

# TRIP RELAYS (I)

Model	RD-2R	RD-2XR	RF-4R	RF-4XR	
Applications	Intended for tripping applications where high demanding requirements in operating time (with tripping time from 8ms to 3 ms) and breaking capacity are needed, that is the case of tripping HV and MV circuit breakers.				
High burden configuration	not available		See page 15 for technical details		
Construction characteristics					
Contacts no.	2 Changeover		4 Changeover		
Connections					
Options	With OP options • LED included • Diode in parallel with the coil included				
Weight (g)	125		250		
Dimensions (mm)	22,5 x 50,4 x 72		42,5 x 50,4 x 72 (F short Type)		
Coil characteristics					
Standard voltages <sup>(1)</sup>	24, 48, 110, 125, 220, 250 <sup>(4)</sup> Vdc / 110, 127, 230 Vac (50-60Hz)	24, 48, 110, 125, 220, 250 Vdc	24, 48, 110, 125, 220, 250 <sup>(4)</sup> Vdc / 110, 127, 230 Vac (50-60 Hz)	24, 48, 110, 125, 220, 250 <sup>(4)</sup> Vdc	
Voltage range	+10% -20% U <sub>N</sub>				
Pick-up voltage	See pick-up/release voltage-temperature curves				
Release voltage	See pick-up/release voltage-temperature curves				
Consumptions	0,95 W		1 W		
	In permanence (U <sub>N</sub> )				
	Peak • ≤96 Vdc	0,8 A / 20 ms	2,5 A / 20 ms	0,8 A / 20 ms	2,5 A / 20 ms
	Peak • >96 Vdc	0,3 A / 20 ms	0,8 A / 20 ms	0,3 A / 20 ms	0,8 A / 20 ms
Operating time					
Pick-up time	<8 ms (<10 ms Vac)	<5,5 ms	<8 ms (<10 ms Vac)	<5,5 ms	
Drop-out time	Vdc: <40 ms Vac: <50 ms	Vdc: <40 ms	Vdc: <40 ms Vac: <50 ms	Vdc: <40 ms	
Contacts					
Contact material	AgNi				
Contacts resistance <sup>(2)</sup>	≤30 mΩ				
Distance between contacts	1,2 mm				
Permanent current	10 A				
Instantaneous current	30 A during 1 s / 80 A during 200 ms / 200 A during 10 ms				
Max. making capacity	40 A / 0,5 s / 110 Vdc				
Breaking capacity	See breaking capacity curves (Contact configuration type B)				
Max. breaking capacity	See value for 50.000 operations				
U <sub>max</sub> opened contact	250 Vdc / 400 Vac				
Performance data					
Mechanical endurance	10 <sup>7</sup> operations				
Operating temperature	-25°C +70°C				
Storage temperature	-30°C +70°C				
Max. operating humidity	93% / +40°C				
Operating altitude <sup>(3)</sup>	<2000 m				

<sup>(1)</sup> Other voltage upon request  
<sup>(2)</sup> Guarantee data for relays just manufactured

<sup>(3)</sup> Ask for higher altitudes  
<sup>(4)</sup> Voltage not recognized by UL