

# Power Relays

## Features

Miniature light weight power relay  
 Switching capacity up to 20A  
 Dielectric strength 2,500VAC  
 Wash tight type is available



CE us: E141516

DE : 40025435

## Ordering information

<b>FRS4N C - S 12 DC12V XXX</b>					
1	2	3	4	5	6
1 Relay model			5 Rated voltage		
2 Contact arrangement: A: 1 Form A; B: 1 Form B; C: 1 Form C			6 Special code		
3 Construction: NIL: Dust cover; S: Wash tight type			Note: RoHS : RoHS compliant relay RoHS-I : AgNi contact RoHS-N: AgSnO <sub>2</sub> contact		
4 Contact rating: 7 : 7A 125VAC/28VDC 12: 12A 125VAC/28VDC (10A 250VAC) 15: 15A 125VAC/28VDC 20: 20A 125VAC/28VDC					

## Coil rating

Rated voltage (V)	Coil resistance Ω +/- 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)					
3	25	120	75 Max.	10 Min.	130 Max.	0.36	<15	<5
5	70	71						
6	100	60						
9	225	40						
12	400	30						
18	900	20						
24	1600	15						
48	6400	7.5						
3	20	150				0.45		
6	80	75						
9	180	50						
12	320	38						
24	1280	19						
48	5120	9.4						

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

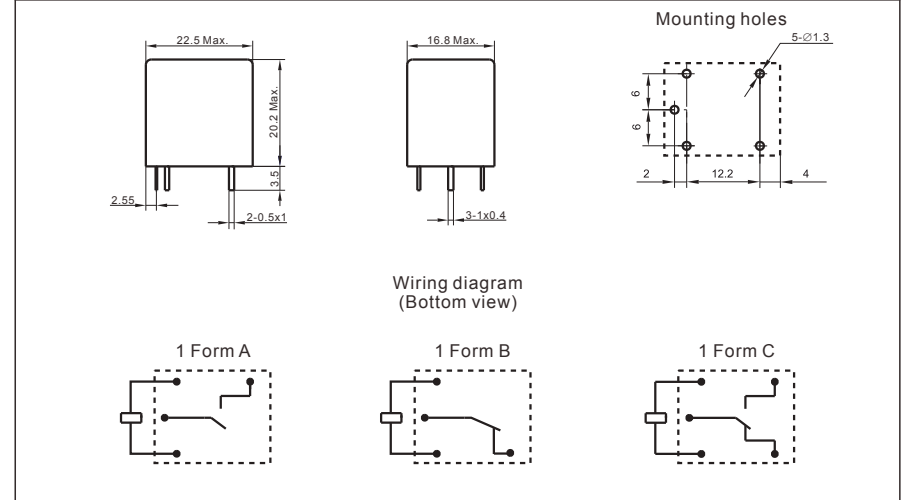
Contact arrangement	SPST (1 Form A or 1 Form B); SPDT (1 Form C)
Contact material	Silver alloy
Contact resistance	100mΩ Max.
Contact rating (resistive)	7 : 7A 125VAC/28VDC 12: 12A 125VAC/28VDC (10A 250VAC) 15: 15A 125VAC/28VDC 20: 20A 125VAC/28VDC (for 1 Form A only) Horse power: ½HP 120VAC (VDE rating for 10A 250VAC/28VDC)
Switching power	2,500VA / 560W Max.
Switching voltage	AC 380V / DC 110V Max.
Insulation resistance	100MΩ Min. (500VDC)
Dielectric strength	750VAC (50Hz/min) Between open contacts 2,500VAC (50Hz/min) Between coil and contact

# El.italia serie FW-FRS4N

Shock resistance	10g Approx.
Vibration resistance	1.5mm Double amplitude 10-55Hz
Ambient temperature	-40°C to +70°C
Operation life	Mechanical 10 <sup>7</sup> Electrical 10 <sup>5</sup> (at rated load)
Weight	16g Approx.

(Specifications are subject to change without notices.)

## Dimensions



## Reference data

