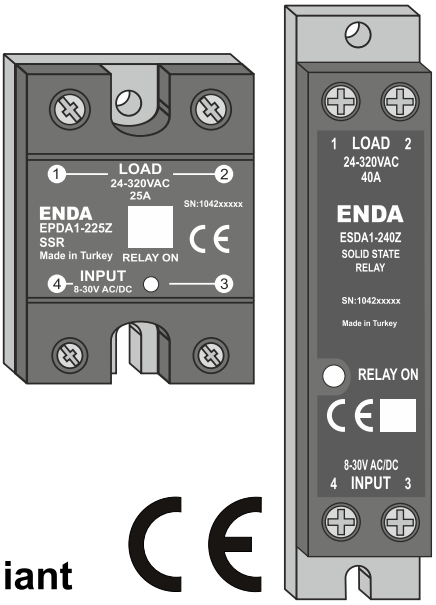
Read this document carefully before using this device. The guarantee will be expired by device damages if you don't attend to the directions in the user manual. Also we don't accept any compensations for personal injury, material damage or capital disadvantages.

ENDA EPDA1, ESDA1, EPGA1, EPAA1, ESAA1 Panel Mounted Solid State Relays

Thank you for choosing **ENDA EPDA1 / ESDA1 / EPGA1 / EPAA1 / ESAA1** Series Solid State Relays

- **12-25-40-50-70-100-120A AC Load current.**
  (Varies by model type. Please check the order code).
- **320-480 AC Load voltage.**
- **3-30V DC (*for only EPxx*), 8-30V AC/DC or 90-240V AC input voltage.**
- **LED status indicator for input voltage.**
- **Zero-cross or Random-cross at AC voltage.**
- **Applicable for three phase loads.**
- **Built-in varistor protection.**
- **Panel or Narrow Panel mounted.**
- **CE Marked according to European Norms.**



ORDER CODE

EP D A 1 - 2 25 Z

Product Basic Code	
Panel Type	EP
Narrow Panel Type	ES

Input Voltage	
3-30V DC	G
8-30V AC/DC	D
90-240V AC	A

Load Voltage	
AC	A

Pole Number	
Single-pole	1

Switching	
Zero-cross	Z
Random-cross	R

Load Current	EPAA	EPDA	EPGA	ESAA	ESDA
12A AC	12	12	12	12	12
25A AC	25	25	25	25	25
40A AC	40	40	40	40	40
50A AC	50	50	50	—	—
70A AC	70	70	70	—	—
100A AC	100	100	—	—	—
120A AC	120	120	—	—	—

Load Voltage	
24-320V AC	2
50-480V AC	4

RoHS Compliant

CE

ENVIRONMENTAL CONDITIONS	
Ambient-storage temperature	-25... +60°C/-30 ... +100°C (without icing and condensation)
Relative humidity	Relative humidity 90% for temperatures up to 20°C decreasing linearly to 50% relative humidity at 40°C.
Pollution degree	2
Overvoltage category	II
Altitude	Max. 1000m
Protection	IP20 According to EN60529

⚠ KEEP AWAY device from exposed to corrosive, volatile and flammable gases or liquids and DO NOT USE the device in similar hazardous locations.

OUTPUT											
Order Code	EPxA1-212x ESDA1-212x ESAA1-212x	EPxA1-225x ESDA1-225x ESAA1-225x	EPxA1-240x ESDA1-240x ESAA1-240x	EPxA1-250X	EPxA1-270X	EPxA1-425x ESDA1-425x ESAA1-425x	EPxA1-440x ESDA1-440x ESAA1-440x	EPxA1-450X	EPxA1-470X	EPxA1-4100X	EPxA1-4120X
Load curent, AC51/25ºC (Arms)	12	25	40	50	70	25	40	50	70	100	120
Load voltage (Vrms)	24 - 320					50 - 480					
Overload current t=1s/25°C (Arms)	50	85	150	200	300	85	150	200	300	540	720
Non rep.surge current/25°C (Arms)	120	250	400	500	800	250	400	500	800	1350	1800
On-state voltage drop (Vrms)	1,6					1,6				1,8	
Leakage current (mArms)	5			10	10	5	5	10	10	20	20
I²t For fusing t=10ms (A²s)	78	340	880	600	1600	340	880	600	1600	9100	16200
Frequency (Hz)	50 - 60					50 - 60					
Minimum operating current (mArms)	160			200	320	160	160	200	320	500	500

