



3/1 Introduction

3/3 Contactors for Switching Motors

General Data

3RT, 3TF Contactors, 3 Pole, 600V

3RT10 Contactors, 5...500HP

3RT10 NEMA labeled contactors, 5...100HP

3RT12 vacuum contactors, 200...500HP

3TF68 and 3TF69 vacuum contactors, 500...860HP

3TB50 to 3TB56 contactors, 125...400HP

3/18 Contactor Assemblies for Switching Motors

3RA13 Reversing Contactor Assemblies

Overview

3RA13 complete units, 5...100HP/600V

3/23 Components for customer assembly

3RT, 3RH, 3TC, 3TK Contactors for Special Applications

Contactors for Switching Resistive Loads (AC-1)

3/24 3RT14, 3 pole, 140...690A

3/25 3RT13, 4 pole, 2 NO, 18...140A

3/26 3RT15, 4 pole, 2 NO + 2 NC, 10...40HP/600V

3/27 Capacitor Contactors

3RT16, 10...75kvar/600V

3/28 Safety Contactors

3RH Contactor Relays

3/30 3RH1 contactor relays, 4 and 8 pole

3/32 3RH11 couplings relays for switching auxiliary circuits, 4 pole

3RT Coupling Relays

3/33 3RT10 coupling relays (interface) for switching motors, 3 pole, 5...20HP/600V

3TX7, 3RS18 Coupling Relays

3TX7 Coupling Relays, Narrow Design

3/34 Relay Couplers

3/35 Relay Coupler with plug-in connections
Semiconductor couplers

3RS18 Coupling Relays

3/36 Relay Couplers

LZS, LZX Plug in Relays

Relay Couplers

3/37 Overview

3/38 Complete units, 11 and 14 pole

3/39 Complete units, 8 pole

3/40 Individual modules for customer assembly

3/43 Configuration notes

3TG10 Power Relays/Miniature Contactors

3/44 4 pole, 5 HP

Accessories and Spare Parts

For 3RT, 3RH, 3TF, 3TC, Contactors and Contactor Relays

3/45 Accessories for 3RT, 3RH

3/55 Accessories for 3TF

3/56 3RT Coils

Controls - Contactors and Contactor Assemblies

Introduction



Size
Type

S00
3RT10 1

S0
3RT10 2

S2
3RT10 3

3RT10 contactors • 3RT12 and 3TF68/69 vacuum contactors

Type AC/DC operation	3RT10 15	3RT10 16	3RT10 17	3RT10 23	3RT10 24	3RT10 25	3RT10 26	3RT10 34	3RT10 35	3RT10 36
Type	–			–				–		

Maximum horsepower ratings (CSA and UL approved values)

200 V	HP	1½	2	3	2	3	5	7½	10	10	15
230 V	HP	2	3	3	3	3	5	7½	10	15	15
460 V	HP	3	5	7½	5	7½	10	15	25	30	40
575 V	HP	5	7½	10	7½	10	15	20	30	40	50

AC-3

I_e /AC-3/400 V	A	7	9	12	9	12	17	25	32	40	50
400 V	kW	3	4	5.5	4	5.5	7.5	11	15	18.5	22
230 V	kW	2.2	3	3	3	3	4	5.5	7.5	11	15
500 V	kW	3.5	4.5	5.5	4.5	7.5	10	11	18.5	22	30
690 V	kW	4	5.5	5.5	5.5	7.5	11	11	18.5	22	22
1 000 V	kW	–	–	–	–	–	–	–	–	–	–

AC-4 (at $I_a = 6 \times I_e$)

400 V	kW	3	4	4	4	5.5	7.5	7.5	15	18.5	22
400 V	kW	1.15	2	2	2	2.6	3.5	4.4	8.2	9.5	12.6

(200 000 operating cycles)

AC-1 (40 °C, ≤ 690 V)

I_e	A	18	22	22	40	40	40	40	50	50	60
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Accessories for contactors

Auxiliary switch blocks	front	3RH19 11	3RH19 21
	lateral	–	3RH19 21
Terminal covers	–	–	3RT19 36-4EA2
Box terminal blocks	–	–	–
Surge suppressor	3RT19 16	3RT19 26	3RT19 26/36

3RU1 and 3RB2 overload relays (protection equipment: overload relays)

3RU11, thermal, CLASS 10	3RU11 16	0.1 ... 12 A	3RU11 26	1.8 ... 25 A	3RU11 36	5.5 ... 50 A
3RB20/21, solid-state, CLASS 5, 10, 20 and 30	3RB20 16	0.1 ... 12 A	3RB20 26	3 ... 25 A	3RB20 36	6 ... 50 A
	3RB21 16		3RB21 26		3RB21 36	
3RB22/23, solid-state, CLASS 5, 10, 20 and 30	3RB2. 83 + 3RB29 06	0.3 ... 25 A			3RB2. 83 + 3RB29 06	10 ... 100 A

3RV10 motor starter protectors (protection equipment: motor starter protectors)

Type	3RV10 11	0.18 ... 12 A	3RV10 21	9 ... 25 A	3RV10 31	22 ... 50 A
Link modules	3RA19 11		3RA19 21		3RA19 31	

3RA13 reversing contactor assemblies

Complete units	Type	3RA13 15	3RA13 16	3RA13 17	3RA13 24	3RA13 25	3RA13 26	3RA13 34	3RA13 35	3RA13 36
400 V	kW	3	4	5.5	5.5	7.5	11	15	18.5	22
Installation kits/wiring connectors		3RA19 13-2A			3RA19 23-2A			3RA19 33-2A		
Mechanical interlocks		3RA19 12-2H			3RA19 24-2B					



S3
3RT1. 4



S6
3RT1. 5



S10
3RT1. 6



S12
3RT1. 7



S14
3TF6

	3RT10 44	3RT10 45	3RT10 46	3RT10 54	3RT10 55	3RT10 56	3RT10 64	3RT10 65	3RT10 66	3RT10 75	3RT10 76	–		
	–			–			3RT12 64	3RT12 65	3RT12 66	3RT12 75	3RT12 76	3TF68	3TF69	
	20	25	30	40	50	60	60	75	100	125	150	200	290	
	25	30	30	50	60	75	75	100	125	150	200	250	350	
	50	60	75	100	125	150	150	200	250	300	400	500	700	
	60	75	100	125	150	200	200	250	300	400	500	650	860	
	65	80	95	115	150	185	225	265	300	400	500	630	820	
	30	37	45	55	75	90	110	132	160	200	250	335	450	
	18.5	22	22	37	45	55	55	75	90	132	160	200	260	
	37	45	55	75	90	110	160	160	200	250	355	434	600	
	45	55	55	110	132	160	200	250	250	400	400/500	600	800	
	30	37	37	75	90	90	90/315	132/355	132/400	250/560	250/710	600	800	
	30	37	45	55	75	90	110	132	160	200	250	355	400	
	15.1	17.9	22	29	38	45	54/78	66/93	71/112	84/140	98/161	168	191	
	100	120	120	160	185	215	275/330	330	330	430/610	610	700	910	
												–		
												3TY7 561		
	3RT19 46-4EA1/2			3RT19 56-4EA1/2/3			3RT19 66-4EA1/2/3			3TX7 686/696				
	–			3RT19 55/56-4G			3RT19 66-4G			–				
				3RT19 56-1C (RC element)							3TX7 572			
	3RU11 46 18 ... 100 A			–			–			–				
	3RB20 46 12,5 ... 100 A			3RB20 56 50 ... 200 A			3RB20 66 55 ... 630 A			3RB20 66 160 ... 630 A				
	3RB21 46			3RB21 56			3RB21 66			3RB21 66				
				3RB2. 83 + 3RB29 56 20 ... 200 A			3RB2. 83 + 3RB29 66 63 ... 630 A							
	3RV10 41 45 ... 100 A			–			–			–				
	3RV10 41 45 – 100 A			–			–			–				
	3RA19 41			–			–			–				
	3RA13 44 3RA13 45 3RA13 46			–			–			–				
	30	37	45	55	75	90	110	132	160	200	250	335		
	3RA19 43-2A			3RA19 53-2A			3RA19 63-2A			3RA19 73-2A			3TX7 680-1A	
				3RA19 54-2A									3TX7 686-1A	

Contactors for Switching Motors

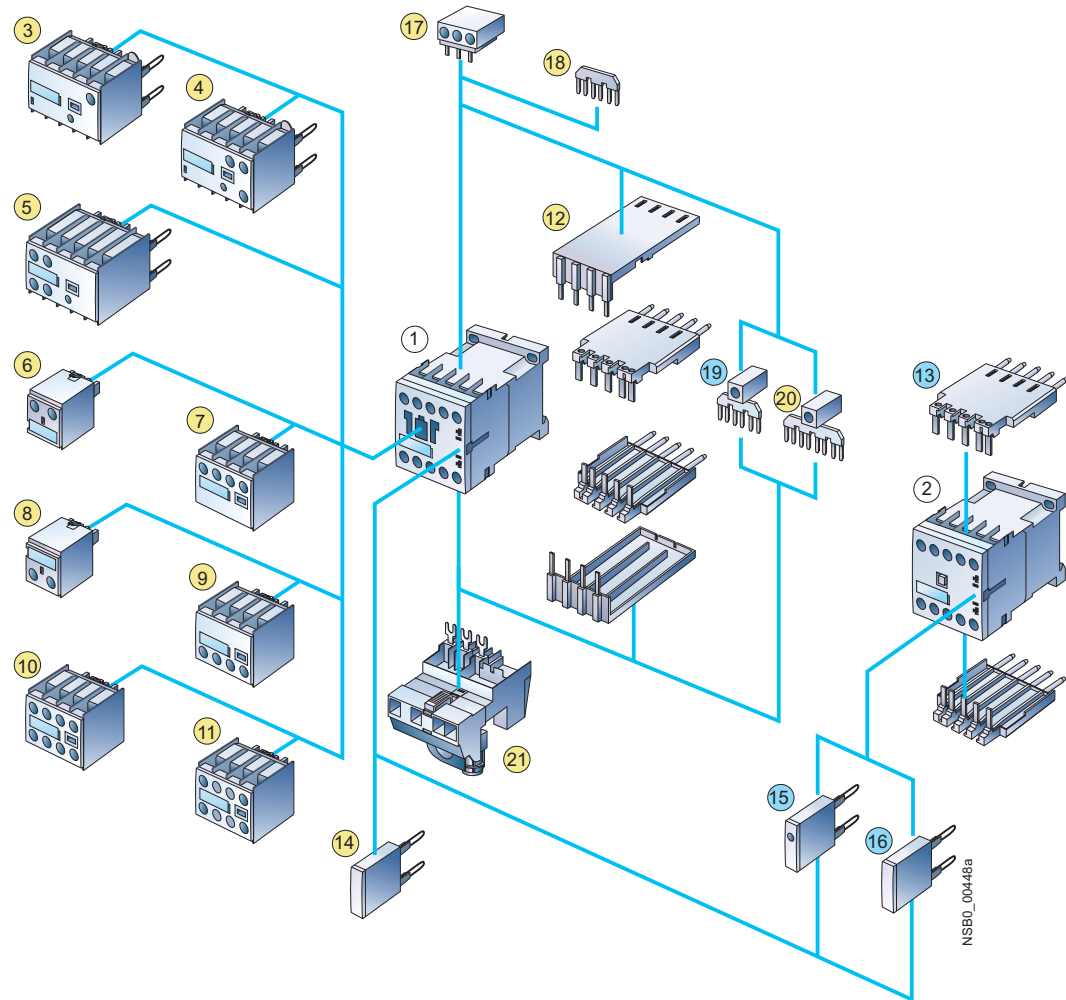
3RT, 3TF Contactors

General data

Overview

3RT1 contactors and coupling relays
Size 500 with mountable accessories

The SIRIUS generation of controls is a complete, modular system family, logically designed right down to the last detail, from the basic units to the accessories.



- ① Contactor
- ② Coupling relay

- ③ Solid-state time-delay block, ON-delay
- ④ Solid-state time-delay block, OFF-delay
- ⑤ Auxiliary switch block with solid-state time delay (ON or OFF-delay or wye-delta function)
- ⑥ 1-pole auxiliary switch block, cable entry from above
- ⑦ 2-pole auxiliary switch block, cable entry from above
- ⑧ 1-pole auxiliary switch block, cable entry from below
- ⑨ 2-pole auxiliary switch block, cable entry from below
- ⑩ 4-pole auxiliary switch block (terminal designations according to EN 50012 or EN 50005)
- ⑪ 2-pole auxiliary switch block, standard version or solid-state compatible design (terminal designations according to EN 50005)
- ⑫ Solder pin adapter for contactors with 4-pole auxiliary switch block
- ⑬ Solder pin adapter for contactors and coupling relays

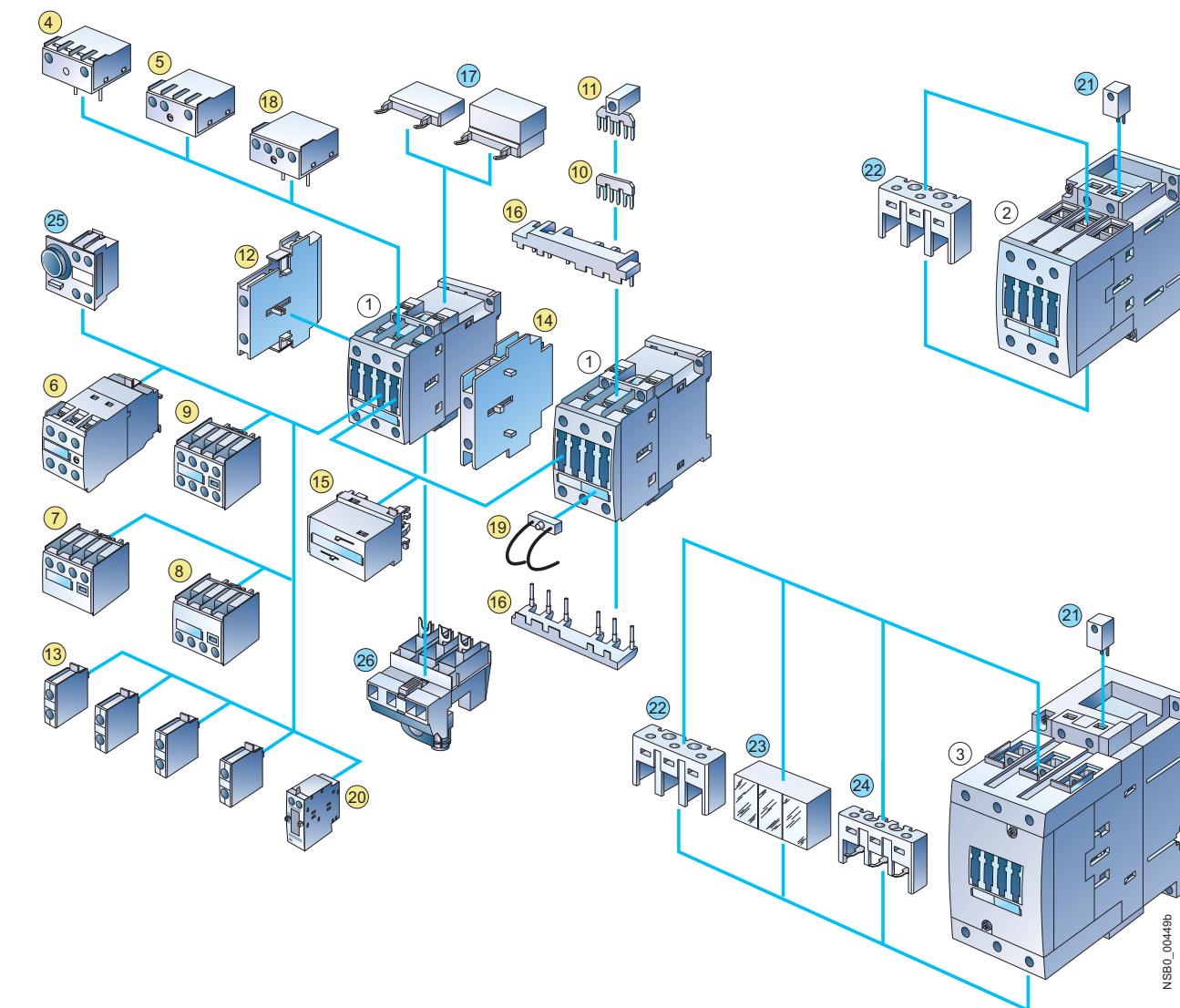
- ⑭ Additional load module for increasing the permissible residual current
- ⑮ Surge suppressor with LED
- ⑯ Surge suppressor without LED
- ⑰ 3-phase feeder terminal
- ⑱ Link for paralleling (star jumper), 3-pole, without connection terminal
- ⑲ Link for paralleling, 3-pole, with terminal
- ⑳ Link for paralleling, 4-pole, with terminal
- ㉑ Connection module (adapter and connector) for contactors with screw-type connection

- For contactors
- For contactors and coupling relays (interface)

Contactors for Switching Motors

3RT, 3TF Contactors

General data



- ① Contactor, size S0,
- ② Contactor, size S2,
- ③ Contactor, size S3,

For sizes S0 to S3:

- ④ Solid-state time-delay block, ON-delay
- ⑤ Solid-state time-delay block, OFF-delay
- ⑥ Auxiliary switch block with solid-state time delay (ON or OFF-delay or wye-delta function)
- ⑦ 2-pole auxiliary switch block, cable entry from above
- ⑧ 2-pole auxiliary switch block, cable entry from below
- ⑨ 4-pole auxiliary switch block (terminal designations according to EN 50012 or EN 50005)
- ⑩ Link for paralleling (star jumper), 3-pole, without connection terminal
- ⑪ Link for paralleling, 3-pole, with terminal
- ⑫ 2-pole auxiliary switch block, laterally mountable left or right (terminal designations according to EN 50012 or EN 50005)
- ⑬ Single-pole auxiliary switch block (up to 4 can be snapped on)
- ⑭ Mechanical interlock, laterally mountable
- ⑮ Mechanical interlock, mountable on the front
- ⑯ Wiring modules on the top and bottom (reversing duty)
- ⑰ Surge suppressor (varistor, RC element, diode assembly), can be mounted on the top or bottom (different for S0 and S2/S3)

- ⑱ Coupling link for mounting directly onto contactor coil
- ⑲ LED module for indicating contactor operation

Only for size S0:

- ⑳ Pneumatic delay block
- ㉑ Connection module (adapter and connector) for contactors with screw-type connection

Only for sizes S0 and S2:

- ㉒ Mechanical latching

Only for sizes S2 and S3:

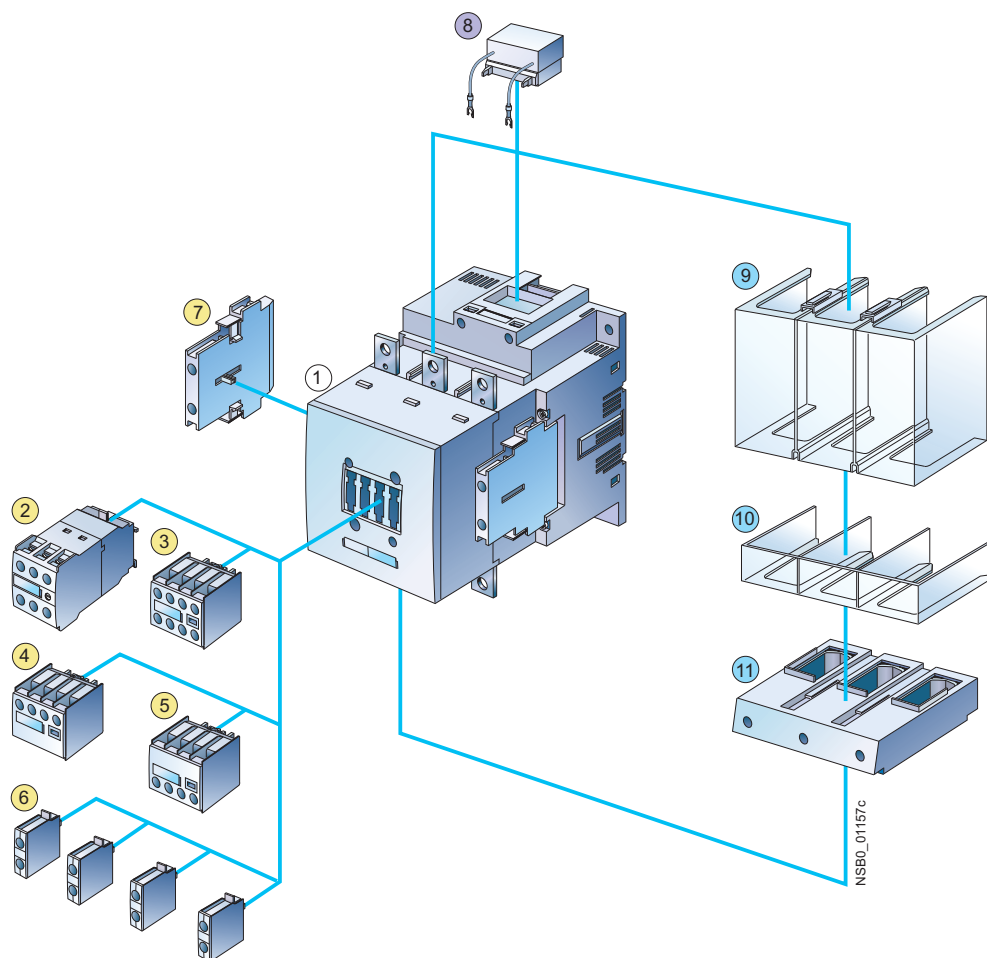
- ㉓ Coil repeat terminal for making contactor assemblies
- ㉔ Terminal cover for box terminals

Only for size S3:

- ㉕ Terminal cover for cable lugs and busbar connections
- ㉖ Auxiliary conductor terminal, 3-pole

- Accessories identical for sizes S0 to S3
- Accessories differ according to size

3RT1 contactors
Sizes S6 to S12 with accessories
(illustration for basic unit)



① 3RT10 and 3RT14 air-break contactor, sizes S6, S10 and S12

- ③ Auxiliary switch block with solid-state time delay (ON or OFF-delay or wye-delta function)
- ④ 4-pole auxiliary switch block (terminal designations according to EN 50012 or EN 50005)
- ⑤ 2-pole auxiliary switch block, cable entry from above
- ⑥ 2-pole auxiliary switch block, cable entry from below
- ⑦ Single-pole auxiliary switch block (up to 4 can be snapped on)
- ⑧ 2-pole auxiliary switch block, laterally mountable left or right (terminal designations according to EN 50012 or EN 50005) (identical for S0 to S12)
- ⑨ Surge suppressor (RC element) for plugging into top of withdrawable coil
- ⑩ Mechanical interlock, laterally mountable

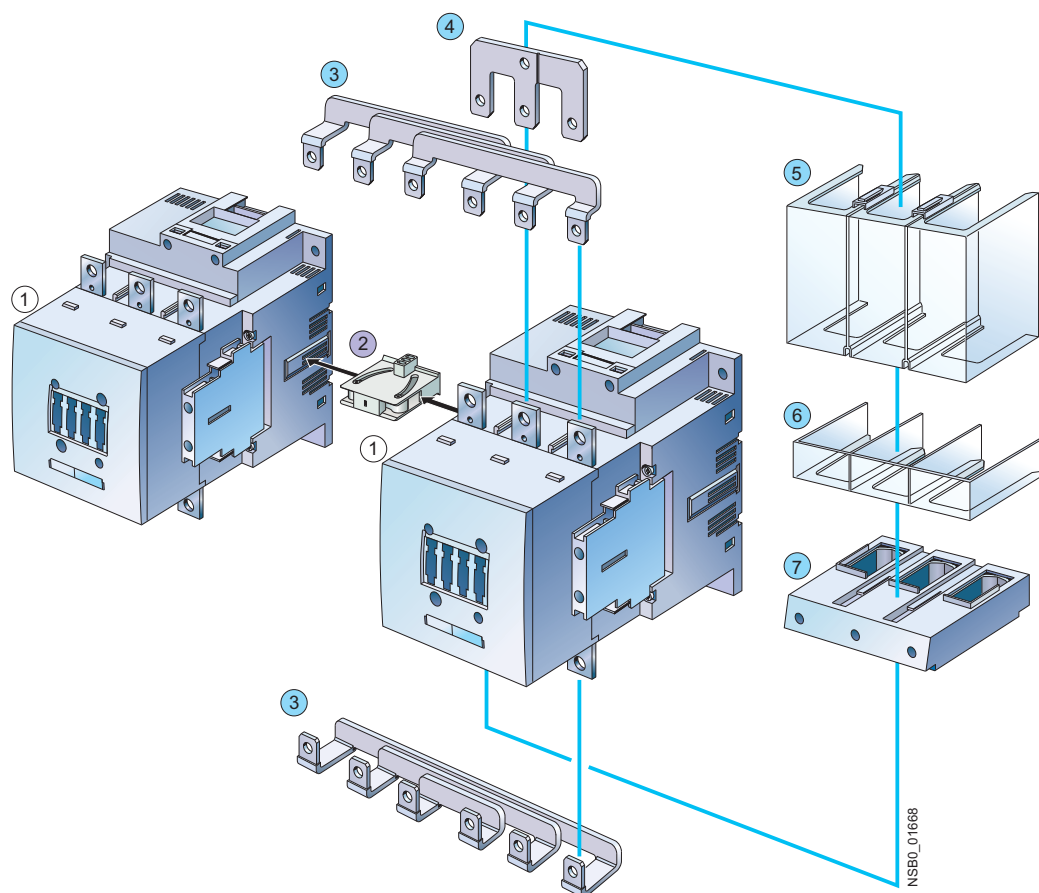
- ⑪ Wiring modules on the top and bottom (reversing duty)
- ⑫ Link for paralleling (star jumper), 3-pole, with through hole different for sizes S6 and S10/S12
- ⑬ Terminal cover for cable lug and busbar connection different for sizes S6 and S10/S12
- ⑭ Terminal cover for box terminal, different for sizes S6 and S10/S12
- ⑮ Box terminal block, different for sizes S6 and S10/S12
- ⑯ Accessories identical for sizes S0 to S12
- ⑰ Accessories identical for sizes S6 to S12
- ⑱ Accessories differ according to size

