# Meter

**Shanghai JEGO Electric Co., Ltd**

**URL：** Https//:www. jegopower.com
**Address :** No. 66 Xinlei Road, Xiangyang Industrial Zone, Liushi Town, Yueqing City, Zhejiang Province, China

# Company Profile

# Meter

## Introduction

Digital power meters are electronic devices designed to measure and display electrical parameters such as voltage, current, frequency and more. They typically feature high precision, excellent readability and straightforward operation. Based on the different parameters to be measured and functional requirements, digital panel meters can be classified into various types, including voltmeters, ammeters, wattmeters and others. They are widely used in industrial automation, power monitoring, laboratory testing equipment, and all applications requiring accurate electrical measurement.

Digital panel meters can adopt various display technologies such as LCD and LED for their display modules, adapting to different working environments and user requirements.

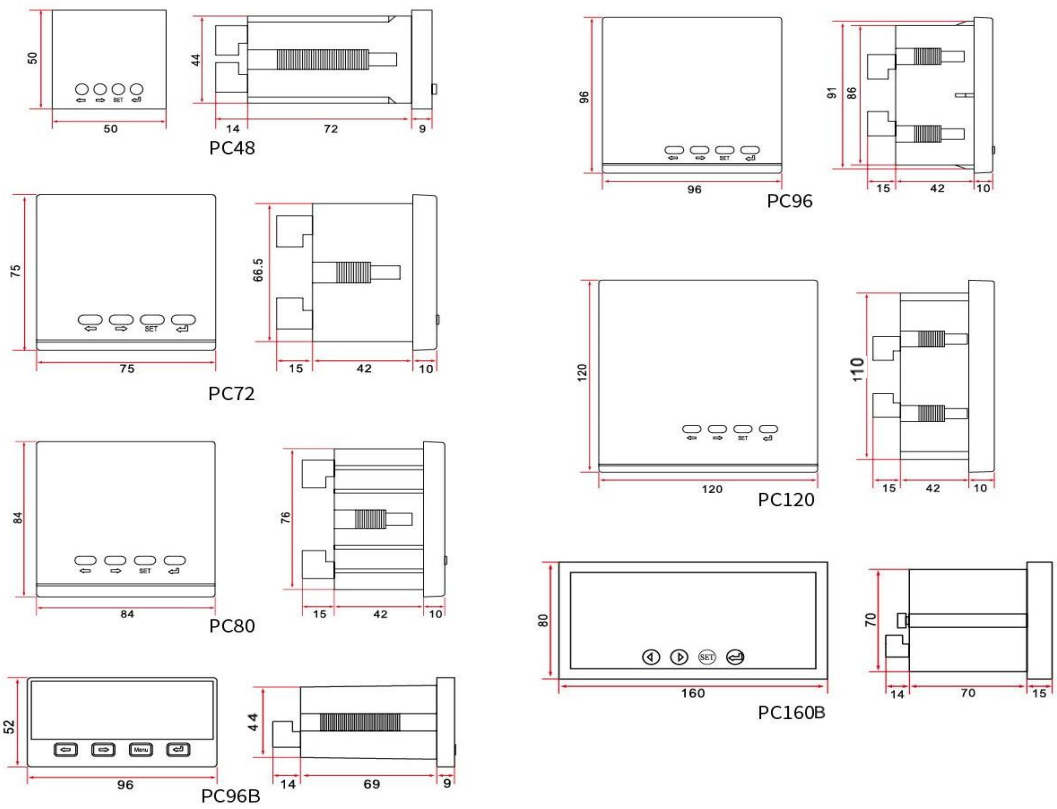
## Main Technical Parameters

| | | |
|---|---|---|
| Input | Voltage | AC 0~500V OR DC 0~500V |
| | Current | AC 1A, 5A |
| | Frequency | 45~65Hz |
| Accuracy class | ±0.5 % | |
| panel size | 48×48, 72×72, 80×80, 96×48(96B), 96×96, 120×120, 160×80(160B) | |
| Type | Single phase, Three-phase | |
| Display mode | LED, LCD | |
| Display code | U: Voltage I: Current F: Frequency H: Power Factor P: Active Power | |
| | Q: Reactive Power R: Speed | |
| Power supply voltage | AC 220V, 50/60Hz (or: AC380V, AC/DC85~265V, DC24V, DC36V, DC48V) | |
| Optional features | RS485、Temperature Monitoring、***Relay output, Switch input, Analog transmission output (See the table below)*** | |
| Usage environment | Temperature | Run: -10~50°C，Storage:-25~70°C |
| | Humidity | ≤85%RH, No condensation or corrosive gases |
| | Altitude | ≤3000m |

