PEOPLE

# Instrument And Meter

PEOPLE ELECTRIC
PRODUCT SALES MANUAL

人民电器

# Providing Safer electrical products globally

# COMPANY PROFILE

People Ele. Appliance Group was wholly owned company of People Holding Group, one of Chinese Top 500 Enterprise, and founded in the year 1996.

Industrial electrical products as the core business of People Ele. Appliance Group, People Electric owns Zhejiang, Shanghai, Nanchang , Fuzhou, Nantong and Zaozhuang six manufacturing bases, 35 wholly owned subsidiaries, 150 holding member enterprises, over 1500 cooperated processing enterprises and over 5000 sales companies.

The products are popularly sold to over 125 countries and regions, which are widely used in Pudong Airport, Beiing-Shanghai high-speed railway, Three Gorges Hydropower, Beijing Subway, Olympic venues, South North Water Transfer, Qinghai-Tibet Railway, Chang'e Lunar Exploration Project and Vietnam Taian hydropower project etc. major projects at home and abroad, which ranked among the World's Top 500 Machinery Enterprises.

Assess by the World's Brand Laboratory, the brand value reaches to RMB 101.636 bilion Yuan.

## Perfect industry chain and personalize solutions, Satisfying the different requirements of global customers

**Power and energy**
- Power
- Petroleum and petrochemical
- Transportation

**Industry and machinery**
- Mining / building materials
- Water / water treatment
- Car

**Date center**
- IT
- High technology
- Internet

**Commercial network**
- Bank insurance
- Public construction
- Community facility

**Building**
- Official building
- Industrial building
- Basic facility

**Residence**
- Residential construction
- Public construction
- Community facility

| More safety | More reliale | More efficient | More economic | More eco-friendly |
|---|---|---|---|---|
| Ensure the safety of life and property | Supply the power uninterruptedly | Reducing the consumption of energy and the cost, shorten the time of supply | Optimize the process of the machinery and factory, improving the comfortability of use. | Supply the energy through the renewable energy, reducing the carbon emissions |

# Contents

## Installation Type Panel Meter


### Main technical parameter

Accuracy: class 1.5, class 2.5
Service condition: -20□ ~+50□
Relative humidity: ≤85%
Withstand voltage influence: ±15%, cause indicating error which is not exceeding basic error.
Mechanical performance: can withstand acceleration of 30M/S, impulse frequency of 80~120 times/min, shock in transit for 2 hours.
Working location: vertical direction.

### Measuring range

| | | Measuring range | Notes |
|---|---|---|---|
| AC Ammeter | A | 50mA~50A | Connect directly |
| | | 10~800/5A | By 5A secondary current CT |
| | kA | 1kA~10kA | |
| AC Voltmeter | V | 5V~750V | Connect directly |
| | kV | 1kV~450kV | By 100V secondary voltage VT |
| DC Ammeter | μA | 50μA ~500μA | Connect directly |
| | mA | 1mA~500mA | |
| | A | 1A~10A | |
| | | 15A~750A | External shunt |
| | kA | 1kA~10kA | |
| DC Voltmeter | V | 1V~750V | Connect directly |
| | kV | 1kV~450kV | External device |
| Frequency Meter | Hz | 45Hz~55Hz<br>45Hz~65Hz<br>55Hz~65Hz<br>100V 220V 380V | By 100V secondary voltage VT |
| Power meter | kW | 100V 380V 5A<br>380V~380kV/100V<br>5A~10KA/5 | By 5A secondary current CT<br>By 100V secondary voltage VT |
| Power factor meter | COSΦ | COSΦ=0.5-1-0.5<br>100V, 220V, 380V<br>5A | By 5A secondary current CT<br>By 100V secondary voltage VT |

# Installation Type Panel Meter


42 Series

## 42 Series installation type panel meter

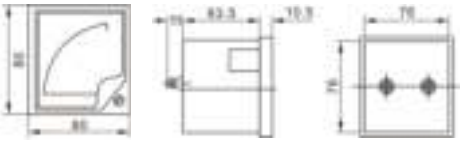
Installation dimension: 112×112mm
Accuracy: class 1.5
Functions: Ammeter, Voltmeter, Power meter, Frequency meter, Power factor meter.
Series: 42L6-A, 42C3-A, 42L6-V, 42C3-V, 42L6-W, 42L6-Var, 42L6-Hz, 42L6-COSφ.



