

Switching Devices – Contactors and Contactor Assemblies

Power Contactors for Switching Motors

Introduction

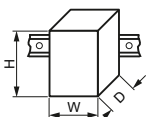
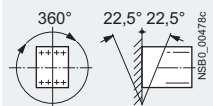

Overview



Size		S00				S0					
Type		3RT201				3RT202					
3RT20 contactors											
Type		3RT2015	3RT2016	3RT2017	3RT2018	3RT2023	3RT2024	3RT2025	3RT2026	3RT2027	3RT2028
AC, DC operation		(p. 3/35, 3/37)				(p. 3/42, 3/44, 3/47)					
AC-3											
$I_e/AC-3/400\text{ V}$	A	7	9	12	16	9	12	17	25	32	38
400 V	kW	3	4	5.5	7.5	4	5.5	7.5	11	15	18.5
230 V	kW	1.5	2.2	3	4	2.2	3	4	5.5	7.5	11
690 V	kW	4	5.5	5.5	7.5	7.5	7.5	11	11	18.5	18.5
1 000 V	kW	--	--	--	--	--	--	--	--	--	--
AC-4 (for $I_a = 6 \times I_e$)											
400 V	kW	3	4	4	5.5	4	5.5	7.5	7.5	11	11
400 V (200 000 operating cycles)	kW	1.15	2	2	2.5	2	2.6	3.5	4.4	6	6
AC-1 (40 °C, ≤ 690 V)											
I_e	3RT20 A	18	22	22	22	40	40	40	40	50	50
Accessories for contactors											
Auxiliary switch blocks	On front	3RH2911			(p. 3/64)	3RH2911			(p. 3/64)		
	Lateral	3RH2911			(p. 3/66)	3RH2921			(p. 3/66)		
Function modules (timing relays)		3RA281.			(p. 3/196)	3RA281.			(p. 3/196)		
Function modules (IO-Link, AS-i)		3RA271.-. AA00			(p. 3/201, 3/206)	3RA271.-. AA00			(p. 3/201, 3/206)		
Surge suppressors		3RT2916			(p. 3/71)	3RT2926			(p. 3/71)		
3RU2 and 3RB3 overload relays (Chapter 7, "Protection Equipment" → "Overload Relays")											
3RU thermal overload relays		3RU2116	0.11 ... 16 A			3RU2126	1.8 ... 40 A				
3RB electronic overload relays		3RB3016 0.1 ... 16 A 3RB3113					3RB3026 0.1 ... 40 A 3RB3123				
• For standard applications											
• For High-Feature applications		3RB22, 3RB23 and 3RB24 with 3RB2906-2.G1 current measuring module					3RB22, 3RB23 and 3RB24 with 3RB2906-2.G1 current measuring module				
		0.3 ... 100 A					0.3 ... 100 A				
3RV20 motor starter protectors (Chapter 7, "Protection Equipment" → "Motor Starter Protectors")											
Type		3RV2011	0.11 ... 16 A			3RV2021	0.45 ... 40 A				
Link modules		3RA2911				3RA2921					
3RA23 reversing contactor assemblies											
Complete units	Type	3RA2315	3RA2316	3RA2317	3RA2318	--	3RA2324	3RA2325	3RA2326	3RA2327	3RA2328
		(p. 3/163)					(p. 3/165)				
400 V	kW	3	4	5.5	7.5	--	5.5	7.5	11	15	18.5
Assembly kits/wiring modules		3RA2913-2AA.			(p. 3/168)	--	3RA2923-2AA.			(p. 3/168)	
Function modules		3RA271.-. BA00			(p. 3/169)	--	3RA271.-. BA0			(p. 3/169)	
3RA24 contactor assemblies for wye-delta starting											
Complete units	Type	3RA2415	3RA2416	3RA2417		3RA2423		3RA2425	3RA2426		
		(p. 3/180)					(p. 3/182)				
400 V	kW	5.5	7.5	11		11		15/18.5	22		
Assembly kits/wiring modules		3RA2913-2BB.			(p. 3/185)	3RA2923-2BB.		(p. 3/185)			
Function modules		3RA271.-. CA00			(p. 3/187)	3RA271.-. CA00		(p. 3/187)			

Note:

Safety characteristics for contactors, see Chap. 16, "Appendix" → "Standards and Approvals" → "Overview".

