

Technical specifications

Short-circuit protection with fuses for motor feeders with short-circuit currents up to 50 kA and 690 V.
For overload relays see Protection Equipment: Overload Relays -> 3RB2 Solid-State Overload Relays.

Rating	Sizes of contactors K1-K3-K2	Rated motor current	Overload relay	Setting range	Permissible back-up fuses for starters, comprising contactor assemblies and overload relays.					
				(the overload relays must be set to 0.58 times the rated motor current)	Single or double infeed ¹⁾					
					Fuse links					
					LV HRC	Type 3NA	LV HRC TYPE 3ND	®	British	
					DIAZED	Type 5SB	Operational class aM	listed fuses CLASS RK5/L	Standard Fuses BS88	
					NEOZED	Type 5SE				
					gL/gG operational class					
					Type of coordination		Type of coordination		Type of coordination	
kW		A	Type	A	"1"	"2"	"2"	A	"1"	"2"
					A	A	A		A	A
5.5	S00-S00-S00	12	3RU11 16-1HB0	5.5 ... 8	35	20	10	30	35	20
7.5	S00-S00-S00	16	3RU11 16-1JB0	7 ... 10	35	20	16	40	35	20
11	S0-S0-S0	22	3RU11 26-4AB0	11 ... 16	63	25	20	60	63	25
15	S0-S0-S0	29	3RU11 26-4BB0	14 ... 20	100	35	20	80	100	35
18.5	S0-S0-S0	35	3RU11 26-4DB0	20 ... 25	100	35	20	100	100	35
22	S2-S2-S0	41	3RU11 36-4EB0	22 ... 32	125	63	35	125	125	63
30	S2-S2-S0	55	3RU11 36-4FB0	28 ... 40	125	63	50	150	125	63
37	S2-S2-S2	66	3RU11 36-4GB0	36 ... 45	125	63	50	175	125	63
45	S2-S2-S2	80	3RU11 36-4HB0	40 ... 50	160	80	50	200	160	80
55	S3-S3-S2	97	3RU11 46-4KB0	57 ... 75	250	125	63	300	250	125
75	S3-S3-S2	132	3RU11 46-4LB0	70 ... 90	250	160	80	350	250	160
90	S6-S6-S3	160	3RB20 56-1FC2	50 ... 200	355	315	160	450	355	250
110	S6-S6-S3	195	3RB20 56-1FC2	50 ... 200	355	315	160	450	355	250
132	S6-S6-S3	230	3RB20 56-1FC2	50 ... 200	355	315	160	500	355	315
160	S6-S6-S3	280	3RB20 56-1FC2	50 ... 200	355	315	200	500	355	315
200	S10-S10-S6	350	3RB20 66-1GC2	55 ... 250	500	400	250 ²⁾	700	500	400
250	S10-S10-S6	430	3RB20 66-1MC2	160 ... 630	500	400 ²⁾	315 ²⁾	800	500	400
315	S12-S12-S10	540	3RB20 66-1MC2	160 ... 630	630	500 ²⁾	400 ²⁾	1000	630	450 ²⁾
355	S12-S12-S10	610	3RB20 66-1MC2	160 ... 630	630	500 ²⁾	400 ²⁾	1000	630	450 ²⁾
400	S12-S12-S10	690	3RB20 66-1MC2	160 ... 630	630 ²⁾	500 ²⁾	400 ²⁾	1000	630 ²⁾	450 ²⁾
500	S12-S12-S10	850	3RB20 66-1MC2	160 ... 630	630 ²⁾	500 ²⁾	500 ²⁾	1200	630 ²⁾	500 ²⁾

¹⁾ The maximum rated motor current must not be exceeded.

²⁾ Only double infeed with separately fused feeder lines for line and delta contactor is possible because the maximum possible fuse value lies far below the rated motor current.

