3RP Timing Relays

3RT19 timing relays for mounting onto contactors

Technical specifications

SRT19 16-2C	According to IEC 61812-1/DIN VDE				
Degree of pollution 3				3RT19 16-2D 3RT19 26-2C 3RT19 26-2D	3RT19 16-2F 3RT19 16-2G 3RT19 16-2L 3RT19 26-2E 3RT19 26-2F
Rated power	Degree of pollution 3	DIN VDE 0110	V AC	300	
Power consumption at 230 V AC, 50 Hz	Operating range of excitation				0.851.1 x <i>U</i> _s , 0.951.05 times rated frequency
AC-15 at 24 400 VAC, 50 Hz		łz			
AC			А		
• DC1 at 250 V	• DC-13 at 24 V		Α		1
Switching frequency	• DC-13 at 250 V				
• When loaded with f₂ 230 V AC 1/h 2500 2500 5000 2500 5000 • When loaded with \$\text{R17016 contactor}\$ 230 V AC 1/h 2500 5000 5000 5000 Recovery time ms 50 150 Minimum ON period ms 55 200 (OFF-delay, without surkilary voltage) 3871916-21: 35 (OFF-delay, with auxiliary voltage) 3871916-21: 35 (OFF-delay, with auxi	gL/gG operational class		А		4
Minimum ON period ms 35 200 (OFF-delay, without auxiliary voltage) SRT1916-2L: 35 (OFF-delay, without auxiliary voltage) SRT1916-2L: 35 (OFF-delay, with auxiliary voltage) STT1916-2L: 35 (OFF-delay, with auxiliary voltage) STT1	 When loaded with I_e 230 V AC 	or, 230 V AC			
Residual current (two-wire)	Recovery time		ms	50	150
(two-wire) VA ≤ 3.5	Minimum ON period		ms	35	without auxiliary voltage) 3RT1916-2L: 35 (OFF-delay,
Setting accuracy ≤±15 % Repeat accuracy ≤±1 % Mechanical endurance Operating cycles 100 x 10 ⁶ 10 x 10 ⁶ Permissible ambient temperature During operation During storage °C -25 +60 -40 +85 -40 +85 Degree of protection according to EN 60529 IP 40 cover IP 20 terminals IP 40 cover IP 20 terminals Conductor cross-sections Solid mm² 2 x (0.5 1.5) ¹⁾ 2 x (0.75 4) ¹⁾ - 41 / 2 x (0.75 4) ¹⁾ - 41 / 2 x (0.75 4) ¹⁾ - 41 / 2 x (0.75 4) ¹⁾ - 42 / 2 x (0.75 4) ¹⁾ - 42 / 2 x (0.75 4) ¹⁾ - 43 / 2 x (0.75 4) ¹	(two-wire) Voltage drop with conducting output			≤ 3.5	
with reference to upper limit of scale Repeat accuracy ≤± 1 % Mechanical endurance Operating cycles 100 x 10 ⁶ 10 x 10 ⁶ Permissible ambient temperature During operation puring storage °C -25 +60 +85 Degree of protection according to EN 60529 IP 40 cover IP 20 terminals Conductor cross-sections • Solid mm² 2 x (0.5 1.5)¹¹) 2 x (0.75 4)¹¹ • Finely stranded with end sleeve mm² 2 x (0.5 2.5) • Solid or stranded AWG 2x (18 14) Terminal screw M3 Tightening torque Nm 0.8 1.2 Permissible mounting position Any Shock resistance Half-sine according to IEC 60068-2-27 Hz/mm 10 55 / 0.35 EMC tests according to basic specification IEC 61000-6-2/IEC 61000-6-4	Short-time loading capacity		А	,	
Mechanical endurance Operating cycles 100 x 106 10 x 106 Permissible ambient temperature During operation During storage °C -25 +60 -40 +85 Degree of protection according to EN 60529 IP 40 cover IP 20 terminals Conductor cross-sections IP 20 (0.5 1.5) ¹) 2 x (0.75 4) ¹) 2 x (0.75 4) ¹ • Solid or stranded with end sleeve mm² 2 x (0.5 2.5) 2 x (0.5 2.5) • Solid or stranded AWG 2 x (18 14) Terminal screw M3 Tightening torque Nm 0.8 1.2 Permissible mounting position Any Shock resistance Half-sine according to IEC 60068-2-27 Hz/mm 15/11 Hz/man resistance according to IEC 60068-2-6 Hz/man 10 55 / 0.35 EMC tests according to basic specification IEC 61000-6-2/IEC 61000-6-4				≤± 15 %	
