3RT2023-1DB44-3MA0

Data sheet



Power contactor, AC-3 9 A, 4 kW / 400 V 2 NO + 2 NC, 24 V DC with inserted varistor 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 	0.6 W
 at AC in hot operating state per pole 	0.2 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 %

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	9 A		
— at 500 V rated value	9 A		
— at 690 V rated value	9 A		
• at AC-3e			
— at 400 V rated value	9 A		
— at 500 V rated value	9 A		
— at 690 V rated value	9 A		
• at AC-4 at 400 V rated value	8.5 A		
 at AC-5a up to 690 V rated value 	35.2 A		
at AC-5b up to 400 V rated value	7.4 A		
• at AC-6a			
up to 230 V for current peak value n=20 rated value	11.4 A		
 up to 400 V for current peak value n=20 rated value 	11.4 A		
 up to 500 V for current peak value n=20 rated value 	9.1 A		
 up to 690 V for current peak value n=20 rated value at AC-6a 	9 A		
— 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 	6.1 A		
— up to 690 V for current peak value n=30 rated value	6.1 A		
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating	10 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	35 A		
— at 110 V rated value	4.5 A		
— at 220 V rated value	1A		
— 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 24 V rated value — at 110 V rated value	35 A		
— at 110 V rated value — at 220 V rated value	5 A		
— at 440 V rated value	1 A		
— 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 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 600 V rated value	0.6 A
operating power	0.07.
• at AC-2 at 400 V rated value	4 kW
• at AC-2 at 400 V fated value • at AC-3	TIVY
— at 230 V rated value	2.2 kW
— at 400 V rated value	2.2 KW 4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	7.5 kW
• at AC-3e	2.2 MM
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	7.5 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	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	7.8 kVA
• up to 690 V for current peak value n=20 rated value	10.7 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	5.2 kVA
• up to 690 V for current peak value n=30 rated value	7.2 kVA
short-time withstand current in cold operating state	
up to 40 °C	
 limited to 1 s switching at zero current maximum 	170 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	170 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	122 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	78 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	68 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at DC	1 500 1/h
operating frequency	
• 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-3 maximum at AC-3e maximum		
at AC-3e maximum at AC-4 maximum	1 000 1/h 300 1/h	
Control circuit/ Control	000 1/11	
type of voltage of the control supply voltage	DC	
control supply voltage at DC		
• rated value	24 V	
operating range factor control supply voltage rated	L1 V	
value of magnet coil at DC		
• initial value	0.8	
full-scale value	1.1	
design of the surge suppressor	with varistor	
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	45 47.5	
• at DC	15 17.5 ms	
arcing time	10 10 ms Standard A1 - A2	
control version of the switch operating mechanism	Stanuaru AT - AZ	
Auxiliary circuit	2	
number of NC contacts for auxiliary contacts instantaneous contact	2	
number of NO contacts for auxiliary contacts	2	
instantaneous contact		
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	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 2 A	
 at 125 V rated value at 220 V rated value 	2 A 1 A	
at 600 V rated value at 600 V rated value	0.15 A	
operational current at DC-13	0.107.	
• 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 	7.6 A	
at 600 V rated value	9 A	
yielded mechanical performance [hp]		
 for single-phase AC motor 		
 — at 110/120 V rated value 	1 hp	
— at 230 V rated value	1 hp	
 for 3-phase AC motor 		
 at 200/208 V rated value 	2 hp	
 — at 220/230 V rated value 	3 hp	
— at 460/480 V rated value	5 hp	

