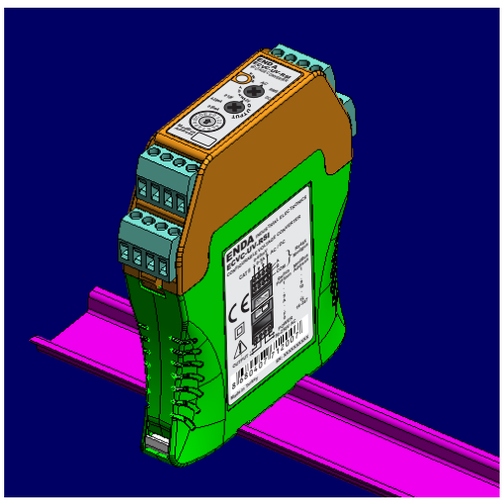
Read this document carefully before using this device. The guarantee will be expired by device damages if you don't attend to the directions in the user manual. Also we don't accept any compensations for personal injury, material damage or capital disadvantages.

ENDA ECVC Configurable Voltage Converter

Thank you for choosing **ENDA ECVC** Configurable Voltage Converter.

* 0-100V AC/DC and 0-500V AC/DC input.
* Measuring type can be selected as AC, DC or True RMS.
* Configurable mA and V outputs.
* Three-way isolation between Input, output and power supply.
* Communication feature over ModBus RTU protocol. (Optional).
* Rail mounted.
* With screw-terminal connections.
* CE marked according to European Norms.



ORDER CODE ECVC - xV - RSI

Product Basic Code	
Configurable Voltage Converter	ECVC

Communication	
RSI	Isolated RS485 ModBus (Optional)

Supply Voltage	
UV	90-250V AC
LV	9-30V DC 7-24V AC

CE

RoHS Compliant

ELECTRICAL CHARACTERISTICS	
Inputs	0-100V AC/DC (Device may be damaged at ±500V DC and above voltages) 0-500V AC/DC (Device may be damaged at ±1250V DC and above voltages)
Input Impedances	For 0-100V AC/DC input : 176.8kΩ. For 0-500V AC/DC input : 884kΩ.
Frequency Range	AC , 10Hz - 200Hz (10Hz-70Hz for squarewave form)
Sampling Duration	250ms
A/D Converter	12 bit
D/A Converter	12 bit
Output	0-20mA DC, 4-20mA DC, 0-10V DC or 1-5V DC selectable. (Load resistance for current outputs up to 500Ω)
Accuracy	For AC : ±%1 (±%2 For square wave form) For DC : ±%1 For RMS : ±%1 (±%2 For square wave form)
Supply	For ECVC-UV : 90-250V AC, 50/60Hz For ECVC-LV : 9-30V DC or 7-24V AC, 50/60Hz
Power Consumption	Max. 7VA
Connection	2,5mm² Screw-terminal connections.
EMC	EN 61326-1: 2012
Security Requirements	EN 61010-1: 2010 (Pollution degree 2, overvoltage category II)
Isolation Test Voltage	For 3kV AC, at 1 minute min.. For 4,2kV DC, at 1 minute min..

ENVIRONMENTAL CONDITIONS	
Ambient/storage temperature	0 ... +50 °C / -25... +70 °C(There shouldn't be icing and condensation in ambient air.)
Relative humidty	Relative humidity 80 % for temperatures up to 31°C, decreasing linearly to % 50 relative humidity at 40°C. (There shouldn't be condensation.)
Protection class	IP20 According to EN60529
Height	Max. 2000m

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

HOUSING	
Mounting	Rail mounted (EN60715,TH35 or G-32)
Dimensions	W25xH97xD115mm
Weight	Approx.150 g (After packaging)
Enclosure material	Self extinguishing plastics (According to EN 60695-11-10 V-O)

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

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Şerifali Mah. Barbaros Cad. No:18 Y.Dudullu 34775
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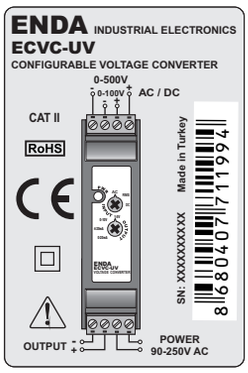
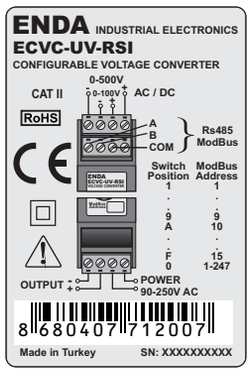
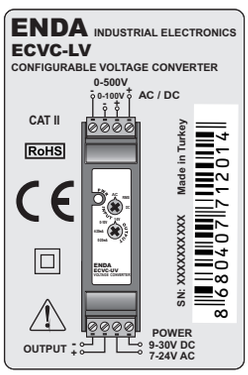
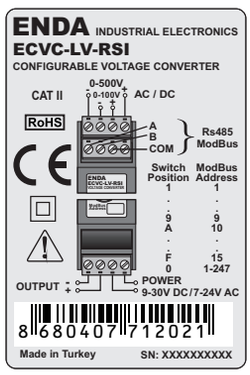
Tel : +90 216 499 46 64 Pbx. Fax : +90 216 365 74 01
url : www.enda.com.tr

