

510 Series



Features

- Heavy duty 35~54A 277VAC power type.
- DPDM contact configuration with large contact gap 2.1mm & 3.0mm version.
- Conforms to European photovoltaic standard IEC 62109-1.
- Coil holding voltage can be reduced to 50~55%V of the nominal coil voltage for saving energy.
- High performance PCB power relay for photovoltaic power generation systems (solar inverter).
- Complies with RoHS-Directive 2011/65/EU.

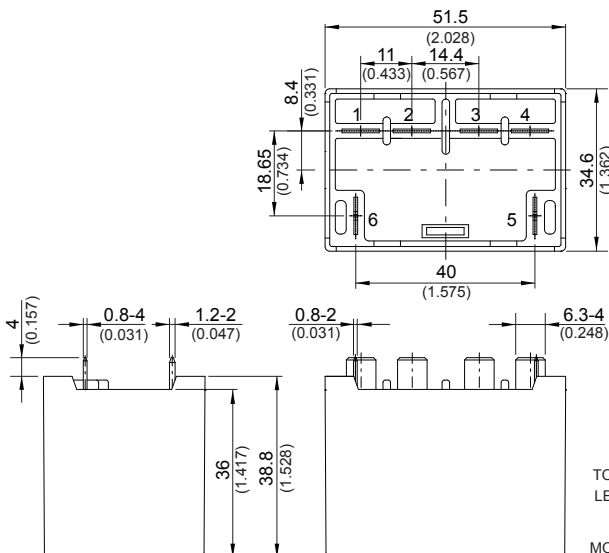


Description

Contact rating (Resistive load)	510 : 35A 240VAC T85 ; ON 1s /OFF 9s ; 20,000 ops. 510S : 48A 240VAC T85 ; ON 1s /OFF 9s ; 10,000 ops. 510H : 54A 240VAC T85 ; ON 1s /OFF 9s ; 10,000 ops.
Coil voltage	12~48VDC
Power consumption	At rated voltage : Approx. 2.4W (for 510, 510S) ; 5.4W (for 510H) At holding voltage : Approx. 0.6W (for 510, 510S) ; 1.35W (for 510H)
Contact material	Ag alloy
Contact gap	2.1mm Min. / 3.0mm Min.
Contact resistance ⁽¹⁾	100mΩ Max. (1A/6VDC by 4 pipes mΩ meter)
Operate time ⁽¹⁾	30ms Max.
Release time ⁽¹⁾	30ms Max.
Insulation resistance ⁽¹⁾	100MΩ Min. (DC 500V)
Dielectric strength ⁽¹⁾	Between open contact : AC 2000V, 50/60Hz 1 min. Between contact and coil : AC 4000V, 50/60Hz 1 min. Between contact circuits : AC 2000V, 50/60Hz 1 min.
Life expectancy (Mechanical)	1,000,000 ops. (frequency 9,000 operations/hr)
Operating ambient temperature	-40~+85° C (no freezing)
Weight	Approx. 90 g

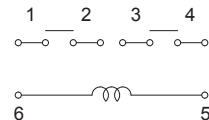
- ※ Note : (1) Initial value. Operate and release time excluding contact bounce.
(2) Consider the heat of PCB is necessary with actual application.
(3) Please contact Song Chuan for the detailed information.

Outline Dimensions

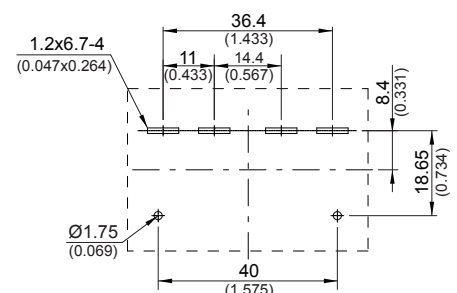


TOLERANCE:
LESS THAN: 1(0.039) ±0.1(0.004)
5(0.197) ±0.3(0.012)
20(0.787) ±0.5(0.020)
MORE THAN: 20(0.787) ±1(0.039)

Wiring Diagram (bottom view)



PC board layout (bottom view)



Disclaimer

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of Song Chuan are reserved.