3RT2025-1FB44-3MA0

Data sheet



Power contactor, AC-3 17 A, 7.5 kW / 400 V 2 NO + 2 NC, 24 V DC, with plugged-in diode combination, 3-pole, Size S0, Screw terminal Captive auxiliary switch

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
 function module for communication 	No
 auxiliary switch 	No
power loss [W] for rated value of the current	
 at AC in hot operating state 	2.7 W
 at AC in hot operating state per pole 	0.9 W
 without load current share typical 	5.9 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 DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 10 ms
mechanical service life (switching 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 %

ain circuit	3
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	600.1/
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	40.4
at AC-1 at 400 V at ambient temperature 40 °C	40 A
rated value	
• at AC-1	40.4
 up to 690 V at ambient temperature 40 °C rated value 	40 A
— up to 690 V at ambient temperature 60 °C	35 A
rated value	0071
• 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-5a up to 690 V rated value at AC-5b up to 400 V rated value 	14.1 A
	14.1 A
• at AC-6a	44.4.0
 up to 230 V for current peak value n=20 rated value 	11.4 A
— up to 400 V for current peak value n=20 rated	11.4 A
value	11.70
— up to 500 V for current peak value n=20 rated	11.4 A
value	
— up to 690 V for current peak value n=20 rated	11.3 A
value	
• at AC-6a	
 up to 230 V for current peak value n=30 rated 	7.6 A
value	
 up to 400 V for current peak value n=30 rated value 	7.6 A
	7.6 A
 up to 500 V for current peak value n=30 rated value 	1.0 A
— up to 690 V for current peak value n=30 rated	7.6 A
value	
minimum cross-section in main circuit at maximum AC-1	10 mm²
rated 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	
— at 24 V rated value	35 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
— at 110 v lated value	
— at 220 V rated value	5 A
	1 A
— at 220 V rated value	

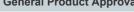
— at 24 V rated value	35 A			
— at 110 V rated value	35 A			
— at 220 V rated value	35 A			
— at 440 V rated value	2.9 A			
— at 600 V rated value	1.4 A			
 at 1 current path at DC-3 at DC-5 				
— at 24 V rated value	20 A			
— at 110 V rated value	2.5 A			
— at 220 V rated value	1 A			
— at 440 V rated 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 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 110 V rated value	35 A			
— at 220 V rated value	10 A			
— at 440 V rated value	0.6 A			
— at 440 V rated value	0.6 A			
operating power	0.071			
at AC-2 at 400 V rated value	7.5 kW			
• at AC-3	1.0 KVV			
— at 230 V rated value	4 kW			
— at 230 V rated value — 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	A DAM			
— at 230 V rated value	4 kW			
— at 400 V rated value	4.5 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	V			
• up to 230 V for current peak value n=20 rated value	4.5 kVA			
 up to 250 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value 	7.8 kVA			
 up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value 	9.9 kVA			
 up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value 	13.6 kVA			
· · · · · · · · · · · · · · · · · · ·	10.0 KVA			
operating apparent power at AC-6a	3 kVA			
up to 230 V for current peak value n=30 rated value				
• 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 short time withstand current in sald expressing state.	9.1 kVA			
short-time withstand current in cold operating state up to 40 °C				
Iimited to 1 s switching at zero current maximum	225 A; Use minimum cross-section acc. to AC-1 rated value			
Ilmited to 1 s switching at zero current maximum Imited to 5 s switching at zero current maximum	225 A; Use minimum cross-section acc. to AC-1 rated value			
limited to 3 s switching at zero current maximum limited to 10 s switching at zero current maximum	180 A; Use minimum cross-section acc. to AC-1 rated value			
Illimited to 10 s switching at zero current maximum Imited to 30 s switching at zero current maximum	115 A; Use minimum cross-section acc. to AC-1 rated value			
limited to 60 s switching at zero current maximum no load switching frequency.	96 A; Use minimum cross-section acc. to AC-1 rated value			
no-load switching frequency	1.500.1/b			
• at DC	1 500 1/h			
operating frequency	1,000,1/b			
at AC-1 maximum at AC-2 maximum	1 000 1/h			
at AC-2 maximum	1 000 1/h			