Contactors for Switching Motors

3RT, 3TF Contactors

General data

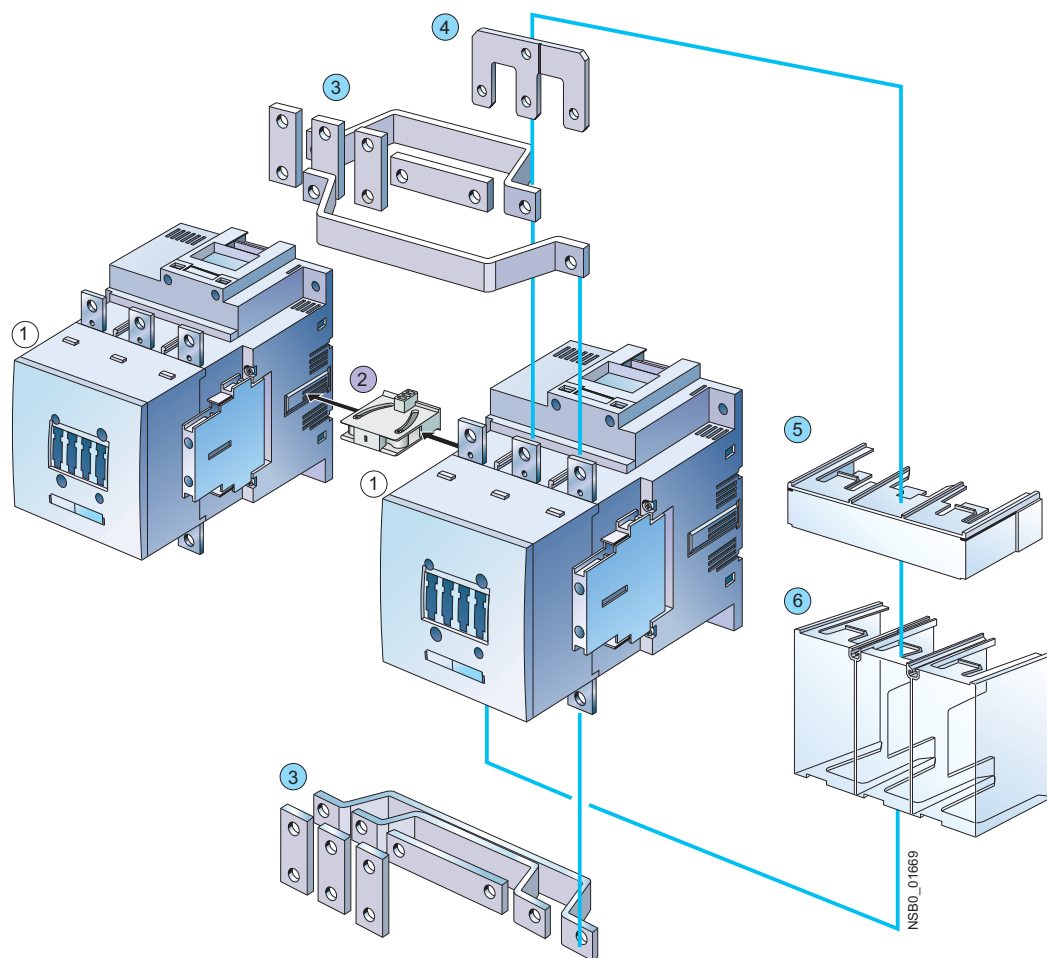
3RA1 contactor assemblies, 3RT1 contactors
Size S6 with accessories



- ① 3RT10 and 3RT14 air-break contactor, size S6
- ② 3RA19 54-2A mechanical interlock, laterally mountable
- ③ 3RA19 53-2A wiring modules on the top and bottom
- ④ 3RT19 56-4BA31 link for paralleling (star jumper), 3-pole, with through hole
- ⑤ Terminal cover for cable lug and busbar connection different for sizes S6 and S10/S12
- ⑥ Terminal cover for box terminal, different for sizes S6 and S10/S12
- ⑦ Box terminal block different for sizes S6 and S10/S12

- Accessories identical for sizes S6 to S12
- Accessories differ according to size

3RA1 contactor assemblies, 3RT1 contactors
 Sizes S6, S10 and S12 with accessories



① 3RT10 and 3RT14 air-break contactor, sizes S6, S10 and S12
 or 3RT12 vacuum contactor, sizes S10 and S1

② Mechanical interlock, laterally mountable

③ 3RA19 wiring modules on the top and bottom

④ 3RT19 56-4BA31 link for paralleling (star jumper), 3-pole,
 with through hole)

⑤ Terminal cover for box terminal,
 different for sizes S6 and S10/S12

⑥ Terminal cover for cable lug and busbar connection ,
 different for sizes S6 and S10/S12

● Accessories identical for sizes S6 to S12

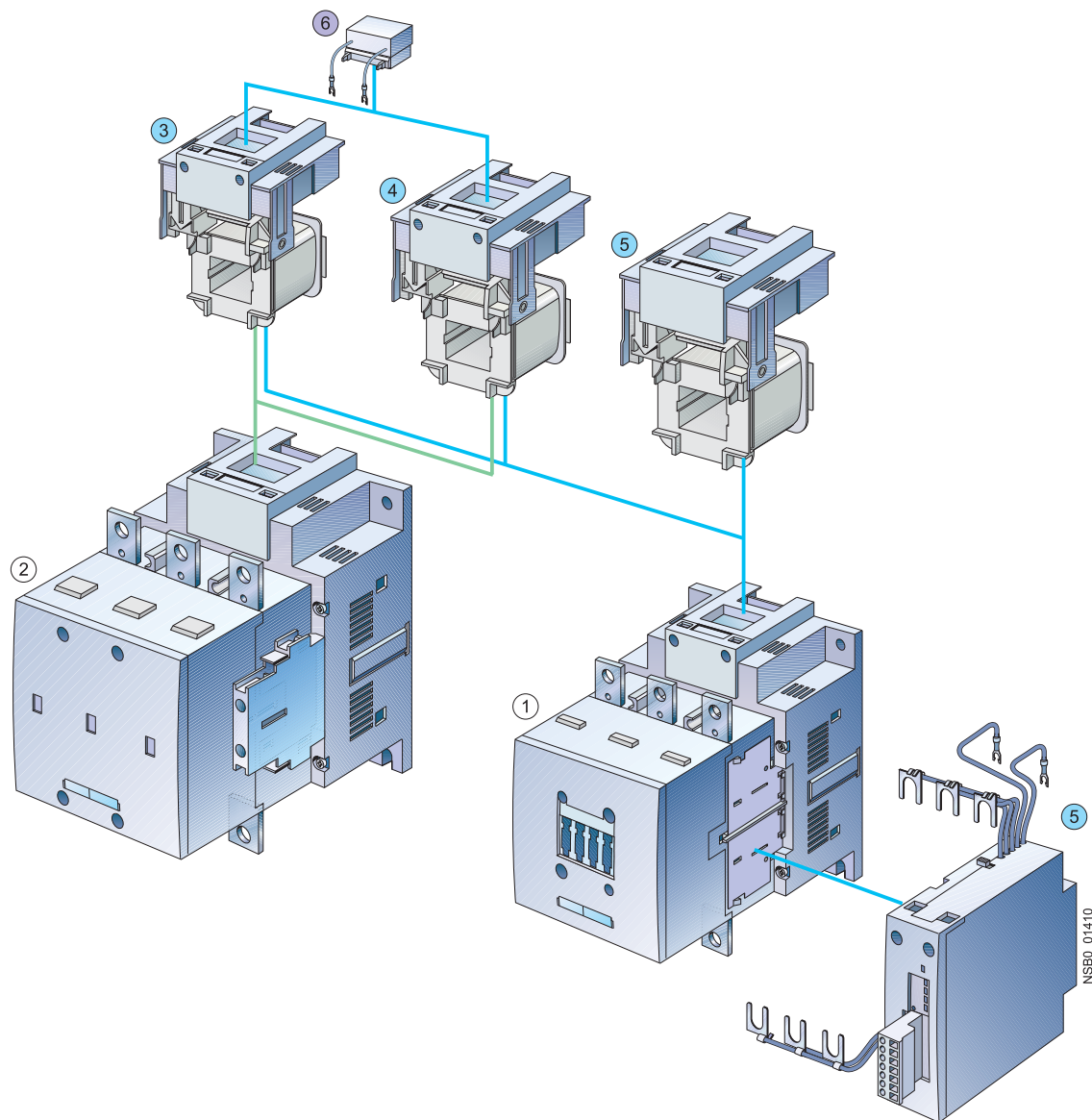
● Accessories differ according to size

Contactors for Switching Motors

3RT, 3TF Contactors

General data

3RT1 contactors Sizes S6 to S12 with accessories



- ① Air-break contactor, sizes S6, S10 and S12
- ② Vacuum contactor, sizes S10 and S12
- ③ Withdrawable coils for 3RT1...A.. contactors with conventional operating mechanism
(size S10: differentiation between 3RT10/3RT14 air-break contactors and 3RT12 vacuum contactors)
(size S12: the same for air-break and vacuum contactors)
- ④ Withdrawable coils for 3RT1...N.. contactors with solid-state operating mechanism.
(size S10: differentiation between 3RT10/3RT14 air-break contactors and 3RT12 vacuum contactors)
(size S12: the same for air-break and vacuum contactors)
- ⑤ Withdrawable coils and laterally mountable module (plug-on) for 3RT1...P.. and 3RT1...Q.. air-break contactors with solid-state operating mechanism and remaining lifetime indicator type.
- ⑥ Surge suppressor (RC element), plug-mountable on withdrawable coils
 - 3RT1...A.. with conventional operating mechanism
 - 3RT1...N.. with solid-state operating mechanism

- Identical for sizes S6 to S12
- Different according to size

Contactors for Switching Motors

3RT, 3TF Contactors

3RT10 contactors, 3 pole, 5 ... 500HP/600V

Selection and ordering data

AC operation



3RT10 1A...



3RT10 2A...

Horsepower ratings and utilization categories							Auxiliary contacts		Rated control supply voltage U_s	Screw connection		Weight approx.
Maximum inductive current	Single phase HP ratings	Horsepower ratings of three-phase motors					Ident. no.	Design		Order No.	List Price \$	
Enclosed Amp Ratings	115 V	230 V	200 V	230 V	460 V	575 V						
AC3	UL/CSA	HP	HP	HP	HP	HP	Amps	NO NC	AC			kg

For screwing and snapping onto 35 mm standard mounting rail

• Size S00

Terminal designations according to EN 50 012

7	20	0.25	0.75	1.5	2	3	5	18	10 E	1	–	120 V, 60 Hz	3RT10 15-1AK61	0.19
									01	–	1	120 V, 60 Hz	3RT10 15-1AK62	0.19
9	20	0.33	1	2	3	5	7.5	22	10 E	1	–	120 V, 60 Hz	3RT10 16-1AK61	0.19
									01	–	1	120 V, 60 Hz	3RT10 16-1AK62	0.19
12	20	0.5	2	3	3	7.5	10	22	10 E	1	–	120 V, 60 Hz	3RT10 17-1AK61	0.19
									01	–	1	120 V, 60 Hz	3RT10 17-1AK62	0.19

• Size S0

9	35	0.33	1	2	3	5	7.5	40	–	–	–	120 V, 60 Hz	3RT10 23-1AK60	0.32
12	35	0.5	2	3	3	7.5	10	40	–	–	–	120 V, 60 Hz	3RT10 24-1AK60	0.32
17	35	1	3	5	5	10	15	40	–	–	–	120 V, 60 Hz	3RT10 25-1AK60	0.32
25	35	2	3	7.5	7.5	15	20	40	–	–	–	120 V, 60 Hz	3RT10 26-1AK60	0.32

AC Coil Selection for 3RT101										
Coil Code	B0	H0	F0	K6	P0	P6	U6	V6	T6	
50 Hz	24 V AC	48 V AC	110 V AC	110 V AC	230 V AC	220 V AC				
60 Hz	24 V AC	48 V AC	110 V AC	120 V AC	230 V AC	240 V AC	277 V AC	480 V AC	600 V AC	

AC Coil Selection for 3RT102 through 3RT104										
Coil Code	C2	H2	G2	K6	L2	P6	U6	V6	T6	
50 Hz	24 V AC	48 V AC	110 V AC	110 V AC	230 V AC	220 V AC				
60 Hz	24 V AC	48 V AC	110 V AC	120 V AC	230 V AC	240 V AC	277 V AC	480 V AC	600 V AC	

Contactors for Switching Motors

3RT, 3TF Contactors

3RT10 contactors, 3 pole, 5 ... 500HP/600V

AC operation



3RT10 3.-1A.00



3RT10 3.-3A.00



3RT10 4.-1A.00



3RT10 4.-3A.00

Horsepower ratings
and utilization categories

AC-3
Maximum
inductive

Enclosed
Amp Ratings
AC3

Single phase
HP ratings
115 V HP
230 V HP
200 V HP
230 V HP
460 V HP
575 V HP

Horsepower ratings of
three-phase motors
AC-1
Maximum
resistive
current
Amps

Auxiliary
contacts

Ident.
no.
Design
NO NC AC

Rated control sup-
ply voltage U_s

Screw connection

Order No.

List
Price \$

Weight
approx.
kg

For screwing and snapping onto 35 mm standard mounting rail

• Size S2

28	35	2	5	7.5	10	20	25	35	-	-	-	120 V, 60 Hz	3RT10 33-1A K60	0.78
32	45	2	5	10	10	25	30	50	-	-	-	120 V, 60 Hz	3RT10 34-1A K60	0.78
40	50	3	7.5	10	15	30	40	50	-	-	-	120 V, 60 Hz	3RT10 35-1A K60	0.78
50	50	3	10	15	15	40	50	60	-	-	-	120 V, 60 Hz	3RT10 36-1A K60	0.78

• Size S3

65	90	5	15	20	25	50	60	100	-	-	-	120 V, 60 Hz	3RT10 44-1A K60	1.78
80	105	7.5	15	25	30	60	75	120	-	-	-	120 V, 60 Hz	3RT10 45-1A K60	1.78
95	105	10	-	30	30	75	100	120	-	-	-	120 V, 60 Hz	3RT10 46-1A K60	1.78

AC Coil Selection for 3RT102 through 3RT104

Coil Code	C2	H2	G2	K6	L2	P6	U6	V6	T6
50 Hz	24 V AC	48 V AC	110 V AC	110 V AC	230 V AC	220 V AC			
60 Hz	24 V AC	48 V AC	110 V AC	120 V AC	230 V AC	240 V AC	277 V AC	480 V AC	600 V AC

Contactors for Switching Motors

3RT, 3TF Contactor

3RT10 contactors, 3 pole, 5...500HP/600V

Selection and ordering data

DC operation · DC solenoid system



3RT10 1.-1B...



3RT10 2.-1B.40



3RT10 2.-3B.40

Horsepower ratings and utilization categories					Auxiliary contacts		Rated control supply voltage U_s	Screw connection		Weight approx.
AC-3 Maximum inductive current	Horsepower ratings of three-phase motors				Ident. no.	Design		Order No.	List Price \$	
Enclosed Amp Ratings	200 V	230 V	460 V	575 V						
AC3	UL/CSA	HP	HP	HP	HP	Amps	NO NC DC V			kg

For screwing and snapping onto 35 mm standard mounting rail

• Size S00

Terminal designations according to EN 50 012

7	20	1.5	2	3	5	18	10 E	1	–	110	3RT10 15-1BB4 1	0.26
							01	–	1	110	3RT10 15-1BB4 2	0.26
9	20	2	3	5	7.5	22	10 E	1	–	110	3RT10 16-1BB4 1	0.26
							01	–	1	110	3RT10 16-1BB4 2	0.26
12	20	3	3	7.5	10	22	10 E	1	–	110	3RT10 17-1BB4 1	0.26
							01	–	1	110	3RT10 17-1BB4 2	0.26

• Size S0

9	35	2	3	5	7.5	40 ¹⁾	–	–	–	110	3RT10 23-1BB4 0	0.56
12	35	3	3	7.5	10	40 ¹⁾	–	–	–	110	3RT10 24-1BB4 0	0.56
17	35	5	5	10	15	40 ¹⁾	–	–	–	110	3RT10 25-1BB4 0	0.56
25	35	7.5	7.5	15	20	40 ¹⁾	–	–	–	110	3RT10 26-1BB4 0	0.56

DC Coil Selection for 3RT101 through 3RT104

Coil Code	A4*	B4	D4	W4	E4	F4	G4	M4	P4
	12 V DC	24 V DC	42 V DC	48 V DC	60 V DC	110 V DC	125 V DC	220 V DC	230 V DC

* 3RT101 Only

1) Further designs/voltages on request.

Contactors for Switching Motors

3RT, 3TF Contactor

3RT10 contactors, 5 ... 500HP/600V

Selection and ordering data

DC operation · DC solenoid system



3RT10 3.-1B.40



3RT10 4.-1B.40



3RT10 3.-3B.40



3RT10 4.-3B.40

Horsepower ratings and utilization categories							Auxiliary contacts		Rated control supply voltage U_s	Screw connection		Weight approx.
Maximum inductive current	Horsepower ratings of three-phase motors					AC-1 Maximum resistive current	Ident. no.	Design		Order No.	List Price \$	
Enclosed Amp Ratings	200 V	230 V	460 V	575 V								
AC3	UL/CSA	HP	HP	HP	HP	Amps		NO	NC	DC V		kg

For screwing and snapping onto 35 mm standard mounting rail

• Size S2

28	35	7.5	10	20	25	50	—			110	3RT10 33-1B F4 0	1.3
32	45	10	10	25	30	50	—			110	3RT10 34-1B F4 0	1.3
40	55	10	15	30	40	60	—			110	3RT10 35-1B F4 0	1.3
50	50	15	15	40	50	55	—			110	3RT10 36-1B F4 0	1.3

For screwing and snapping onto 35 mm and 75 mm standard mounting rails

• Size S3

65	90	20	25	50	60	100	—			110	3RT10 44-1B F4 0	2.68
80	105	25	30	60	75	120	—			110	3RT10 45-1B F4 0	2.68
95	105	30	30	75	100	120	—			110	3RT10 46-1B F4 0	2.68

DC Coil Selection for 3RT101 through 3RT104

Coil Code	B4	D4	W4	E4	F4	G4	M4	P4
	24 V DC	42 V DC	48 V DC	60 V DC	110 V DC	125 V DC	220 V DC	230 V DC

Contactors for Switching Motors

3RT, 3TF Contactor

3RT10 contactors, 3 pole, 5 ... 500HP/600V

AC/DC operation (40 to 60 Hz, DC)

Withdrawable coils

Integrated coil circuit (varistor)

Auxiliary and control conductors: screw terminals or Cage Clamp terminals

Main conductors: busbar connections, for 3RT1054 box terminals¹⁾



3RT10 54-1



3RT10 6-6



3RT10 7-6

Size	Horsepower ratings and utilization categories							Auxiliary contacts, lateral (side) mounted		Rated control supply voltage U_s	Order No.	List Price \$	Weight approx.
	Maximum inductive current AC-3 UL/CSA	UL horsepower ratings of three-phase motors			AC-1 Maximum resistive current Amps								
		200 V HP	230 V HP	460 V HP		575 V HP	NO	NC	AC/DC V	kg			
Conventional operating mechanism													
S6	115	140	40	50	100	125	160	2	2	110 ... 127	3RT10 54-6AF36	3.5	
	150	195	50	60	125	150	185	2	2	110 ... 127	3RT10 55-6AF36	3.1	
	185	195	60	75	150	200	215	2	2	110 ... 127	3RT10 56-6AF36		
S10	225	250	60	75	150	200	275	2	2	110 ... 127	3RT10 64-6AF36	5.7	
	265	330	75	100	200	250	330	2	2	110 ... 127	3RT10 65-6AF36		
	300	330	100	125	250	300	330	2	2	110 ... 127	3RT10 66-6AF36		
S12	400	400	125	150	300	400	430	2	2	110 ... 127	3RT10 75-6AF36	9.1	
	500	520	150	200	400	500	610	2	2	110 ... 127	3RT10 76-6AF36		
Solid-state operating mechanism · for DC 24 V PLC output													
S6	115	140	40	50	100	125	160	2	2	96 ... 127	3RT10 54-6NF36	3.5	
	150	195	50	60	125	150	185	2	2	96 ... 127	3RT10 55-6NF36	3.1	
	185	195	60	75	150	200	215	2	2	96 ... 127	3RT10 56-6NF36		
S10	225	250	60	75	150	200	275	2	2	96 ... 127	3RT10 64-6NF36	5.7	
	265	330	75	100	200	250	330	2	2	96 ... 127	3RT10 65-6NF36		
	300	330	100	125	250	300	330	2	2	96 ... 127	3RT10 66-6NF36		
S12	400	400	125	150	300	400	430	2	2	96 ... 127	3RT10 75-6NF36	9.1	
	500	520	150	200	400	500	610	2	2	96 ... 127	3RT10 76-6NF36		

Universal Coil Selection for 3RT105 through 3RT107: Conventional Operation

Coil Code	B3	D3	F3	M3	P3	U3	V3	R3	S3	T3
Volts AC/DC 40 - 60 Hz, DC	23 .. 26 V	42 .. 48 V	110 .. 127 V	200 .. 220 V	220 .. 240 V	240 .. 277 V	380 .. 420 V	440 .. 480 V	500 .. 500 V	575 .. 600 V

Universal Coil Selection for 3RT105 through 3RT107: Solid-State

Coil Code	B3	F3	P3
Volts AC/DC 40 - 60 Hz, DC	21 .. 27.3 V	96 .. 127 V	200 .. 227 V

¹⁾ Alternatively the 3RT10 54-1 contactor can be supplied with busbar connections instead of box terminals. In the 8th position of the Order No. the "1" must be replaced with "6", e.g. 3RT10 54-6... (for screw terminals) or the "3" must be replaced by "2" (for Cage Clamp terminals)

Contactors for Switching Motors

3RT, 3TF Contactor

3RT10 contactors, 3 pole, 5...500HP/600V

AC/DC operation (40 to 60 Hz, DC)

Withdrawable coils

Integrated coil circuit (varistor)

Auxiliary and control conductors: screw terminals

Main conductors: busbar connections, for 3RT10 54 box terminals¹⁾



3RT10 56-6P



3RT10 56-6Q

Size	Horsepower ratings and utilization categories						Auxiliary contacts, lateral (side) mounted		Rated control supply voltage U_s	Order No.	List Price \$	Weight approx.
	Maximum inductive current	Horsepower ratings of three-phase motors				AC-1 Maximum resistive current						
		200 V	230 V	460 V	575 V							
		AC-3 Amps	UL/CSA	HP	HP		HP	HP				
Solid-state operating mechanism · for DC 24 V PLC output/PLC relay output, with remaining lifetime indication												
S6	115	140	40	50	100	125	160	1	1	96 ... 127	3RT10 54-6PF35	3.5
	150	195	50	60	125	150	185	1	1	96 ... 127	3RT10 55-6PF35	3.1
	185	195	60	75	150	200	215	1	1	96 ... 127	3RT10 56-6PF35	
S10	225	250	60	75	150	200	275	1	1	96 ... 127	3RT10 64-6PF35	5.7
	265	330	75	100	200	250	330	1	1	96 ... 127	3RT10 65-6PF35	
	300	330	100	125	250	300	330	1	1	96 ... 127	3RT10 66-6PF35	
S12	400	400	125	150	300	400	430	1	1	96 ... 127	3RT10 75-6PF35	9.1
	500	520	150	200	400	500	610	1	1	96 ... 127	3RT10 76-6PF35	
Solid-state operating mechanism · with AS-Interface and remaining lifetime indication												
S6	115	140	40	50	100	125	160	1	1	96 ... 127	3RT10 54-6QF35	3.5
	150	195	50	60	125	150	185	1	1	96 ... 127	3RT10 55-6QF35	3.1
	185	195	60	75	150	200	215	1	1	96 ... 127	3RT10 56-6QF35	
S10	225	250	60	75	150	200	275	1	1	96 ... 127	3RT10 64-6QF35	5.7
	265	330	75	100	200	250	330	1	1	96 ... 127	3RT10 65-6QF35	
	300	330	100	125	250	300	330	1	1	96 ... 127	3RT10 66-6QF35	
S12	400	400	125	150	300	400	430	1	1	96 ... 127	3RT10 75-6QF35	9.1
	500	520	150	200	400	500	610	1	1	96 ... 127	3RT10 76-6QF35	

¹⁾ Alternatively the 3RT10 54-1 contactor can be supplied with busbar connections instead of box terminals. Without additional price. In the 8th position of the Order No. the "1" must be replaced with "6", e.g. 3RT10 54-6...35.

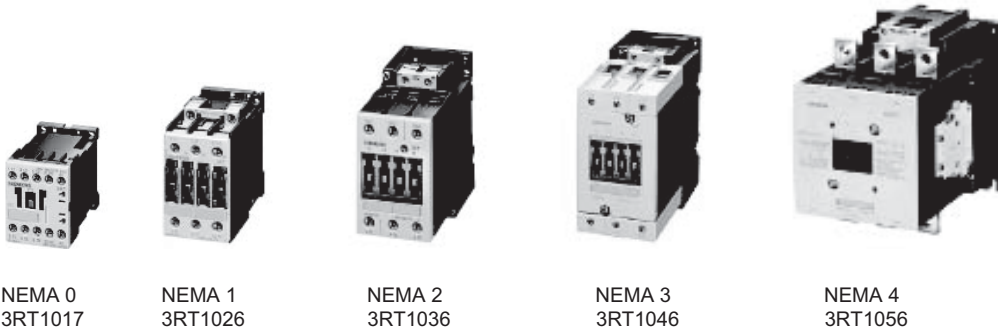
Contactors for Switching Motors

3RT, 3TF Contactor

3RT10 NEMA labelled contactors, 3 pole

Selection and ordering data

- * Available in both AC coil and DC Coil versions
- * Accepts all standard SIRIUS accessories
- * NEMA Size 0 through 3 can be mounted to the load side of a 3RV MSP
- * Accepts 3RU11 and 3RB20 overload relays
- * NEMA Size 4 devices are delivered without lugs



Contactors with AC Coils										
NEMA Size	Max Horsepower				Amp Rating	Aux Contacts		Coil	Order No.	Weight approx.
	200V	230V	460V	575V		NO	NC	V/60Hz		
0	3	3	5	5	18	1	0	120	3RT1017-1AK61-0UA0	0.19
1	7 1/2	7 1/2	10	10	27	0	0	120	3RT1026-1AK60-0UA0	0.32
2	10	15	25	25	45	0	0	120	3RT1036-1AK60-0UA0	0.78
3	25	30	50	50	90	0	0	120	3RT1046-1AK60-0UA0	1.78
4	40	50	100	100	135	2	2	120	3RT1056-6AF36-0UA0	3.1

Contactors with DC Coils										
NEMA Size	Max Horsepower				Amp Rating	Aux Contacts		Coil	Catalog No	Weight kg
	200V	230V	460V	575V		NO	NC	V/DC		
0	3	3	5	5	18	1	0	24	3RT1017-1BB41-0UA0	0.26
1	7 1/2	7 1/2	10	10	27	0	0	24	3RT1026-1BB40-0UA0	0.56
2	10	15	25	25	45	0	0	24	3RT1036-1BB40-0UA0	1.3
3	25	30	50	50	90	0	0	24	3RT1046-1BB40-0UA0	2.68
4	40	50	100	100	135	2	2	24	3RT1056-6AR36-0UA0 ¹⁾	3.1

1) Coils for the 3RT105 contactors are rated AC/DC operation. See page 3/56 for alternative AC and DC coil voltages and ranges.

