Features

- 35A switching capacity
- The clearance distance between contact and coil is bigger than 6.4mm, the creepage distance is bigger than 8mm.
- Low coil holding voltage contributes to saving energy of equipment
- 1.8mm contact gap (compliant to IEC 62109-2-2011)
- UL insulation system: Class F
- Environmental friendly product (RoHS compliant)
- Dimensions: 30.4 x 16.0 x 23.3 mm

Application

To Inverter used for Photovoltaic Power Generation System / Solar Inverter / AC/DC Power Control / UPS / Industrial Control, etc.

Contact Data

Contact Arrangement	1A
Contact Material	Ag Alloy
Contact Rating (Resistive Load)	35A 277VAC (resistive) 35A 277VAC (inductive COS θ =0.8)
Max. Switching Power	9695VA
Max. Switching Voltage	277VAC
Max. Switching Current	35A (resistive)
Contact Resistance	$\leqq$100mΩ (at 1A 6VDC)
Electrical Endurance	$3x10^4$ (35A 277VAC, Resistive load, 85℃, 1s on 9s off)
Mechanical Endurance	$1x10^5$

Note: 1) The data shown above are initial values.

Coil Parameter (at 23℃)

Coil Voltage (VDC)		Coil Resistance (Ω±10%)	Pickup Voltage(max) (VDC)	Release Voltage(max) (VDC)	Coil Power Consumption (W)
Rated	Max.				
5	5.5	17.9	3.75	0.25	Approx. 1.4
9	9.9	58.0	6.75	0.45	
12	13.2	103	9.00	0.60	
18	19.8	230	13.50	0.90	
24	26.4	410	18.00	1.20	

Holding voltage: 50% to 110%UN (temperature 23℃), 55% to 80%UN (temperature 85℃)

Note: 1) The coil holding voltage is the voltage applied to coil 100ms after the rated voltage.
2) To avoid overheating and burning, the coil can not be consistently applied to with voltage larger than maximum holding voltage.
3) Maximun voltage refers to the maximum voltage which relay coil could endure in a short period of time.
4) The data shown above are initial values.

Operation Condition

Insulation Resistance		1000MΩ (at 500VDC)
Dielectric Strength	Between Contacts	2500VAC 1min
	Between Contact and Coil	4500VAC 1min
Surge Voltage (Between Contact and Coil)		10kV (1.2/50μs)
Temperature Rise (at Rated Voltage)		95K max. (Contact load current 31A, rated voltage excitation, at 60℃)
		70K max. (Contact load current 31A, 80% of rated voltage excitation, at 85℃)
Shock Resistance	Functional	196m/s^2
	Endurance	980m/s^2
Vibration Resistance		10~55Hz double amplitude 1.5mm
Ambient Temperature		-40 ~ +85℃ (Apply holding voltage to coil, which is 55% to 80% that of rated voltage)

Operation Condition

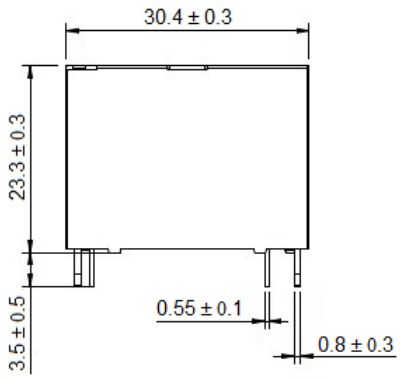
Operate Time	≦20ms
Release Time	≦10ms
Relative Humidity	5%~85%
Weight	Approx. 21g

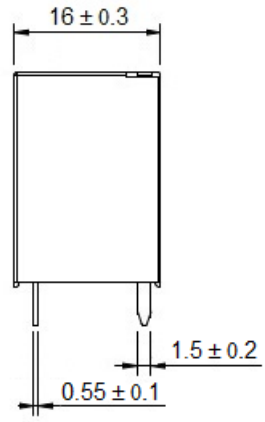
Ordering Information

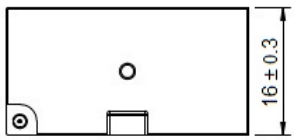
			CEL-G	-12D	-A	-S	(XXX)
Model							
Coil Voltage	5, 9, 12, 18, 24VDC						
Contact Arrangement	**A**: 1 Form A						
Construction	**Nil**: Flux tight	**S**: Sealed					
Special Code	**Nil**: Standard	**XXX**: Customer special requirement					

Dimensions (UNIT: mm)

Outline Dimensions

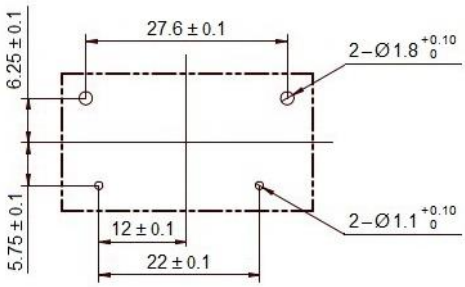




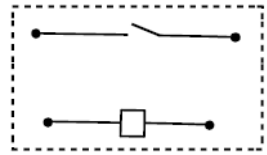


Dimensions (UNIT: mm)

Mounting (Bottom views)



Wiring Diagram (Bottom views)



Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≦1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≦5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.5mm.

2) The tolerance without indicating for PCB layout is always ±0.1mm.

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.