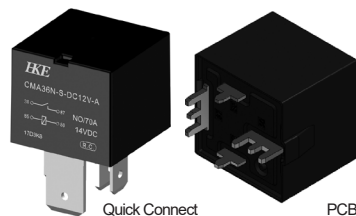


CMA36N

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°C of operating ambient temperature

Relay Picture

Quick Connect

PCB

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.50mΩ(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°C),50A(85°C),30A(125°C)
	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
		Max.20ms(With Diode)
Operating Temperature		-40°C to +125°C
Humidity		5~95%RH,50°C
Shock Resistance	294m/s ² (30g)	
Vibration Resistance	5Hz~22.3Hz,10mmDouble Amplitude	
	22.3Hz~500Hz,98m/s ² (10g)	
Mechanic	Cover Strength: 200N (Pull/Press)	
	Terminal Strength: 100N (Pull/Press)	
	Terminal Bending: 10N (Each Direction)	
Weight	Approximately 32.0g (Without Bracket)	
	Approximately 35.0g (Bracket)	

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)

CMA36N

AUTOMOTIVE RELAY

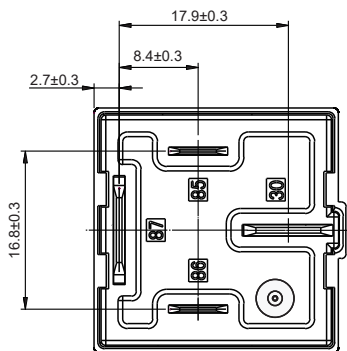
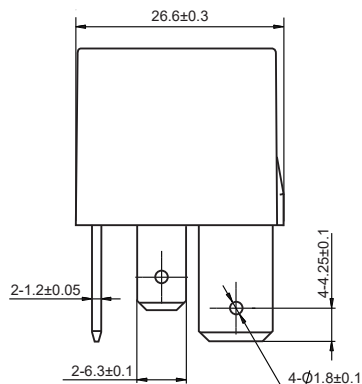
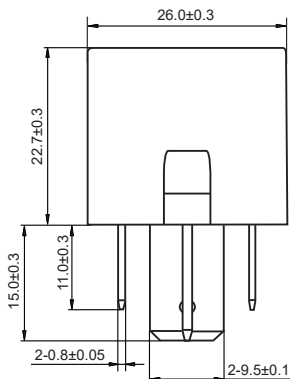
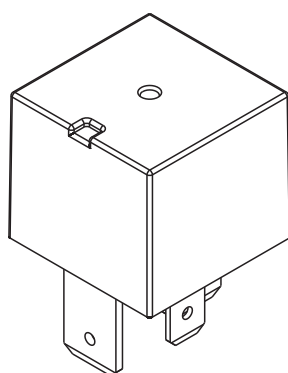
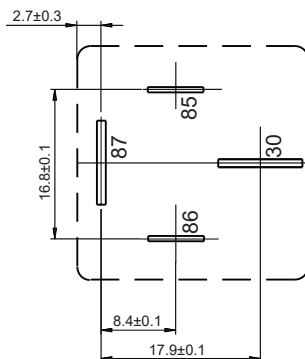
COIL DATA

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 $\leq \text{VDC}$	Release Voltage $\geq \text{VDC}$	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
Without Bracket

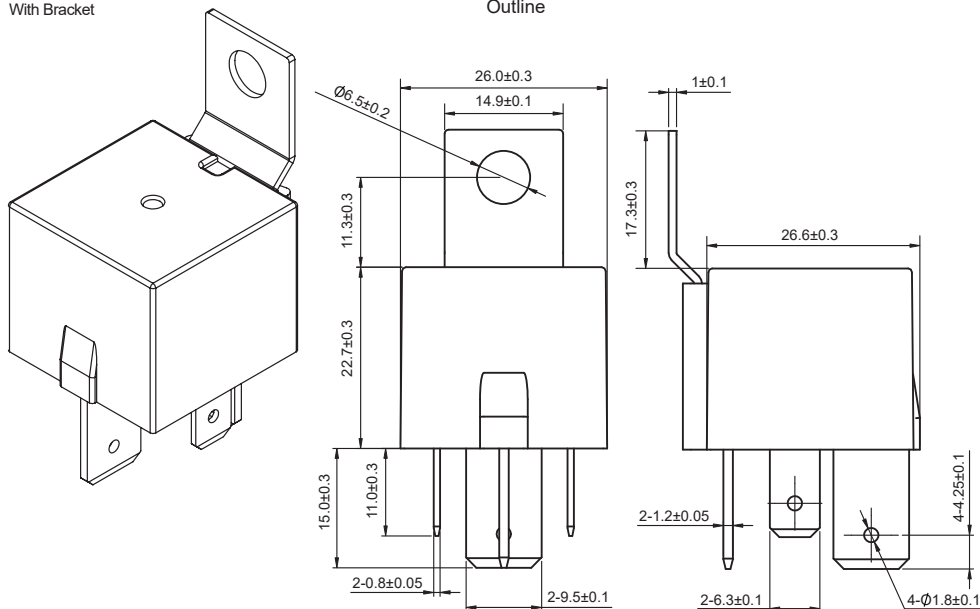
Outline

Mounting Hole Layout
(Bottom View)

