

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

Overview

The 3RA13 reversing contactor assemblies can be ordered as follows:

Sizes S00 to S3

- Fully wired and tested, with mechanical and electrical interlock
- As individual parts for customer assembly

Sizes S6 to S12

- Only as individual parts for customer assembly

There is also a range of accessories (auxiliary switch blocks, surge suppressors, etc.) that must be ordered separately.

Overload relays for motor protection [see Chapter 7 "Protection Equipment" → "Overload Relays"](#).

The 3RA13 contactor assemblies have screw terminals. Sizes S00 to S3 are suitable for screw and snap-on mounting onto TH 35 standard mounting rails.

For assemblies with AC operation and 50/60 Hz, a dead interval of 50 ms must be provided when used with voltages ≥ 500 V; a dead interval of 30 ms is recommended for use with voltages ≥ 400 V. These dead times do not apply to assemblies with DC operation.

The operating times of the individual contactors are not affected by the mechanical interlock

Complete units

The fully wired reversing contactor assemblies are suitable for use in any climate. They are finger-safe according to EN 50274.

The contactor assemblies consist of 2 contactors with the same power, with one NC contact in the basic unit. The contactors are mechanically and electrically interlocked (NC contact interlock).

For motor protection, either 3RU11 or 3RB2. overload relays for direct mounting or stand-alone installation or thermistor motor protection releases must be ordered separately.

Components for customer assembly

Assembly kits for all sizes are available for customer assembly of reversing contactor assemblies.

Contactors, overload relays, the mechanical interlock (as of size S2) and – for momentary-contact operation – auxiliary switch blocks for latching must be ordered separately.

See also the configuration manual "SIRIUS Configuration":

<http://support.automation.siemens.com/WW/view/de/40625241>

Ratings AC-2 and AC-3 for 50 Hz 400 V AC		Size	Order No.				Assembly kit	Fully wired and tested contactor assemblies
Rating kW	Operational current I_e A		Contactor	Mechanical interlocks ¹⁾	Mechanical interlocks ²⁾	Mechanical interlocks ³⁾		
3	7	S00	3RT10 15	-- ⁴⁾	--	--	3RA19 13-2A ⁵⁾	3RA13 15-8XB30-1 ..
4	9		3RT10 16					3RA13 16-8XB30-1 ..
5.5	12		3RT10 17					3RA13 17-8XB30-1 ..
5.5	12	S0	3RT10 24	3RA19 24-1A	3RA19 24-2B	--	3RA19 23-2A ⁶⁾	3RA13 24-8XB30-1 ..
7.5	17		3RT10 25					3RA13 25-8XB30-1 ..
11	25		3RT10 26					3RA13 26-8XB30-1 ..
15	32	S2	3RT10 34	3RA19 24-1A	3RA19 24-2B	--	3RA19 33-2A ⁷⁾	3RA13 34-8XB30-1...
18.5	40		3RT10 35					3RA13 35-8XB30-1...
22	50		3RT10 36					3RA13 36-8XB30-1...
30	65	S3	3RT10 44	3RA19 24-1A	3RA19 24-2B	--	3RA19 43-2A ⁷⁾	3RA13 44-8XB30-1...
37	80		3RT10 45					3RA13 45-8XB30-1...
45	95		3RT10 46					3RA13 46-8XB30-1...
55	115	S6	3RT10 54	--	--	3RA19 54-2A	3RA19 53-2M ⁸⁾	--
75	150		3RT10 55					
90	185		3RT10 56					
110	225	S10	3RT10 64	--	--	3RA19 54-2A	3RA19 63-2A ⁸⁾	--
132	265		3RT10 65					
160	300		3RT10 66					
200	400	S12	3RT10 75	--	--	3RA19 54-2A	3RA19 73-2A ⁸⁾	--
250	500		3RT10 76					

¹⁾ Can be mounted onto the front.

²⁾ Laterally mountable with one auxiliary contact.

³⁾ Laterally mountable without auxiliary contact.

⁴⁾ Interlock can only be ordered with assembly kit.

⁵⁾ Assembly kit contains: mechanical interlock; connecting clips for 2 contactors; wiring modules on the top and bottom.

