

● Features

- 50A switching capability
- > 1.5 mm contact gap
- Heavy load up to 5000VA
- 4.5kV dielectric strength (between coil and contacts)
- PCB & QC layouts available
- UL insulation system: Class F available
- Environmental friendly product (RoHS compliant)
- Dimensions: 30.5 x 16.0 x 23.4 mm

30.5 x 16.0 x 26.6 mm (PCB)

30.5 x 16.0 x 30.1 mm (Bracket)



● Application

- UPS / Solar Inverter / Industrial machinery / FA Equipment / Saving Energy Equipment / Home Appliances / Air Conditioning / Refrigerator / Electronic Water Heater, etc.

● Contact Data

Contact Arrangement	1A
Contact Material	Ag Alloy
Contact Rating	50A 250VAC (resistive) 25A 277VAC (resistive) 1.5HP 125VAC 1.5HP 250VAC TV-10 120VAC inrush current: 80A 250VAC (COS θ =0.7)
Max. Switching Power	13850VA
Max. Switching Voltage	300VAC
Max. Switching Current	50A
Contact Resistance	$\leq 100\text{m}\Omega$

Air Conditioner Relay I CE 50A



RELAY / ISO9001 / IATF16949 CERTIFIED

● Contact Data

Electrical Endurance	25A: 1×10^5 50A: 6×10^3
Mechanical Endurance	1×10^7

● Coil Parameter (at 23°C)

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(max) (VDC)	Coil Power Consumption (W)
Rated	Max.				
3	3.9	10	2.25	0.3	0.90
5	6.5	28	3.75	0.5	
6	7.8	40	4.50	0.6	
9	11.7	90	6.75	0.9	
12	15.6	160	9.00	1.2	
24	31.2	640	18.0	2.4	
48	62.4	2560($1 \pm 15\%$)	36.0	4.8	

● Operation Condition

Insulation Resistance		1000M Ω min (at 500VDC)
Dielectric Strength	Between Contacts	2500VAC 1min
	Between Contact and Coil	4500VAC 1min
Shock Resistance	Functional	98m/s ²
	Endurance	980m/s ²
Vibration Resistance		10~55Hz double amplitude 1.5mm
Ambient Temperature		-40 ~ +85°C
Operate Time		≤ 20 ms
Release Time		≤ 10 ms
Relative Humidity		5%~85%
Weight		Approx. 28g

Air Conditioner Relay I CE 50A



RELAY / ISO9001 / IATF16949 CERTIFIED

● Safety Standards

UL	TUV	CQC
25A/277VAC 1.5HP/250VAC, 125VAC TV10/120VAC	25A/250VAC	25A/250VAC

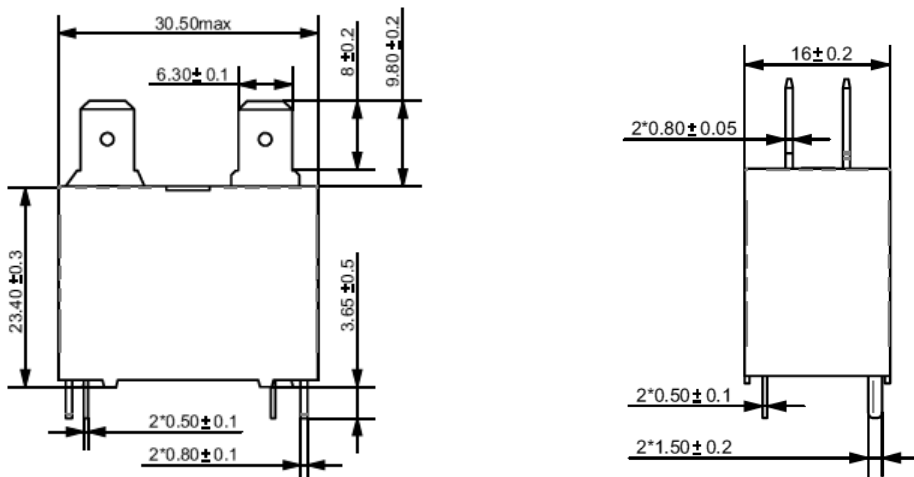
● Ordering Information

	CE	-12VDC	-A	-25	-P	(XXX)
Model						
Coil Voltage	3, 5, 6, 9, 12, 24, 48VDC					
Contact Arrangement	A: 1 Form A					
Contact Current	25: 25A					
Structure	Blank: PCB and Quick connect type P: PCB type B: Bracket cover					
Special Code	017: 50A XXX: Customer special requirement					

