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

Technical specifications

Contactor	Type Size		3RT13 16 S00	3RT13 17	3RT13 25 S0	3RT13 26	3RT13 36 S2	3RT13 44 S3	3RT13 46 S3
General data									
Permissible mounting position[1]									
Mechanical endurance		Operating cycles	30 million		10 million				
Electrical endurance at I_e/AC-1		Operating cycles	Approx. 0.5 million						
Rated insulation voltage U_i (degree of pollution 3)		V	690						
Permissible ambient temperature	During operation During storage	°C °C	-25 ... +60 -55 ... +80						
Degree of protection Acc. to EN 60947-1, Appendix C	Device Connection range		IP20				IP20 IP00		
Touch protection acc. to EN 50274			Finger-safe						
Short-circuit protection of contactors without overload relays									
Main circuit Fuse links, gL/gG operational class LV HRC, 3NA, DIAZED, 5SB, NEOZED, 5SE	Type of coordination "1"[1] Type of coordination "2"[1]	A A	35 20		63 25/35		160 63	250 125	250 160
- acc. to IEC 60947-4-1/ EN 60947-4-1	Weld-free	A	10		16		50	63	100
Control									
Magnetic coil operating range	AC at 50 Hz AC at 60 Hz		0.8 ... 1.1 x U_s 0.85 ...1.1 x U_s						
	DC at 50 °C DC at 60 °C		0.8 ... 1.1 x U_s 0.85 ... 1.1 x U_s						
	AC/DC				0.8 ... 1.1 x U_s				
Power consumption of the magnetic coils (when coil is cold and 1.0 x U_s)									
AC operation, 50 Hz	• Closing • P.f.	VA VA			61 0.82		145 0.79	270 0.68	
	• Closed • P.f.	VA VA			7.8 0.24		12.5 0.36	22 0.27	
AC operation, 50/60 Hz	• Closing • P.f.	VA	26.5/24.3 0.79/0.75		64/63 0.82/0.74		170/155 0.76/0.72	298/274 0.72/0.62	
	• Closed • P.f.	VA	4.4/3.4 0.27/0.27		8.4/6.8 0.24/0.28		15/11.8 0.35/0.38	27/20 0.29/0.31	
DC operation	• Closing = Closed	W	3.3		5.6		13.3	15	
Operating times for 0.8 ... 1.1 x U_s[2] Total break time = Opening delay + Arcing time									
• DC operation	Closing delay Opening delay	ms ms	25 ... 100 7 ... 10		30 ... 90 13 ... 40		50 ... 110 15 ... 30	110 ... 200 14 ... 20	
• AC operation	Closing delay Opening delay	ms ms	8 ... 35 4 ... 30		6 ... 30 13 ... 25		4 ... 35 10 ... 30	20 ... 50 10 ... 25	
• Arcing time		ms	10 ... 15		10 ... 15		10 ... 15	10 ... 15	
Main circuit									
AC capacity									
Utilization category AC-1, switching resistive loads									
Rated operational currents I_e	at 40 °C, up to 690 V at 60 °C, up to 690 V	A A	18 16	22 20	35 30	40 35	60 55	110 100	140 120
Rated power for AC loads P.f. = 0.95 (at 40 °C)	at 230 V 400 V	kW kW	7 12	8.5 14.5	12.5 22	15 26	23 39	42 72	53 92
Minimum conductor cross-section for loads with I_e	at 40 °C at 60 °C	mm² mm²	2.5 2.5	2.5 2.5	10 10	10 10	16 16	50 50	50 50
Utilization category AC-2 and AC-3									
Rated operational currents I_e	at 60°C, up to 400 V	A	9	12	17	25	26	--	--
Rated power of slipring or squirrel-cage motors at 50 Hz and 60 Hz	at 230 V 400 V	kW kW	3 4	3 5.5	4 7.5	5.5 11	5.5 11	-- --	-- --

[1] In accordance with the corresponding 3-pole 3RT1 contactors.

[2] With size S00, DC operation: Operating times at 0.85 ... 1.1 x U_s.