⁶⁾ Assembly kit contains: wiring modules on the top and bottom.

⁷⁾ Assembly kit contains: 2 connecting clips for contactors; wiring modules on the top and bottom.

⁸⁾ Assembly kit contains: wiring module on the top and bottom.

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Selection and ordering data

Fully wired and tested contactor assemblies · Size S00 · up to 5.5 kW



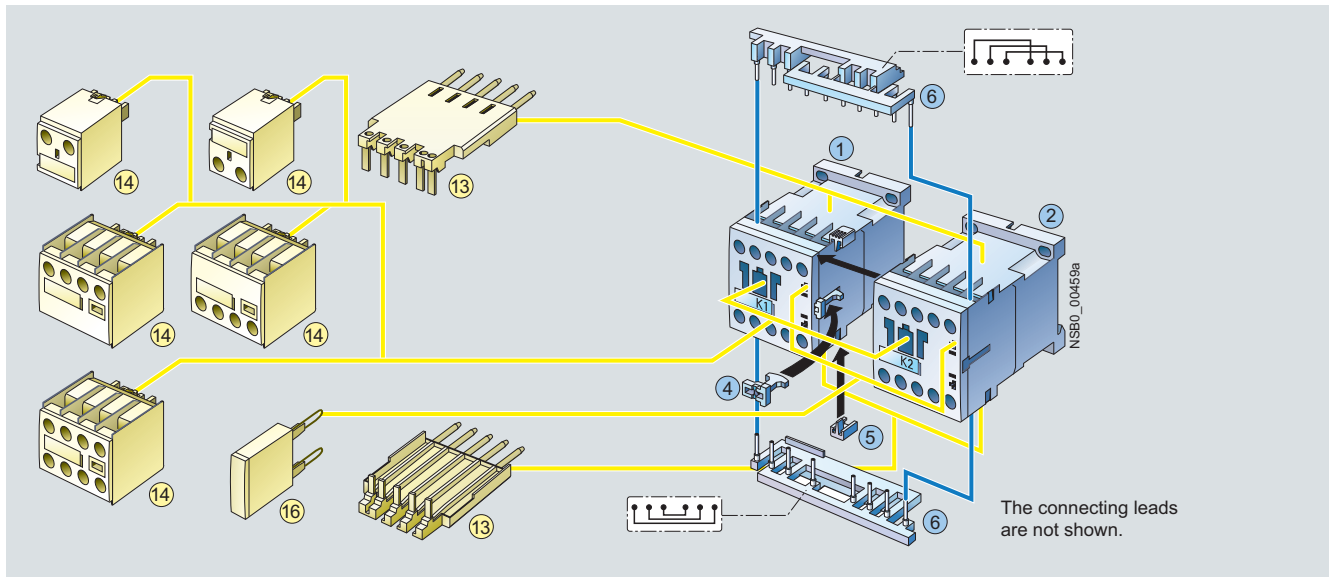
3RA13 1.-8XB30-1...

Ratings AC-2 and AC-3					Rated control supply voltage U_s ¹⁾	DT	Screw terminals			PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of induction motors at 50 Hz and						Order No.	Price € per PU				
	400 V	230 V	400 V	500 V								
A	kW	kW	kW	kW	V							
AC operation, 50/60 Hz												
7	2.2	3	3.5	4	AC 24	A	3RA13 15-8XB30-1AB0		1	1 unit	41B	
					AC 110	A	3RA13 15-8XB30-1AF0		1	1 unit	41B	
					AC 230	▶	3RA13 15-8XB30-1AP0		1	1 unit	41B	
9	3	4	4.5	5.5	AC 24	A	3RA13 16-8XB30-1AB0		1	1 unit	41B	
					AC 110	A	3RA13 16-8XB30-1AF0		1	1 unit	41B	
					AC 230	▶	3RA13 16-8XB30-1AP0		1	1 unit	41B	
12	3	5.5	5.5	5.5	AC 24	A	3RA13 17-8XB30-1AB0		1	1 unit	41B	
					AC 110	A	3RA13 17-8XB30-1AF0		1	1 unit	41B	
					AC 230	▶	3RA13 17-8XB30-1AP0		1	1 unit	41B	
DC operation												
7	2.2	3	3.5	4	24 DC	▶	3RA13 15-8XB30-1BB4		1	1 unit	41B	
9	3	4	4.5	5.5	24 DC	▶	3RA13 16-8XB30-1BB4		1	1 unit	41B	

¹⁾ Coil operating range
at 50 Hz: 0.8 ... 1.1 x U_s ;
at 60 Hz: 0.85 ... 1.1 x U_s .

