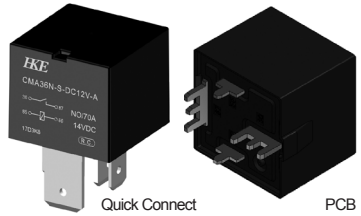


**CMA36N**

AUTOMOTIVE RELAY

**Features**

- General purpose automotive relay
- Dimensions:26.6×26.0×22.7(mm)
- 70A of switching capability
- Contact:1 Form A
- Available for Plastic sealed and unsealed type
- Quick Connect Terminals and PCB Terminals
- 125℃ of operating ambient temperature

**Relay Picture****ORDERING INFORMATION****CMA36N - S - DC12V - A - R - P**

Model	Enclosure	Coil Voltage	Contact Form	Parallel Electronic Component	Terminal Type
	S - Plastic Sealed Type Blank - Unsealed	DC12V DC24V	A - 1 Form A	Blank-Standard R- With Resistor (12V - 680Ω, 24V - 2700Ω) D - With Diode	Blank - Quick Connect Terminals P - PCB Terminals

**SPECIFICATION****CONTACT DATA**

Contact Form	1 Form A	
Contact Material	Ag Alloy	
Contact Rating	Resistive: NO:70A/14VDC NO:40A/28VDC Inductive: Make150A/14VDC,break50A/14VDC Lamp: Surge200A/14VDC,break40A/14VDC	
Contact Resistance	Max.25mΩ( 24VDC 1A)	
Load	Max. Switching Voltage	Refer to 'Max.switching power curve'
	Max. Switching Current	Make(NO,lamp)200A Break (steady state) 70A (res. 13.5V)
	Max.Continuous Current	70A(23℃),50A(85℃),30A(125℃)
	Min. Switching Load	1A 6VDC
Life	Electrical	100,000Cycles
	Mechanical	1,000,000Cycles (300cycles/minutes)

**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	5~95%RH,50℃	
Shock Resistance	294m/s <sup>2</sup> (30g)	
Vibration Resistance	5Hz~22.3Hz,10mmDouble Amplitude 22.3Hz~500Hz,98m/s <sup>2</sup> (10g)	
Mechanic	Cover Strength: 200N (Pull/Press) Terminal Strength: 100N (Pull/Press) Terminal Bending: 10N (Each Direction)	
Weight	Approximately 38g	

Note:Data shown are of initial value

**COIL DATA**

Nominal Coil Power	1.6W (12V) , 1.8W (24V)
Nominal Coil Power (With Resistor)	1.8W (12V) , 2.0W (24V)

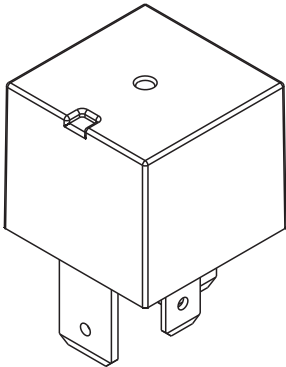
COIL DATA

Ambient Temperature: 23°C

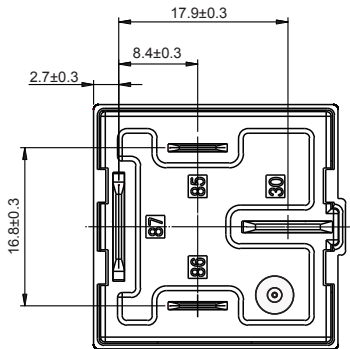
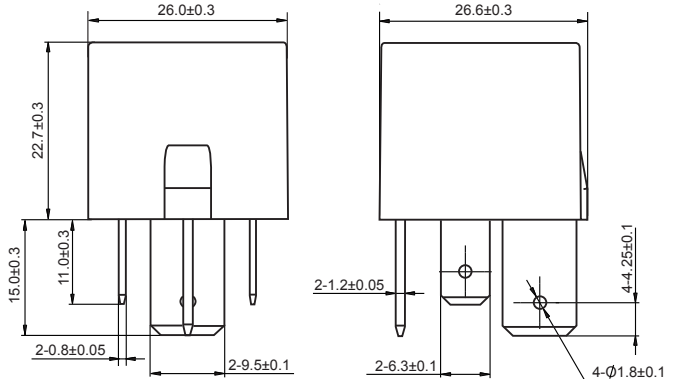
Model	Nominal Voltage VDC	Coil Resistance $\Omega \pm 10\%$	Parallel Resistance $\Omega \pm 5\%$	Equivalent Resistance $\Omega \pm 10\%$	Operate Voltage $\leq VDC$	Release Voltage $\geq VDC$	Coil Power W
CMA36N(S)-DC12V-A	12	90	-	-	7.8	1.2	1.6
CMA36N(S)-DC12V-A-R	12	90	680	79.5	7.8	1.2	1.8
CMA36N(S)-DC24V-A	24	320	-	-	16	2.4	1.8
CMA36N(S)-DC24V-A-R	24	320	2700	286	16	2.4	2.0

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

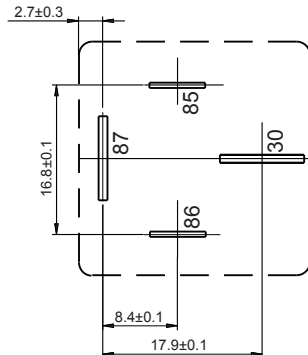
Quick Connect Terminals



Outline



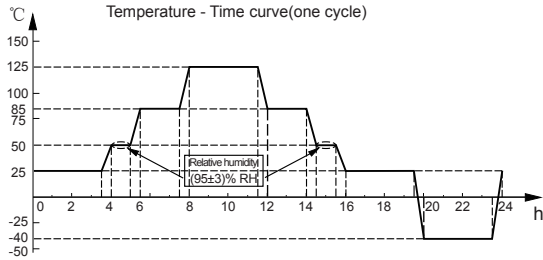
Mounting Hole Layout (Bottom View)





REFERENCE DATA

Temperature curve for electrical endurance test



Max. switching power curve

