

# 3RP, 3RT19 Timing Relays

## 3RP20 timing relays, 45 mm

### Technical specifications

Type		3RP20 05 3RP20 25
<b>Rated insulation voltage</b> Degree of pollution 3 Overvoltage category III	V AC	300
<b>Operating range at excitation</b> <sup>1)</sup>		0.85 ... 1.1 x <i>U</i> s at AC. 0.8 ... 1.25 x <i>U</i> s at DC; 0.95 ... 1.05 times rated frequency
<b>Rated power</b> Power consumption at 230 V AC, 50 Hz	W VA	1 4
<b>Rated operational current <i>I</i><sub>o</sub></b> • 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
<b>Uninterrupted thermal current <i>I</i><sub>th</sub></b>	A	5
<b>DIAZED protection</b> <sup>2)</sup> gL/gG operational class	A	4
<b>Switching frequency</b> • When loaded with <i>I</i> <sub>o</sub> 230 V AC • When loaded with 3RT10 16 contactor, 230 V AC	1/h 1/h	2500 5000
<b>Recovery time</b>	ms	150
<b>Minimum ON period</b>	ms	35
<b>Setting accuracy</b> with reference to scale value		Typical ±5 %
<b>Repeat accuracy</b>		≤ ±1 %
<b>Mechanical endurance</b> Operating cycles		30 x 10 <sup>6</sup>
<b>Permissible ambient temperature</b> During operation During storage	°C °C	-25 ... +60 -40 ... +85
<b>Degree of protection</b> acc. to EN 60529		IP40 cover, IP20 terminals
<b>Connection type</b>		<b>Screw terminals</b>
• Terminal screw • Solid • Finely stranded with end sleeve • AWG cables, solid or stranded • Tightening torque	mm <sup>2</sup> mm <sup>2</sup> 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
<b>Connection type</b>		<b>Spring-loaded terminals</b>
• Solid • Finely stranded, with end sleeves acc. to DIN 46228 • Finely stranded • AWG cables, solid or stranded	mm <sup>2</sup> mm <sup>2</sup> mm <sup>2</sup> AWG	2 x (0.25 ... 1.5) 2 x (0.25 ... 1.5) 2 x (0.25 ... 1.5) 2 x (24 ... 16)
<b>Permissible mounting positions</b>		Any
<b>Shock resistance</b> acc. to IEC 60068 for half-sine shock type	g/ms	15/11
<b>Vibration resistance</b> acc. to IEC 60068-2-6		10 ... 55 Hz: 0.35 mm
<b>Electromagnetic compatibility (EMC)</b> Tests acc. to basic specification		EN 61000-6-2/EN 61000-6-4

<sup>1)</sup> If nothing else is stated.

<sup>2)</sup> *I*<sub>k</sub> ≥ 1 kA, weld-free according to IEC 60947-5-1.

<sup>3)</sup> 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.