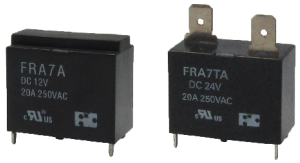
Features

Miniature 20A switching capabilities
4.5KV dielectric coil to contact
Heavy load up to 5,000VA
Applicable to motor switching
PCB & QC terminal



cUus: E139468

Ordering information

FRA7 T A DC12V
1 2 3 4

1 Relay model	4 Rated voltage
2 Termination: NIL: PCB type;	Note: RoHS : RoHS compliant relay
T : PCB & quick connect type	RoHS-I : AgNi contact
3 Contact arrangement: A: 1 Form A	RoHS-N: $AgSnO_2$ contact

Coil rating

Rated voltage (V)	Coil resistance Ω+/-10%	Rated current (mA)	Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
			% of rated voltage (at 20°C)					
5	27.8	180	70 Max.	10 Min.	130 Max.	0.9	<20	<10
12	160	75						
24	640	37.5						

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

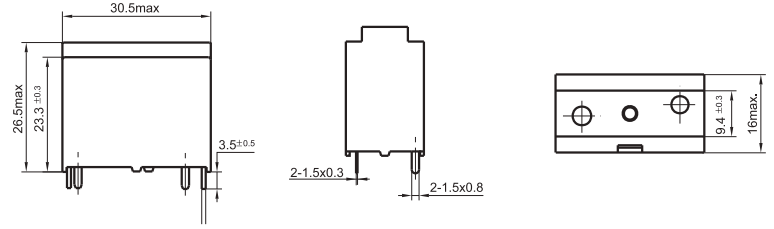
Contact arrangement		SPST (1 Form A)
Contact material		Silver alloy
Contact resistance		30mΩ Max. (Measured at 1A 24VDC)
Contact rating (resistive)		Rate load :20A 250VAC; 1HP 120VAC; 2HP 240VAC Motor load: Inrush 80A 0.3S (Cos∅=0.7) Break 20A (Cos∅=0.9) (TÜV - Pending *rating: 20A 250VAC Cos∅: 0.9)
Switching power		5,000VA Max.
Switching voltage		AC 300V Max.
Insulation resistance		1,000MΩ Min. (500VDC)
Dielectric strength		1,000VAC (50Hz/min) Between open contacts 4,500VAC (50Hz/min) Between coil and contact
Shock resistance		Functional : 196m/s^2 Destructive: 980m/s^2
Vibration resistance		1.5mm Double amplitude 10-55Hz
Ambient temperature		-25°C to +70°C
Humidity		85% RH, 40°C
Operation life	Mechanical	2 x 10^6
	Electrical	10^5 (at rated load)
Weight		23g Approx.

(Specifications are subject to change without notices.)

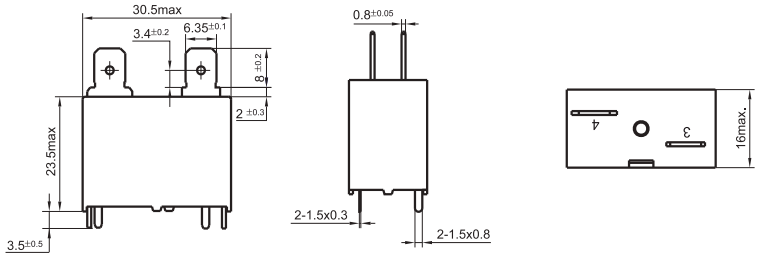
Dimensions

mm

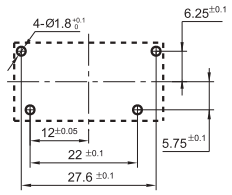
FRA7



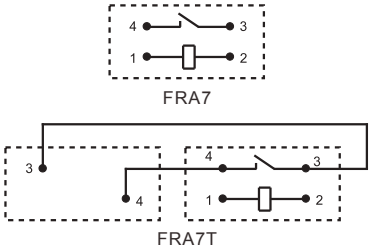
FRA7T



Mounting holes

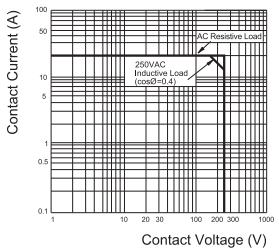


Wiring diagram (Bottom view)



Reference data

MAXIMUM SWITCHING POWER



ENDURANCE CURVE