Energy meter for alternating three-phase current

for direct connection up to 80 amps
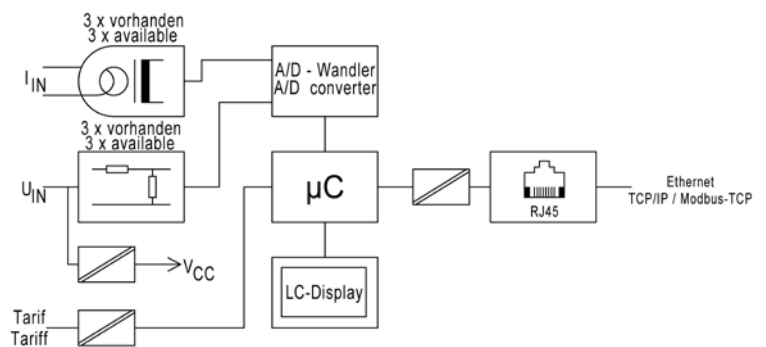with Ethernet interface

Type:
EZD-TCP 80

Application

The electronic energy meter EZD-TCP is used to record the active and reactive energy during import and export in three-phase systems under any load. Their application covers for example industrial plants, workshops, machines and offices. The energy values are displayed, stored and provided on an Ethernet interface for further processing. All values for current, voltage, frequency, power and energy can be read on an LCD display. The connection is made directly up to a maximum current of 80 amps.
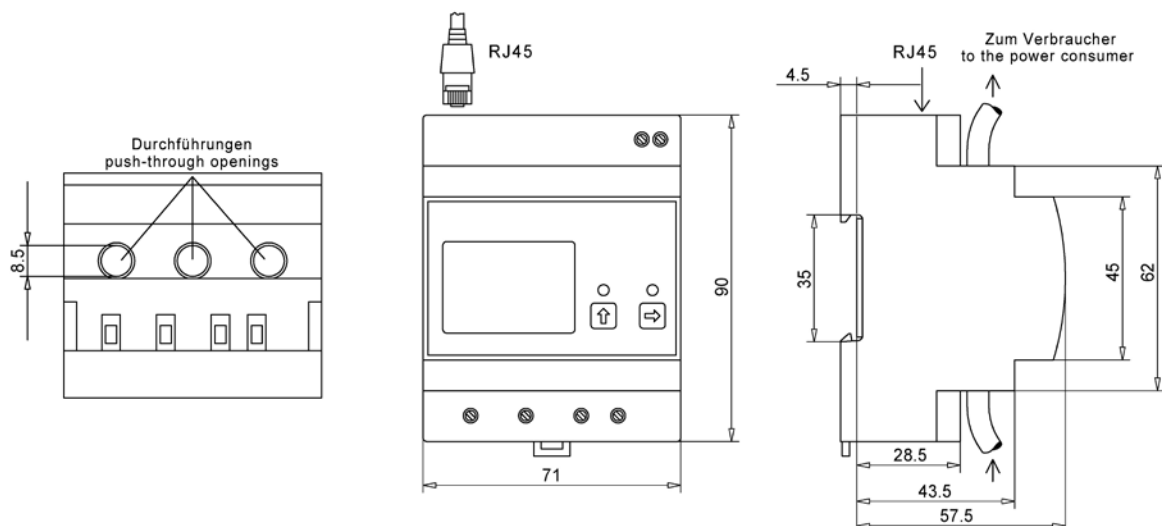
Function

The values to be measured are transferred to an integrated module via internal current transformers and voltage dividers. The instantaneous values of current and voltage are recorded here. A microcontroller takes over the evaluation and the storage of the measured values. The values are shown on an LCD display.
A separate auxiliary voltage is not required, it is obtained from the measuring voltage. The meter readings and programming are saved in case of a power failure.
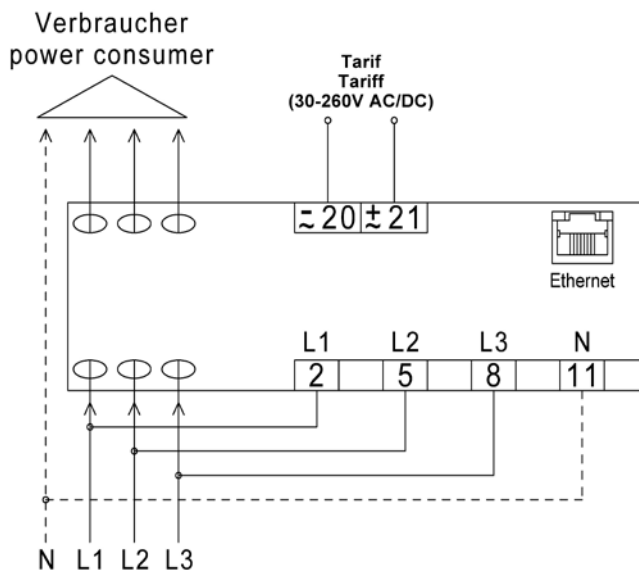

Dimensions

Types and variants

EZD-TCP 80

Connection

Verbraucher
power consumer

Tarif
Tariff
(30-260V AC/DC)

≃ 20 ± 21

Ethernet

L1   L2   L3   N
2   5   8   11

N L1 L2 L3

Technical data

Input		
	Mains connection	3-phase 4-wire power system, direct measurement bidirectional meter, 2-tariff measurement
	Rated voltage	50-300 V / 87-520 V and 3 x 87-520 V
	Current information acc. to meter print	I_{min} - I_{ref} (I_{max}) A
	Starting current I_{st}	0,02 A (symmetrical per phase)
	Minimum current I_{min}	0,2 A
	Transition current I_{tr}	0,5 A
	Reference current I_{ref}	5 A
	Limit current I_{max}	80 A
	Rated frequency	40-70 Hz
	Energy consumption	voltage circuit approx. 0,7 VA; current circuit approx. 0,1 VA
	Accuracy	active energy class B acc. DIN EN 50470-3 reactive energy class 2 acc. DIN EN 62053-23
	Backstop	yes
Indicators		
	Display	LCD-display, update 2 times per second active energy in kWh or MWh with 7.2 digits reactive energy in kvarh or Mvarh with 5.2 digits
	Function indicators	LED for active energy import and export 600 pulses/kWh both LED light up at current < I_{min}
	Reset	via buttons on front panel
Interface		
	Interface	10 Mbits/s Ethernet LAN-interface
	Protocol	TCP/IP protocol MODBUS-TCP-protocol
Tariff control input		
	Tariff 1	0 V or open
	Tariff 2	30 - 260V AC/DC, 0,4 VA
	Separation	4 kV