For further coil voltages see page 2/35

For auxiliaries and accessories see page 2/41-52

For dimensional drawings see pages 2/180-181

Contactors for Switching Motors

3RT, 3TF Contactors

3RT12 vacuum contactors, 3 pole, 200 ... 500HP/600V

1

2

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17

Selection and ordering data

AC/DC operation (40 to 60 Hz, DC)

Auxiliary and control conductors: screw terminals

Withdrawable coils

Integrated coil circuit (Varistor)

Main conductors: busbar connections



3RT12 7.

3RT12 7.

Size	Horsepower ratings and utilization categories						Auxiliary contacts, lateral		Rated control supply voltage U_c	Order No.	List Price \$	Weight approx.
	Maximum inductive current	Ratings of three-phase motors			AC-1 Maximum resistive current							
	AC-3	UL/CSA	HP	HP	HP	575 V HP	Amps	NO	NC	AC/DC V		kg
Conventional operating mechanism												
S10	225	330	60	75	150	200	330	2	2	110 ... 127	3RT12 64-6AF36	6.4
	265	330	75	100	200	250	330	2	2	110 ... 127	3RT12 65-6AF36	
	300	330	100	125	250	300	330	2	2	110 ... 127	3RT12 66-6AF36	
S12	400	540	125	150	300	400	610	2	2	110 ... 127	3RT12 75-6AF36	9.6
	500	540	150	200	400	500	610	2	2	110 ... 127	3RT12 76-6AF36	
Solid-state operating mechanism - for DC 24 V PLC output												
S10	225	330	60	75	150	200	330	2	2	96 ... 127	3RT12 64-6NF36	6.4
	265	330	75	100	200	250	330	2	2	96 ... 127	3RT12 65-6NF36	
	300	330	100	125	250	300	330	2	2	96 ... 127	3RT12 66-6NF36	
S12	400	540	125	150	300	400	610	2	2	96 ... 127	3RT12 75-6NF36	9.6
	500	540	150	200	400	500	610	2	2	96 ... 127	3RT12 76-6NF36	

Contactor for Switching Motors

Contactor and Contactor Assemblies

3TF68 and 3TF69 vacuum contactors, 3 pole, 500...860HP/600V

3TB50 to 3TB56 vacuum contactors, 3 pole, 125...400HP/600V

Selection and ordering data

Size						Auxiliary contacts	Rated control supply voltage U_s 1)	Order No.	List Price \$	Weight approx.
AC-3 Maximum inductive current	Maximum horsepower rating		AC-1 Maximum resistive current			Design				
	200 V 230 V 460 V 575 V									
A	HP	HP	HP	HP	A	NO NC				kg

AC operation 2)3)

3TF68

- Auxiliary and control conductors: screw connections
- Main conductor: bar connections



630	200	250	500	600	700	4	4	110-132 V, 50/60 Hz	3TF68 44-0CF7	15
820	290	350	700	860	910	4	4	110-132 V, 50/60 Hz	3TF69 44-0CF7	19

DC operation · DC economy circuit

- Auxiliary and control conductors: screw connections
- Main conductor: bar connections

630	200	250	500	600	700	3	3	DC 24 V	3TF68 33-1DB4	16.9
820	290	350	700	860	910	3	3	DC 24 V	3TF69 33-1DB4	20.9

3TB50 to 3TB56 contactors 3-pole, with DC solenoid system

Selection and ordering data

Size						Auxiliary contacts	Rated control supply voltage U_s 1)	Order No.	List Price \$	Weight approx.
AC-3 Maximum inductive current	Maximum horsepower rating		AC-1 Maximum resistive current			Design				
	200 V		230 V 460 V 575 V							
A	HP	HP	HP	HP	A	NO NC				kg

DC operation · DC solenoid system

3TB50

- Auxiliary and control conductors: screw connections
- Main conductor: bar connections



110	40	50	100	125	170	2	2	DC 24 V	3TB50 17-0BB4	4
170	50	60	125	150	230	2	2	DC 24 V	3TB52 17-0BB4	6.8
250	75	100	200	250	325	2	2	DC 24 V	3TB54 17-0BB4	12.5
400	125	150	300	400	425	2	2	DC 24 V	3TB56 17-0BB4	19.2

Reversing contactors supplied: 3TC44 17-4A..

1) Built-in surge suppression: varistor circuit.

2) 3TF68/69 vacuum contactors are supplied with integrated overvoltage damping for the main current paths. The surge suppression circuit is not required if 3TF68/69 contactors are used in circuits with DC choppers, frequency converters or speed-variable operating mechanisms, for example. It could be damaged by the voltage peaks and harmonics and cause phase-to-phase short-circuits.
For this reason, the contactors can also be supplied without integrated overvoltage damping. Without additional price.
The order number must include "-Z" and the order code "A02".

Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor	Type	3TF68...-C/-D, 3TF69...-C/-D
AC operation · Magnetic coils for 50/60 Hz		
230 ... 277 V AC	P7	
380 ... 460 V AC	Q7	
500 ... 600 V AC	S7	
DC operation		
110 V DC	F4	
125 V DC	G4	
220 V DC	M4	
230 V DC	P4	

Contactors for Switching Motors

3RA13 Reversing Contactor Assemblies

Overview

Overview

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

Sizes S00 to S3

- Fully wired and tested, open type, with mechanical and electrical interlock. ¹⁾

Sizes S00 to S12

- As components 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 section 3.

The 3RA13 contactor assemblies have screw connections and are available for screwing or snapping onto 35 mm standard mounting rails.

The CE and RoHS approvals only apply to the complete contactor assemblies and not to the components for customer assembly.

AC and DC operation

IEC 60 947, EN 60 947 (VDE 0660)

Maximum horsepower rating at 460 V AC	AC-3 maximum inductive current	Size	Order No.					
			Contactor	Mechanical interlock ²⁾	Mechanical interlock ³⁾	Mechanical interlock ⁴⁾	Installation kit	Fully wired and tested contactor assembly
HP	A							
3 5 7.5	7 9 12	S00	3RT10 15 3RT10 16 3RT10 17	– ⁵⁾	–	–	3RA19 13-2A ⁶⁾	3RA13 15-8XB30-1.. 3RA13 16-8XB30-1.. 3RA13 17-8XB30-1..
5 7.5 10 15	9 12 17 25	S0	3RT10 23 3RT10 24 3RT10 25 3RT10 26	3RA19 24-1A	3RA19 24-2B	–	3RA19 23-2A ⁷⁾	3RA13 23-8XB30-1.. 3RA13 24-8XB30-1.. 3RA13 25-8XB30-1.. 3RA13 26-8XB30-1..
20 25 30 40	28 32 40 50	S2	3RT10 33 3RT10 34 3RT10 35 3RT10 36	3RA19 24-1A	3RA19 24-2B	–	3RA19 33-2A ⁸⁾	3RA13 33-8XB30-1.. 3RA13 34-8XB30-1.. 3RA13 35-8XB30-1.. 3RA13 36-8XB30-1..
50 60 75	65 80 95	S3	3RT10 44 3RT10 45 3RT10 46	3RA19 24-1A	3RA19 24-2B	–	3RA19 43-2A ⁹⁾	3RA13 44-8XB30-1.. 3RA13 45-8XB30-1.. 3RA13 46-8XB30-1..
100 125 150	115 150 185	S6	3RT10 54 3RT10 55 3RT10 56	–	–	3RA19 54-2A	3RA19 53-2A ¹⁰⁾	–
150 200 250	225 265 300	S10	3RT10 64 3RT10 65 3RT10 66	–	–	3RA19 54-2A	3RA19 63-2A ¹⁰⁾	–
300 400	400 500	S12	3RT10 75 3RT10 76	–	–	3RA19 54-2A	3RA19 73-2A ¹⁰⁾	–

- 1) An additional dead interval of 50 ms is necessary on reversing at voltages > 500 V.
- 2) Laterally mountable with one auxiliary contact.
- 3) For front mounting with one auxiliary contact.
- 4) Laterally mountable without auxiliary contact.
- 5) Interlock must be ordered with installation kit.
- 6) Installation kit contains: mechanical interlock; 2 connecting clips for 2 contactors; wiring connectors on the top and bottom.

- 7) Installation kit contains: wiring connectors on the top and bottom.
- 8) Installation kit contains: 2 connecting clips for 2 contactors; wiring connectors on the top and bottom.
- 9) Installation kit contains: 2 connecting clips for 2 contactors; wiring connectors on the top and bottom.
- 10) Installation kit contains: wiring connector on the top and bottom.

3RA13 complete units, 5...100HP/600V

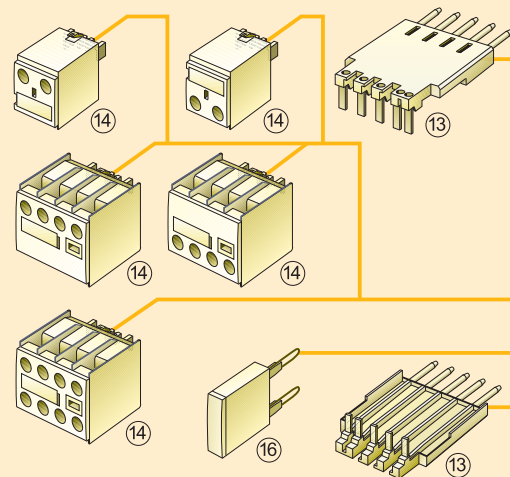
AC-3 maximum inductive current	Maximum Horsepower ratings of three-phase motors					Rated control supply voltage	Fully wired and tested contactor assembly ³⁾		Weight approx.
	200 V	230 V	460 V	575 V			Order No.	List Price \$	
A	HP	HP	HP	HP					kg
AC operation									
7	1.5	2	3	5	120 V, 60 Hz		3RA13 15-8XB30-1AK6		0.4
9	2	3	5	7.5	120 V, 60 Hz		3RA13 16-8XB30-1AK6		0.4
12	3	3	7.5	10	120 V, 60 Hz		3RA13 17-8XB30-1AK6		0.4
DC operation									
7	1.5	2	3	5	DC 24 V		3RA13 15-8XB30-1BB4		0.52
9	2	3	5	7.5	DC 24 V		3RA13 16-8XB30-1BB4		0.52
12	3	3	7.5	10	DC 24 V		3RA13 17-8XB30-1BB4		0.52

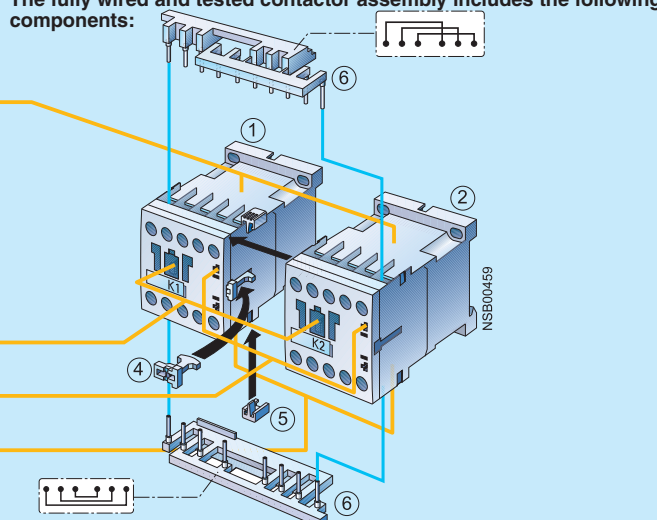


1) Coil operating range
at 50 Hz: 0.8 ... 1.1 x U_N ;
at 60 Hz: 0.85 ... 1.1 x U_N .

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

3) See page 3/56 for alternative AC and DC coil voltages and ranges.





13	Solder pin adapters	3RT19 16-4KA1
14	Auxiliary switch block, front (auxiliary switch block according to EN 50005 must be used)	3RH19 11-1....
16	Surge suppressors	3RT19 16-1....

		K1	K2
1 2	Contactors, 3 kW	3RT10 15	3RT10 15
1 2	Contactors, 4 kW	3RT10 16	3RT10 16
1 2	Contactors, 5.5 kW	3RT10 17	3RT10 17
4 5 6	Assembly kit	3RA19 13-2A	
The assembly kit contains:			
4	Mechanical interlock		
5	2 connecting clips for 2 contactors		
6	Wiring modules on the top and bottom for connecting the main current paths, electrical interlock included ¹⁾ , interruptible (NC contact interlock)		

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

Contactors for Switching Motors

3RA13 Reversing Contactor Assemblies

3RA13 complete units, 5 ... 100HP/600V

Selection and ordering data

Fully wired and tested contactor assemblies - Size S0 - up to 20HP/600V

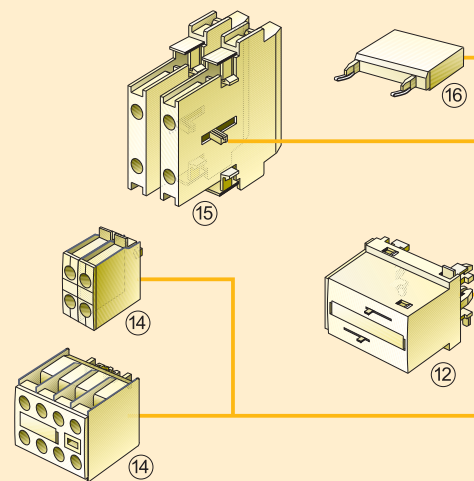


AC-3 maximum inductive current	Maximum HP ratings of three-phase motors					Rated control supply voltage	Fully wired and tested contactor assembly		Weight approx. kg
	200/208 V	230/240 V	460/480 V	575/600 V			Order No.	List Price \$	
A	HP	HP	HP	HP					
AC operation									
9	2	3	5	7.5	120 V, 60 Hz		3RA13 23-8XB30-1AK6		0.72
12	3	3	7.5	10	120 V, 60 Hz		3RA13 24-8XB30-1AK6		0.72
17	5	5	10	15	120 V, 60 Hz		3RA13 25-8XB30-1AK6		0.72
25	7.5	7.5	15	20	120 V, 60 Hz		3RA13 26-8XB30-1AK6		0.72
DC operation									
9	2	3	5	7.5	DC 24 V		3RA13 23-8XB30-1BB4		1.2
12	3	3	7.5	10	DC 24 V		3RA13 24-8XB30-1BB4		1.2
17	5	5	10	15	DC 24 V		3RA13 25-8XB30-1BB4		1.2
25	7.5	7.5	15	20	DC 24 V		3RA13 26-8XB30-1BB4		1.2

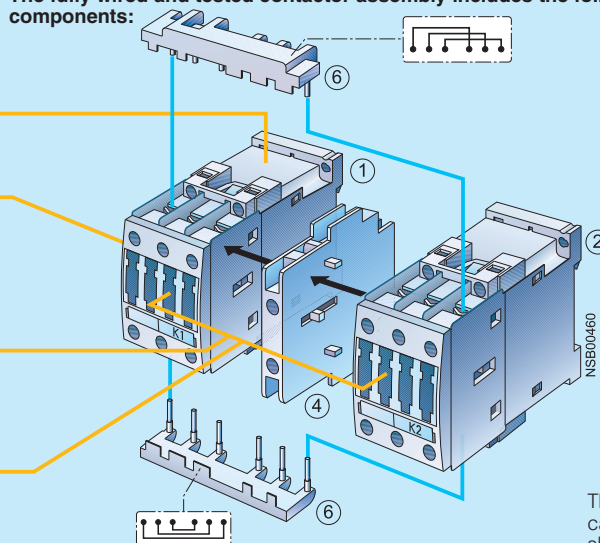
1) Coil operating range at 50 Hz: 0.8 ... 1.1 x U_s ; at 60 Hz: 0.85 ... 1.1 x U_s .

2) See page 3/56 for alternative AC and DC coil voltages and ranges.

Mountable accessories (to be ordered separately):



The fully wired and tested contactor assembly includes the following components:



Accessories	Order No.	Individual parts	Order No.	K1	K2
12 Mechanical interlock, front	3RA19 24-1A	1 2 Contactors, 5.5 kW	3RT10 24		3RT10 24
14 Auxiliary switch block, front	3RH19 21-1CA..	1 2 Contactors, 7.5 kW	3RT10 25		3RT10 25
15 Auxiliary switch block, lateral	3RH19 21-1EA..	1 2 Contactors, 11 kW	3RT10 26		3RT10 26
16 Surge suppressors	3RT19 26-1....	4 Mechanical interlock, lateral	3RA19 24-2B		
		6 Assembly kit	3RA19 23-2A		

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

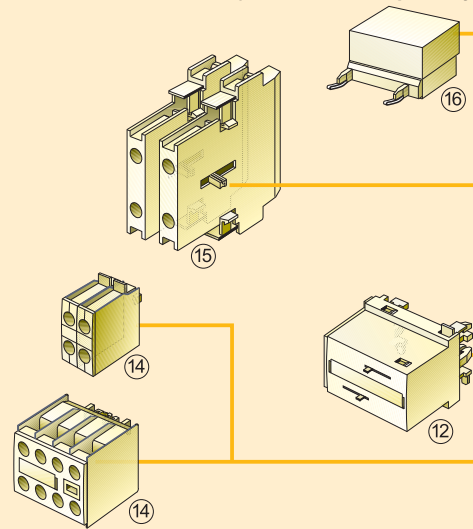
3RA13 complete units, 5...100HP/600V

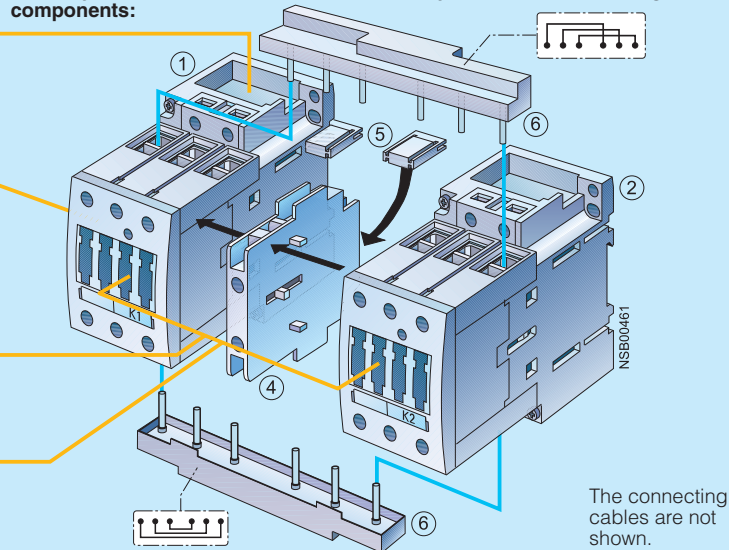
Fully wired and tested contactor assemblies · Size S2 · up to 50Hp/600V

AC-3 maximum inductive current	Maximum HP ratings of three-phase motors				Rated control supply voltage ¹⁾	Fully wired and tested contactor assembly		Weight approx.
	200/208 V	230/240 V	460/480 V	575/600 V		Order No.	List Price \$	
A	HP	HP	HP	HP				kg
AC operation								
28	7.5	10	20	25	120 V, 60 Hz	3RA13 33-8XB30-1AK6		1.8
32	10	10	25	30	120 V, 60 Hz	3RA13 34-8XB30-1AK6		1.8
40	10	15	30	40	120 V, 60 Hz	3RA13 35-8XB30-1AK6		1.8
50	15	15	40	50	120 V, 60 Hz	3RA13 36-8XB30-1AK6		1.8
DC operation								
28	7.5	10	20	25	DC 24 V	3RA13 33-8XB30-1BB4		2.84
32	10	10	25	30	DC 24 V	3RA13 34-8XB30-1BB4		2.84
40	10	15	30	40	DC 24 V	3RA13 35-8XB30-1BB4		2.84
50	15	15	40	50	DC 24 V	3RA13 36-8XB30-1BB4		2.84

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

²⁾ See page 3/56 for alternative AC and DC coil voltages and ranges.





12	Mechanical interlock, front	3RA19 24-1A
14	Auxiliary switch block, front	3RH19 21-1CA..
15	Auxiliary switch block, lateral	3RH19 21-1EA..
16	Surge suppressors	3RT19 26-1.... 3RT19 36-1....
5	2 connecting clips for 2 contactors with a distance of 10 mm	
6	Wiring modules on the top and bottom for connecting the main current paths	

1 2	Contactors, 15 kW
1 2	Contactors, 18.5 kW
1 2	Contactors, 22 kW
4	Mechanical interlock, lateral
5 6	Assembly kit The assembly kit contains:

K1	K2
3RT10 34	3RT10 34
3RT10 35	3RT10 35
3RT10 36	3RT10 36
3RA19 24-2B	
3RA19 33-2A	

Contactors for Switching Motors

3RA13 Reversing Contactor Assemblies

3RA13 complete units, 5 ... 100HP/600V

Selection and ordering data

Fully wired and tested contactor assemblies · Size S3 · up to 100HP/600V

Size S3 · up to 45 kW

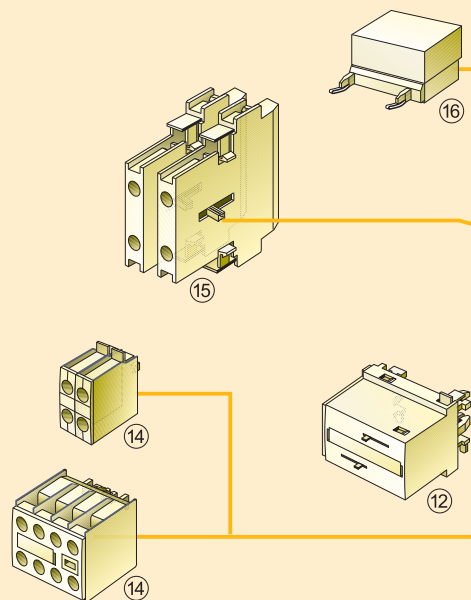
AC-3 maximum inductive current	Maximum HP ratings of three-phase motors				Rated control supply voltage	Fully wired and tested contactor assembly		Weight approx. kg
	200/208 V	230/240 V	460/480 V	575/600 V		Order No.	List Price \$	
A	HP	HP	HP	HP				
AC operation								
65	20	25	50	60	120 V, 60 Hz	3RA13 44-8XB30-1AK6		3.9
80	25	30	60	75	120 V, 60 Hz	3RA13 45-8XB30-1AK6		3.9
95	30	30	75	100	120 V, 60 Hz	3RA13 46-8XB30-1AK6		3.9
DC operation								
65	20	25	50	60	DC 24 V	3RA13 44-8XB30-1BB4		5.7
80	25	30	60	75	DC 24 V	3RA13 45-8XB30-1BB4		5.7
95	30	30	75	100	DC 24 V	3RA13 46-8XB30-1BB4		5.7



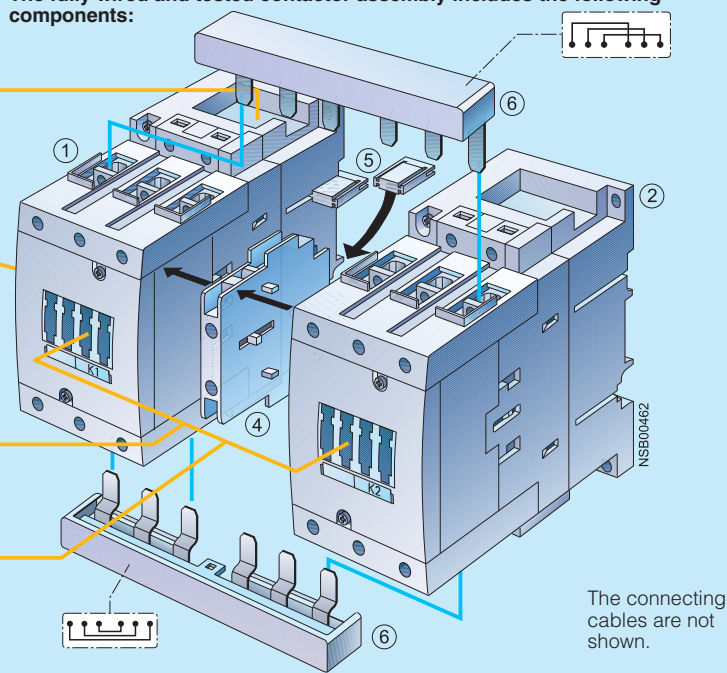
1) Coil operating range at 50 Hz: $0.8 \dots 1.1 \times U_N$; at 60 Hz: $0.85 \dots 1.1 \times U_N$.

2) See page 3/56 for alternative AC and DC coil voltages and ranges.

Mountable accessories (to be ordered separately):



The fully wired and tested contactor assembly includes the following components:



Accessories

Order No.

- 12 Mechanical interlock, front
- 14 Auxiliary switch block, front
- 15 Auxiliary switch block, lateral
- 16 Surge suppressors

- 3RA19 24-1A
- 3RH19 21-1CA..
- 3RH19 21-1EA..
- 3RT19 26-1....
- 3RT19 36-1....

