

Power Contactors for Switching Motors

SIRIUS 3RT contactors, 3-pole up to 250 kW

				Contactors		
Type				3RT105.	3RT106.	3RT107.
Size				S6	S10	S12
Control						
Operating range of the solenoid operating mechanism		AC/DC		$0.8 \times U_{s \min} \dots 1.1 \times U_{s \max}$		
Power consumption of the solenoid operating mechanism (with cold coil and rated range $U_{s \min} \dots U_{s \max}$)						
• Standard operating mechanism (3RT10...-A)						
- AC operation	Closing at $U_{s \min}$	VA/p.f.		250/0.9	490/0.9	700/0.9
	Closing at $U_{s \max}$	VA/p.f.		300/0.9	590/0.9	830/0.9
	Closed at $U_{s \min}$	VA/p.f.		4.8/0.8	5.6/0.9	7.6/0.9
	Closed at $U_{s \max}$	VA/p.f.		5.8/0.8	6.7/0.9	9.2/0.9
- DC operation	Closing at $U_{s \min}$	W		300	540	770
	Closing at $U_{s \max}$	W		360	650	920
	Closed at $U_{s \min}$	W		4.3	6.1	8.5
	Closed at $U_{s \max}$	W		5.2	7.4	10
• Solid-state operating mechanism (3RT10...-N/-P/-S)						
- AC operation	Closing at $U_{s \min}$	VA/p.f.		190/0.8	400/0.8	560/0.8
	Closing at $U_{s \max}$	VA/p.f.		280/0.8	530/0.8	750/0.8
	Closed at $U_{s \min}$	VA/p.f.		3.5/0.6	5.5/0.5	5.6/0.5
	Closed at $U_{s \max}$	VA/p.f.		4.8/0.6	8.5/0.4	9/0.4
- DC operation	Closing at $U_{s \min}$	W		250	440	600
	Closing at $U_{s \max}$	W		320	580	800
	Closed at $U_{s \min}$	W		2.1	2.8	3
	Closed at $U_{s \max}$	W		2.8	3.4	3.6
PLC control input acc. to IEC 60947-1						
• Solid-state operating mechanism (3RT10...-N/-P/-S)				Type 1		
• Rated voltage			V DC	24		
• Operating range			V DC	17 ... 30		
• Power consumption			mA	≤ 30		
• Recovery time after mains failure, typical (applicable only for fail-safe version 3RT10...-S)			s	2		
Operating times for rated range $U_{s \min} \dots U_{s \max}$ (Total break time = Opening delay + Arcing time)						
• Standard operating mechanism (3RT10...-A)	Closing delay	ms		25 ... 50	35 ... 50	50 ... 70
	Opening delay	ms		40 ... 60	50 ... 80	70 ... 100
• Solid-state operating mechanism						
- Actuated via A1/A2 (3RT10...-N/-P)	Closing delay	ms		100 ... 120	110 ... 130	125 ... 150
	Opening delay	ms		80 ... 100		
- Actuated via PLC input (3RT10...-N/-P)	Closing delay	ms		40 ... 60	50 ... 65	65 ... 80
	Opening delay	ms		80 ... 100		
- Actuated via F-PLC input (3RT10...-S)	Closing delay	ms		60 ... 75		
	Opening delay	ms		115 ... 130		
• Arcing time			ms	10 ... 15		

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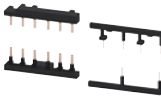
Accessories and Spare Parts for SIRIUS 3RT Contactors and SIRIUS 3RH2 Contactor Relays Accessories

Link modules

Selection and ordering data

	For contactors	Size	Version	SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	Type			d					
Safety main circuit connectors for two contactors									
	3RT2.1	S00	For series connection of two contactors	2	3RA2916-1A		1	1 unit	41B
	3RT2.2	S0		2	3RA2926-1A		1	1 unit	41B
	3RT2.3	S2		2	3RA2936-1A		1	1 unit	41B
3RA2926-1A									

PU (UNIT, SET, M) = 1
 PS* = 1 unit (unless otherwise specified)
 PG = 41B

	For con- tactors	Size	Version	SD	Article No.	Price per PU	SD	Article No.	Price per PU
	Type			d			d		
Assembly kits for reversing contactor assemblies for making 3-pole contactor assemblies									
	3RT201	S00-S00	The assembly kit contains: Mechanical interlock, two connecting clips for two contactors, wiring modules on the top and bottom For main, auxiliary and control circuits ▶		Screw terminals 			Spring-type terminals 	
3RA2923-2AA1					3RA2913-2AA1	▶		3RA2913-2AA2	
	3RT202	S0-S0	The assembly kit contains: Mechanical interlock, two connecting clips for two contactors, wiring modules on the top and bottom - For main, auxiliary and control circuits¹⁾ ▶ - Only for main circuit²⁾		3RA2923-2AA1			--	
3RA2923-2AA2					--	▶		3RA2923-2AA2	
	3RT203	S2-S2	The assembly kit contains: Two connectors for two contactors, wiring modules on the top and bottom (3RA2934-2B mechanical interlock must be ordered separately, see page 3/114) - For main and auxiliary circuits ▶ - Only for main circuit³⁾		3RA2933-2AA1		5	--	
3RA2933-2AA1					--			3RA2933-2AA2	
	3RT204	S3-S3	The assembly kit contains: Two connectors for two contactors, wiring modules on the top and bottom (3RA2934-2B mechanical interlock must be ordered separately, see page 3/114) - For main and auxiliary circuits ▶ - Only for main circuit³⁾	2	3RA2943-2AA1		2	--	
3RA2943-2AA1					--			3RA2943-2AA2	
	3RT1.5	S6-S6	The assembly kit contains: Wiring modules on the top and bottom	2	3RA1953-2A		2	3RA1953-2A	
3RA2943-2AA2	3RT1.6	S10-S10		2	3RA1963-2A		2	3RA1963-2A	
	3RT1.7	S12-S12		2	3RA1973-2A		2	3RA1973-2A	
3RA1953-2A									
									