● Dimensions (UNIT: mm)

Outline Dimensions

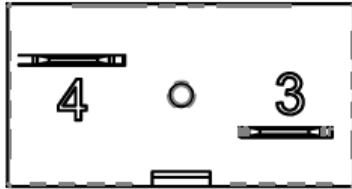
Standard type



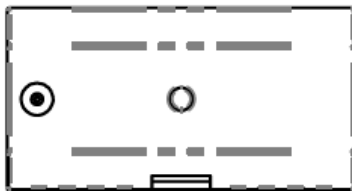
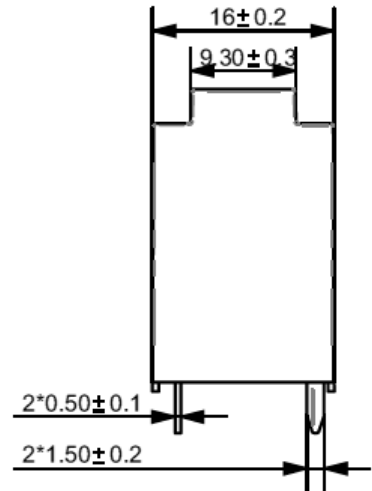
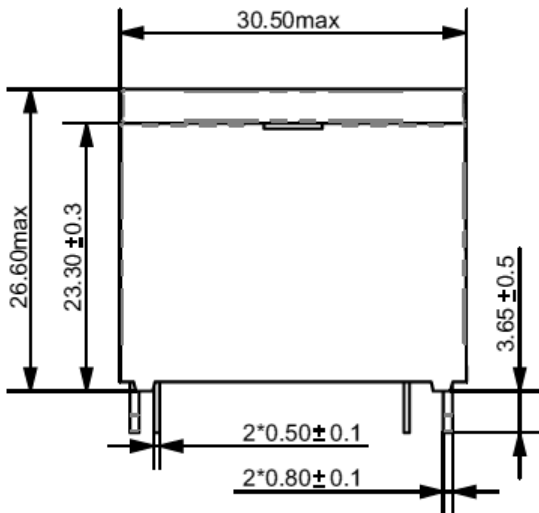
● Dimensions (UNIT: mm)

