

Automotive Relays

El.italia serie FW-FRC11

Features

- Small size and high contact rating
- High temperature design
- Ideal for use in automotive control
- Metal cover & direct coupling type



Ordering information

FRC11 A - 2 N DC12V
 1 2 3 4 5

- 1 Relay model
- 2 Contact rating: A: 1 Form A
- 3 Mounting terminal: NIL: Plain dust cover type; 2 : Metal bracket dust cover
- 4 Coil suppression: NIL: Standard type; N: With diode; R : With resistor

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

Coil rating

Rated voltage (V)	Coil resistance Ω \pm -10%	Must operate voltage % of rated voltage (at 20°C)	Must dropout voltage	Maximum voltage	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
12	100	65 Max.	5 Min.	150 Max.	1.5	<10	<7
24	384						

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

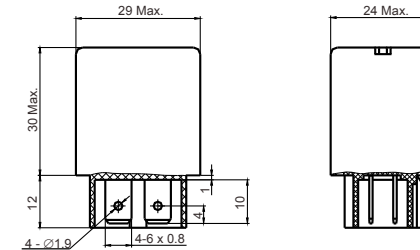
Contact arrangement		SPST (1 Form A)
Contact material		Silver alloy
Contact resistance		50mΩ Max.
Contact rating (resistive)		40A 14VDC
Switching power		560W Max.
Switching voltage		DC 75V Max.
Insulation resistance		100MΩ Min. (at 500VDC)
Dielectric strength		500VAC (50Hz/min)
Shock resistance		20g Approx.
Vibration resistance		1.5mm Double amplitude 10-40Hz
Ambient temperature		-40°C to +85°C (Special request: +105°C)
Humidity		85% RH, 40°C
Operation life	Mechanical	10 ⁵
	Electrical	10 ⁵
Weight		FRC11: 35g Approx.; FRC11-2: 38g Approx.

(Specifications are subject to change without notices.)

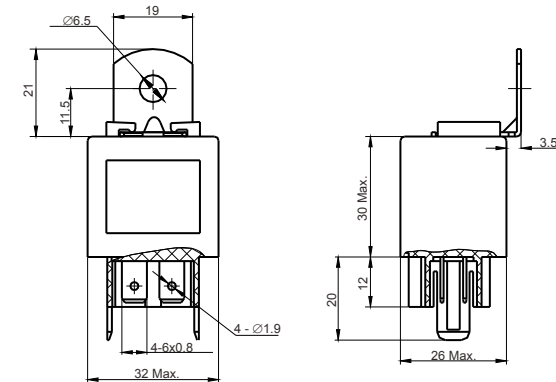
Dimensions

mm

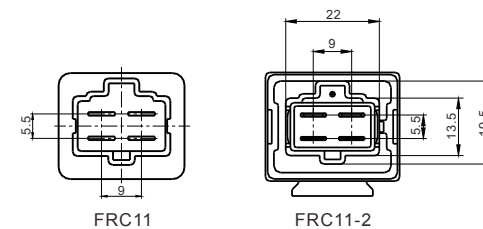
FRC11



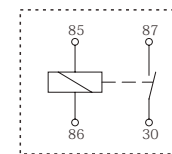
FRC11-2



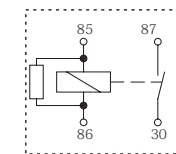
Mounting holes



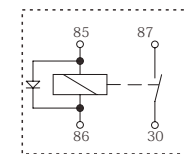
Wiring diagram



1 Form A



With resistor



With diode