

Automotive Relays

Features

- Small size and high contact rating (100A)
- High temperature design
- Plug in or PC board terminal
- Optional mounting bracket
- Wash tight type is available



Ordering information

FRC3B A - 1 A N S - DC12V
 1 2 3 4 5 6 7

1 Relay model: FRC3; FRC3B	6 Construction: NIL: Dust cover; S: Wash tight type (only for plain dust cover & metal bracket dust cover)
2 Contact arrangement: A: 1 Form A; C: 1 Form C	7 Rated voltage
3 Mounting termination: NIL: Moulded bracket dust cover; 1: Plain dust cover; 2: Metal bracket dust cover	Note: RoHS : RoHS compliant relay RoHS-I : AgNi contact RoHS-N: AgSnO ₂ contact
4 Version: NIL: Plug in type; A: PCB type	
5 Coil suppression: NIL: Standard type; N: With diode; R : Resistor; T: Transil (DB-03)	

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)
	FRC3	FRC3B	FRC3	FRC3B						
12	80	50	150	240	65 Max.	10 Min.	130 Max.	FRC3 : 1.8	<10	<10
24	320	195	75	123						

*If use resistor:
 DC 6V with 180Ω resistor
 DC 12V with 680Ω resistor
 DC 24V with 2,702Ω resistor

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	30mΩ Max.	
Contact rating (resistive)	FRC3 : N.O.: 70A 14VDC (Special: 80A 14VDC); N.C.: 60A 14VDC FRC3B: N.O.: 100A 14VDC; N.C.: 70A 14VDC	
Switching power	FRC3: 980W Max.; FRC3B: 1,200W Max.	
Switching voltage	DC 75V Max.	
Insulation resistance	100MΩ Min. (500VDC)	
Dielectric strength	500VAC (50Hz/min)	
Shock resistance	20g Approx.	
Vibration resistance	1.5mm Double amplitude 10-40Hz	
Ambient temperature	-40°C to +85°C (Special request up to 125°C)	
Humidity	85% RH, 40°C	
Operation life	Mechanical	10 ⁷
	Electrical	10 ⁵ (at rated load)
Weight	47g Approx.	

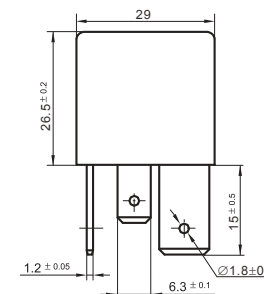
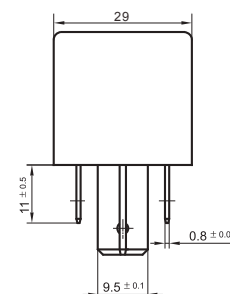
(Specifications are subject to change without notices.)

El.italia serie FW-FRC3(B)

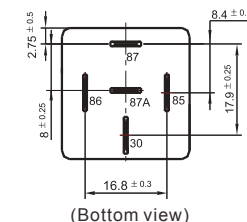
Dimensions

mm

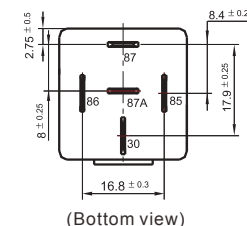
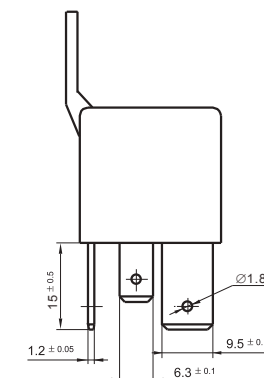
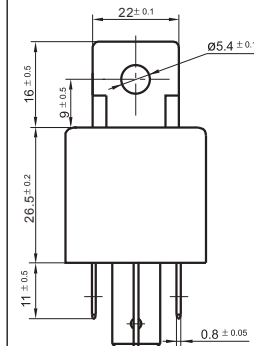
Dust cover



Mounting holes



Moulded bracket dust cover



Metal bracket dust cover

