## 3RA13, 3RA14 Contactor Assemblies

## 3RA13 Reversing Contactor Assemblies

### 3RA13 complete units, 3 ... 45 kW

#### Overview

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

#### Size S00 to S3

Fully wired and tested, with mechanical and electrical interlock. 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 recommend for use with voltages ≥ 400 V. These dead times do not apply to assemblies with DC operation.

### Size S00 to S12

As individual parts for customer assembly.

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

For overload relays for motor protection, see "Protection Equipment" → "Overload Relays".

The 3RA13 contactor assemblies have screw terminals and are suitable for screw and snap-on mounting onto 35 mm standard mounting rails.

#### 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 tripping units 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 S0) and – for momentary-contact operation – auxiliary switch blocks for latching must be ordered separately.

Rated data A for AC 50 Hz	AC-2 and AC-3 2 400 V	Size	Order No.					
Rating	Operational current I <sub>e</sub>		Contactor	Mechanical interlock <sup>1)</sup>	Mechanical interlock <sup>2)</sup>	Mechanical interlock <sup>3)</sup>	Assembly kit	Fully wired and tested contactor assemblies
kW	Α							
3	7	S00	3RT10 15	4)			3RA19 13-2A <sup>5)</sup>	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 <sup>6)</sup>	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 <sup>7)</sup>	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 <sup>7)</sup>	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 <sup>8)</sup>	-
75	150		3RT10 55					
90	185		3RT10 56					
110	225	S10	3RT10 64			3RA19 54-2A	3RA19 63-2A <sup>8)</sup>	-
132	265		3RT10 65					
160	300		3RT10 66					
200	400	S12	3RT10 75			3RA19 54-2A	3RA19 73-2A <sup>8)</sup>	-
250	500		3RT10 76					

<sup>1)</sup> Can be mounted onto the front.

<sup>2)</sup> Laterally mountable with one auxiliary contact.

<sup>3)</sup> Laterally mountable without auxiliary contact.

<sup>4)</sup> Interlock can only be ordered with assembly kit.

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

<sup>6)</sup> Assembly kit contains: wiring modules on the top and bottom.

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

<sup>8)</sup> Assembly kit contains: wiring module on the top and bottom.

3RA13 complete units, 3 ... 45 kW

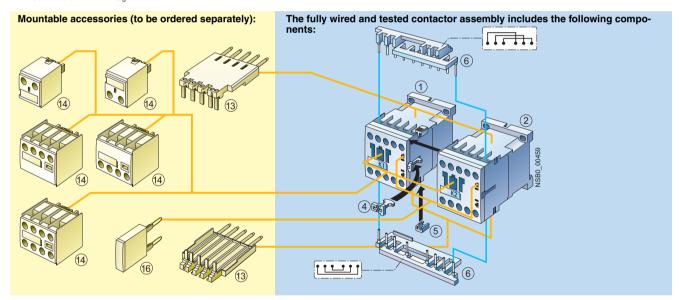
### Selection and ordering data

Fully wired and tested contactor assemblies<sup>2)</sup> · Size S00 · up to 5.5 kW

,					0.20	ap to ore							
	Rated dar Opera- tional current I <sub>e</sub>	Rating	s of ion mot			Rated control supply voltage $U_s^{1)}$	DT	Screw terminals	<b>+</b>	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	up to			500 V	690 V			Order No.	Price per PU				
	A	kW	kW	kW	kW	V							kg
AC operation, 50/60	Hz												
The state of the s	7	2.2	3	3.5	4	AC 24 AC 110 AC 230	A A	3RA13 15-8XB30-1AB0 3RA13 15-8XB30-1AF0 3RA13 15-8XB30-1AP0		1 1 1	1 unit 1 unit 1 unit	101 101 101	0.430 0.430 0.430
141 - 141 -	9	3	4	4.5	5.5	AC 24 AC 110 AC 230	A A	3RA13 16-8XB30-1AB0 3RA13 16-8XB30-1AF0 3RA13 16-8XB30-1AP0		1 1 1	1 unit 1 unit 1 unit	101 101 101	0.430 0.430 0.430
3RA13 18XB30-1	12	3	5.5	5.5	5.5	AC 24 AC 110 AC 230	A A	3RA13 17-8XB30-1AB0 3RA13 17-8XB30-1AF0 3RA13 17-8XB30-1AP0		1 1 1	1 unit 1 unit 1 unit	101 101 101	0.430 0.430 0.430
DC operation													
	7 9	2.2 3	3 4	3.5 4.5	4 5.5	DC 24 DC 24	<b>&gt;</b>	3RA13 15-8XB30-1BB4 3RA13 16-8XB30-1BB4		1 1	1 unit 1 unit	101 101	0.550 0.550

 $<sup>^{1)}</sup>$  Coil operating range at 50 Hz: 0.8 ... 1.1 x  $U_{\rm S}$ ; at 60 Hz: 0.85 ... 1.1 x  $U_{\rm S}$ 

<sup>&</sup>lt;sup>2)</sup> The contactors integrated in the contactor assemblies have no unassigned auxiliary contacts.



Acc	essories	Order No.	Page	Individu	al parts	Order No.		Page
			-		-	K1	K2	_
13	Solder pin adapters	3RT19 16-4KA1	3/111	12	Contactor, 3 kW	3RT10 15	3RT10 15	3/15
14	Auxiliary switch block,			12	Contactor, 4 kW	3RT10 16	3RT10 16	3/15
	front (auxiliary switch block	3RH19 11-1	3/102	12	Contactor, 5.5 kW	3RT10 17	3RT10 17	3/15
	according to EN 50005			456	Assembly kit	3RA19 13-2A		3/38
	must be used)				The assembly kit contains	S:		
16	Surge suppressors	3RT19 16-1	3/108, 3/109		1 Machanical interleals			

- 4 Mechanical interlock
- 5 2 connecting clips for 2 contactors
- Wiring modules on the top and bottom for connecting the main current paths, electrical interlock included <sup>1)</sup>, interruptible (NC contact interlock)

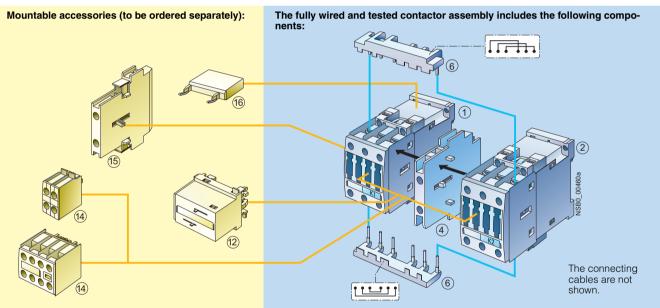
<sup>1) 3</sup>RT10 1. contactors with one NC contact in the basic unit are required for the electrical interlock.

