

# Automotive Relays

# El.italia serie FW-FRA15

## Features

Miniature and light weight  
Use for car control applications  
Switching capacity up to 20A  
Wash tight version



## Ordering information

**FRA15 C - S DC12V**  
1 2 3 4

1 Relay model  
2 Contact arrangement: A: 1 Form A; C: 1 Form C  
3 Construction: NIL: Dust cover; S: Wash tight type  
4 Rated voltage

Note: RoHS : RoHS compliant relay  
RoHS-I : AgNi contact  
RoHS-N: AgSnO<sub>2</sub> contact

## Coil rating

Rated voltage (V)	Coil resistance $\Omega$ +/- 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	31	161						
12	180	66.6	60 Max.	10 Min.	130 Max.	0.8	<10	<10
24	720	33.3						

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.

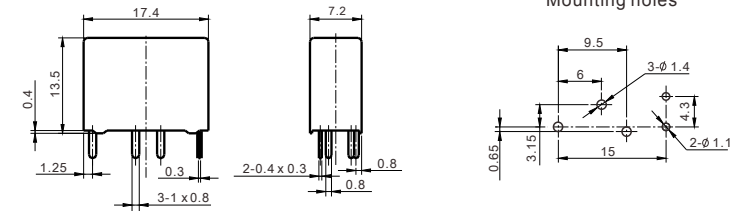
## Characteristics

Contact arrangement	SPST (1 Form A); SPDT (1 Form C)	
Contact material	Silver alloy	
Contact resistance	100m $\Omega$ Max.	
Contact rating (resistive)	NO: 20A/14VDC NC: 10A/14VDC	
Switching power	280W Max.	
Switching voltage	DC 24V Max.	
Switching current	25A/14VDC Max. (10 minutes at 20°C)	
Insulation resistance	100M $\Omega$ Min. (500VDC)	
Dielectric strength	500VAC (50Hz/min)	
Shock resistance	Functional : 100m/s <sup>2</sup> Destructive: 1,000m/s <sup>2</sup>	
Vibration resistance	44m/s <sup>2</sup> (consultant) 10-100Hz	
Ambient temperature	-40°C to +85°C	
Humidity	85% RH, 40°C	
Operation life	Mechanical	10 <sup>7</sup>
	Electrical	10 <sup>5</sup>
Weight	4g Approx.	

(Specifications are subject to change without notices.)

## Dimensions

mm



### Mounting holes

### Wiring diagram (Bottom view)

