

Technical data

SLIM RELAYS SSR & SER, Electromagnetic and solid

Table 1: Technical data

	SER1; Contact data	SSR1; Output circuit - Triac
Number and type of contacts	1 CO	1 NO
Contact material	AgSnO2	-
Rated / max. switching voltage AC	400 V AC / 250 V DC	400 V AC / 440 V AC
Min. switching voltage	10 V AC / DC	20 V AC
Rated load (capacity)		
AC1	6 A / 250 V AC	1,2 A / 400 V AC
DC1	6 A / 24 V DC; 0,15 A / 250 V DC	-
Min. switching current	100 mA	10 mA
Max. inrush current / Max. non-repeat surge current	10 A (t=20 ms)	30 A (t=20 ms)
Rated current	6 A	1,2 A
Max. breaking capacity AC1	1 500 VA	-
Min. breaking capacity	1 W	-
Contact resistance	≤100 mΩ 100 mA, 24 V	-
Max. operating frequency (cycles/hour)		
• at rated load AC1	360	-
• no load	72 000	-
I ² t for fusing	-	5,1 A ² s (t=1-10 ms)
di/dt	-	50 A/μs
dV/dt	-	40 V/μs
Input circuit		
Rated voltage AC: 50/60 Hz AC/DC	24 V; 230 V	
Must release voltage / Turn-off voltage	AC: ≥ 0,2 Un DC: ≥ 0,1 Un	
Must operate voltage	AC & DC: ≤ 0,8 Un	-
Rated power consumption AC/DC	0,3 ... 1,6 VA / 0,3 ... 1,6 W	0,3 VA / 0,3 W 24 V AC/DC
AC/DC	-	1,6 VA / 1,6 W 230 V AC/DC
Insulation according to PN-EN 60664-1		
Insulation rated voltage	400 V AC	600 V AC
Rated surge voltage	4 000 V 1,2 / 50 μs	-
Overvoltage category	III	-
Insulation pollution degree	3	2
Dielectric strength		
• input - output	4 000 V AC 50/60 Hz, 1 min. (type of insulation: reinforced)	4 000 V AC 50/60 Hz, 1 min. (type of insulation: reinforced)
• input - output	6 000 V 1,2 / 50 μs	-
• mass - input, output	2 500 V AC 50/60 Hz, 1 min.	-
• contact clearance	1 000 V AC 50/60 Hz, 1 min. (type of clearance: micro-disconnection)	-
Input - output distance		
• clearance	≥ 6 mm	-
• creepage	≥ 8 mm	-
General data		
Operating / release time (typical values)	AC: 7 ms DC: 6 ms / AC: 15 ms DC: 10 ms	10 ms max. (zero turn-on) / 10 ms max.
Electrical life		
• resistive AC1 (cos φ = 0,4)	> 0,6 x 10 ⁵ 6 A, 250 V AC; > 2 x 10 ⁵ 2 A, 250 V AC	-
• resistive DC1	10 ⁵ 6 A, 30 V DC	-
Mechanical life (cycles)	> 2 x 10 ⁷	-
Dimensions (L x W x H)	93,8 x 6,2 x 80 mm	
Weight	40 g	
Ambient temperature		
• storage	-40...+70 °C	-40...+70 °C
• operating	-40...+55 °C (-40...+60 °C 24 V DC)	-40...+55 °C
Protection category	IP 20 PN-EN 60529	
Environmental protection	RTI PN-EN 116000-3	
Shock resistance	10 g	
Vibration resistance	5 g 10...500 Hz	

Input data SER1

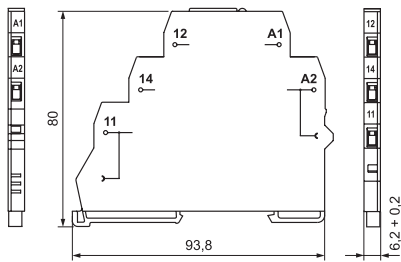
Interface relay code	Rated input voltage, Un	Power of input circuit	Input - voltage range, V	
			min. (20 °C)	max. (55 °C)
SER1-024ACDC	24 V AC/DC	0,5 VA / 0,5 W	19,2	26,4
SER1-230ACDC	230 V AC/DC	0,8 VA / 0,8 W	184,0	253,0

Input data SSR1

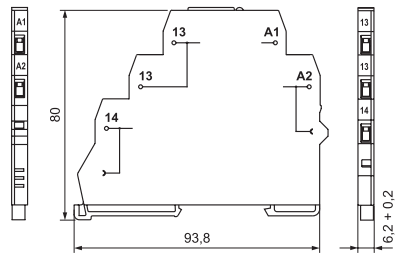
Interface relay code	Rated input voltage Un	Power of input circuit
SSR1-230ACDC	230 V AC/DC	1,6 VA / 1,6 W

Dimensions

SER1-024ACDC / SER1-230ACDC

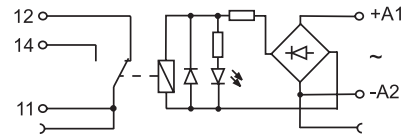


SSR1-024ACDC / SSR1-230ACDC

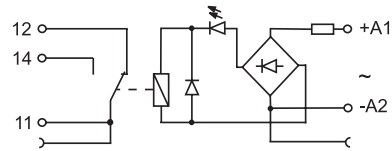


Connection diagram

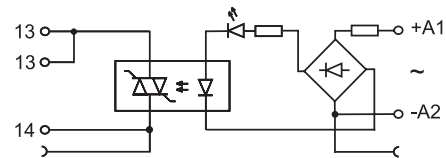
SER1-024ACDC



SER1-230ACDC



SSR1-024ACDC
SSR1-230ACDC



SR-TERMINAL

