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SINGLE PHASE SHORT CIRCUIT PROTECTED SOLID STATE RELAYS – DC -AC **SDSCP-480-...,SERIES**

Features

- Opto isolation 2500 VAC.
- Gets protected against load short circuits.
- Zero Voltage Turn-On.
- Reverse voltage protection.
- TTL Compatible (sink mode).
- Output NO configuration.
- Built in snubber.
- Chassis Mountable.
- Higher load cycle resistance.
- High thermal cycling capacity.
- High fusing current.
- Normal/Fault Indication.

(J: Zero voltage turn-on; K: Random turn-on)



Type Selection Guide

| Input Control Voltage | Rated operational voltage | Rated operational current AC rms. | | | | |
|-----------------------|---------------------------|-----------------------------------|--------------|--------------|--------------|--------------|
| | | 25 A | 40 A | 50 A | 75 A | 90 A |
| 3 - 32 VDC | 480 VAC rms | SDSCP-480-25 | SDSCP-480-40 | SDSCP-480-50 | SDSCP-480-75 | SDSCP-480-90 |

* Available on request

K Random/Instant turn-on: **Type Selection SDSCP-330-10K.**

Input Specifications

| Type | SDSCP -480 - 25/..... |
|-----------------------|-----------------------|
| Control Voltage | 3 – 32 VDC |
| Control Current Range | 50 mA |
| Pick-Up Voltage | 1 VDC |
| Drop Out Voltage | 1 VDC |
| Input Resistance | Current Regulator |

* Available on request

Output Specifications

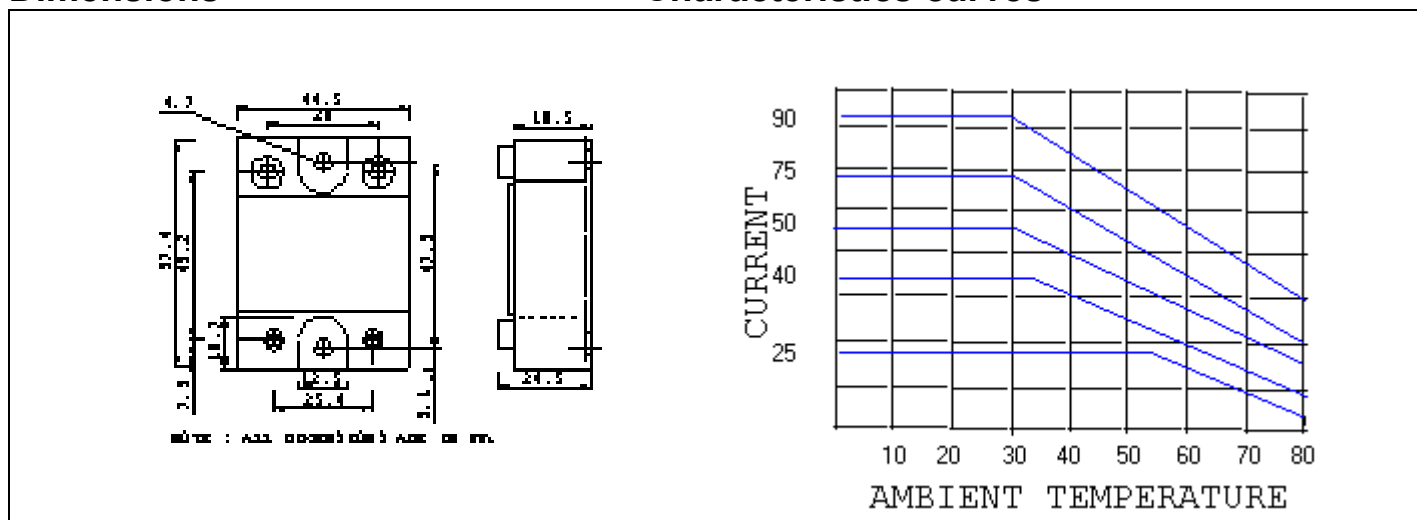
| Type | SDSCP-480-25 | SDSCP-480-40 | SDSCP-480-50 | SDSCP-480-75 | SDSCP-480-90 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Current Range with proper heat sink (IT) | 25 A | 40 A | 50 A | 75 A | 90 A |
| Surge Current non-repetitive $t = 20\text{secs}$ (ITMS) | 500 A | 500 A | 520 A | 1150 A | 1350 A |
| Voltage Drop @ Current (VTM) | 1.8 VACrms | 1.8 VAC rms | 2 VAC rms | 2 VAC rms | 2 VAC rms |
| Voltage Range (VRMS) | 160 – 280 VAC rms | | | | |
| Over Voltage Rating (PIV) Transient Peak | 800 V Peak | 800 V Peak | 800 V Peak | 800 V Peak | 800 V Peak |
| Off-state leakage current @ voltage – (IDRM) | 10 mA | 10 mA | 10 mA | 10 mA | 10 mA |
| Turn-on (max) – T-On | 10 ms | 10 ms | 10 ms | 10 ms | 10 ms |
| Turn-off (max) – T-Off | 10 ms | 10 ms | 10 ms | 10 ms | 10 ms |
| Holding current (IH) | 300 mA | 300 mA | 300 mA | 300 mA | 300 mA |
| Dv/Dt @ Voltage (out) | 1000 V/ μs | 1000 V/ μs | 1000 V/ μs | 1000 V/ μs | 1000 V/ μs |
| I ² T Fusing I ² t (10 ms) | 1250 A ² S | 5000 A ² S | 5000 A ² S | 5000 A ² S | 5000 A ² S |

