



HEXING

Installation Manual

Integrated Prepaid Keypad Meters

For HXE34-KP Meters(CT & CTPT Connection)

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Introduction

Range of validity

The present installation manual applies to the meter specified on the title page.

Purpose

The installation manual contains all the information required for application of the meters for installation and maintenance.

Target group

The contents of this installation manual are intended for qualified personnel of energy supply companies responsible for installation and maintenance of the meter.

Hexing Electrical reserves the right of final interpretation



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1 General view



Figure 1.1 View of HXE34-KP

Front View

The meter information is printed on front cover and front door. The information could be printed according to requirements of Power Supply Company. There is a button for data query and manual disconnector control, an optical communication interface for HHU operation and local maintenance.

2 Installation Tools

- ♦ cross screw driver 1
- ♦ electric drill 1
- ♦ wire stripper 1
- ♦ sealing 1
- ♦ lead seal clamp 1
- ♦ sealing pliers 1
- ♦ meter hanger screws 1
- ♦ ordinary screw 2



3 Installation

3.1 Installation Requirements

The prepaid keypad meter should be installed correctly as this could determine the meter functionality and lifespan. Please follow the prescribed procedures carefully.

When selecting a suitable position for the meter, the following should be considered:

- Security (indoors or outdoors) against tampering.
- General safety consideration in case of possible electric shock, fire, etc.
- For safety consideration, and avoid damage to the meter, install the meter where is far away from any water tap.
- Keep the energy meter away from a stove or heater, or any compliance which will produce heating exceeds meter's limited heat withstand.
- Keypad of the meter should be accessible by user.
- The meter should be installed in a dry ventilated place to ensure the installation and use of meter is secure and reliable. At places that are dirty or might damage the meter, a protection cabinet or box shall be used to protect the meter.
- The meter should be fixed in a firm, fire-resistant surface that do not shake easily.

NOTE

Make sure to disconnect the power of the power network before installing the meter.

3.2 Meter Handling

The integrated prepaid keypad meter should be handled carefully, as this unit comprise of very delicate and sophisticated electronics. Please avoid the following actions:

- Avoid drop meter during the installation.
- Make sure meter is installed where is arid and ventilated.
- Do not attempt to open the meter cover.
- Do not add any additional or external voltages to the meter other than what is specified by the supplier.

3.3 Installation Process

The integrated prepaid keypad meter is designed to withstand extreme external conditions. Please follow these instructions to install it:

- Choose a place that is easy for installation according to the dimension of the meter;
- Check the meter for any visible damage caused by shipping. If there is visible damage, please change the meter.
- Switch off the voltage.
- Remove the terminal block cover.
- Check the vertical distance between the meter hanger and the two mounting screw holes so as to select the best place to drill the holes on the wall or any installation place.
- Use the vertical installation method; fix the meter hanger with M4 screw.



- Fix the two mounting hole with normal M4 screws. Make sure the three screws are fastened.
- Make wire connection according to the connection diagram. Make sure to fasten all the screws during the wire connection so as to avoid any damage to the meter due to insufficient contact.
- Attaché the terminal cover to the meter base.
- Seal the terminal cover with sealing wire and screw.
- Record the serial number on the nameplate for backing up the user and installation position.

3.4 Inspection

Please ensure that the following instructions are covered:

- Check that the meter is properly and firmly installed
- Make sure the wire connection is right, and that the incoming supply the outgoing load wires are connected to the terminals.
- Check that the EARTH conductor is connected to the EARTH terminal (if applicable)
- Double-check that all electrical terminal screws are tight, and that the electrical connections are secure and neat
- Check that the sealing hole is sealed properly.
- After the installation, when the meter is powered on, the balance indicator LED shall be lightened.

4 Maintenance

4.1 Replace Battery

In the lifespan of the battery, some reasons may result in little part of batteries are run out ahead of time and damage, such as the meter are stored in warehouse for a too long time, or the temperature of the application site is too high. When the battery needs to be replaced, the indicator will flash on the LCD. The message will be sent to the master station through alarm register. The battery could work for another week from the alarm is given to it is totally run out of use.