Type	3RT2015, 3RT2016		3RT2017, 3RT2018	
Size	S00		S00	
Dimensions (W x H x D) ¹⁾				
• With mounted auxiliary switch block	mm	45 x 57.5 x 73 / 45 x 70 x 73		
• With mounted function module	mm	45 x 57.5 x 116 / 45 x 70 x 121		
	mm	45 x 57.5 x 142 / 45 x 70 x 142		
General technical specifications				
Permissible mounting position				
The contactors are designed for operation on a vertical mounting surface.				
				
Upright mounting position				
				
Special version required				
Mechanical endurance				
• Basic units	Operating cycles	30 million		
• Basic units with snap-on auxiliary switch block	Operating cycles	10 million		
• Solid-state compatible auxiliary switch block	Operating cycles	5 million		
Electrical endurance				
For contact endurance of the main contacts, see page 3/17 .				
Rated insulation voltage U_i (pollution degree 3)	V	690		
Rated impulse withstand voltage U_{imp}	kV	6		
Protective separation between the coil and the main contacts acc. to IEC 60947-1, Appendix N	V	400		
Mirror contacts				
A mirror contact is an auxiliary NC contact that cannot be closed simultaneously with an NO main contact.				
• 3RT201., 3RT231. (removable auxiliary switch block)				
Yes, this applies to both the basic unit as well as to between the basic unit and the mounted auxiliary switch block acc. to IEC 60947-4-1, Appendix F				
• 3RT201., 3RT231. (permanently mounted auxiliary switch block)				
Yes, acc. to IEC 60947-4-1, Appendix F, and SUVA				
• 3RH2919-.NF.. solid-state compatible auxiliary switch blocks				
Have no mirror contact for size S00				
Ambient temperature				
• During operation	°C	-25 ... +60		
• During storage	°C	-55 ... +80		
Degree of protection acc. to IEC 60947-1, Appendix C				
IP20				
Touch protection acc. to EN 50274				
Finger-safe				
Shock resistance rectangular pulse				
• AC operation	g/ms	6.7/5 and 4.2/10		7.3/5 and 4.7/10
• DC operation	g/ms	6.7/5 and 4.2/10		7.3/5 and 4.7/10
Shock resistance sine pulse				
• AC operation	g/ms	10.5/5 and 6.6/10		11.4/5 and 7.3/10
• DC operation	g/ms	10.5/5 and 6.6/10		11.4/5 and 7.3/10
Conductor cross-sections				
For conductor cross-sections, see page 3/23 .				
Short-circuit protection				
Main circuit				
• Fuse links, operational class gG: LV HRC, type 3NA; DIAZED, type 5SB; NEOZED, type 5SE according to IEC 60947-4-1/EN 60947-4-1				
- Type of coordination "1"	A	35	50	
- Type of coordination "2"	A	20	25	
- Weld-free ²⁾	A	10	10	
• Miniature circuit breakers (up to 230 V) with C characteristic Short-circuit current 1 kA, type of coordination "1"	A	10	10	
Auxiliary circuit				
Short-circuit test acc. to IEC 60947-5-1/EN 60947-5-1				
• with fuse links of operational class gG: DIAZED, type 5SB; NEOZED, type 5SE with short-circuit current $I_k = 1$ kA	A	10		
• with 230 V miniature circuit breakers, C characteristic with short-circuit current $I_k = 400$ A	A	6		
Short-circuit protection for contactors with overload relays				
See Configuration Manual "Configuring SIRIUS Innovations", http://support.automation.siemens.com/WW/view/en/39714188.				
Short-circuit protection for fuseless load feeders				
See Chapter 8 "Load Feeders and Motor Starters for Use in the Control Cabinet" → "SIRIUS 3RA2 Load Feeders"				

1) Dimensions for devices with screw terminals / spring-type terminals.

2) Test conditions according to IEC 60947-4-1.



