



Energy meter with indirect connection via CT for single-phase and three phase lines with 3 or 4 wires with MID certification. The device measures and displays positive and negative active and reactive energies, among others, and is equipped with a double tariff input. In the supervision systems, through the model with RS485 Modbus RTU communication port, it is possible to transmit and display all the electrical parameters in addition to the energy consumption.

Functions

- Active positive and negative energy at the terminals (MID)
- Active and reactive energy on the primary side (CT/VT)
- Active and reactive energy tariff 1 and tariff 2
- Partial resettable active and reactive energy
- Current / Voltage / Frequency
- Power factor
- Active, reactive and apparent power
- Average active power and peak average power
- Programmable hour meter (start counting from 0 ... 50% of the positive rated power)
- Digital input (Double tariff / pulses from external meters)

Item	Conto D4 - Pt MID		
	Network	Output	Input
CE4TBDTMID	3Ph /3Ph + N	RS485 Modbus RTU	Double tariff
CE4TBMTMID	3Ph /3Ph + N	M-bus	Double tariff

Technical features

INPUT CURRENT	
Starting current (Ist)	0,01A
Min. current (Imin)	0,05A
Basic current (Ib)	5A
Max. current (Imax)	6A
Short-time overcurrent	30Imax/10ms
Power consumption	0,3W / 0,2VA for phase
INPUT VOLTAGE	
Reference 3 phase voltages (with N)	230V +/-10%
Reference 3 phase voltages (without N)	400V +/-10%
NETWORK	
Reference frequency	50-60Hz
Frequency tolerance	49...51-59...61Hz
AUXILIARY SUPPLY	
Nominal voltage	Taken from measurement (self-supplied)
ACCURACY	
Active energy kWh EN50470	cl. B
Reactive energy kvarh EN/IEC 62053-23	cl. 2
DISPLAY	
Type	Backlit LCD
Digit height	6mm
Energy Sec Energy Pri:**	99999999 (resolution in function of CT/VT ratio) (see note 1)
MECHANICAL FEATURES	
Housing	4 module DIN 43880 (35mm)
Housing material	self-extinguishing polycarbonate
Protection degree	IP20 terminals/ IP54 front frame
Sealable terminals	Yes
Connections type	screw terminals
Cable with lag	output - max 1mm ² / input - max 16mm ²
Flexible cable	output - max 2,5mm ² / input - max 10mm ²
ENVIRONMENTAL CONDITIONS	
Nominal temperature range	-25...55°C
Limit range for storage and transport	-40...70°C
Suitable for tropical climates	yes
Max.power dissipation*	≤4W
Output	
RS485 COMMUNICATION	
Protocol	Modbus RTU
Standard	RS485-3-wire
Baud rate	selectable 4800...19200 bit/s
M-BUS COMMUNICATION	
Protocol	M-BUS
Standard	EN13757
Baud rate	selectable 300...9600 bit/s
Input	
Type	Free contact (voltage)
Contact characteristics	12-24Vdc -10mA
Management	Double tariff T1-T2 or pulse from external contactors (selecting pulse measurement unit)

Note 1

*For switchboard thermal calculation

** kCT*kVT MAXIMUM DISPLAY
 1...9 9999999,99kWh/kvarh
 10...99 99999999,9kWh/kvarh
 100...999 999999999kWh/kvarh
 1000...9999 9999999,99MWh/Mvarh
 10000...99999 99999999,9MWh/Mvarh
 ≥100000 999999999MWh/Mvarh

kCT programmable 1...9999
 kVT programmable 1,00...300,00
 kCTxkVT max 3.000.000

Wiring diagrams