NOTE

The safety of operation people could not be guaranteed if liquid enters the meter during battery replacement process. The operation people could execute switching off the voltage before step (3) and switching on the voltage after step (3). It is not suitable to replace battery in rainy time.



5 Connection Diagrams

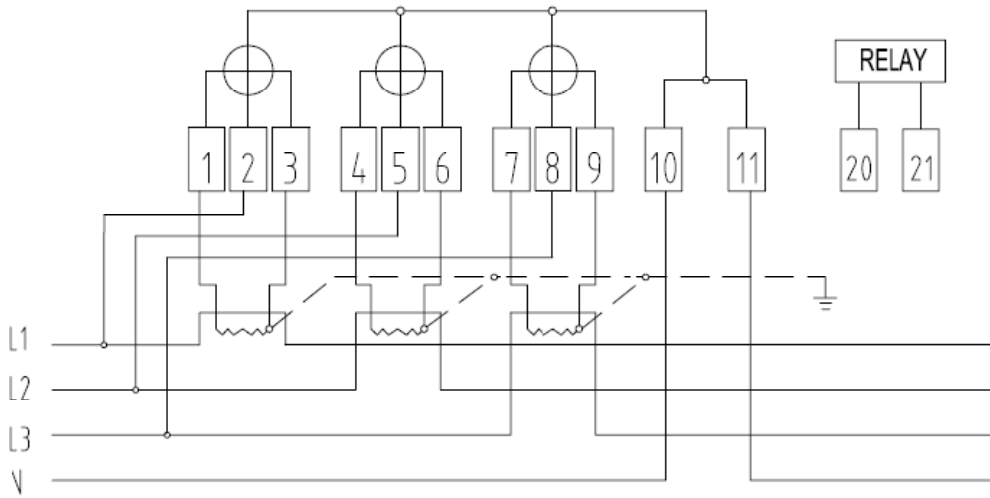


Fig 5.1 three phase meter (CT connection)

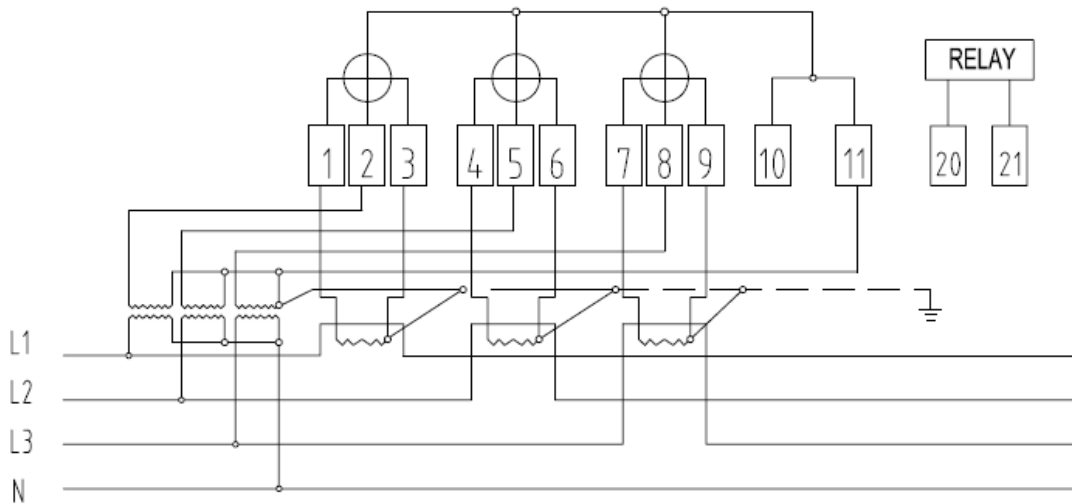
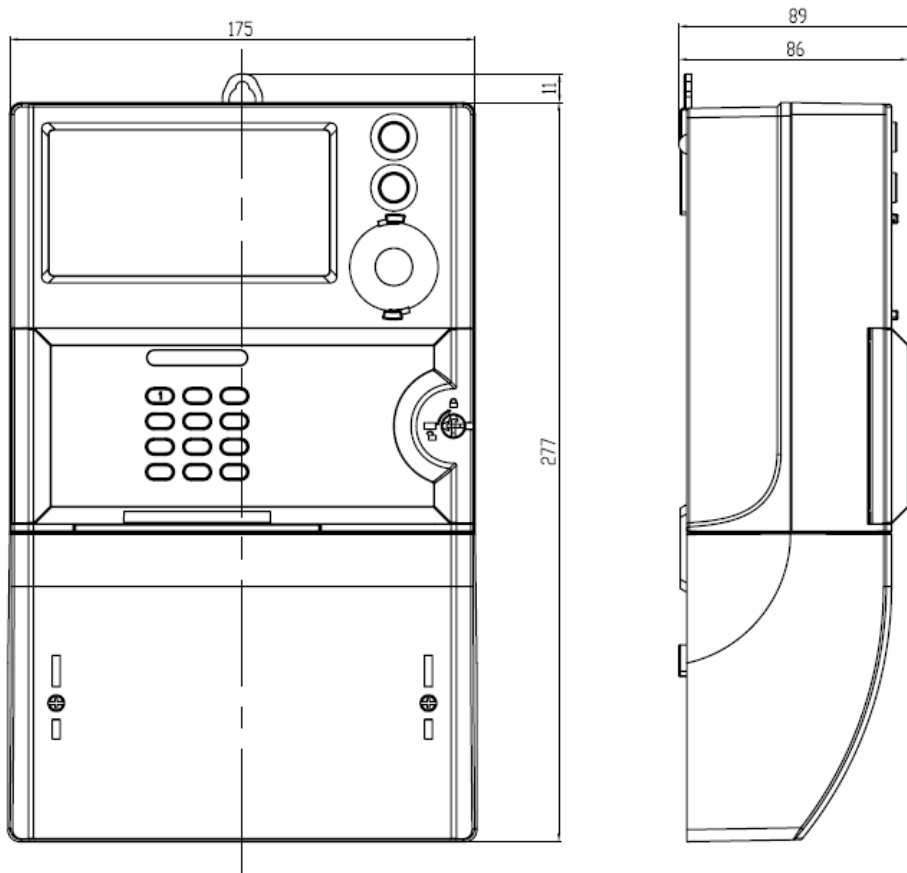