• at AC-3 maximum	1 000 1/h		
at AC-3 maximum at AC-3e maximum			
at AC-3e maximum at AC-4 maximum	1 000 1/h		
Control circuit/ Control	300 1/h		
	DC.		
type of voltage of the control supply voltage	DC		
control supply voltage at DC	041/		
• rated value	24 V		
operating range factor control supply voltage rated value of magnet coil at DC			
• initial value	0.8		
full-scale value	1.1		
design of the surge suppressor	with diode assemblies		
closing power of magnet coil at DC	5.9 W		
holding power of magnet coil at DC	5.9 W		
closing delay			
• at DC	50 170 ms		
opening delay			
• at DC	15 17.5 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	2		
instantaneous contact			
number of NO contacts for auxiliary contacts instantaneous contact	2		
operational current at AC-12 maximum	10 A		
operational current at AC-15			
at 230 V rated value	6 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 	6 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]			
 for single-phase AC motor 			
 — at 110/120 V rated value 	1 hp		
— at 230 V rated value	3 hp		
 for 3-phase AC motor 			
 at 200/208 V rated value 	3 hp		
 — at 220/230 V rated value 	5 hp		
— at 460/480 V rated value	10 hp		

contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation mounting dimensions mounting position fastening method • side-by-side mounting • side-by-side mounting • with side-by-side mounting • for grounded parts — convards — upwards — forwards — upwards — forwards — upwards — ownwards — ownwards — ownwards — ownwards — ownwards — ownwards • for live parts — forwards — the side — downwards — ownwards — o	at 575/600 V roted value	15 hp		
Short-circult protection	— at 575/600 V rated value	15 hp		
design of the fuse link		7000 / Q000		
• for short-circuit protection of the main circuit — with type of assignment 2 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required space of the switch and such as a second and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on vertical mounting surface; can be different forward and backward by +2.25° on v				
- with type of assignment 2 required for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position 4-/-180" rotation possible on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting surface; can be tilted forward and backward by 4-/-2.25" on vertical mounting and according to 35 mm standard mounting rail according to 35 mm standard mounting rail according to 10 mm 20 manuting and accordinate for auxiliary contacts 20 manuting and accordinate for auxiliary contacts 20 minuting and accordinate for auxiliary contacts 20 minuting and accordinate for auxiliary contacts 20 minuting and accordina	·	αG: 63Δ (690\/ 100kΔ), aM: 32Δ (690\/ 100kΔ), RS88: 63Δ (415\/ 80kΔ)		
installation/ mounting/ dimensions mounting position Fastening method score and an activation of the auxiliary switch required invariant and backward by -/- 22.5" on vertical mounting surface: can be titled toneard and backward by -/- 22.5" on vertical mounting surface: screw and snap-on mounting onto 35 mm standard mounting rail according to DN EN 60715 **ester and snap-on mounting onto 35 mm standard mounting rail according to DN EN 60715 **resured spacing** **eight by-side mounting** **height by-side mounting** **eight by-side mounting** **ervards	•			
required mounting osition fastening method				
mounting position -/-180° rotation possible on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on vertical mounting surface; can be titled forward and backward by 4- 22.5° on with according to 5 mm standard mounting rail according to 7 mm standard mounting rail acc	,	90. 10 A (000 V, 1 IVA)		
forward and backward by + 22.5° on vertical mounting surface screw and snap-po mounting onto 35 mm standard mounting rail according to DIN EN 60715	Installation/ mounting/ dimensions			
astening method	mounting position			
e side-by-side mounting		•		
Neight Start Sta	fastening method			
height width 45 mm	• side-by-side mounting			
width depth				
depth required spacing with side-by-side mounting — forwards — upwards — downwards — 10 mm — downwards — of or grounded parts — for grounded parts — forwards — upwards — upwards — the side — downwards — upwards — at the side — downwards — to fire parts — forwards — to fire parts — forwards — upwards — upwards — to main contection — to main current circuit — at the side — downwards — to main current circuit — at the side — of main current circuit — of rauxiliary 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 o solid — sinely stranded with core end processing — finely stranded with core end processing of inely stranded with core end processing of inely stranded with core end processing onnectable conductor cross-section for main contacts — solid or stranded — finely stranded with core end processing onnectable conductor cross-section for auxiliary contacts — solid or stranded — finely stranded with core end processing onnectable 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-section for auxiliary contacts — solid or stranded — finely stranded with core end processing type of connectable conductor cross-sections — for auxiliary contacts — solid or stranded — finely stranded with core end processing type of connectable conductor cross-sections — for auxiliary contacts — solid or stranded — finely stranded with core end processing type of connectable conductor cross-sections — for auxiliary contacts — solid or stranded — finely stranded with core end processing type of connectable conductor cross-sections — for auxiliary contacts — solid or stranded — finely stranded with core end processing type of connectable conductor c				
required spacing with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — at the side — downwards — upwards — to mards — the side — downwards — to mards — upwards — to mards — to mards — upwards — to mards — to realizing and control circuit — of a usiliary and control circuit — of a usiliary and control circuit — of maildiary and control circuit — of manicalizing and control circuit — solid or stranded — finely stranded with core end processing — at AWG cables for main contacts — solid — finely stranded with core end processing type of connectable conductor cross-section for main contacts — solid — 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-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-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 auxiliary contacts — solid or stranded — finely stranded with core end processing type of connectable conductor cross-sections — for auxiliary contacts — solid or stranded — finely stranded with core end processing type of connectable conductor conductor cross-sections — for auxiliary contacts — solid or stranded — finely stranded				
- upwards	, ,	10 mm		
- downwards				
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards - forwards - downwards - downwards - downwards - at the side - formain current circuit • for axilliary and control circuit • for axilliary and control circuit • for axilliary and control circuit • for amin current circuit - for amin contacts - solid - solid - solid - finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing • for axilliary contacts • solid or stranded • finely stranded with core end processing • for axilliary contacts • solid or stranded • finely stranded with core end processing • for axilliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for axilliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for axilliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for axilliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for axilliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for axilliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for axilliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for axilliary contacts	·			
