

JT2150W

SOLAR RELAY



File No.: E319069



File No.: R 50481936



File No.: CQC18002191708



Features

- 35A switching capability
- Applicable to solar photovoltaic inverter
- Applicable to UPS
- 1.8mm contact gap
- Product in accordance to IEC60335-1 available
- Low coil holding voltage contribute to saving energy of equipment
- UL insulation system: Class F available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (31.8 x 27.0 x 19.1)mm

CONTACT DATA

Contact arrangement	1A
Contact resistance ¹⁾	50mΩ max.(at 1A 24VDC)
Contact material	AgSnO ₂
Contact rating (Res.load)	35A 250VAC
Max.switching voltage	277VAC
Max.switching current ⁽¹⁾	35A
Max.switching power	9695VA
Mechanical endurance	1 x 10 ⁶ ops
Electrical endurance	4x10 ⁴ ops (35A 250VAC, Resistive load, 85°C, 1s on 9s off)

Notes: 1) The circuit printed by the relay shall be designed with sufficient current carrying section to avoid overheating.

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil&contacts	with T: 4000VAC 1min without T: 2500VAC 1min
	Between open contacts	1500VAC 1min
Surge withstand voltage	6kV(1.2/50μs)	
Operate time(at nomi.volt.)	20ms max.	
Release time(at nomi.volt.)	10ms max.	
Coil temperature rise (at nomi.volt.)	70K max. (Contact load current 43A, rated voltage excitation 50%, at 85°C)	
Shock resistance	Functional	98m/s ²
	Destructive	980m/s ²
Vibration resistance	10Hz to 55Hz 1.5mm DA	
Humidity	5% to 85% RH	
Ambient temperature	-40°C to 85°C	
Termination	PCB	
Unit weight	Approx. 36g	
Construction	Plastic sealed Dust protected	

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

COIL

Coil power	Approx. 1.6W
Holding voltage	40% to 110% U _N (at 23°C) 50% to 70% U _N (at 85°C)

Notes: 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.

COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC ¹⁾	Drop-out Voltage VDC ¹⁾	Max. Voltage VDC ^{*2)}	Coil Resistance Ω
5	≤4.00	≥0.25	6.5	15.6 x (1±10%)
12	≤9.60	≥0.60	15.6	90.0 x (1±10%)
24	≤19.2	≥1.20	31.2	360 x (1±10%)
48	≤38.4	≥2.40	62.4	1440 x (1±10%)

Notes: 1) The data shown above are initial values.
2) *Maximum Voltage refers to the maximum voltage which relay coil could endure in a short period of time.

SAFETY APPROVAL RATINGS

UL/ CUL	35A 277VAC/250VAC/125VAC 85°C 40A 277VAC/250VAC/125VAC 60°C 10A on current carrying with 43A 10A off 277VAC/250VAC 85°C
TUV	35A 277VAC/250VAC/125VAC 85°C 40A 277VAC/250VAC/125VAC 60°C 10A on current carrying with 43A 10A off 277VAC/250VAC 85°C
CQC	35A 277VAC/250VAC/125VAC 85°C 40A 277VAC/250VAC/125VAC 60°C

Notes: 1) Only typical loads are listed above.
Other load specifications can be available upon request.



JINTIAN RELAY

ISO9001、ISO14001、OHSAS18001 CERTIFIED

ORDERING INFORMATION

JT2150W -1A T -12D E T (142) (XXX)

Type

Contact arrangement 1H: 1 Form A

Dielectric strength T: 4000VAC(Between coil&contacts)
Nil: 2500VAC(Between coil&contacts)

