Power Relays

Features

Low coil power consumption Small size and low cost PCB mounting, DIL pitch terminal Standard and high sensitive operation use Dust cover or wash tight type



c us: E141516(N)

Ordering information	
ERS1H - S3 - DC12V	
1 Relay model: FRS1; FRS1K (standard 5 pins)	4 Contact rating: NIL: 1Amp; 2: 2Amp; 3: 3Amp;
2 Power consumption: NIL: 0.36W;	5 : 5Amp (for "B" type only)
B : 0.45W (available with 5Amp);	5 Rated voltage
H : 0.2W high sensitive	Note: RoHS : RoHS compliant relay
3 Construction: NIL Dust cover; S: Wash tight type	RoHS-I : AgNi contact
	RoHS-N: AgSnO, contact

Coil rating

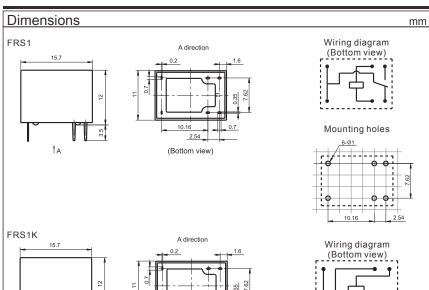
	<u> </u>								
Rated voltage	Coil resistance Ω+/-10%		Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (W)	Operate time	Release time	
(V)	FRS1(K)B	FRS1(K)	FRS1(K)H	% of ra	ated voltage (at	t 20°C)	Approx.	(ms)	(ms)
3	20	25	45				FRS1(K)B:		
5	56	70	120				0.45		
6	80	100	180	75 Max.	10 Min.	110 Max.	FRS1(K):	<5	<5
9	180	220	400		TO MITT.	TTU Wax.	0.36	<5	~ 5
12	320	400	700				FRS1(K)H:		
24	1280	1600	2800				0.20		

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 Contact material Contact resistance Contact rating (resistive)	SPST (1 Form A); SPDT (1 Form C) Silver alloy (gold flash) 50mΩ Max. 10 125/VAC / 30VDC 304 25FVAC / 30VDC				
Contact resistance	50mΩ Max. 1A 125VAC / 30VDC				
	1A 125VAC / 30VDC				
Contact rating (resistive)					
	1A 125VAC / 30VDC 2A 125VAC / 30VDC 3A 125VAC / 30VDC 5A 125VAC / 30VDC (only available for "B" type - 0.45W)				
Switching power	625VA / 150W Max.				
Switching voltage	AC 220V / DC 60V Max.				
Insulation resistance	100MΩ Min. (500VDC)				
Dielectric strength	500VAC (50Hz/min) Between open contacts 500VAC (50Hz/min) Between coil and contact (Special: 1,000Vrms)				
Shock resistance	10g Approx.				
Vibration resistance	1.5mm Double amplitude 10-55Hz				
Ambient temperature	-25°C to +75°C				
Operation life Mechanical Electrical	10 ⁷ 10 ⁵				
Weight	4g Approx.				

(Specifications are subject to change without notices.)



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(Bottom view)

2.54

07

3.5

1_A

