• of main contactsScrew-type terminals• for auxiliary contactsScrew-type terminals• for auxiliary contactsScrew-type terminals• for auxiliary contactsScrew-type terminals• for auxiliary contactsScrew-type terminals• for AuxG cables for main contactsScrew-type terminals• for AuxG cables for main contactsZx (1 2.5 mm²), Zx (2.5 10 mm²)• finely stranded with core end processing1 10 mm²• finely stranded with core end processing1 10 mm²• finely stranded with core end processing0.5 2.5 mm²• solid or stranded0.5 2.5 mm²• for auxiliary contacts 25 mm²• for auxiliary contacts 25 mm²• for auxiliary contacts 25 mm²• for auxiliary con	— upwards	10 mm		
• for live parts 10 mm - forwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 6 mm Connections/Terminals Screw-type terminals Screw-type terminals • for ania current circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of main current circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of main contacts Screw-type terminals • of main contacts Screw-type terminals • for anian contacts Screw-type terminals • for anian contacts Screw-type terminals • for anian contacts Screw-type terminals • for avectore conductor cross-sections Screw-type terminals • for avectore conductor cross-section for main contacts Screw-type terminals • for avectore cross-section for main contacts <td>— at the side</td> <td colspan="3">6 mm</td>	— at the side	6 mm		
forwards10 mm upwards10 mm downwards10 mm at the side6 mmConnections: Terminalstype of electrical connection• for main current circuitscrew-type terminals• for auxiliary and control circuitscrew-type terminals• at contactor for auxiliary contactsScrew-type terminals• of main current circuitscrew-type terminals• at contactor for auxiliary contactsScrew-type terminals• of magnet collScrew-type terminals• of main contactsScrew-type terminals• of main contactsScrew-type terminals• for auxiliary anded2x (1 2.5 mm²), 2x (2.5 10 mm²)- solid or stranded2x (1 2.5 mm²), 2x (2.5 10 mm²)- solid or stranded2x (1 2.5 mm²), 2x (2.5 10 mm²)- solid or stranded2x (1 2.5 mm²), 2x (2.5 10 mm²)- solid or stranded1 10 mm²• for AWG cables for main contacts2x (1 2.5 mm²), 2x (2.5 10 mm²)• solid or stranded1 10 mm²• stranded with core end processing1 10 mm²• stranded with core end processing1 10 mm²• solid or stranded0.5 2.5 mm²• for auxiliary contacts 2.5 mm²)• for auxiliary contacts 2.5 mm²)• for auxiliary contacts 2.5 mm²)• for aux	— downwards	10 mm		
upwards 10 mm downwards 10 mm at the side 6 mm Connections/Terminals 5 mm type of electrical connection 5 mm • for main current circuit screw-type terminals • of magnet coil Screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of magnet coil Screw-type terminals • of addition stranded 2x (1 2.5 mm²), 2x (2.5 10 mm²) - solid or stranded 2x (1 2.5 mm²), 2x (2.5 10 mm²) - finely stranded with core end processing 2x (1 10 mm² • solid or stranded 1 10 mm² • solid or stranded 0.5 2.5 mm² • solid or stranded 0.5 2.5 mm² <td< td=""><td>• for live parts</td><td></td></td<>	• for live parts			
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at the side 6 mm Connections/Terminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary contacts screw-type terminals • of magnet coil Screw-type terminals • of main contacts Screw-type terminals • of magnet coil Screw-type terminals • of magnet coil Screw-type terminals • of main contacts Screw-type terminals • of main contacts Screw-type terminals • of or auxiliary contacts Screw-type terminals • of main contacts Screw-type terminals • of add 2x (1 2.5 mm²), 2x (2.5 10 mm²) solid Screw-type terminals • of advG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) • of advG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) • solid 1 10 mm² • solid 1 10 mm² • solid or stranded 1 10 mm² • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • for auxiliary contacts	— upwards	10 mm		
Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of magnet coil Screw-type terminals type of connectable conductor cross-sections Screw-type terminals • for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) - solid 2x (1 2.5 mm²), 2x (2.5 10 mm²) - solid or stranded 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² - finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² • solid 1 10 mm² • solid 1 10 mm² • solid or stranded 1 10 mm² • solid or stranded 0.5 2.5 mm² • solid or stranded 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 • for auxiliary contacts 2x (0.5 1.5 mm²), 2x	— downwards	10 mm		
type of electrical connection screw-type terminals • for main current circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of magnet coil Screw-type terminals type of connectable conductor cross-sections Screw-type terminals • of main contacts Screw-type terminals - solid Screw-type terminals - solid or stranded 2x (1 2.5 mm²), 2x (2.5 10 mm²) - solid or stranded 2x (1 2.5 mm²), 2x (2.5 10 mm²) - finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 10 mm²) • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² • for AWG cables for main contacts 2x (1 2.5 mm²), 2x (14 8) connectable conductor cross-section for main contacts 1 10 mm² • solid 1 10 mm² • finely stranded with core end processing 0.5 2.5 mm² • solid or stranded 0.5 2.5 mm² • solid or stranded 0.5 2.5 mm² • for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for auxiliary contact	— at the side	6 mm		
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• for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14)	— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
	 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
AWG number as coded connectable conductor cross	 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)		
	AWG number as coded connectable conductor cross			

section	
for main contacts	16 8
 for auxiliary contacts 	20 14
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	Туре А
T1 value	
 for proof test interval or service life according to IEC 61508 	20 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	EMV	Functional Saftey	Test Certificates		Marine / Shipping
EHC	RCM	Type Examination Cer- tificate	Special Test Certific- ate	Type Test Certific- ates/Test Report	ABS
Marine / Shipping				other	
BUREAU VERITAS		RINA	KMRS RMRS	<u>Miscellaneous</u>	<u>Confirmation</u>
other	Railway	Environment			
<u>Confirmation</u>	Special Test Certific- ate	EPD	Environmental Con- firmations		

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=3RT2025-1AP00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2025-1AP00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-1AP00

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

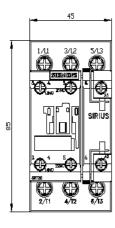
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2025-1AP00&lang=en

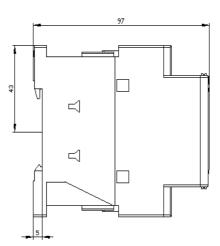
Characteristic: Tripping characteristics, I²t, Let-through current

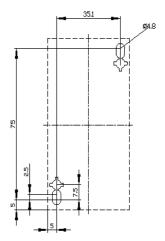
https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-1AP00/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2025-1AP00&objecttype=14&gridview=view1











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