

3RP, 3RT19 Timing Relays

3RP15 timing relays in industrial enclosure, 22.5 mm

Technical specifications

Type		3RP15 05 3RP15 31 3RP15 32 3RP15 33	3RP15 11 3RP15 12 3RP15 13 3RP15 25 3RP15 55	3RP15 40	3RP15 60	3RP15 74 3RP15 76	3RP15 27
Rated insulation voltage Degree of pollution 3 Overvoltage category III	V AC	300; 500 for 3RP15 05-1BT10					
Operating range at excitation ¹⁾		0.85 ... 1.1 x U_s at AC. 0.8 ... 1.25 x U_s at DC; 0.95 ... 1.05 times rated frequency					
Rated power Power consumption at 230 V AC, 50 Hz	W VA	2 6		²⁾	6		1 1
Rated operational current I_e • AC-140, DC-13 • AC-15 at 24 ... 400 V, 50 Hz • DC-13 at - 24 V - 125 V - 250 V	A A A A A	-- ³⁾ 1 0.2 0.1					0.01 ... 0.6 -- -- -- --
Uninterrupted thermal current I_{th}	A	5					--
DIAZED protection ⁴⁾ gL/gG operational class	A	4					--
Switching frequency • When loaded with I_e 230 V AC • When loaded with 3RT10 16 contactor, 230 V AC	1/h 1/h	2500 5000					5000
Recovery time	ms	150			300	150	50
Minimum ON period	ms	35 ⁵⁾	--	200 ⁶⁾	--		
Residual current with non-conducting output	mA	--					5
Voltage drop with conducting output	VA	--					3.5
Short-time loading capacity	A	--					10 (up to 10 ms)
Setting accuracy with reference to scale value		Typical ±5 %					
Repeat accuracy		≤ ±1 %					
Mechanical endurance Operating cycles		30 x 10 ⁶					
Permissible ambient temperature During operation During storage	°C °C	-25 ... +60 -40 ... +85					
Degree of protection acc. to EN 60529		IP40 cover, IP20 terminals					
Connection type		Screw terminals					
• Terminal screw • Solid • Finely stranded with end sleeve • AWG cables, solid or stranded • Tightening torque	mm ² mm ² AWG Nm	M 3 (standard screwdriver, size 2 and Pozidriv 2) 1 x (0.5 ... 4) / 2 x (0.5 ... 2.5) 1 x (0.5 ... 2.5) / 2 x (0.5 ... 1.5) 2 x (20 ... 14) 0.8 ... 1.2					
Connection type		Spring-loaded terminals					
• Solid • Finely stranded, with end sleeves acc. to DIN 46228 • Finely stranded • AWG cables, solid or stranded	mm ² mm ² mm ² AWG	2 x (0.25 ... 1.5) 2 x (0.25 ... 1.5) 2 x (0.25 ... 1.5) 2 x (24 ... 16)					
Permissible		Any					
Shock resistance acc. to IEC 60068 for half-sine shock type	g/ ms	15/11					
Vibration resistance acc. to IEC 60068-2-6		10 ... 55 Hz: 0.35 mm					
Electromagnetic compatibility (EMC) Tests acc. to basic specification		EN 61000-6-2/EN 61000-6-4					

¹⁾ If nothing else is stated.

²⁾ Maximum inrush current 1A/100 ms.

³⁾ For 3RP15 05-.R: NC contact → $I_e = 1$ A.

⁴⁾ $I_k \geq 1$ kA weld-free according to IEC 60947-5-1.

⁵⁾ Minimum ON period with 3RP15 05-.BW30, 150 ms, until instantaneous contact has switched.

⁶⁾ For correct operation, observe minimum ON period.