6L2 Series

## 6L2 Series installation type panel meter

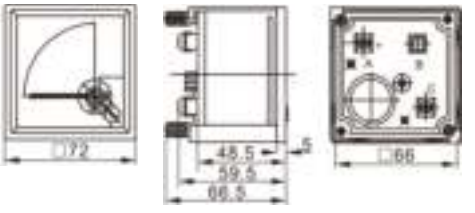
Installation dimension: 77×77mm
Accuracy: class 1.5
Functions: Ammeter, Voltmeter, Power meter, Frequency meter, Power factor meter.
Series: 6L2-A, 6C2-A, 6L2-V, 6C2-V, 6L2-W, 6L2-Var, 6L2-Hz, 6L2-COSφ.




72 Series

## 72 Series installation type panel meter

Installation dimension: 67×67mm
Accuracy: class 1.5
Functions: Ammeter, Voltmeter, Power meter, Frequency meter, Power factor meter.
Series: 72T1-A (AC Ammeter), 72C1-A (DC Ammeter), 72T1-V (AC Voltmeter), 72C1-V (DC Voltmeter), 72L1-W, 72L1-Var, 72L1-Hz, 72L1-COSΦ.

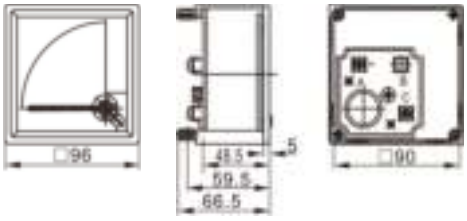


## Installation Type Panel Meter


96 Series

### 96 Series installation type panel meter

Installation dimension: 91×91mm
Accuracy: class 1.5
Functions: Ammeter, Voltmeter, Power meter, Frequency meter, Power factor meter.
Series: 96T1-A (AC Ammeter), 96C1-A (DC Ammeter), 96T1-V (AC Voltmeter), 96C1-V (DC Voltmeter), 96L1-W, 96L1-Var, 96L1-Hz, 96L1-COSϕ

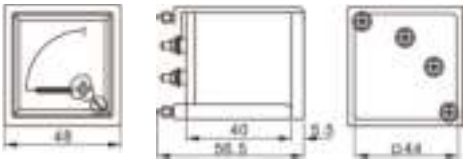




99 Series

### 99 Series installation type panel meter

Installation dimension: 45×45mm
Accuracy: class 2.5
Functions: Ammeter, Voltmeter, Power meter, Frequency meter, Power factor meter.
Series: 99T1-A (AC Ammeter), 99C1-A (DC Ammeter), 99T1-V (AC Voltmeter), 99C1-V (DC Voltmeter), 99L1-W, 99L1-Var, 99L1-Hz, 99L1-COSϕ

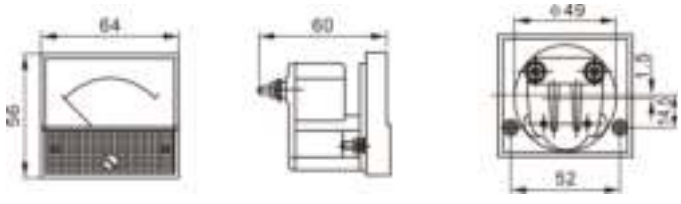




85 Series

### 85 Series installation type panel meter

Installation dimension: 56×64mm
Accuracy: class 2.5
Functions: Ammeter, Voltmeter, Power meter, Frequency meter, Power factor meter.
Series: 85L1-A, 85C1-A, 85L17-A, 85C17-A, 85L1-V, 85C1-V, 85L17-V, 85C17-V, 85L1-W, 85L17-W, 85L1-Var, 85L17-Var, 85L1-Hz, 85L17-Hz, 85L1-COSϕ, 85L17-COSϕ



