



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 ERCA1 Rail Mountable Proportional Solid State Relays With Integrated Heat Sink

Thank you for choosing ENDA ERCA1 Proportional Solid State Relays.

- \* 25-40-50-70A AC load current.
- \* 300-420-500V AC load voltage.
- \* 4-20 mA input signal.
- \* LED status indicator for input signal.
- \* AC voltage phase angle switching.
- \* For peak voltage with varistor protection.
- \* Rail mountable.
- \* CE marked according to European Norms.

ORDER CODE ER C A 1 - 2 25 PA - F

Product Basic Code  
Rail mountable ER

Input signal  
4-20mA C

Load voltage  
AC A

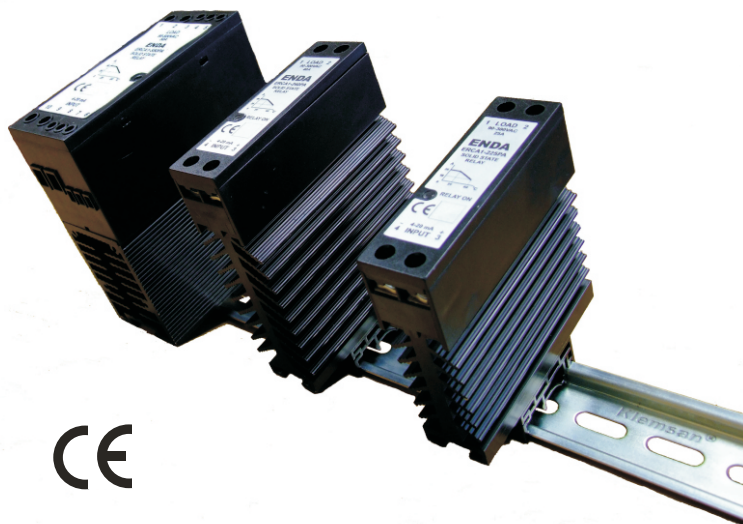
Number of pole  
Single pole 1

Option  
Fan F

Switching  
Phase angle PA

Load Current	
25A AC	25
40A AC	40
50A AC	50
70A AC	70

Load voltage	
90-300V AC	2
90-420V AC	4
90-500V AC	5



CE

### ENVIRONMENTAL CONDITIONS

Ambient/storage temperature	-25... +60 °C / -30... +100 °C (In the environment icing and condensation should not be.)
Relative humidity	At +40 °C %50, temperature was reduced at +20 °C could be %90. (Condensation should not be.)
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	ERCA1-225PA	ERCA1-240PA	ERCA1-425PA	ERCA1-440PA	ERCA1-550PA-F	ERCA1-570PA-F
Load Current, AC51/25°C (Arms)	25	40	25	40	50	70
Load voltage (Vrms)	90 - 300		90 - 420		90 - 500	
Overload current t=1s/25°C (Arms)	85	150	70	110	180	400
Non rep.surge current/25°C (Arms)	250	400	190	290	270	600
On-state voltage drop (Vrms)	1,6		1,8		1,8	
Leakage current (mArms)	5		8		10	15
I <sup>2</sup> t for fusing t=10ms (A <sup>2</sup> s)	340	880	265	610	720	4000
Frequency (Hz)	50- 60		50 - 60		50 - 60	
Power factor (CosΦ)	>0,75		>0,75		>0,75	
Minimum operating current (mArms)	160		200		300	400

### INPUT

Input signal	4-20 mA ( If the input signal >30mA, the device can go out of order.)
Transmission signal	>4,2 mA
Drop-out signal	<4,1 mA
Turn-on time	15ms
LED indicator	Lights up in proportional with input signal
Dynamic input impedance	>550 Ω
Protection	Protection against the inverse of the input signal is connected.