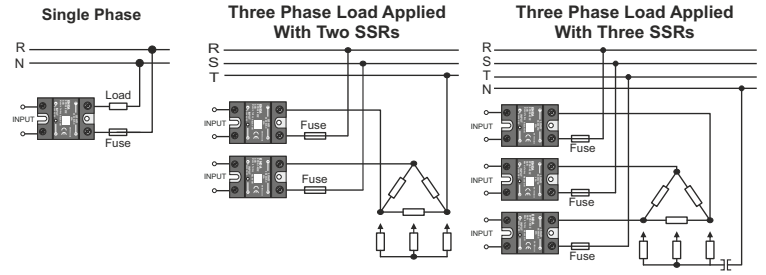
THERMAL SPECIFICATIONS											
Tj Junction temperature (°C)	≤125	≤125	≤125	≤125	≤125	≤125	≤125	≤125	≤125	≤125	≤125
Rth(j-c)Junction-case thermal resistance (°C/W)	≤2,3	≤1,2	≤0,7	≤0,5	≤0,4	≤1,2	≤1,0	≤0,6	≤0,4	≤0,3	≤0,25
Rth(j-a)Junction-ambient thermal resistance (°C/W)	≤20	≤20	≤20	≤20	≤20	≤20	≤20	≤20	≤20	≤20	≤20

INPUT			
Order code	EPGA1-xxxZ EPGA1-xxxR	ExDA1-xxxZ ExDA1-xxxR	ExAA1-xxxZ ExAA1-xxxR
Input voltage	3 - 30VDC	8 - 30VAC/DC	90 - 240Vac
Pick-up voltage	> 3VDC	> 6VAC/DC	> 75Vac
Drop-out voltage	< 2VDC	< 2VAC/DC	< 6Vac
Input current	< 10mAdc	< 17mAac/10mAdc	< 8mAac
Turn-on time	Max. ½ Period	Max. ½ Period	Max.1 Period
Turn-off time	Max. ½ Period	Max. ½ Period	Max. 2 Period
LED indicator	If input voltage is AC/DC >3V, LED lights up.	If input voltage is AC/DC >6V, LED lights up.	If input voltage is AC/DC >75V, LED lights up.

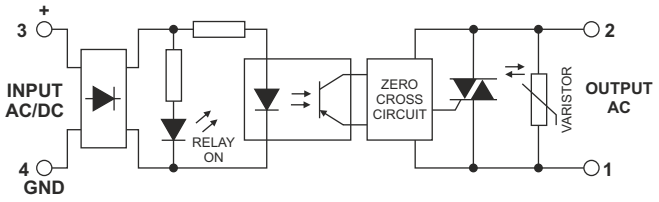
GENERAL			
Order code	EPxA1-xxxZ EPxA1-xxxR	ESDA1-xxxZ ESDA1-xxxR	ESAA1-xxxZ ESAA1-xxxR
Dimensions	W45xH62xD31mm	W24xH101xD29mm	W24xH101xD29mm
Weight (After packaging)	EPxA1-2xx/4xxZ/R = 95g EPxA1-550/570Z/R = 110g EPxA1-5100/5120Z/R = 115g	ESDA1-2xx/4xxZ/R = 95g	ESAA1-2xx/4xxZ/R = 95g
Isolation voltage	2500Vrms between I/O terminals for 1 min.		
Connection	For power line 16mm² (with cable terminal 25mm²) cable, for signal line 4mm² 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	Mounted to the panel by using M4 screws.		
Enclosure material	Self extinguishing plastics. (According to EN 60695-11-10 V-O)		

⚠ Avoid any liquid contact when the device is switched on.
DO NOT clean the device with solvent (thinner, gasoline, acid etc.) and / or abrasive cleaning agents.

