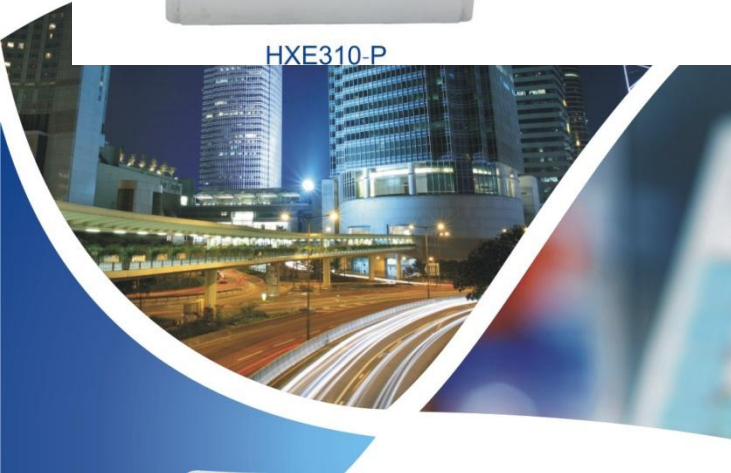




HXE310-P



## ***HXE310-P***

**Three Phase  
Split Prepayment Meter**

*Focus on creating value for clients*



HXE310-P

HXE310-P is a three phase direct connection 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 (E Mode)
- 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

### ➤ LCD Display

- Balance display configurable
- 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 of last 6 months active energy consumption
- 12-month billing data and more frozen data for inquiry

### ➤ Communication with CIU via PLC or MBUS,

depending on the site

### ➤ RS485 Communication with interface in accordance to DLMS standard (optional)

### ➤ Event Record

- Multiple event detections and records with categories of operation, power grid and tampering

### ➤ 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

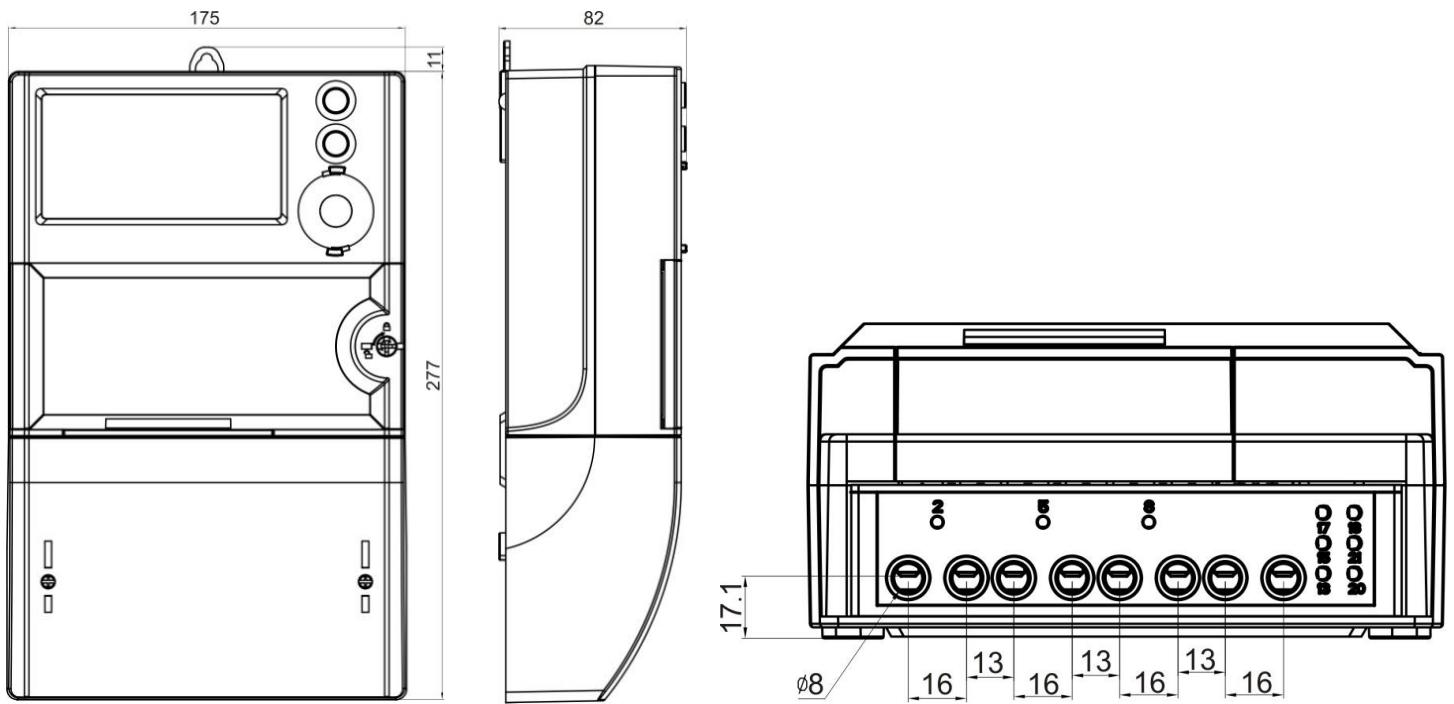
Description	Value
<b>Accuracy</b>	Class 1 or 2 (IEC), Class A or B (MID)
<b>Voltage</b> Reference voltage Operating voltage range	3x220/380V-3x240/415V 70%-120%Un
<b>Current</b> Basic current Maximum current Starting current	5A,10A 40A, 60A, 80A, 100A ≤ 0.4%Ib
<b>Frequency</b>	50Hz or 60Hz
<b>Temperature</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%
<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	4.5mm x 8.8mm 8
<b>Communication Interface</b> Optical communication PLC/MBUS alternative	DLMS/COSEM
<b>Weight</b> Net weight Package	Approx.1.61kg ( Extended terminal cover) Approx.1.57kg( Short terminal cover) Approx.0.15 kg ( Extended terminal cover) Approx.0.15kg ( Short terminal cover)