Contact rating of auxiliary contacts according to UL A600 / 0600	ot E7E/600 \/ -ata-d \\alle	7.5 ha	
design of the fuse link - with type of coordination 1 required — with type of assignment 2 required - the short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary switch required - the short-circuit protection of the auxiliary contacts - the short-circuit protection of the auxiliary contacts - short-circuit protection of the auxiliary contacts - short-circuit protection of the short-circuit protection of the auxiliary contacts - short-circuit protec	— at 575/600 V rated value	7.5 hp	
design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 1 required — with type of exaginment 2 required — with type of assignment 2 required recipited **recipited (recipited) **mounting position **mounting position fastening method **side by-side mounting **height **edite by-side mounting **with side-by-side mounting **with disd-by-side mounting **with side-by-side mounting **ormands - upwards - downwards - forwards - forwards - upwards - forwards - upwards - downwards - downwards - downwards - downwards - ormands - upwards - for it we parts - forwards - for it we parts - forwards - upwards - downwards - or main current circuit - for main current circuit - or an indigent comectable conductor cross-sections • for main contacts - 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 - 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 strande		Abuu / Qbuu	
- for short-circuit protection of the main circuit			
- with type of coordination 1 required	· ·		
— with type of assignment 2 required • for short-circult protection of the auxiliary switch required mounting position ### A	 for short-circuit protection of the main circuit 		
For short-circuit protection of the auxiliary switch required	 — with type of coordination 1 required 	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)	
required mounting position fastening method side-by-side mounting with side-by-side mounting - forwards - u pwards - to man - to rive parts - forwards - to rive parts - to	 — with type of assignment 2 required 	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)	
mounting position	,	gG: 10 A (500 V, 1 kA)	
mounting position	<u> </u>		
forward and backward by ++ 2.2.5° on vertical mounting surface screw-type terminals of main contacts of miley stranded with core end processing of of connectable conductor cross-sections of one connectable conductor cross-section for main contacts - solid or stranded - finely stranded with core end processing of al AMOR cables for auxiliary contacts - solid or stranded - finely stranded with core end processing of all AMOR cables 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 - 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 str	Installation/ mounting/ dimensions		
according to DIN EN 80715 Yes height width depth 151 mm required spacing • with side-by-side mounting — forwards — upwards — ownwards — ownwards — orwards — orwards — ownwards — of river in the side — ownwards — ownwards — of rowards — ownwards — of rowards — ownwards — of rowards — of rowards — ownwards — o	mounting position		
height width 45 mm	fastening method		
width depth	side-by-side mounting	Yes	
depth required spacing with side-by-side mounting with side-by-side mounting	height	85 mm	
required spacing with side-by-side mounting —forwards — upwards — downwards — at the side of regrounded parts — the side — downwards — upwards — to mards — the side — downwards — for live parts — forwards — for live parts — forwards — upwards — to mards — side — side Connections/Terminals type of electrical connection • for main current circuit • at contactor for auxillary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • standed • 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 main contacts • solid • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • finely stranded with core end processing • for auxillary contacts • solid or stranded • finely stranded with core end processing • for auxillary contacts • solid or stranded • finely stranded with core end processing • for auxillary contacts • solid or stranded • finely stranded with core end processing • for auxillary contacts • solid or stranded • finely stranded with core end processing • for auxillary contacts • solid or stranded • finely stranded with core end processing • for auxillary contacts • solid or stranded • finely stranded with core end processing • for auxillary contacts • fo	width	45 mm	
with side-by-side mounting forwards upwards downwards at the side forgrounded pards forwards forwards forwards forwards forwards upwards downwards downwards downwards downwards for live pards forwards for man current circuit for auxiliary and control circuit for auxiliary and control circuit for auxiliary and control circuit solid or stranded finely stranded with core end processing at AWG cables for main contacts solid 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 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 process	depth	151 mm	
with side-by-side mounting forwards upwards downwards at the side forgrounded pards forwards forwards forwards forwards forwards upwards downwards downwards downwards downwards for live pards forwards for man current circuit for auxiliary and control circuit for auxiliary and control circuit for auxiliary and control circuit solid or stranded finely stranded with core end processing at AWG cables for main contacts solid 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 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 process	required spacing		
forwards upwards			
- downwards - at the side	, and a	10 mm	
- downwards - at the side	— upwards	10 mm	
• for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards - for live parts - forwards - upwards - upwards - upwards - upwards - downwards - at the side - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - solid - solid - solid or stranded - finely stranded with core end processing - at the side - 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 - strander - solid or stranded - strander - solid or	·	10 mm	
• for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards - for live parts - forwards - upwards - upwards - upwards - upwards - downwards - at the side - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - solid - solid - solid or stranded - finely stranded with core end processing - at the side - 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 - strander - solid or stranded - strander - solid or	— at the side		