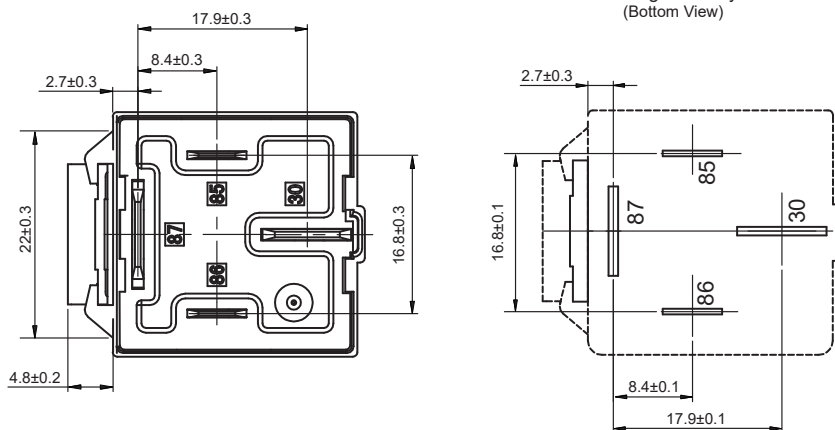
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

Quick Connect Terminals With Bracket

Outline



Mounting Hole Layout (Bottom View)

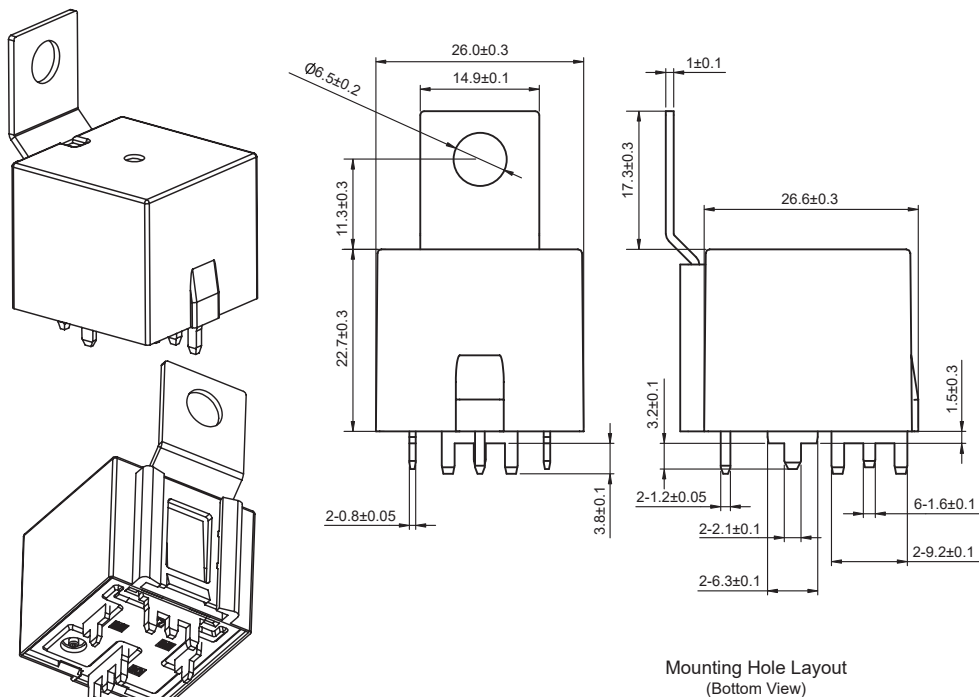
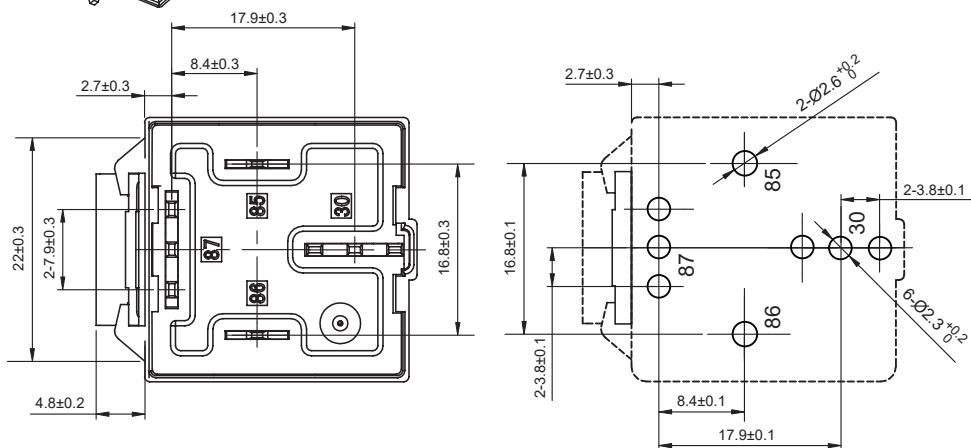