## Optional Function Combination Selection Table

| Module Name | Maximum number combination | | | | |
|---|---|---|---|---|---|
| | Ⅰ | Ⅱ | Ⅲ | Ⅳ | Ⅴ |
| Discrete input | 4 | 6 | 8 | 10 | 12 |
| Discrete output | 4 | 4 | 4 | 2 | 0 |
| Analog output | 4 | 2 | 0 | 0 | 0 |

## PC series appearance and installation dimensions




| Model Code | Panel Size | | Cutout Size | | Length mm |
|---|---|---|---|---|---|
| | W | H | W | H | |
| **48** | 50 | 50 | 45 | 45 | 72 |
| **72** | 75 | 75 | 67 | 67 | 42 |
| **80** | 84 | 84 | 76 | 76 | 42 |
| **96B** | 96 | 52 | 91 | 45 | 69 |
| **96** | 96 | 96 | 91 | 91 | 42 |
| **120** | 120 | 120 | 111 | 111 | 42 |
| **160B** | 160 | 80 | 151 | 71 | 70 |

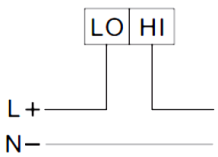
Note: The length dimension does not include the terminal

# LED Single-Phase Ammeter

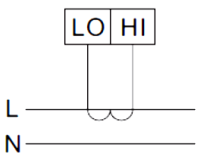
| Accuracy | 0.5 | | | | | | |
|---|---|---|---|---|---|---|---|
| Measuring Current Range | Direct connection：1A~5A<br>Connect current transformer：>5A | | | | | | |
| Power supply voltage | Default: AC 220V, 50/60Hz ;<br>Customize: AC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | | | |
| **Type** | **PC48-I** | **PC72-I** | **PC80-I** | **PC96B-I** | **PC96-I** | **PC120-I** | **PC160B-I** |
| RS485 | 1 | 2 | 2 | 1 | 2 | 2 | 1 |
| Analog transmission output | 1 | 4 | 4 | 1 | 4 | 4 | 1 |
| Relay output | 2 | 4 | 4 | 2 | 4 | 4 | 2 |
| Discrete input | - | 12 | 12 | 2 | 12 | 12 | 2 |

**Note 1: The attachment function is not included by default. Various optional functions can be selected from the table, and specific combinations can be negotiated and customized.**
**Note 2: Other special requirements can be negotiated and customized.**

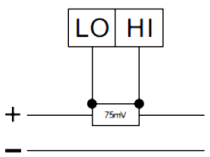
## Electrical wiring diagram




1A~5A direct connection




High current is connected through a transformer



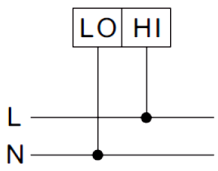

Connected to DC via a shunt

# LED Series Single-Phase Voltmeter

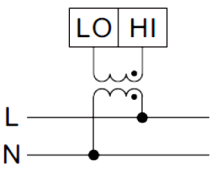
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Accuracy** | 0.5 | | | | | | |
| **Measuring Current Range** | AC: 0~500V 45~65Hz ; Above 500V, it must be connected through a voltage transformer<br>DC: 0~500V | | | | | | |
| **Power supply voltage** | AC 220V, 50/60Hz ;<br>Or AC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | | | |
| **Type** | **PC48-U** | **PC72-U** | **PC80-U** | **PC96B-U** | **PC96-U** | **PC120-U** | **PC160B-U** |
| **RS485** | 1 | 2 | 2 | 1 | 2 | 2 | 1 |
| **Analog transmission output** | 1 | 4 | 4 | 1 | 4 | 4 | 1 |
| **Relay output** | 2 | 4 | 4 | 2 | 4 | 4 | 4 |
| **Discrete input** | - | 12 | 12 | 2 | 12 | 12 | 2 |

**Note 1: The attachment function is not included by default. Various optional functions can be selected from the table, and specific combinations can be negotiated and customized.**
**Note 2: Other special requirements can be negotiated and customized.**

