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 with AC; 0.8 to 1.25 x U_s with DC; 0.95 ... 1.05 times rated frequency					
Rated power Power consumption at 230 V AC, 50 Hz		W VA	2 6		 2[2]	 6		1 1
Rated operational current I_e								
• AC-140, DC-13		A	--					0.01 ... 0.6
• AC-15 at 24 ... 400 V, 50 Hz		A	3[3]					--
• DC-13 at								
- 24 V		A	1					--
- 125 V		A	0.2					--
- 250 V		A	0.1					--
Uninterrupted thermal current I_{th}		A	5					
DIAZED fuse[4] gL/gG operational class		A	4					--
Switching frequency								
• When loaded with I_e 230 V AC		1/h	2500					5000
• When loaded with 3RT10 16 contactor, 230 V AC		1/h	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					100 x 10^6
Permissible ambient temperature	During operation During storage	°C °C	-25 ... +60 -40 ... +85					
Degree of protection according to EN 60529			IP40 cover, IP20 terminals					
Conductor cross-sections								
• Screw terminals (to connect 1 or 2 conductors); for standard screwdriver (size 2 and Pozidriv 2)	Solid	mm²	1 x (0.5 ... 4) 2 x (0.5 ... 2.5)					
	Finely stranded with end sleeve	mm²	1 x (0.5 ... 2.5) 2 x (0.5 ... 1.5)					
	AWG conductors, solid or stranded	AWG	2 x (20 ... 14)					
	Terminal screw		M 3.5					
	Tightening torque	Nm	0.8 ... 1.2					
• Spring-loaded terminals (to connect 1 or 2 conductors; for 22.5 mm timing relay use screwdriver with 3 mm blade or 8WA2 807 opening tool)	Solid	mm²	2 x (0.25 ... 1.5)					
	Finely stranded							
	• With end sleeve	mm²	2 x (0.25 ... 1)					
	• Without end sleeve	mm²	2 x (0.25 ... 1.5)					
	AWG conductors, solid or stranded	AWG	2 x (24 ... 16)					
Mounting position (permissible)			Any					
Shock resistance according to IEC 60068 for half-sine shock type		*g*/ms	15/11					
Vibration resistance according to IEC 60068-2-6		Hz/mm	10 ... 55/0.35					
Electromagnetic compatibility (EMC) Tests according 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 ≥ 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.