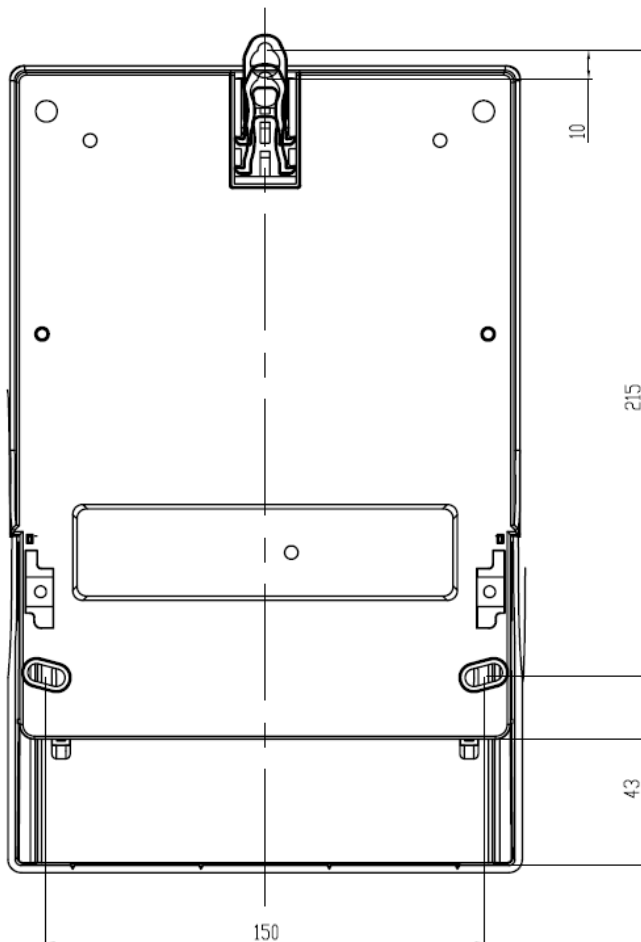
Fig 5.2 three phase meter (CT/PT connection)