Individual parts

- 1 2 Contactors, 30 kW
- 1 2 Contactors, 37 kW
- 1 2 Contactors, 45 kW
- 4 Mechanical interlock, lateral
- 5 6 Assembly kit

The assembly kit contains:

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

Order No.

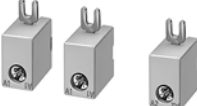
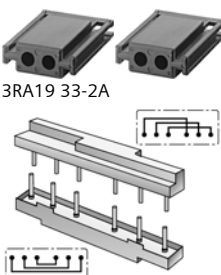
- | K1 | K2 |
|----------|----------|
| 3RT10 44 | 3RT10 44 |
| 3RT10 45 | 3RT10 45 |
| 3RT10 46 | 3RT10 46 |

3RA13, 3RA14 Contactor Assemblies

3RA13 Reversing Contactor Assemblies

Components for customer assembly

Selection and ordering data

For contactors	Size	Version	DT	Order No.	PS*	Weight per PU approx.
Type						kg
Mechanical interlocks						
	3RT10 2	S0	For lateral mounting¹⁾ 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 unit	0.060
	3RT10 3	S2				
	3RT10 4	S3				
	3RT13 2					
	3RT13 3					
	3RT10 2	S0	For mounting to the front²⁾ 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 unit	0.050
	3RT10 3	S2				
	3RT10 4	S3				
	3RT13 2	S0				
	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 unit	0.050
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. (1 set contains 10 x A1 and 5 x A2)	3RA19 23-3B	1 unit	0.080
	3RT10 4					
Assembly kits for making 3-pole contactor assemblies						
	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 unit	0.040
	3RT10 2	S0	The assembly kit contains: wiring modules on the top and bottom	3RA19 23-2A	1 unit	0.060
	3RT10 3	S2	The assembly kit contains: 2 connecting clips for 2 contactors; wiring modules on the top and bottom	3RA19 33-2A	1 unit	0.120
	3RT10 4	S3	The assembly kit contains: 2 connecting clips for 2 contactors; wiring modules on the top and bottom	3RA19 43-2A	1 unit	0.300
	3RT10 5	S6	The assembly kit contains: wiring modules on the top and bottom	3RA19 53-2A	1 unit	1.300
	3RT1. 6	S10		3RA19 63-2A	1 unit	2.400
	3RT1. 7	S12		3RA19 73-2A	1 unit	3.000

Wiring modules and mechanical connectors are also available separately.

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.

Contactors for Special Applications

3RT14 Contactors for Switching Resistive Loads (AC-1)

3 pole, 140 ... 690 A

Selection and ordering data

3RT14 46-1A...0



Ratings AC-1 utilization category,					UL Ratings			Rated control supply voltage U_s	Order No.	List Price \$	Weight approx.
IEC Ratings					Max Current	230/ 240V	460/ 480V				
Rated power of three phase loads $\cos \phi = 0.95$ (@ 60°C)					Amps	Hp	Hp	Hp			kg
Amps	230V kW	400V kW	500V kW	690V kW							

**With screw connections · for screwing and snapping onto
35 mm and 75 mm standard mounting rails**

Size S3 · (without auxiliary contacts)

• AC operation

140	50	86	107	148	110	15	30	40	120 V, 60 Hz	3RT14 46-1AK6 0	1.8
-----	----	----	-----	-----	-----	----	----	----	--------------	-----------------	-----

• DC operation · DC solenoid system

140	50	86	107	148	131	15	30	40	DC 24 V DC 48 V	3RT14 46-1BB4 0 3RT14 46-1BW40	2.7
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AC/DC operation (40 to 60 Hz, DC)

Auxiliary and control conductors: screw terminals

Withdrawable coils

Integrated coil circuit (Varistor)

Main conductors: busbar connections

3RT14 6...



Size	Ratings AC-1 utilization category,				UL Rating	Auxiliary contacts, lateral		Rated control supply voltage U_s	Order No.	List Price \$	Weight approx.
	IEC Ratings										
	AC-1 Maximum resistive current Amps	Rated power of three phase loads $\cos \phi = 0.95$ (@ 60°C)				Max Current Amps					
	230V kW	400V kW	500V kW	690V kW		NO	NC	AC/DC V			kg

Conventional operating mechanism

S6	275	95	165	205	285	210	2	2	110 ... 127	3RT14 56-6AF36	3.1
S10	400	145	250	315	430	360	2	2	110 ... 127	3RT14 66-6AF36	5.7
S12	690	245	430	535	740	580	2	2	110 ... 127	3RT14 76-6AF36	9.1

Solid-state operating mechanism · for DC 24 V PLC output

S6	275	95	165	205	285	210	2	2	96 ... 127	3RT14 56-6NF36	3.1
S10	400	145	250	315	430	360	2	2	96 ... 127	3RT14 66-6NF36	5.7
S12	690	245	430	535	740	580	2	2	96 ... 127	3RT14 76-6NF36	9.1

Solid-state operating mechanism · for DC 24 V PLC output/PLC relay output, with remaining lifetime indication

S6	275	95	165	205	285	210	1	1	96 ... 127	3RT14 56-6PF35	3.1
----	-----	----	-----	-----	-----	-----	---	---	------------	----------------	-----

Solid-state operating mechanism · with AS-Interface and remaining lifetime indication

S6	275	95	165	205	285	210	1	1	96 ... 127	3RT14 56-6QF35	3.1
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3RT14 7...



Universal Coil Selection for 3RT145 through 3RT147: Conventional Operation										
Coil Code	B3	D3	F3	M3	P3	U3	V3	R3	S3	T3
Volts AC/DC 40 - 60 Hz, DC	23 ... 26 V	42 ... 48 V	110 ... 127 V	200 ... 220 V	220 ... 240 V	240 ... 277 V	380 ... 420 V	440 ... 480 V	500 ... 500 V	575 ... 600 V

Universal Coil Selection for 3RT145 through 3RT147: Solid-State			
Coil Code	B3	F3	P3
Volts AC/DC 40 - 60 Hz, DC	21 ... 27.3 V	96 ... 127 V	200 ... 227 V

Note: B3 code not available for the ASI Interface
or Remaining Lifetime Contactors.

Contactors for Special Applications

3RT13 Contactors for Switching Resistive Loads (AC-1)

4 pole, 2 NO, 18 ... 140 A

Selection and ordering data



AC operation

4 NO contacts

Ratings Utilization category	Rated control supply voltage U_s	Screw connection		Weight approx.
AC-1		Order No.	List Price \$	
Maximum resistive current				
Amps				
40°C 60°C				kg

For screwing and snapping onto 35 mm standard mounting rail

• Size S00 ¹⁾				
18	16	120 V, 50/60 Hz	3RT13 16-1AK60	0.19
22	20	120 V, 50/60 Hz	3RT13 17-1AK60	0.19
• Size S0				
35 ²⁾	30 ²⁾	120 V, 50/60 Hz	3RT13 25-1AK60	0.36
40 ²⁾	35 ²⁾	120 V, 50/60 Hz	3RT13 26-1AK60	0.36

For screwing and snapping onto 35 mm standard mounting rail

AC operation

• Size S2				
60	55	120 V, 60 Hz	3RT13 36-1AK60	0.93
• Size S3				
110	100	120 V, 60 Hz	3RT13 44-1AK60	2.0
140	120	120 V, 60 Hz	3RT13 46-1AK60	2.11

DC operation · DC solenoid system

• Size S00				
18	16	DC 24 V DC 110 V	3RT13 16-1BB40 3RT13 16-1BF40	0.25
22	20	DC 24 V DC 110 V	3RT13 17-1BB40 3RT13 17-1BF40	0.25
• Size S0				
35 ¹⁾	30 ¹⁾	DC 24 V DC 110 V	3RT13 25-1BB40 3RT13 25-1BF40	0.59
40 ¹⁾	35 ¹⁾	DC 24 V DC 110 V	3RT13 26-1BB40 3RT13 26-1BF40	0.59
• Size S2				
60	55	DC 24 V DC 110 V	3RT13 36-1BB40 3RT13 36-1BF40	1.56
• Size S3				
110	100	DC 24 V DC 110 V	3RT13 44-1BB40 3RT13 44-1BF40	3.1
140	120	DC 24 V DC 110 V	3RT13 46-1BB40 3RT13 46-1BF40	3.1

Size S00: Auxiliary switch blocks can be snapped on according to EN 50 005.

Sizes S0 ... S3: Auxiliary switch blocks can be snapped on according to EN 50 012 and EN 50 005.
(for S0 no more than 2 auxiliary contacts.

1) For size S00: Coil operating range
at 50 Hz: 0.8 ... 1.1 x U_s , at 60 Hz: 0.85 ... 1.1 x U_s .

2) Minimum conductor cross-section 10 mm².

3) For 220 V DC make this change in the Order No.: BB --> BM.

4) See page 3/56 for alternative AC and DC coil voltages and ranges.

Contactors for Special Applications

3RT15 contactors for Switching Resistive Loads (AC-1)

4 pole, 2 NO + 2 NC, 10...40HP

Selection and ordering data

AC and DC operation
2 NO + 2 NC¹⁾



3RT15 1.-1....



3RT15 1.-2....



3RT15 26-1....

2 NO contacts + 2 NC contacts¹⁾

Ratings Utilization category		Rated control supply voltage U_s		Screw connection	Weight approx.
AC-3		AC-1		Order No.	
Maximum inductive current	Maximum horsepower rating at 600 VAC	Maximum resistive current			
Amps	HP	Amps 40°C 60°C			kg

For screwing and snapping onto 35 mm standard mounting rail

AC operation

• Size S00²⁾

9	10	18	16	120 V, 60 Hz	3RT15 16-1AK60	0.19
12	10	22	20	120 V, 60 Hz	3RT15 17-1AK60	0.19

• Size S0

25	20	40 ³⁾	35 ³⁾	120 V, 60 Hz	3RT15 26-1AK60	0.36
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• Size S2

40	40	55	50	120 V, 60 Hz	3RT15 35-1AK60	0.93
----	----	----	----	--------------	----------------	------

DC operation · DC solenoid system

• Size S00

9	10	18	16	DC 24 V DC 48 V	3RT15 16-1BB40 3RT15 16-1BF40	0.25
12	10	22	20	DC 24 V DC 48 V	3RT15 17-1BB40 3RT15 17-1BF40	0.25

• Size S0

20	20	40 ³⁾	35 ³⁾	DC 24 V DC 48 V	3RT15 26-1BB40 3RT15 26-1BF40	0.59
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• Size S2

40	40	55	50	DC 24 V DC 48 V	3RT15 35-1BB40 3RT15 35-1BF40	1.56
----	----	----	----	--------------------	----------------------------------	------

Size S00: Snap-on auxiliary switch blocks according to EN 50005.

Sizes S0 to S3: Snap-on auxiliary switch blocks according to EN 50012 and EN 50005
(for S0 max. 2 auxiliary contacts, please note information in the Technical Information LV 1 T).

1) For reversing poles; not suitable for reversing duty.

2) For size S00: Coil operating range
at 50 Hz: 0.8 to 1.1 x U_s
at 60 Hz: 0.85 to 1.1 x U_s .

3) Minimum conductor cross-section 10 mm².

4) See page 3/56 for alternative AC and DC coil voltages and ranges.

1) For changing polarity;
not suitable for reversing.

2) Size S00:
Coil voltage tolerance
at 50 Hz: 0.8 ... 1.1 x U_s
at 60 Hz: 0.85 ... 1.1 x U_s

3) Required conductor cross-section 10 mm².

Contactors for Special Applications

3RT16 Capacitor Contactors

10...75Kvar

Selection and ordering data

AC operation
Screw terminals



3RT16 17-1A.03



3RT16 27-1A.01



3RT16 47-1A.01

AC-6b utilization category

For switching three-phase capacitors at an ambient temperature of 60 °C²⁾

UL capacitor rating at operational voltage

200/208	230/240	460/480	575/600
kvar	kvar	kvar	kvar

Current	Auxiliary contacts, unassigned	Rated control supply voltage U_s ¹⁾
		AC

Screw connection

Order No.	List Price \$	Weight approx. kg
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For screwing and snapping onto 35 mm standard mounting rail

• Size S00

1Ø	3	4	8	10	18A	2 NO	120 V, 60 Hz	3RT16 17-1AK6 3	0.24
3Ø	6	7	15	18					

• Size S0

1Ø	7	8	16	20	36A	1 NO	120 V, 60 Hz	3RT16 27-1AK6 1	0.38
3Ø	12.5	14	28.5	35					

• Size S3

1Ø	15	17	35	43	72A	1 NO	120 V, 60 Hz	3RT16 47-1AK6 1	1.93
3Ø	26	30	60	75					

1) For size S3: 55 °C.

2) Operating range: $0.85 \dots 1.1 \times U_s$.

3) For conductor cross-sections $> 6 \text{ mm}^2$ use 3RV19 25-5AB terminals (2 units).

4) See page 3/56 for alternative AC and DC coil voltages and ranges.

Contactors and Contactor Assemblies

Safety Contactors and Control Relays

Safety Contactors

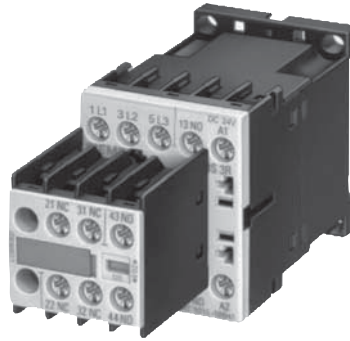
Sirius Safety Contactors and Control Relays with Permanently Attached Auxiliary Contact Blocks

Sirius safety contactors and control relays are available with permanently attached front mounted auxiliary contact blocks.

- Control relays meet or exceed the requirements specified in the IEC standard for auxiliary devices, 60947-5-1.
- Contactors meet or exceed the requirements specified in the IEC standard for auxiliary devices, 60947-4-1.
- II devices are UL Listed and CE Marked.



File #
E31519



3RT1016-1A**4-3MA0

Application Areas

- In industries, such as the automotive, where the auxiliary contact blocks are required to be permanently attached to meet the requirements of "unintentional misuse" as specified in IEC 60292, paragraph 3.12. Tested by SUVA.

Features

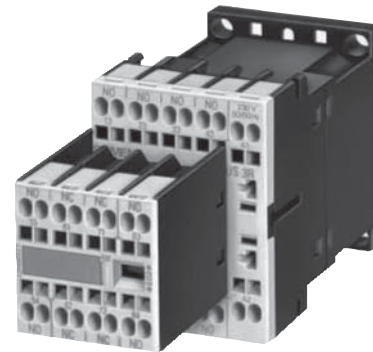
- Permanently attached front mounted auxiliary contact blocks on the contactors, 3RT1*1 (S00), 3RT1*2 (S0), 3RT1*3 (S2) and 3RT1*4 (S3) are available in a variety of configurations.
- Permanently attached auxiliary contact blocks on the control relays, 3RH12, are available in various combination up to 8 contacts.
- Cage clamp connections are optional on the 3RH12 relays and 3RT1*1 (S00) contactors.
- Manual operation of the contactor or control relay prevented.
- Standard optional accessories available in the current catalog.
- The symbol for mechanically linked contacts is added to the device marking.



IEC 60947-5-1
for control
relays



IEC 60947-4-1
for contactors



3RT1016-2A**4-3MA0
(with cage clamp)

Technical Information

- Technical information can be found in the current Siemens Industrial Control Product Catalog. You may contact your Siemens Energy & Automation, Inc. sales office for a current catalog.
- AC3 and AC4 charts are the same as standard products found in the current Siemens Industrial Control Product Catalog.
- Due to the permanently attached front mounted auxiliary contacts, the main contacts are not replaceable.

Contactors and Contactor Assemblies

Safety Contactors and Control Relays

Safety Contactors

3RT1 Safety Control Relays Selection Guide

Contact rating: Base unit NEMA A600/P600
Top mounted block, NEMA A600/Q600

UL NEMA	Ie AC15 230V	Catalog Number (screw terminals)	List Price \$	Catalog Number (cage clamp)	List Price \$	Auxilliary Contact					
						Base Device		Contact Block		Total	
						NO	NC	NO	NC	NO	NC
AC COILS											
A600	6A	3RH1244-1A**0		3RH1244-2A**0		4	0	0	4	4	4
A600	6A	3RH1253-1A**0		3RH1253-2A**0		4	0	1	3	5	3
A600	6A	3RH1262-1A**0		3RH1262-2A**0		4	0	2	2	6	2
A600	6A	3RH1271-1A**0		3RH1271-2A**0		4	0	3	1	7	1
DC COILS											
A600	6A	3RH1244-1B**0		3RH1244-2B**0		4	0	0	4	4	4
A600	6A	3RH1253-1B**0		3RH1253-2B**0		4	0	1	3	5	3
A600	6A	3RH1262-1B**0		3RH1262-2B**0		4	0	2	2	6	2
A600	6A	3RH1271-1B**0		3RH1271-2B**0		4	0	3	1	7	1

3RT1 Safety Contactors Selection Guide

Power Poles: 3 NO
Top mounted auxiliary box: 2 NO / 2NC

480V Hp	400V kW	AC3 Amps	AC1 Amps	Catalog Number (screw terminals)	Catalog Number (cage clamp)	Power Pole		Auxiliary Contact							
								Base Device		Contact Block		Total			
						NO	NC	NO	NC	NO	NC	NO	NC		
AC COILS															
3	3	7	18	3RT1015-1A**4-3MA0	3RT1015-2A**4-3MA0	—	3	—	1	—	2	2	3	2	
5	4	9	22	3RT1016-1A**4-3MA0	3RT1016-2A**4-3MA0	—	3	—	1	—	2	2	3	2	
7.5	5.5	12	22	3RT1017-1A**4-3MA0	3RT1017-2A**4-3NA0	—	3	—	1	—	2	2	3	2	
7.5	5.5	12	40	3RT1024-1A**4-3MA0	—	—	3	—	—	—	2	2	2	2	
10	7.5	17	40	3RT1025-1A**4-3MA0	—	—	3	—	—	—	2	2	2	2	
15	11	25	40	3RT1026-1A**4-3MA0	—	—	3	—	—	—	2	2	2	2	
25	15	32	50	3RT1034-1A**4-3MA0	—	—	3	—	—	—	2	2	2	2	
30	18.5	40	60	3RT1035-1A**4-3MA0	—	—	3	—	—	—	2	2	2	2	
40	22	50	55	3RT1036-1A**4-3MA0	—	—	3	—	—	—	2	2	2	2	
50	30	65	100	3RT1044-1A**4-3MA0	—	—	3	—	—	—	2	2	2	2	
60	37	80	120	3RT1045-1A**4-3MA0	—	—	3	—	—	—	2	2	2	2	
70	45	100	120	3RT1046-1A**4-3MA0	—	—	3	—	—	—	2	2	2	2	
DC COILS															
3	3	7	18	3RT1015-1B**4-3MA0	3RT1015-2B**4-3MA0	—	3	—	1	—	2	2	3	2	
5	4	9	22	3RT1016-1B**4-3MA0	3RT1016-2B**4-3MA0	—	3	—	1	—	2	2	3	2	
7.5	5.5	12	22	3RT1017-1B**4-3MA0	3RT1017-2B**4-3MA0	—	3	—	1	—	2	2	3	2	
7.5	5.5	12	40	3RT1024-1B**4-3MA0	—	—	3	—	—	—	2	2	2	2	
10	7.5	17	40	3RT1025-1B**4-3MA0	—	—	3	—	—	—	2	2	2	2	
15	11	25	40	3RT1026-1B**4-3MA0	—	—	3	—	—	—	2	2	2	2	
25	15	32	50	3RT1034-1Q**4-3MA0	—	—	3	—	—	—	2	2	2	2	
30	18.5	40	60	3RT1035-1Q**4-3MA0	—	—	3	—	—	—	2	2	2	2	
40	22	50	55	3RT1036-1Q**4-3MA0	—	—	3	—	—	—	2	2	2	2	
50	30	65	100	3RT1044-1Q**4-3MA0	—	—	3	—	—	—	2	2	2	2	
60	37	80	120	3RT1045-1Q**4-3MA0	—	—	3	—	—	—	2	2	2	2	
70	45	100	120	3RT1046-1Q**4-3MA0	—	—	3	—	—	—	2	2	2	2	

For 3RH1 Safety Controls Relays

Coil Voltage Options①
(replace ** with the coil code)

VDC		VAC			
Voltage	Code	50-60 Hz	50 Hz	60 Hz	Code
24	B4	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	P0①
—	—	—	110	120	K6①
—	—	—	—	—	—

For 3RT1 Safety Contactors

Coil Voltage Options①
(replace ** with the coil code)

VDC		VAC		
Voltage	Code	50 Hz	60 Hz	Code
24	B4①	110	120	K6①
—	—	—	—	—
—	—	—	230	P0①
—	—	—	—	—
—	—	—	—	—

Notes:

* Not all combinations are in the order entry system. Contact your Siemens sales office for any part numbers not appearing in the order entry system. For other control voltages that can be requested see page 2/35

Contact Siemens for coil voltage availability. Not all coil voltages apply to all contactor/relay sizes

3RH1 contactor relays, 4 and 8 pole

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

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Overview

The SIRIUS generation of controls is a complete, modular system family, logically designed right down to the last detail, from the basic units to the accessories.

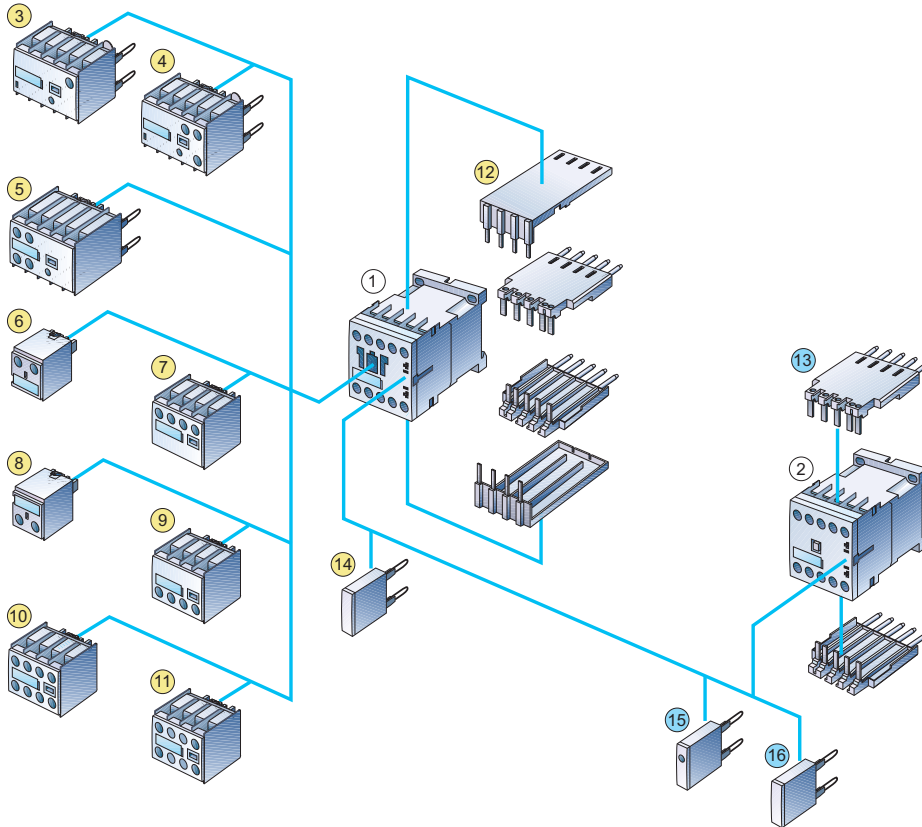
Contactor relays and coupling relays
Size S00 with accessories

AC and DC operation

IEC 60947, EN 60947 (VDE 0660)

The 3RH1 contactor relays are suitable for use in any climate. They are finger-safe according to EN 50274.

The 3RH1 contactor relays have screw or Cage Clamp terminals. Four contacts are available in the basic unit.



- ① Contactor relay
- ② Coupling relay for auxiliary circuit
- ③ Solid-state time-delay block, ON-delay
- ④ Solid-state time delay block, OFF-delay
- ⑤ Auxiliary switch block with solid-state time delay (versions: ON or OFF-delay)
- ⑥ 1-pole auxiliary switch block, cable entry from above
- ⑦ 2-pole auxiliary switch block, cable entry from above
- ⑧ 1-pole auxiliary switch block, cable entry from below
- ⑨ 2-pole auxiliary switch block, cable entry from below
- ⑩ 4-pole auxiliary switch block (terminal designations according to EN 50011 or EN 50005)
- ⑪ 2-pole auxiliary switch block, standard version or solid-state compatible version (terminal designations according to EN 50005)
- ⑫ Solder pin adapter for contactor relays with 4-pole auxiliary switch block,
- ⑬ Solder pin adapter for contactor relays and coupling relays
- ⑭ Additional load module for increasing the permissible residual current,
- ⑮ Surge suppressor with LED
- ⑯ Surge suppressor without LED

3RH Contactor Relays

3RH1 contactor relays, 4 and 8 pole

Selection and ordering data

AC and DC operation



3RH11 ...-1...



3RH12 ...-1...

Rated operational current	Contacts	Rated control supply voltage U_s	DT	Screw terminals	PS	Weight per PU approx.
$I_e/AC-15/AC-14$ at 230 V	Ident. No. Version			Order No.		
A	NO NC V					kg

For screw and snap-on mounting onto 35 mm standard mounting rails

AC operation

AC 50/60 Hz¹⁾

• Size S00

Terminal designations according to EN 50011

6	40 E	4	--	120	▶	3RH11 40-1AK60	1 unit	0.200
	31 E	3	1	120	▶	3RH11 31-1AK60	1 unit	0.200
	22 E	2	2	120	▶	3RH11 22-1AK60	1 unit	0.200

DC operation ▶ DC solenoid system

6	40 E	4	--	24	▶	3RH11 40-1BB40	1 unit	0.260
	31 E	3	1	24	▶	3RH11 31-1BB40	1 unit	0.260
	22 E	2	2	24	▶	3RH11 22-1BB40	1 unit	0.260

With permanently mounted auxiliary switch block

6	44 E	4	4	24	▶	3RH12 44-1BB40	1 unit	0.310
	62 E	6	2	24	▶	3RH12 62-1BB40	1 unit	0.310

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

²⁾ See page 3/56 for alternative AC and DC coil voltages

3RH11 coupling relays for switching auxiliary circuits, 4 pole

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Application

DC operation

IEC 60947 and EN 60947 (VDE 0660)

The 3RH11 coupling relays for switching auxiliary circuits are tailored to the special requirements of working with electronic controls.