Note:

The contactors integrated in the contactor assemblies have no unassigned auxiliary contacts.



Mountable accessories (optional)

Accessories	Order No.	Page
13 Solder pin adapters	3RT19 16-4KA1	3/65
14 Auxiliary switch block, front (auxiliary switch block according to EN 50005 must be used)	3RH19 11-1....	3/35
16 Surge suppressors	3RT19 16-1....	3/42

Complete contactor assemblies

Individual parts		Order No.		Page
		Q1	Q2	
1 2	Contactor, 3 kW	3RT10 15	3RT10 15	3/14
1 2	Contactor, 4 kW	3RT10 16	3RT10 16	3/14
1 2	Contactor, 5.5 kW	3RT10 17	3RT10 17	3/14
4 5 6	Assembly kit	3RA19 13-2A		3/64

The assembly kit contains:

- 4** Mechanical interlocks
- 5** 2 connecting clips for 2 contactors
- 6** Wiring modules on the top and bottom for connecting the main current paths, electrical interlock included¹⁾, interruptible (NC contact interlock)

¹⁾ 3RT10 1. contactors with one NC contact in the basic unit are required for the electrical interlock.

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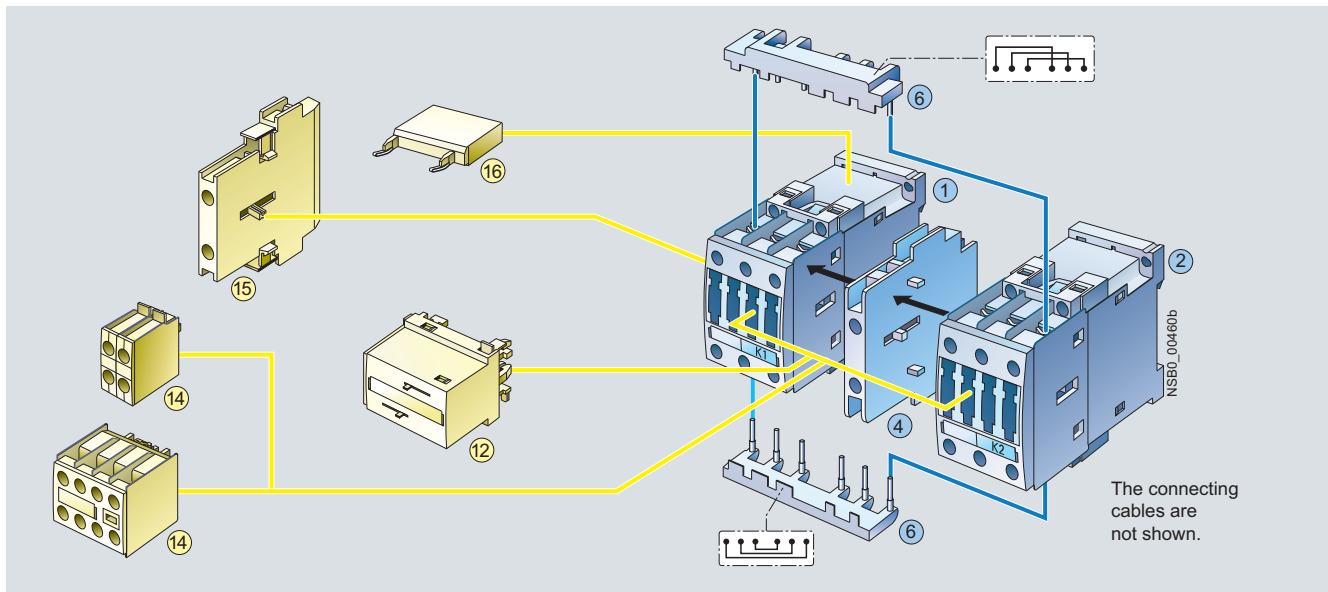
Fully wired and tested contactor assemblies · Size S0 · up to 11 kW



3RA13 2.-8XB30-1...

