



Read this document carefully before using this device. The guarantee will be expired by damaging of the device if you don't attend to the directions in the user manual. Also we don't accept any compensations for personal injury, material damage or capital disadvantages.

ENDA EPDA3 / EPAA3 Panel Mounted Three-phase Solid State Relays

Thank you for choosing ENDA EPDA3 / EPAA3 series Solid State Relays.

- * 25-40-50A AC three-phase load current.
- * 480V AC load voltage.
- * 8-30V AC/DC or 90-240V AC input voltage.
- * Led status indicator for input voltage.
- * Zero-cross switching.
- * Applicable for three phase loads.
- * Built-in varistor protection.
- * Fan control thermostat (option).
- * Panel mountable.
- * CE marked according to European Norms.



R^{HS}
Compliant

ORDER CODE

| | | | |
|--------------------|-------------------------------|--------------|-------------------------------------|
| Product Basic Code | EPDA3 - 425Z - T | Option | Thermostat T |
| Panel type SSR | EP | Switching | Zero crossing Z |
| Input voltage | 8-30V AC/DC D 90-240V AC A | Load current | 25A AC 25 40A AC 40 50A AC 50 |
| Load voltage | AC A | Load voltage | 50-480V AC 4 |
| Pole number | Three-pole 3 | | |

| ENVIRONMENTAL CONDITIONS | |
|-----------------------------|---|
| Ambient-storage temperature | -25... +60 °C / -30... +100 °C (Shouldn't be icing and condensation in ambient.) |
| Relative humidity | 50% Relative humidity for +40°C temperature increases up to 90% at +20°C. (Shouldn't be condensation) |
| Pollution degree | 2 |
| Overvoltage category | II |
| Altitude | Max. 1000m |
| Protection | Ip20 According to EN60529 |

Do not use the device in locations subject to corrosive and flammable gases.

| OUTPUT | | | |
|---|------------|------------|------------|
| Order Code | EPxA3-425Z | EPxA3-440Z | EPxA3-450Z |
| Load current, AC51/25°C (Arms) | 25 | 40 | 50 |
| Load voltage (Vrms) | 50 - 480 | | |
| Overload current t=1s/25°C (Arms) | 70 | 110 | 150 |
| Non rep.surge current/25°C (Arms) | 190 | 290 | 380 |
| On-state voltage drop (Vrms) | 1,8 | | |
| Leakage current (mArms) | 8 | | |
| I ² t for fusing t=10ms (A ² s) | 265 | 610 | 720 |
| Frequency (Hz) | 50 - 60 | | |
| Min. operating current (mArms) | 200 | | |

| THERMAL SPECIFICATIONS | | | |
|---|------|------|------|
| T _j Junction temperature (°C) | ≤125 | ≤125 | ≤125 |
| R _{th(j-c)} Junction-case thermal resistance (°C/W) | ≤1,2 | ≤1,0 | ≤0,6 |
| R _{th(j-a)} Junction-ambient thermal resistance (°C/W) | ≤20 | ≤20 | ≤20 |

| INPUT | | |
|------------------|--|--|
| Order code | EPDA3-4xxZ | EPAA3-4xxZ |
| Input voltage | 8 - 30Vac/dc | 90 - 240Vac |
| Pick-up voltage | > 6Vac/dc | > 75Vac |
| Drop-out voltage | < 2Vac/dc | < 6Vac |
| Input current | < 17mAac/10mAac | < 8mAac |
| Turn-on time | Maximum 1/2 Period | Maximum 1 Period |
| Turn-off time | Maximum 1/2 Period | Maximum 2 Period |
| LED indicator | If the input voltage >6V ac/dc, LED lights up. | If the input voltage >75V ac, LED lights up. |

| GENERAL | |
|-----------------------|---|
| Order code | EPxA3-4xxZ |
| Dimensions | W103xH74xD37mm |
| Weight | For EPxA3-425/440Z 200g , For EPxA3-450Z 220g (After packaging) |
| Isolation voltage | 2500Vrms between I/O terminals for 1 min. |
| Connection | For power line 16mm ² (with cable terminal 25mm ²) cable, for signal line 4mm ² cable can be connected. |
| Terminal screw torque | For power line max. 2,2Nm, for signal line max. 1,2Nm. |
| Product standard | EN 60947-4-3 |
| Mounting | With M5 screws is mounted to the panel. |
| Enclosure material | Self extinguishing plastics (According to EN 60695-11-10 V-O) The temperature is above 50°C, the SSR works. (24Vdc 2A, 120Vac 2A) |



While cleaning the device, solvents (thinner, benzine, acid etc.) or corrosive materials must not be used.