The 3RH11 coupling relays cannot be extended with auxiliary switch blocks.

Selection and ordering data

DC operation

Screw terminals

Low power consumption

Extended operating range of the magnetic coils

Integrated coil circuit



3RH11 ...-1.B40

Surge suppressors	Rated operational current NEMA A600/P600 rating	Auxiliary contacts	DT	Screw terminals	PS*	Weight per PU approx.
		Ident. No.	Version	Order No.		
			NO NC			kg

For screw and snap-on mounting onto 35 mm standard mounting rail

• Size S00

Terminal designations according to EN 50011

Rated control supply voltage $U_s = 24$ V DC, operating range **0.7 to 1.25 x U_s**

Power consumption of the magnetic coils **2.3 W** at 24 V (no auxiliary switch blocks can be mounted)

Diode, varistor or RC element, attachable	40 E	4	--	3RH11 40-1HB40	1 unit	0.260
	31 E	3	1	3RH11 31-1HB40	1 unit	0.260
	22 E	2	2	3RH11 22-1HB40	1 unit	0.260
Built-in diode	40 E	4	--	3RH11 40-1JB40	1 unit	0.260
	31 E	3	1	3RH11 31-1JB40	1 unit	0.260
	22 E	2	2	3RH11 22-1JB40	1 unit	0.260
Built-in varistor	40 E	4	--	3RH11 40-1KB40	1 unit	0.260
	31 E	3	1	3RH11 31-1KB40	1 unit	0.260
	22 E	2	2	3RH11 22-1KB40	1 unit	0.260

Rated control supply voltage $U_s = 24$ V DC, operating range **0.85 to 1.85 x U_s**

Power consumption of the magnetic coils **1.4 W** at 24 V (no auxiliary switch blocks can be mounted)

Diode, varistor or RC element, attachable	40 E	4	--	3RH11 40-1MB40-0KT0	1 unit	0.260
	31 E	3	1	3RH11 31-1MB40-0KT0	1 unit	0.260
	22 E	2	2	3RH11 22-1MB40-0KT0	1 unit	0.260
Built-in diode	40 E	4	--	3RH11 40-1VB40	1 unit	0.260
	31 E	3	1	3RH11 31-1VB40	1 unit	0.260
	22 E	2	2	3RH11 22-1VB40	1 unit	0.260
Built-in varistor	40 E	4	--	3RH11 40-1WB40	1 unit	0.260
	31 E	3	1	3RH11 31-1WB40	1 unit	0.260
	22 E	2	2	3RH11 22-1WB40	1 unit	0.260

1) See page 3/56 for alternative AC and DC coil voltages

3RT Coupling Relays

3RT10 coupling relays (interface), for switching motors, 3 pole, 5... 20HP/600V

Overview

DC operation

IEC 60947, EN 60947

The 3RT10 coupling relays for switching motors are tailored to the special requirements of working with electronic controls.

Coupling relays have a low power consumption, an extended coil operating range and an integrated surge suppressor for damping opening surges (exception: 3RT10 1.-1HB4).

3RT10 1. coupling relays size S00 cannot be fitted with any auxiliary switch blocks, 3RT10 2. size S0 can be fitted with two 1-pole auxiliary switch blocks.

Selection and ordering data

DC operation



3RT10 2.-1KB40



3RT10 1.-1HB4.

	Ratings Utilization category		Auxiliary contacts		Screw connection		Weight approx.
	Maximum inductive current	Maximum ¹⁾ horsepower ratings at 600 V	Ident. no.	Design	Order No.	List Price \$	
	Amps	HP		NO NC			kg

For screwing and snapping onto 35 mm standard mounting rail

• Size S00

Terminal designations according to EN 50 012

Rated control supply voltage U_s = DC 24 V, coil voltage tolerance **0.7 to 1.25** × U_s

Power consumption of the coils **2.3 W** at 24 V (no auxiliary switch blocks can be mounted)

Diode, varistor or RC element can be mounted	7	5	10 01	1 – 1	3RT10 15-1HB41 3RT10 15-1HB42	0.26
Diode integrated	7	5	10 01	1 – 1	3RT10 15-1J B41 3RT10 15-1J B42	0.26
Varistor integrated	7	5	10 01	1 – 1	3RT10 15-1KB41 3RT10 15-1KB42	0.26
Diode, varistor or RC element can be mounted	9	7.5	10 01	1 – 1	3RT10 16-1HB41 3RT10 16-1HB42	0.26
Diode integrated	9	7.5	10 01	1 – 1	3RT10 16-1J B41 3RT10 16-1J B42	0.26
Varistor integrated	9	7.5	10 01	1 – 1	3RT10 16-1KB41 3RT10 16-1KB42	0.26
Diode, varistor or RC element can be mounted	12	10	10 01	1 – 1	3RT10 17-1HB41 3RT10 17-1HB42	0.26
Diode integrated	12	10	10 01	1 – 1	3RT10 17-1J B41 3RT10 17-1J B42	0.26
Varistor integrated	12	10	10 01	1 – 1	3RT10 17-1KB41 3RT10 17-1KB42	0.26

Surge suppressor	Ratings Utilization category		Auxiliary contacts		Screw connection		Weight approx.
	Maximum inductive current	Maximum horsepower ratings 600V	Ident. no.	Design	Order No.	List Price \$	
	Amps	HP		NO NC			kg

For screwing and snapping onto 35 mm standard mounting rail

• Size S0

Rated control supply voltage U_s = DC 24 V, coil voltage tolerance **0.7 to 1.25** × U_s

Power consumption of the coils **4.2 W** at 24 V (two single-pole auxiliary switch blocks can be mounted)

Varistor mounted	12	10	–	–	–	3RT10 24-1KB40	0.6
	17	15	–	–	–	3RT10 25-1KB40	0.6
	25	20	–	–	–	3RT10 26-1KB40	0.6

3TX7, 3RS18 Coupling Relays

3TX7 Coupling Relays, Narrow Design

Relay couplers

Selection and ordering data

AC and DC operation · for snap-on mounting onto 35 mm standard mounting rail

Rated control supply voltage U_s	Contacts Version	Width	DT	Screw terminals	PS*	Weight per PU approx.
AC 50/60 Hz	 			Order No.		
V	NO CO	mm				kg

Relay coupling links in terminal block design

 3TX7 002-1....  3TX7 002-2....	Output coupling links						
	24 AC/DC	1 ¹⁾	--	11.5	3TX7 002-1AB00	1 unit	0.035
					3TX7 002-1AB02	1 unit	0.035
	24 AC/DC	--	1	17.5	3TX7 002-1BB00	1 unit	0.045
	230 AC/DC				3TX7 002-1BF00	1 unit	0.045
	24 AC/DC	2 ²⁾	--	22.5	3TX7 002-1CB00	1 unit	0.061
			2 ^{1) 2)}		3TX7 002-1FB02	1 unit	0.061
	Input coupling links						
	24 AC/DC	1	--	11.5	3TX7 002-2AB00	1 unit	0.035
	110 AC/DC				3TX7 002-2AE00	1 unit	0.035
	230 AC/DC ²⁾	1	--	11.5	3TX7 002-2AF00	1 unit	0.035
					3TX7 002-2AF05	1 unit	0.035
	230 AC/DC	--	1 ^{1) 3)}	17.5	3TX7 002-2BF02	1 unit	0.045

Rated control supply voltage U_s	Contacts Version	Manual-O-automatic switch for testing purposes	Width	DT	Screw terminals	PS*	Weight per PU approx.
AC 50/60 Hz	 				Order No.		
V	NO CO		mm				kg

Relay couplers in double-decker design



3TX7 004-1LB0.

Output coupling links								
24 AC/DC	--	1	Without	6.2	3TX7 004-1LB00	1 unit	0.035	
230 AC/DC	--	1	Without	6.2	3TX7 004-1LF00	1 unit	0.035	
	--	1	Without	12.5 ⁴⁾	3TX7 004-1BF05	1 unit	0.051	
24 AC/DC	--	1 ¹⁾	Without	6.2	3TX7 004-1LB02	1 unit	0.035	
24 AC/DC	1	--	Without	6.2	3TX7 004-1MB00	1 unit	0.035	
230 AC/DC	1	--	Without	6.2	3TX7 004-1MF00	1 unit	0.035	
24 AC/DC	--	1	With	12.5	3TX7 004-1BB10	1 unit	0.052	
Input coupling links								
24 AC/DC	1 ¹⁾	--	Without	6.2	3TX7 004-2MB02	1 unit	0.035	
110 AC/DC	1 ¹⁾	--	Without	6.2	3TX7 004-2ME02	1 unit	0.035	
230 AC/DC	1 ¹⁾	--	Without	6.2	3TX7 004-2MF02	1 unit	0.035	

Note: For replacement products see 3RS18 Coupling Links with Industrial Housing or other 3TX70 products.

For coil voltages which are not listed, see SITOP power DC Power Supplies, e.g. 6EP1 331-2BA10 and 6EP1 731-2BA00, in "Power Supplies".

- 1) Hard gold-plated contacts.
- 2) The same potential must be applied to the output contacts of the 2 NO/2 CO relays.
- 3) Observe the maximum permissible cable length.
- 4) For long cables.

Accessories

For coupling link	Version	DT	Order No.	PS*	Weight per PU approx.
Type					kg

Connecting combs

	3TX7 004	24 terminals, blue Width 6.2 mm	3TX7 004-8AA00	1 unit	0.017
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Connecting cables

3TX7 002, 3TX7 003, 3TX7 004, 3TX7 005	24 terminals, with supply, blue	3TX7 004-8BA00	1 unit	0.040
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3TX7, 3RS18 Coupling Relays

3TX7 Coupling Relays, Narrow Design

Relay couplers with plug-in connection

Semiconductor couplers

Selection and ordering data

Rated control supply voltage U_s	Contacts Version	DT	Screw terminals	DT	Spring-loaded terminals	PS*	Weight per PU approx.
V	NO CO		Order No.		Order No.		kg
Plug-in base couplers, 6.2 mm, complete with relay							
24 DC	1	--	3TX7 014-1AM00		3TX7 015-1AM00	5 units	0.045
24 DC	--	1	3TX7 014-1BM00		3TX7 015-1BM00	5 units	0.045
24 AC/DC	--	1	3TX7 014-1BB00		3TX7 015-1BB00	5 units	0.045
115 AC/DC	--	1	3TX7 014-1BE00		3TX7 015-1BE00	5 units	0.045
230 AC/DC	--	1	3TX7 014-1BF00		3TX7 015-1BF00	5 units	0.045
Plug-in base couplers, 6.2 mm, complete with relay and hard gold-plating¹⁾							
24 DC	--	1	3TX7 014-1BM02		3TX7 015-1BM02	5 units	0.045
24 AC/DC	--	1	3TX7 014-1BB02		3TX7 015-1BB02	5 units	0.040
115 AC/DC	--	1	3TX7 014-1BE02		3TX7 015-1BE02	5 units	0.045
230 AC/DC	--	1	3TX7 014-1BF02		3TX7 015-1BF02	5 units	0.045

¹⁾ Hard gold-plated contacts are especially suitable for steady-state inputs of programmable logic controllers.

AC and DC operation · for snap-on mounting onto 35 mm standard mounting rail

	Rated control supply voltage U_s	Contacts/ Version	Switching current	Width	DT	Screw terminals	DT	Spring-loaded terminals	PS*	Weight per PU approx.
	AC 50/60 Hz					Order No.		Order No.		
	V		A	mm						kg
	Semiconductor couplers									
	Output coupling links									
	24 DC	1 transistor	1.8 1.5	12.5 11.5		3TX7 002-3AB00 3TX7 002-3AB01		-- --	1 unit 1 unit	0.033 0.035
	Input coupling links									
	24 AC/DC 110 ... 240 AC	1 transistor	0.1	12.5		3TX7 002-4AB00 3TX7 002-4AG00		-- --	1 unit 1 unit	0.031 0.035
3TX7 002										

	Rated control supply voltage U_s	Switching voltage	Switch- ing current	Manual-0- automatic switch for testing purposes	Width	DT	Screw terminals	DT	Spring-loaded terminals	PS*	Weight per PU approx.
	AC 50/60 Hz						Order No.		Order No.		
	V	V	A		mm						kg
	Semiconductor couplers										
	Output coupling links										
	24 DC	48 V DC 30 V DC	0.5 1.5	Without	6.2		3TX7 004-3AB04 3TX7 004-3PB54		3TX7 005-3AB04 3TX7 005-3PB54	1 unit 1 unit	0.034 0.029
	24 DC 110 ... 230 AC/DC	30 V DC	3	Without	6.2		3TX7 004-3PB74 3TX7 004-3PG74		3TX7 005-3PB74 3TX7 005-3PG74	1 unit 1 unit	0.032 0.033
	24 DC	30 V DC	5	Without With	12.5		3TX7 004-3AC04 3TX7 004-3AC14		3TX7 005-3AC04 3TX7 005-3AC14	1 unit 1 unit	0.052 0.061
	24 DC	24 ... 250 V AC	2	Without	12.5		3TX7 004-3AC03		3TX7 005-3AC03	1 unit	0.060
	Input coupling links										
	110 ... 230 AC/DC	30 V DC	0.1	Without	6.2		3TX7 004-4PG24		3TX7 005-4PG24	1 unit	0.034

Note: For replacement products see 3RS18 Coupling Links with Industrial Housing or other 3TX70 products.

3TX7, 3RS18 Coupling Relays

3RS18 Coupling Relays with Industrial Housing

Relay couplers

Overview

The new 3RS18 coupling relays are couplers in the well-proven standard 22.5 mm timing relay enclosure. The series comprises relays with 1, 2 and 3 changeover contacts with screw and spring-type connections for combined voltages and wide voltage ranges.

The relay coils are protected internally with noise suppression diodes.

Benefits

- Wide voltage range: one product for all voltages
- The industrial housing supports the same connection methods as the timing relay including spring-type connections, 2 wires can be clamped
- Versions with solid-state compatible outputs (hard gold-plating)
- Up to 3 changeover contacts with only 22.5 mm width

Selection and ordering data

Rated control supply voltage U_s	Contacts Version	DT	Screw terminals	DT	Spring-loaded terminals	PS*	Weight per PU approx.
AC 50/60 Hz			Order No.		Order No.		
V	W						kg
Coupling relays in industrial enclosure, 22.5 mm							
Wide voltage range							
24 ... 240	2		3RS18 00-1BW00		3RS18 00-2BW00	1 unit	0.143
	3		3RS18 00-1HW00		3RS18 00-2HW00	1 unit	0.168
	3 ¹⁾		3RS18 00-1HW01		3RS18 00-2HW01	1 unit	0.168
Combination voltage							
24 AC/DC and 110 ... 120 AC	1		3RS18 00-1AQ00		3RS18 00-2AQ00	1 unit	0.116
	2		3RS18 00-1BQ00		3RS18 00-2BQ00	1 unit	0.142
	3		3RS18 00-1HQ00		3RS18 00-2HQ00	1 unit	0.173
	3 ¹⁾		3RS18 00-1HQ01		3RS18 00-2HQ01	1 unit	0.173
24 AC/DC and 220 ... 240 AC	1		3RS18 00-1AP00		3RS18 00-2AP00	1 unit	0.112
	2		3RS18 00-1BP00		3RS18 00-2BP00	1 unit	0.142
	3		3RS18 00-1HP00		3RS18 00-2HP00	1 unit	0.166
	3 ¹⁾		3RS18 00-1HP01		3RS18 00-2HP01	1 unit	0.170

¹⁾ Hard gold-plated contacts.



LZS, LZX Plug-In Relays

Relay Couplers

Overview

Overview

The LZX complete units and accessory parts previously available are no longer listed in this catalog. They can still be supplied however in limited quantities. In their place you will now find the new LZS types. LZS complete units are fully compatible with their predecessors, the LZX complete units. The LZX plug-in relays have not been changed and are used accordingly in both the LZS and the LZX series.

Due to differences in geometry the LED modules, plug-in bases, retaining brackets and labels can be combined and/or used in only the respective series, LZS or LZX.

List for converting from LZX to LZS relay couplers:

Complete units	
Previous Order No.	New Order No.
LZX:PT3A5L24	LZS:PT3A5L24
LZX:PT3A5R24	LZS:PT3A5R24
LZX:PT3A5S15	LZS:PT3A5S15
LZX:PT3A5T30	LZS:PT3A5T30
LZX:PT5A5L24	LZS:PT5A5L24
LZX:PT5A5R24	LZS:PT5A5R24
LZX:PT5A5S15	LZS:PT5A5S15
LZX:PT5A5T30	LZS:PT5A5T30
LZX:PT5B5L24	LZS:PT5B5L24
LZX:PT5B5R24	LZS:PT5B5R24
LZX:PT5B5S15	LZS:PT5B5S15
LZX:PT5B5T30	LZS:PT5B5T30
LZX:RT3A4L24	LZS:RT3A4L24
LZX:RT3A4R24	LZS:RT3A4R24
LZX:RT3A4S15	LZS:RT3A4S15
LZX:RT3A4T30	LZS:RT3A4T30
LZX:RT3B4L24	LZS:RT3B4L24
LZX:RT3B4R24	LZS:RT3B4R24
LZX:RT3B4S15	LZS:RT3B4S15
LZX:RT3B4T30	LZS:RT3B4T30
LZX:RT4A4L24	LZS:RT4A4L24
LZX:RT4A4R24	LZS:RT4A4R24
LZX:RT4A4S15	LZS:RT4A4S15
LZX:RT4A4T30	LZS:RT4A4T30
LZX:RT4B4L24	LZS:RT4B4L24
LZX:RT4B4R24	LZS:RT4B4R24
LZX:RT4B4S15	LZS:RT4B4S15
LZX:RT4B4T30	LZS:RT4B4T30

Prices for the new LZS series are lower than for the previous LZX series. In addition the LZS series offers not only service-proven screw connections but also versions with push-in terminals.

The following conversion list will help you to change over from the LZX types previously sold to the new LZS types. Please contact your regional adviser if you have any questions.

List for converting from LZX to LZS accessories for individual modules:

Accessories for individual modules	
Previous Order No.	New Order No.
LZX:MT28800	LZS:MT28800
LZX:MT78750	LZS:MT78750
LZX:PT16016	LZS:PT17024
LZX:PT16040	LZS:PT17040
LZX:PT78702	LZS:PT78720
LZX:PT78703	LZS:PT78730
LZX:PT78704	LZS:PT78740
LZX:PT78802	LZS:PT78722
LZX:PT78804	LZS:PT78742
LZX:RPMG0024	LZS:PTMG0024
LZX:RPMG0524	LZS:PTMG0524
LZX:RPMG0730	LZS:PTMG0730
LZX:RPML0024	LZS:PTML0024
LZX:RPML0524	LZS:PTML0524
LZX:RPML0730	LZS:PTML0730
LZX:RPMT00A0	LZS:PTMT00A0
LZX:RPMU0548	LZS:PTMU0524
LZX:RPMU0730	LZS:PTMU0730
LZX:RT16016	LZS:RT17016
LZX:RT78625	LZS:RT78725
LZX:RT78626	LZS:RT78726
LZX:RY16040	LZS:RT17040

LZS, LZX Plug-In Relays Relay Couplers

Complete units, 11 and 14 pole

Selection and ordering data

Version	Rated control supply voltage U_s at AC 50/60 Hz	Contacts, number of CO contacts	Width	DT	Screw terminals	PS*	PG	Weight per PU approx.
V			mm		Order No.			kg

Complete units, 11- and 14-pole, PT series



LZS:PT3A5L24

Complete units with plug-in base

For snap-on mounting onto 35 mm standard mounting rail comprising:

- Plug-in relay
- Standard plug-in base with screw terminals
- LED module (version 24 V DC: LED module with freewheel diode)
- Fixing/ejection bracket
- Label

3 CO	24 DC 24 AC 115 AC 230 AC	3	28	LZS:PT3A5L24 LZS:PT3A5R24 LZS:PT3A5S15 LZS:PT3A5T30	5 units 5 units 5 units 5 units	101 101 101 101	0.085 0.085 0.085 0.085
4 CO	24 DC 24 AC 115 AC 230 AC	4	28	LZS:PT5A5L24 LZS:PT5A5R24 LZS:PT5A5S15 LZS:PT5A5T30	5 units 5 units 5 units 5 units	101 101 101 101	0.090 0.090 0.090 0.090

Complete units with plug-in base (logical isolation)¹⁾

For snap-on mounting onto 35 mm standard mounting rail comprising:

- Plug-in relay
- Plug-in base with logical isolation and screw terminals
- LED module (version 24 V DC: LED module with freewheel diode)
- Fixing/ejection bracket
- Label

4 CO	24 DC 24 AC 115 AC 230 AC	4	28	LZS:PT5B5L24 LZS:PT5B5R24 LZS:PT5B5S15 LZS:PT5B5T30	5 units 5 units 5 units 5 units	101 101 101 101	0.095 0.095 0.095 0.095
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Push-in terminals

Order No.

Complete units, 11- and 14-pole, PT series



LZS:PT5D5L24

Complete units with plug-in base (logical isolation)¹⁾

For snap-on mounting onto 35 mm standard mounting rail comprising:

- Plug-in relay
- Plug-in base with logical isolation and push-in terminals
- LED module (version 24 V DC: LED module with freewheel diode)
- Fixing/ejection bracket
- Label

4 CO	24 DC 24 AC 115 AC 230 AC	4	28	LZS:PT5D5L24 LZS:PT5D5R24 LZS:PT5D5S15 LZS:PT5D5T30	5 units 5 units 5 units 5 units	101 101 101 101	0.098 0.098 0.098 0.098
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¹⁾ Note:

Logical isolation: The terminals for the contacts and the terminals for the coil are arranged on separate levels, e.g. above for contacts and below for the coil. Logical isolation is not necessarily safe isolation (see the technical specifications of the relay types).

Safe isolation: Safe isolation prevents voltage of one circuit affecting another circuit with sufficient protection (EN 61140).

LZS, LZX Plug-In Relays

Relay Couplers

Complete units, 8 pole

Version	Rated control supply voltage U_s at AC 50/60 Hz	Contacts, number of CO contacts	Width	DT	Order No.	PS*	PG	Weight per PU approx.
	V		mm					kg
Complete units, 8-pole, 5 mm pinning, RT series								
Complete units with standard plug-in base					Screw terminals			
For snap-on mounting onto 35 mm standard mounting rail comprising: • Plug-in relay • Standard plug-in base with screw terminals • LED module (version 24 V DC: LED module with freewheel diode) • Fixing/ejection bracket • Label								
1 CO	24 DC 24 AC 115 AC 230 AC	1	15.5		LZS:RT3A4L24 LZS:RT3A4R24 LZS:RT3A4S15 LZS:RT3A4T30	5 units 5 units 5 units 5 units	101 101 101 101	0.052 0.052 0.052 0.052
2 CO	24 DC 24 AC 115 AC 230 AC	2	15.5		LZS:RT4A4L24 LZS:RT4A4R24 LZS:RT4A4S15 LZS:RT4A4T30	5 units 5 units 5 units 5 units	101 101 101 101	0.052 0.052 0.052 0.052
Complete units with plug-in base with logical isolation and screw terminals								
For snap-on mounting onto 35 mm standard mounting rail comprising: • Plug-in relay • Plug-in base with logical isolation and screw terminals • LED module (version 24 V DC: LED module with freewheel diode) • Fixing/ejection bracket • Label								
1 CO	24 DC 24 AC 115 AC 230 AC	1	15.5		LZS:RT3B4L24 LZS:RT3B4R24 LZS:RT3B4S15 LZS:RT3B4T30	5 units 5 units 5 units 5 units	101 101 101 101	0.055 0.055 0.055 0.055
2 CO	24 DC 24 AC 115 AC 230 AC	2	15.5		LZS:RT4B4L24 LZS:RT4B4R24 LZS:RT4B4S15 LZS:RT4B4T30	5 units 5 units 5 units 5 units	101 101 101 101	0.055 0.055 0.055 0.055
					Push-in terminals			
					Order No.			
Complete units, 8-pole, 5 mm pinning, RT series								
Complete units with plug-in base with logical isolation and push-in terminals								
For snap-on mounting onto 35 mm standard mounting rail comprising: • Plug-in relay • Plug-in base with logical isolation and push-in terminals • LED module (version 24 V DC: LED module with freewheel diode) • Fixing/ejection bracket • Label								
1 CO	24 DC 24 AC 115 AC 230 AC	1	15.5		LZS:RT3D4L24 LZS:RT3D4R24 LZS:RT3D4S15 LZS:RT3D4T30	5 units 5 units 5 units 5 units	101 101 101 101	0.065 0.065 0.065 0.065
2 CO	24 DC 24 AC 115 AC 230 AC	2	15.5		LZS:RT4D4L24 LZS:RT4D4R24 LZS:RT4D4S15 LZS:RT4D4T30	5 units 5 units 5 units 5 units	101 101 101 101	0.065 0.065 0.065 0.065



LZS:RT4B4T30



LZS:RT3D4L24



LZS:RT4B4T30



LZS:RT3D4L24

Note:

Logical isolation: The terminals for the contacts and the terminals for the coil are arranged on separate levels, e.g. above for contacts and below for the coil. Logical isolation is not necessarily safe isolation (see the technical specifications of the relay types).

Safe isolation: Safe isolation prevents voltage of one circuit affecting another circuit with sufficient protection (EN 61140).

