

# Type JEHPR48D50 Solid State Relay



- Zero switching
- LED indication
- Clip-on IP 20 protection cover
- Self-lifting terminals
- Housing free of moulding mass
- Transient Voltage: 1200V<sub>p</sub>
- Opto-isolation: > 4000VAC rms
- Input range: 4-32 VDC
- Operational ratings: Up to 50 AMPS rms
- Rated voltage: 480 VAC rms



## Product Description

The industrial, 1-phase relay with anti parallel thyristor output is the most widely used industrial SSR due to its multiple application possibilities. The relay can be used for resistive, inductive and capacitive loads. The zero switching relay switches ON when the sinusoidal curve crosses zero and switches OFF when the current crosses zero.

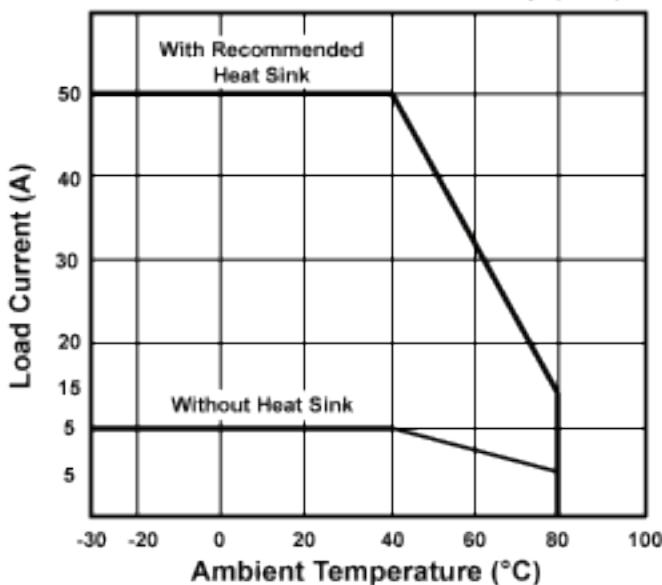
The instant-on relay with DC control input can be used for phase control. The built in varistor secures transient protection for the heavy industrial applications, and the LED indicates the status of the control input. The clip on cover is securing touch protection to IP20. Protected output terminals can handle cables up to 16mm<sup>2</sup> (6 AWG).

## Output Specifications

### Rated operational current

|   |             |
|---|-------------|
| TA=25°C   | 50 AMPS rms |
| <b>Load Current Range</b>                                     | 50 AMPS rms |
| <b>Max. Surge Current (10 ms)</b>                             | 700 Apk     |
| <b>Max. Off-State Leakage Current</b>                         | 10 mA       |
| <b>Max. I<sup>2</sup>t for fusing (10 ms, A<sup>2</sup>S)</b> | 1250        |
| <b>Max. On-State Voltage Drop</b>                             | 1.7 Vrms.6  |
| <b>Min. Off-State DV/DT</b>                                   | 500V/μs     |

### Max. Load Current vs. Ambient Temp (50A)



## Input Specifications

|   |                 |
|---|-----------------|
| <b>Control voltage range</b>            | 4 - 32 VDC      |
| <b>Max. Turn-On Voltage @ Ta = 25°C</b> | 4 VDC           |
| <b>Max. Reverse Protection Voltage</b>  | -32 vdc         |
| <b>Max. Turn-Off Voltage</b>            | 1.2 VDC         |
| <b>Max. Input Current</b>               | 25 mA           |
| <b>Max. Turn-On Time</b>                | 1/2 cycle + 1ms |
| <b>Max. Turn-Off Time</b>               | 1/2 cycle + 1ms |

## General Specifications

|                                    |                       |
|------------------------------------|-----------------------|
| <b>Operational voltage range</b>   | 48 to 530 VAC rms     |
| <b>Max. Transient Voltage</b>      | ≥ 1200 V <sub>p</sub> |
| <b>Load Current Range</b>          | 50 Arms               |
| <b>Operational frequency range</b> | 47 to 63 Hz           |
| <b>Power factor</b>                | 0.5                   |
| <b>Approvals</b>                   | cULus                 |
| <b>CE-marking</b>                  | Yes                   |

## Thermal Specifications

|                                    |                               |
|------------------------------------|-------------------------------|
| <b>Operating temperature range</b> | -30° to 80°C (-22° to 126°F)  |
| <b>Storage temperature range</b>   | -30° to 100°C (-22° to 212°F) |

## Dimensions

