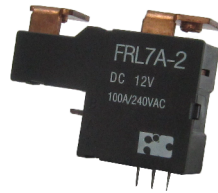


Latching Relays

El.italia serie **FW-FRL7**

Features

Magnet latching relay
 1 coil or 2 coils are available
 High sensitivity and reliability
 Well anti-shock and anti-vibration
 Heavy contact load (100A)



Ordering information

FRL7 A - 1 DC12V

1 2 3 4

1 Relay model
 2 Contact arrangement: A: 1 Form A; B: 1 Form B
 3 Sort: 1: 1 coil latching; 2: 2 coils latching

4 Rated voltage
 Note: RoHS : RoHS compliant relay
 RoHS-I : AgNi contact
 RoHS-N: AgSnO₂ contact

Coil rating

Rated voltage (V)	Coil resistance $\Omega \pm 10\%$		Switching voltage (V DC)	Operate voltage range (V DC)	Pulse magnitude (ms)	Power consumption (W)	Operate time (ms)	Release time (ms)
	1 Coil	2 Coils						
6	16	2 x 8	<4.8	4.9 ~ 10	≥ 36	1 coil - 2.25	<12	<6
12	64	2 x 32	<9.6	9.8 ~ 20		2 coils - 4.5		
24	260	2 x 130	<19.2	19.7 ~ 40				

CAUTION: 1. The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
 2. Pickup and release voltage are for test purposes only and are not to be used as design criteria.

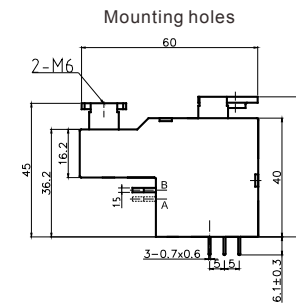
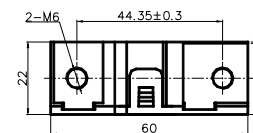
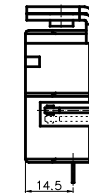
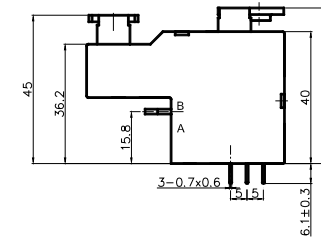
Characteristics

Contact arrangement	SPST (1 Form A-NO or 1 Form B-NC)	
Contact material	Silver alloy	
Contact resistance	30m Ω Max.	
Contact rating (resistive)	100A 240VAC	
Switching power	23,000VAC (Cos ≥ 0.1); 2,300VAC (Cos ≥ 0.4)	
Switching voltage	400VAC Max.	
Switching current	100A	
Insulation resistance	1,000M Ω Min. (500VDC)	
Dielectric strength	2,000VAC (50Hz/min) Between open contacts 4,000VAC (50Hz/min) Between coil and contact	
Surge voltage	12,000V	
Shock resistance	Functional : 100m/s ² Destructive: 1,000m/s ²	
Vibration resistance	1.5mm Double amplitude 10-55Hz	
Ambient temperature	-25°C to +70°C	
Humidity	85% RH, 40°C	
Operation life	Mechanical	10 ⁶
	Electrical	10 ⁴
Weight	82g Approx.	

(Specifications are subject to change without notices.)

Dimensions

mm



Notes LIA: NC side
 B: NO side

Wiring diagram (Bottom view)