LZS, LZX Plug-In Relays Relay Couplers

Individual modules for customer assembly

Version	Rated control supply voltage U_s at AC 50/60 Hz	Contacts, number of CO contacts	Width	DT	Order No.	PS*	PG	Weight per PU approx.
	V		mm					kg

Individual modules for customer assembly, PT series

Industrial relays, 8-, 11-, and 14-pole



LZX:PT370024

Mini industrial relays

- With test bracket and mechanical switch position indicator, without LED¹⁾

24 DC	2	22.5	▶	LZX:PT270024	1 unit	101	0.030
	3		▶	LZX:PT370024	1 unit	101	0.031
	4		▶	LZX:PT570024	1 unit	101	0.031
24 AC	2	22.5		LZX:PT270524	1 unit	101	0.030
	3			LZX:PT370524	1 unit	101	0.031
	4		▶	LZX:PT570524	1 unit	101	0.031
115 AC	2	22.5		LZX:PT270615	1 unit	101	0.028
	3			LZX:PT370615	1 unit	101	0.030
	4		▶	LZX:PT570615	1 unit	101	0.030
230 AC	2	22.5		LZX:PT270730	1 unit	101	0.029
	3		▶	LZX:PT370730	1 unit	101	0.030
	4		▶	LZX:PT570730	1 unit	101	0.030

- With hard gold-plating

24 DC	4	22.5	▶	LZX:PT580024	1 unit	101	0.031
230 AC			▶	LZX:PT580730	1 unit	101	0.031

- Without test bracket

24 DC	4	22.5		LZX:PT520024	1 unit	101	0.031
230 AC				LZX:PT520730	1 unit	101	0.031

Plug-in bases for PT relays



LZS:PT78720



LZS:PT78740



LZS:PT78722



LZS:PT7874P

Standard plug-in bases with screw terminals

For mounting onto standard mounting rail

--	2	28		LZS:PT78720	1 unit	101	0.045
	3			LZS:PT78730	1 unit	101	0.048
	4			LZS:PT78740	1 unit	101	0.050

Plug-in bases with logical isolation²⁾ and screw terminals

For mounting onto standard mounting rail

--	2	28		LZS:PT78722	1 unit	101	0.048
	4			LZS:PT78742	1 unit	101	0.050

Plug-in bases with logical isolation²⁾ with push-in terminals

For mounting onto standard mounting rail

--	2	28		LZS:PT7872P	1 unit	101	0.045
	4			LZS:PT7874P	1 unit	101	0.050

Screw terminals

Push-in terminals

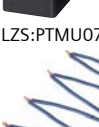
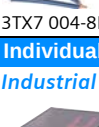
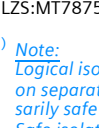
¹⁾ The test bracket is designed to be non-latching. If the test bracket is pressed further until 90° has been reached, two small lugs break off and the test bracket can be latched in position.

²⁾ **Note:**
*Logical isolation: The terminals for the contacts and the terminals for the coil are arranged on separate levels, e.g. above for contacts and below for coil. Logical isolation is not necessarily safe isolation (see the technical specifications of the relay types).
Safe isolation: Safe isolation prevents voltage of one circuit affecting another circuit with sufficient protection (EN 61140).*

LZS, LZX Plug-In Relays

Relay Couplers

Individual modules for customer assembly

Version	Rated control supply voltage U_s at AC 50/60 Hz	Contacts, number of CO contacts	Width	DT	Order No.	PS*	PG	Weight per PU approx.
	V		mm					kg
Individual modules for customer assembly, PT series								
<i>More individual modules</i>								
 LZS:PTML0024	LED modules							
	• Red							
	With freewheel diode	24 DC	--	12.5	LZS:PTML0024	1 unit	101	0.004
 LZS:PTMG0024	Without freewheel diode	24 AC/DC			LZS:PTML0524	1 unit	101	0.004
		110 ... 230 AC/DC			LZS:PTML0730	1 unit	101	0.004
	• Green							
 LZS:PTMG0524	With freewheel diode	24 DC	--	12.5	LZS:PTMG0024	1 unit	101	0.004
	Without freewheel diode	24 AC			LZS:PTMG0524	1 unit	101	0.004
		110 ... 230 AC/DC			LZS:PTMG0730	1 unit	101	0.004
 LZS:PT17021	Fixing/ejection brackets for PT base							
	With logical isolation ¹⁾ , screw terminals and push-in terminals		--	26	LZS:PT17021	10 units	101	0.300
	Fixing/ejection brackets for standard plug-in base							
 LZS:PT17024	Without logical isolation, screw terminals		--	26	LZS:PT17024	10 units	101	0.300
	Labels							
			--	26	LZS:PT17040	10 units	101	0.200
 LZS:PTMU0524	RC elements							
		24 ... 48 AC	--	26	LZS:PTMU0524	1 unit	101	0.004
		110 ... 230 AC			LZS:PTMU0730	1 unit	101	0.004
 LZS:PTMT00A0	Freewheel diodes with connection to A1							
		6 ... 230 DC	--	26	LZS:PTMT00A0	1 unit	101	0.004
	Connecting cables							
 3TX7 004-8BA00	24-pole, current carrying capacity 12 A, with supply, blue				3TX7 004-8BA00	1 unit	101	0.040
	Individual modules for customer assembly, MT series							
	<i>Industrial relays, 11-pole</i>							
 LZX:MT326024	Industrial relays with test bracket							
	Without LED	24 DC	3	35.5	LZX:MT321024	1 unit	101	0.088
	With LED				LZX:MT323024	1 unit	101	0.088
 LZX:MT326115	Without LED	24 AC	3	35.5	LZX:MT326024	1 unit	101	0.089
	With LED				LZX:MT328024	1 unit	101	0.089
	Without LED	115 AC	3	35.5	LZX:MT326115	1 unit	101	0.087
 LZX:MT328115	With LED				LZX:MT328115	1 unit	101	0.088
	Without LED	230 AC	3	35.5	LZX:MT326230	1 unit	101	0.089
	With LED				LZX:MT328230	1 unit	101	0.089
 LZS:MT78750	Plug-in bases for mounting onto standard mounting rail							
	For mounting onto standard mounting rail				Screw terminals			
	With screw terminals		--	38	LZS:MT78750	1 unit	101	0.050
 LZS:MT28800	Retaining brackets							
			--	38	LZS:MT28800	1 unit	101	0.003

¹⁾ Note:
 Logical isolation: The terminals for the contacts and the terminals for the coil are arranged on separate levels, e.g. above for contacts and below for coil. Logical isolation is not necessarily safe isolation (see the technical specifications of the relay types).
 Safe isolation: Safe isolation prevents voltage of one circuit affecting another circuit with sufficient protection (EN 61140).

LZS, LZX Plug-In Relays Relay Couplers

Individual modules for customer assembly

Version	Rated control supply voltage U_s at AC 50/60 Hz	Contacts, number of CO contacts	Width	DT	Order No.	PS*	PG	Weight per PU approx.
	V		mm					kg

Individual modules for customer assembly, RT series

Print relays, 8-pole, 5 mm pinning



LZX:RT314024



LZX:RT78725



LZS:RT78726



LZS:RT7872P



LZS:PTML0024



LZS:RT17016



LZS:RT17040



LZS:PTMT0730



3TX7 004-8BA00

Print relays

- With hard gold-plating

Version with 1 CO contact

24 DC
230 AC

1

12.7

LZX:RT315024
LZX:RT315730

1 unit
1 unit

101
101

0.016
0.015

Print relays

Version with 1 CO contact

24 DC
24 AC
115 AC
230 AC

1

12.7

LZX:RT314024
LZX:RT314524
LZX:RT314615
LZX:RT314730

1 unit
1 unit
1 unit
1 unit

101
101
101
101

0.016
0.007
0.013
0.007

Version with 2 CO contacts

12 DC
24 DC
24 AC
115 AC
230 AC

2

12.7

LZX:RT424012
LZX:RT424024
LZX:RT424524
LZX:RT424615
LZX:RT424730

1 unit
1 unit
1 unit
1 unit
1 unit

101
101
101
101
101

0.015
0.015
0.014
0.012
0.010

Standard plug-in bases with screw terminals

For mounting onto standard mounting rail

--

15.5

Screw terminals

LZS:RT78725

1 unit

101

0.035

Plug-in bases with logical isolation and screw terminals

For mounting onto standard mounting rail

--

15.5

LZS:RT78726

1 unit

101

0.037

Plug-in bases with logical isolation and push-in terminals

For mounting onto standard mounting rail

--

15.5

Push-in terminals

LZS:RT7872P

1 unit

101

0.035

LED modules

- Red

With freewheel diode

24 DC

--

15.5

LZS:PTML0024

1 unit

101

0.004

Without freewheel diode

24 AC/DC
110 ... 230 AC/DC

--

--

LZS:PTML0524
LZS:PTML0730

1 unit
1 unit

101
101

0.004
0.004

- Green

With freewheel diode

24 DC

--

15.5

LZS:PTMG0024

1 unit

101

0.004

Without freewheel diode

24 AC/DC
110 ... 230 AC/DC

--

--

LZS:PTMG0524
LZS:PTMG0730

1 unit
1 unit

101
101

0.004
0.004

Fixing/ejection brackets

For RT bases

--

--

15.5

LZS:RT17016

10 units

101

0.300

Labels

--

--

15.5

LZS:RT17040

10 units

101

0.200

RC elements

24 ... 48 AC
110 ... 230 AC

--

15.5

LZS:PTMU0524
LZS:PTMU0730

1 unit
1 unit

101
101

0.004
0.004

Freewheel diodes with connection to A1

6 ... 230 DC

--

15.5

LZS:PTMT00A0

1 unit

101

0.004

Connecting cables

24-pole,
current carrying capacity 12 A,
with supply, blue

3TX7 004-8BA00

1 unit

101

0.040

Note: For coil voltages which are not listed, see SITOP power DC Power Supplies, e.g. 6EP1 331-2BA10 and 6EP1 731-2BA00, in "Power Supplies".

LZS, LZX Plug-In Relays

Relay Couplers

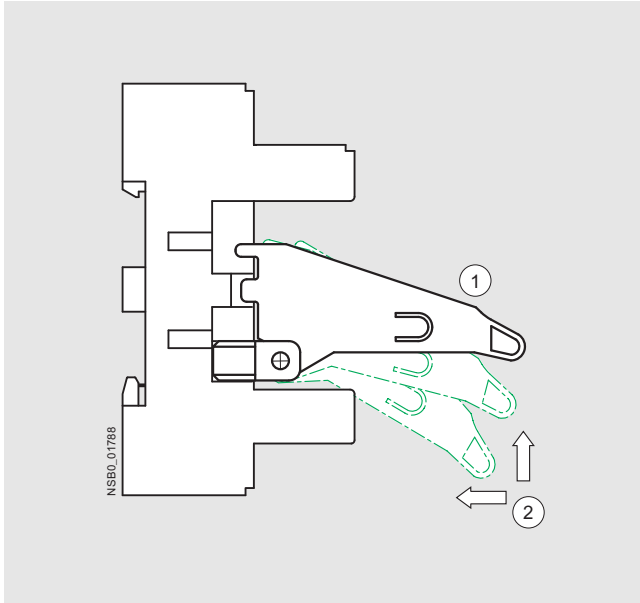
Configuration Notes

More information

Notes on configuration

PT series

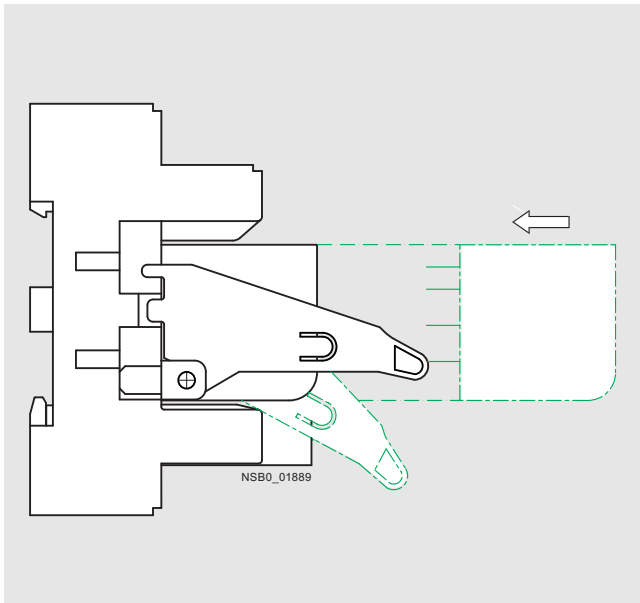
Mounting the LZS:PT17024 fixing/ejection bracket on the LZS:PT787.0 standard plug-in base with screw terminals:



Legend:

- 1) Locking position
- 2) Mounting direction

Plug-in relay mounting

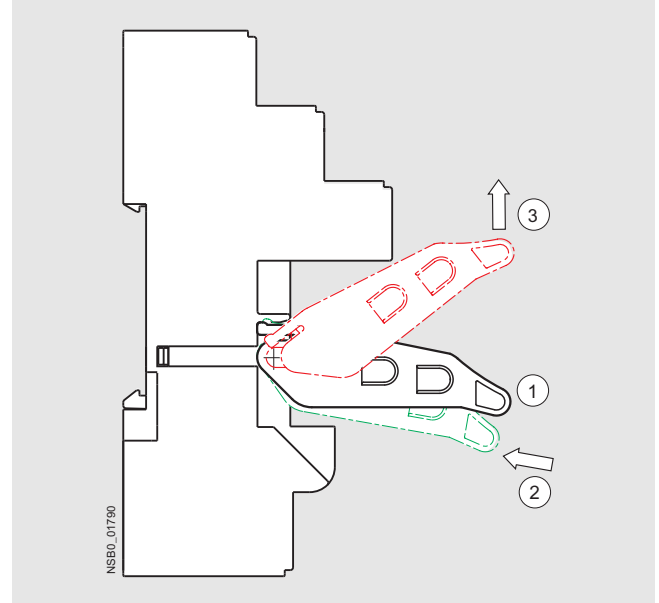


Caution:

The LZS:PT17021 and LZS:PT17024 ejection brackets of the plug-in relays are not status displays!

RT series

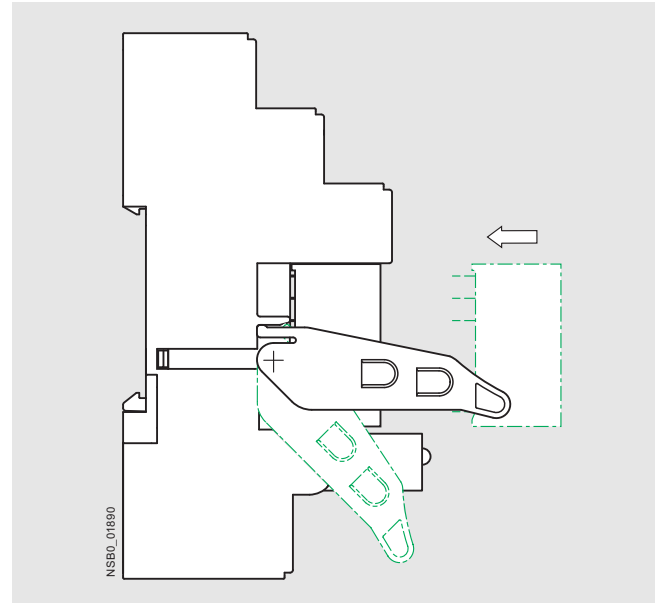
Mounting the LZS:RT17016 fixing/ejection bracket on the LZS:RT7872 plug-in base



Legend:

- 1) Locking position
- 2) Mounting direction
- 3) Demounting direction

Plug-in relay mounting



Caution:

The LZS:RT17016 ejection bracket of the plug-in relays are not status displays!

3TG10 Power Relays/Miniature Contactors

Relay Couplers

4 pole, 5 HP

1

2

3

4

5

6

7

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15

16

17

Overview

The 3TG10 power relays/miniature contactors with 4 main contacts are available with 6.3-0.8 mm screw terminals or flat connectors. The versions with screw terminals are climate-proof and finger-safe according to IEC 61140.

The 3TG10 power relays/miniature contactors are small. Their width is 36 mm.

The 3TG10 power relays/miniature contactors have an integrated protective circuit against opening surges.

Application

Because they are hum-free they are suitable for use in household appliances and distribution boards in office and residential areas. They can also be used for applications where there is little space such as air conditioners, heating systems, pumps, and fans, i.e. for simple electrical controls.

Selection and ordering data

Ratings Utilization category			Main contacts	Rated control supply voltage U_s	Order No.	List Price \$	Weight approx.	Pack
AC-1 maximum resistive load	Horsepower ratings of three-phase loads at 60 Hz 600 V	AC-3 maximum inductive current	Design 				kg	Units
A	HP	A	NO	NC				

With screw connections, 4-pin
for screwing and snapping onto 35 mm standard mounting rail · hum-free

• AC operation

	3TG10 ..-0	20	5	8.4	4	–	110 V, 45–450 Hz	3TG10 10-0AG2	0.15	10
					3	1	110 V, 45–450 Hz	3TG10 01-0AG2	0.15	10

• DC operation

	20	5	8.4	4	–	DC 24 V	3TG10 10-0BB4	0.15	10
				3	1	DC 24 V	3TG10 01-0BB4		

With tab connectors 6.3 x 0.8 mm, 4-pin
for screwing and snapping onto 35 mm standard mounting rail · hum-free

• AC operation

	3TG10 ..-1	16	5	8.4	4	–	110 V, 45–450 Hz	3TG10 10-1AG2	0.14	10
					3	1	110 V, 45–450 Hz	3TG10 01-1AG2	0.14	10

• DC operation

	16	5	8.4	4	–	DC 24 V	3TG10 10-1BB4	0.14	10
				3	1	DC 24 V	3TG10 01-1BB4		

1) The links for paralleling can be reduced by one pole. The rated operational currents are valid for each pole. The links for paralleling are insulated.

Accessories and Spare Parts

For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH

Selection and ordering data



For contactors	Rated operational current NEMA A600/Q600	Auxiliary contacts	DT	Screw terminals	PS*	Weight per PU approx.
Type	Ident. No.	Version NO NC NO NC	Order No.			kg

Auxiliary switch blocks for snapping onto the front according to EN 50012

Size S00

For assembling contactors with 2, 4 or 5 auxiliary contacts

3RT10 1.-1...1,	11 E	--	1	--	--	▶	3RH19 11-1HA01	1 unit	0.060
3RT10 1.-2...1	22 E	1	2	--	--	▶	3RH19 11-1HA12	1 unit	0.060
Ident. No. 10 E	23 E	1	3	--	--	▶	3RH19 11-1HA13	1 unit	0.060
	32 E	2	2	--	--	▶	3RH19 11-1HA22	1 unit	0.060

Sizes S0 ... S12¹⁾

4-pole

3RT1. 2,	31	3	1	--	--	▶	3RH19 21-1HA31	1 unit	0.075
3RT1. 3 ... 3RT1.7,	22	2	2	--	--	▶	3RH19 21-1HA22	1 unit	0.075
3RT11	13	1	3	--	--	▶	3RH19 21-1HA13	1 unit	0.075
	22 ²⁾	2	2	--	--	▶	3RH19 21-1XA22-0MA0	1 unit	0.075

Auxiliary switch blocks for snapping onto the front according to EN 50005

Size S00

2- or 4-pole auxiliary switch blocks for assembling contactors with 3 or 5 auxiliary contacts

3RT1. 1,	20	2	--	--	-	▶	3RH19 11-1FA20	1 unit	0.050
3RH11,	11	1	1	--	-	▶	3RH19 11-1FA11	1 unit	0.050
3RH14	02	--	2	--	-	▶	3RH19 11-1FA02	1 unit	0.050
	11 U	--	--	1	1	▶	3RH19 11-1FB11	1 unit	0.050
	40	4	--	--	--	▶	3RH19 11-1FA40	1 unit	0.060
	31	3	1	--	--	▶	3RH19 11-1FA31	1 unit	0.060
	22	2	2	--	--	▶	3RH19 11-1FA22	1 unit	0.060
	22 U	--	--	2	2	▶	3RH19 11-1FC22	1 unit	0.060
	11, 11 U	1	1	1	1	▶	3RH19 11-1FB22	1 unit	0.060

1- and 2-pole auxiliary switch blocks. Cable entry from one side

• Cable entry from above

3RT1. 1,	--	1	--	--	--	▶	3RH19 11-1AA10	1 unit	0.015
3RH11,	--	--	1	--	--	▶	3RH19 11-1AA01	1 unit	0.015
3RH14	--	1	1	--	--	▶	3RH19 11-1LA11	1 unit	0.045
	--	2	--	--	--	▶	3RH19 11-1LA20	1 unit	0.045

• Cable entry from below

3RT1. 1,	--	1	--	--	--	▶	3RH19 11-1BA10	1 unit	0.015
3RH11,	--	--	1	--	--	▶	3RH19 11-1BA01	1 unit	0.015
3RH14	--	1	1	--	--	▶	3RH19 11-1MA11	1 unit	0.045
	--	2	--	--	--	▶	3RH19 11-1MA20	1 unit	0.045

¹⁾ Exception: 3RT16.

²⁾ With identification numbers 5, 6, 7, 8.

Accessories and Spare Parts For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH



3RH19 21-1F.



3RH19 21-1C.



3RH19 21-1LA



3RH19 21-1MA.

For contactors	Rated operational current NEMA A600/Q600	Auxiliary contacts	DT	Screw terminals	PS*	Weight per PU approx.
Type		Ident. No. Version NO NC NO NC		Order No.		kg

Auxiliary switch blocks for snapping onto the front according to EN 50005

Sizes S0 ... S12¹⁾

4-pole auxiliary switch blocks							
3RT1. 2,	40	4	--	--	--	▶ 3RH19 21-1FA40	1 unit 0.075
3RT1. 3	31	3	1	--	--	▶ 3RH19 21-1FA31	1 unit 0.075
...	22	2	2	--	--	▶ 3RH19 21-1FA22	1 unit 0.075
3RT1. 7	04	--	4	--	--	▶ 3RH19 21-1FA04	1 unit 0.075
3RT11	22 U	--	--	2	2	▶ 3RH19 21-1FC22	1 unit 0.075
1-pole auxiliary switch blocks to EN 50005 and EN 50012							
3RT1. 2	--	1	--	--	--	▶ 3RH19 21-1CA10	1 unit 0.020
...	--	--	1	--	--	▶ 3RH19 21-1CA01	1 unit 0.020
3RT1. 7	--	--	--	1	--	▶ 3RH19 21-1CD10	1 unit 0.020
3RT11	--	--	--	--	1	▶ 3RH19 21-1CD01	1 unit 0.020
2-pole auxiliary switch blocks with cable entry from one side							
• Cable entry from above							
3RT1. 2,	--	1	1	--	--	▶ 3RH19 21-1LA11	1 unit 0.075
3RT1. 3	--	2	--	--	--	▶ 3RH19 21-1LA20	1 unit 0.075
...	--	--	2	--	--	▶ 3RH19 21-1LA02	1 unit 0.075
• Cable entry from below							
3RT1. 7	--	1	1	--	--	▶ 3RH19 21-1MA11	1 unit 0.075
3RT11	--	2	--	--	--	▶ 3RH19 21-1MA20	1 unit 0.075
	--	--	2	--	--	▶ 3RH19 21-1MA02	1 unit 0.075

¹⁾ Exception: 3RT16.



3RH19 11-1GA..

For contactor relays	Rated operational current NEMA A600/Q600	Contacts	DT	Screw terminals	PS*	Weight per PU approx.
		Ident. No. Version NO NC		Order No.		Unit(s) kg

Snap-on auxiliary switch blocks according to EN 50011

For assembling contactor relays with 8 contacts							
3RH11 40,	80E	4	--		▶ 3RH19 11-1GA40	1 unit	0.060
3RH14 40	71E	3	1		▶ 3RH19 11-1GA31	1 unit	0.060
(Ident. No.	62E	2	2		▶ 3RH19 11-1GA22	1 unit	0.060
40 E)	53E	1	3		▶ 3RH19 11-1GA13	1 unit	0.060
	44E	--	4		▶ 3RH19 11-1GA04	1 unit	0.060

Accessories and Spare Parts

For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH



3RH19 21-1DA11
3RH19 21-1JA11



3RH19 11-1NF..



3RH19 21-1FE22

For contactors	Rated operational current NEMA A600/Q600	Auxiliary contacts	DT	Screw terminals	PS*	Weight per PU approx.
		Version NO NC		Order No.		kg
Type						

Laterally mountable auxiliary switch blocks according to EN 50012

Sizes S0 ... S12

- First laterally mountable auxiliary switch block (right or left), 2-pole

3RT1. 2 ... 3RT1. 7	1	1		3RH19 21-1DA11	1 unit	0.050
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Sizes S3 ... S12

- Second laterally mountable auxiliary switch block (right or left), 2-pole

3RT1. 4 ... 3RT1. 7	1	1		3RH19 21-1JA11	1 unit	0.050
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Laterally mountable auxiliary switch blocks according to EN 50005

Sizes S0 ... S12

- First laterally mountable auxiliary switch block (right or left), 2-pole

3RT1. 2 ...	2	--		3RH19 21-1EA20	1 unit	0.050
3RT1. 7	1	1		3RH19 21-1EA11	1 unit	0.050
	--	2		3RH19 21-1EA02	1 unit	0.050

Sizes S3 ... S12

- Second laterally mountable auxiliary switch block (right or left), 2-pole

3RT1. 4 ...	2	--		3RH19 21-1KA20	1 unit	0.050
3RT1. 7	1	1		3RH19 21-1KA11	1 unit	0.050
	--	2		3RH19 21-1KA02	1 unit	0.050

For contactors	Version	Contacts	DT	Screw terminals	PS*	Weight per PU approx.
	Version NO NO NC NC			Order No.		kg
Type						

Solid-state compatible auxiliary switch blocks for snapping onto the front, according to EN 50005

Size S00

3RT1. 1, 3RH11, 3RH14	No positively-driven operation	1 -- -- 1		3RH19 11-1NF11	1 unit	0.045
		2 -- -- --		3RH19 11-1NF20	1 unit	0.045
		-- -- -- 2		3RH19 11-1NF02	1 unit	0.045

Sizes S0 ... S12

3RT1. 2 ... 3RT1. 7	1 NO + 1 NC, solid-state compatible auxiliary switches; 1 NO + 1 NC standard aux. switches	1 1 1 1		3RH19 21-1FE22	1 unit	0.070
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Solid-state compatible auxiliary switch blocks, laterally mountable, according to EN 50012

Sizes S0 ... S12

- First laterally mountable auxiliary switch block (right or left), 2-pole

3RT1. 2 ... 3RT1. 7	1 NO + 1 NC solid-state compatible auxiliary switches	1 -- -- 1		--		
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Sizes S3 ... S12

- Second laterally mountable auxiliary switch block (right or left), 2-pole

3RT1. 4 ... 3RT1. 7	1 NO + 1 NC solid-state compatible auxiliary switches	1 -- -- 1		--		
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Accessories and Spare Parts

For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH

For contactors	Auxiliary contacts	Rated control supply voltage $U_s^{1)}$	Time setting range t	DT	Order No.	PS*	Weight per PU approx.
Type		V	s				kg

Solid-state time-delay auxiliary switch blocks for snapping onto the front, terminal designations according to DIN 46199, Part 5

Size S00



3RT19 16-2....

