

## ● Features

- Contact gap: 1.5 mm (.059 inch)  
Compliant with European photovoltaic standard (IEC62109\* and VDE0126\*\*).
- 25A switching capability
- Heavy load up to 5000VA
- 4.5kV dielectric strength (between coil and contacts)
- Ideal for motor switching
- 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

- Home Appliances / A/C Control / Refrigerator / Electronic Water Heater, etc.

## ● Contact Data

Contact Arrangement	1A
Contact Material	Ag Alloy
Contact Rating	25A 277VAC (resistive) 1.5HP 125VAC 1.5HP 250VAC TV-10 120VAC inrush current: 80A 250VAC (COS $\theta$ =0.7)
Max. Switching Power	6925VA
Max. Switching Voltage	300VAC
Max. Switching Current	25A
Contact Resistance	$\leq 100\text{m}\Omega$

● Contact Data

Electrical Endurance	1x10 <sup>5</sup>
Mechanical Endurance	1x10 <sup>7</sup>

● Coil Parameter (at 23°C)

Coil Voltage (VDC)		Coil Resistance (Ω±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±15%)	36.0	4.8	

● Operation Condition

Insulation Resistance		1000MΩ min (at 500VDC)
Dielectric Strength	Between Contacts	1500VAC 1min
	Between Contact and Coil	4500VAC 1min
Shock Resistance	Functional	98m/s <sup>2</sup>
	Endurance	980m/s <sup>2</sup>
Vibration Resistance		10~55Hz double amplitude 1.5mm
Ambient Temperature		-40 ~ +85°C
Operate Time		≤ 20ms
Release Time		≤ 10ms
Relative Humidity		5%~85%
Weight		Approx. 28g

