

Power Relays

Features

Miniature light weight power relay
 Switching capacity up to 20A
 Dielectric strength 4,000VAC
 Wash tight type is available
 Insulation system class F is available
 CTI250 is special request



us: E139468

Ordering information

FRS4L B C - S 20 DC12V E XXX							
1	2	3	4	5	6	7	8
1 Relay model				6 Rated voltage			
2 Power consumption: NIL: 0.36W; B: 0.45W				7 Insulation system: NIL: Class B; F: Class F			
3 Contact arrangement: A: 1 Form A; B: 1 Form B; C: 1 Form C				8 Special code			
4 Construction: NIL: Dust cover; S: Wash tight type				Note: RoHS : RoHS compliant relay RoHS-I : AgNi contact RoHS-N: AgSnO ₂ contact			
5 Contact rating: 20: 20A 125VAC 12: 12A 125VAC 10A 250VAC 5A 250VAC (Special request: 16A 277VAC)							

Coil rating

Rated voltage (V)	Coil resistance $\Omega \pm 10\%$		Rated current (mA)		Must operate voltage % of rated voltage (at +20°C)	Must dropout voltage % of rated voltage (at +20°C)	Maximum voltage	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
	FRS4L	FRS4LB	FRS4L	FRS4LB						
3	25	20	120	150						
5	69	56	73	75				FRS4L: 0.36;		
6	100	80	60	68.5				FRS4BL: 0.45		
9	225	180	40	50	75 Max.	10 Min.	130 Max.		<15	<5
12	400	320	30	38						
24	1600	1280	15	19						
48	6400	5120	7.5	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

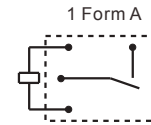
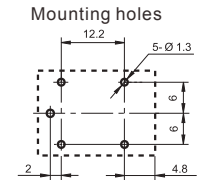
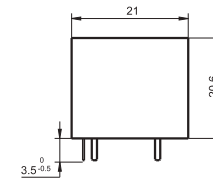
Contact arrangement	SPST (1 Form A or 1 Form B); SPDT (1 Form C)	
Contact material	Silver alloy	
Contact resistance	100m Ω Max. (initial value)	
Contact rating (resistive)	NO: 20A 125VAC/28VDC (Special request: 16A 277VAC/28VDC) 1HP 125VAC/250VAC 10A 250VAC TV-8 NC: 20A 125VAC/28VDC (Special request: 16A 277VAC/28VDC) ½HP 125VAC/250VAC 10A 250VAC TV-8	
Switching power	4,450VA / 560W Max.	
Switching voltage	AC 380V / DC 110V Max.	
Insulation resistance	100M Ω Min. (500VDC)	
Dielectric strength	1,000VAC (50Hz/min) Between open contacts 2,500VAC (50Hz/min) Between coil and contact (Surge voltage: 4,000V)	
Shock resistance	10g Approx.	
Vibration resistance	1.5mm Double amplitude 10-55Hz	
Ambient temperature	-40°C to +85°C	
Operation life	Mechanical	10 ⁷
	Electrical	10 ⁵ (at rated load)
Weight	16g Approx.	

(Specifications are subject to change without notices.)

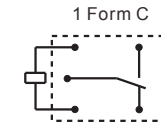
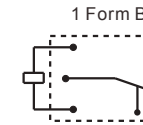
El.italia serie FW-FRS4L

Dimensions

mm



Wiring diagram
(Bottom view)



Reference data