Power Contactors for Switching Motors

SIRIUS 3RT20 contactors, 3-pole, up to 37 kW

Type			3RT2015, 3RT2016	3RT2017, 3RT2018
Size			S00	S00
Control				
Solenoid coil operating range				
• AC operation	50 Hz		0.8 ... 1.1 × U_s	
	60 Hz		0.85 ... 1.1 × U_s	
• DC operation	Up to 50 °C		0.8 ... 1.1 × U_s	
	Up to 60 °C		0.85 ... 1.1 × U_s	
Power consumption of the solenoid coils (for cold coil and 1.0 × U_s)				
• AC operation, 50/60 Hz, standard version				
- Closing	VA		27/24.3	37/33
- P.f.			0.8/0.75	0.8/0.75
- Closed	VA		4.2/3.3	5.7/4.4
- P.f.			0.25/0.25	0.25/0.25
• AC operation, 50 Hz, for USA/Canada				
- Closing	VA		26.4	36
- P.f. for closing			0.81	0.8
- Closed	VA		4.4	5.9
- P.f. for closed			0.24	0.24
• AC operation, 60 Hz, for USA/Canada				
- Closing	VA		31.7	43
- P.f. for closing			0.81	0.8
- Closed	VA		4.8	6.5
- P.f. for closed			0.25	0.25
• DC operation (closing = closed)	W		4	4
Permissible residual current of the electronics (with 0 signal)				
• AC operation			< 3 mA × (230 V/ U_s) ¹⁾	< 4 mA × (230 V/ U_s) ¹⁾
• DC operation			< 10 mA × (24 V/ U_s) ¹⁾	
Operating times ²⁾				
Total break time = Opening delay + Arcing time				
• AC operation for 0.8 ... 1.1 × U_s	Closing delay	ms	9 ... 35	8 ... 33
	Opening delay	ms	3.5 ... 14	4 ... 15
• DC operation for 0.85 ... 1.1 × U_s	Closing delay	ms	30 ... 100	30 ... 100
	Opening delay	ms	7 ... 13	7 ... 13
• Arcing time		ms	10 ... 15	10 ... 15
Operating times for 1.0 × U_s ²⁾				
• AC operation	Closing delay	ms	9.5 ... 24	9 ... 22
	Opening delay	ms	4 ... 14	4.5 ... 15
• DC operation	Closing delay	ms	35 ... 50	35 ... 50
	Opening delay	ms	7 ... 12	7 ... 12

¹⁾ The 3RT2916-1GA00 additional load module is recommended for higher residual currents.

²⁾ The OFF-delay of the NO contact and the ON-delay of the NC contact are increased if the contactor coils are attenuated against voltage peaks (noise suppression diode 6 to 10 times; diode assembly 2 to 6 times, suppressor diode +1 ms to 5 ms; varistor +2 ms to 5 ms).

Type			3RT2015	3RT2016	3RT2017	3RT2018
Size			S00	S00	S00	S00
Main circuit						
Load rating with AC						
Utilization category AC-1, Switching resistive loads						
• Rated operational current I_e	At 40 °C up to 690 V	A	18	22	22	22
	At 60 °C up to 690 V	A	16	20	20	20
• Rated power for AC loads ¹⁾	230 V	kW	6	7.5	7.5	7.5
P.f. = 0.95 (at 60 °C)	400 V	kW	10.5	13	13	13
	690 V	kW	18	22	22	22
• Minimum conductor cross-section for loads with I_e	At 40 °C	mm ²	2.5	4	4	4
	At 60 °C	mm ²	2.5	2.5	2.5	2.5
Utilization categories AC-2 and AC-3						
• Rated operational currents I_e	Up to 400 V	A	7	9	12	16
	440 V	A	7	9	11	14
	500 V	A	6	7.7	9.2	12.4
	690 V	A	4.9	6.7	6.7	8.9
• Rated power for slipping or squirrel-cage motors at 50 and 60 Hz	At 230 V	kW	1.5	2.2	3	4
	400 V	kW	3	4	5.5	7.5
	690 V	kW	4	5.5	5.5	7.5
Thermal load capacity	10 s current ²⁾	A	56	72	96	128
Power loss per conducting path	At I_e /AC-3	W	0.42	0.7	1.24	2.2
Utilization category AC-4 (for $I_a = 6 \times I_e$)³⁾						
• Maximum values:						
- Rated operational current I_e	Up to 400 V	A	6.5	8.5	8.5	11.5
- Rated power for squirrel-cage motors with 50 Hz and 60 Hz	Up to 400 V	A	3	4	4	5.5
• The following applies to a contact endurance of about 200 000 operating cycles:						
- Rated operational currents I_e	Up to 400 V	A	2.6	4.1	4.1	5.5
	690 V	A	1.8	3.3	3.3	4.4
- Rated power for squirrel-cage motors with 50 Hz and 60 Hz	At 230 V	kW	0.67	1.1	1.1	1.5
	400 V	kW	1.15	2	2	2.5
	690 V	kW	1.15	2.5	2.5	3.5

1) Industrial furnaces and electric heaters with resistance heating, etc. (increased power consumption on heating up has been taken into account).

