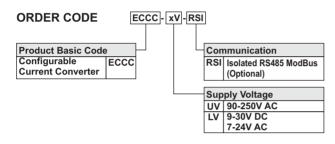


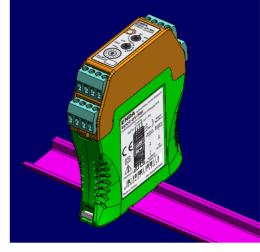
Read this document carefully before using this device. The guarantee will be expired by device damages if you don't attend to the directions in the user manual. Also we don't accept any compensations for personal injury, material damage or capital disadvantages.

ENDA ECCC Configurable Current Converter

Thank you for choosing ENDA ECCC Configurable Current Converter.

- * Can be used with current transformer or shunt.
- * 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.







ELECTRICAL CHARACTERISTICS				
Inputs	0-5A AC/DC (Device may be damaged at 10A and above currents)			
	0-60mV AC/DC (Device may be damaged at 50V and above voltages)			
Input Impedances	For 0-5A AC/DC (with internal shunt) input : 17mΩ.			
	For 0-60mV AC/DC (with external shunt) input : 100Ω.			
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 ECCC-UV: 90-250V AC, 50/60Hz			
	For ECCC-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 CONDITION	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.			

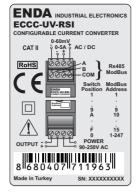
HOUSING	DUSING	
Mounting	Rail mounted (EN60715,TH35 or G-32)	
Dimensions	W25xH97xD115mm	
Weight	Approx.150 g (After packaging)	
Enclosure material	Self extinguishing plastics (According to EN 60695-11-10 V-O)	
While cleaning the device colvents (thinner henring acid atc.) or correcive materials must not be used		



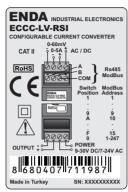


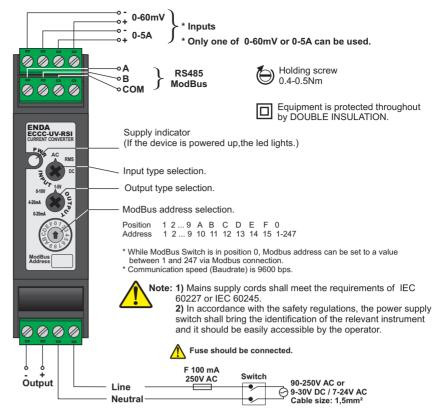
CONNECTION DIAGRAM













ENDA ECCC 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 ECCC Configurable Current Converter Modbus Address Map

Addı	Register resses al (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 Registe Addresses Desimal (Hex	Type		Read / Write Permissions	Min.Value	Max. Value
0000 0x000	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.		1	247

