Features

High contact rating (60A)
High temperature design
Ideal for use in control-car starter and light
Plug in or PC board terminals
Dust cover only

Ordering information

FRC2 B A - 1 B N - DC12V
1 2 3 4 5 6 7

1 Relay model
2 Contact rating: NIL: 50A(NO) 40A(NC); B: 60A(NO) 40A(NC)
3 Contact arrangement: A: 1 Form A; C: 1 Form C; U: 1 Form U
4 Mounting termination: NIL: Moulded bracket dust cover;
1: Plain dust cover; 2 : Metal bracket dust cover
5 Version: NIL: Plug-in type; A: PCB type
6 Coil suppression: NIL: Standard type;
N: With diode; R: Resistor; T: Transil (DB-03)
7 Rated voltage
Note: RoHS : RoHS compliant relay
RoHS-I : AgNi contact
RoHS-N: $AgSnO_2$ contact

Coil rating

Rated voltage (V)	Coil resistance Ω+/-10%	Rated current (mA)	Must operate voltage	Must dropout voltage	Maximum voltage	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
			% of rated voltage (at 20°C)					
6	20	300	65 Max.	10 Min.	130 Max.	1.8	<7	<5
12	80	150						
24	320	75						
48	1280	37.5						

*If use resistor:
DC 6V with 180Ω resistor
DC 12V with 680Ω resistor
DC 24V with 2,702Ω resistor

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

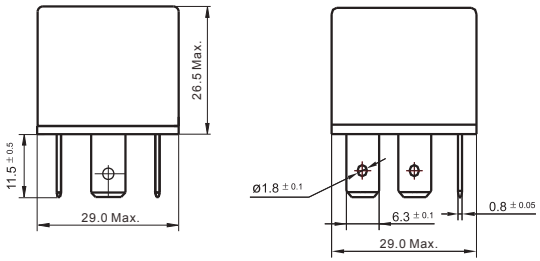
Contact arrangement		1 Form A; 1 Form C; 1 Form U
Contact material		Silver alloy
Contact resistance		30mΩ Max.
Contact rating (resistive)		1A: 50A 14VDC (Special request: 60A 14VDC) 1C: (NO) 50A 14VDC; (NC) 40A 14VDC 1U (2 x 1 Form A): 2 x 25A 14VDC
Switching power		700W Max.
Switching voltage		DC 75V Max.
Insulation resistance		100MΩ Min. (500VDC)
Dielectric strength		500VAC (50Hz/min)
Shock resistance		20g Approx.
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		38g Approx.

(Specifications are subject to change without notices.)

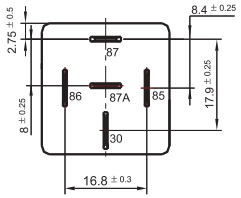
Dimensions

mm

Dust cover

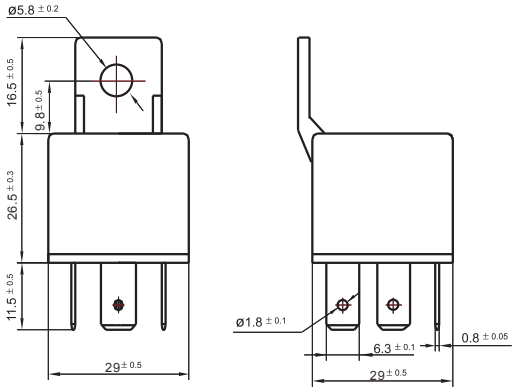


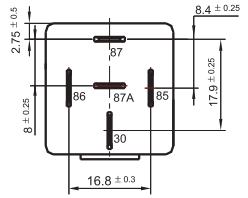
Mounting holes



(Bottom view)

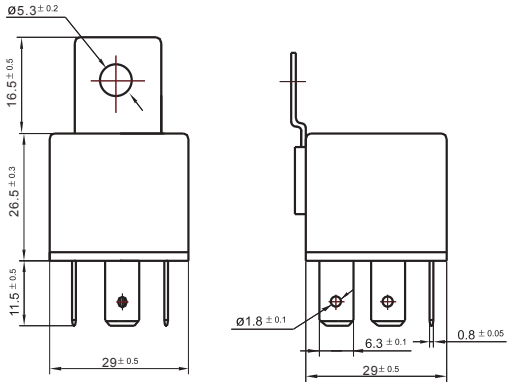
Moulded bracket dust cover

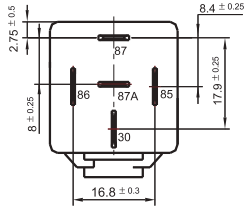




(Bottom view)

Metal bracket dust cover



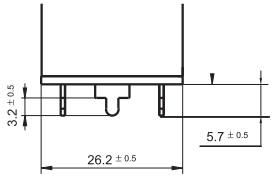


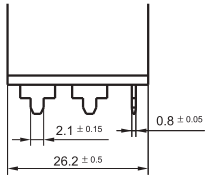
(Bottom view)

Dimensions

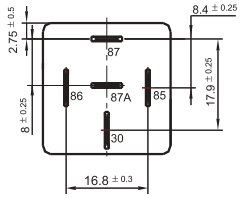
mm

PCB type terminal



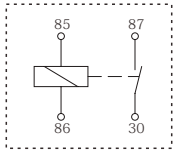


Mounting holes

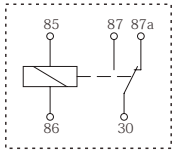


(Bottom view)

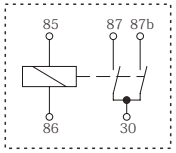
Wiring diagram



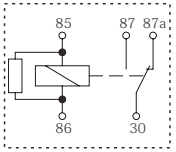
1 Form A



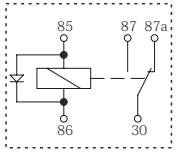
1 Form C



1 Form U



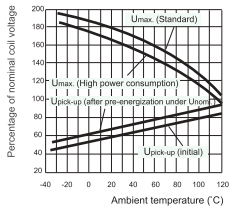
With resistor



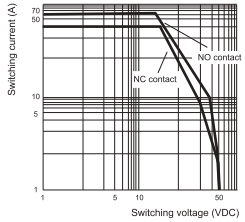
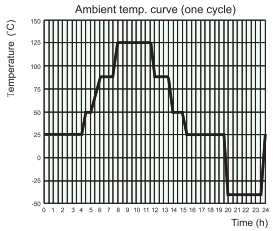
With diode

Reference data

1. Coil operating voltage range



2. Load limit curve



3. Ambient temperature curve of the electrical endurance test