## Installation type marine instrument meter

### Main technical parameter

1.Rotational part uses magneticelectric wire support, rotation without friction, reliable operation.
2.High mechanical shock resistance, the vibration works satisfactorily under the condition of 0.7 g acceleration.
3.High accuracy: class 0.5 for frequency meter, class 3.0 for power factor meter, others are class 1.5.
4.Pointer expansion angle is 240°
5.Operation environmental temperature: -25℃~+55℃
6.Protection grade of case: IP22
7.Voltage withstand: circuit and case AC2000V/1min.

### New 45 type wide angle series instrument meter (110×110)

| No. | Product name | Model No. | Measuring range | Connecting mode | Note |
|---|---|---|---|---|---|
| 1 | DC Ammeter | 45C 8/9·2101-A | 0.5mA-1A-7.5kA | Directly connect, external with shunt above 10A | It can be extended to other non-electricity indication meter such as rotation rate, rudder angle, temperature, and pressure, etc. |
| 2 | DC Voltmeter | 45C 8/9·2101-V | 100mV-500V-3kV | Directly connect, external with resistor above 750V | |
| 3 | AC Ammeter | 45L 8/9·2102-A | 1-10A-10kA | Directly connect, through CT above 10A | Secondary current 5A, overload 2, 3, 6 times |
| 4 | AC Voltmeter | 45L 8/9·2102-V | 50-450V-42kV | Directly connect, through PT above 450V | Secondary voltage 100V |
| 5 | High resistance meter | 45L 8/9·2103-MΩ | 0-5MΩ | 127V, 200V, 1mA, through PT380V/100V | Integrated head, JDB,ZCB equipped with insulation monitor |
| 6 | Three phase power meter | 45L 8/9·2105-W | 3kW-6MW | Through PT/100V, CT/5A | Integrated head, negative power as scale of 10-20% |
| 7 | Reactive power meter | 45L 8/9·2106-Var | 2.5Kvar-5Mvar | Through PT/100V, CT/5A | Integration of head and convertor |
| 8 | Power factor meter | 45L 8/9·2107-COSφ | Capacitive 0.5-1-0.5 inductive | Through PT380V/100V CT/5A | Integration of head and convertor |
| 9 | Frequency meter | 45L 8/9·2108-Hz | 45-55-65Hz 350-480Hz | 100V, 220V, through PT380V/100V | Integration of head and convertor |
| 10 | Three phase synchronizer meter | 45T 8/9·2109-S | Synchronization point | 100V, 220V, through PT380V/100V | Motor-driven pointer type, electronic luminous type 360° |

### New 63 type wide angle series instrument meter (80×80)

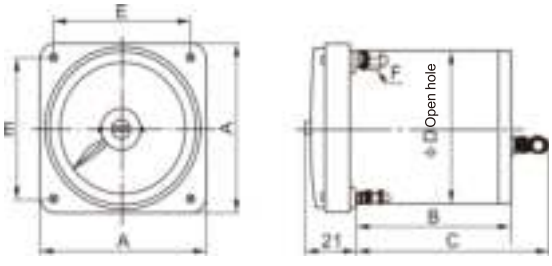
| No. | Product name | Model No. | Measuring range | Connecting mode | Note |
|---|---|---|---|---|---|
| 1 | DC Ammeter | 63C 18/19·2181-A | 0.5mA-1A-7.5kA | Directly connect, external with shunt above 10A | It can be extended to other non-electricity indication meter such as rotation rate, rudder angle, temperature, and pressure, etc. |
| 2 | DC Voltmeter | 63C 18/19·2181-V | 100mV-500V-3kV | Directly connect, external with resistor above 500V | |
| 3 | AC Ammeter | 63L 18/19·2182-A | 1-10A-10kA | Directly connect, through CT above 10A | Secondary current 5A, overload 2, 3, 6 times |