2) According to IEC 60947-4-1. Rated values for various start-up conditions, see Chapter 7, "Protection Equipment" → "Overload Relays".

3) These data also apply to 3RT2516 and 3RT2517 (2 NO + 2 NC) up to a rated operational voltage of 400 V.



Power Contactors for Switching Motors

SIRIUS 3RT20 contactors, 3-pole, up to 37 kW



Type		3RT2015	3RT2016	3RT2017	3RT2018
Size		S00	S00	S00	S00
Main circuit					
Load rating with DC					
Utilization category DC-1, switching resistive loads ($L/R \leq 1$ ms)					
• Rated operational currents I_e (at 60 °C)					
- 1 conducting path	Up to 24 V A	15	20		
	60 V A	15	20		
	110 V A	1.5	2.1		
	220 V A	0.6	0.8		
	440 V A	0.42	0.6		
	600 V A	0.42	0.6		
- 2 conducting paths in series	Up to 24 V A	15	20		
	60 V A	15	20		
	110 V A	8.4	12		
	220 V A	1.2	1.6		
	440 V A	0.6	0.8		
	600 V A	0.5	0.7		
- 3 conducting paths in series	Up to 24 V A	15	20		
	60 V A	15	20		
	110 V A	15	20		
	220 V A	15	20		
	440 V A	0.9	1.3		
	600 V A	0.7	1		
Utilization category DC-3/DC-5, shunt-wound and series-wound motors ($L/R \leq 15$ ms)					
• Rated operational currents I_e (at 60 °C)					
- 1 conducting path	Up to 24 V A	15	20		
	60 V A	0.35	0.5		
	110 V A	0.1	0.15		
	220 V A	--			
	440 V A	--			
	600 V A	--			
- 2 conducting paths in series	Up to 24 V A	15	20		
	60 V A	3.5	5		
	110 V A	0.25	0.35		
	220 V A	--			
	440 V A	--			
	600 V A	--			
- 3 conducting paths in series	Up to 24 V A	15	20		
	60 V A	15	20		
	110 V A	15	20		
	220 V A	1.2	1.5		
	440 V A	0.14	0.2		
	600 V A	0.14	0.2		
Switching frequency					
Switching frequency z in operating cycles/hour					
Contactors without overload relays					
• No-load switching frequency	AC/DC	h ⁻¹	10 000		
• Switching frequency z during rated operation ¹⁾					
- $I_e/AC-1$	At 400 V	h ⁻¹	1 000		
- $I_e/AC-2$	At 400 V	h ⁻¹	750		
- $I_e/AC-3$	At 400 V	h ⁻¹	750		
- $I_e/AC-4$	At 400 V	h ⁻¹	250		
Contactors with overload relays					
• Mean value		h ⁻¹	15		

¹⁾ Dependence of the switching frequency z' on the operational current I' and operational voltage U' :
 $z' = z \times (I_e/I') \times (400 V/U')^{1.5} \times 1/h$