Coil voltage 5, 12, 24, 48VDC

Construction¹⁾²⁾ E:Plastic sealed Nil:Dust protected

Contact material T: AgSnO₂

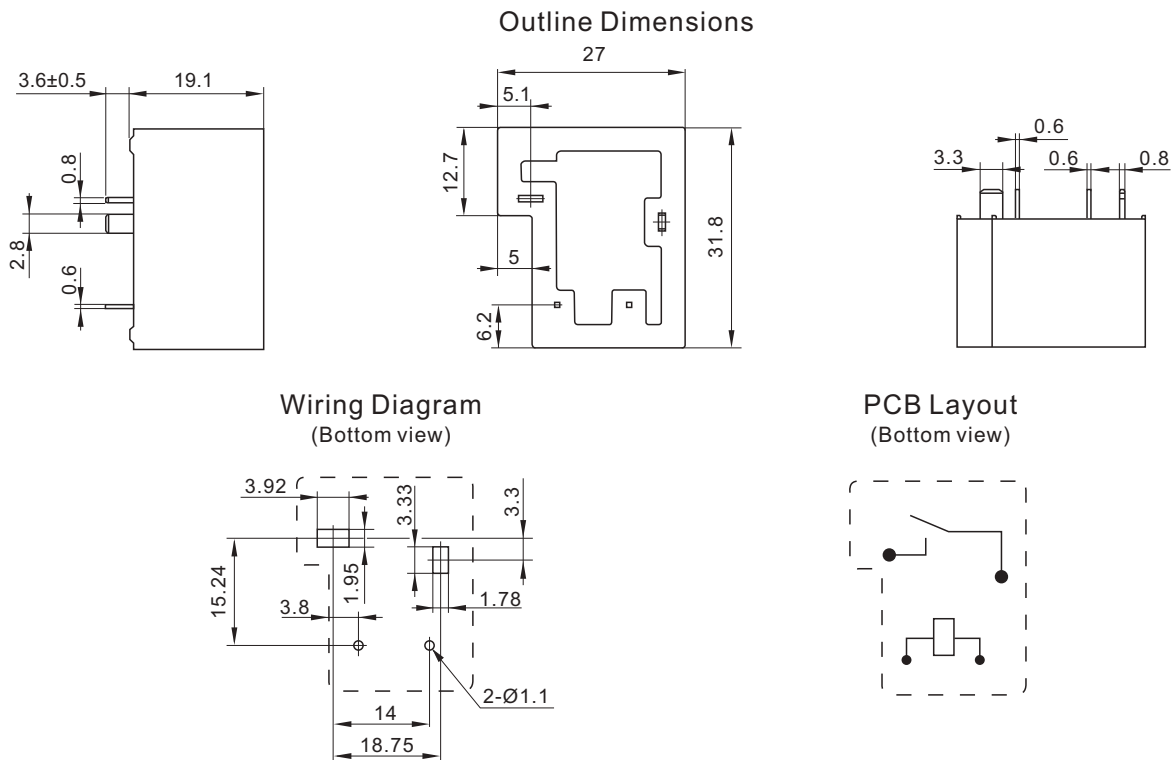
(142) Special code: Solar

Special code³⁾ XXX: Customer special requirement Nil: Standrad

- Notes:** 1) We recommend dust protected types for a clean environment (free from contaminations like H₂S, SO₂ or NO₂ dust, ect.). We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H₂S, SO₂ or NO₂, dust, ect.).
2) Contact is recommended for suitable condition and specifications if water cleaning or surface process is involved in assembling relays on PCB.
3) The customer special requirement express as special code after evaluating by JINTIAN.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm



Remark: 1) The pin dimension of the product outline drawing is the size before tinning (it will become larger after tinning), and the mounting hole size is the recommended design size of the PCB board hole. The specific PCB board hole design size can be mapped and adjusted according to the actual product.

2) In case of no tolerance shown in outline dimension: outline dimension ≤ 1 mm, tolerance should be ± 0.2 mm; outline dimension > 1 mm and ≤ 5 mm, tolerance should be ± 0.3 mm; outline dimension > 5 mm, tolerance should be ± 0.4 mm.

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

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 JINTIAN for the technical service. However, it is the user's responsibility to determine which product should be used only.