# PANEL METER

| No. | Product name | Model No. | Measuring range | Connecting mode | Note |
|---|---|---|---|---|---|
| 4 | AC Voltmeter | 63C $\frac{18}{19}$·2182-V | 50-450V-42kV | Directly connect, through PT above 450V | Secondary voltage 100V |
| 5 | Three phase power meter | 63C $\frac{18}{19}$·2185-W | 3kW-6MW | Through PT/100V, CT/5A | External with convertor, negative power as scale of 10-20% |
| 6 | Reactive power meter | 63L $\frac{18}{19}$·2186-Var | 2.5Kvar-5Mvar | Through PT/100V, CT/5A | External with convertor |
| 7 | Power factor meter | 63L $\frac{18}{19}$·2187-COSφ | Capacitive 0.5-1-0.5 inductive | Through PT380V/100V CT/5A | Integration of head and convertor |
| 8 | Frequency meter | 63L $\frac{18}{19}$·2188-Hz | 45-55-65Hz | 220V, 380V, through PT380V/100V | Integration of head and convertor |
| 9 | DC Ammeter | 63C1 $\frac{18}{19}$·63C2-A | 0.5mA-10A-750A | Directly connect, equipped with shunt | |
| 10 | DC Voltmeter | 63C1·63C2-V | 2-750V | Directly connect | |
| 11 | AC Ammeter | 63L1·63L2-A | 1-20A, 10A-7.5kA | Directly connect, equipped with VT | CT /5A |
| 12 | AC Voltmeter | 63L1·63L2-V | 50V-450V-7.2kV | Directly connect, equipped with CT | Secondary voltage /100V |

## Dimensions (mm)

| Model | A | B | C | D open hole | E | F |
|---|---|---|---|---|---|---|
| New 45 type | 110 | 80 | 90 | 101 | 95 | M5 open hole Φ6 |
| New 63 type | 80 | 90 | 105 | 71 | 64 | M4 open hole Φ6 |




Installation dimension for New 45 type, new 63 type

Illustration: W, S tube length of New 45 type (45C, 45L, 2101-2109 Series) lengthening 40mm, others are the same.

# RM858 series

## Digital meter

## Application

RM858E series multi-function digital meter is high accuracy, high reliability, and high cost-effective intelligent distribution instrument, specially designed for power monitoring, intelligent controlling and measurement, applicable of power system, industrial and mining enterprises, public facilities, intelligent buildings and so on.

## Feature

2.1 Measure three-phase voltage, three-phase current, active power, reactive power, power factor,frequency, etc;
2.2 Measure active electric energy and reactive electric energy;
2.3 Pulse output of active electric energy and reactive electric energy;
2.4 Adopt latest microprocessor and digital signal processing technology;
2.5 Adopt calculation method of collecting each measurement channel separately;
2.6 Standard RS-485 communication interface, support Modbus-RTU protocol;
2.7 Big screen, blue backlight, text field LCD display;
2.8 Friendly man-machine operation interface;
2.9 Input parameter is programmable, easy to install and wire, easy maintenance.