Permissible ambient temperature During operation During storage °C -25 +60 -40 +85 Degree of protection according to EN 60529 IP 40 cover IP 20 terminals Conductor cross-sections Solid mm² 2 x (0.5 1.5)¹¹ 2 x (0.75 4)¹¹ • Finely stranded with end sleeve mm² 2 x (0.5 2.5) 3 x (0.5 2.5) • Solid or stranded AWG 2 x (18 14) 3 x (18 14) Terminal screw M3 3 x (0.5 2.5) 4 x (0.5	<u> </u>				
During storage °C -40 +85 Degree of protection according to EN 60529 IP 40 cover IP 20 terminals Conductor cross-sections Solid mm² 2 × (0.5 1.5)¹¹ 2 × (0.75 4)¹¹ • Finely stranded with end sleeve mm² 2 × (0.5 2.5) 4 × (0.5 2.5) • Solid or stranded AWG 2 × (18 14) 4 × (18 14) Terminal screw M3 3 × (18 1.2) Permissible mounting position Any 5 × (18 1.2) Shock resistance Half-sine according to IEC 60068-2-27 B/ms 15/11 Hz/mm 10 55 / 0.35 10 55 / 0.35 EMC tests according to basic specification IEC 61000-6-2/IEC 61000-6-4 IEC 61000-6-2/IEC 61000-6-4	Mechanical endurance	Operating cycles		100 x 10 ⁶	10 x 10 ⁶
according to EN 60529 IP 20 terminals Conductor cross-sections	Permissible ambient temperature				
• Solid mm² 2 x (0.5 1.5)¹¹ 2 x (0.75 4)¹¹ • Finely stranded with end sleeve • Solid or stranded **MG 2 x (0.5 2.5) • Solid or stranded **MG 2 x (18 14) **Terminal screw **M3 **Tightening torque **Nm 0.8 1.2 **Permissible mounting position **Shock resistance Half-sine according to IEC 60068-2-27 **Vibration resistance according to IEC 60068-2-6 **EMC tests according to basic specification **Indication 1.5					
 Finely stranded with end sleeve Solid or stranded MWG 2 x (0.5 2.5) AWG 2 x (18 14) Terminal screw M3 Tightening torque Nm 0.8 1.2 Permissible mounting position Any Shock resistance Half-sine according to IEC 60068-2-27 Vibration resistance according to IEC 60068-2-6 EMC tests according to basic specification IEC 61000-6-2/IEC 61000-6-4 			mm²		
Tightening torque Permissible mounting position Shock resistance Half-sine according to IEC 60068-2-27 Vibration resistance according to IEC 60068-2-6 EMC tests according to basic specification Nm 0.8 1.2 Any 15/11 15/11 10 55 / 0.35 IEC 61000-6-2/IEC 61000-6-4				2 x (0.5 2.5)	
Permissible mounting position Any Shock resistance g/ms 15/11 Half-sine according to IEC 60068-2-27 Hz/mm 10 55 / 0.35 Vibration resistance according to IEC 60068-2-6 Hz/mm IEC 61000-6-2/IEC 61000-6-4 EMC tests according to basic specification					
Shock resistance Half-sine according to IEC 60068-2-27 Vibration resistance according to IEC 60068-2-6 Hz/mm 10 55 / 0.35 EMC tests according to basic specification	Tightening torque		Nm	0.8 1.2	
Half-sine according to IEC 60068-2-27 Vibration resistance according to IEC 60068-2-6 EMC tests according to basic specification Hz/mm 10 55 / 0.35 IEC 61000-6-2/IEC 61000-6-4	Permissible mounting position			Any	
according to IEC 60068-2-6 EMC tests according to basic specification IEC 61000-6-2/IEC 61000-6-4		7	g/ms	15/11	
according to basic specification			Hz/mm	10 55 / 0.35	
Overvoltage protection Varistor Integrated into timing relay Integrated into 3RT19 16				IEC 61000-6-2/IEC 61000-6-4	
	Overvoltage protection	Varistor		Integrated into timing relay	Integrated into 3RT19 16

¹⁾ 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.