Starter	Sizes S..S..S.. Type 3RA... ..										
		00-00-00 14 15	00-00-00 14 16	0-0-0 14 23	0-0-0 14 25	2-2-0 14 34	2-2-2 14 35	2-2-2 14 36	3-3-2 14 44	3-3-2 14 45	

All technical specifications not mentioned in the table below are identical to those of the individual 3RT contactors and 3RU overload relays

Mechanical endurance		Operat- ing cycles	3 million								
Short-circuit protection without overload relay			1)								
Maximum rated current of the fuse											
Main circuit											
Fuse links, gL/gG											
LV HRC 3NA, DIAZED 5SB, NEOZED 5SE											
Single or double infeed											
- acc. to IEC 60947-4-1/ EN 60947-4-1	Type of coordination "1"	A	35	35	63	100	125	125	160	250	250
	Type of coordination "2"	A	20	20	25	35	63	63	80	125	160
Control circuit											
Fuse links, gL/gG		A	10 6 ²⁾ , if the auxiliary contact of the overload relay is connected in the contactor coil circuit								
DIAZED 5SB, NEOZED 5SE		A									
(short-circuit current $I_k \leq 1$ kA)											
Miniature circuit breaker with C characteristic		A	10 6 ²⁾ , if the auxiliary contact of the overload relay is connected in the contactor coil circuit								
		A									
Size of individual contactors	K1 line contactor	Type 3RT	10 15	10 17	10 24	10 26	10 34	10 35	10 36	10 44	10 45
	K3 delta contactor	Type 3RT	10 15	10 17	10 24	10 26	10 34	10 35	10 36	10 44	10 45
	K2 star contactor	Type 3RT	10 15	10 15	10 24	10 24	10 26	10 34	10 34	10 35	10 36
Unassigned auxiliary contacts of the individual contactors			3)								
Current-carrying capacity with reversing time up to 10 s											
Rated operational current I_e	at 400 V	A	12	17	25	40	65	80	86	115	150
	500 V	A	8.7	11.3	20.8	31.2	55.4	69.3	86	112.6	138.6
	690 V	A	6.9	9	20.8	22.5	53.7	69.3	69.3	98.7	138.6
Rated power for induction motors at 50 Hz and 60 Hz and	at 230 V	kW	3.3	4.7	7.2	12	20.4	25.5	27.8	37	49
	400 V	kW	5.8	8.2	12.5	21	35	44	48	65	85
	500 V	kW	5.3	6.9	13	20.5	38	48	60	80	98
	690 V	kW	5.8	7.5	18	20.4	51	66	67	97	136
	1000 V	kW	--	--	--	--	--	--	--	--	--
		h ⁻¹	15	15	15	15	15	15	15	15	15
Switching frequency with overload relay											
Current-carrying capacity with reversing time up to 15 s											
Rated operational current I_e	at 400 V	A	12	17	25	31	44	57	67	97	106
	500 V	A	8.7	11.3	20.8	31	44	57	67	97	106
	690 V	A	6.9	9	20.8	22.5	44	57	67	97	106
Rated power for induction motors at 50 Hz and 60 Hz and	at 230 V	kW	3.3	4.7	7.2	9.4	13.8	18.2	21.6	32	35
	400 V	kW	5.8	8.2	12.5	16.3	24	31.6	38	55	60
	500 V	kW	5.3	6.9	13	20.4	30	40	47	69	75
	690 V	kW	5.8	7.5	18	20.4	42	55	65	95	104
	1000 V	kW	--	--	--	--	--	--	--	--	--
		h ⁻¹	15	15	15	15	15	15	15	15	15
Switching frequency with overload relay											
Current-carrying capacity with reversing time up to 20 s											
Rated operational current I_e	at 400 V	A	12	17	25	28	39	51	57	85	92
	500 V	A	8.7	11.3	20.8	28	39	51	57	85	92
	690 V	A	6.9	9	20.8	22.5	39	51	57	85	92
Rated power for induction motors at 50 Hz and 60 Hz and	at 230 V	kW	3.3	4.7	7.2	8.5	12.2	16.3	18.4	28	30
	400 V	kW	5.8	8.2	12.5	14.7	21.3	28	32	48	52
	500 V	kW	5.3	6.9	13	18.4	26.7	35	40	60	65
	690 V	kW	5.8	7.5	18	20.4	37	49	55	83	90
	1000 V	kW	--	--	--	--	--	--	--	--	--
		h ⁻¹	15	15	15	15	15	15	15	15	15
Switching frequency with overload relay											

1) Short-circuit protection with overload relays, see Protection Equipment:
Overload Relays -> 3RB2Solid-State Overload Relays.

2) Up to $I_k < 0.5$ kA; ≤ 260 V.

3) [For circuit diagrams of the control circuit see page 3/236.](#)