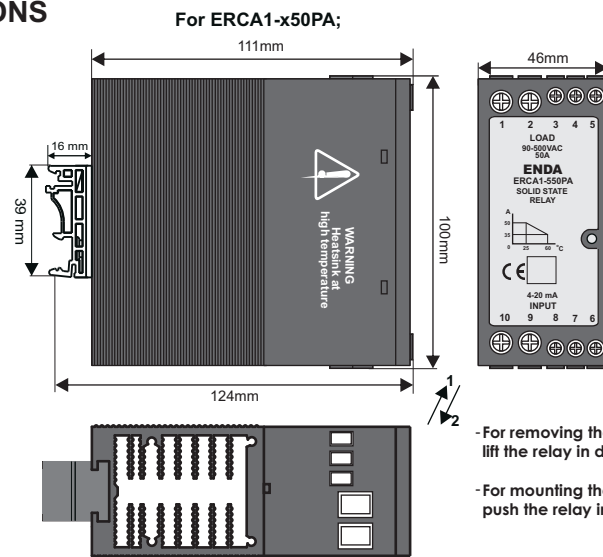
### GENERAL

Order code	ERCA1-x25PA	ERCA1-x40PA	ERCA1-5xxPA
Dimensions	G24xY84xD97mm	G30xY84xD115mm	G46xY100xD124mm
Weight	Approx. 203 g (After packaging)	Approx. 280 g (After packaging)	Approx. 450 g (After packaging)
Isolation Voltage	2500 Vrms between I/O terminals for 1 min.		
Connection	M4 screw-type ( Can be connected 2x4mm <sup>2</sup> or insulated cable terminal with can be connected 1x6mm <sup>2</sup> cable.)		For power line 16mm <sup>2</sup> cable (with 25mm <sup>2</sup> cable terminal) cable, for signal line can be connected 4mm <sup>2</sup> cable.
Terminal screw torque	Max. 1,2Nm		
Product standard	EN 60947-4-3		
Mounting	Rail mountable (EN60715, TH35 or G-32)		
Enclosure material	Self extinguishing plastics (According to EN 60695-11-10 V-O)		
Fan (option)	none	none	Thermostat-controlled, operates at 50°C.



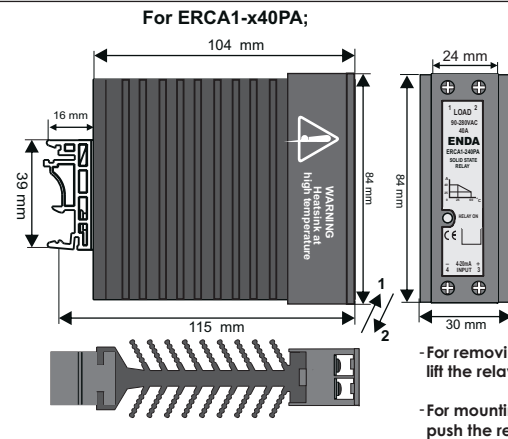
While cleaning the device, solvents (thinner, benzene, acid etc.) or corrosive materials must not be used.

## DIMENSIONS



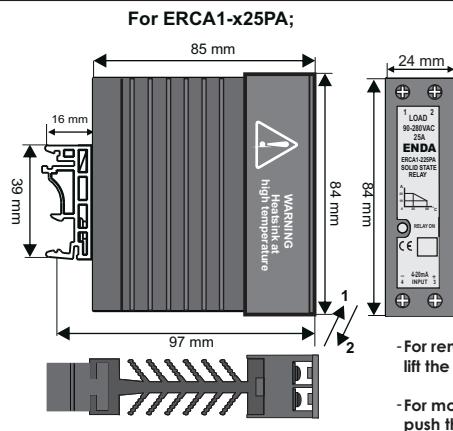
- For removing the relay from rail, lift the relay in direction 1.

- For mounting the relay to rail, push the relay in direction 2.



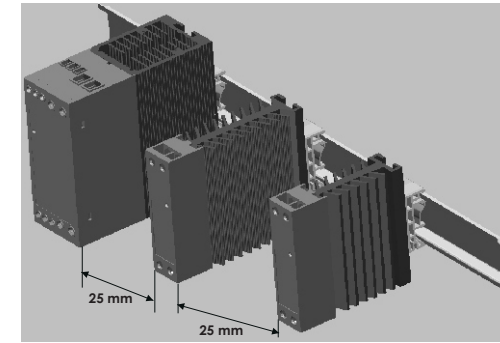
- For removing the relay from rail, lift the relay in direction 1.

- For mounting the relay to rail, push the relay in direction 2.

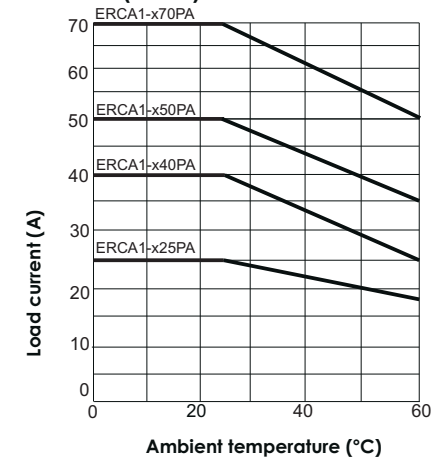


- For removing the relay from rail, lift the relay in direction 1.

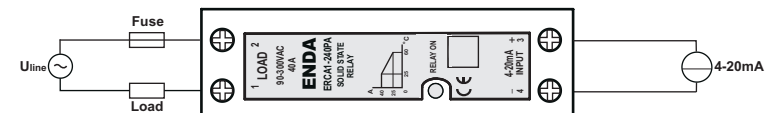
- For mounting the relay to rail, push the relay in direction 2.



## IT(RMS) A



## APPLICATIONS



## TRANSFER FEATURES

Control Current (mA)	Output Power
4	0
8	25
12	50
16	75
20	99

**NOTE:**  
END A ERCA1 SSR: Control of heating, lighting and slightly inductive loads for example; is suitable for control of small fans and can also be used for high-power incandescent lamps.