<b>Dimension</b>	266mm×175mm×82mm (Extended terminal cover)
	224mm×175mm×82mm (Short terminal cover)

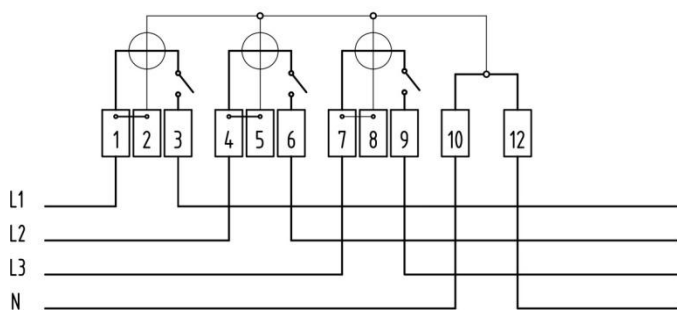
## ■ Standard

<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

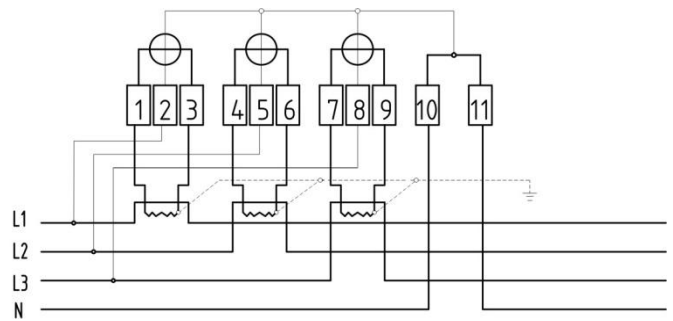
## ■ Dimensions



## ■ Connection Diagram



Symmetric Connection



Asymmetric Connection

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