3RA13 complete units, 3 ... 45 kW

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

	Rated da Opera- tional current I <sub>e</sub>	Rating	s of ion mot			Rated control supply voltage $U_s^{1)}$	DT	Screw terminals	<b>+</b>	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	up to							Order No.	Price per PU				
	400 V	230 V	400 V	500 V	690 V								
	Α	kW	kW	kW	kW	V							kg
	AC ope	ration	, 50/60	Hz									<u>.</u>
A VIEW	12	3	5.5	7.5	7.5	AC 24 AC 110	A	3RA13 24-8XB30-1AC2 3RA13 24-8XB30-1AG2		1	1 unit 1 unit	101 101	0.770 0.770
0.00						AC 230		3RA13 24-8XB30-1AL2		1	1 unit	101	0.770
	17	4	7.5	10	11	AC 24	Α	3RA13 25-8XB30-1AC2		1	1 unit	101	0.770
						AC 110	Α	3RA13 25-8XB30-1AG2		1	1 unit	101	0.770
						AC 230	<b></b>	3RA13 25-8XB30-1AL2		1	1 unit	101	0.770
20000	25	5.5	11	11	11	AC 24	Α	3RA13 26-8XB30-1AC2		1	1 unit	101	0.770
						AC 110	Α	3RA13 26-8XB30-1AG2		1	1 unit	101	0.770
3RA13 28XB30-1						AC 230	Α	3RA13 26-8XB30-1AL2		1	1 unit	101	0.770
	DC ope	ration											
	12	3	5.5	7.5	7.5	DC 24	<b></b>	3RA13 24-8XB30-1BB4		1	1 unit	101	1.230
	17	4	7.5	10	11	DC 24	Α	3RA13 25-8XB30-1BB4		1	1 unit	101	1.230
	25	5.5	11	11	11	DC 24	Α	3RA13 26-8XB30-1BB4		1	1 unit	101	1.230

 $<sup>^{1)}</sup>$  Coil operating range at 50 Hz: 0.8 ... 1.1 ×  $U_{\rm S}$ ; at 60 Hz: 0.85 ... 1.1 ×  $U_{\rm S}$ 



Acce	essories	Order No.	Page	Individu	al parts	Order No. K1	K2	Page
12	Mechanical interlock, front Auxiliary switch block, front	3RA19 24-1A 3RH19 21-1CA.	3/37	1 2 1 2 1 2	Contactor, 5.5 kW Contactor, 7.5 kW Contactor, 11 kW	3RT10 24 3RT10 25 3RT10 26	3RT10 24 3RT10 25 3RT10 26	3/16 3/16 3/16
<ul><li>15</li><li>16</li></ul>	Auxiliary switch block, lateral Surge suppressor	3RH19 21-1EA 3RT19 26-1	3/104 3/108	<ul><li>4</li><li>6</li></ul>	Mechanical interlock, lateral Assembly kit	3RA19 24-2B 3RA19 23-2A		3/37 3/38

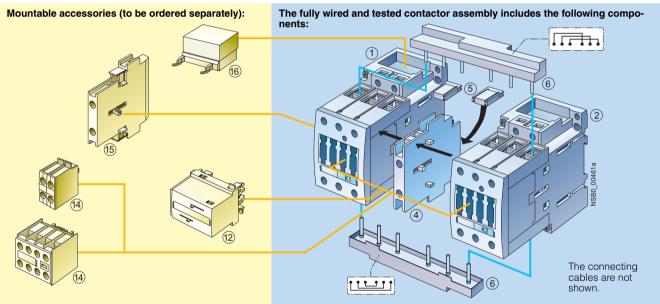
The assembly kit contains wiring modules on the top and bottom (they also form the mechanical connection between the contactors).

3RA13 complete units, 3 ... 45 kW

#### Fully wired and tested contactor assemblies · Size S2 · up to 22 kW

r any mnoa ana tooto		.07 400	70111011	00 0,		up to zz KII							
	Rated da Opera- tional current I <sub>e</sub>	Rating	s of ion mot			Rated control supply voltage $U_s^{1)}$	DT	Screw terminals	<b>+</b>	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	up to			500 V	COO V			Order No.	Price per PU				
	500 V	230 V	400 V	500 V	690 V								
	Α	kW	kW	kW	kW	V							kg
	AC ope	ration	, 50/60	) Hz									
aire Valley	32	7.5	15	18.5	18.5	AC 24 AC 110 AC 230	A A A	3RA13 34-8XB30-1AC2 3RA13 34-8XB30-1AG2 3RA13 34-8XB30-1AL2		1 1 1	1 unit 1 unit 1 unit	101 101 101	2.300 2.300 2.300
States	40	11	18.5	22	22	AC 24 AC 110 AC 230	A A A	3RA13 35-8XB30-1AC2 3RA13 35-8XB30-1AG2 3RA13 35-8XB30-1AL2		1 1 1	1 unit 1 unit 1 unit	101 101 101	2.300 2.300 2.300
	50	15	22	30	22	AC 24 AC 110 AC 230	B B A	3RA13 36-8XB30-1AC2 3RA13 36-8XB30-1AG2 3RA13 36-8XB30-1AL2		1 1 1	1 unit 1 unit 1 unit	101 101 101	2.300 2.300 2.300
3RA13 38XB30-1	DC ope	ration											
	32 40	7.5 11	15 18.5	18.5 22	18.5 22	DC 24 DC 24	A A	3RA13 34-8XB30-1BB4 3RA13 35-8XB30-1BB4		1 1	1 unit 1 unit	101 101	3.450 3.450 3.450
3RA13 38XB30-1	DC ope	ration 7.5	15	18.5	18.5	AC 24 AC 110 AC 230 DC 24	B B A	3RA13 36-8XB30-1AC2 3RA13 36-8XB30-1AG2 3RA13 36-8XB30-1AL2 3RA13 34-8XB30-1BB4		1 1 1 1 1 1 1	1 unit 1 unit 1 unit 1 unit	101 101 101	2 2 2 3 3

 $<sup>^{1)}</sup>$  Coil operating range at 50 Hz: 0.8 ... 1.1 x  $U_{\rm S}$ ; at 60 Hz: 0.85 ... 1.1 x  $U_{\rm S}$ 



Acc	essories	Order No.	Page	Individu	ıal parts	Order No. K1	K2	Page
12	Mechanical interlock, front Auxiliary switch block, front	3RA19 24-1A 3RH19 21-1CA	3/37 3/103	12 12 12	Contactor, 15 kW Contactor, 18.5 kW Contactor, 22 kW	3RT10 34 3RT10 35 3RT10 36	3RT10 34 3RT10 35 3RT10 36	3/17 3/17 3/17
<ul><li>15</li><li>16</li></ul>	Auxiliary switch block, lateral Surge suppressor	3RH19 21-1EA 3RT19 26-1 3RT19 36-1	3/104 3/108	<ul><li>4</li><li>5</li><li>6</li></ul>	Mechanical interlock, lateral Assembly kit	3RA19 24-2B 3RA19 33-2A		3/37 3/38

The assembly kit contains:

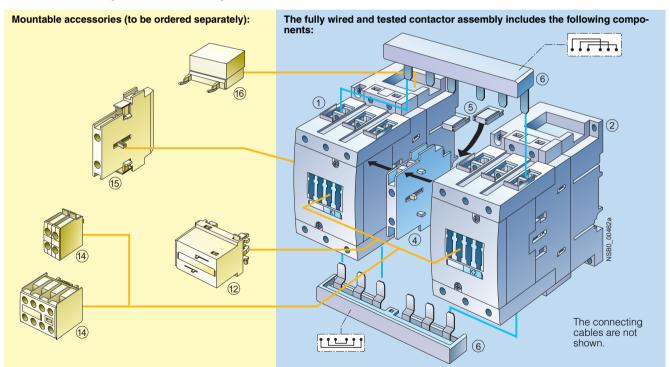
- 5 2 connecting clips for 2 contactors with 10 mm distance
- 6 Wiring modules on the top and bottom for connecting the main current paths

3RA13 complete units, 3 ... 45 kW

Fully wired and tested contactor assemblies · Size S3 · up to 45 kW

	Rated date Operational current I <sub>e</sub>	Rating	s of ion mot			Rated control supply voltage $U_s^{1)}$	DT	Screw terminals	<b>+</b>	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	up to			500 V	000 W			Order No.	Price per PU				
	500 V	230 V	400 V	500 V	690 V								
	Α	kW	kW	kW	kW	V							kg
	AC ope	ration	at 50/	60 Hz									
	65	18.5	30	37	45	AC 24 AC 110 AC 230	B B B	3RA13 44-8XB30-1AC2 3RA13 44-8XB30-1AG2 3RA13 44-8XB30-1AL2		1 1 1	1 unit 1 unit 1 unit	101 101 101	4.500 4.500 4.500
Taran United States	80	22	37	45	55	AC 24 AC 110 AC 230	B B B	3RA13 45-8XB30-1AC2 3RA13 45-8XB30-1AG2 3RA13 45-8XB30-1AL2		1 1 1	1 unit 1 unit 1 unit	101 101 101	4.500 4.500 4.500
	95	22	45	55	55	AC 24 AC 110 AC 230	B B B	3RA13 46-8XB30-1AC2 3RA13 46-8XB30-1AG2 3RA13 46-8XB30-1AL2		1 1 1	1 unit 1 unit 1 unit	101 101 101	4.500 4.500 4.500
	DC ope	ration											
3RA13 48XB30-1	65 80 95	18.5 22 22	30 37 45	37 45 55	45 55 55	DC 24 DC 24 DC 24	B B B	3RA13 44-8XB30-1BB4 3RA13 45-8XB30-1BB4 3RA13 46-8XB30-1BB4		1 1 1	1 unit 1 unit 1 unit	101 101 101	6.500 6.500 6.500