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

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

Contactor	Type Size			3RT13 16 S00	3RT13 17	3RT13 25 S0	3RT13 26
Main circuit							
DC capacity							
Utilization category DC-1, switching resistive loads (*L/R* ≤ 1ms)							
Rated operational currents I_e (at 40 °C)							
• 1 conducting path	up to 24 V	A		18	22	35	
	60 V	A		18	22	20	
	110 V	A		2.1	2.1	4.5	
	220 V	A		0.8	0.8	1	
	440 V	A		0.6	0.6	0.4	
• 2 conducting paths in series	up to 24 V	A		18	22	35	
	60 V	A		18	22	35	
	110 V	A		12	12	35	
	220 V	A		1.6	1.6	5	
	440 V	A		0.8	0.8	1	
• 3 conducting paths in series	up to 24 V	A		18	22	35	
	60 V	A		18	22	35	
	110 V	A		18	22	35	
	220 V	A		18	22	35	
	440 V	A		1.3	1.3	2.9	
• 4 conducting paths in series	up to 24 V	A		18	22	35	
	60 V	A		18	22	35	
	110 V	A		18	22	35	
	220 V	A		18	22	35	
	440 V	A		1.3	1.3	2.9	
Utilization category DC-3/DC-5 **Shunt-wound and series-wound motors (*L/R* ≤ 15 ms)**							
Rated operational currents I_e (at 40 °C)							
• 1 conducting path	up to 24 V	A		18	20	20	
	60 V	A		0.5	0.5	5	
	110 V	A		0.15	0.15	2.5	
	220 V	A		--	--	1	
	440 V	A		--	--	0.09	
• 2 conducting paths in series	up to 24 V	A		18	20	35	
	60 V	A		5	5	35	
	110 V	A		0.35	0.35	15	
	220 V	A		--	--	3	
	440 V	A		--	--	0.27	
• 3 conducting paths in series	up to 24 V	A		18	20	35	
	60 V	A		18	20	35	
	110 V	A		18	20	35	
	220 V	A		1.5	1.5	10	
	440 V	A		0.2	0.2	0.6	
• 4 conducting paths in series	up to 24 V	A		18	20	35	
	60 V	A		18	20	35	
	110 V	A		18	20	35	
	220 V	A		1.5	1.5	35	
	440 V	A		0.2	0.2	0.6	
Maximum breaking current AC							
e.g. for isolation of load distributions • 50/60 Hz	400 V	A		72	96	200	

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

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

Contactor	Type Size		**3RT13 36** **S2**	**3RT13 44** **S3**	**3RT13 46** **S3**
Main circuit					
DC capacity					
Utilization category DC-1, switching resistive loads (*L/R* ≤ 1ms)					
Rated operational currents I_e (at 40 °C)					
• 1 conducting path	up to 24 V	A	50	70	80
	60 V	A	23	23	60
	110 V	A	4.5	4.5	9
	220 V	A	1	1	2
	440 V	A	0.4	0.4	0.6
• 2 conducting paths in series	up to 24 V	A	50	70	80
	60 V	A	45	70	80
	110 V	A	45	70	80
	220 V	A	5	5	10
	440 V	A	1	1	1.8
• 3 conducting paths in series	up to 24 V	A	50	70	80
	60 V	A	45	70	80
	110 V	A	45	70	80
	220 V	A	45	70	80
	440 V	A	2.9	2.9	4.5
• 4 conducting paths in series	up to 24 V	A	50	70	80
	60 V	A	45	70	80
	110 V	A	45	70	80
	220 V	A	45	70	80
	440 V	A	2.9	2.9	4.5
Utilization category DC-3/DC-5 **Shunt-wound and series-wound motors (*L/R* ≤ 15 ms)** **Rated operational currents I_e** (at 40 °C)					
• 1 conducting path	up to 24 V	A	20	20	20
	60 V	A	6	6	6.5
	110 V	A	2.5	2.5	2.5
	220 V	A	1	1	1
	440 V	A	0.1	0.15	0.15
• 2 conducting paths in series	up to 24 V	A	45	70	80
	60 V	A	45	70	80
	110 V	A	25	70	80
	220 V	A	5	7	7
	440 V	A	0.27	0.42	0.42
• 3 conducting paths in series	up to 24 V	A	45	70	80
	60 V	A	45	70	80
	110 V	A	45	70	80
	220 V	A	25	35	35
	440 V	A	0.6	0.8	0.8
• 4 conducting paths in series	up to 24 V	A	45	70	80
	60 V	A	45	70	80
	110 V	A	45	70	80
	220 V	A	45	70	80
	440 V	A	0.6	0.8	0.8
Maximum breaking current AC					
e.g. for isolation of load distributions					
• 50/60 Hz	400 V	A	400	520	760