ON-delay (varistor integrated)						
3RT1. 1, 3RH11 ²⁾ 3RH14	1 NO + 1 NC	24 AC/DC ³⁾	0.05 ... 1	3RT19 16-2EJ11	1 unit	0.090
			0.5 ... 10	3RT19 16-2EJ21	1 unit	0.090
			5 ... 100	3RT19 16-2EJ31	1 unit	0.090
	100 ... 127 AC ³⁾		0.05 ... 1	3RT19 16-2EC11	1 unit	0.090
			0.5 ... 10	3RT19 16-2EC21	1 unit	0.090
			5 ... 100	3RT19 16-2EC31	1 unit	0.090
	200 ... 240 AC ³⁾		0.05 ... 1	3RT19 16-2ED11	1 unit	0.090
			0.5 ... 10	3RT19 16-2ED21	1 unit	0.090
			5 ... 100	3RT19 16-2ED31	1 unit	0.090
OFF-delay without auxiliary voltage (varistor integrated) ⁴⁾						
3RT1. 1, 3RH11 ²⁾ 3RH14	1 NO + 1 NC	24 AC/DC ³⁾	0.05 ... 1	3RT19 16-2FJ11	1 unit	0.090
			0.5 ... 10	3RT19 16-2FJ21	1 unit	0.090
			5 ... 100	3RT19 16-2FJ31	1 unit	0.090
	100 ... 127 AC/DC ³⁾		0.05 ... 1	3RT19 16-2FK11	1 unit	0.090
			0.5 ... 10	3RT19 16-2FK21	1 unit	0.090
			5 ... 100	3RT19 16-2FK31	1 unit	0.090
	200 ... 240 AC/DC ³⁾		0.05 ... 1	3RT19 16-2FL11	1 unit	0.090
			0.5 ... 10	3RT19 16-2FL21	1 unit	0.090
			5 ... 100	3RT19 16-2FL31	1 unit	0.090
OFF-delay with auxiliary voltage						
3RT10 1 3RH11	1 CO	24 AC/DC	0.5 ... 10	3RT19 16-2LJ21	1 unit	0.090
		100 ... 127 AC	0.5 ... 10	3RT19 16-2LC21	1 unit	0.090
		200 ... 240 AC	0.5 ... 10	3RT19 16-2LD21	1 unit	0.090
Wye-delta function (varistor integrated)						
3RT10 1 ²⁾	1 NO, delayed +	24 AC/DC ³⁾	1.5 ... 30	3RT19 16-2GJ51	1 unit	0.090
	1 NO, instantaneous,	100 ... 127 AC ³⁾	1.5 ... 30	3RT19 16-2GC51	1 unit	0.090
	dead time 50 ms	200 ... 240 AC ³⁾	1.5 ... 30	3RT19 16-2GD51	1 unit	0.090

Sizes S0 ... S12



3RT19 26-2....

With ON-delay								
3RT10, 3RT13, 3RT14, 3RT15	1 NO + 1 NC	24 AC/DC ⁵⁾	0.05 ... 1 0.5 ... 10 5 ... 100	3RT19 26-2EJ11 3RT19 26-2EJ21 3RT19 26-2EJ31	1 unit 1 unit 1 unit	0.090 0.090 0.090		
		100 ... 127 AC ⁵⁾	0.05 ... 1 0.5 ... 10 5 ... 100	3RT19 26-2EC11 3RT19 26-2EC21 3RT19 26-2EC31	1 unit 1 unit 1 unit	0.090 0.090 0.090		
			200 ... 240 AC ⁵⁾	0.05 ... 1 0.5 ... 10 5 ... 100	3RT19 26-2ED11 3RT19 26-2ED21 3RT19 26-2ED31	1 unit 1 unit 1 unit	0.090 0.090 0.090	
	OFF-delay without auxiliary voltage ⁴⁾							
	3RT10, 3RT13, 3RT14, 3RT15	1 NO + 1 NC		24 AC/DC ⁵⁾	0.05 ... 1 0.5 ... 10 5 ... 100	3RT19 26-2FJ11 3RT19 26-2FJ21 3RT19 26-2FJ31	1 unit 1 unit 1 unit	0.090 0.090 0.090
			100 ... 127 AC/DC ⁵⁾	0.05 ... 1 0.5 ... 10 5 ... 100	3RT19 26-2FK11 3RT19 26-2FK21 3RT19 26-2FK31	1 unit 1 unit 1 unit	0.090 0.090 0.090	
				200 ... 240 AC/DC ⁵⁾	0.05 ... 1 0.5 ... 10 5 ... 100	3RT19 26-2FL11 3RT19 26-2FL21 3RT19 26-2FL31	1 unit 1 unit 1 unit	0.090 0.090 0.090
		Wye-delta function						
		3RT10, 3RT13, 3RT14, 3RT15	1 NO, delayed + 1 NO, instantaneous, dead time 50 ms		24 AC/DC ⁵⁾	1.5 ... 30	3RT19 26-2GJ51	1 unit
100 ... 127 AC ⁵⁾				1.5 ... 30	3RT19 26-2GC51	1 unit	0.090	
200 ... 240 AC ⁵⁾				1.5 ... 30	3RT19 26-2GD51	1 unit	0.090	

¹⁾ The AC voltages are valid for 50 and 60 Hz.

²⁾ Cannot be fitted onto coupling relays.

³⁾ The terminals for the control supply voltage are connected to the contactor by the integrated spring contacts of the solid-state time auxiliary switch above it when this switch is mounted.

⁴⁾ Setting of output contacts in as-supplied state not defined (bistable relay). Application of the control supply voltage once results in contact changeover to the correct setting.

⁵⁾ Terminals A1 and A2 for the control supply voltage of the solid-state time-delay auxiliary switch must be connected to the associated contactor by means of connecting cables.

Accessories and Spare Parts

For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH

For contactors		Rated control supply voltage U_s	Time setting range t	DT	Order No.	PS*	Weight per PU approx.		
Type		V	s				kg		
Solid-state time-delay blocks with semiconductor output									
Size S00									
	3RT1. 1, 3RH11 ¹⁾ 3RH14	For mounting onto the front of contactors • ON-delay (varistor integrated)							
		24 ... 66 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100		3RT19 16-2CG11 3RT19 16-2CG21 3RT19 16-2CG31	1 unit 1 unit 1 unit	0.050 0.050 0.050		
		90 ... 240 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100		3RT19 16-2CH11 3RT19 16-2CH21 3RT19 16-2CH31	1 unit 1 unit 1 unit	0.050 0.050 0.050		
		• OFF-delay with auxiliary voltage (varistor integrated)							
		24 ... 66 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100		3RT19 16-2DG11 3RT19 16-2DG21 3RT19 16-2DG31	1 unit 1 unit 1 unit	0.060 0.060 0.060		
		90 ... 240 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100		3RT19 16-2DH11 3RT19 16-2DH21 3RT19 16-2DH31	1 unit 1 unit 1 unit	0.060 0.060 0.060		
Sizes S0 ... S3									
	3RT10 2, 3RT10 3, 3RT10 4, 3RT13 ²⁾ 3RT15	For mounting onto coil terminals on top of the contactors • ON-delay (varistor integrated)							
		24 ... 66 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100		3RT19 26-2CG11 3RT19 26-2CG21 3RT19 26-2CG31	1 unit 1 unit 1 unit	0.050 0.050 0.050		
		90 ... 240 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100		3RT19 26-2CH11 3RT19 26-2CH21 3RT19 26-2CH31	1 unit 1 unit 1 unit	0.050 0.050 0.050		
		• OFF-delay with auxiliary voltage (varistor integrated)							
		24 ... 66 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100		3RT19 26-2DG11 3RT19 26-2DG21 3RT19 26-2DG31	1 unit 1 unit 1 unit	0.050 0.050 0.050		
		90 ... 240 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100		3RT19 26-2DH11 3RT19 26-2DH21 3RT19 26-2DH31	1 unit 1 unit 1 unit	0.050 0.050 0.050		
OFF-delay devices									
	3RT1. 1, 3RT1. 2, 3RH1...-1BF40	110 AC/DC			3RT19 16-2BK01	1 unit	0.150		
	3RT1. 1, 3RT1. 2, 3RH1...-1BM40	220/230 AC/DC			3RT19 16-2BL01	1 unit	0.150		
	3RT1. 1 ... 3RT1. 4, 3RH1...-1BB40	24 DC			3RT19 16-2BE01	1 unit	0.150		
Pneumatic delay blocks, terminal designation according to EN 50005									
	3RT1. 2	For mounting onto the front side of size S0 contactors ³⁾⁴⁾ Auxiliary contacts 1 NO and 1 NC • ON-delay							
			0.1 ... 30 1 ... 60		3RT19 26-2PA01 3RT19 26-2PA11	1 unit 1 unit	0.080 0.080		
		• OFF-delay							
			0.1 ... 30 1 ... 60		3RT19 26-2PR01 3RT19 26-2PR11	1 unit 1 unit	0.080 0.080		
		Mechanical latching blocks							
		Sizes S0 and S2							
	3RT1.2, 3RT1.3	For mounting on 1 contactor, contactor remains in the energized state even after a voltage failure							
		24 AC/DC			3RT19 26-3AB31	1 unit	0.130		
		110 AC/DC			3RT19 26-3AF31	1 unit	0.130		
		230 AC/DC			3RT19 26-3AP31	1 unit	0.130		

¹⁾ Cannot be fitted onto coupling relays.

²⁾ Not to be used for 3RT10 4. and 3RT13 4. contactors with U_s 42 V.

³⁾ In addition to these, no other auxiliary contacts are permitted.

⁴⁾ Versions according to DIN VDE 0116 on request.

Accessories and Spare Parts For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH

For contactors	Version	Rated control supply voltage U_s ¹⁾		DT	Order No. ²⁾	PS*	Weight per PU approx.
		AC operation	DC operation				
Type		V AC	V DC				kg

Surge suppressors without LED (also for Cage Clamp terminals)

Size S00



3RT19 16-1DG00

For plugging onto the front side of the contactors with and without auxiliary switch blocks

3RT1., 3RH1	Varistors	24 ... 48	24 ... 70	3RT19 16-1BB00	1 unit	0.010
		48 ... 127	70 ... 150	3RT19 16-1BC00	1 unit	0.010
		127 ... 240	150 ... 250	3RT19 16-1BD00	1 unit	0.010
		240 ... 400	--	3RT19 16-1BE00	1 unit	0.010
		400 ... 600	--	3RT19 16-1BF00	1 unit	0.010
3RT1., 3RH1	RC elements	24 ... 48	24 ... 70	3RT19 16-1CB00	1 unit	0.010
		48 ... 127	70 ... 150	3RT19 16-1CC00	1 unit	0.010
		127 ... 240	150 ... 250	3RT19 16-1CD00	1 unit	0.010
		240 ... 400	--	3RT19 16-1CE00	1 unit	0.010
		400 ... 600	--	3RT19 16-1CF00	1 unit	0.010
3RT1., 3RH1	Noise suppression diodes	--	12 ... 250	3RT19 16-1DG00	1 unit	0.010
3RT1., 3RH1	Diode assemblies (diode and Zener diode) for DC operation	--	12 ... 250	3RT19 16-1EH00	1 unit	0.010

Size S0



3RT19 26-1B.00

For fitting onto the coil terminals at top or bottom

3RT1. 2	Varistors	24 ... 48	24 ... 70	3RT19 26-1BB00	1 unit	0.025
		48 ... 127	70 ... 150	3RT19 26-1BC00	1 unit	0.025
		127 ... 240	150 ... 250	3RT19 26-1BD00	1 unit	0.025
		240 ... 400	--	3RT19 26-1BE00	1 unit	0.025
		400 ... 600	--	3RT19 26-1BF00	1 unit	0.025
3RT1. 2	RC elements	24 ... 48	24 ... 70	3RT19 26-1CB00	1 unit	0.025
		48 ... 127	70 ... 150	3RT19 26-1CC00	1 unit	0.025
		127 ... 240	150 ... 250	3RT19 26-1CD00	1 unit	0.025
		240 ... 400	--	3RT19 26-1CE00	1 unit	0.025
		400 ... 600	--	3RT19 26-1CF00	1 unit	0.025
3RT1.2	Diode assemblies For DC operation					
		• Connectable at the top	24	3RT19 26-1ER00	1 unit	0.025
		(e.g. for contactor with overload relay)	30 ... 250	3RT19 26-1ES00	1 unit	0.025
		• Connectable at the bottom	24	3RT19 26-1TR00	1 unit	0.025
		(e.g. for fuseless load feeders)	30 ... 250	3RT19 26-1TS00	1 unit	0.025

Sizes S2 and S3



3RT19 26-1B.00



3RT19 36-1C.00

For fitting onto the coil terminals at top or bottom

3RT1. 3, 3RT1. 4	Varistors	24 ... 48	24 ... 70	3RT19 26-1BB00	1 unit	0.025
		48 ... 127	70 ... 150	3RT19 26-1BC00	1 unit	0.025
		127 ... 240	150 ... 250	3RT19 26-1BD00	1 unit	0.025
		240 ... 400	--	3RT19 26-1BE00	1 unit	0.025
		400 ... 600	--	3RT19 26-1BF00	1 unit	0.025
3RT1. 3 ³⁾ , 3RT1. 4	RC elements	24 ... 48	24 ... 70	3RT19 36-1CB00	1 unit	0.040
		48 ... 127	70 ... 150	3RT19 36-1CC00	1 unit	0.040
		127 ... 240	150 ... 250	3RT19 36-1CD00	1 unit	0.040
		240 ... 400	--	3RT19 36-1CE00	1 unit	0.040
		400 ... 600	--	3RT19 36-1CF00	1 unit	0.040
3RT1. 3, 3RT1. 4	Diode assemblies For DC operation					
		• Connectable at the top	24	3RT19 36-1ER00	1 unit	0.025
		(e.g. for contactor with overload relay)	30 ... 250	3RT19 36-1ES00	1 unit	0.025
		• Connectable at the bottom	24	3RT19 36-1TR00	1 unit	0.025
		(e.g. for fuseless load feeders)	30 ... 250	3RT19 36-1TS00	1 unit	0.025

¹⁾ Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.

²⁾ For packs of 10 units, the Order No. must be supplemented with "Z" and the order code "X90".

³⁾ Mountable only at the top for 3RT1.3/ with AC operation.

Accessories and Spare Parts

For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH

For contactors	Version	Rated control supply voltage U_s ¹⁾		Power consumption of LED at U_s	DT	Order No. ²⁾	PS*	Weight per PU approx.
		AC operation	DC operation					
Type		V AC	V DC					kg

Surge suppressors without LED (also for Cage Clamp terminals)

Sizes S6 ... S12



3RT19 56-1C.00

For connecting to withdrawable coil with screw terminals with contactors with

- 3RT1...-A... conventional operating mechanism
- 3RT1...-N... solid-state operating mechanism

3RT1. 5, 3RT1. 6, 3RT1. 7	RC elements	24 ... 48	24 ... 70	--	3RT19 56-1CB00	1 unit	0.035
		48 ... 127	70 ... 150	--	3RT19 56-1CC00	1 unit	0.035
		127 ... 240	150 ... 250	--	3RT19 56-1CD00	1 unit	0.035
		240 ... 400	--	--	3RT19 56-1CE00	1 unit	0.035
		400 ... 600	--	--	3RT19 56-1CF00	1 unit	0.035

Surge suppressors without LED (also for Cage Clamp terminals)

Size S00



3RT19 16-1L.00

For plugging onto the front side of the contactors with and without auxiliary switch blocks

3RT1, 3RH1.	Varistors	24 ... 48	12 ... 24	10 ... 120	3RT19 16-1JJ00	1 unit	0.010
		48 ... 127	24 ... 70	20 ... 470	3RT19 16-1JK00	1 unit	0.010
		127 ... 240	70 ... 150	50 ... 700	3RT19 16-1JL00	1 unit	0.010
		--	150 ... 250	160 ... 950	3RT19 16-1JP00	1 unit	0.010
3RT1, 3RH1.	Noise suppression diodes	--	24 ... 70	20 ... 470	3RT19 16-1LM00	1 unit	0.010
		--	50 ... 150	50 ... 700	3RT19 16-1LN00	1 unit	0.010
		--	150 ... 250	160 ... 950	3RT19 16-1LP00	1 unit	0.010

For contactors	Version	DT	Order No.	PS*	Weight per PU approx.
Type					kg

Additional load modules

Size S00 (also for Cage Clamp terminals)



3RT19 16-1GA00

For plugging onto the front side of the contactors with and without auxiliary switch blocks²⁾

3RT1. 1, 3RH1.	For increasing the permissible residual current and for limiting the residual voltage. Results in safe opening of contactors with direct control via 230 V AC semiconductor outputs of SIMATIC controllers. Acts simultaneously as surge suppressor. Rated voltage: AC 50/60 Hz, 180 to 255 V. Operating range: 0.8 to 1.1 x U_s	3RT19 16-1GA00	1 unit	0.010
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Coupling links for control by PLC

Sizes S0 ... S3



3RH19 24-1GP11

For mounting onto the coil terminals of the contactors

3RT1. 2, 3RT1. 3, 3RT1. 4	Operating range 17 to 30 V DC Power consumption at 24 V DC: 0.5 W Permissible residual current of the electronics (for 0 signal) 2.5 mA Rated operational current I_e : AC-15/AC-14 at 230 V: 3 A, DC-13 at 230 V: 0.1 A With LED for indicating switching state. With integrated varistor for damping opening surges.	3RH19 24-1GP11	1 unit	0.060
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LED modules for indicating the contactor function (also for Cage Clamp terminals)

Sizes S0 ... S12³⁾



3RT19 26-1QT00 mounted to contactor

3RT1. 2, 3RT1. 3, 3RT1. 4	For snapping into the location hole of an inscription label on the front of a contactor either directly on the contactor or on the front auxiliary switch. The LED module is connected to coil terminals A1 and A2 of the contactor and indicates its energized state. Yellow LED. Rated voltage: 24 ... 240 V AC/DC, polarized. (1 pack = 5 units)	3RT19 26-1QT00	5 units	0.010
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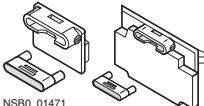
¹⁾ Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.

²⁾ For packs of 10 units, the Order No. must be supplemented with "-Z" and the order code "X90".

³⁾ For sizes S6 ... S12 the connecting leads have to be extended.

Accessories and Spare Parts For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH

For contactors		Version	DT	Order No.	PS*	Weight per PU approx.
Size	Type					kg
Auxiliary terminals, 3-pole						
	S3	3RT10 4.	For connection of auxiliary and control cables to the main conductor connections (for one side)	B 3RT19 46-4F	1 unit	0.035
Box terminal blocks						
	S6	3RT1. 5 (3RB10 5)	For round and ribbon cables Up to 70 mm² ³⁾ Up to 120 mm²	3RT19 55-4G	1 unit	0.230
			Auxiliary conductor connection for box terminals	3RT19 56-4G	1 unit	0.260
	S10/S12	3RT1. 6, 3RT1. 7 (3RB10 6)	Up to 240 mm² With auxiliary conductor connection	3TX7 500-0A	1 unit	0.010
				3RT19 66-4G	1 unit	0.676
Covers						
	S2	3RT10 3	Terminal covers for box terminals Additional touch protection to be fitted at the box terminals (2 units required per contactor)	3RT19 36-4EA2	1 unit	0.020
	S3	3RT10 4, 3RT14 4		3RT19 46-4EA2	1 unit	0.025
	S6	3RT1. 5	Length: 25 mm	3RT19 56-4EA2	1 unit	0.030
	S10/S12	3RT1. 6, 3RT1. 7	Length: 30 mm	3RT19 66-4EA2	1 unit	0.040
	S3	3RT10 4, 3RT14 4	Terminal covers for cable lugs and busbar connection ⁴⁾ For complying with the phase clearances and as touch protection if box terminal is removed (2 units required per contactor)	3RT19 46-4EA1	1 unit	0.040
				3RT19 56-4EA1	1 unit	0.070
	S6	3RT1. 5	Length: 100 mm	3RT19 66-4EA1	1 unit	0.130
			Length: 120 mm			
	S6	3RT1. 5	For busbar cover between contactor and 3RB10 overload relay or wiring module for contactor assemblies	3RT19 56-4EA3	1 unit	0.020
			Length: 27 mm	3RT19 66-4EA3	1 unit	0.060
	S10/S12 ⁵⁾	3RT1. 6, 3RT1. 7	Length: 42 mm			
S6	3RT1. 5	For busbar cover of the flat line connectors for reversing and wye-delta assemblies Length: 38 mm	3RT19 56-4EA4	1 unit	0.030	
Sealable covers						
	S00	3RT1.1 3RH1. ⁶⁾	Sealable cover for preventing manual operation	3RT19 16-4MA10	5 units	0.010
	S0 ... S12	3RT1.2 ... 3RT1.7 ⁶⁾	1 unit required per contactor	3RT19 26-4MA10	5 units	0.010

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¹⁾ The links for paralleling can be reduced by one pole.

²⁾ Sizes S00 to S2: The links for paralleling are insulated.
Size S3: A cover plate is included for touch protection. (Can only be used when the box terminal is removed.)

Sizes S6 to S12: The 3RT19 56-4EA1 (for S6) or 3RT19 66-4EA1 (for S10 and S12) cover can be used for touch protection.

³⁾ As standard for 3RT10 54-1 contactor (55 kW).

⁴⁾ Also fits on contactors S6 ... S12 with box terminals.

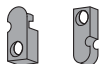
⁵⁾ The 3RT1966-4EA3 cover is required in addition for use in contactor assemblies (reversing/wye-delta).

⁶⁾ Not for contactors and contactor relays with auxiliary switch block mounted onto the front.

Accessories and Spare Parts

For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH

For contactors	Version	DT	Order No.	PS*	Weight per PU approx.
Type					kg
Solder pin adapters for contactors					
<i>Size S00</i>					
	3RT1. 1, 3RH11	Assembly kit for soldering contactors onto a printed circuit board. For 1 contactor, 1 set is required.	3RT19 16-4KA1	4 units	0.030
					
Solder pin adapters for contactors with mounted 4-pole auxiliary switch block					
<i>Size S00</i>					
	3RT1. 1, 3RH11	Assembly kit for soldering contactors with an auxiliary switch block onto a printed circuit board. For 1 contactor, 1 set is required.	3RT19 16-4KA2	4 units	0.070
					
					
					
Screw adapters with screw or Cage Clamp terminals					
<i>Size S0</i>					
	3RT1.2.	Screw adapters for easy screw fixing. 2 units required per contactor (1 pack contains 10 sets for 10 contactors)	3RT19 26-4P	10 units	0.010

	For contactors	Max. conductor cross-sections	DT	Order No.	PS*	Weight per PU approx.
	Size	Type	mm ²			kg
Links for paralleling						
	3-pole, with connection terminal ^{1) 2)}					
	S00	3RT10 1	25	3RT19 16-4BB31	1 unit	0.0151
	S0	3RT10 2.	35, stranded	3RT19 26-4BB31	1 unit	10.020
	S2	3RT10 3.	95	3RT19 36-4BB31	1 unit	10.100
	3-pole, with through hole (star jumpers) ¹⁾²⁾					
	S3	3RT10 4. 3RT14 4.	185	3RT19 46-4BB31	1 unit	10.200
	S6	3RT1. 5	--	3RT19 56-4BA31	1 unit	0.1601
	S10/S12	3RT1. 6, 3RT1. 7	--	3RT19 66-4BA31	1 unit	0.5001
	4-pole, with connection terminal ^{1) 2)}					
	S00	3RT1. 1	25	3RT19 16-4BB41	1 unit	0.0151

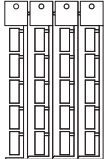
¹⁾ The links for paralleling can be reduced by one pole.

²⁾ Sizes S00 to S2: The links for paralleling are insulated.
Size S3: A cover plate is included for touch protection. (Can only be used when the box terminal is removed.)
Sizes S6 to S12: The 3RT19 56-4EA1 (for S6) or 3RT19 66-4EA1 (for S10 and S12) cover can be used for touch protection.