 $<sup>^{1)}</sup>$  Coil operating range at 50 Hz: 0.8 ... 1.1 x  $U_{\rm S}$ ; at 60 Hz: 0.85 ... 1.1 x  $U_{\rm S}$ 



	J	marviau	al parts	Order No. K1	K2	Page
19 21-1CA 3 19 21-1EA 3	3/103 3/104	1 2 1 2 1 2 4 5 6	Contactor, 30 kW Contactor, 37 kW Contactor, 45 kW Mechanical interlock, lateral Assembly kit The assembly kit contains:	3RT10 44 3RT10 45 3RT10 46 3RA19 24-2B 3RA19 43-2A	3RT10 44 3RT10 45 3RT10 46	3/18 3/18 3/18 3/37 3/38
ا	9 21-1CA 3 9 21-1EA 3 9 26-1 3	9 21-1CA 3/103 9 21-1EA 3/104 9 26-1 3/108	9 24-1A 3/37 1 2 9 21-1CA 3/103 1 2 9 21-1EA 3/104 1 2 9 26-1 3/108 4	9 24-1A 3/37 1 2 Contactor, 30 kW 9 21-1CA. 3/103 1 2 Contactor, 37 kW 9 21-1EA. 3/104 1 2 Contactor, 45 kW 9 26-1 3/108 4 Mechanical interlock, lateral 9 36-1 5 6 Assembly kit	K1         9 24-1A       3/37       1 2       Contactor, 30 kW       3RT10 44         9 21-1CA.       3/103       1 2       Contactor, 37 kW       3RT10 45         9 21-1EA.       3/104       1 2       Contactor, 45 kW       3RT10 46         9 26-1       3/108       4       Mechanical interlock, lateral       3RA19 24-2B	K1     K2       9 24-1A     3/37     1 2     Contactor, 30 kW     3RT10 44     3RT10 44       9 21-1CA.     3/103     1 2     Contactor, 37 kW     3RT10 45     3RT10 45       9 21-1EA.     3/104     1 2     Contactor, 45 kW     3RT10 46     3RT10 46       9 26-1     3/108     4     Mechanical interlock, lateral     3RA19 24-2B       9 36-1     5 6     Assembly kit     3RA19 43-2A

- 5 2 connecting clips for 2 contactors with 10 mm distance
- 6 Wiring modules on the top and bottom for connecting the main current paths

**Components for customer assembly** 

Selection and orderi	ng data									
	For contactors	Size	Version		Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	Туре									kg
Mechanical interlocks	s									
	3RT10 2 3RT10 3 3RT10 4 3RT13 2 3RT13 3 3RT13 4 3RT14 4 3RT15 2 3RT15 3	\$0 \$2 \$3	For lateral mounting 1) 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	101	0.060
3RA19 24-1A mounted onto 2 contactors	3RT10 2 3RT10 3 3RT10 4 3RT13 2 3RT15 2	\$0 \$2 \$3 \$0	For mounting to the front <sup>2)</sup> Onto contactors with sizes S0 to 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	101	0.050
3RA19 54-2A	3RT1. 5 to 3RT1. 7	S6 S10 S12	For lateral mounting, without auxiliary contacts; size S6, S10 and S12 contactors 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	101	0.050
3RA19 54-2C Coil repeat terminals	3RT10 4A with 3RT10 5	. <b>S3</b> with <b>S6</b>	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	101	0.050
3RA19 23-3B	3RT10 3 3RT10 4	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)	В	3RA19 23-3B		1	1 unit	101	0.080
Base plates										
40	3RT10 5 3RT1. 6 3RT1. 7	S6 S10 S12	For customer assembly of reversing contactor assemblies	B B B	3RA19 52-2A 3RA19 62-2A 3RA19 72-2A		1 1 1	1 unit 1 unit 1 unit	101 101 101	1.300 2.100 2.300

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

<sup>&</sup>lt;sup>2)</sup> Can also be used for size S0 4-pole contactors.

## **Components for customer assembly**

	For contactors  Type	Size	Version	DT	Order No. Price per PU		PS*	PG	Weight per PU approx.
Assembly kits for mak		contactor a	ssemblies						
3RA19 13-2A	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	101	0.040
3RA19 23-2A	3RT10 2	S0	The assembly kit contains: wiring modules on the top and bottom	•	3RA19 23-2A	1	1 unit	101	0.060
3RA19 33-2A	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	101	0.120
	ODT40.4	-	The constability of the contains		000 40 00 00			101	0.000
3RA19 43-2A	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	101	0.300
NSBO_01724	3RT10 5	S6	The assembly kit contains: Wiring modules on the top and bottom (for connection with box termi- nal)	A .	3RA19 53-2A	1	1 unit	101	1.300
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	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	3RA19 53-2M 3RA19 63-2A 3RA19 73-2A	1 1 1	1 unit 1 unit 1 unit	101 101 101	0.900 2.400 3.000

### Components for customer assembly

	For contactors	Size	Contactor clearance	Version		DT	Order No. Price per PU		PS*	PG	Weight per PU approx.
	Туре		mm					,			kg
Wiring modules, sing	gle										
	3RT10 1	S00-S00	0	Top (in-ph	nase)	•	3RA19 13-3D	1	5 units	101	0.015
				Bottom (w reversal)	vith phase		3RA19 13-3E	1	5 units	101	0.015
	3RT10 2	S0-S0	0	Top (in-ph	nase)	<b></b>	3RA19 23-3D	1	5 units	101	0.020
		and <b>S0-S0</b>	and 10	Bottom (w reversal)	vith phase	•	3RA19 23-3E	1	5 units	101	0.020
	3RT10 3	S2-S2	10	Top (in-ph	nase)	<b>&gt;</b>	3RA19 33-3D	1	1 unit	101	0.065
				Bottom (w reversal)	vith phase	•	3RA19 33-3E	1	1 unit	101	0.065
	3RT10 4	S3-S3	10	Top (in-ph	nase)	<b>&gt;</b>	3RA19 43-3D	1	1 unit	101	0.160
				Bottom (w reversal)	vith phase	•	3RA19 43-3E	1	1 unit	101	0.160
NSB0_01834	3RT10 5	S6-S6	10		nase, for con- ith box termi-	A	3RA19 53-3D	1	1 unit	101	0.620
A19 53-3D					phase rever- nnection with- erminal)	Α	3RA19 53-3P	1	1 unit	101	0.440
A19 53-3P	For contactors	Size	Contactor clearance	Inter- locking	Version	DT	Order No. Price per PU		PS*	PG	Weigh per Pl approx
	Туре		mm								kg
echanical connecto							1 pack = 10 sets for 10 assem	olies			
A19 12-2H	3RT1. 1 <sup>1)</sup>	S00-S00	0	Lateral	For 3- and 4-pole con- tactors	•	3RA19 12-2H	1	10 units	101	0.010
Z/A	3RT1. 2	S0-S0	0	On front	For 3- and	Α	3RA19 22-2C	1	10 units	101	0.025
A19 22-2C			10 <sup>2)</sup>	Lateral	4-pole con- tactors	•	3RT19 22-2D	100	20 units	101	11.000
A19 22-20	3RT1. 3 3RT1. 4	S2-S2 S3-S3	0	On front	For 3-pole contactors	<b>&gt;</b>	3RA19 32-2C	1	10 units	101	0.010
A19 32-2C											
	3RT1. 3 3RT1. 4 3RT1. 5	S2-S2 S3-S3 S6-S6	10	Lateral	For 3-pole contactors	•	3RA19 32-2D	1	10 units	101	0.010
RA19 32-2D											
	3RT1. 3	S2-S2	10	Lateral	For 4-pole contactors	Α	3RA19 32-2G	1	10 units	101	0.010
RA19 32-2G	3RT1. 4	S3-S3	10	Lateral	For 4 pole	В	3RA19 42-2G	1	10 units	101	0.010
	onil.4	<b>33-33</b>	IU	Latefal	For 4-pole contactors	D	JIM 13 42-2U	'	IU UIIIIS	101	0.010

<sup>1)</sup> This pack contains 10 additional interlocks.

