# Power Relays

#### Features

Subminiature light weight relay Printing circuit terminal Low coil power consumption Switching capacity up to 20A Dust cover or wash tight type



c us: E141516

: R50136658 / R50149970

### Ordering information

FRS11 C - S 10 DC12V F 6

1 Relay model

2 Contact arrangement: A: 1 Form A; B: 1 Form B; C: 1 Form C

3 Construction: NIL: Dust cover; S: Wash tight type

4 Contact rating: 5:5A 125VAC/28VDC; 10:10A 125VAC/28VDC;

12: 12A 125VAC/28VDC; 10A 250VAC; 6A 277VAC;

15: 15A 125VAC/28VDC;

20: 20A 125VAC/16VDC; 1/3HP 125V/277VAC

TÜV rating: 6A 250VAC/28VDC

5 Rated voltage

6 Insulation standard: NIL: B class; F : F class (155°C)

Note: RoHS: RoHS compliant relay RoHS-I : AqNi contact

RoHS-N: AgSnO, contact

### Coil rating

Rated voltage	Coil resistance	Rated current	Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (W)	Operate time	Release time
(V)	Ω+/-10%	(mA)	% of rated voltage (at 20°C)			Approx.	(ms)	(ms)
3 5 6 9 12 24 48	25 70 100 220 400 1600 6400	120 70 60 40 30 15 7.5	75 Max.	10 Min.	130 Max.	0.36	<10	<5

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 or 1 Form B); SPDT (1 Form C)					
Contact material		Silver alloy					
Contact resistance		100mΩ Max.					
Contact rating (resistive)		05: 5A 125VAC/28VDC 10: 10A 125VAC/28VDC					
		12: 12A 125VAC/28VDC 10A 250VAC 6A 277VAC (TÜV: 6A 250VAC/28VDC) 15: 15A 125VAC/28VDC					
		20: 20A 125VAC/16VDC 1/3HP 125/277VAC					
Switching power		2,500VA / 420W Max.					
Switching voltage		AC 380V / DC 110V Max.					
Insulation resistance		250MΩ Min. (500VDC)					
Dielectric strength		1,000VAC (50Hz/min) Between open contacts 1,500VAC (50Hz/min) Between coil and contact					
Shock resistance		10g Approx.					
Vibration resistance		1.5mm Double amplitude 10-50Hz					
Ambient temperature		-40°C to +85°C					
Humidity		93% RH, 40°C					
Operation life	Mechanical	10 <sup>7</sup>					
	Electrical	10 <sup>5</sup> (at rated load)					
Weight		10g Approx.					

(Specifications are subject to change without notices.)

## **EL.ITALIA SRL**

## El.italia serie FW-FRS11







