

Features

- Miniature relay
- 25A switching capability
- Dielectric strength 5,000Vrms
- Low coil consumption
- Wash tight type is available



RoHS: PENDING

Ordering information

FRM10NB 25 - 1C S 2 DC12V G F

1 2 3 4 5 6 7 8

1 Relay model	6 Contact material: N: AgSnO ₂ ; I : AgNi
2 Contact rating: NIL: 20A; 25: 25A	7 Contact plating: G: AU plated
3 Contact arrangement: 1A: 1 Form A; 1C: 1 Form C	8 Insulation standard: NIL: Standard (85°C); F : F class (155°C)
3 Construction: NIL: Dust cover; S: Wash tight type	Note: RoHS : RoHS compliant relay
4 Version: 1: Terminal space 3.5mm; 2: Terminal space 5.0mm	
5 Rated voltage	

Coil rating

Rated voltage (V)	Coil resistance Ω+/-10%	Must operate voltage % of rated voltage (at 20°C)	Must dropout voltage % of rated voltage (at 20°C)	Maximum voltage	Power consumption	Operate time (ms)	Release time (ms)
6	88						
9	198						
12	351						
18	790						
24	1405						
48	5620						

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.

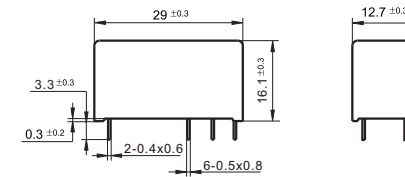
Characteristics

Contact arrangement	SPST (1 Form A); SPDT (1 Form C)	
Contact material	Silver alloy	
Contact resistance	100mΩ Max.	
Contact rating (resistive)	5mm: 25A 250VAC, 20/16A 250VAC; 3.5mm: 12/12A 250VAC	
Switching power	6,250VA Max.	
Switching voltage	AC 440V Max. (Max. switching current 25A)	
Insulation resistance	1,000MΩ Min. (500VDC)	
Dielectric strength	1,000VAC (50Hz/min) Between open contacts 5,000VAC (50Hz/min) Between coil and contact	
Shock resistance	Functional : 980m/s ² 11ms Destructive: 980m/s ² 11ms	
Surge voltage	10kV (1.2/50μs) Between coil and contact	
Vibration resistance	1.5mm Double amplitude 10-55Hz	
Ambient temperature	-40°C to +105°C	
Humidity	85% RH, 40°C	
Operation life	Mechanical	1 x 10 ⁷
	Electrical	1 x 10 ⁵ (105°C)
		2.5 x 10 ⁴ (TV-8)
Weight	14g Approx.	

(Specifications are subject to change without notices.)

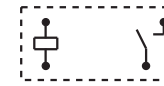
Dimensions

mm

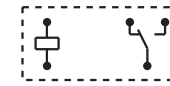


Wiring diagram
(Bottom view)

3.5mm terminal space

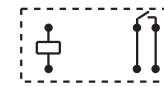


1 Form A

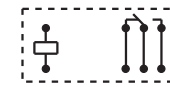


1 Form C

5.0mm terminal space



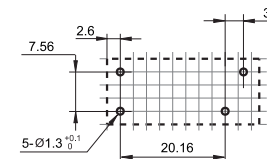
1 Form A



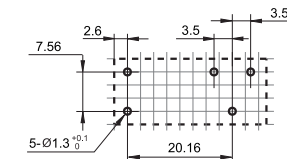
1 Form C

Mounting holes

3.5mm terminal space

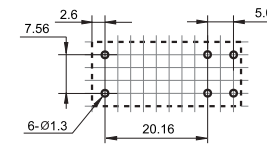


1 Form A

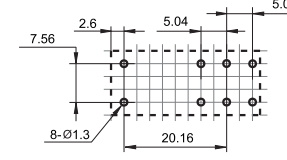


1 Form C

5.0mm terminal space



1 Form A



1 Form C