3RA19 42-2G

<sup>2)</sup> The connector function can be fulfilled with the wiring modules for size S0, a contactor clearance of 10 mm and a lateral interlock.

## 3RA13, 3RA14 Contactor Assemblies

## 3RA14 Contactor Assemblies for Wye-Delta Starting

### 3RA14 complete units, 3 ... 75 kW

#### Overview

These 3RA14 contactor assemblies for wye-delta starting are designed for standard applications.

#### Note:

Contactor assemblies for wye-delta starting in special applications such as very heavy starting<sup>1)</sup> or wye-delta starting of special motors must be customized. Help with designing such special applications is available from Technical Assistance.

The 3RA14 contactor assemblies for wye-delta starting can be ordered as follows:

### Sizes S00 to S3:

Fully wired and tested, with electrical interlock, dead interval of up to 10 s on reversing (size S00 with electrical and mechanical interlocks).

 Sizes S00 to S12: As individual parts for customer assembly.

A dead interval of 50 ms on reversing is already integrated in the time relay function.

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

For overload relays for motor protection see "Protection Equipment"  $\rightarrow$  "Overload Relays"  $\rightarrow$  "3RB2 Solid-State Overload Relays".

The 3RA14 contactor assemblies have screw terminals and are suitable for screw and snap-on mounting onto 35 mm standard mounting rails.

Fully wired and tested 3RA14 contactor assemblies have one unassigned NO contact which is mounted onto the front of the K3 delta contactor.

A solid-state time-delay auxiliary switch block is snapped onto the front of the complete contactor assemblies, size S00 up to 7.5 kW, while a timing relay is mounted onto the side of sizes S0 to S3, 11 kW to 75 kW.

Rated da at AC 50	ata Hz 400 V		Size				Accessories for customer assembly	
Rating kW	Opera- tional current I <sub>e</sub> A	Motor current A		Line/delta contactor	Star contactor	Order No. complete	Timing relays	Assembly kit A, for double infeed
5.5	12	9.5 13.8	S00-S00-S00	3RT10 15	3RT10 15	3RA14 15-8XB31-1	3RT19 16-2G.51	
7.5	17	12.1 17		3RT10 17		3RA14 16-8XB31-1	3RP15 74-1N.30	
11	25	19 25	S0-S0-S0	3RT10 24	3RT10 24	3RA14 23-8XC21-1	3RP15 74-1N.30	
15	32	24.1 34		3RT10 26		3RA14 25-8XC21-1		
18.5	40	34.5 40						
22	50	31 43	S2-S2-S0	3RT10 34	3RT10 26	3RA14 34-8XC21-1	3RP15 74-1N.30	3RA19 33-2C <sup>3)</sup>
30	50	48.3 65		3RT10 34				
37	80	62.1 77.8	S2-S2-S2		3RT10 34	3RA14 35-8XC21-1		3RA19 33-2B <sup>3)</sup>
45	86	69 86		3RT10 36		3RA14 36-8XC21-1		
55	115	77.6 108.6	S3-S3-S2	3RT10 44	3RT10 35	3RA14 44-8XC21-1	3RP15 74-1N.30	3RA19 43-2C <sup>3)</sup>
75	150	120.7 150		3RT10 45	3RT10 36	3RA14 45-8XC21-1		
90	160	86 160	S6-S6-S3	3RT10 54	3RT10 44		3RP15 74-1N.30	
10	195	86 195						
32	230	86 230		3RT10 55	3RT10 45			
60	280	86 280		3RT10 56	3RT10 46			
200	350	95 350	S10-S10-S6	3RT10 64	3RT10 54		3RP15 74-1N.30	
250	430	95 430		3RT10 65	3RT10 55			
15	540	277 540	S12-S12-S10	3RT10 75	3RT10 64	-	3RP15 74-1N.30	
355	610	277 610						
00	690	277 690			3RT10 65			
00	850	277 850		3RT10 76	3RT10 66			

<sup>1)</sup> For effective support from Technical Assistance you must provide the following details:

- Rated motor voltage
- Rated motor currentService factor, operating values
- Motor starting current factor
- Starting time
- Ambient temperature

#### Footnotes for page 3/41:

- Assembly kit contains mechanical interlock, 3 connecting clips; wiring modules on the top (connection between line and delta contactor) and on the bottom (connection between delta and star contactor); star jumper.
- 2) Assembly kit contains 5 connecting clips; wiring modules on the top (connection between line and delta contactor) and on the bottom (connection between delta and star contactor); star jumper.
- 3) Assembly kit contains wiring module on the bottom (connection between delta and star contactor) and star jumper.
- 4) Wiring module on top from reversing contactor assembly (note conductor cross-sections).

## 3RA13, 3RA14 Contactor Assemblies

## 3RA14 Contactor Assemblies for Wye-Delta Starting

### 3RA14 complete units, 3 ... 75 kW

#### Components for customer assembly

Assembly kits with wiring modules and, if necessary, mechanical connectors are available for contactor assemblies for wye-delta starting. Contactors, overload relays, wye-delta timing relays, auxiliary switches for electrical interlock – if required also feeder terminals, mechanical interlocks (exception: In the case of the assembly kit for size S00 contactor assemblies the mechanical interlock between the delta contactor and the star contactor is included in the kit) and base plates – must be ordered separately.

The wiring kits for sizes S00 and S0 contain the top and bottom main conducting path connections between the line and delta contactors (top) and between the delta and star contactors (bottom).

In the case of sizes S2 to S12 only the bottom main conducting path connection between the delta and star contactors is included in the wiring module, owing to the larger conductor cross-section at the infeed.

### Motor protection

Overload relays or thermistor motor protection tripping units can be used for overload protection.

The overload relay can be either mounted onto the line contactor or separately fitted. It must be set to 0.58 times the rated motor current.

#### Note:

The selection of contactor types refers to fused configurations (see note on Technical Information on page 3/1).