- upwards - at the side - downwards - for live parts - forwards - upwards - downwards - upwards - downwards - downwards - downwards - downwards - downwards - at the side - formactions/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 auxiliary contacts - for main current circuit - for main current circuit - solid - solid - solid - solid - finely stranded with core end processing - at AWG cables for main contacts - solid - solid - solid - solid - solid - solid - at AWG cables for main 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 - 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 strande		10 mm	
- at the side — downwards 10 mm • for live parts — forwards 10 mm — upwards 10 mm — upwards 10 mm — at the side 6 mm Connections/ Terminals type of electrical connection • for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • for main current circuit screw-type terminals • of magnet coil Screw-type terminals • solid — solid or stranded 2x (1 2.5 mm²), 2x (2.5 10 mm²) — solid or stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 10 mm²) • at AWG cables for main contacts 2x (16 12), 2x (14 8) connectable conductor cross-section for main contacts • solid 1 10 mm² • finely stranded with core end processing 1 10 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² type of connectable conductor cross-sections • for auxiliary contacts — 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) - finely stranded with core end processing 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) - finely stranded with core end processing 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)			
- downwards • for live parts - forwards - upwards - upwards - downwards - at the side - domnwards - at the side - formal s type of electrical connection • for auxiliary and control circuit • of 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 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 • 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 - 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	·		
• for live parts — forwards — 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 • 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 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 • 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			
- forwards - upwards - downwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • for any lider of electrical connections • for any lider of electrical connection • 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 • 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 - 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 - 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 111111	
- upwards - downwards - at the side Connections/ Terminals type of electrical connection • for auxiliary and control circuit • at contactor for auxiliary contacts • for main contacts - solid - solid or stranded - finely stranded with core end processing • finely stranded with core end processing • forinely 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 • 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 • 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 • for auxiliary contacts • for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts • for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts 2x (20 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 1.5 mm²), 2x (0.75 2.5 mm²)	·	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 - solid - solid or stranded - finely stranded with core end processing • solid or stranded - finely stranded with core end processing • solid or stranded - solid or stranded - stranded - finely stranded with core end processing • solid or stranded - finely stranded with core end processing • solid or 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 • 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 - solid or stranded			
- at the side 6 mm 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 • of magnet coil Screw-type terminals • for main contacts - solid stranded - solid or stranded 2x (1 2.5 mm²), 2x (2.5 10 mm²) • at AWG cables for main contacts • solid stranded 1 10 mm² • stranded 2 10 mm² • finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² • x (16 12), 2x (14 8) connectable conductor cross-section for main contacts • solid 1 10 mm² • finely stranded with core end processing 1 10 mm² • finely stranded with core end processing 1 10 mm² • finely stranded with core end processing 1 10 mm² • finely stranded with core end processing 1 10 mm² • finely stranded 0.5 2.5 mm² • solid or stranded 0.5 2.5 mm² • for auxiliary contacts - solid or stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • at AWG cables for auxiliary contacts - solid or stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • at AWG cables for auxiliary contacts	•		
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • stranded • finely stranded with core end processing • solid or stranded • stranded • finely stranded with core end processing • finely stranded with core end processing • solid or 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 • 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 — solid or stranded — finely stranded with core end processing • stranded with core end processi			
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • stranded • finely stranded with core end processing • solid • 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 • 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 • 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 (20 1.5 mm²), 2x (0.75 2.5 mm²) • at AWG cables for auxiliary contacts		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 ostranded ostranded finely stranded with core end processing ostranded			
 for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (2 16), 2x (18 14) 			
 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 ostranded at AWG cables for main contacts e solid ostranded finely stranded with core end processing e stranded ostranded ostranded ostranded ostranded ostranded with core end processing ostranded of inely stranded with core end processing osolid or stranded osolid or stranded with core end processing osolid or stranded osoluctor cross-sections osolid or stranded osolid or stranded<			
• of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • solid • stranded • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • finely stranded with core end processing • solid • 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 • at AWG cables for auxiliary contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (0.75 2.5 mm²) 2x (1 2.5 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) 2x (20 1.6), 2x (18 14)	 for auxiliary and control circuit 	screw-type terminals	
