

## Features

- Miniature power designed for mounting on PC board
- Small size and light weight
- Low cost and high performance
- Switching capacity up to 25A
- Open type, dust cover or wash tight type



## Ordering information

**FRA3 C - S 1 DC12V**  
1 2 3 4 5

1 Relay model	4 Version:
2 Contact arrangement: A: 1 Form A; B: 1 Form B; C: 1 Form C; U: 1 Form U; V: 1 Form V; W: 1 Form W	NIL: Operate voltage 57.5% Max. (at 20°C) 1 : Special operate voltage 55% Max. (at 20°C) 5 Rated voltage
3 Construction: NIL: Open type; C: Dust cover; S : Wash tight type	Note: RoHS : RoHS compliant relay RoHS-I : AgNi contact RoHS-N: AgSnO <sub>2</sub> 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)
6	36	167	57.5 Max.	10 Min.	150 Max.	1.0	<10	<5
12	145	83						
24	576	42						

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

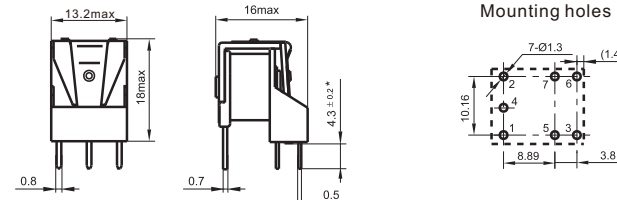
Contact arrangement	1 Form A; 1 Form B; 1 Form C; 1 Form U; 1 Form V; 1 Form W
Contact material	Silver alloy
Contact resistance	50mΩ Max.
Contact rating (resistive)	1 Form A (NO): 20A 14VDC (Special request: 25A 14VDC) 1 Form C (NO): 15A 14VDC; (NC): 10A 14VDC 1 Form U (NO-DM): 2 x 15A/14VDC 1 Form V (NC-DB): 2 x 10A/14VDC 1 Form W (NO): 2 x 15A; (NC): 2 x 10A
Switching power	280W / 2 x 280W Max.
Switching voltage	DC 75V Max.
Insulation resistance	100MΩ Min. (500VDC)
Dielectric strength	750VAC (50Hz/min) Between open contacts 1,500VAC (50Hz/min) Between coil and contact
Shock resistance	10g Approx.
Vibration resistance	1.27mm Double amplitude 10-40Hz
Ambient temperature	Storage: -40°C to +130°C; Operation: -40°C to +105°C
Humidity	85% RH, 40°C
Operation life	Mechanical 10 <sup>7</sup> Electrical 10 <sup>5</sup> (at rated load)
Weight	Open type: 9g Approx. Wash tight type: 12g Approx.

(Specifications are subject to change without notices.)

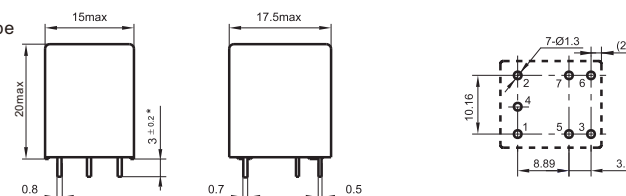
## Dimensions

mm

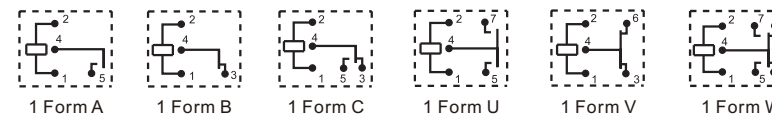
### Open type



### Dust cover / Wash tight type

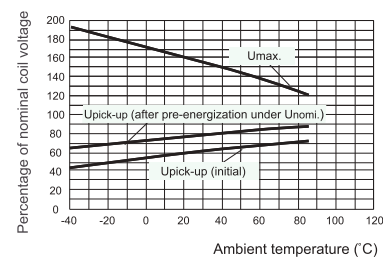


### Wiring diagram (Bottom view)



## Reference data

### 1. Coil operating voltage range



### 2. Load limit curve