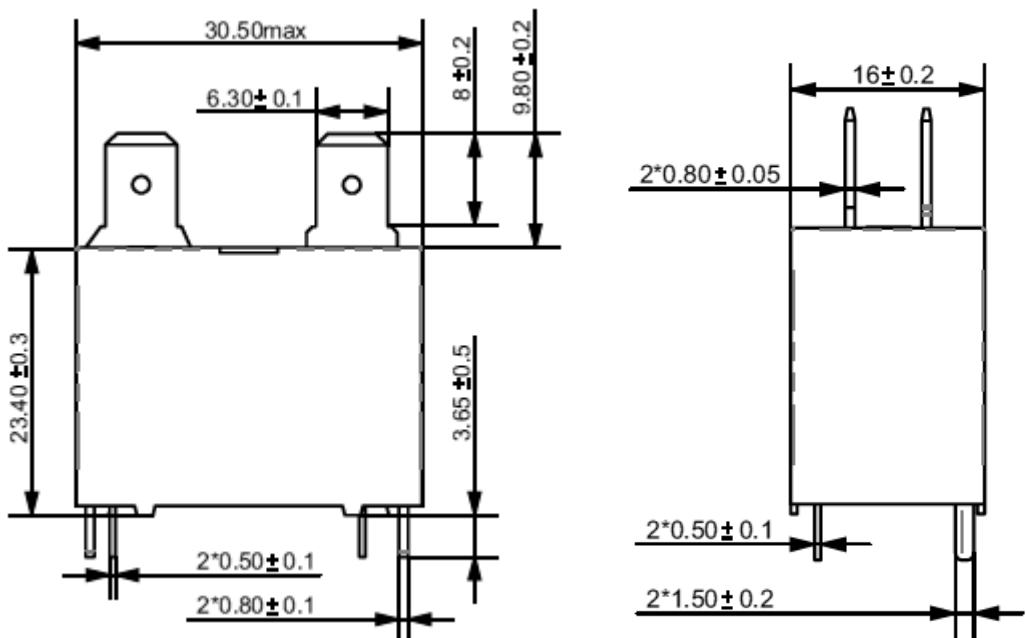
## ● Ordering Information

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

## ● Dimensions (UNIT: mm)

Outline Dimensions

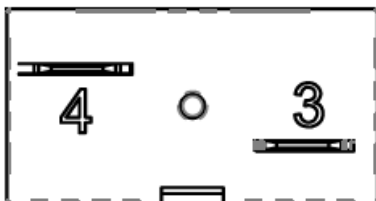
Standard type



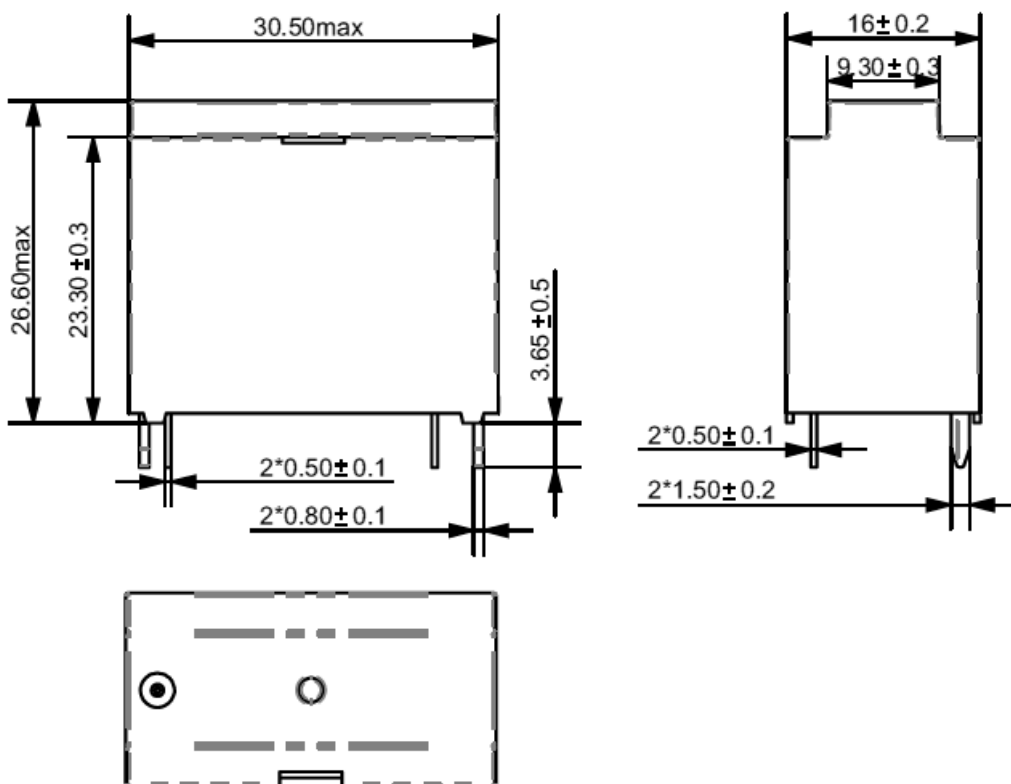
● Dimensions (UNIT: mm)

