Coil rating

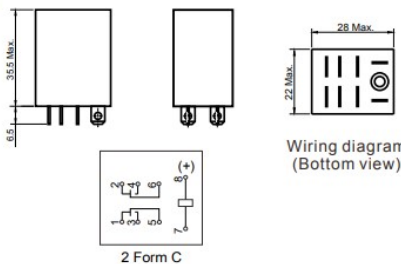|	Rated voltage (V)	Coil resistance Ω+/-10%	Rated current (mA) 50Hz	60Hz	Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption Approx.	Operate time (ms)	Release time (ms)
					% of rated voltage (at +20°C)					
AC	6	11.5	234	200						
	12	46	117	100						
	24	184	58.5	50						
	36	370	39	33.4		30 Min.		1.2VA		
	48	735	28	24						
	120	4550	14.1	13.6						
	220/240	14400	11.4	10	80 Max.		110 Max.		<25	<25
DC	5	27.5	182							
	6	40	150							
	12	160	75							
	24	650	36.9			10 Min.		0.9W		
	36	1500	24.5							
	48	2600	18.5							
	110	11000	10							

CAUTION: 1. The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
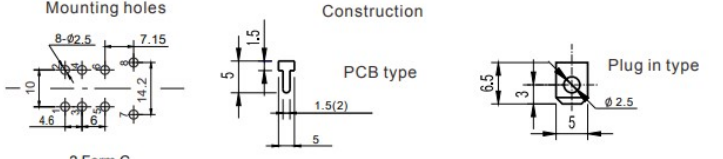2. Pickup and release voltage are for test purposes only and are not to be used as design criteria.

Characteristics

Contact arrangement	SPST (1 Form A); SPDT (1 Form C); DPST (2 Form A); DPDT (2 Form C); 3PST (3 Form A); 3PDT (3 Form C)
Contact material	Silver alloy
Contact resistance	50mΩ Max. (at 1A 6VDC)
Contact rating (resistive)	See figure 1
Switching power	5,540VA / 560W Max.
Switching voltage	AC 300V / DC 30V Max.
Insulation resistance	500MΩ Min. (500VDC)
Dielectric strength	1,000VAC (50Hz/min) Between open contacts 1,500VAC (50Hz/min) Between coil and contact
Shock resistance	Functional : 98m/s² Destructive: 980m/s²
Vibration resistance	1.5mm Double amplitude 10-55Hz

Ambient temperature		-40°C to +85°C
Humidity		85% RH, 30°C
Operation life	Mechanical	2 X 10⁷
	Electrical	1 X 10⁵
Weight		For 1 pole & 2 poles: 35g Approx.; For 3 poles: 50g Approx.

(Specifications are subject to change without notices.)

Dimensions   mm

FRM3W

Wiring diagram
(Bottom view)

2 Form C

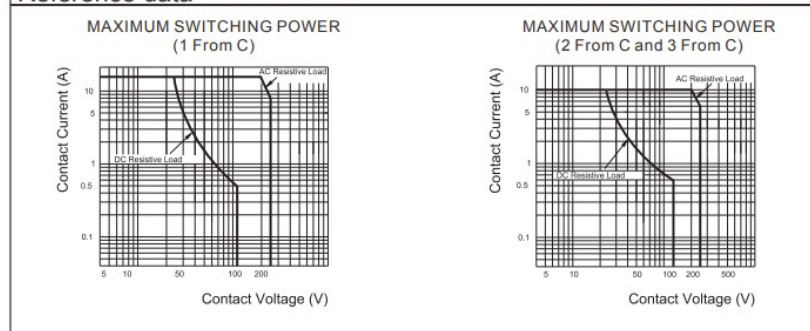## Dimensions   mm

Mounting holes   Construction

PCB type

Plug in type

2 Form C

Reference data

MAXIMUM SWITCHING POWER
(1 From C)

MAXIMUM SWITCHING POWER
(2 From C and 3 From C)

Figure 1

Item 1	1 pole	2 & 3 poles
Rating load	15A 250VAC 15A 28VDC Special request: 20A 277VAC / 28VDC	10A 250VAC 10A 28VDC Special request: (for 2 poles) 10A 277VAC / 28VDC 12A 250VAC / 28VDC ½HP 125VAC
Maximum switching voltage	AC 250V / DC 30V	
Maximum current	20A	10A / 12A

(Specifications are subject to change without notices.)