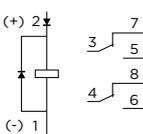
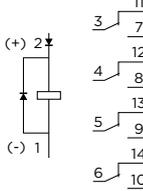


TRIP RELAYS (I)

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)	(A) 22,5 x (B) 50,4 x (C) 72 (D type)		(A) 42,5 x (B) 50,4 x (C) 72 (F short type)		
Coil characteristics					
Standard voltages ⁽¹⁾	24, 48, 110, 125, 220, 250 Vdc /110, 127, 230 Vac (50-60Hz)	48, 110, 125, 220, 250 Vdc	24, 48, 110, 125, 220, 250 Vdc / 110, 127, 230 Vac (50-60 Hz)	48, 110, 125, 220, 250 Vdc	
Voltage range	+10% -20% U _N				
Pick-up voltage	See pick-up/release voltage-temperature curves				
Release voltage	See pick-up/release voltage-temperature curves				
Average consumption	In permanence (U _N)	0,95 W	1 W		
	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 ⁽²⁾	≤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 _{max} opened contact	250 Vdc / 400 Vac				
Performance data					
Mechanical endurance	10 ⁷ operations				
Operating temperature	-25°C +70°C				
Storage temperature	-40°C +85°C				
Max. operating humidity	93% / +40°C				
Operating altitude ⁽³⁾	<2000 m				

⁽¹⁾ Other voltage upon request

⁽²⁾ Guarantee data for relays just manufactured

⁽³⁾ Ask for higher altitudes

MODEL SELECTION

TRIP	Type	Range	Aux. Supply	Options
Model Selection ▶▶			OP	
Relay type				
2 contacts relay	RD-2R	-*	0*	1 0 0 0
2 contacts relay	RD-2XR	-*	0*	1 0 0 0
4 contacts relay	RF-4R		0*	1 0 0 0
4 contacts relay	RF-4XR		0*	1 0 0 0
8 contacts relay	RJ-8R		0*	1 0 0 0
8 contacts relay	RJ-8XR		0*	1 0 0 0
16 contacts relay	RI-16R		0*	1*/2*** 0* 0* 0*
Ultra-fast (only Vdc)	RJ-4XR4	-*	0*	1* 0* 0* 0*
Ultra-fast (only Vdc)	RXR-4	-*	-*	-* -* -* -*
Ultra-fast (only Vdc)	RF-4UR	-*	-*	-* -* -* -*
Range				
High Burden		HB		
Low burden (all by default)		-		
Rolling stock applications or low duty loads or guided contacts**		FF		
Aux. Supply Vdc or Vac				
Indicate voltage level and if it is VDC or VAC (ex: 24 VDC)				
Options				
				0
Front LED	No			0
	Yes			1
Mechanical contact position indicator	No			0
	Yes			1
Trip flag	No			0
	Yes			1
Push to test button	No			0
	To Push the contacts			1

Standard model

*Mandatory option

** For more information refer to railway application brochure

*** Option only available for HB models with 48 and 125 Vdc rated voltage. Red LED for trip signaling.