

Latching Relays

Features

- 1 coil magnet latching relay available
- Small size and light weight
- Switching capacity up to 50A
- Low coil power consumption
- PC board mounting
- Strong anti-shock, anti vibration, high reliability and long life



CEus: E139468

Ordering information

FRL1B C - S DC12V

1 2 3 4

1 Relay model	4 Rated voltage
2 Contact arrangement: A: 1 Form A; B: 1 Form B; C: 1 Form C	Note: AgSnO ₂ contact
3 Construction: E: Dust cover; S : Sealed	

Coil rating

1 coil latching

Rated voltage (V DC)	Coil resistance Ω+/-10%	Must operate voltage	Operating voltage range	Plus magnitude (ms)	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
		% of rated voltage					
5	16.7	80 Max.	120 Max.	≥100	1.5	≤15	≤15
12	96						
24	384						
48	1536						

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

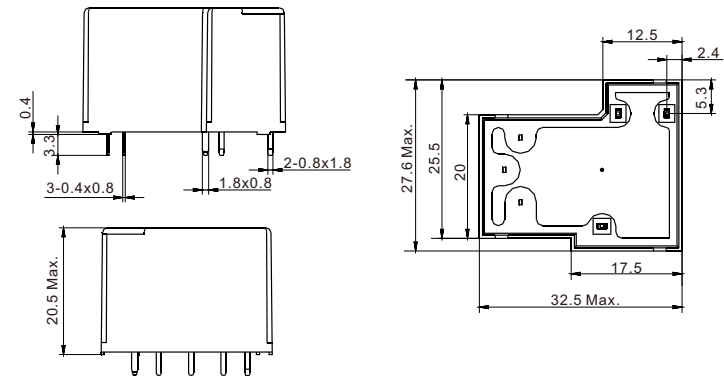
Contact arrangement	SPST (1 Form A or 1 Form B); SPDT (1 Form C)
Contact material	Silver alloy
Contact resistance (initial)	20mΩ Max. (Measured at 1A 24VDC)
Contact rating (resistive)	Resistive load : SPST : 50A 277VAC (5 x 10 ⁴) SPDT: 40A 277VAC (3 x 10 ⁴) Incandescent lamp: 5,000W 240VAC (3 x 10 ⁴) Electronic ballast : 16A 280VAC (6 x 10 ³) Motor load : 5HP 277VAC (3 x 10 ⁴)
Switching power	12,500VA / 1,500W Max.
Switching voltage	AC 300V / DC 110V Max.
Switching current	50A Max.
Insulation resistance	1,000MΩ Min. (500VDC)
Dielectric strength	1,500VAC (50Hz/min) Between open contacts 2,500VAC (50Hz/min) Between coil and contact (Special request: 4,000VAC)
Shock resistance	200m/s ² 11ms
Vibration resistance	1.5mm Double amplitude 10-55Hz
Terminals strength	10N
Solderability	235°C ±2°C 3s ±0.5s
Ambient temperature	-40°C to +85°C
Humidity	85% RH, 40°C
Operation life	Mechanical 10 ⁶ Electrical (Please refer to contact rating)
Weight	28g Approx.

(Specifications are subject to change without notices.)

El.italia serie FW-FRL1B

Dimensions

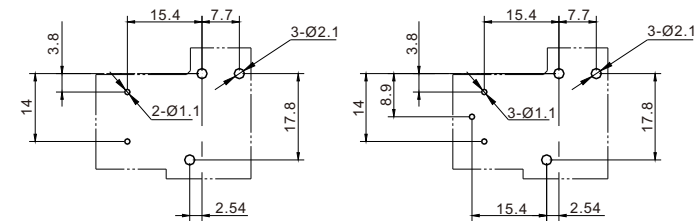
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Mounting holes

1 coil latching

2 coils latching



Wiring diagram (Bottom view)

Single coil latching

