

# Power Relays

## Features

Miniature relay (15.7mm height)  
 High contact capacity up to 20A  
 Dielectric strength 5,000Vrms  
 Isolation spacing greater than 8mm  
 Ambient temperature up to 125°C  
 Flux proofed only



## Ordering information

<b>FRM10NT - 1A DC12V - 1 N</b>				
1	2	3	4	5
1 Relay model		5 Contact material: NIL: AgNi; N: AgSnO <sub>2</sub>		
2 Contact arrangement: 1A: 1 Form A; 1B: 1 Form B		Note: RoHS : RoHS compliant relay;		
3 Rated voltage		RoHS-I : AgNi contact;		
4 Termination: NIL: QC terminal vertical;		RoHS-N: AgSnO <sub>2</sub> contact		
1 : QC terminal horizontal				

## Coil rating

Rated voltage (V)	Coil resistance Ω+/-10%	Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
5	62	70 Max.	10 Min.	150 Max.	0.41	<15	<8
6	90						
12	360						
24	1440						
48	5760±15%						
60	7500±15%						
110	25200±15%						

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)
Contact material	Silver alloy
Contact resistance	100mΩ Max. (at 1A 6VDC)
Contact rating (resistive)	20A 250VAC
Switching current	20A Max.
Switching power	5,000VA Max.
Switching voltage	AC 440V / DC 125V Max.
Temperature rise	55K Max. at normal voltage
Insulation resistance	1,000MΩ Min. (at 500VDC)
Dielectric strength	1,000VAC (50Hz/min) Between open contacts 5,000VAC (50Hz/min) Between coil and contact
Surge voltage	10KV (1.2 x 50μs)
Shock resistance	Functional : 98m/s <sup>2</sup> Destructive: 980m/s <sup>2</sup>
Vibration resistance	10-55Hz NO contact: 10g; NC contact: 5g
Ambient temperature	-40°C to +125°C
Humidity	35% - 85% RH
Operation life	Mechanical 10 <sup>7</sup> Electrical 10 <sup>5</sup> (at rated load)
Weight	16g Approx.

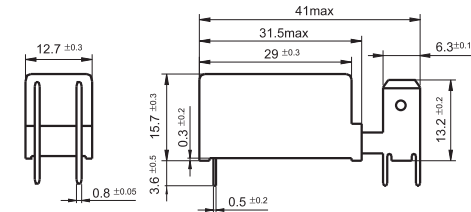
(Specifications are subject to change without notices.)

# El.italia serie FW-FRM10NT

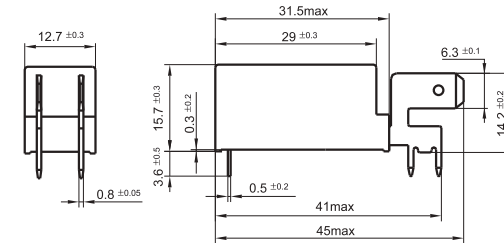
## Dimensions

mm

FRM10NT-.....



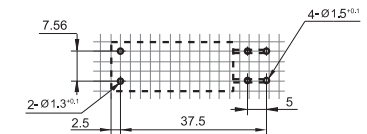
FRM10NT-.....-1



Wiring diagram (Bottom view)



Mounting holes



## Reference data