			Overload relay, the (trip class CLASS		Overload relay, so (CLASS 10 trip cla	
Assembly kit B, for single infeed	Star jumper	Base plates	Setting range	Order No.	Setting range	Order No.
			А		A	
3RA19 13-2B <sup>1)</sup>	3RT19 16-4BA31		5.5 8	3RU11 16-1HB0	3 12	3RB20 16-1SB0
			7 10	3RU11 16-1JB0		
3RA19 23-2B <sup>2)</sup>	3RT19 26-4BA31		11 16	3RU11 26-4AB0	6 25	3RB20 26-1QB
			14 20	3RU11 26-4BB0		
			20 25	3RU11 26-4DB0		
3RV19 35-1A	3RT19 26-4BA31	3RA19 32-2E	18 25	3RU11 36-4DB0	12.5 50	3RB20 36-1UB
			28 40	3RU11 36-4FB0		
	3RT19 36-4BA31	3RA19 32-2F	36 45	3RU11 36-4GB0		
			40 50	3RU11 36-4HB0		
	3RT19 36-4BA31	3RA19 42-2E	45 63	3RU11 46-4JB0	25 100	3RB20 46-1EB
			70 90	3RU11 46-4LB0		
3RA19 53-3D <sup>4)</sup>	3RT19 46-4BA31	3RA19 52-2E			50 200	3RB20 56-1FC
	3RT19 56-4BA31	3RA19 62-2E			55 250	3RB20 66-1GC
	3RT19 66-4BA31	3RA19 72-2E			160 630	3RB20 66-1MC

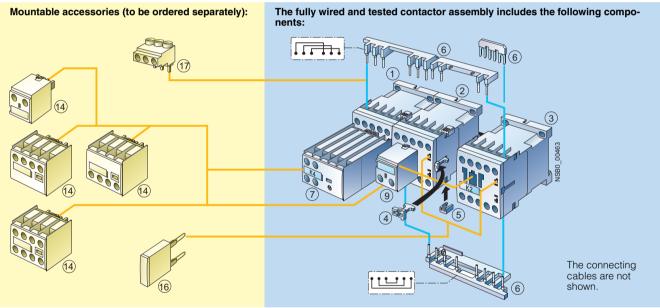
### 3RA14 complete units, 3 ... 75 kW

### Selection and ordering data

Fully wired and tested contactor assemblies · Size S00-S00-S00 · up to 7.5 kW

	Rated da Opera- tional current I <sub>e</sub>	Rating	s of ion mot	ors		Rated control supply voltage $U_s^{1)}$	DT	Screw terminals	<b>+</b>	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	up to		400 V	500 V	690 V			Order No.	Price per PU				
	А	kW	kW	kW	kW	V							kg
	AC ope	ration	, 50/60	Hz									
	12	3.3	5.5	7.2	9.2	AC 24 AC 110 AC 230	CC	3RA14 15-8XB31-1AB0 3RA14 15-8XB31-1AF0 3RA14 15-8XB31-1AP0		1 1 1	1 unit 1 unit 1 unit	101 101 101	0.950 0.950 0.950
A County	17	4.7	7.5	10.3	9.2	AC 24 AC 110 AC 230	B B	3RA14 16-8XB31-1AB0 3RA14 16-8XB31-1AF0 3RA14 16-8XB31-1AP0		1 1 1	1 unit 1 unit 1 unit	101 101 101	0.990 0.990 0.990
3RA14 18XB31-1	DC ope	ration											
	12 17	3.3 4.7	5.5 7.5	7.2 10.3	9.2 9.2	DC 24 DC 24	В	3RA14 15-8XB31-1BB4 3RA14 16-8XB31-1BB4		1 1	1 unit 1 unit	101 101	1.120 1.120

 $<sup>^{1)}</sup>$  Coil operating range at 50 Hz: 0.8 ... 1.1 x  $U_{\rm S}$ ; at 60 Hz: 0.85 ... 1.1 x  $U_{\rm S}$ 



Ac	cessories	Order No.	Page	Individu	al parts	Order No. K1 <sup>1)</sup>	<b>K3</b> <sup>2)</sup>	<b>K2</b> <sup>2)</sup>	Page
14 16	Auxiliary switch block, front Surge suppressors	3RH19 11-1 3RT19 16-1	3/102 3/108,	123	Contactor, 5.5 kW Contactor, 7.5 kW	3RT10 15 3RT10 17	3RT10 15 3RT10 17	3RT10 15 3RT10 15	3/15 3/15
17	Three-phase feeder terminals	3RA19 13-3K	3/109 3/47	7	Solid-state time-delay auxiliary switch block, front	3RT19 16-2	2G.51		3/106
				9 4 5 6	Auxiliary switch block with 1 unassigned NO contact Assembly kit				3/102 3/47

The assembly kit contains:

- 4 Mechanical interlock
- 3 connecting clips
- Wiring modules on the top and bottom for connecting the main and control conducting paths

<sup>1)</sup> Use version with 1 NO.

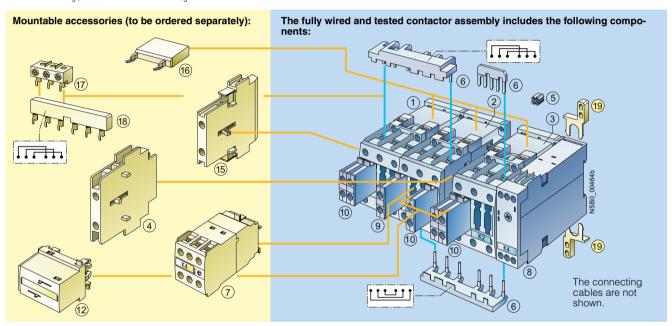
<sup>2)</sup> Use version with 1 NC.

3RA14 complete units, 3 ... 75 kW

### Fully wired and tested contactor assemblies · Size S0-S0-S0 · up to 18.5 kW

Tuny when and tested	Comaci	01 433	CIIIDII	03 - 01	20 00	00-00 · up to	70.0	7 KW					
	Rated dat	ta AC-3	}			Rated control	DT	Screw terminals	<b>+</b>	PU	PS*	PG	Weight
	Opera- tional current I <sub>e</sub>		ion mot	ors		supply voltage $U_s^{1)}$				(UNIT, SET, M)			per PU approx.
	up to							Order No.	Price				
	400 V	230 V	400 V	500 V	690 V				per PU				
	Α	kW	kW	kW	kW	V							kg
20 DE 6	AC ope	ration	, 50/60	Hz									
	25	7.1	11	15.6	19	AC 24 AC 110	C	3RA14 23-8XC21-1AC2 3RA14 23-8XC21-1AG2		1	1 unit	101 101	1.800 1.800
10 00000 mg						AC 110 AC 230	<b>&gt;</b>	3RA14 23-8XC21-1AG2		1	1 unit 1 unit	101	1.800
555	32 / 40	11.4	15 /	19	19	AC 24	С	3RA14 25-8XC21-1AC2		1	1 unit	101	1.800
200 4000			18.5			AC 110 AC 230	C	3RA14 25-8XC21-1AG2 3RA14 25-8XC21-1AL2		1 1	1 unit 1 unit	101 101	1.800 1.800
3RA14 28XC21-1	DC ope	ration											
	25	7.1	11	15.6	19	DC 24	<b></b>	3RA14 23-8XC21-1BB4		1	1 unit	101	2.450
	32 / 40	11.4	15 / 18.5	19	19	DC 24		3RA14 25-8XC21-1BB4		1	1 unit	101	2.450

Coil operating range at 50 Hz: 0.8 ... 1.1 x  $U_{\rm S}$ ; at 60 Hz: 0.85 ... 1.1 x  $U_{\rm S}$ 



Ac	cessories	Order No.	Page	Individu	al parts	Order No	•		Page
						K1	K3	K2	
4	Mechanical interlock, lateral	3RA19 24-2B	3/37	123	Contactor, 11 kW	3RT10 24	3RT10 24	3RT10 24	3/16
7	Solid-state time-delay auxiliary switch block, front 1)	3RT19 26-2G	3/106	123	Contactors, 15/18.5 kW	3RT10 26	3RT10 26	3RT10 24	3/16
12	Mechanical interlock, front	3RA19 24-1A	3/37	8	Timing relay, lateral	3RP15 74-	1N.30		4)
15	Auxiliary switch block, lateral	3RH19 21-1EA	3/104	9	Auxiliary switch block with 1 unassigned NO contact	3RH19 21-	1CA10		3/103
16	Surge suppressor	3RT19 26-1	3/108		Auxiliary switch block for				
17	Three-phase feeder terminal <sup>2)</sup>	3RV19 15-5A	3/47	10	local control				
18 19	Three-phase busbar <sup>2)</sup> Push-in lug <sup>3)</sup> for timing relay	3RT19 26-4CC20	3/47		- 2 units - 3 units	3RH19 21- 3RH19 21-			3/103
10	screw fixing	3RP19 03	4)	56	Assembly kit	3RA19 23-	2B		3/47
					The assembly kit contains:				

Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of K3, a standard auxiliary switch block can only be mounted onto the side.

main and control conducting paths

Wiring modules on the top and bottom for connecting the

Connecting clips

<sup>2) 17</sup> and 18 can only be mounted with contactors with screw terminal (coil).

