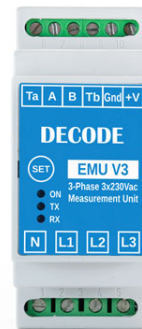


EMU

Electronic Measurement Units

Highlights

- Three types of inputs
- Communication protocol: modbus RTU, addresses in range 1-247, broadcast address 0
- Supported rates: 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200 bps
- Data formats available: 8 bits with No Parity, Even Parity or Odd Parity
- Factory defaults: 9600bps, 1 start, 8 data, parity none, Modbus address 1
- Screw terminals connection
- Power requirements: 10-28V DC / consumption less than 1W
- Measurement isolation 3000 V DC
- Plastic enclosure (35 x 86 x 58 mm), DIN rail 35mm mountable



Description

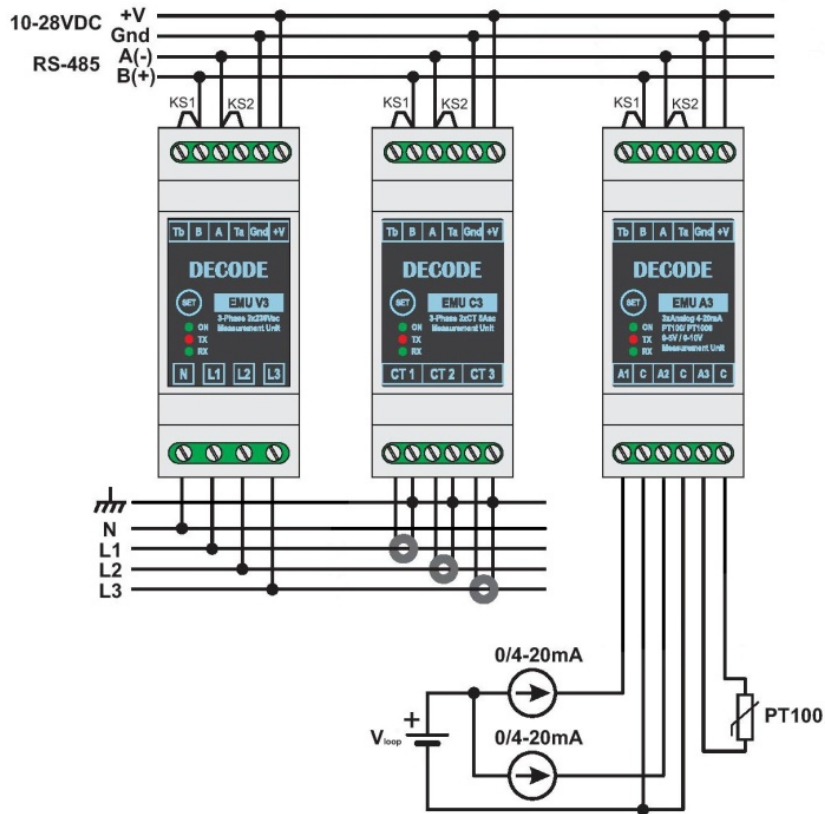
DECODE EMU devices represent series of measuring devices for measurement of AC and DC voltages and currents with integrated RS-485 Modbus connection.

There are three different device options supported where the third one, with analogue input unit, offer several subtypes.

- **EMU V3** - for AC voltages measurement 3 x 230V AC
- **EMU C3** - for AC currents measurement (current transformers) 3 x CT 5A AC
- **EMU A3-TTT** - 3 x analogue input measurement (TTT designates input type, example: device EMU A3-001 features first two inputs 0/4-20mA where the third one features PT100 input)

Technical specification

| DECODE EMU measuring devices | EMU V3 | EMU C3 | EMU A3 – TTT | | | | |
|------------------------------|--------------------------------------|---------------|--------------------------------------|------------------------|------------------------|------------|------------|
| | | | Type T = 0 | Type T = 1 | Type T = 2 | Type T = 3 | Type T = 4 |
| Measured parameters | L1, L2, L3, L12, L23, L31, frequency | CT1, CT2, CT3 | 0-20mA, 4-20mA input resistance 40 Ω | PT 100 | PT 100 | 0-5V DC | 0-10V DC |
| Measurement range | 0-250V AC rms | 0-5A AC rms | 0-25mA DC | from -50 °C to +150 °C | from -50 °C to +150 °C | 0-5V DC | 0-10V DC |
| Resolution | 10mV rms | 1mA rms | 0.01mA | 0.1 °C | 0.1 °C | 1mV | 1mV |
| Measurement type | True RMS | | - | - | - | - | - |



Connection diagram

Jumpers KS1 and KS2 are to be placed only if RS-485 line termination is required. For short distances the termination is not needed. Distances longer than 100m, as well as presence of notable disturbances, require line termination at one of slave devices, specifically the one positioned at the end of line.

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