## Model selection

| Specification \ Model | | RM-858E-AS3 | RM-858E-3S3 | RM-858E-9S3 | RM-858E-2S3 | RM-858E-ASY3 | RM-858E-3SY3 | RM-858E-9SY3 | RM-858E-2SY3 |
|---|---|---|---|---|---|---|---|---|---|
| Real-time measurement | Three-phase voltage | √ | √ | √ | √ | √ | √ | √ | √ |
| | Three-phase current | √ | √ | √ | √ | √ | √ | √ | √ |
| | Active/reactive power | √ | √ | √ | √ | √ | √ | √ | √ |
| | Power factor | √ | √ | √ | √ | √ | √ | √ | √ |
| | Frequency | √ | √ | √ | √ | √ | √ | √ | √ |
| Electric energy measurement | Active electric energy | √ | √ | √ | √ | √ | √ | √ | √ |
| | Reactive electric energy | √ | √ | √ | √ | √ | √ | √ | √ |
| | Two-way measurement | √ | √ | √ | √ | √ | √ | √ | √ |
| Electric energy pulse output | | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 2 |
| Switching value input | | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional |
| Switching value output | | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional |
| Transmitting output | | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional |
| Communication interface | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Display mode | | LED | LED | LED | LED | LCD | LCD | LCD | LCD |
| Frame size (mm) | | 72×72 | 80×80 | 96×96 | 120×120 | 72×72 | 80×80 | 96×96 | 120×120 |
| Hole size (mm) | | 67×67 | 76×76 | 91×91 | 111×111 | 67×67 | 76×76 | 91×91 | 111×111 |

# RM858 series

Digital meter

## Single phase AC digital ammeter

Model: RM858AI-☐K1
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45, 91×45.
Display data: single phase AC current
Display mode: LED display
Communication mode: RS-485 (optional)
Network: single phase

## Single phase DC digital ammeter

Model: RM858DI-☐K1
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45, 91×45.
Display data: single phase DC current
Display mode: LED display
Communication mode: RS-485 (optional)
Network: single phase

## Single phase AC digital voltmeter

Model: RM858AV-☐K1
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45, 91×45.
Display data: single phase AC voltage
Display mode: LED display
Communication mode: RS-485 (optional)
Network: single phase

## Single phase DC digital voltmeter

Model: RM858DV-☐K1
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45, 91×45.
Display data: single phase DC voltage
Display mode: LED display
Communication mode: RS-485 (optional)
Network: single phase

# RM858 series

Digital meter

## Three-phase digital ammeter

Model: RM858I-□K3
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45
Display data: three-phase AC current
Display mode: LED display
Communication mode: RS-485 (optional)
Network: three-phase four-wire, three-phase three-wire

## Three-phase digital ammeter

Model: RM858I-□KY3
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45
Display data: three-phase AC current
Display mode: LCD display
Communication mode: RS-485 (optional)
Network: three-phase four-wire, three-phase three-wire

## Three-phase digital voltmeter

Model: RM858U-□K3
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45
Display data: three-phase AC voltage
Display mode: LED display
Communication mode: RS-485 (optional)
Network: three-phase four-wire, three-phase three-wire

## Three-phase digital voltmeter

Model: RM858U-□KY3
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45
Display data: three-phase AC voltage
Display mode: LCD display
Communication mode: RS-485 (optional)
Network: three-phase four-wire, three-phase three-wire

# RM858 series

## Digital meter


RM858F-□K1

### Digital Frequency Meter

Model: RM858F-□K1
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45

**Feature:**
1.Display: 4 digital LED display
2.Accuracy: 0.5%±1 digit
3.Auxiliary power: AC 110V±10% 50/60Hz, AC220V±10% 50/60Hz
4.Input signal: 0~ AC 600V
5.Measuring range: 45~55Hz
6.Consumption: ＜3.2VA
7.Max signal consumption: ＜0.3VA
8.Operating environment: -10℃~+50℃, humidity: ≤85%
9.Storage environment: -30℃~+60℃, humidity: ≤70%
10.Withstand voltage:＞2kV, 1min


RM858PF-□K1

### Digital Power Factor Meter

Model: RM858PF-□K1
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45

**Feature:**
1.Display: 4 digital LED display
2.Accuracy: 0.5%±3 digit
3.Auxiliary power: AC 110V±10% 50/60Hz, AC220V±10% 50/60Hz
4.Input signal: 100V 200V 380V, 0-1A or 0-5A
5.Measuring range: 0-1.00(CorL)
6.Consumption: ＜3.2VA
7.Max signal consumption: ＜0.3VA
8.Operating environment: -10℃~+50℃, humidity: ≤85%
9.Storage environment: -30℃~+60℃, humidity: ≤70%
10. Withstand voltage: ＞2kV, 1min