<sup>3)</sup> Not included in the scope of supply of the preassembled contactor assemblies; can be ordered as an accessory.

<sup>&</sup>lt;sup>4)</sup> See "Monitoring and Control Devices: 3RP, 7PV Timing Relays" → "3RP15 Timing Relays in Industrial Enclosure, 22.5 mm".

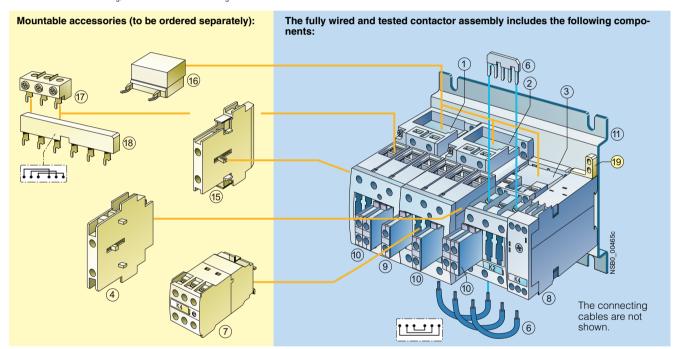
<sup>\*</sup> You can order this quantity or a multiple thereof.

### 3RA14 complete units, 3 ... 75 kW

Fully wired and tested contactor assemblies · Size S2-S2-S0 · up to 30 kW

,													
	Rated dat	ta AC-3				Rated control	DT	Screw terminals	<b></b>	PU	PS*	PG	Weight
	Opera- tional current I <sub>e</sub>		ion mot	ors		supply voltage $U_s^{1)}$				(UNIT, SET, M)			per PU approx.
	up to							Order No.	Price				
	400 V	230 V	400 V	500 V	690 V				per PU				
	Α	kW	kW	kW	kW	V							kg
	AC ope	ration	, 50/60	Hz									
and Page	50 / 65	19.6	22 /	35	34	AC 24	С	3RA14 34-8XC21-1AC2		1	1 unit	101	3.100
			30			AC 110 AC 230	C	3RA14 34-8XC21-1AG2 3RA14 34-8XC21-1AL2		1	1 unit 1 unit	101 101	3.100 3.100
00000	DC ope	ration											
	50 / 65	19.6	22 / 30	35	34	DC 24	<b>&gt;</b>	3RA14 34-8XC21-1BB4		1	1 unit	101	4.500
3RA14 34-8XC21-1													

 $<sup>^{1)}</sup>$  Coil operating range at 50 Hz: 0.8 ... 1.1 x  $U_{\rm S}$ ; at 60 Hz: 0.85 ... 1.1 x  $U_{\rm S}$ 



Α	ccessories	Order No.	Page	Individu	al parts	Order No K1	К3	K2	Page
4				123	Contactors, 22/30 kW	3RT10 34	3RT10 34	3RT10 26	3/16
	Depth compensation required K3: 1.5 mm; K2: 0 mm <sup>1)</sup>	3RA19 24-2B	3/37	8	Timing relay, lateral	3RP15 74-	1N.30		4)
7		3RT19 26-2G	3/106	9	Auxiliary switch block with 1 unassigned NO contact				
1	,	3RH19 21-1EA	3/104	10	Auxiliary switch block for local control	3RH19 21-	1CA10		3/103
1	Surge suppressors	3RT19 26-1 3RT19 36-1	3/108, 3/109	10	- 2 units - 3 units	3RH19 21- 3RH19 21-			3/103
1	Three-phase feeder terminals	3RV19 35-5A	3/47	11	Base plate	3RA19 32-	2E		3/47
1	Three-phase busbars	3RV19 35-1A	3/47	6	Assembly kit	3RA19 33-	2C		3/47
1	Push-in lug <sup>3)</sup> for timing relay	3PP10 03	4)		The assembly kit contains	the star jum	per on the t	op and the	wiring

<sup>1)</sup> Use the 3RA19 32-2B base plate for this configuration.

3RP19 03

module on the bottom for connecting the main current paths.

screw fixing

<sup>2)</sup> Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of K3, a standard auxiliary switch block can only be

<sup>3)</sup> Not included in the scope of supply of the preassembled contactor assemblies; can be ordered as an accessory.

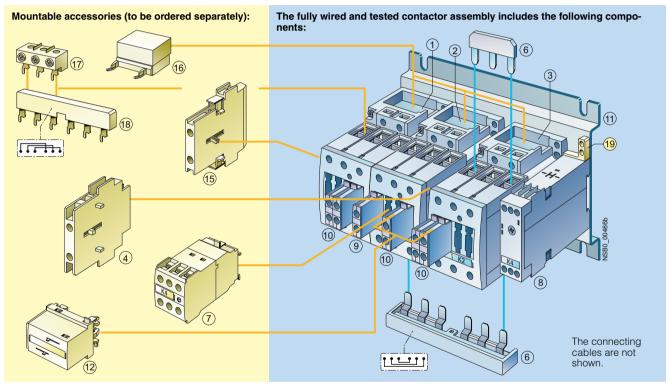
 $<sup>^{4)}</sup>$  See "Monitoring and Control Devices: 3RP, 7PV Timing Relays"  $\rightarrow$ "3RP15 Timing Relays in Industrial Enclosure, 22.5 mm"

3RA14 complete units, 3 ... 75 kW

Fully wired and tested contactor assemblies · Size S2-S2-S2 · up to 45 kW

Tuny when and tested	a oomaoi	.07 400	CIIIDII	00 01	20 02	or or up to	70 1	.,,					
	Rated da					Rated control supply volt-	DT	Screw terminals	<b>+</b>	PU (UNIT,	PS*	PG	Weight per PU
	Opera- tional		ion mot	ors		age $U_s^{(1)}$				SET, M)			approx.
	current I <sub>e</sub> up to	at 50 h	Hz and					Order No.	Price per PU	ivi)			
	400 V	230 V	400 V	500 V	690 V								
	Α	kW	kW	kW	kW	V							kg
	AC ope	ration	, 50/60	Hz									
PA CONTRACTOR	80	25	37	51	63	AC 24	С	3RA14 35-8XC21-1AC2		1	1 unit	101	3.700
9000						AC 110 AC 230	C	3RA14 35-8XC21-1AG2 3RA14 35-8XC21-1AL2		1	1 unit 1 unit	101 101	3.700 3.700
	86	27	45	55	63	AC 24	C	3RA14 36-8XC21-1AC2		1	1 unit	101	3.700
						AC 110 AC 230	C	3RA14 36-8XC21-1AG2 3RA14 36-8XC21-1AL2		1 1	1 unit 1 unit	101 101	3.700 3.700
3RA14 38XC21-1	DC ope	ration											
3 3. 3.QET T	80 86	25 27	37 45	51 55	63 63	DC 24 DC 24	B B	3RA14 35-8XC21-1BB4 3RA14 36-8XC21-1BB4		1 1	1 unit 1 unit	101 101	5.500 5.500

 $<sup>^{1)}</sup>$  Coil operating range at 50 Hz: 0.8 ... 1.1 x  $U_{\rm S}$ ; at 60 Hz: 0.85 ... 1.1 x  $U_{\rm S}$ .