type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • solid • 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 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 • at AWG cables for auxiliary contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 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)			
• for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • stranded • stranded • stranded • stranded • finely stranded with core end processing • solid • stranded • stranded • finely stranded with core end processing • solid or stranded • solid or stranded • solid or stranded • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded — solid or stranded — 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 • at AWG cables for auxiliary contacts • at AWG cables for auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The solid or stranded auxiliary contacts **The soli	of magnet coil	Screw-type terminals	
- solid - solid - solid or stranded - finely stranded with core end processing - solid or stranded - solid or stranded - solid or stranded - solid or stranded - solid - solid - solid - solid - solid or stranded - solid or str	type of connectable conductor cross-sections		
- solid or stranded - finely stranded with core end processing • at AWG cables for main contacts • solid - stranded - stranded - 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 • for auxiliary contacts - solid or stranded - finely stranded with core end processing • 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 - sol	for main contacts		
 — finely stranded with core end processing at AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) Connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing 1 10 mm² 1 10 mm² Connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing 2x (0.5 2.5 mm² Type of connectable conductor cross-sections for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts 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) 	— solid	2x (1 2.5 mm²), 2x (2.5 10 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 type of connectable conductor cross-sections for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts for auxiliary contacts 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 (20 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 	— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 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 type of connectable conductor cross-sections for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts for auxiliary contacts 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 (20 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 	 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²	
 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 type of connectable conductor cross-sections for auxiliary contacts solid or stranded for auxiliary contacts racin 10 mm² type of connectable conductor cross-sections for auxiliary contacts racin 10 mm² 0.5 2.5 mm² type of connectable conductor cross-sections for auxiliary contacts racin 10 mm² 0.5 2.5 mm² type of connectable conductor cross-sections for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) at AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) 	 at AWG cables for main contacts 	2x (16 12), 2x (14 8)	
 solid stranded finely stranded with core end processing finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing for auxiliary contacts solid or stranded for auxiliary contacts resolid or stranded finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) resolid 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) 	connectable conductor cross-section for main		
 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 with core end processing type of connectable conductor cross-sections for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts 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 (20 16), 2x (18 14) 	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 for auxiliary contacts solid or stranded for auxiliary contacts minely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) at AWG cables for auxiliary contacts at AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) 	• solid	1 10 mm²	
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 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	• stranded	1 10 mm²	
ontacts output stranded output finely stranded with core end processing output type of connectable conductor cross-sections output for auxiliary contacts — solid or stranded — finely stranded with core end processing output output output finely stranded with core end processing output o	finely stranded with core end processing	1 10 mm²	
 ◆ 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) 			
type of connectable conductor cross-sections	solid or stranded	0.5 2.5 mm²	
type of connectable conductor cross-sections	 finely stranded with core end processing 	0.5 2.5 mm ²	
 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) 			
— 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)			
 — 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 (20 16), 2x (18 14) 	•	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
• at AWG cables for auxiliary contacts 2x (20 16), 2x (18 14)			
	-		
ANNI - DUMPOR DE COMON CONNOCTABIO CONMUCTOR OFOCO	AWG number as coded connectable conductor cross	ΔΛ (Δ0 10), ΔΛ (10 1 1)	

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
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>



EMC	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates	Marine / Shipping
RCM	Type Examination Certificate	C € _{EG-Konf.}	Type Test Certificates/Test Report	ABS

Marine / Shipping













Confirmation

other

Dangerous Good



Transport Information

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=3RT2023-1DB44-3MA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2023-1DB44-3MA0

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

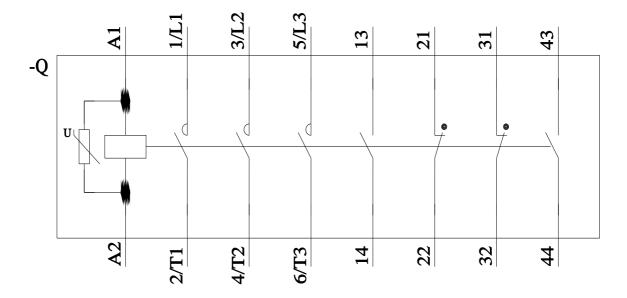
https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-1DB44-3MA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2023-1DB44-3MA0&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-1DB44-3MA0/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2023-1DB44-3MA0&objecttype=14&gridview=view1



6/2/2022 last modified: