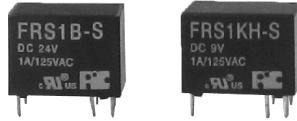


## Features

- 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



us: E141516(N)

Conrad spezifische Daten sind gelb makiert!

## Ordering information

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

## Coil rating

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

505188

505196

505218

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

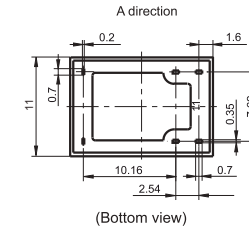
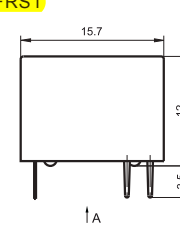
Contact arrangement	SPST (1 Form A); SPDT (1 Form C)
Contact material	Silver alloy (gold flash)
Contact resistance	50mΩ Max.
Contact rating (resistive)	<b>1A 125VAC / 30VDC</b> 2A 125VAC / 30VDC 3A 125VAC / 30VDC 5A 125VAC / 30VDC (only available for "B" type - 0.45W)
Switching power	625VA / 150W Max.
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 10 <sup>7</sup> Electrical 10 <sup>5</sup>
Weight	4g Approx.

(Specifications are subject to change without notices.)

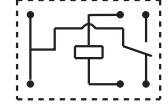
## Dimensions

mm

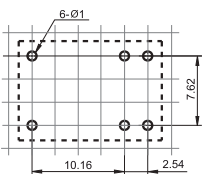
### FRS1



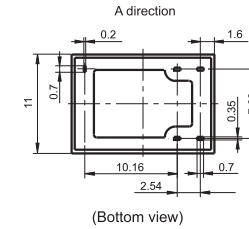
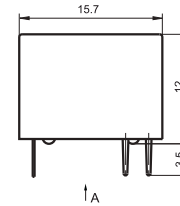
### Wiring diagram (Bottom view)



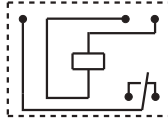
### Mounting holes



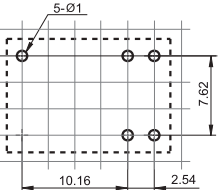
### FRS1K



### Wiring diagram (Bottom view)

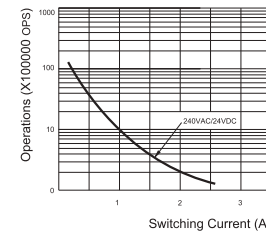


### Mounting holes

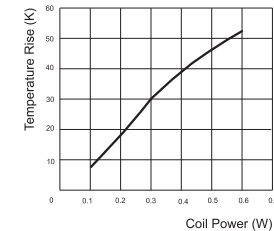


## Reference data

### ENDURANCE CURVE



### COIL TEMPERATURE RISE



### OPERATE TIME

