



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 EPDA2 / EPAA2 Panel Mountable Three-phase Solid State Relays

Thank you for choosing ENDA EPDA2 / EPAA2 series Solid State Relays.

- \* 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<sup>HS</sup>  
Compliant

## ORDER CODE

Product Basic Code	EPDA2	Option	Thermostat T
Panel type SSR	EP	Switching	Zero crossing Z
Input voltage	8-30V AC/DC D 90-240V AC A	Load current	70A AC 70 40A AC 40 25A AC 25
Load voltage	AC A	Load voltage	50-480V AC 4
Pole number	Two-pole 2		

## 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	EPxA2-470Z-T	EPxA2-440Z-T	EPxA2-425Z-T
Load current, AC51/25°C (Arms)	70	40	25
Load voltage (Vrms)	50 - 480	50 - 480	50 - 480
Overload current t=1s/25°C (Arms)	1000	1000	1000
Non rep.surge current/25°C (Arms)	900	900	900
On-state voltage drop (Vrms)	1,8	1,8	1,8
Leakage current (mArms)	15	15	15
I <sup>2</sup> t for fusing t=10ms (A <sup>2</sup> s)	4000	4000	4000
Frequency (Hz)	50 - 60	50 - 60	50 - 60
Min. operating current (mArms)	400	400	400

## THERMAL SPECIFICATIONS

T <sub>j</sub> Junction temperature (°C)	≤125
R <sub>th(j-c)</sub> Junction-case thermal resistance (°C/W)	≤0,6
R <sub>th(j-a)</sub> Junction-ambient thermal resistance (°C/W)	≤20

## INPUT

Order code	EPDA2-4xxZ-T	EPAA2-4xxZ-T
Input voltage	8 - 30Vac/dc	90 - 240Vac
Pick-up voltage	> 6Vac/dc	> 75Vac
Drop-out voltage	< 2Vac/dc	< 6Vac
Input current	< 17mAac/10mAdc	< 8mAac
Turn-on time	Maximum ½ Period	Maximum ½ Period
Turn-off time	Maximum ½ Period	Maximum ½ Period
LED indicator	If the input voltage >6V ac/dc, LED lights up.	If the input voltage >75V ac, LED lights up.

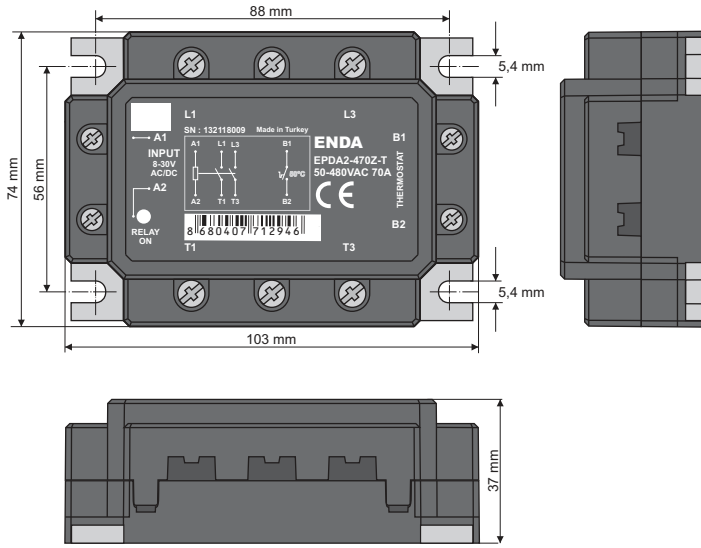
## GENERAL

Order code	EPxA2-470Z-T - EPxA2-440Z-T - EPxA2-425Z-T
Dimensions	W103xH74xD37mm
Weight	250g (After packaging)
Isolation voltage	2500Vrms between I/O terminals for 1 min.
Connection	For power line 16mm <sup>2</sup> (with cable terminal 25mm <sup>2</sup> ) cable, for signal line 4mm <sup>2</sup> 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)

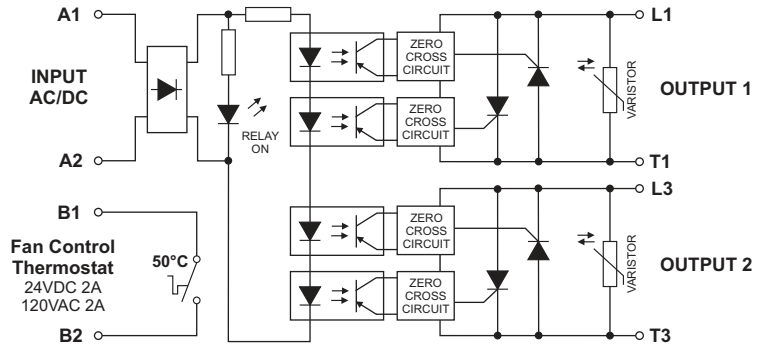


While cleaning the device, solvents (thinner, benzine, acid etc.) or corrosive materials must not be used.