Ratings AC-2 and AC-3					Rated control supply voltage $U_s^{1)}$	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of induction motors at 50 Hz and									
400 V	230 V	400 V	500 V	690 V			Order No.	Price € per PU		
A	kW	kW	kW	kW	V					
AC operation, 50/60 Hz										
12	3	5.5	7.5	7.5	AC 24	A	3RA13 24-8XB30-1AC2	1	1 unit	41B
					AC 110	A	3RA13 24-8XB30-1AG2	1	1 unit	41B
					AC 230	▶	3RA13 24-8XB30-1AL2	1	1 unit	41B
17	4	7.5	10	11	AC 24	A	3RA13 25-8XB30-1AC2	1	1 unit	41B
					AC 110	A	3RA13 25-8XB30-1AG2	1	1 unit	41B
					AC 230	▶	3RA13 25-8XB30-1AL2	1	1 unit	41B
25	5.5	11	11	11	AC 24	A	3RA13 26-8XB30-1AC2	1	1 unit	41B
					AC 110	A	3RA13 26-8XB30-1AG2	1	1 unit	41B
					AC 230	A	3RA13 26-8XB30-1AL2	1	1 unit	41B
DC operation										
12	3	5.5	7.5	7.5	24 DC	▶	3RA13 24-8XB30-1BB4	1	1 unit	41B
17	4	7.5	10	11	24 DC	A	3RA13 25-8XB30-1BB4	1	1 unit	41B
25	5.5	11	11	11	24 DC	A	3RA13 26-8XB30-1BB4	1	1 unit	41B

¹⁾ Coil operating range
at 50 Hz: 0.8 ... 1.1 × U_s ; at 60 Hz: 0.85 ... 1.1 × U_s .



Mountable accessories (optional)

Accessories	Order No.	Page
12 Mechanical interlock, front	3RA19 24-1A	3/63
14 Auxiliary switch block, front	3RH19 21-1CA..	3/34
15 Auxiliary switch block, lateral	3RH19 21-1EA..	3/38
16 Surge suppressors	3RT19 26-1....	3/42

Complete contactor assemblies

Individual parts		Order No.		Page
		Q1	Q2	
1 2	Contactor, 5.5 kW	3RT10 24	3RT10 24	3/15
1 2	Contactor, 7.5 kW	3RT10 25	3RT10 25	3/15
1 2	Contactor, 11 kW	3RT10 26	3RT10 26	3/15
4	Mechanical interlock, lateral	3RA19 24-2B		3/63
6	Assembly kit	3RA19 23-2A		3/64



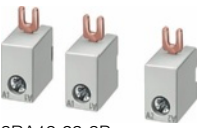
The assembly kit contains wiring modules on the top and bottom (they also form the mechanical connection between the contactors).

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Components for customer assembly