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards • for live parts — forwards — upwards — downwards — downwards — downwards — downwards — at the side — formads — 10 mm — upwards — downwards — 10 mm — downwards — at the side — formadictions/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit • for main current circuit • 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 • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts - solid or stranded — finely stranded with core end processing • for auxiliary contacts - solid or stranded — finely stranded with core end processing • for auxiliary contacts - solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts				
forwards		O THIN		
- upwards - at the side - downwards - for live parts - forwards - upwards - for live parts - forwards - upwards - downwards - upwards - downwards - downwards - downwards - at the side - formain current circuit - for auxiliary and control circuit - for auxiliary and control circuit - at contactor for auxiliary contacts - of magnet coil - solid - solid or stranded - finely stranded with core end processing - solid or stranded - solid or		10 mm		
- at the side				
- downwards • for live parts - forwards - upwards - 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 - 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 • 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 • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts	•			
• for live parts — forwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main current • for auxiliary and 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 • stranded • finely stranded with core end processing • 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 • for auxiliary contacts • solid or stranded — finely stranded with core end processing • for auxiliary contacts • solid or stranded — finely stranded with core end processing • for auxiliary contacts • solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts				
forwards upwards downwards downwards at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main current • 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 connectable conductor cross-section for main contacts • 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 • 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		10 11111		
- upwards - downwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current 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 with core end processing • finely stranded with core end processing • solid • 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 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 • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded - finely stranded with core end processing • for auxiliary contacts • solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts • solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts	•	10 mm		
- 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 • finely stranded with core end processing • solid - solid - solid - solid - solid - stranded - finely stranded with core end processing • solid - 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 • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • 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 process				
- at the side Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary and control circuit screw-type terminals • of magnet coil screw-type terminals • or main contacts - solid - solid stranded - solid or stranded solid stranded stranded solid solid stranded solid solid stranded solid solid stranded solid solid solid stranded solid soli	•			
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 • finely stranded with core end processing • finely stranded with core end processing • 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 • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • at AWG cables for auxiliary contacts 2x (20 1.5 mm²), 2x (0.75 2.5 mm²)				
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 • solid • stranded • finely stranded with core end processing • solid or 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 • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		O Hilli		
• for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil **Screw-type terminals** • of magnet coil **Screw-type terminals** • of magnet coil **Screw-type terminals** • of magnet coil **Screw-type terminals** ***Screw-type terminals** **Screw-type terminals** **Screw-type terminals** **Screw-type terminals** **Screw-ty				
 • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil Screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals 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 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (16 12), 2x (14 8) 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 2.5 mm² type of connectable conductor cross-sections • finely stranded with core end processing • for auxiliary contacts — solid or stranded — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 		screw-type terminals		
 at contactor for auxiliary contacts of magnet coil Screw-type terminals Screw-type termina		•		
• 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 • solid 1 10 mm² • stranded • finely stranded with core end processing • finely stranded with core end processing • solid • stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts • at AWG cables for auxiliary contacts • at AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14)	-			
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 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 • 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 • for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts • at AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (14 8) 2x (1 2.5 mm²), 2x (15 10 mm²) 2x (1 2.5 mm²), 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (16 12), 2x (14 8) 2x (1 2.5 mm²), 2x (16 12), 2x (18 14) 2x (1 2.5 mm²), 2x (16 12), 2x (18 14) 2x (1 2.5 mm²), 2x (16 12), 2x (18 14) 				
- solid - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - solid - solid - finely stranded with core end processing - at AWG cables for main contacts - solid - solid - stranded - finely stranded with core end processing - solid - stranded - finely stranded with core end processing - solid or stranded - solid or str	••			
- solid or stranded - finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • finely stranded with core end processing • stranded • 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 • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded -	— solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)		
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connectable conductor cross-section for main contacts • solid • stranded • stranded with core end processing 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 type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing • at AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
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connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
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 finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts — solid or stranded — finely stranded with core end processing at AWG cables for auxiliary contacts 0.5 2.5 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 	•			
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 for auxiliary contacts — solid or stranded — finely stranded with core end processing at AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 	finely stranded with core end processing	0.5 2.5 mm²		
— 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) ● at AWG cables for auxiliary contacts 2x (20 16), 2x (18 14)	type of connectable conductor cross-sections			
 — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 	 for auxiliary contacts 			
• at 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)		
	at AWG cables for auxiliary contacts	2x (20 16), 2x (18 14)		
AWG number as coded connectable conductor cross	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
B10 value with high demand rate according to SN 31920	450 000
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
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 Dec Machinery	claration of Conformity	Test Certificates	Marine / Shipping
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Type Examination **Certificate**