Type		3RT2023 ... 3RT2025	3RT2026 ... 3RT2028	3RT202. -NB3	3RT202. -NF3..	3RT202. -NP3
Size		S0	S0	S0	S0	S0
Control						
Type of operating mechanism		AC or DC		UC (AC/DC)		
Solenoid coil operating range		AC/DC	0.8 ... 1.1 x U_s		0.7 ... 1.3 x U_s ¹⁾	
Power consumption of the solenoid coils (for cold coil and 1.0 x U_s)						
• AC operation, 50 Hz, standard version						
- Closing	VA	65	77	6.6	11.9	12.7
- P.f.		0.82	0.82	0.98	0.98	0.98
- Closed	VA	7.6	9.8	1.9	1.6	3.9
- P.f.		0.25	0.25	0.86	0.79	0.51
• AC operation, 50/60 Hz, standard version						
- Closing	VA	68/67	81/79	6.6/6.7	11.9/12.0	12.7/14.7
- P.f.		0.72/0.74	0.72/0.74	0.98/0.98	0.98/0.98	0.98/0.98
- Closed	VA	7.9/6.5	10.5/8.5	1.9/2.0	1.6/1.8	3.9/4.3
- P.f.		0.25/0.28	0.25/0.28	0.86/0.82	0.79/0.74	0.51/0.56
• AC operation, 50 Hz, for USA/Canada						
- Closing	VA	65	77	--	--	--
- P.f.		0.82	0.82	--	--	--
- Closed	VA	7.6	9.8	--	--	--
- P.f.		0.25	0.28	--	--	--
• AC operation, 60 Hz, for USA/Canada						
- Closing	VA	73	87	--	--	--
- P.f.		0.76	0.76	--	--	--
- Closed	VA	7.2	9.4	--	--	--
- P.f.		0.28	0.28	--	--	--
• DC operation (closing = closed)						
	W	5.9/5.9	5.9/5.9	5.9/1.4	10.2/1.3	14.3/1.9
Permissible residual current of the electronics (with 0 signal)						
• AC operation						
	mA	<6 mA x (230 V/ U_s)	<7 mA x (230 V/ U_s)			
• DC operation						
	mA	<16 mA x (24 V/ U_s)				
Operating times for 0.8 ... 1.1 x U_s²⁾						
Total break time = Opening delay + Arcing time						
• AC operation						
- Closing delay	ms	9 ... 38	8 ... 40	60 ... 80	50 ... 70	60 ... 80
- Opening delay	ms	4 ... 16	4 ... 16	30 ... 45	35 ... 45	35 ... 45
• DC operation						
- Closing delay	ms	50 ... 170	50 ... 170	60 ... 75	50 ... 70	50 ... 75
- Opening delay	ms	15 ... 17.5	15 ... 17.5	30 ... 45	35 ... 45	40 ... 50
• Arcing time						
	ms	10	10	10	10	10
Operating times for 1.0 x U_s²⁾						
• AC operation						
- Closing delay	ms	10 ... 18	10 ... 17	65 ... 80	50 ... 70	60 ... 80
- Opening delay	ms	4 ... 16	4 ... 16	30 ... 45	35 ... 45	30 ... 50
• DC operation						
- Closing delay	ms	55 ... 80	55 ... 80	60 ... 80	56 ... 70	60 ... 80
- Opening delay	ms	16 ... 17	16 ... 17	30 ... 45	35 ... 45	30 ... 50

1) The following applies to $U_{s \max} = 280$ V: Upper limit = 1.1 x $U_{s \max}$.

2) The OFF-delay of the NO contact and the ON-delay of the NC contact are increased if the contactor coils are attenuated against voltage peaks (varistor +2 ms to 5 ms, diode assembly: 2 to 6 times).

Type		3RT2035	3RT2036	3RT2037	3RT2038
Size		S2	S2	S2	S2
Conductor cross-sections (1 or 2 conductors connectable)					
Main conductors		 Screw terminals			
• Solid or stranded	mm ²	2 x (1 ... 35) ¹⁾ ; 1 x (1 ... 50) ¹⁾			
• Finely stranded with end sleeve	mm ²	2 x (1 ... 25) ¹⁾ ; 1 x (1 ... 35) ¹⁾			
• AWG cables, solid or stranded	AWG	2 x (18 ... 2) ¹⁾ ; 1 x (18 ... 1) ¹⁾			
• Terminal screws		Pozidriv size 2; Ø 5 ... 6			
- Tightening torque	Nm	3 ... 4.5 (27 ... 40 lb.in)			
Auxiliary and control conductors					
• Solid or stranded	mm ²	2 x (0.5 ... 1.5) ¹⁾ ; 2 x (0.75 ... 2.5) ¹⁾			
• Finely stranded with end sleeve	mm ²	2 x (0.5 ... 1.5) ¹⁾ ; 2 x (0.75 ... 2.5) ¹⁾			
• Solid or stranded AWG (2 x)	AWG	2 x (20 ... 16) ¹⁾ ; 2 x (18 ... 14) ¹⁾			
• Terminal screws		M3 (for Pozidriv size 2, Ø 5 ... 6)			
- Tightening torque	Nm	0.8 ... 1.2 (7 ... 10.3 lb.in)			
Auxiliary and control conductors²⁾		 Spring-type terminals			
• Operating devices ³⁾	mm	3.0 x 0.5			
• Solid or stranded	mm ²	2 x (0.5 ... 2.5)			
• Finely stranded with end sleeve	mm ²	2 x (0.5 ... 1.5)			
• Finely stranded without end sleeve	mm ²	2 x (0.5 ... 2.5)			
• AWG cables, solid or stranded	AWG	2 x (20 ... 14)			

1) If two different conductor cross-sections are connected to one clamping point, both cross-sections must lie in one of the ranges specified.

