



## ***HEXE110-P***

Single Phase  
Residential Meter

*Focus on creating value for clients*



HXE110-P is a single phase residential meter used in a split prepayment metering system. It complies with STS standard and communicates with a CIU by MBUS or PLC for energy consumption monitoring and credit charging.

## ■ Highlights

- STS standard protocol ensures an open and secure operating system
- Optical Communication, Open Protocol: DLMS/COSEM Standard
- Internal switch relay for load demand control by configuration or remote communication
- Prepayment and post-payment mode switchable for users' convenience

## ■ Main Functionalities

### ➤ Measurement

- Unidirectional or Bi-directional Measurement
- Active energy, Active reverse energy Measurement
- Instantaneous value measurement

- Prepayment is made via a numeric token
- Balance display configurable
- Communication with CIU via PLC or MBUS, depending on the site

### ➤ LCD Display

- Large digit LCD display, easy for reading
- LCD backlights to increase readability in low light conditions(optional)
- Scrolling display configurable for instant information enquiry
- Display the latest 6 months active energy

### consumption

- 12-month billing d and more frozen data for inquiry

- RS485 Communication with interface in accordance to DLMS standard (optional)
- Emergency Credit for a certain sum of energy supply depending on User's credit level
- User-friendly mode for energy supply for low credit during weekends or holidays (optional)
- **Tampering Proof:**
  - Meter Cover open detection and record
  - Meter terminal detection and record
  - Bypass (optional)
  - Large magnetic event(optional)
- Auxiliary Terminal for Energy Pulse Output(optional)

## ■ Specifications

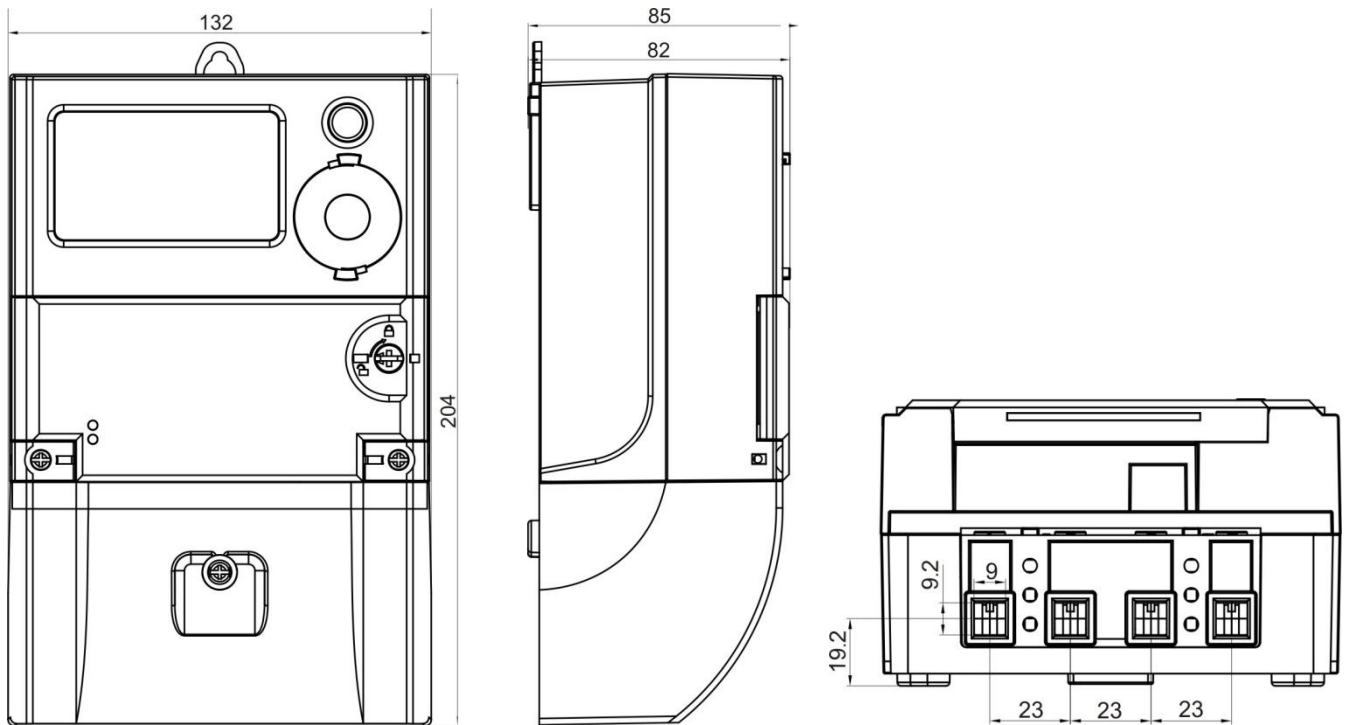
Description	Value
<b>Accuracy</b>	Class 1 or 2 (IEC), Class A or B (MID)
<b>Voltage</b> Reference voltage Operating voltage range	110-127V,220-240V 70%-120%Un
<b>Current</b> Basic current Maximum current Starting current	5A, 10A 60A, 80A, 100A ≤ 0.4%Ib
<b>Frequency</b>	50Hz or 60Hz
<b>Temperature</b> Operation range Limit range for storage and transport	-25°C to +60°C -40°C to +75°C
<b>Humidity</b>	Up to 95% non-condensing
<b>Power Consumption</b> Power consumption in voltage circuit (active) Power consumption in voltage circuit (apparent) Power consumption in current circuit	≤2 W ≤10 VA ≤1 VA
<b>Insulation Strength</b> AC voltage test Impulse voltage test	4kV during 1min 1.2/50μs mains connections 6kV
<b>EMC</b> Electrostatic discharges(Contact discharges) Electrostatic discharges(Air discharges) Surge immunity test Fast transient burst test Electromagnetic RF fields (80MHz to 2000MHz)	8kV 15kV 4kV 4kV 10V/m(with current), 30V/m(without current)
<b>Connection Terminals</b>	∅ 8mm
<b>Housing</b> Protection degree Meter cove Meter base Terminal cover	IP54 (with long terminal cover) Opaque PC+ fiber glass with a transparent window Opaque PC + fiber glass Opaque PC+ fiber glass
<b>Display</b> Digit size Number of digits	8.8mm x 4.5mm 8
<b>Communication Interface</b> Optical communication PLC/MBUS alternative	DLMS/COSEM
<b>Weight</b> Net weight Package	Approx.0.93kg(extended terminal cover) Approx.0.89kg(short terminal cover) Approx.0.08kg(extended terminal cover), Approx.0.08kg(short terminal cover)