Accessories and Spare Parts

For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3RT, 3RH

Version	DT	Order No.	PS*	Weight per PU approx. kg
Insulation stop for securely holding back the conductor insulation on conductors up to 1 mm² for contactors with Cage Clamp terminals				
 NSK-7724 3RT19 16-4JA02		3RT19 16-4JA02	20 units	0.100
Tools for opening Cage Clamp terminal				
 8WA2 804		3WA2 880	1 unit	0.034
		8WA2 803	1 unit	0.024
Blank labels				
 NSK-7237 3RT19 00-1SB10	Unit labeling plates for "SIRIUS"			
	• 10 × 7 mm, pastel turquoise	3RT19 00-1SB10	816 units	0.239
	• 20 × 7 mm, pastel turquoise	3RT19 00-1SB20	340 units	0.220
	Labels for sticking for "SIRIUS"			
	• 19 × 6 mm, pastel turquoise	3RT19 00-1SB60	3060 units	0.153
	• 19 × 6 mm, zinc/yellow	3RT19 00-1SD60	3060 units	0.120

Accessories and Spare Parts

For 3RT, 3RH, 3TF Contactors and Contactor Relays

Accessories for 3TF

Selection and ordering data

For contactors		Version	Rated control supply voltage U_s	DT	Order No.	PS*	Weight per PU approx.
Size	Type		V DC				kg
Surge suppressors¹⁾							
	14	3TF68 and 3TF69	Varistors²⁾				
			For DC economy circuit; for snapping onto the side of auxiliary switches	24 ... 48	3TX7 572-3G	1 unit	0.080
				48 ... 127	3TX7 572-3H	1 unit	0.080
				127 ... 240	3TX7 572-3J	1 unit	0.080
Solid-state compatible auxiliary switch blocks with screw terminals							
	14	3TF68 and 3TF69	For mounting onto the side of contactors. For use in dusty atmosphere and solid-state circuits with rated operational currents I_e AC-14 and DC-13 from 1 to 300 mA at 3 to 60 V. With 1 changeover contact. 2nd auxiliary switch block, left or right (replacement for 3TY6 561-1U, 3TY6 561-1V)		3TY7 561-1UA00	1 unit	0.060
	2 and 4						
Coupling links for control by PLC							
	14	3TF68 and 3TF69	Operating range: 17 to 30 V DC. Power consumption: 0.5 W at 24 V DC. Fitted with varistor. For snapping onto the side of auxiliary switch, with surge suppression		3TX7 090-0D	1 unit	0.080
Terminal covers for protection against inadvertent contact with exposed busbar connections							
	14	3TF68	For screwing onto free screw end on middle connecting bar. 2 units required per contactor. (1 set = 2 units)		3TX7 686-0A	1 unit	0.410
		3TF69			3TX7 696-0A	1 unit	0.410

3TX7

3RT coil voltages

Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor type	3RT10 1, 3RH11	3RT10 2, 3RT10 3, 3RT10 4	3RT14 4	3RT13 1, 3RT15 1	3RT13 2 ... 3RT13 4, 3RT15 2 and 3RT15 3	3RT16
Rated control supply voltage U_s						

Sizes S00 ... S3

AC operation¹⁾

Magnetic coils for 50 Hz (exception: size S00: 50 and 60 Hz²⁾)

24 V AC	B0	B0	B0	B0	B0	B0
42 V AC	D0	D0	D0	D0	--	--
48 V AC	H0	H0	H0	H0	--	--
110 V AC	F0	F0	F0	F0	F0	F0
230 V AC	P0	P0	P0	P0	P0	P0
400 V AC	V0	V0	V0	V0	V0	V0

Magnetic coils for 50 and 60 Hz²⁾

24 V AC	B0	C2	C2	B0	C2	C2
42 V AC	D0	D2	D2	D0	D2	--
48 V AC	H0	H2	H2	H0	H2	--
110 V AC	F0	G2	G2	F0	G2	G2
208 V AC	M2	M2	M2	M2	M2	M2
220 V AC	N2	N2	N2	N2	N2	N2
230 V AC	P0	L2	L2	P0	L2	L2

Magnetic coils (for USA and Canada³⁾)

50 Hz	60 Hz					
110 V AC	120 V AC	K6	K6	K6	K6	K6
220 V AC	240 V AC	P6	P6	P6	P6	P6
-----	277 V AC	U6	U6	U6	U6	U6
-----	480 V AC	V6	V6	V6	V6	V6
-----	600 V AC	T6	T6	T6	T6	T6

Magnetic coils (for Japan)

50/60 Hz ⁴⁾	60 Hz ⁵⁾					
100 V AC	110 V AC	G6	G6	G6	G6	G6
200 V AC	220 V AC	N6	N6	N6	N6	N6
400 V AC	440 V AC	R6	R6	R6	R6	R6

DC operation¹⁾

12 V DC	A4	--	--	A4	--	--
24 V DC	B4	B4	B4	B4	B4	--
42 V DC	D4	D4	D4	D4	D4	--
48 V DC	W4	W4	W4	W4	--	--
60 V DC	E4	E4	E4	--	--	--
110 V DC	F4	F4	F4	F4	F4	--
125 V DC	G4	G4	G4	G4	G4	--
220 V DC	M4	M4	M4	M4	M4	--
230 V DC	P4	P4	P4	P4	--	--

Sizes S6 ... S12

AC/DC operation (AC40 ... 60 Hz, DC)

Conventional operating mechanism

$U_{s \min} \dots U_{s \max}^{6)}$	Contactor type	3RT1. 5.-.A 3RT1. 6.-.A 3RT1. 7.-.A	$U_{s \min} \dots U_{s \max}^{6)}$	Contactor type	3RT1. 5.-.A 3RT1. 6.-.A 3RT1. 7.-.A
23 ... 26 V AC/DC	B3		240 ... 277 V AC/DC	U3	
42 ... 48 V AC/DC	D3		380 ... 420 V AC/DC	V3	
110 ... 127 V AC/DC	F3		440 ... 480 V AC/DC	R3	
200 ... 220 V AC/DC	M3		500 ... 550 V AC/DC	S3	
220 ... 240 V AC/DC	P3		575 ... 600 V AC/DC	T3	

Solid-state operating mechanism

$U_{s \min} \dots U_{s \max}^{6)}$	Contactor type	3RT1. 5.-.N 3RT1. 6.-.N 3RT1. 7.-.N	3RT1. 5.-.P/Q 3RT1. 6.-.P/Q 3RT1. 7.-.P/Q
21 ... 27.3 V	B3		--
96 ... 127 V AC/DC	F3		F3
200 ... 277 V AC/DC	P3		P3

Examples

AC operating mechanism	3RT10 23-1AP00	Contactor with screw terminals; with magnetic coil for 50 Hz for rated control supply voltage 230 V AC.
	3RT10 23-1AG20	Contactor with screw terminals; with magnetic coil for 50/60 Hz for rated control supply voltage 110 V AC.
DC operating mechanism	3RT10 34-3BB40	Contactor with Cage Clamp terminals; for rated control supply voltage 24 V DC.
	3RT10 34-3BG40	Contactor with Cage Clamp terminals; for rated control supply voltage 125 V DC.

¹⁾ For deviating coil voltages and coil operating ranges of sizes S00 and S0, the 24 V DC SITOP Power supply unit with wide range input (93 to 264 V AC; 30 to 264 V DC) can be used for coil excitation

²⁾ Coil operating range at 50 Hz: 0.8 to $1.1 \times U_s$
at 60 Hz: 0.85 to $1.1 \times U_s$.

³⁾ Coil operating range Size S00: at 50 Hz: 0.85 to $1.1 \times U_s$
at 60 Hz: 0.8 to $1.1 \times U_s$
Sizes S0 to S3: at 50 Hz and 60 Hz: 0.8 to $1.1 \times U_s$.

⁴⁾ Coil operating range Size S00: at 50/60 Hz: 0.85 to $1.1 \times U_s$
Sizes S0 to S3: at 50 Hz: 0.8 to $1.1 \times U_s$
at 60 Hz: 0.85 to $1.1 \times U_s$.

⁵⁾ Coil operating range at 60 Hz: 0.8 to $1.1 \times U_s$.

⁶⁾ Operating range: $0.8 \times U_{s \min}$ to $1.1 \times U_{s \max}$.

Contactors and Contactor Assemblies

3RT1 Contactors

Spare parts

Selection and ordering data

For contactor		Rated control supply voltage U_s	Screw connection		Cage Clamp connection		Weight approx.		
Size	Type		Order No.	List Price \$	Order No.	List Price \$			
			kg						
			Coils · AC operation						
	S0	3RT10 2 .,	24 V, 50 Hz	3RT19 24-5AB01	3RT19 24-5AB02	0.069			
		3RT13 2 .,	42 V, 50 Hz	3RT19 24-5AD01	3RT19 24-5AD02				
		3RT15 2 .,	48 V, 50 Hz	3RT19 24-5AH01	3RT19 24-5AH02				
			110 V, 50 Hz	3RT19 24-5AF01	3RT19 24-5AF02				
			230 V, 50 Hz	3RT19 24-5AP01	3RT19 24-5AP02				
			400 V, 50 Hz	3RT19 24-5AV01	3RT19 24-5AV02				
			24 V, 50/60 Hz	3RT19 24-5AC21	3RT19 24-5AC22				
			42 V, 50/60 Hz	3RT19 24-5AD21	3RT19 24-5AD22				
			48 V, 50/60 Hz	3RT19 24-5AH21	3RT19 24-5AH22				
			110 V, 50/60 Hz	3RT19 24-5AG21	3RT19 24-5AG22				
			208 v, 50/60 Hz	3RT1924-5AM21	3RT1924-5AM22				
			220 V, 50/60 Hz	3RT19 24-5AN21	3RT19 24-5AN22				
			230 V, 50/60 Hz	3RT19 24-5AL21	3RT19 24-5AL22				
			110 V, 50 Hz/120 V, 60 Hz	3RT19 24-5AK61	3RT19 24-5AK62				
			220 V, 50 Hz/240 V, 60 Hz	3RT19 24-5AP61	3RT19 24-5AP62				
			277 V, 60 Hz	3RT1924-5AU61	3RT1924-5AU62				
			480 V, 60 Hz	3RT1924-5AV61	3RT1924-5AV62				
			600 V, 60 Hz	3RT1924-5AT61	3RT1924-5AT62				
		100 V, 50/60 Hz/110 V, 60 Hz	3RT19 24-5AG61	3RT19 24-5AG62					
		200 V, 50/60 Hz/220 V, 60 Hz	3RT19 24-5AN61	3RT19 24-5AN62					
		400 V, 50/60 Hz/440 V, 60 Hz	3RT19 24-5AR61	3RT19 24-5AR62					
	S2	3RT10 33	24 V, 50 Hz	3RT19 34-5AB01	3RT19 34-5AB02	0.088			
		3RT10 34	42 V, 50 Hz	3RT19 34-5AD01	3RT19 34-5AD02				
			48 V, 50 Hz	3RT19 34-5AH01	3RT19 34-5AH02				
			110 V, 50 Hz	3RT19 34-5AF01	3RT19 34-5AF02				
			230 V, 50 Hz	3RT19 34-5AP01	3RT19 34-5AP02				
			400 V, 50 Hz	3RT19 34-5AV01	3RT19 34-5AV02				
			42 V, 50/60 Hz	3RT19 34-5AD21	3RT19 34-5AD22				
			48 V, 50/60 Hz	3RT19 34-5AH21	3RT19 34-5AH22				
			24 V, 50/60 Hz	3RT19 34-5AC21	3RT19 34-5AC22				
			110 V, 50/60 Hz	3RT19 34-5AG21	3RT19 34-5AG22				
			208 V, 50/60 Hz	3RT1934-5AM21	3RT1934-5AM22				
			220 V, 50/60 Hz	3RT19 34-5AN21	3RT19 34-5AN22				
			230 V, 50/60 Hz	3RT19 34-5AL21	3RT19 34-5AL22				
			110 V, 50 Hz/120 V, 60 Hz	3RT19 34-5AK61	3RT19 34-5AK62				
			220 V, 50 Hz/240 V, 60 Hz	3RT19 34-5AP61	3RT19 34-5AP62				
			277 V, 60 Hz	3RT1934-5AU61	3RT1934-5AU62				
			480 V, 60 Hz	3RT1934-5AV61	3RT1934-5AV62				
			600 V, 60 Hz	3RT1934-5AT61	3RT1934-5AT62				
		100 V, 50/60 Hz/110 V, 60 Hz	3RT19 34-5AG61	3RT19 34-5AG62					
		200 V, 50/60 Hz/220 V, 60 Hz	3RT19 34-5AN61	3RT19 34-5AN62					
		400 V, 50/60 Hz/440 V, 60 Hz	3RT19 34-5AR61	3RT19 34-5AR62					
		3RT10 35,	24 V, 50 Hz	3RT19 35-5AB01	3RT19 35-5AB02	0.088			
		3RT10 36,	42 V, 50 Hz	3RT19 35-5AD01	3RT19 35-5AD02				
		3RT13 3 .,	48 V, 50 Hz	3RT19 35-5AH01	3RT19 35-5AH02				
		3RT15 3 .,	110 V, 50 Hz	3RT19 35-5AF01	3RT19 35-5AF02				
			230 V, 50 Hz	3RT19 35-5AP01	3RT19 35-5AP02				
			400 V, 50 Hz	3RT19 35-5AV01	3RT19 35-5AV02				
			24 V, 50/60 Hz	3RT19 35-5AC21	3RT19 35-5AC22				
			42 V, 50/60 Hz	3RT19 35-5AD21	3RT19 35-5AD22				
			48 V, 50/60 Hz	3RT19 35-5AH21	3RT19 35-5AH22				
			110 V, 50/60 Hz	3RT19 35-5AG21	3RT19 35-5AG22				
			208 V, 50/60 Hz	3RT1935-5AM21	3RT1935-5AM22				
			220 V, 50/60 Hz	3RT19 35-5AN21	3RT19 35-5AN22				
			230 V, 50/60 Hz	3RT19 35-5AL21	3RT19 35-5AL22				
			110 V, 50 Hz/120 V, 60 Hz	3RT19 35-5AK61	3RT19 35-5AK62				
			220 V, 50 Hz/240 V, 60 Hz	3RT19 35-5AP61	3RT19 35-5AP62				
			277 V, 60 Hz	3RT1935-5AU61	3RT1935-5AU62				
			480 V, 60 Hz	3RT1935-5AV61	3RT1935-5AV62				
			600 V, 60 Hz	3RT1935-5AT61	3RT1935-5AT62				
		100 V, 50/60 Hz/110 V, 60 Hz	3RT19 35-5AG61	3RT19 35-5AG62					
		200 V, 50/60 Hz/220 V, 60 Hz	3RT19 35-5AN61	3RT19 35-5AN62					
		400 V, 50/60 Hz/440 V, 60 Hz	3RT19 35-5AR61	3RT19 35-5AR62					

Contactors and Contactor Assemblies

3RT1 Contactors

Spare parts

Selection and ordering data

For contactor		Rated control supply voltage U_s		Screw connection		Cage Clamp connection		Weight approx.				
Size		Type		Order No.	List Price \$	Order No.	List Price \$	kg				
Coils - AC operation												
	S3	3RT10 44	24 V, 50 Hz	3RT19 44-5AB01		3RT19 44-5AB02		0.130				
			42 V, 50 Hz	3RT19 44-5AD01		3RT19 44-5AD02						
			48 V, 50 Hz	3RT19 44-5AH01		3RT19 44-5AH02						
			110 V, 50 Hz	3RT19 44-5AF01		3RT19 44-5AF02						
			230 V, 50 Hz	3RT19 44-5AP01		3RT19 44-5AP02						
			400 V, 50 Hz	3RT19 44-5AV01		3RT19 44-5AV02						
			24 V, 50/60 Hz	3RT19 44-5AC21		3RT19 44-5AC22						
			42 V, 50/60 Hz	3RT19 44-5AD21		3RT19 44-5AD22						
			48 V, 50/60 Hz	3RT19 44-5AH21		3RT19 44-5AH22						
			110 V, 50/60 Hz	3RT19 44-5AG21		3RT19 44-5AG22						
			208 V, 50/60 Hz	3RT1944-5AM21		3RT1944-5AM22						
			220 V, 50/60 Hz	3RT19 44-5AN21		3RT19 44-5AN22						
			230 V, 50/60 Hz	3RT19 44-5AL21		3RT19 44-5AL22						
			110 V, 50 Hz/120 V, 60 Hz	3RT19 44-5AK61		3RT19 44-5AK62						
			220 V, 50 Hz/240 V, 60 Hz	3RT19 44-5AP61		3RT19 44-5AP62						
			277 V, 60 Hz	3RT1944-5AU61		3RT1944-5AU62						
			480 V, 60 Hz	3RT1944-5AV61		3RT1944-5AV62						
			600 V, 60 Hz	3RT1944-5AT61		3RT1944-5AT62						
		3RT10 45, 3RT10 46, 3RT13 4., 3RT14 46	100 V, 50/60 Hz/110 V, 60 Hz	3RT19 44-5AG61		3RT19 44-5AG62		0.130				
			200 V, 50/60 Hz/220 V, 60 Hz	3RT19 44-5AN61		3RT19 44-5AN62						
			400 V, 50/60 Hz/440 V, 60 Hz	3RT19 44-5AR61		3RT19 44-5AR62						
			24 V, 50 Hz	3RT19 45-5AB01		3RT19 45-5AB02						
			42 V, 50 Hz	3RT19 45-5AD01		3RT19 45-5AD02						
			48 V, 50 Hz	3RT19 45-5AH01		3RT19 45-5AH02						
			110 V, 50 Hz	3RT19 45-5AF01		3RT19 45-5AF02						
			230 V, 50 Hz	3RT19 45-5AP01		3RT19 45-5AP02						
			400 V, 50 Hz	3RT19 45-5AV01		3RT19 45-5AV02						
			24 V, 50/60 Hz	3RT19 45-5AC21		3RT19 45-5AC22						
			42 V, 50/60 Hz	3RT19 45-5AD21		3RT19 45-5AD22						
			48 V, 50/60 Hz	3RT19 45-5AH21		3RT19 45-5AH22						
			110 V, 50/60 Hz	3RT19 45-5AG21		3RT19 45-5AG22						
			208 V, 50/60 Hz	3RT1945-5AM21		3RT1945-5AM22						
			220 V, 50/60 Hz	3RT19 45-5AN21		3RT19 45-5AN22						
			230 V, 50/60 Hz	3RT19 45-5AL21		3RT19 45-5AL22						
					3RT10 45, 3RT10 46, 3RT13 4., 3RT14 46	110 V, 50 Hz/120 V, 60 Hz	3RT19 45-5AK61			3RT19 45-5AK62		0.130
						220 V, 50 Hz/240 V, 60 Hz	3RT19 45-5AP61			3RT19 45-5AP62		
277 V, 60 Hz	3RT1945-5AU61					3RT1945-5AU62						
480 V, 60 Hz	3RT1945-5AV61					3RT1945-5AV62						
600 V, 60 Hz	3RT1945-5AT61					3RT1945-5AT62						
100 V, 50/60 Hz/110 V, 60 Hz	3RT19 45-5AG61					3RT19 45-5AG62						
200 V, 50/60 Hz/220 V, 60 Hz	3RT19 45-5AN61		3RT19 45-5AN62									
400 V, 50/60 Hz/440 V, 60 Hz	3RT19 45-5AR61		3RT19 45-5AR62									
Coils - DC operation												
	S2	3RT10 3., 3RT13 3., 3RT15 3.	24 V	3RT19 34-5BB41		3RT19 34-5BB42		0.558				
			42 V	3RT19 34-5BD41		3RT19 34-5BD42						
			48 V	3RT19 34-5BW41		3RT19 34-5BW42						
			60 V	3RT19 34-5BE41		3RT19 34-5BE42						
			110 V	3RT19 34-5BF41		3RT19 34-5BF42						
			125 V	3RT19 34-5BG41		3RT19 34-5BG42						
			220 V	3RT19 34-5BM41		3RT19 34-5BM42						
			230 V	3RT19 34-5BP41		3RT19 34-5BP42						
			S3	3RT10 4., 3RT13 4., 3RT14 4.	24 V	3RT19 44-5BB41			3RT19 44-5BB42		0.916	
	42 V	3RT19 44-5BD41				3RT19 44-5BD42						
	48 V	3RT19 44-5BW41				3RT19 44-5BW42						
	60 V	3RT19 44-5BE41				3RT19 44-5BE42						
	110 V	3RT19 44-5BF41				3RT19 44-5BF42						
	125 V	3RT19 44-5BG41				3RT19 44-5BG42						
	220 V	3RT19 44-5BM41				3RT19 44-5BM42						
	230 V	3RT19 44-5BP41				3RT19 44-5BP42						

For contactor		Rated control supply voltage	Order No.	List Price \$	Weight approx.
Size Type		$U_{s \min}$ to $U_{s \max}$ AC/DC V			kg

3RT19 55-5A...



S6	3RT10 5, 3RT14 5	23 ... 26	3RT19 55-5AB31 3RT19 55-5AD31 3RT19 55-5AF31 3RT19 55-5AM31 3RT19 55-5AP31 3RT19 55-5AU31 3RT19 55-5AV31 3RT19 55-5AR31 3RT19 55-5AS31 3RT19 55-5AT31	0.49
		42 ... 48		
		110 ... 127		
		200 ... 220		
S10	3RT10 6, 3RT14 6	220 ... 240	3RT19 65-5AB31 3RT19 65-5AD31 3RT19 65-5AF31 3RT19 65-5AM31 3RT19 65-5AP31 3RT19 65-5AU31 3RT19 65-5AV31 3RT19 65-5AR31 3RT19 65-5AS31 3RT19 65-5AT31	0.65
		240 ... 277		
		380 ... 420		
		440 ... 480		
		500 ... 550		
		575 ... 600		
	3RT12 6 Vacuum contactor	23 ... 26	3RT19 66-5AB31 3RT19 66-5AD31 3RT19 66-5AF31 3RT19 66-5AM31 3RT19 66-5AP31 3RT19 66-5AU31 3RT19 66-5AV31 3RT19 66-5AR31 3RT19 66-5AS31 3RT19 66-5AT31	
		42 ... 48		
		110 ... 127		
		200 ... 220		
S12	3RT10 7, 3RT14 7, 3RT12 7 Vacuum contactor	220 ... 240	3RT19 75-5AB31 3RT19 75-5AD31 3RT19 75-5AF31 3RT19 75-5AM31 3RT19 75-5AP31 3RT19 75-5AU31 3RT19 75-5AV31 3RT19 75-5AR31 3RT19 75-5AS31 3RT19 75-5AT31	1.1
		240 ... 277		
		380 ... 420		
		440 ... 480		
		500 ... 550		
		575 ... 600		
		23 ... 26		
		42 ... 48		
		110 ... 127		
		200 ... 220		

Contactors and Contactor Assemblies

3RT1 Contactors

Spare parts

Selection and ordering data

For contactor		Rated control supply voltage $U_{s \min}$ to $U_{s \max}$	Order No.	List Price \$	Weight approx. kg
Size	Type	AC/DC V			

Withdrawable coils

3RT19 55-5N...



Solid-state operating mechanism - for DC 24 V PLC output

S6	3RT10 5, 3RT14 5	21 ... 27.3 96 ... 127 200 ... 277	3RT19 55-5NB31 3RT19 55-5NF31 3RT19 55-5NP31	0.49
S10	3RT10 6, 3RT14 6	21 ... 27.3 96 ... 127 200 ... 277	3RT19 65-5NB31 3RT19 65-5NF31 3RT19 65-5NP31	0.65
	3RT12 6 Vacuum contactor	21 ... 27.3 96 ... 127 200 ... 277	3RT19 66-5NB31 3RT19 66-5NF31 3RT19 66-5NP31	
S12	3RT10 7, 3RT14 7, 3RT12 7 Vacuum contactor	21 ... 27.3 96 ... 127 200 ... 277	3RT19 75-5NB31 3RT19 75-5NF31 3RT19 75-5NP31	1.1

Solid-state operating mechanism - for DC 24 V PLC output/PLC relay output, with remaining lifetime indication (withdrawable coil with lateral electronics module)

S6	3RT10 5, 3RT14 5	96 ... 127 200 ... 277	3RT19 55-5PF31 3RT19 55-5PP31	1.1
S10	3RT10 6, 3RT14 6	96 ... 127 200 ... 277	3RT19 65-5PF31 3RT19 65-5PP31	1.1
S12	3RT10 7, 3RT14 7	96 ... 127 200 ... 277	3RT19 75-5PF31 3RT19 75-5PP31	1.1

Solid-state operating mechanism - with AS-Interface and remaining lifetime indication (withdrawable coil with lateral electronics module)

S6	3RT10 5, 3RT14 5	96 ... 127 200 ... 277	3RT19 55-5QF31 3RT19 55-5QP31	1.1
S10	3RT10 6, 3RT14 6	96 ... 127 200 ... 277	3RT19 65-5QF31 3RT19 65-5QP31	1.1
S12	3RT10 7, 3RT14 7	96 ... 127 200 ... 277	3RT19 75-5QF31 3RT19 75-5QP31	1.1

Contactors and Contactor Assemblies

3RT1 Contactors

Spare parts

Selection and ordering data

For contactor		Design	Order No.	List Price \$	Weight approx.	Pack.
Size	Type				kg	
Arc chutes						
					1 unit	
S2	3RT10 3.	1 arc chute, 3-pole	3RT19 36-7A			1 unit
S3	3RT10 4., 3RT14 46		3RT19 46-7A			
S6	3RT10 54 3RT10 55 3RT10 56		3RT19 54-7A 3RT19 55-7A 3RT19 56-7A		0.72	
S10	3RT10 64 3RT10 65 3RT10 66		3RT19 64-7A 3RT19 65-7A 3RT19 66-7A		1.24	
S12	3RT10 75 3RT10 76		3RT19 75-7A 3RT19 76-7A		1.4	
S6	3RT14 56		3RT19 56-7B		0.72	
S10	3RT14 66		3RT19 66-7B		1.24	
S12	3RT14 76		3RT19 76-7B		1.4	
Contacts with fixing parts						
• for contactors with 3 main contacts						
					1 set	
S2	3RT10 34 3RT10 35 3RT10 36	Main contacts (3 NO) for AC-3 utilization category (1 set = 3 moving and 6 fixed contacts with fixing parts)	3RT19 34-6A 3RT19 35-6A 3RT19 36-6A			1 set
S3	3RT10 44 3RT10 45 3RT10 46		3RT19 44-6A 3RT19 45-6A 3RT19 46-6A			
S6	3RT10 54 3RT10 55 3RT10 56		3RT19 54-6A 3RT19 55-6A 3RT19 56-6A		0.28	
S10	3RT10 64 3RT10 65 3RT10 66		3RT19 64-6A 3RT19 65-6A 3RT19 66-6A		0.48	
S12	3RT10 75 3RT10 76		3RT19 75-6A 3RT19 76-6A		0.9	
S3	3RT14 46	Main contacts (3 NO) for AC-1 utilization category (1 set = 3 moving and 6 fixed contacts with fixing parts)	3RT19 46-6D			
S6	3RT14 56		3RT19 56-6D		0.28	
S10	3RT14 66		3RT19 66-6D		0.48	
S12	3RT14 76		3RT19 76-6D		0.9	
• for 3RT12 vacuum contactors						
					1 set	
S10	3RT12 64 3RT12 65 3RT12 66	3 vacuum interrupters with fixing parts	3RT19 64-6V 3RT19 65-6V 3RT19 66-6V		1.4	1 set
S12	3RT12 75 3RT12 76		3RT19 75-6V 3RT19 76-6V		1.5	
• for contactors with 4 main contacts						
					1 set	
S2	3RT13 26	Main contacts (4 NO contacts) for utilization category AC-1 (1 set = 4 moving and 8 fixed contacts with fixing parts)	3RT19 36-6E			1 set
S3	3RT13 44 3RT13 46		3RT19 44-6E 3RT19 46-6E			