

Power Relays

El.italia serie FW-FRM1H

Features

- Miniature high power relay with big performance in small package
- High contact capacity
- Designed for the use of heavy duty
- Slim type and low cost
- Dust cover and wash tight type is available



CAUS: E141516

Ordering information

FRM1H - 1C S 2 - DC12V
1 2 3 4 5

- 1 Relay model
- 2 Contact arrangement: 1A: 1 Form A; 1C: 1 Form C
- 3 Construction: NIL: Dust cover; S: Wash tight type
- 4 Terminal space: 2: 5.0mm

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

Coil rating

Rated voltage (V)	Coil resistance Ω/+10%	Rated current (mA)	Must operate voltage % of rated voltage (at 20°C)	Must dropout voltage % of rated voltage (at 20°C)	Maximum voltage (V)	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
6	68	88						
9	160	56						
12	275	44						
24	1100	22						
48	4170	11.5						
60	7000+/-15%	8.5						

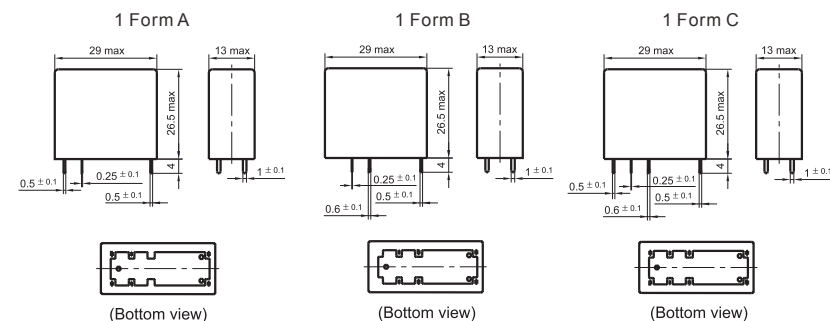
CAUTION: 1. The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
2. Pickup and release voltage are for test purposes only and are not to be used as design criteria.

Characteristics

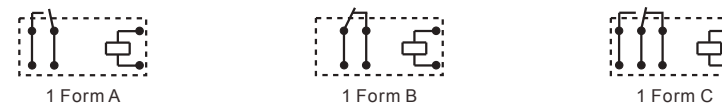
Contact arrangement	SPST (1 Form A or 1 Form B); SPDT (1 Form C)	
Contact material	Silver alloy	
Contact resistance	50mΩ Max. (at 1A 24VDC)	
Contact rating (resistive)	20A 277VAC/24VDC; TV-8 125VDC 1HP 240VAC	
Switching power	5,540VA / 480W Max.	
Switching voltage	AC 277V / DC 30V Max.	
Insulation resistance	1,000MΩ Min. (500VDC)	
Dielectric strength	1,000VAC (50Hz/min) Between open contacts 4,000VAC (50Hz/min) Between coil and contact	
Vibration resistance	1.5mm Double amplitude 10-55Hz	
Ambient temperature	-40°C to +85°C	
Humidity	98% RH, 40°C	
Operation life	Mechanical	5 x 10 ⁶
	Electrical	1 x 10 ⁵ (at rated load)
Weight	18.5g Approx.	

(Specifications are subject to change without notices.)

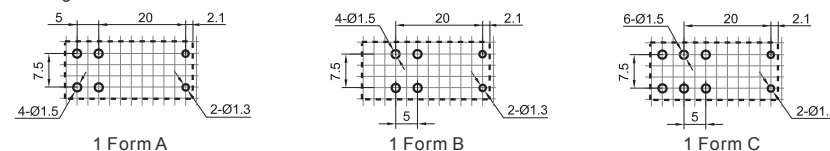
Dimensions



Wiring diagram (Bottom view)

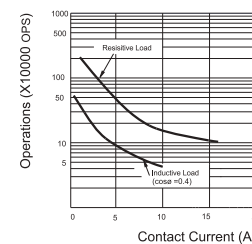


Mounting holes



Reference data

ENDURANCE CURVE



COIL TEMPERATURE RISE

