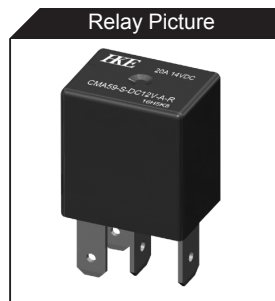




- ### Features
- Automotive Mute Relay  
Dimensions: 20.4×15.1×22.0mm
  - 100,000operations for 25A 14VDC (Locked rotor current )
  - Quick-Flat connection terminal
  - sound pressure≤50dB
  - Compliance to RoHS and ELV



## ORDERING INFORMATION

**CMA59 - S - DC12V - A - R**

	Enclosure	Coil Voltage	Contact Form	Parallel Resistor
Model	S - Plastic Sealed Type	DC12V	A - 1 Form A C - 1 Form C	Blank-Standard R- With Resistor (12V - 680Ω)

## SPECIFICATION

### CONTACT DATA

Contact Form	A-1 Form A,C-1 Form C	
Contact Material	Ag Alloy	
Contact Rating	A(Resistive): 20A 14VDC C(Resistive): NO:20A 14VDC NC:10A 14VDC Motor: 25A (peak) 14VDC	
Contact Resistance	Max.100mΩ(6VDC 1A)	
Load	Max. Switching Voltage	16VDC
	Max. Switching Current	30A
	Max.Continuous Current	30A(23℃, 1h)
	Min. Switching Load	1A 6VDC
Life	Electrical	100,000ops (720ops/h)
	Mechanical	1,000,000ops (300ops/min)

### COIL DATA

Nominal Coil Power	0.64W
Nominal Coil Power(With Resistor)	0.85W
Max.nominal coil voltage(5A)	DC14V(Continuous) DC16V(15 min.)

### GENERAL DATA

Insulation Resistance		Min.100MΩ 500VDC
Dielectric Strength	Between open contacts	550VAC,50/60Hz,1 min
	Between coil and contacts	550VAC,50/60Hz,1 min
Operate Time		Max.10ms
Release Time		Max.10ms
Operating Temperature		-40℃ to +125℃
Humidity		35~95%RH, +40℃
Shock Resistance	Endurance	1,000m/s <sup>2</sup> (10g)
	Misoperation	100m/s <sup>2</sup> (100g)
Vibration Resistance	Endurance	10~55Hz,1.5mm double amplitude
	Misoperation	10~55Hz,1.5mm double amplitude
Weight		Approximately11.6g

Note:Data shown are of initial value

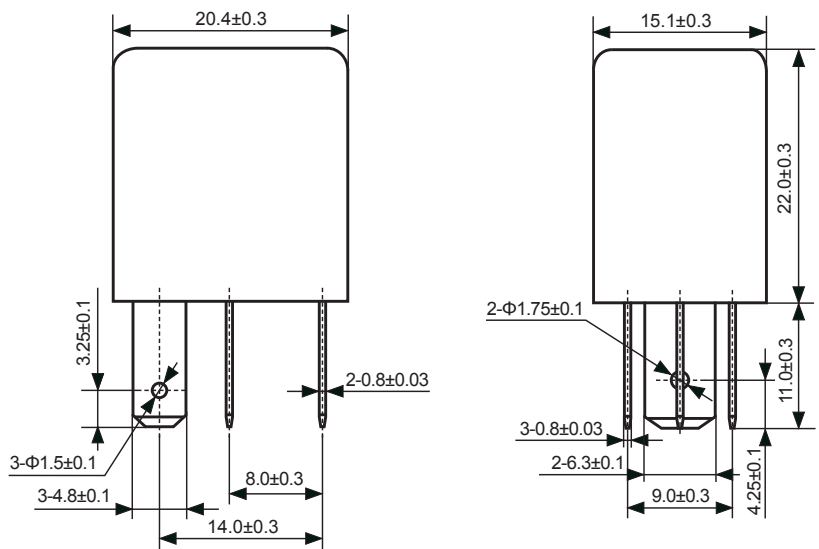
COIL DATA

Ambient Temperature: 23°C

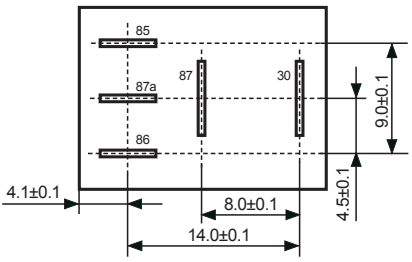
Model	Nominal Voltage VDC	Coil Resistance Ω±10%	Parallel resistor Ω±5%	Equivalent resistance(Ω±10%)	Operate Voltage ≤VDC	Release Voltage ≥VDC	Max. Allowable Voltage (5A)	Coil Power W
CMA59-S-DC12V	12	225	—	—	7.2	1.2	14	0.64
CMA59-S-DC12V (R)	12	225	680	169	7.2	1.2	14	0.85

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

Outline



Mounting Hole Layout (Bottom View)



Wiring Diagram (Bottom View)