CMA36N

AUTOMOTIVE RELAY

OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)PCB Terminals
With Bracket

Outline

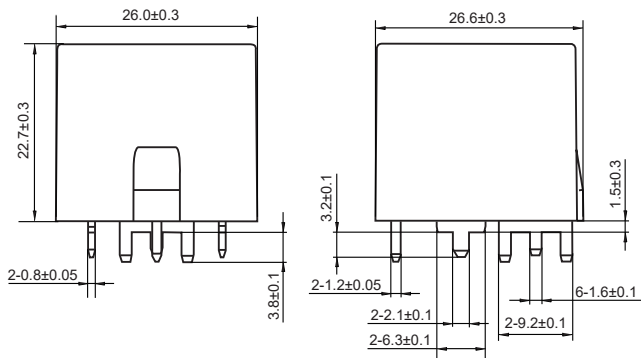
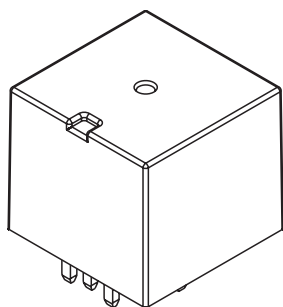
Mounting Hole Layout
(Bottom View)

ISO9001, IATF16949, ISO14001 Approved

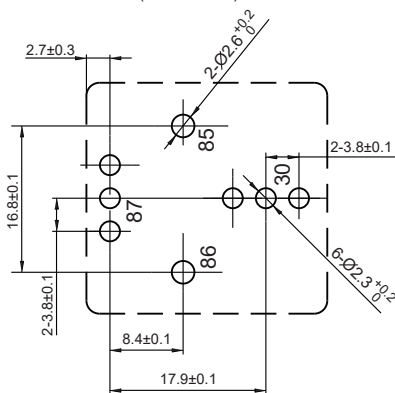
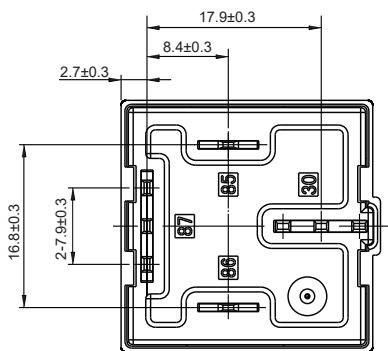
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

PCB Terminals
Without Bracket

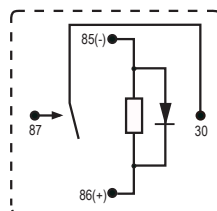
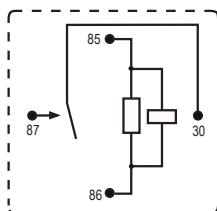
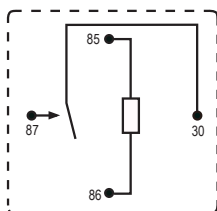
Outline



Mounting Hole Layout
(Bottom View)

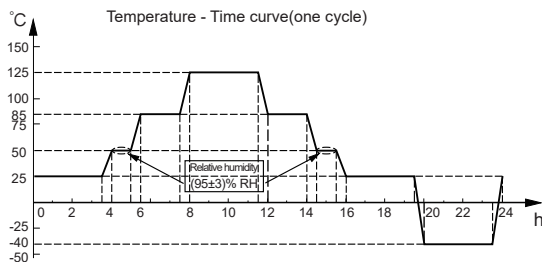


Wiring Diagram
(Bottom View)



REFERENCE DATA

Temperature curve for electrical endurance test



Max. switching power curve