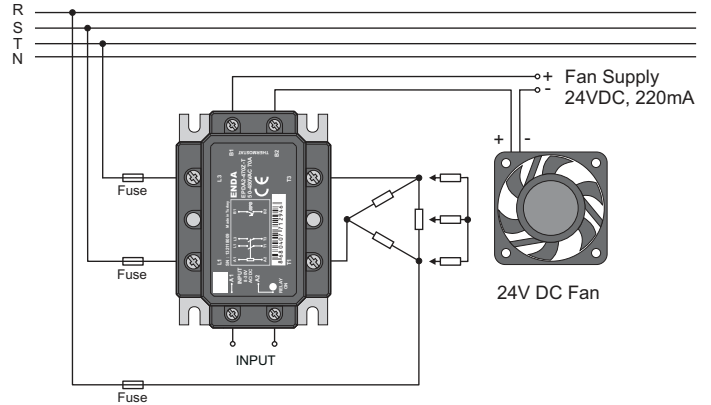
## DIMENSIONS



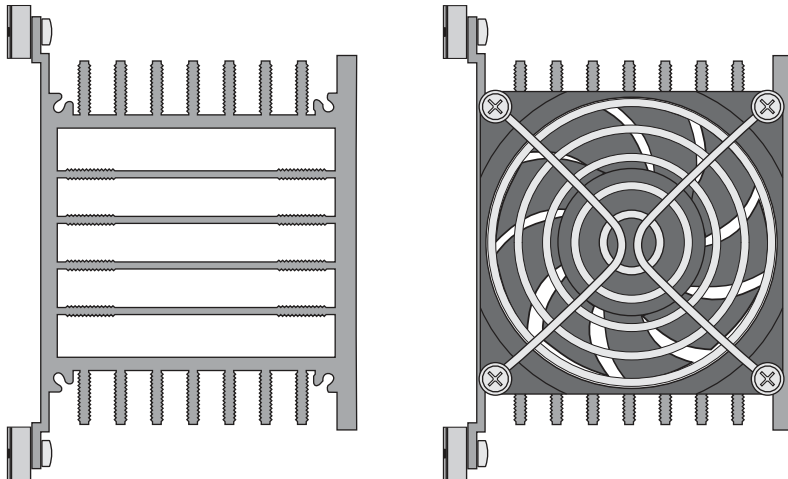
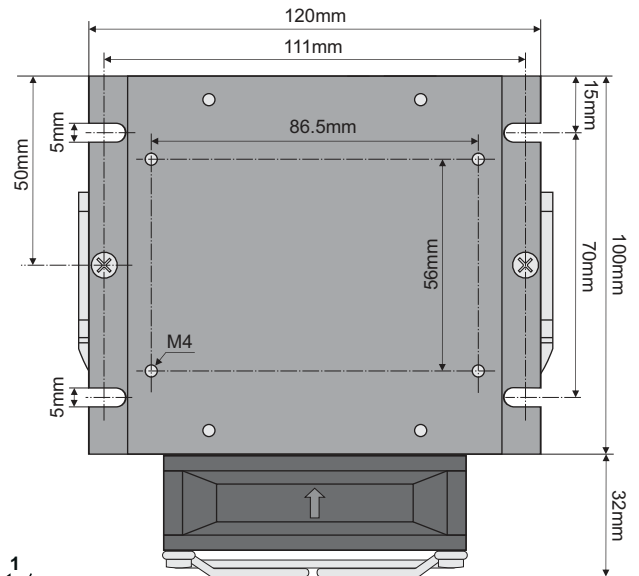
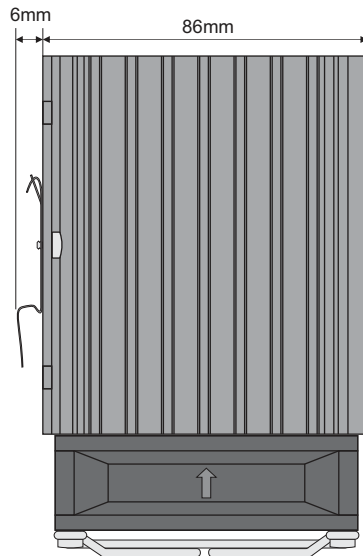
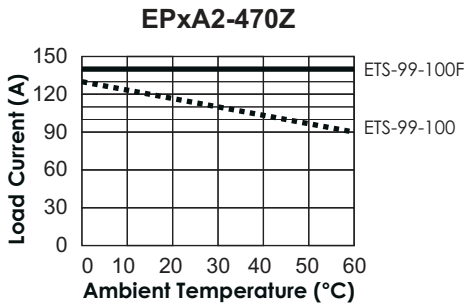
## CONNECTION DIAGRAM



## CONNECTION EXAMPLES



## ENDA ETS-99-100F RAIL AND PANEL MOUNTED HEAT SINK



- For removing the device from the panel;  
Pull up in direction 1

- For mounting the device to the panel;  
Push down in direction 2

Fan supply : 24VDC, 100mA.  
Fan side of the device must be at the bottom.

Heat Sink Order Code	SSR Current (A)	Dimensions WxHxD (mm)	Thermal Resistance (°C/W)
ETS-99-100	3x25	99x87x100	0,75
ETS-99-100F	3x40-3x50	99x87x125	0,34