3RA1963-2A									

¹⁾ Use of the 3RA2923-2AA1 assembly kit in conjunction with the 3RT202-.....-3MA0 contactors is limited because the auxiliary switches in the basic unit are not allowed to be used on account of the permanently mounted auxiliary switch block.

²⁾ Version in size S0 with spring-type terminals:
Only the wiring modules for the main circuit are included.
No connecting clips are included for the auxiliary and control circuit.

³⁾ Version in sizes S2 and S3 with spring-type terminals in the auxiliary and control circuits: Only the wiring modules for the main circuit are included. A cable set is included for the auxiliary circuit.

Reversing Contactor Assemblies

SIRIUS 3RA23 reversing contactor assemblies, up to 55 kW

Sizes S00 to S3

Rated data AC-2 and AC-3 for 50 Hz 400 V AC		Size	Type		
Rating kW	Operational current I_e A		Contactor (See from page 3/55 onwards)	Assembly kit (See page 3/110)	Fully-wired and tested reversing contactor assemblies
			⊕ Screw terminals		
3	7	S00	3RT2015-1...2	3RA2913-2AA 1	3RA2315-8XB30-1...
4	9		3RT2016-1...2	3RA2913-2AA 1	3RA2316-8XB30-1...
5.5	12		3RT2017-1...2	3RA2913-2AA 1	3RA2317-8XB30-1...
7.5	16		3RT2018-1...2	3RA2913-2AA 1	3RA2318-8XB30-1...
5.5	12	S0	3RT2024-1...0	3RA2923-2AA 1	3RA2324-8XB30-1...
7.5	16		3RT2025-1...0	3RA2923-2AA 1	3RA2325-8XB30-1...
11	25		3RT2026-1...0	3RA2923-2AA 1	3RA2326-8XB30-1...
15	32		3RT2027-1...0	3RA2923-2AA 1	3RA2327-8XB30-1...
18.5	38		3RT2028-1...0	3RA2923-2AA 1	3RA2328-8XB30-1...
18.5	40	S2	3RT2035-1...0	3RA2933-2AA 1	3RA2335-8XB30-1...
22	55		3RT2036-1...0	3RA2933-2AA 1	3RA2336-8XB30-1...
30	65		3RT2037-1...0	3RA2933-2AA 1	3RA2337-8XB30-1...
37	80		3RT2038-1...0	3RA2933-2AA 1	3RA2338-8XB30-1...
37	80	S3	3RT2045-1...0	3RA2943-2AA 1	3RA2345-8XB30-1...
45	90		3RT2046-1...0	3RA2943-2AA 1	3RA2346-8XB30-1...
55	110		3RT2047-1...0	3RA2943-2AA 1	3RA2347-8XB30-1...
			⦿ Spring-type terminals		
3	7	S00	3RT2015-2...2	3RA2913-2AA2	3RA2315-8XB30-2...
4	9		3RT2016-2...2	3RA2913-2AA2	3RA2316-8XB30-2...
5.5	12		3RT2017-2...2	3RA2913-2AA2	3RA2317-8XB30-2...
7.5	16		3RT2018-2...2	3RA2913-2AA2	3RA2318-8XB30-2...
5.5	12	S0	3RT2024-2...0	3RA2923-2AA2	3RA2324-8XB30-2...
7.5	16		3RT2025-2...0	3RA2923-2AA2	3RA2325-8XB30-2...
11	25		3RT2026-2...0	3RA2923-2AA2	3RA2326-8XB30-2...
15	32		3RT2027-2...0	3RA2923-2AA2	3RA2327-8XB30-2...
18.5	38		3RT2028-2...0	3RA2923-2AA2	3RA2328-8XB30-2...

Note:

The 3RA2934-2B mechanical interlock for sizes S2 and S3 must be ordered separately, [see page 3/114](#).

Article No. scheme

Product versions		Article number											
SIRIUS reversing contactor assembly		3RA23 ☐ ☐ - ☐ ☐ ☐ ☐ ☐ - ☐ ☐ ☐ ☐											
Size of the contactor	e.g. 4 = S3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Rating dependent on size	e.g. 5 = 37 kW for size S3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Type of overload relay	e.g. 8X = without	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Assembly	e.g. E = communication-capable installation	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Interlock	e.g. 3 = mechanical and electrical	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Free auxiliary switches	e.g. 0 = S3: 2 NO total	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Type of electrical connection	e.g. 1 = screw terminals (main and auxiliary circuits)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Operating range/solenoid coil circuit	e.g. A = AC standard/without coil circuit	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Rated control supply voltage	e.g. L2 = 230 V AC, 50/60 Hz	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Example		3RA23 4 5 - 8 X E 3 0 - 1 A L 2											

Note:

The Article No. scheme shows an overview of product versions for better understanding of the logic behind the article numbers.

For your orders, please use the article numbers quoted in the selection and ordering data.