

Features

Switching capacity up to 50A
Ambient temperature up to 125°C
Suitable for automation system and automobile auxiliary, etc.



Ordering information

FRC10 A - R DC12V

1 2 3 4

1 Relay model: FRC10: Plain dust cover;
FRC10W: Waterproof cover
2 Contact arrangement: A: 1 Form A; C: 1 Form C
3 Coil suppression: NIL: Standard type; N: With diode;
R : With resistor

4 Rated voltage
Note: RoHS : RoHS compliant relay
RoHS-I : AgNi contact
RoHS-N: AgSnO₂ contact

Coil rating

Rated voltage (V)	Coil resistance Ω +/- 10%	Rated current (mA)	Must operate voltage	Must dropout voltage	Maximum voltage 130 Max.	Power consumption (W) Approx. 1.8	Operate time (ms) <7	Release time (ms) <5
			% of rated voltage (at 20°C)					
6	20	300	65 Max.	10 Min.	130 Max.	1.8	<7	<5
12	80	150						
24	320	75						

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

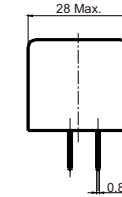
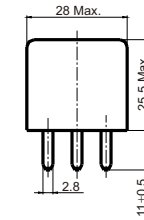
Contact arrangement	SPST (1 Form A); SPDT (1 Form C)	
Contact material	Silver alloy	
Contact resistance	100mΩ Max.	
Contact rating (resistive)	40A 14VDC (NO) 30A 14VDC (NC) (Special request: 50/30A)	
Switching power	560W Max.	
Switching voltage	DC 75V Max.	
Insulation resistance	100MΩ Min. (500VDC)	
Dielectric strength	500VAC (50Hz/min)	
Shock resistance	200m/s ² 11ms	
Vibration resistance	1.27mm Double amplitude 10-40Hz 40-70Hz 50m/s ² 0.5mm Double amplitude 70-100Hz 100-500Hz 100m/s ²	
Ambient temperature	-40°C to +85°C (Special request up to 125°C)	
Humidity	95% RH, 45°C	
Operation life	Mechanical	10 ⁷
	Electrical	10 ⁵
Weight	FRC10: 34g Approx.; FRC10W: 40g Approx.	

(Specifications are subject to change without notices.)

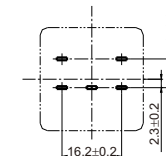
Dimensions

mm

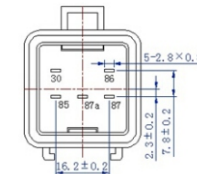
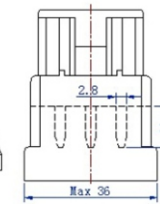
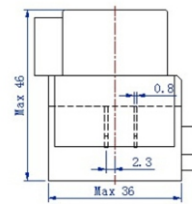
FRC10



Mounting holes

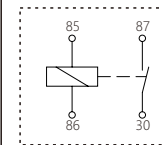


FRC10W

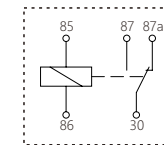


Terminal Layout (Bottom views)

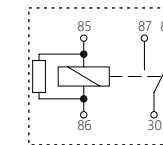
Wiring diagram



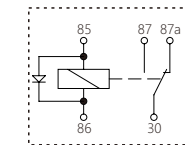
1 Form A



1 Form C



With resistor



With diode