6 Dimension

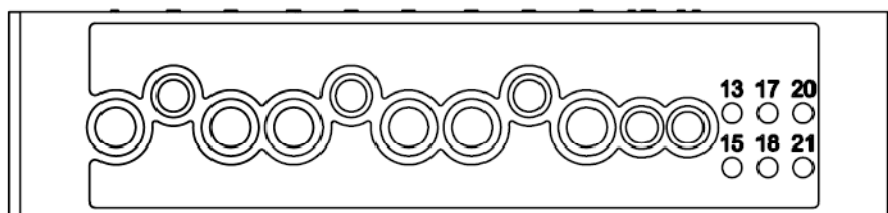
Length×width×height=277mm×175mm×89mm

6.1 Outline Drawing





6.2 Terminal Block Drawing



7 LCD Display

7.1 LCD Full Screen Display

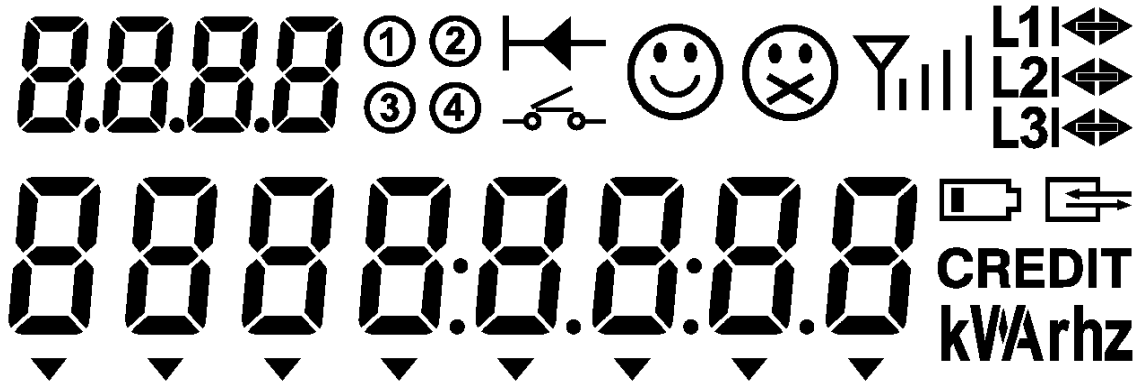


Fig 7.1.1 Size and layout of LCD

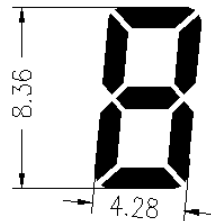


Fig 7.1.2 Size of each digit

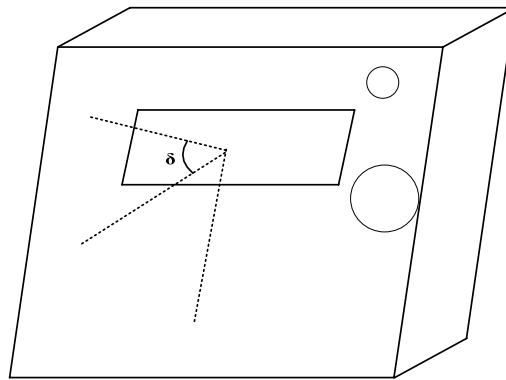










Fig 7.1.3 Diagram of view angle

7.2 LCD Display Items

Display item	Description
0000.00.00.00	Data display area
0.0.0.0	OBIS code display area

CREDIT kVArhz	Unit display area
	Communication
	Reverse indication
	Low battery
	Contactor connected
	Contactor disconnected
	Recharge successful
	Recharge failed
	GPRS signal
▼ (S1~S8)	<p>Event status indicator</p> <ul style="list-style-type: none"> ● When meter cover is open, ▼S2 indicates; ● When terminal cover is open, ▼S3 indicates; ● When meter is overloaded, ▼S4 indicates; ● When meter cover open and terminal cover detection function is disabled, ▼S5 indicates; ● When meter is three-phase unbalance, ▼S6 indicates (3-phase meter only).