<b>Dimension</b>	204mm×132mm×85mm(extended terminal cover) 164mm×132mm×85mm (short terminal cover)
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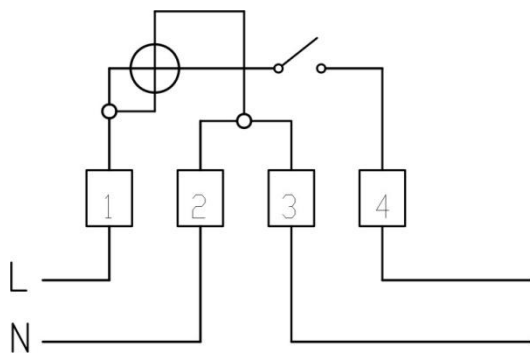
## ■ Standard

<b>IEC62052-11</b>	Electricity metering equipment (a.c.) General requirements, tests and test conditions – Part 11: Metering equipment
<b>IEC62053-21</b>	Electricity metering equipment (a.c.) Particular requirements –Part 21:Static meters for active energy(classes 1 and 2)
<b>IEC62055-41</b>	Electricity metering - Payment systems - Part 41: Standard transfer specification (STS) - Application layer protocol for one-way token carrier systems
<b>IEC62055-51</b>	Electricity metering - Payment systems - Part 51: Standard transfer specification (STS) - Physical layer protocol for one-way numeric and magnetic card token carriers
<b>IEC62056-46</b>	Electricity metering – Data exchange for meter reading, tariff and load control – Part 46: Data link layer using HDLC protocol
<b>IEC62056-53</b>	Electricity metering – Data exchange for meter reading, tariff and load control – Part 53:COSEM Application layer
<b>IEC62056-61</b>	Electricity metering – Data exchange for meter reading, tariff and load control – Part 61:OBIS Object identification system
<b>IEC62056-62</b>	Electricity metering – Data exchange for meter reading, tariff and load control – Part 62:Interface classes
<b>EN50470-1</b>	Electricity metering equipment (a.c.) —Part 1: General requirements, tests and test conditions — Metering equipment(class indexes A, B and C)
<b>EN50470-3</b>	Electricity metering equipment (a.c.) —Part 3: Particular requirements —Static meters for active energy (class indexes A, B and C)
<b>IEC62056-21</b>	Electricity metering – Data exchange for meter reading, tariff and load control – Part 21:Direct local data exchange

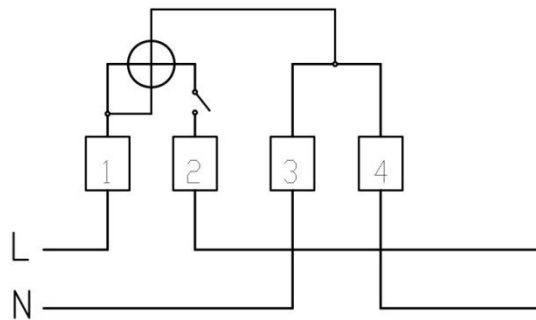
## ■ Dimensions



## ■ Connection Diagram



Symmetric Connection



Asymmetric Connection

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