RM858P-□K1

### Digital Power Meter

Model: RM858P-□K1
Hole size (mm): 111×111, 76×76, 91×91, 67×67, 45×45

**Feature:**
1.Display: 4 digital LED display
2.Accuracy: 1.0%±1 digit
3.Auxiliary power: AC 110V±10% 50/60Hz, AC220V±10% 50/60Hz
4.Input signal: 100V 200V 380V, 0-1A or 0-5A
5.Measuring range: all ranges
6.Consumption: ＜3.2VA
7.Max signal consumption: ＜0.3VA
8.Operating environment: -10℃~+50℃, humidity: ≤85%
9.Storage environment: -30℃~+60℃, humidity: ≤70%
10.Withstand voltage: ＞2kV, 1min

# RDNseries

Din type digital meter

## RDN-G2X2-UI

Measuring Range:80~300V,0~999A
Signal Input:AC 80~300V,5A
Accuracy Class:±(1%FS+1 digit)
Auxiliary Power:no

## RDN-G2X2-UICT

Measuring Range:80~300V,0~100A
Signal Input:AC 80~300V,0~100A
Accuracy Class:±(1%FS+1 digit)
Auxiliary Power:no

## RDN-G2X1-I

Measuring Range:80~300V,0~999A
Signal Input:AC 80~300V,5A
Accuracy Class:±(1%FS+1 digit)
Auxiliary Power:no

## RDN-G2X1-ICT

Measuring Range:0~999A
Signal Input:AC 5A
Accuracy Class:±(1%FS+1 digit)
Auxiliary Power:AC 80~300V

## RDN-G2X1-U

Measuring Range:80~300V
Signal Input:AC 80~300V
Accuracy Class:±(1%FS+1 digit)
Auxiliary Power:no

# RDN series

Din type digital meter

## RDN-G3K1-I

Measuring Range:0~9999A
Signal Input:AC 5A
Accuracy Class:±(0.5%FS+1 digit)
Auxiliary Power:AC220V,50/60Hz

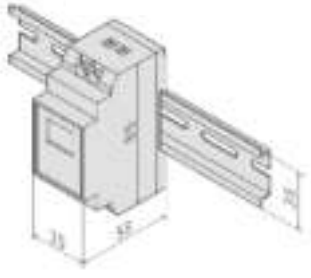
## RDN-G3k1-U

Measuring Range:0~600v
Signal Input:AC 0~600v
Accuracy Class:±(0.5%FS+1 digit)
Auxiliary Power:AC220V,50/60Hz

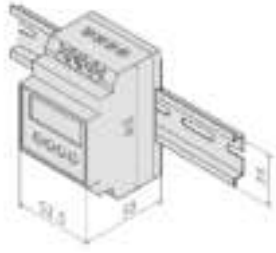
## RDN-G3k1-F

Measuring Range:30~99Hz
Signal Input:AC 30~500v
Accuracy Class:±(0.5%FS+1 digit)
Auxiliary Power:AC220V,50/60Hz

## Dimension and Installment



G2 series



G3 series

# DD862 series

## Single phase mechanical meter

## Application

DD862 single phase energy meter is induction meter for measuring energy in AC circuit,50/60Hz
It conforms to the standard IEC62053-21. Durable and stable indoor use.