Outline Dimensions

Standard type



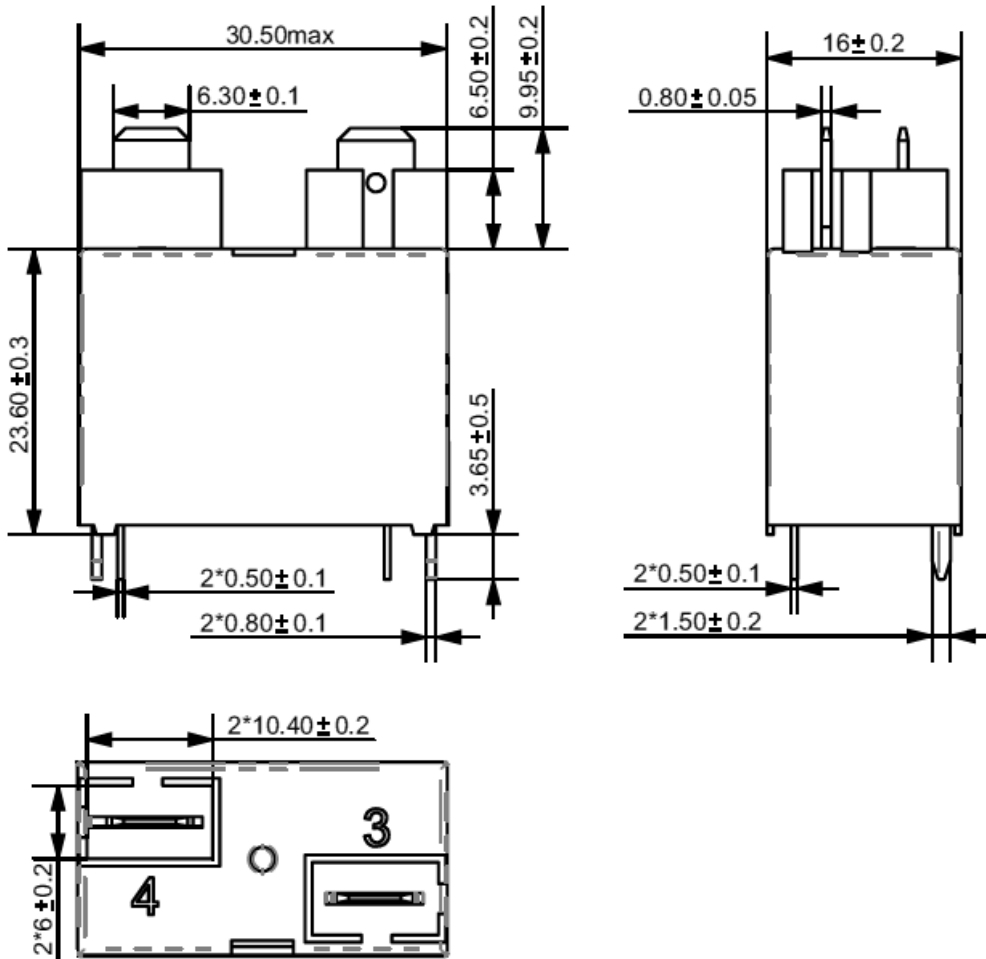
PCB type



● Dimensions (UNIT: mm)

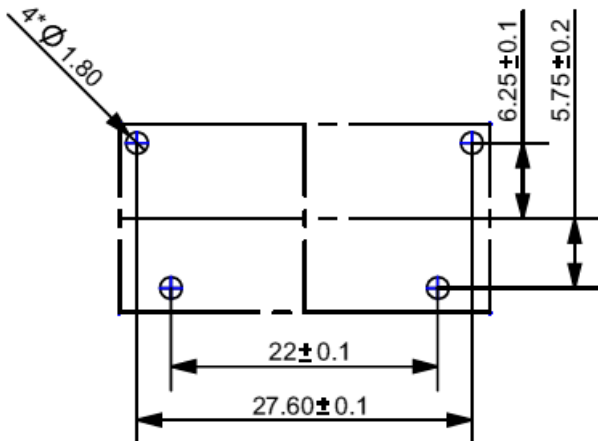
Outline Dimensions

Bracket cover type

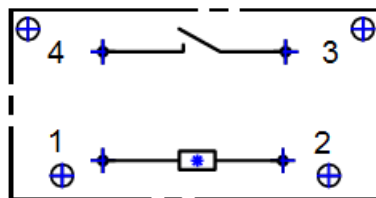


## ● Dimensions (UNIT: mm)

Mounting (Bottom views)

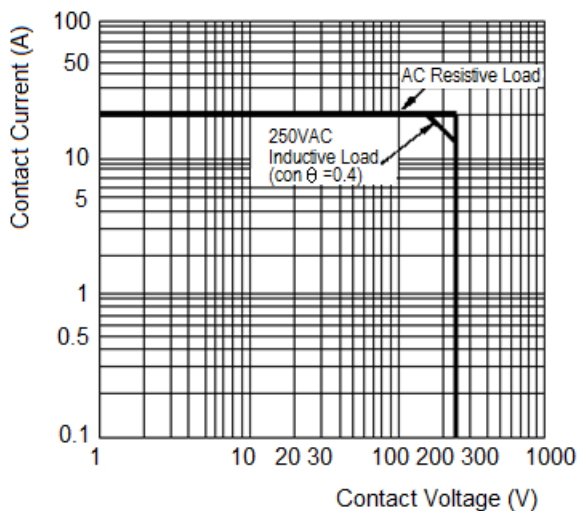


Wiring Diagram (Bottom views)

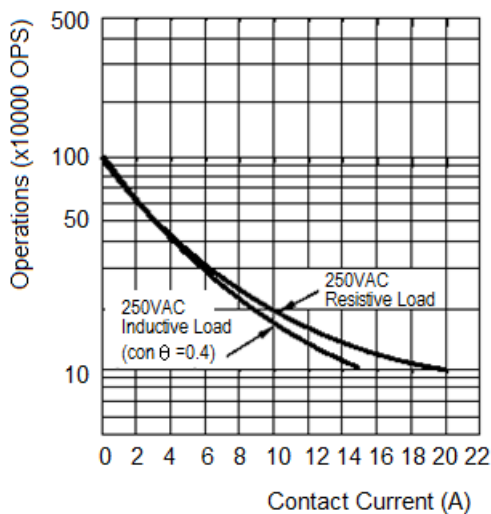


## ● Engineering Data

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  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.5$ mm.

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

Note:

\* Safety standard of PV power inverter

\*\*German safety standard of PV power inverter

\*\*\*Due to addition of altitude stipulation (2,000 m  
6,561.68 ft or more) to IEC62109.

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.