Ac	cessories	Order No.	Page	Individu	al parts	Order No K1	K3	K2	Page
7	Mechanical interlock, lateral Solid-state time-delay auxiliary switch block, front <sup>1)</sup> Mechanical interlock, front	3RA19 24-2B 3RT19 26-2G 3RA19 24-1A	3/37 3/106 3/37	123	Contactor, 37 kW Contactor, 45 kW Timing relay, lateral	3RT10 35 3RT10 36 3RP15 74-	3RT10 35 3RT10 36	3RT10 34 3RT10 34	3/17 3/17 3)
15	Auxiliary switch block, lateral	3RH19 21-1EA	3/104	9	Auxiliary switch block with 1 unassigned NO contact	3RH19 21-	1CA10		3/103
16	Surge suppressor	3RT19 26-1 3RT19 36-1	3/108, 3/109	10	Auxiliary switch block for local control	001110.01	10101		
17	Three-phase feeder terminal	3RV19 35-5A	3/47		- 2 units - 3 units	3RH19 21- 3RH19 21-			3/103
18	Three-phase busbars	3RV19 35-1A	3/47	11	Base plate	3RA19 32-	2F		3/47
19	Push-in lug <sup>2)</sup> for timing relay screw fixing	3RP19 03	3)	6	Assembly kit	3RA19 33-	2B		3/47

<sup>1)</sup> Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of K3, a standard auxiliary switch block can only be mounted onto the side.

The assembly kit contains the star jumper on the top and the wiring module on the bottom for connecting the main current paths.

 $<sup>^{2)}\,</sup>$  Not included in the scope of supply of the preassembled contactor assemblies; can be ordered as an accessory.

<sup>3)</sup> See "Monitoring and Control Devices: 3RP, 7PV Timing Relays" → "3RP15 Timing Relays in Industrial Enclosure, 22.5 mm".

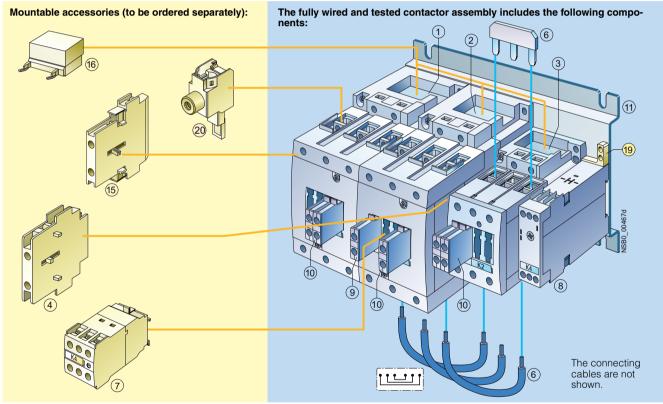
<sup>\*</sup> You can order this quantity or a multiple thereof.

3RA14 complete units, 3 ... 75 kW

Fully wired and tested contactor assemblies · Size S3-S3-S2 · up to 75 kW

,							-						
	Rated da	ta AC-3	3			Rated control	DT	Screw terminals	<b>(1)</b>	PU	PS*	PG	Weight
	Opera- tional current I <sub>e</sub>		ion mot	ors		supply voltage $U_s^{1)}$				(UNIT, SET, M)			per PU approx.
	up to							Order No.	Price				
	400 V	230 V	400 V	500 V	690 V				per PU				
	А	kW	kW	kW	kW	V							kg
	AC ope	ration	, 50/60	Hz									
- Oct	115	37	55	81	93	AC 24 AC 110	B B	3RA14 44-8XC21-1AC2 3RA14 44-8XC21-1AG2		1 1	1 unit 1 unit	101 101	6.000 6.000
						AC 230	<b>&gt;</b>	3RA14 44-8XC21-1AL2		i	1 unit	101	6.000
100	150	47	75	103	110	AC 24	В	3RA14 45-8XC21-1AC2		1	1 unit	101	6.000
						AC 110 AC 230	B	3RA14 45-8XC21-1AG2 3RA14 45-8XC21-1AL2		1	1 unit 1 unit	101 101	6.000 6.000
( Lake	DC ope	ration											
3RA14 48XC21-1	115 150	37 47	55 75	81 103	93 110	DC 24 DC 24	B B	3RA14 44-8XC21-1BB4 3RA14 45-8XC21-1BB4		1 1	1 unit 1 unit	101 101	8.600 8.600
		• • •						J.D. I. IS SKOLI IBB I					5.500

Coil operating range at 50 Hz: 0.8 ... 1.1 x  $U_{\rm S}$ ; at 60 Hz: 0.85 ... 1.1 x  $U_{\rm S}$ .



Acc	cessories	Order No.	Page	Individu	al parts	Order No. K1	K3	K2	Page
4	Mechanical interlock, lateral Depth compensation required K3: 0 mm: K2: 27.5 mm <sup>1)</sup>	3RA19 24-2B	3/37	123	Contactor, 55 kW Contactor, 75 kW	3RT10 44 3RT10 45	3RT10 44 3RT10 45	3RT10 35 3RT10 36	3/17 3/17
7	Solid-state time-delay auxiliary switch block, front <sup>2)</sup> Auxiliary switch block, lateral	3RT19 26-2G 3RH19 21-1EA	3/106 3/104	9	Timing relay, lateral Auxiliary switch block with 1 unassigned NO contact Auxiliary switch block for	3RP15 74- 3RH19 21-			3/103
16 19	Surge suppressor Push-in lug <sup>3)</sup> for timing relay	3RT19.6-1	3/108		local control - 2 units - 3 units	3RH19 21- 3RH19 21-			3/103
20	screw fixing Single-phase feeder terminals	3RP19 03 3RA19 43-3L	3/47	<b>11 6</b>	Base plate Assembly kit	3RA19 42- 3RA19 43-	2C		3/47 3/47

<sup>1)</sup> Use the 3RA19 42-2B base plate for this configuration.

 $<sup>^{2)}</sup>$  Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of K3, a standard auxiliary switch block can only be mounted onto the side.

The assembly kit contains the star jumper on the top and the wiring module on the bottom for connecting the main current paths.

<sup>3)</sup> Not included in the scope of supply of the preassembled contactor assemblies; can be ordered as an accessory.

<sup>4)</sup> See "Monitoring and Control Devices: 3RP, 7PV Timing Relays" → "3RP15 Timing Relays in Industrial Enclosure, 22.5 mm".