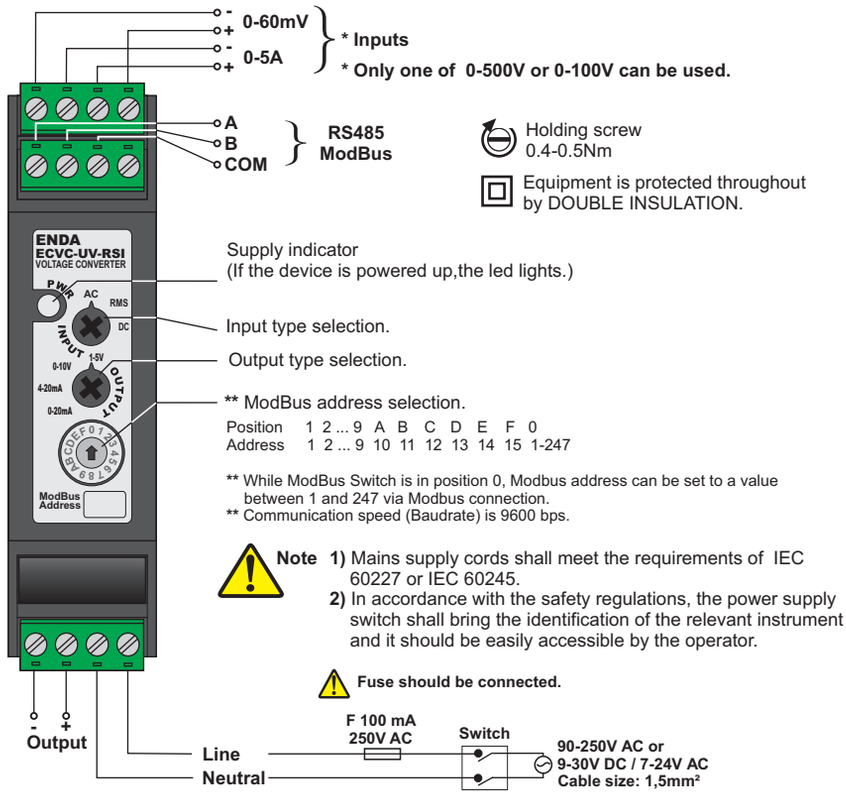
CONNECTION DIAGRAM











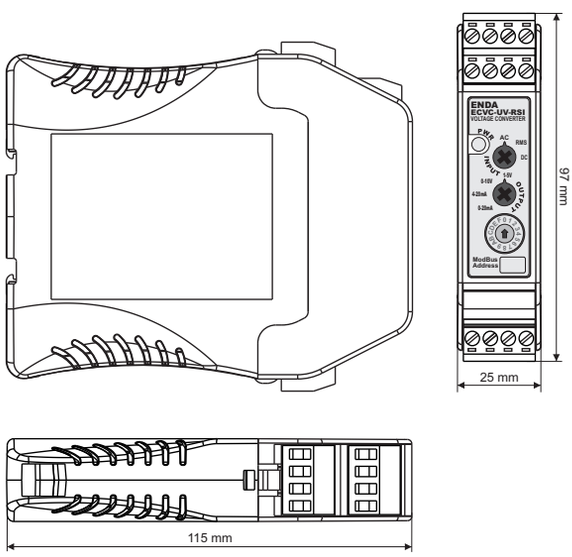
ENDA ECVC series converters are rail mounted devices. Make sure that the device is used only for intended purpose. The shielding must be grounded on the instrument side. During an installation, all of the cables that are connected to the device must be free of energy. The device must be protected against inadmissible humidity, vibrations, severe soiling and make sure that the operation temperature is not exceeded. All input and output lines that are not connected to the supply network must be laid out as shielded and twisted cables. These cables should not be close to the power cables or components. The installation and electrical connections must be carried on by a qualified staff and must be according to the relevant locally applicable regulations.

ENDA ECVC Configurable Voltage Converter Modbus Address Map

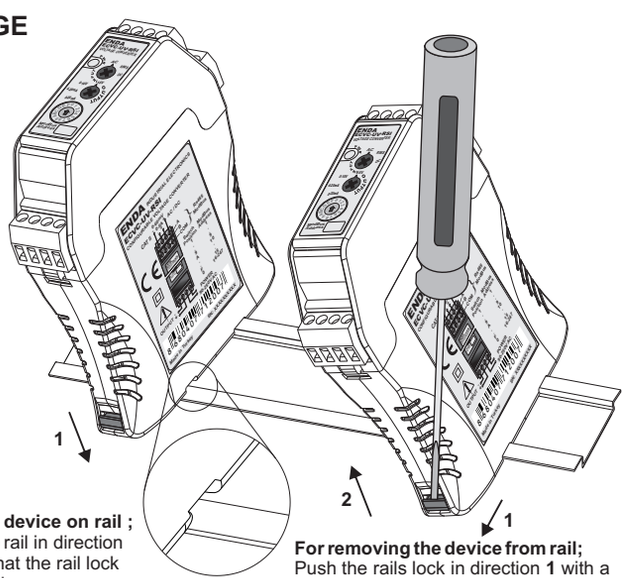
Input Register Addresses Desimal (Hex)	Data Type	Data Content	Read / Write Permissions	Min. Value	Max. Value
0000 0x0000	Word	Measured current value.	Read Only	0	500
0001 0x0001	Word	Measured current input type (0:AC,1:RMS,2:DC)	Read Only	0	2
0002 0x0002	Word	Selected output type (0:0-20mA, 1:4-20mA, 2:0-10V, 3:1-5V)	Read Only	0	3

Holding Register Addresses Desimal (Hex)	Data Type	Data Content	Read / Write Permissions	Min.Value	Max. Value
0000 0x0000	Word	The valid adress, when ModBus address switch is in position 0. Intended adress value is written when ModBus address switch is in position 1,2,...F. Valid ModBus address will be the written address after setting ModBus address switch to position 0.	Readable / Writable	1	247

DIMENSIONS



MONTAGE



For mounting the device on rail ;
Push the device to rail in direction **1** and make sure that the rail lock is interlocked to rail.

For removing the device from rail;
Push the rails lock in direction **1** with a screwdriver and pull the device in direction **2**.

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