CONNECTION SAMPLES



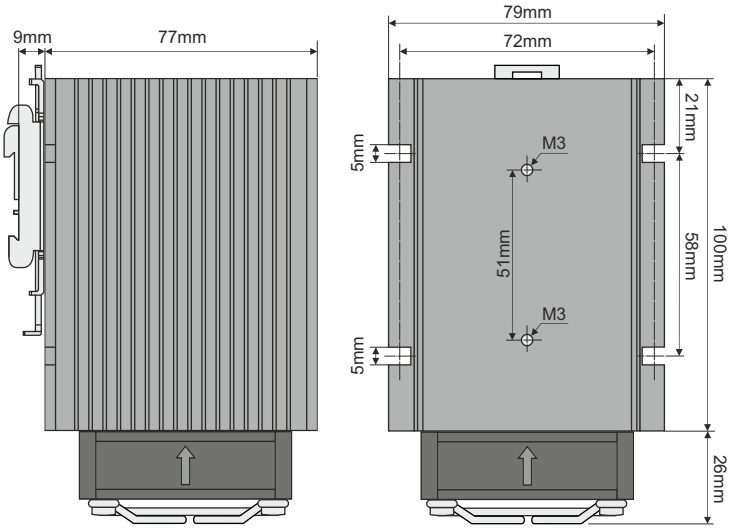
CONNECTION DIAGRAM



ENDA ETS SERIES RAIL AND PANEL MOUNTED HEATSINKS

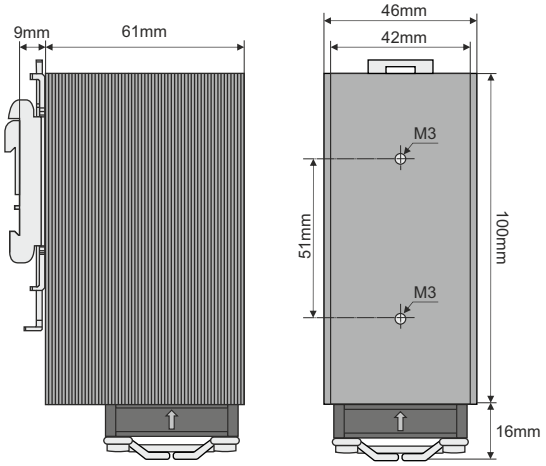
Heatsink	SSR Current (A)	Dimensions WxHxD (mm)	Thermal Resistance (°C/W)
ETS-46-62 ETS-46-80 ETS-46-100	12-25 20-25 25-40	46x61x62 46x61x80 46x61x100	2,0 1,7 1,5
ETS-62-100	40-50	62x77x100	1,0
ETS-46-100F	50-70	46x61x116	0,7
ETS-62-100F	70-120	62x77x126	0,4

Please refer to "ENDA ETS Series Rail and Panel Mounted Heatsinks" manual for details. Contact your local dealer(s) or download the latest manual from http://enda.com/en/automation/ssr/heatsink/ ENDA website.

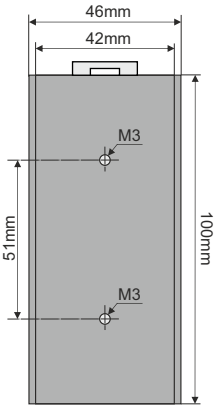


Fan Supply : 24VDC, 220mA.
The fan side of the device must be located at the bottom.

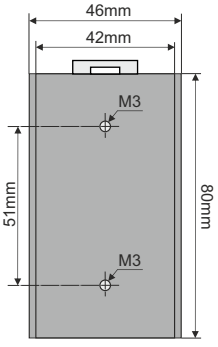
ENDA ETS-46-100F ENDA ETS SERIES RAIL AND PANEL MOUNTED HEATSINK



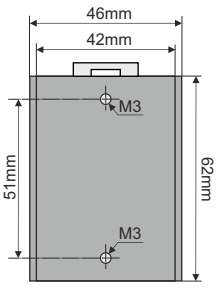
ENDA ETS-46-100



ENDA ETS-46-80

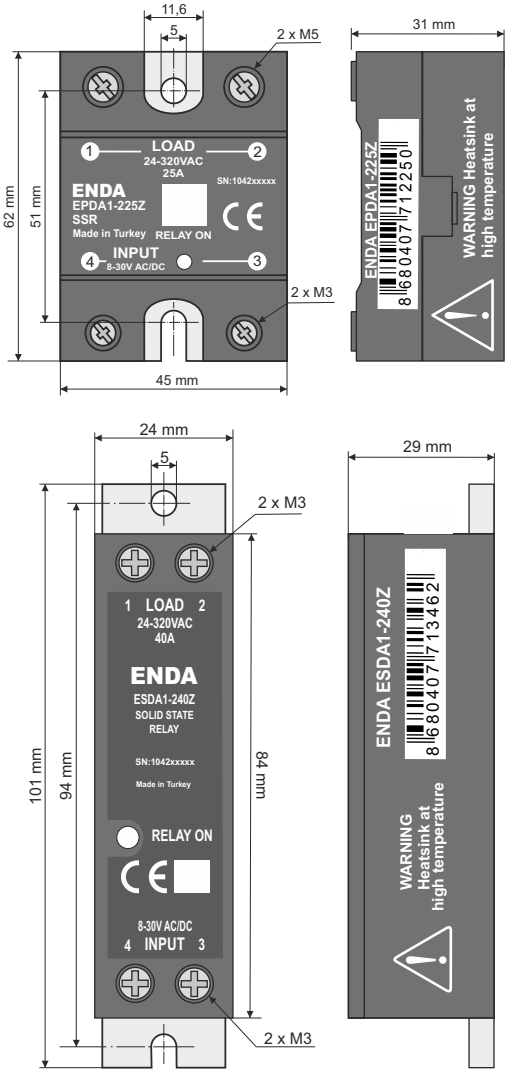


ENDA ETS-46-62



Fan Supply : 24VDC, 100mA.
The fan side of the device must be located at the bottom.

DIMENSIONS



sisel
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