2) Max. external diameter of the cable insulation: 3.6 mm.
On spring-type terminals with conductor cross-sections $\leq 1 \text{ mm}^2$, an insulation stop must be used, see [Accessories](#), page 3/76.

3) Tool for opening the spring-type terminals;
see [Accessories](#), page 3/76.

Data for North America

Type		3RT2015	3RT2016	3RT2017	3RT2018
Size		S00	S00	S00	S00
☞ and Ⓜ rated data					
Rated insulation voltage	V AC	600			
Uninterrupted current , at 40 °C, open and enclosed	A	20			
Maximum horsepower ratings (from ☞ and Ⓜ approved values)					
• Rated power for three-phase motors at 60 Hz	At 200 V hp	1.5	2	3	3
	230 V hp	2	3	3	5
	460 V hp	3	5	7.5	10
	575 V hp	5	7.5	10	10
Short-circuit protection¹⁾ (contactor or overload relay)	At 600 V kA	5			
• Fuse CLASS J ²⁾	A	40			
• Circuit breakers with overload protection acc. to UL 489	A	50			
• Combination motor controllers type E according to UL 508 and UL 60947-4-1		Values on request.			
Overload relays					
• Type		3RU211 / 3RB301			
• Setting range	A	0.11 ... 16 / 0.1 ... 16			

1) For more information about short-circuit values, e.g. for protection against short-circuit currents, see the UL reports on the individual devices, www.siemens.com/sirius/manuals.

For the dimensioning of load feeders, see also the Configuration Manual "Configuring SIRIUS Innovations for UL", <http://support.automation.siemens.com/WW/view/en/53433538>.

2) Values for RK5 fuses on request.



Power Contactors for Switching Motors

SIRIUS 3RT20 contactors, 3-pole, up to 37 kW

Type		3RT2023	3RT2024	3RT2025	3RT2026	3RT2027	3RT2028
Size		S0	S0	S0	S0	S0	S0
and rated data							
Rated insulation voltage	V AC	600				600	
Uninterrupted current , at 40 °C, open and enclosed	A	35				42	
Maximum horsepower ratings (from and approved values)							
• Rated power for three-phase motors at 60 Hz	At 200 V hp 230 V hp 460 V hp 575 V hp	2 3 5 7.5	3 3 7.5 10	3 5 10 15	5 7.5 15 20	10 10 20 25	10 10 25 25
Short-circuit protection¹⁾ (contactor or overload relay)							
• Fuse CLASS J ²⁾	A	125				150	
• Circuit breakers with overload protection acc. to UL 489	A	70				100	
• Combination motor controllers type E according to UL 508 and UL 60947-4-1	At 480 V Type At 600 V Type	3RV202 Values on request.					
Overload relays							
• Type		3RU212 / 3RB302					
• Setting range	A	1.8 ... 40 / 0.1 ... 40					

¹⁾ For more information about short-circuit values, e.g. for protection against short-circuit currents, see the UL reports on the individual devices, www.siemens.com/sirius/manuals.
For the dimensioning of load feeders, see also the Configuration Manual "Configuring SIRIUS Innovations for UL", <http://support.automation.siemens.com/WW/view/en/53433538>.

²⁾ Values for RK5 fuses on request.

Type		3RT2035	3RT2036	3RT2037	3RT2038
Size		S2	S2	S2	S2
and rated data					
Rated insulation voltage	V AC	600			
Uninterrupted current , at 40 °C, open and enclosed	A	55	60	80	90
Maximum horsepower ratings (from and approved values)					
• Rated power for three-phase motors at 60 Hz	At 200/208 V hp 230/240 V hp 460/480 V hp 575/600 V hp	10 15 30 40	15 15 40 50	20 20 50 50	20 25 50 60
Short-circuit protection¹⁾ (contactor or overload relay)					
• RK5 fuse	A	150	200	250	250
• Circuit breakers with overload protection acc. to UL 489	At 480 V Type A kA	3RV1742 50 50 60 70 Values on request.			
	At 600 V Type A kA	3RV1742 40 50 50 60 Values on request.			
Overload relays					
• Type		Thermal / electronic 3RU213 / 3RB303			
• Setting range	A	11 ... 80 / 12 ... 80			

¹⁾ For more information about short-circuit values, e.g. for protection against short-circuit currents, see the UL reports on the individual devices, www.siemens.com/sirius/manuals.