Outline Dimensions

Standard type



PCB type



Air Conditioner Relay I CE 50A

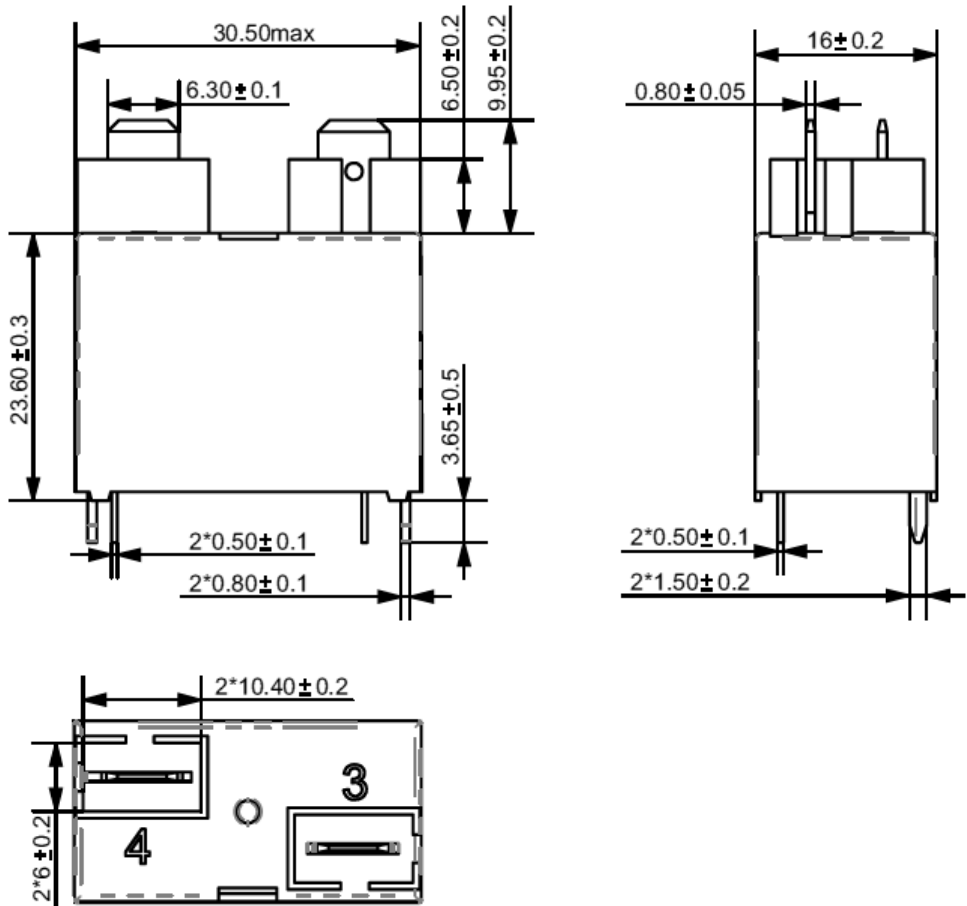


RELAY / ISO9001 / IATF16949 CERTIFIED

● Dimensions (UNIT: mm)

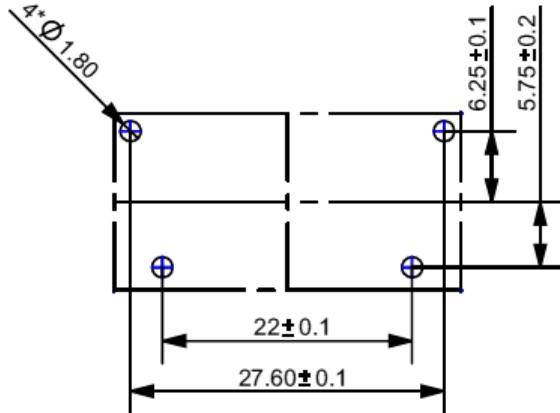
Outline Dimensions

Bracket cover type

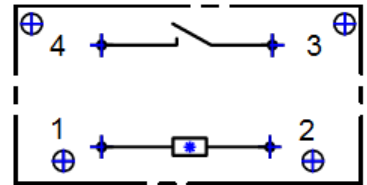


● Dimensions (UNIT: mm)

Mounting (Bottom views)

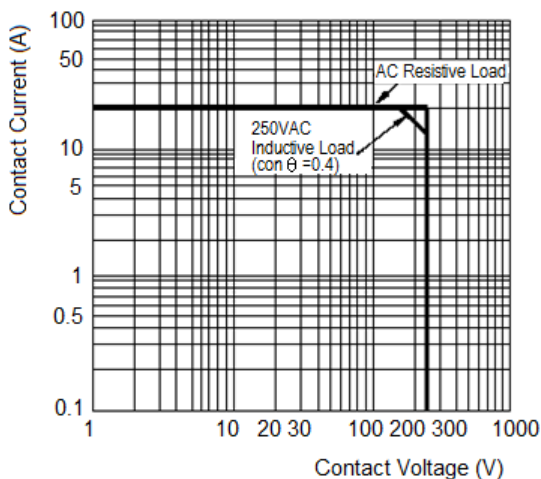


Wiring Diagram (Bottom views)

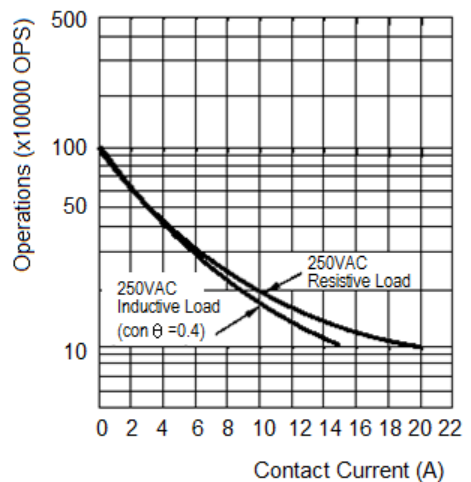


● Engineering Data

Maximum Switching Power



Endurance Curve



Test Conditions:

Room temp., 1s on 9s off.

Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $>1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $>5\text{mm}$, tolerance should be $\pm 0.5\text{mm}$.

2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

Air Conditioner Relay I CE 50A



RELAY / ISO9001 / IATF16949 CERTIFIED

Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact IOEC for the technical service. However, it is the user's responsibility to determine which product should be used only.

In & Out Electronic Corporation. All rights of IOEC are reserved.