Automotive Relays

Features

Small size & high contact rating 150A High temperature design Ideal for using in automobile Plug in terminal



Ordering information

$\frac{FRC6}{1} \underset{2}{\overset{B}{}} \underset{3}{\overset{A}{}} - \underset{4}{\overset{1}{}} \underset{6}{\overset{N}{}} \underset{7}{\overset{DC12V}{\overset{DC12V}{\overset{N}{}}}$				
1 Relay model	6 Coil suppression: NIL: Standard type;			
2 Contact rating: NIL: 100A 12VDC; B: 150A 12VDC	N : With diode; R: Resistor;			
3 Contact arrangement: A: 1 Form A; C: 1 Form C	T : With transil (DB-03)			
4 Mounting termination: 1: Plain dust cover	7 Rated voltage			
5 Termination: NIL: 9.5mm (for pins#30, 87 & 87a);	Note: RoHS : RoHS compliant relay			
1 : 6.3mm (for pins #30, 87 & 87a) [only	RoHS-I : AgNi contact			
available for 50A 24VDC]	RoHS-N: AgSnO ₂ contact			

Coil rating

Rated voltage	Coil resistance	Rated current	Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (W)	Operate time	Release time
(V)	Ω+/-10%	(mA)	% of rated voltage (at 20°C)		Approx.	(ms)	(ms)	
12 24	50 195	240 123	65 Max.	10 Min.	130 Max.	2.9	<10	<5
*If with resist 12VDC with	stor: 1 680Ω +/- 10%		-	-				

24VDC with 2,700Ω +/- 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 arrangem	ient	SPST (1 Form A); SPDT (1 Form C)					
Contact material		Silver alloy					
Contact resistance		30mΩ Max.					
Contact rating (resistive)		FRC6 : N.O.: 100A 12VDC, 50A 24VDC; N.C.: 80A 12VDC, 40A 24VDC					
		FRC6B: N.O.: 150A 12VDC, 70A 24VDC; N.C.: 100A 12VDC, 50A 24VDC					
Switching power		1,800W Max.					
Switching voltage		DC 75V Max.					
Switching current		150A Max.					
Voltage drop		≤200mV (at contact rating)					
Insulation resistance		100MΩ Min. (500VDC)					
Dielectric strength		500VAC (50Hz/min)					
Shock resistance		147m/s ² 11ms					
Vibration resistance		1.5mm Double amplitude 10-40Hz					
Ambient temperature		-40°C to +85°C (Special request up to 125°C)					
Humidity		85% RH, 40°C					
Operation life	Mechanical	10 ⁷					
	Electrical	10 ⁵ (at rated load)					
Weight		60g Approx.					

(Specifications are subject to change without notices.)

