

■ Features

- Miniature heavy duty general purpose automotive relay
Dimensions: 20.4×15.1×22.0(mm)
- Switching capacity 35A
- 1 Form A and C contact configurations
- Operating ambient temperature: 125°C
- Applications: air compressor, heater, fan motor, blower fan, defogger, etc



ORDERING INFORMATION

CMA33(4133) - [S] - [DC12V] - [A] - [R] - [D]

Model	Enclosure	Coil Voltage	Contact Form	Parallel Resistor	Parallel Diode
	S - Plastic Sealed Type	DC12V DC24V	A - 1 Form A C - 1 Form C	R- With Resistance (6V - 180Ω, 12V - 680Ω, 24V - 2700Ω) Blank-Standard	D - With Diode Blank - Standard

SPECIFICATION

CONTACT DATA

Contact Form	1 Form A, 1 Form C	
Contact Material	Ag Alloy	
Contact Rating	Refer to table1	
Contact Resistance	Max. 50mΩ (6VDC 1A)	
Load	Max. Switching Voltage	28VDC
	Max. Switching Current	35A
	Max. Make Current	NO: 90A NC: 20A
	Max. Switching Power	490W (12VDC) 420W (24VDC)
Life	Electrical	100,000 operations
	Mechanical	1,000,000 operations

COIL DATA

Nominal Coil Power	1.5W (12V), 1.8W (24V)
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GENERAL DATA

Insulation Resistance	Min. 100MΩ 500VDC	
Dielectric Strength	Between open contacts	500VAC, 1min
	Between coil and contacts	500VAC, 1min
Operate Time	Max. 10ms	
Release Time	Max. 10ms	
Operating Temperature	-40°C to +85°C	
Humidity	35~95%RH, +40°C	
Shock Resistance	Endurance	1,000m/s ²
	Misoperation	100m/s ²
Vibration Resistance	Endurance	10~55Hz, 1.5mm double amplitude
	Misoperation	10~55Hz, 1.5mm double amplitude
Weight	Approximately 18.0g	

Note:Data shown are of initial value

Table 1 (Contact Rating)

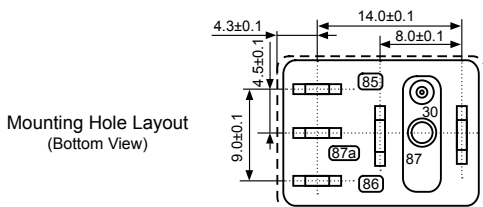
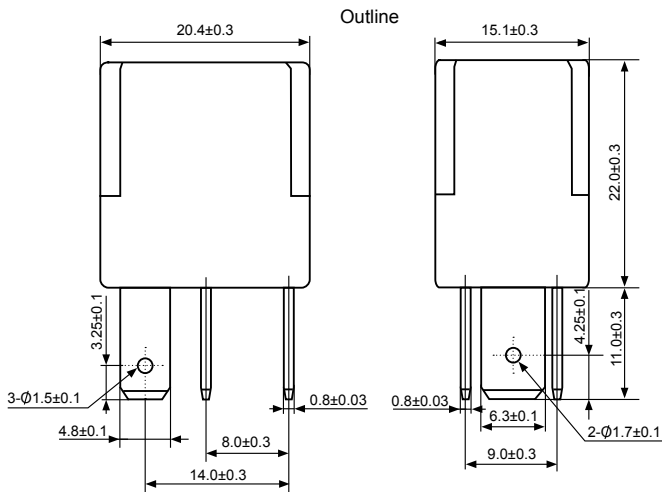
Type		Coil Voltage 12VDC	Coil Voltage 24VDC
Rating (Resistive Load)	Contact Rating	NO: 35A 14VDC NC: 20A 14VDC	NO: 15A 28VDC NC: 8A 28VDC
	85°C Switching Current	NO: 20A(14VDC) NC: 10A(14VDC)	NO: 15A(28VDC) NC: 8A(28VDC)

COIL DATA

Ambient Temperature: 23°C

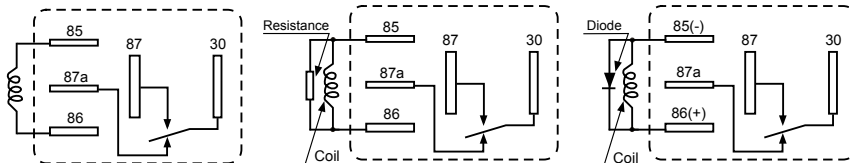
Model	Nominal Voltage VDC	Coil Resistance Ω +/-10%	Parallel Resistor Ω	Operate Voltage \leq VDC	Release Voltage \geq VDC	Coil Power mW
CMA33(4133)-S-DC12V	12	96	680	7.2	1.2	1500
CMA33(4133)-S-DC24V	24	320	2700	14.4	2.4	1800

OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)



Wiring Diagram (Bottom View)

Remark: Form A: Without 87a terminal
Form C: With all terminals



REFERENCE DATA

Coil Temperature Rise