General Specifications

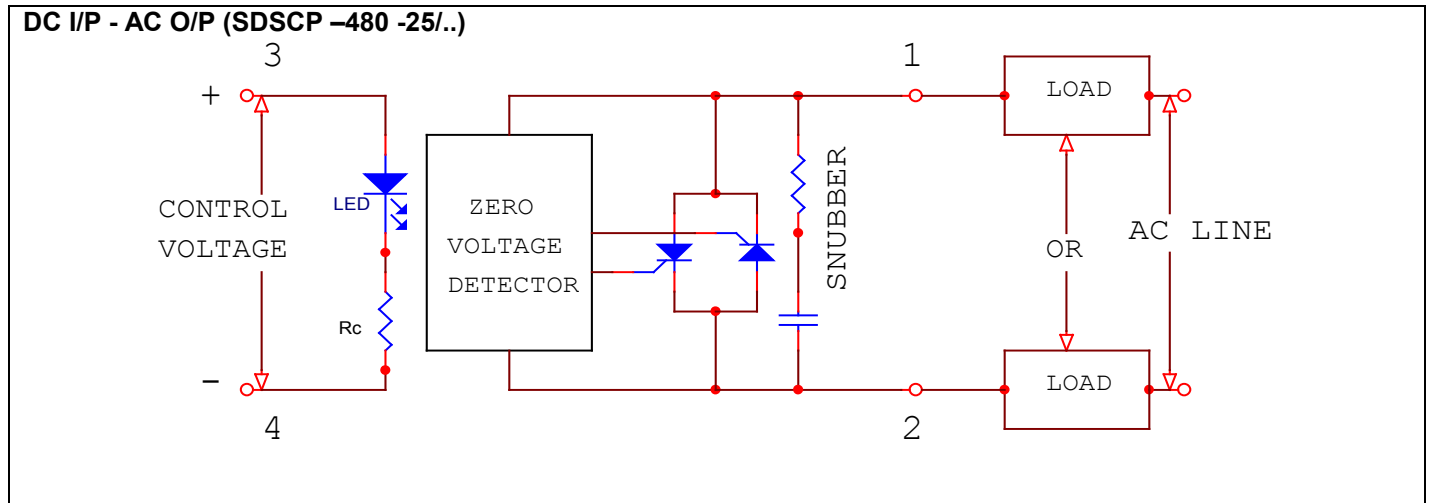
| Type | SDSCP-480-25 | SDSCP-480-40 | SDSCP-480-50 | SDSCP-480-75 | SDSCP-480-90 |
|---|---|---|---|---|---|
| Frequency Range | 47 – 70 Hz | 47 – 70 Hz | 47 – 70 Hz | 47 – 70 Hz | 47 – 70 Hz |
| Dielectric Strength (Input to Output to Base) | 2500 VAC – effective 4000 VAC – optional | 2500 VAC – effective 4000 VAC – optional | 2500 VAC – effective 4000 VAC – optional | 2500 VAC – effective 4000 VAC – optional | 2500 VAC – effective 4000 VAC – optional |
| Weight | Approx. 100 g | | | | |
| Storage Temp. | – 40 °C to 100 °C | | | | |
| Junction Temperature | 100°C | | | | |

Dimensions

Characteristics curves



Functional Block Diagram



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