

Features

Subminiature, standard PC layout
 High switching capacity in a compact package
 SPST (N.O.) and SPDT (N.O. & N.C.) configurations
 High sensitivity: 0.2W (SPST); 0.45W (SPDT)
 Use on control, air conditioner and heating control of small appliances
 Dust cover or wash tight type



us: E139468

Ordering information

FRM8 H A - S - I DC12V XXX
 1 2 3 4 5 6 7

1 Relay model	6 Rated voltage
2 Power consumption: NIL: 0.45W; H: 0.2W (SPST only)	7 Special code
3 Contact arrangement: A: 1 Form A; C: 1 Form C	Note: RoHS : RoHS compliant relay;
4 Construction: NIL: Dust cover; S: Wash tight type	RoHS- I: AgNi contact;
5 Contact material: NIL: AgCdO; I: AgNi; +G: Au plated	RoHS-N: AgSnO ₂ 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	Maximum voltage	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
	FRM8	FRM8H	FRM8	FRM8H						
3	20	45	150	66.7	75 Max.	5 Min.	130 Max.	FRM8: 0.45	<8	<5
5	55	125	91	40						
6	80	180	75	33.3						
9	180	400	50	22.5						
12	320	700	37.5	16.7						
18	720	1600	25	11.2						
24	1280	2800	18.8	8.5						
48	5120	11580	9.4	4.1						

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

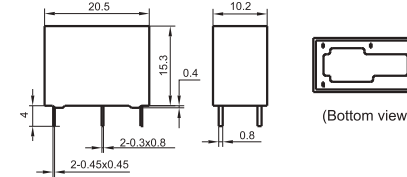
Contact arrangement	SPST (1 Form A); SPDT (1 Form C)
Contact material	Silver alloy
Contact resistance	100mΩ Max. (at 1A 6VDC)
Contact rating (resistive)	UL approval: SPST (N.O.): 10A 125VAC 5A 250VAC/30VDC SPDT (N.O.): 10A 125VAC 5A 250VAC/30VDC (N.C.): 3A 250VAC/30VDC VDE rating: NO: 5A 250VAC NC: 3A 250VAC
Switching power	1,250VA / 150W Max. (NO) 750VA / 90W Max. (NC)
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
Shock resistance	Functional : 98m/s ² Destructive: 980m/s ²
Vibration resistance	1.6mm Double amplitude 10-55Hz
Ambient temperature	-40°C to +70°C (Special NO contact: AgNi -40°C to +85°C)
Operation life	Mechanical 10 ⁷ Electrical 10 ⁵ (at rated load)
Weight	7g Approx.

(Specifications are subject to change without notices.)

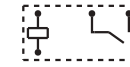
Dimensions

mm

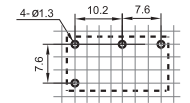
1 Form A



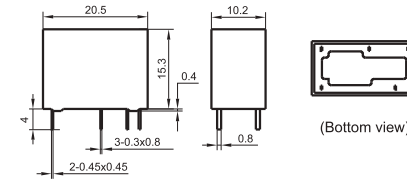
Wiring diagram (Bottom view)



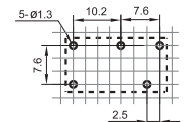
Mounting holes



1 Form C

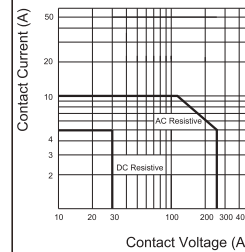


Wiring diagram (Bottom view)

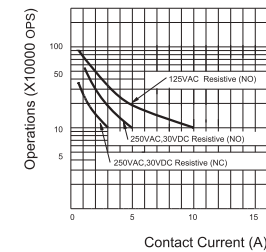


Reference data

MAXIMUM SWITCHING POWER



ENDURANCE CURVE



COIL TEMPERATURE RISE

