

Technical specifications

All technical specifications not mentioned in the table below are identical to those of the 3RT10 17 contactors for size S00, to those of the 3RT10 26 contactors for size S0 and to those of the 3RT10 45 contactors for size S3.




Contactors	Type Size		3RT16 17-.A..3 S00	3RT16 27-.A..1 S0	3RT16 47-.A..1 S3
Capacitor rating at rated power (utilization category AC-6b)	230 V, 50/60 Hz kvar		3 ... 7.5	3.5 ... 15	3.5 ... 30
	400 V, 50/60 Hz kvar		5 ... 12.5	6 ... 25	5 ... 50
	525 V, 50/60 Hz kvar		7.5 ... 15	7.8 ... 30	7.5 ... 60
	690 V, 50/60 Hz kvar		10 ... 21	10 ... 42	10 ... 84
Auxiliary contacts mounted (unassigned)			1 NO + 1 NC	1 NO	
Auxiliary contacts mountable (lateral), not for sizes S00 and S0			--		2 NC + 2 NO or 1 NO + 1 NC
Operating range of the magnetic coils			0.8 ... 1.1 x U_s		
Max. switching frequency	h ⁻¹		180	100	
Electrical endurance	Oper- ating cycles		> 250000	> 150000	> 100000
Ambient temperature	°C		60		
Regulations			IEC 60947/EN 60947 (VDE 0660)		
Short-circuit protection			1.6 ... 2.2 x I_e		
Conductor cross-sections					
Screw terminals (1 or 2 conductors can be connected)	Main conductors				
	• Solid	mm ²	2 x (0.5 ... 1.5); 2 x (0.75 ... 2.5) Acc. to IEC 60947; Max. 2 x (1 ... 4)	2 x (1 ... 2.5); 2 x (2.5 ... 6) Acc. to IEC 60947; Max. 1 x 10 ¹⁾	
	• Finely stranded with end sleeve	mm ²	2 x (0.5 ... 1.5); 2 x (0.75 ... 2.5)	2 x (1 ... 2.5); 2 x (2.5 ... 6) ¹⁾	
	• AWG conductors				
	- Solid	AWG	2 x (20 ... 16)	2 x (16 ... 12)	
	- Solid or stranded	AWG	2 x (18 ... 14)	2 x (14 ... 10)	
	- Stranded	AWG	1 x 12	1 x 8	
	• Terminal screws		M3	M4 (Pozidriv size 2)	
	- Tightening torque	Nm lb.in	0.8 ... 1.2 7 ... 10.3	2 ... 2.5 18 ... 22	

¹⁾ 3RV19 25-5AB infeed terminal for 16 mm².

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

3RT16 Capacitor Contactors

12.5 ... 50 kvar

Contactor	Type	3RT16 17-.A..3	3RT16 27-.A..1	3RT16 47-.A..1
	Size	S00	S0	S3
Conductor cross-sections				
<div>Screw terminals</div> <div>(1 or 2 conductors can be connected)</div> <div>Front clamping point connected</div> <div></div>	Main conductors:			
	with box terminal			
	• Finely stranded with end sleeve	mm ²	--	2.5 ... 35
	• Finely stranded without end sleeve	mm ²	--	4 ... 50
	• Solid	mm ²	--	2.5 ... 16
<div>Rear clamping point connected</div> <div></div>	• Stranded	mm ²	--	4 ... 70
	• Ribbon cable conductors (number x width x circumference)	mm	--	6 x 9 x 0.8
	• AWG conductors, solid or stranded	AWG	--	10 ... 2/0
	• Finely stranded with end sleeve	mm ²	--	2.5 ... 50
	• Finely stranded without end sleeve	mm ²	--	10 ... 50
<div>Both clamping points connected</div> <div></div>	• Solid	mm ²	--	2.5 ... 16
	• Stranded	mm ²	--	10 ... 70
	• Ribbon cable conductors (number x width x circumference)	mm	--	6 x 9 x 0.8
	• AWG conductors, solid or stranded	AWG	--	10 ... 2/0
	• Finely stranded with end sleeve	mm ²	--	Max. 2 x 35
Connection for drilled copper bars ¹⁾	• Finely stranded without end sleeve	mm ²	--	Max. 2 x 35
	• Solid	mm ²	--	Max. 2 x 16
	• Stranded	mm ²	--	Max. 2 x 50
	• Ribbon cable conductors (number x width x circumference)	mm	--	2 x (6 x 9 x 0.8)
	• AWG conductors, solid or stranded	AWG	--	2 x (10 ... 1/0)
Without box terminal with cable lugs ²⁾	• Terminal screw		--	M6 (hex. socket, A/F 4)
	- Tightening torque	NM	--	4 ... 6
		lb. in	--	36 ... 53
	Max. width	mm	--	10
	• Finely stranded with cable lug	mm ²	--	10 ... 50 ³⁾
	• Stranded with cable lug	mm ²	--	10 ... 70 ³⁾
	• AWG conductors, solid or stranded	AWG	--	7 ... 1/0
	Auxiliary conductors:			
	• Solid	mm ²	2 x (0.5 ... 1.5) ⁴⁾ . 2 x (0.75 ... 2.5) ⁴⁾ According to IEC 60947; max. 2 x (1 ... 4)	2 x (0.5 ... 1.5) ⁴⁾ . 2 x (0.75 ... 2.5) ⁴⁾ according to IEC 60947; max. 2 x (0.75 ... 4)
	• Finely stranded with end sleeve	mm ²	2 x (0.5 ... 1.5) ⁴⁾ . 2 x (0.75 ... 2.5) ⁴⁾	
	• AWG conductors, solid or stranded	AWG	2 x (20 ... 16) ⁴⁾ . 2 x (18 ... 14) ⁴⁾ ; 1 x 12	
	• Terminal screw		M3	
Cage Clamp terminals	- Tightening torque	Nm	0.8 ... 1.2	
		lb.in	7 ... 10.3	
	Auxiliary conductors:			
	• Solid	mm ²	2 x (0.25 ... 2.5)	
	• Finely stranded with end sleeve	mm ²	2 x (0.25 ... 1.5)	
(1 or 2 conductors can be connected)	• Finely stranded without end sleeve	mm ²	2 x (0.25 ... 2.5)	
	• AWG conductors, solid or stranded	AWG	2 x (24 ... 14)	

1) If bars larger than 12 x 10 mm are connected, a 3RT19 46-4EA1 terminal cover is needed to comply with the phase clearance.

2) When connecting conductors which are larger than 25 mm², the 3RT19 46-4EA1 cover must be used to keep the phase clearance.

3) Only with crimped cable lugs according to DIN 46234. Cable lug max. 20 mm wide.

4) If two different conductor cross-sections are connected at one clamping point, then the two cross-sections must lie within the range quoted. If identical cross-sections are used, this restriction does not apply.