

3RP Timing Relays

3RP20 timing relays, 45 mm

Technical specifications

Type		3RP20 05 3RP20 25	
Rated insulation voltage Degree of pollution 3 Overvoltage category III		V AC	300
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	1 4
Rated operational current I _o • AC-15, at 24 ... 400 V, 50 Hz • DC-13 at - 24 V - 125 V - 250 V		A A A A	3 1 0.2 0.1
Uninterrupted thermal current I _{th}		A	5
DIAZED fuse ²⁾ gL/gG operational class		A	4
Switching frequency • When loaded with I _o 230 V AC • When loaded with 3RT10 16 contactor, 230 V AC		1/h 1/h	2500 5000
Recovery time		ms	150
Minimum ON period		ms	35
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 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 Finely stranded with end sleeve AWG conductors, solid or stranded Terminal screw Tightening torque • 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 Finely stranded • With end sleeve • Without end sleeve AWG conductors, solid or stranded		mm ² mm ² AWG Nm mm ² mm ² mm ² AWG	2 x (0.5 ... 1.5) ³⁾ 2 x (0.75 ... 2.5) ³⁾ 2 x (0.5 ... 1.5) ³⁾ 2 x (0.75 ... 2.5) ³⁾ 2 x (18 ... 14) M3 0.8 ... 1.2 2 x (0.25 ... 2.5) 2 x (0.25 ... 1.5) 2 x (0.25 ... 2.5) 2 x (24 ... 14)
Mounting positon (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) $I_k \geq 1$ kA, weld-free according to IEC 60947-5-1.

3) If two different conductor cross-sections are connected to one clamping point, both cross-sections must lie in the range specified. If identical cross-sections are used, this restriction does not apply.