For the dimensioning of load feeders, see also the Configuration Manual "Configuring SIRIUS Innovations for UL", <http://support.automation.siemens.com/WW/view/en/53433538>.

Type		3RT201	3RT202, 3RT203	
Size		S00	S0, S2	
		Integrated or mountable auxiliary switch block	Integrated	Mountable auxiliary switch block
and rated data of the auxiliary contacts				
Rated voltage	V AC	600		600
Switching capacity		A 600, Q 600	A 600, P 600	A 600, Q 600
Uninterrupted current	At 240 V AC A	10		10

Power Contactors for Switching Motors

SIRIUS 3RT20 contactors, 3-pole, up to 37 kW

DC operation

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



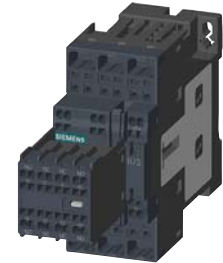
3RT202.-1B.40



3RT202.-2B.40



3RT202.-1B.44

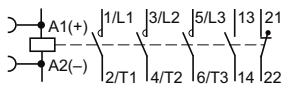


3RT202.-2B.44

Rated data		Auxiliary contacts	Rated control supply voltage	DT	Screw terminals	DT	Spring-type terminals
AC-2 and AC-3, T_U : Up to 60 °C		AC-1, T_U : 40 °C	U_s				
Operational current I_e up to 400 V	Rating ¹⁾ of three-phase motors at 50 Hz and up to 400 V	Operational current I_e up to 690 V					
A	kW	A			Article No.	Price per PU	Article No.
							Price per PU

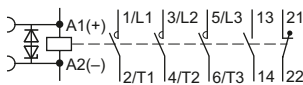
For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S0²⁾



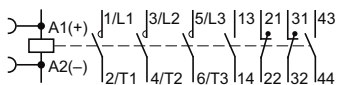
9	4	40	11	1	1	24		▶	3RT2023-1BB40	▶	3RT2023-2BB40
12	5.5	40	11	1	1	24		▶	3RT2024-1BB40	▶	3RT2024-2BB40
17	7.5	40	11	1	1	24		▶	3RT2025-1BB40	▶	3RT2025-2BB40
25	11	40	11	1	1	24		▶	3RT2026-1BB40	▶	3RT2026-2BB40
32	15	50	11	1	1	24		▶	3RT2027-1BB40	▶	3RT2027-2BB40
38	18.5	50	11	1	1	24		▶	3RT2028-1BB40	▶	3RT2028-2BB40

With coil circuit plugged in (diode assembly)



9	4	40	11	1	1	24	B	▶	3RT2023-1FB40	▶	3RT2023-2FB40
12	5.5	40	11	1	1	24		▶	3RT2024-1FB40	▶	3RT2024-2FB40
17	7.5	40	11	1	1	24		▶	3RT2025-1FB40	▶	3RT2025-2FB40
25	11	40	11	1	1	24		▶	3RT2026-1FB40	▶	3RT2026-2FB40
32	15	50	11	1	1	24		▶	3RT2027-1FB40	▶	3RT2027-2FB40
38	18.5	50	11	1	1	24		▶	3RT2028-1FB40	▶	3RT2028-2FB40

With mounted auxiliary switch block (removable)³⁾



9	4	40	22	2	2	24		▶	3RT2023-1BB44	▶	3RT2023-2BB44
12	5.5	40	22	2	2	24		▶	3RT2024-1BB44	▶	3RT2024-2BB44
17	7.5	40	22	2	2	24		▶	3RT2025-1BB44	▶	3RT2025-2BB44
25	11	40	22	2	2	24		▶	3RT2026-1BB44	▶	3RT2026-2BB44
32	15	50	22	2	2	24		▶	3RT2027-1BB44	▶	3RT2027-2BB44
38	18.5	50	22	2	2	24		▶	3RT2028-1BB44	▶	3RT2028-2BB44

For online configurator, see www.siemens.com/sirius/configurators.

1) Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.

2) The 3RT20 contactors are also available with ring terminal lug connection. Please contact your local Siemens representative for information about these special versions.

3) Article number for the auxiliary switch block (removable): 3RH2911-.HA11.

Other voltages according to page 3/50 on request.

For accessories, see page 3/59.