	For contactors	Size	Version		Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Type									
Mechanical interlocks									
	3RT10 2	S0	Laterally mountable¹⁾ Each with one auxiliary contact (1 NC contact) per contactor (can only be used to connect contactors which are not more than 1 size larger or smaller). The mounting depth of the smaller contactor has to be adapted.)	▶	3RA19 24-2B		1	1 unit	41B
	3RT10 3	S2							
	3RT10 4	S3							
	3RT13 2								
	3RT13 4								
3RA19 24-1A mounted onto 2 contactors	3RT14 4								
	3RT15 2								
	3RT15 3								
	3RT10 2	S0	Can be mounted onto the front²⁾ Onto contactor sizes S2 and S3 (for contactors of the same size) Note: Size S0: Wiring modules must be mounted first. Sizes S2 and S3: Use 3RA19 32-2C mechanical connectors.	▶	3RA19 24-1A		1	1 unit	41B
	3RT10 3	S2							
3RT10 4	S3								
3RT13 2									
3RT15 2									
	3RT1. 5	S6	Laterally mountable, without auxiliary contacts Contactor sizes S6, S10 and S12 can be interlocked with each other as required; no adaptation of mounting depth is necessary. Contactor clearance 10 mm.	▶	3RA19 54-2A		1	1 unit	41B
	3RT1. 6	S10							
	3RT1. 7	S12							
3RA19 54-2A									
	3RT10 4.-A with 3RT10 5	S3 with S6	Adapters, laterally mountable; for mechanical interlocking of contactor S3 (only for AC operation) with contactor S6 using 3RA19 54-2A locking device (must be ordered separately) incl. connecting clips	A	3RA19 54-2C		1	1 unit	41B
3RA19 54-2C									
Coil repeat terminals									
	3RT10 3	S2, S3	For the coil terminals A1 and A2 for reversing starters (contactor sizes S2 and S3). 2 x A1 and 1 x A2 required per assembly. (one set contains 10 x A1 and 5 x A2)	B	3RA19 23-3B		1	1 unit	41B
	3RT10 4								
3RA19 23-3B									
Base plates									
	3RT10 5	S6	For customer assembly of reversing contactor assemblies	B	3RA19 52-2A		1	1 unit	41B
	3RT1. 6	S10		B	3RA19 62-2A		1	1 unit	41B
	3RT1. 7	S12		B	3RA19 72-2A		1	1 unit	41B

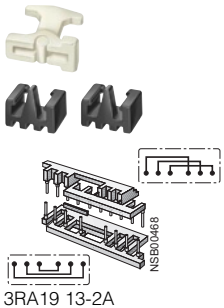
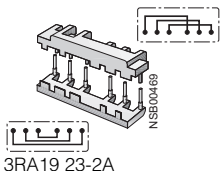
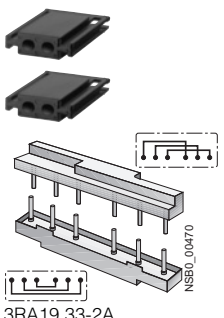
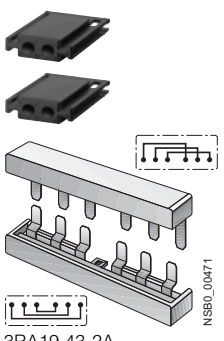
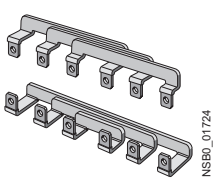
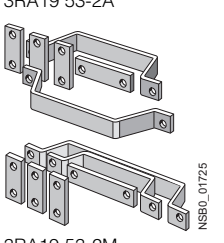
¹⁾ Can also be used for 4-pole contactors with sizes S2 and S3.

²⁾ Can also be used for size S0 4-pole contactors.

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For contactors	Type	Size	Version	DT	Order No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
Assembly kits for making 3-pole contactor assemblies									
 3RT10 1	3RT10 1	S00	The assembly kit contains: mechanical interlock; 2 connecting clips for 2 contactors; wiring modules on the top and bottom	▶	3RA19 13-2A		1	1 unit	41B
 3RT10 2	3RT10 2	S0	The assembly kit contains: wiring modules on the top and bottom	▶	3RA19 23-2A		1	1 unit	41B
 3RT10 3	3RT10 3	S2	The assembly kit contains: 2 connecting clips for 2 contactors; wiring modules on the top and bottom	▶	3RA19 33-2A		1	1 unit	41B
 3RT10 4	3RT10 4	S3	The assembly kit contains: 2 connecting clips for 2 contactors; wiring modules on the top and bottom	▶	3RA19 43-2A		1	1 unit	41B
 3RT10 5	3RT10 5	S6	The assembly kit contains: Wiring modules on the top and bottom (for connection with box terminal)	A	3RA19 53-2A		1	1 unit	41B
 3RT1. 6 3RT1. 7	3RT10 5 3RT1. 6 3RT1. 7	S6 S10 S12	The assembly kit contains: Wiring modules on the top and bottom (for connection without box terminal)	A A A	3RA19 53-2M 3RA19 63-2A 3RA19 73-2A		1 1 1	1 unit 1 unit 1 unit	41B 41B 41B