8 Nameplate

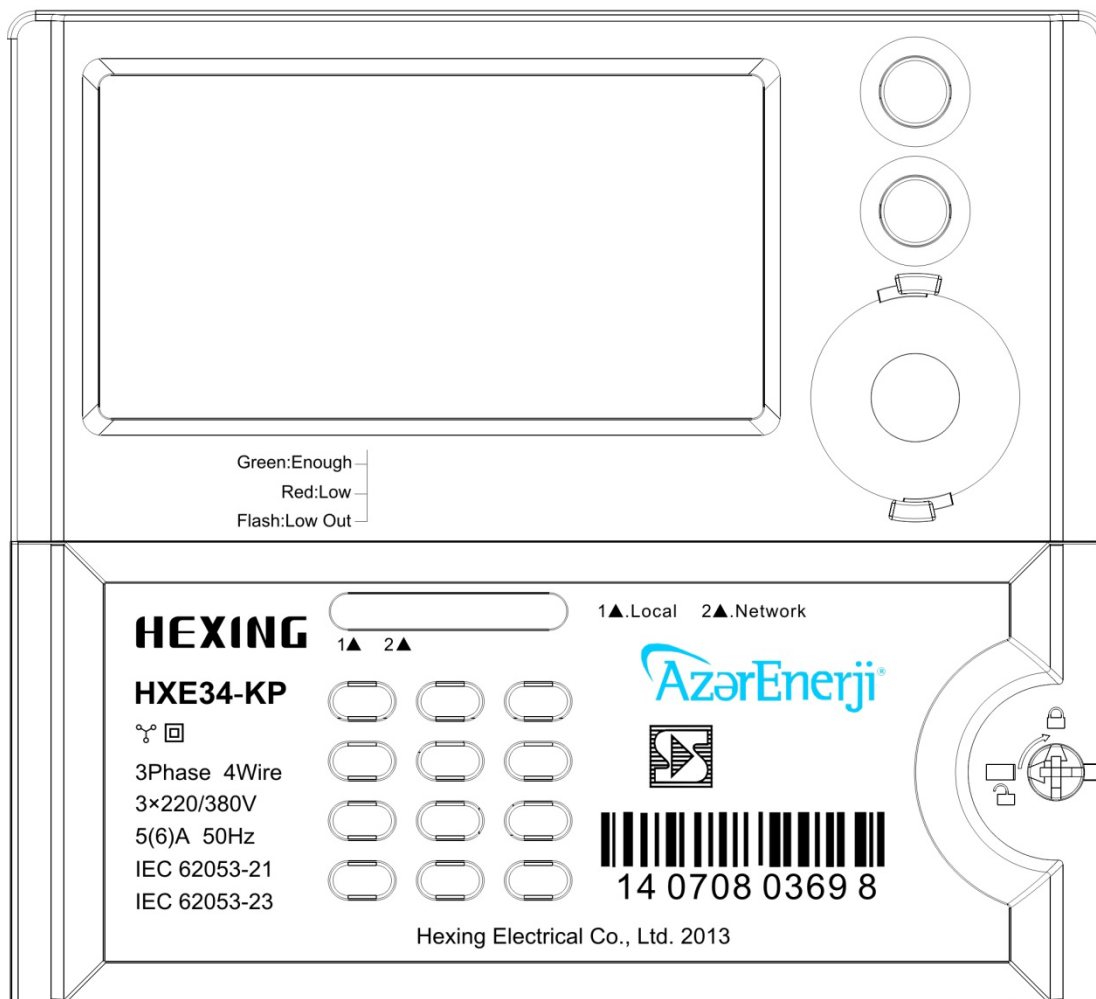


Fig 8.1 CT Meter

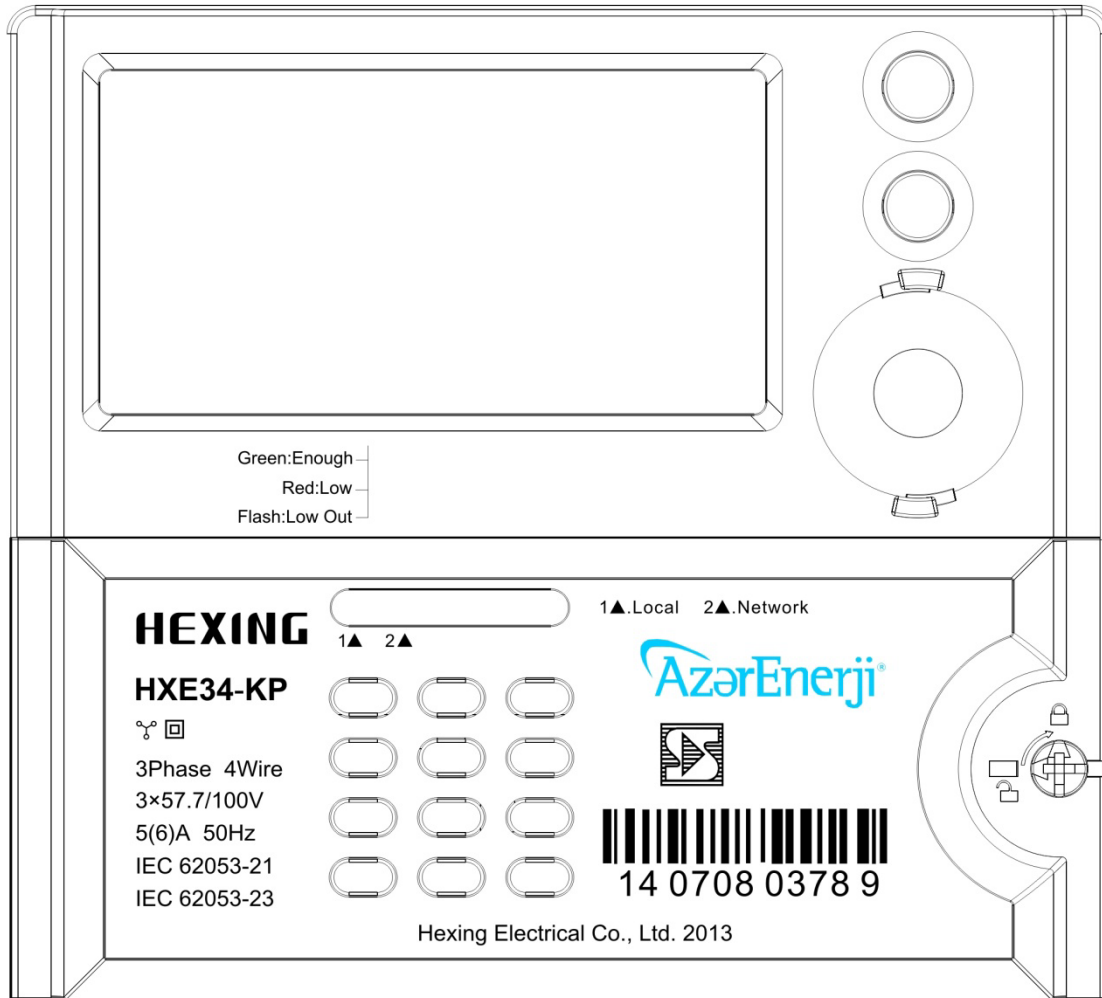


Fig 8.2 CTPT Meter

9 Technical Specifications

Parameter	Characteristics
Reference voltage	3*220/380VAC- three phase CT 3*57.7/100VAC-three phase CTPT
Working voltage	70%Un~120%Un
Frequency	(50±5)Hz
Current	5(6)A
Accuracy	CL 1.0 for kWh & CL 2.0 for kvarh
Starting current	4‰Ib
impulse constant	Active: 10000 imp/kWh



	Reactive 10000 imp/kvarh
Working temperature	Normal working temperature: -25°C ~+60°C Extreme working temperature: -40°C ~+70°C
Relative humidity	≤95%
Power consumption in voltage circuit	≤1.5W, 10VA
Power consumption in current circuit	≤1VA
Degree of protection	IP54
Fast transient burst	4kV
Electrostatic discharges	Contact discharge 8kV, air discharge 15kV
Insulation	1 minute under 4kV, 50Hz
Impulse voltage	8 kV



NOTE: Information in this document is subject to change without notice. The information is accurate at the time of printing (March, 2013) © Hexing Electrical





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