

Features

High contact rating (40A)
 High temperature design
 Ideal for use in control-car starter and light
 Quick connect or PC board terminals
 Dust cover or wash tight type



Ordering information

ERC1 B A - 1 A N S J - DC12V

1 Relay model
 2 Contact rating: NIL: 30A 14VDC; B : 40A 14VDC
 3 Contact arrangement: A: 1 Form A; B : 1 Form B;
 C: 1 Form C; 2A: 2 x #87; 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 Construction: NIL: Dust cover; S: Wash tight type
 (only for dust cover & metal bracket dust cover)
 8 Terminations: J: #30 & #86 terminal revised
 9 Rated voltage
 Note: RoHS : RoHS compliant relay
 RoHS-1 : AgNi contact
 RoHS-N: AgSnO₂ contact

Coil rating

Rated voltage (V)	Coil resistance Ω +/- 10%	Rated current (mA)	Must operate voltage % of rated voltage (at 20°C)	Must dropout voltage 10 Min.	Maximum voltage 130 Max.	Power consumption (W) Approx.	Operate time (ms)	Release time (ms)
6	22.5	267	65 Max.			1.6	<7	<5
12	90	133						
24	360	67						

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

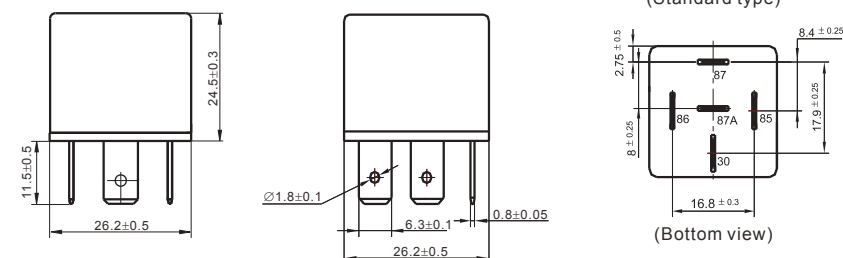
Contact arrangement	SPST (1 Form A or 1 Form B); SPDT (1 Form C); 1 Form U (2 x 1 Form A); 2A (2 x Pin#87)		
Contact material	Silver alloy		
Contact resistance	30mΩ Max.		
Contact rating (resistive)	FRC1 : N.O.: 30A 14VDC; N.C.: 20A 14VDC FRC1B: N.O.: 40A 14VDC; N.C.: 30A 14VDC (Special request: 40A) For 1 Form U (2A): 2 x 20A; 2A (2 x pin#87): 2 x 20A		
Switching power	630W Max.		
Switching voltage	DC 75V Max.		
Insulation resistance	100MΩ Min. (500VDC)		
Dielectric strength	500Vrms between coil and contact		
Shock resistance	20g Approx.		
Vibration resistance	1.5mm Double amplitude 10-40Hz		
Ambient temperature	-40°C to +85°C (Special request: -40°C to +125°C)		
Humidity	85% RH, 40°C		
Operation life	Mechanical	10 ⁷	
	Electrical	10 ⁵	
Weight	FRC1: 36g Approx.; FRC1-1: 31g Approx.; FRC1-2: 38g Approx.		

(Specifications are subject to change without notices.)

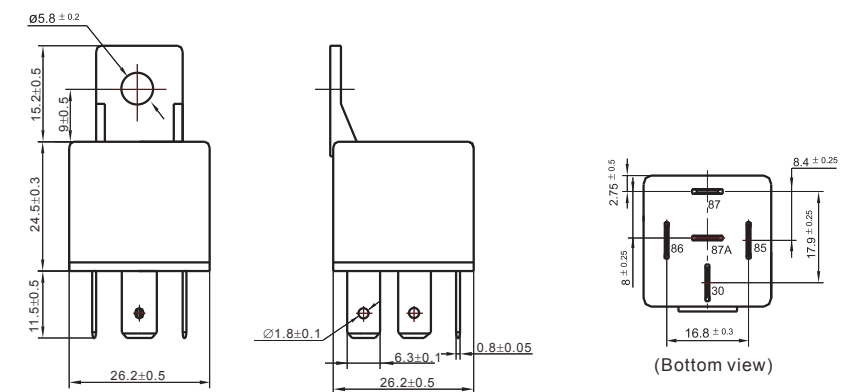
Dimensions

mm

Dust cover



Moulded bracket dust cover



Metal bracket dust cover