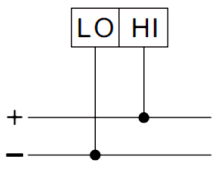
## Electrical wiring diagram




Wiring at 500VAC and below




Above 500VAC connected via transformer



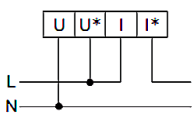

Wiring at 500VDC and below

# LED Series Single Phase Multifunction Meter

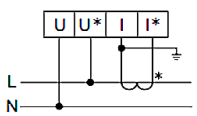
| | | | | | | |
|---|---|---|---|---|---|---|
| **Accuracy** | 0.5 | | | | | |
| **Measurement Range** | AC:1A~5A, 0~500VAC,(45~65)Hz<br>*Those exceeding the current or voltage range must be connected through a transformer.* | | | | | |
| **Power Supply Voltage** | Default: AC 220V, 50/60Hz ;<br>Or AC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | | |
| **Function** | Single-phase current, single-phase voltage, frequency, active power, reactive power, apparent power, power factor, four-quadrant electric energy metering | | | | | |
| **Type** | **PC72-E** | **PC80-E** | **PC96B-E** | **PC96-E** | **PC120-E** | **PC160B-E** |
| **RS485** | 1 | 1 | - | 1 | 1 | - |
| **Temperature Measurement** | 1 | 1 | 1 | 1 | 1 | 1 |
| **Analog transmission output** | 4 | 4 | 1 | 4 | 4 | 1 |
| **Relay output** | 4 | 4 | 2 | 4 | 4 | 2 |
| **Discrete input** | 12 | 12 | 2 | 12 | 12 | 2 |

**Note 1: All types are equipped with 1-channel RS485 communication as standard. Other optional functions shall be selected according to the table, and specific combinations can be customized through negotiation.**
**Note 2: Other special requirements can be customized through negotiation.**

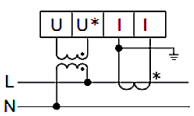
## Electrical wiring diagram




500VAC, 5A and below wiring




Wiring below 500VAC and above 5A



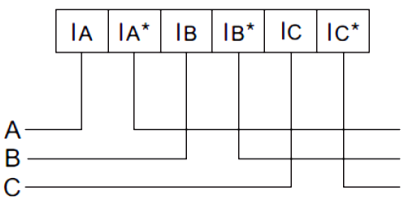

500VAC, 5A or above wiring

# LED Series Three-Phase Ammeter

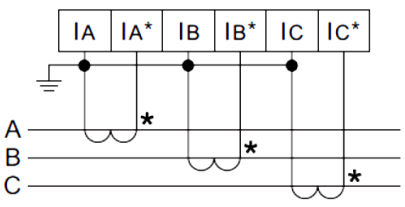
| Accuracy | 0.5 | | | | | | |
|---|---|---|---|---|---|---|---|
| Measurement Range | AC 1A~5A; 45~65Hz<br>5A or above must be connected through a current transformer | | | | | | |
| Power supply voltage | Default: AC 220V, 50/60Hz ;<br>OrAC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | | | |
| **Type** | **PC48-3I** | **PC72-3I** | **PC80-3I** | **PC96B-3I** | **PC96-3I** | **PC120-3I** | **PC160B-3I** |
| **RS485** | 1 | 2 | 2 | 1 | 2 | 2 | 1 |
| **Analog transmission output** | 1 | 4 | 4 | 1 | 4 | 4 | 1 |
| **Relay output** | 2 | 4 | 4 | 2 | 4 | 4 | 2 |
| **Discrete input** | - | 12 | 12 | 2 | 12 | 12 | 2 |

**Note 1: The attachment function is not included by default. Various optional functions can be selected from the table, and specific combinations can be negotiated and customized.**
**Note 2: Other special requirements can be negotiated and customized.**