**Components for customer assembly** 

	Version	Size	DT		rice PU	PS*	PG	Weigh
				per	PU (UNIT, SET, M)			per PL approx
Assembly kits					,			kί
	The assembly kit contains: mechanical interlock; 3 connecting clips star jumper, wiring modules on the top and bottom	S00-S00-S00	•	3RA19 13-2B	1	1 unit	101	0.050
	The assembly kit contains: 5 connecting clips star jumper, wiring modules on the top and bottom	S0-S0-S0	•	3RA19 23-2B	1	1 unit	101	0.060
	The assembly kit contains:	S2-S2-S0	•	3RA19 33-2C	1	1 unit	101	0.060
	star jumper, wiring module on the bottom	S2-S2-S2 S3-S3-S2	<b>&gt;</b>	3RA19 33-2B 3RA19 43-2C	1	1 unit 1 unit	101 101	0.070 0.140
	(Wiring module on the top is not included	S3-S3-S3	<b>&gt;</b>	3RA19 43-2B	1	1 unit	101	0.16
See of the		S6-S6-S6	Α	3RA19 53-2B	1	1 unit	101	0.850
	tor and the delta contactor is recom-	S6-S6-S6 S10-S10-S10	A A	3RA19 53-2N 3RA19 63-2B	1	1 unit 1 unit	101 101	0.600
3RA19 53-2B	mended.)	S12-S12-S12	В	3RA19 73-2B	1	1 unit	101	2.200
6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								
3RA19 53-2N, 3RA19 63-2B, 3RA19 73-2B								
Single-phase feeder	^							
Three-phase feeder	Conductor cross-section: 95 mm <sup>2</sup>	S3	Α	3RA19 43-3L	1	1 unit	101	0.280
Tiffee-priase feeder	Feeder terminal block for the line contactor for large conductor cross-sections			201404040			101	0.000
	Conductor cross-section: 6 mm <sup>2</sup> Conductor cross-section: 25 mm <sup>2</sup> Conductor cross-section: 50 mm <sup>2</sup>	S00 S0 S2	<b>&gt;</b>	3RA19 13-3K 3RV19 25-5AB 3RV19 35-5A	1 1 1	1 unit 1 unit 1 unit	101 101 101	0.020 0.04 0.110
Three-phase busba	rs  Bridging phase-by-phase of all input terminals of							
	the line contactor (K1) and the delta contactor (K3)	S0 S2	D	3RT19 26-4CC20 3RV19 35-1A	1	1 unit 1 unit	101 101	0.030
Links for paralleling				5.1.7 TO 00 TA		, ann	101	5.100
	j, 3-pole (star jumpers)							0.010
	Without connection terminal	S00	▶	3RT19 16-4BA31	1	1 unit	101	
		\$00 \$0 \$2	<b>* * *</b>	3RT19 16-4BA31 3RT19 26-4BA31 3RT19 36-4BA31	1 1 1	1 unit 1 unit 1 unit	101	0.010
	Without connection terminal (the links for paralleling can be reduced	S0 S2 S3	<b>* *</b>	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31	1 1 1	1 unit 1 unit 1 unit	101 101 101	0.010 0.020 0.030
	Without connection terminal (the links for paralleling can be reduced	S0 S2 S3 S6 <sup>1)</sup>	<b>&gt;</b>	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31 3RT19 56-4BA31	1 1	1 unit 1 unit 1 unit 1 unit	101 101 101 101	0.010 0.020 0.030 0.160
3RT19 26-4BA31	Without connection terminal (the links for paralleling can be reduced	S0 S2 S3	* * *	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31	1 1 1 1	1 unit 1 unit 1 unit	101 101 101	0.010 0.020 0.030
	Without connection terminal (the links for paralleling can be reduced	S0 S2 S3 S6 <sup>1)</sup>	* * *	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31 3RT19 56-4BA31	1 1 1 1	1 unit 1 unit 1 unit 1 unit	101 101 101 101	0.010 0.020 0.030 0.160
3RT19 26-4BA31	Without connection terminal (the links for paralleling can be reduced by one pole)  For customer assembly of contactor assemblies for wye-delta starting with a laterally mounted timing relay	S0 S2 S3 S6 <sup>1)</sup> S10, S12 <sup>1)</sup>	* * *	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31 3RT19 56-4BA31	1 1 1 1	1 unit 1 unit 1 unit 1 unit	101 101 101 101	0.010 0.020 0.030 0.160
3RT19 26-4BA31	Without connection terminal (the links for paralleling can be reduced by one pole)  For customer assembly of contactor assemblies for wye-delta starting with a laterally mounted timing relay Side-by-side mounting 10 mm distance between K3 and K2 Side-by-side mounting	\$0 \$2 \$3 \$6 <sup>1)</sup> \$10, \$12 <sup>1)</sup> \$2, \$2, \$2 \$2, \$2, \$0 \$2, \$2, \$2 \$3, \$3, \$2	<b>B</b> B B	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31 3RT19 56-4BA31 3RT19 66-4BA31 3RA19 32-2E 3RA19 32-2E 3RA19 42-2E	1 1 1 1 1 1 1 1 1 1 1	1 unit 1 unit 1 unit 1 unit	101 101 101 101 101 101 101 101	0.010 0.020 0.030 0.160 0.500 0.450 0.450 0.480
3RT19 26-4BA31	Without connection terminal (the links for paralleling can be reduced by one pole)  For customer assembly of contactor assemblies for wye-delta starting with a laterally mounted timing relay Side-by-side mounting 10 mm distance between K3 and K2	\$0 \$2 \$3 \$6 <sup>1)</sup> \$10, \$12 <sup>1)</sup> \$2, \$2, \$2 \$2, \$2, \$0 \$2, \$2, \$2 \$3, \$3, \$2 \$6, \$6, \$3 \$6, \$6, \$6	B B B B B	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31 3RT19 56-4BA31 3RT19 66-4BA31 3RA19 32-2E 3RA19 32-2F 3RA19 42-2E 3RA19 52-2E 3RA19 52-2E	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 unit 1 unit	101 101 101 101 101 101 101 101 101	0.010 0.020 0.030 0.160 0.500 0.450 0.480 0.870 1.800 1.950
3RT19 26-4BA31	Without connection terminal (the links for paralleling can be reduced by one pole)  For customer assembly of contactor assemblies for wye-delta starting with a laterally mounted timing relay Side-by-side mounting 10 mm distance between K3 and K2 Side-by-side mounting	\$0 \$2 \$3 \$6 <sup>1)</sup> \$10, \$12 <sup>1)</sup> \$2, \$2, \$2 \$2, \$2, \$0 \$2, \$2, \$2 \$3, \$3, \$2 \$6, \$6, \$3 \$6, \$6, \$6 \$10, \$10, \$6	B B B B B B B B B B B B B B B B B B B	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31 3RT19 56-4BA31 3RT19 66-4BA31 3RA19 32-2E 3RA19 32-2F 3RA19 42-2E 3RA19 52-2E 3RA19 52-2F 3RA19 52-2F 3RA19 52-2F	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 unit 1 unit	101 101 101 101 101 101 101 101 101 101	0.010 0.020 0.030 0.160 0.500 0.450 0.480 0.870 1.800 1.950 3.180
3RT19 26-4BA31	Without connection terminal (the links for paralleling can be reduced by one pole)  For customer assembly of contactor assemblies for wye-delta starting with a laterally mounted timing relay Side-by-side mounting 10 mm distance between K3 and K2 Side-by-side mounting	\$0 \$2 \$3 \$6 <sup>1)</sup> \$10, \$12 <sup>1)</sup> \$2, \$2, \$2 \$2, \$2, \$0 \$2, \$2, \$2 \$3, \$3, \$2 \$6, \$6, \$3 \$6, \$6, \$6	B B B B B	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 46-4BA31 3RT19 56-4BA31 3RT19 66-4BA31 3RA19 32-2E 3RA19 32-2F 3RA19 42-2E 3RA19 52-2E 3RA19 52-2E	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 unit 1 unit	101 101 101 101 101 101 101 101 101	0.010 0.020 0.030 0.160 0.500 0.450 0.480 0.870 1.950 3.180 3.400
3RT19 26-4BA31	Without connection terminal (the links for paralleling can be reduced by one pole)  For customer assembly of contactor assemblies for wye-delta starting with a laterally mounted timing relay Side-by-side mounting 10 mm distance between K3 and K2 Side-by-side mounting	\$0 \$2 \$3 \$6 <sup>1)</sup> \$10, \$12 <sup>1)</sup> \$2, \$2, \$2 \$2, \$2, \$2 \$3, \$3, \$2 \$6, \$6, \$3 \$6, \$6, \$6 \$10, \$10, \$6 \$10, \$10, \$10	BBB BBB BBB BBB BBB BBB BBB BBB BBB BB	3RT19 26-4BA31 3RT19 36-4BA31 3RT19 56-4BA31 3RT19 56-4BA31 3RT19 66-4BA31 3RA19 32-2E 3RA19 32-2F 3RA19 42-2E 3RA19 52-2E 3RA19 52-2E 3RA19 52-2E 3RA19 62-2E 3RA19 62-2E	1 1 1 1 1 1 1 1 1 1 1 1 1	1 unit 1 unit	101 101 101 101 101 101 101 101 101 101	0.010 0.020 0.030 0.160 0.500 0.450 0.450 0.480 0.870

<sup>1)</sup> The 3RT19 56-4EA1 (S6) or 3RT19 66-4EA1 (S10, S12) cover can be used for touch protection.

<sup>\*</sup> You can order this quantity or a multiple thereof.