UK Declaration of **Conformity**

Type Test Certificates/Test Report



Marine / Shipping other











Confirmation

other

Dangerous Good



Transport Informa-<u>tion</u>

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=3RT2025-1FB44-3MA0

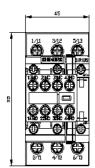
Cax online generator

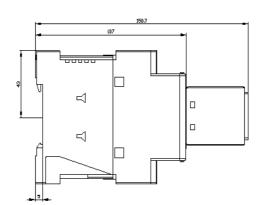
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2025-1FB44-3MA0

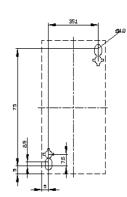
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-1FB44-3MA0 Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-1FB44-3MA0/char

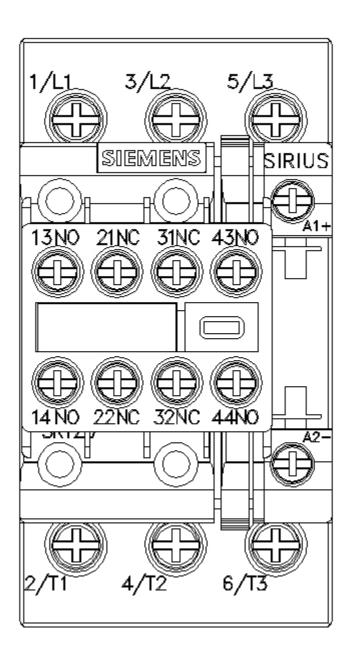
Further characteristics (e.g. electrical endurance, switching frequency)

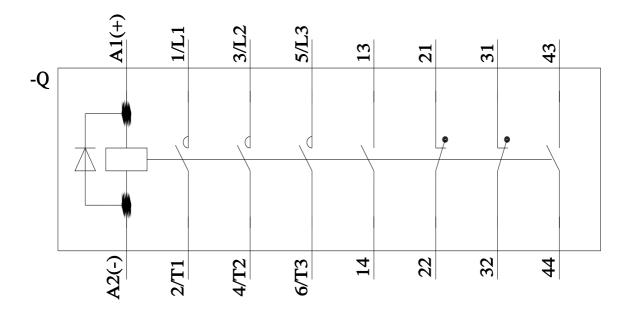
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2025-1FB44-3MA0&objecttype=14&gridview=view1











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