## Electrical wiring diagram




500VAC, 5A and below wiring




Wiring below 500VAC and above 5A

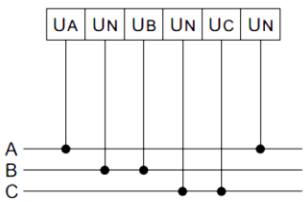
# LED Series Three-Phase Voltmeter

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Accuracy** | 0.5 | | | | | | |
| **Measurement Range** | AC 0~500V; 45~65Hz<br>500VAC and above must be connected through a voltage transformer | | | | | | |
| **Power supply voltage** | Default: AC 220V, 50/60Hz ;<br>Or AC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | | | |
| **Type** | **PC48-3U** | **PC72-3U** | **PC80-3U** | **PC96B-3U** | **PC96-3U** | **PC120-3U** | **PC160B-3U** |
| **RS485** | 1 | 2 | 2 | 1 | 2 | 2 | 2 |
| **Analog transmission output** | 1 | 4 | 4 | 1 | 4 | 4 | 1 |
| **Relay output** | 2 | 4 | 4 | 2 | 4 | 4 | 2 |
| **Discrete input** | - | 12 | 12 | 2 | 12 | 12 | 2 |

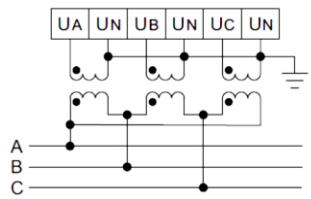
**Note 1: The attachment function is not included by default. Various optional functions can be selected from the table, and specific combinations can be negotiated and customized.**
**Note 2: Other special requirements can be negotiated and customized.**

## Electrical wiring diagram

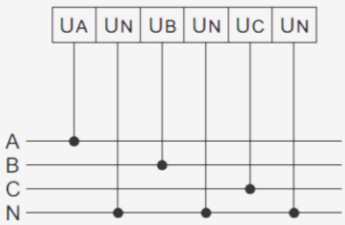
three-phase three-wire system



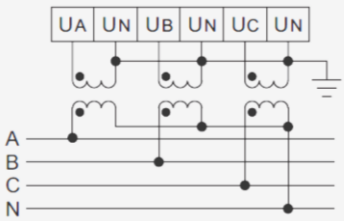

Direct wiring




Connected via voltage transformer




Direct wiring




Connected via voltage transformer

**Three-phase four-wire system**

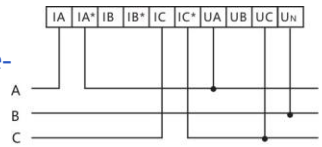
# LED Series Three phase multifunctional instrument

| Accuracy | 0.5 | | | | | |
|---|---|---|---|---|---|---|
| Measurement Range | AC: 1A~5A, 0~500VAC, 45~65Hz , Access via a transformer is required when exceeding the range. | | | | | |
| Power Supply Voltage | Default: AC 220V, 50/60Hz ;<br>Or AC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | | |
| Function | Current, voltage, frequency, power factor, active power, reactive power, apparent power, four-quadrant electric energy measurement | | | | | |
| **Type** | **PC72-3E** | **PC80-3E** | **PC96B-3E** | **PC96-3E** | **PC120-3E** | **PC160B-3E** |
| RS485 | 1 | 1 | - | 1 | 1 | 1 |
| Temperature Measurement | 1 | 1 | 1 | 1 | 1 | 1 |
| Analog transmission output | 4 | 4 | 1 | 4 | 4 | 1 |
| Relay output | 4 | 4 | 2 | 4 | 4 | 2 |
| Discrete input | 12 | 12 | 2 | 12 | 12 | 2 |

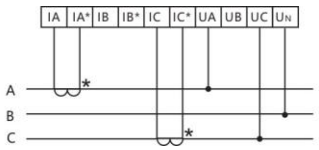
**Note 1: All types are equipped with 1-channel RS485 communication as standard. Other optional functions shall be selected according to the table, and specific combinations can be customized through negotiation.**
**Note 2: Other special requirements can be customized through negotiation.**

## Electrical wiring diagram

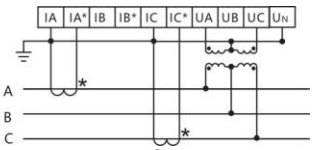
three-phase three-wire system



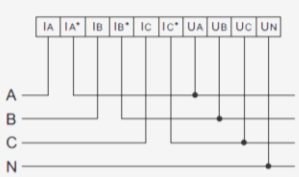

Direct wiring



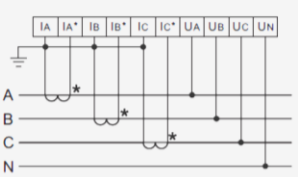

Wiring via current transformers



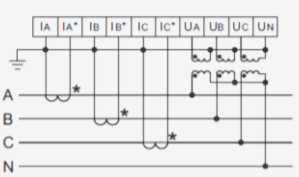

Connected via current and voltage transformers




Direct wiring




Wiring via current transformers




Connected via current and voltage transformers

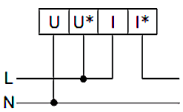
Three-phase four-wire system

# LCD Series Single phase multifunction meter

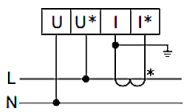
| Accuracy | 0.5 | | | | |
|---|---|---|---|---|---|
| Measurement Range | 1A~5A，0~500VAC， （45~65）Hz | | | | |
| Power Supply Voltage | Default: AC 220V, 50/60Hz ;<br>Or AC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | |
| Function | Current, voltage, frequency, power factor, active power, reactive power, apparent power, four-quadrant electric energy measurement | | | | |
| **Type** | **PC48Y-E** | **PC72Y-E** | **PC80Y-E** | **PC96Y-E** | **PC120-E** |
| RS485 | - | 1 | 1 | 1 | 1 |
| Analog transmission output | 1 | 4 | 4 | 4 | 4 |
| Relay output | 2 | 4 | 4 | 4 | 4 |
| Discrete input | - | 12 | 12 | 12 | 12 |

**Note 1: All types are equipped with 1-channel RS485 communication as standard. Other optional functions shall be selected according to the table, and specific combinations can be customized through negotiation.**
**Note 2: Other special requirements can be customized through negotiation.**

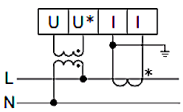
## Electrical wiring diagram




500VAC, 5A and below wiring




Wiring below 500VAC and above 5A



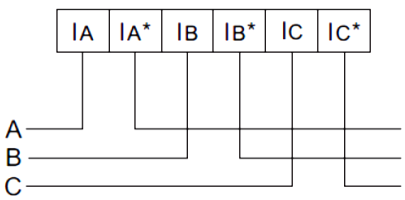

500VAC, 5A or above wiring

# LCD Series Three-Phase Ammeter

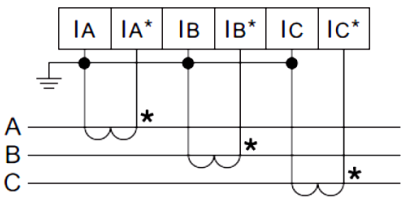
| | | | | | |
|---|---|---|---|---|---|
| **Accuracy** | 0.5 | | | | |
| **Measurement Range** | AC 1A~5A； 45~65Hz<br>For currents above 5A, access shall be made via current transformers. | | | | |
| **Power Supply Voltage** | Default: AC 220V, 50/60Hz ;<br>Or: AC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | |
| **Type** | **PC48Y-3I** | **PC72Y-3I** | **PC80Y-3I** | **PC96Y-3I** | **PC120Y-3I** |
| **RS485** | 1 | 2 | 2 | 2 | 2 |
| **Analog variable transmission output** | 1 | 4 | 4 | 4 | 4 |
| **Relay output** | 2 | 4 | 4 | 4 | 4 |
| **Digital input** | - | 12 | 12 | 12 | 12 |

**Note 1: All types are equipped with 1-channel RS485 communication as standard. Other optional functions shall be selected according to the table, and specific combinations can be customized through negotiation.**
**Note 2: Other special requirements can be customized through negotiation.**

## Electrical wiring diagram




500VAC, 5A and below wiring




Wiring below 500VAC and above 5A

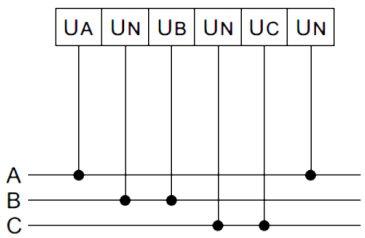
# LCD Series Three-Phase Voltmeter

| | | | | | |
|---|---|---|---|---|---|
| **Accuracy** | 0.5 | | | | |
| **Measurement Range** | AC 0~500V;Voltages above 500V must be connected via a voltage transformer. | | | | |
| **Power Supply Voltage** | Default: AC 220V, 50/60Hz ;<br>Or: AC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | |
| **Type** | **PC48Y-3U** | **PC72Y-3U** | **PC80Y-3U** | **PC96Y-3U** | **PC120Y-3U** |
| **RS485** | 1 | 2 | 2 | 2 | 2 |
| **Analog variable transmission output** | 1 | 4 | 4 | 4 | 4 |
| **Relay output** | 2 | 4 | 4 | 4 | 4 |
| **Digital input** | - | 12 | 12 | 12 | 12 |

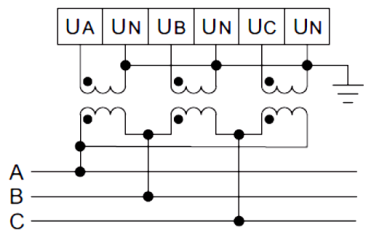
**Note 1: All types are equipped with 1-channel RS485 communication as standard. Other optional functions shall be selected according to the table, and specific combinations can be customized through negotiation.**
**Note 2: Other special requirements can be customized through negotiation.**

## Electrical wiring diagram

three-phase three-wire system

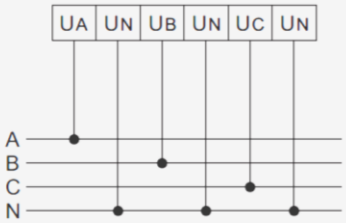



Direct wiring

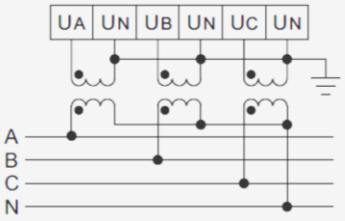



Connected via voltage transformer

**Three-phase four-wire system**




Direct wiring




Connected via voltage transformer

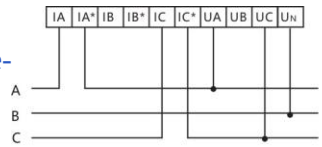
# LCD Series Three phase multifunctional instrument

| Accuracy | 0.5 | | | | |
|---|---|---|---|---|---|
| Measurement Range | 1A~5A; 0~500VAC; (45~65)Hz ,<br>Access shall be made via a transformer if the range is exceeded. | | | | |
| Power Supply Voltage | Default: AC 220V, 50/60Hz ;<br>Or: AC380V, AC/DC85~265V, DC24V, DC36V, DC48V | | | | |
| Function | Current, voltage, frequency, power factor, active power, reactive power, apparent power, four-quadrant electric energy metering | | | | |
| **Type** | **PC48Y-3E** | **PC72Y-3E** | **PC80Y-3E** | **PC96Y-3E** | **PC120Y-3E** |
| RS485 | - | 1 | 1 | 1 | 1 |
| Temperature Measurement | 1 | 4 | 4 | 4 | 4 |
| Analog transmission output | 1 | 4 | 4 | 4 | 4 |
| Relay output | 2 | 4 | 4 | 4 | 4 |
| Discrete input | - | 12 | 12 | 12 | 12 |

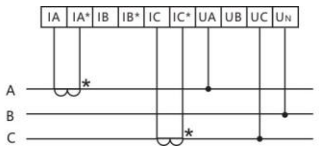
**Note 1: All types are equipped with 1-channel RS485 communication as standard. Other optional functions shall be selected according to the table, and specific combinations can be customized through negotiation.**
**Note 2: Other special requirements can be customized through negotiation.**

## Electrical wiring diagram

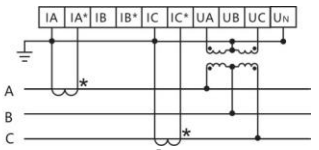
three-phase three-wire system



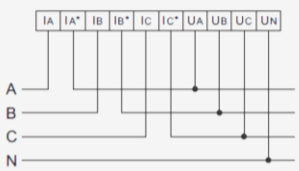

Direct wiring



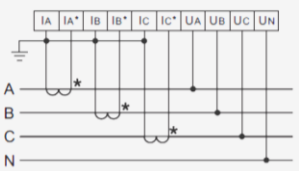

Wiring via current transformers



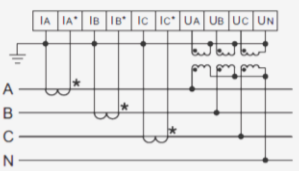

Connected via current and voltage transformers




Direct wiring




Wiring via current transformers




Connected via current and voltage transformers

Three-phase four-wire system