
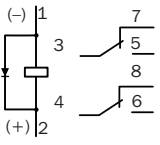
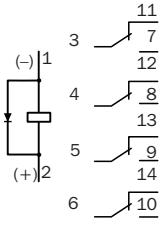


# TRIP RELAYS (I)

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		
<b>Construction characteristics</b>					
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)		
<b>Coil characteristics</b>					
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
<b>Operating time</b>					
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	
<b>Contacts</b>					
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				
<b>Performance data</b>					
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