## Technical features

| | |
|---|---|
| Degree Index | 2 |
| Reference voltage | 50Hz |
| Current | See form.1 |
| Starting current | Maximum is 0.5% of basic current |
| Basic rotating speed | See form.1 |
| Basic rotating torque | About 4.5x10Nm |
| Voltage circuit power consumption | ＜1W |
| Withstand impulse voltage | 6KV |
| Mounting size | 152mmx104mm |
| Outline size | 177mmx133mmx118mm |
| Reliability | Over 20 years operation with free-maintenance once mounting |
| Net weight | 1.4kg |

## Form 1; overload multiples,basic current & rotating speed

| Model | Rated current | Basic rotating speed |
|---|---|---|
| DD862 | 1.5(6)A | Based on spec. of nameplate |
| | 2.5(10)A | |
| | 5(20)A | |
| | 10(40)A | |
| | 15(60)A | |
| | 20(80)A | |
| | 30(100)A | |

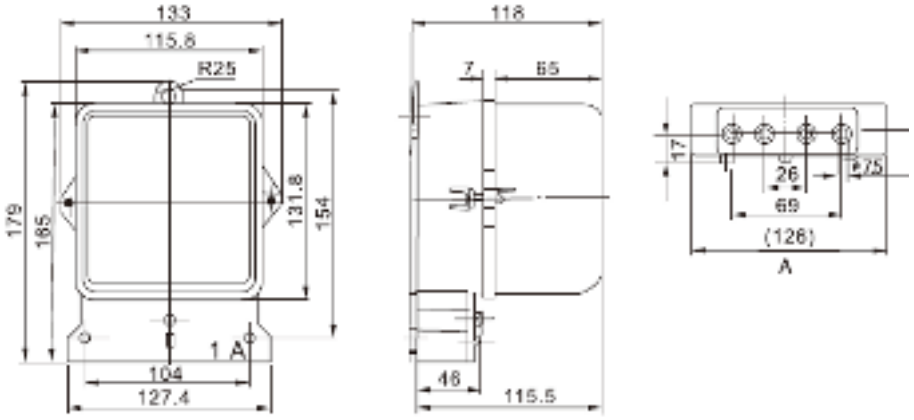
## Working condition

Working temperature: -20℃~+50℃
Extreme working temperature: -30℃~+60℃
Relative humidity: ⩽75%

# DD862 series

Single phase mechanical meter

## Outline & mounting size




Direct connection type

CT type

# D86 series

## Three-phase mechanical meter

## Application

D86 Three-phase Energy Meter Series Including the DT862 three-phase four-wire watt-hour meter;
Ds862 three-phase three-wire watt-hour meter;
DX862 three-phase four-wire 90°reactive power meter;
Dx865 three-phase three-wire 90°reactive power meter are induction AC watt-hour meter, used for measuring rated frequency 50Hz three-phase three-wire, three-phase four-wire active or reactive energy in the power system.
It conforms to the standard IEC62053-21. Durable and stable indoor use.

## Technical features

| Model | Category | Accuracy | Reference voltage | Rated current In |
|---|---|---|---|---|
| DS862(class 2) | Three phase three wires active energy meter | 2 class | 3x380V | 3x1.5(6)A |
| | | | | 3x3(6)A |
| | | | | 3x5(20)A |
| | | | | 3x10(40)A |
| | | | | 3x15(60)A |
| | | | | 3x20(80)A |
| | | | | 3x30(100)A |
| | | | 3x100V | 3x1.5(6)A |
| | | | | 3x3(6)A |
| DT864 | Three phase three wires active energy meter | 3 class | 3x57.7/100V | 3x1.5(6)A |
| | | | | 3x3(6)A |
| | | | 3x220/380V | 3x1.5(6)A |
| | | | | 3x3(6)A |
| | | | | 3x5(20)A |
| | | | | 3x10(40)A |
| | | | | 3x15(60)A |
| | | | | 3x20(80)A |
| | | | | 3x30(100)A |
| DX862 | Three phase four wires reactive energy meter | 2 class 3 class | 3x380V | 3x1.5(6)A |
| | | | | 3x3(6)A |
| | | | 3x100V | 3x1.5(6)A |
| | | | | 3x3(6)A |

## Balanced load

| Load current | Power factor | Basic error range | |
|---|---|---|---|
| | | 2 class | 3 class |
| 0.05Ib | Cosφ=1.0 | ±2.5 | |
| 0.1Ib-Imax | | ±2.0 | |
| 0.1Ib | Cosφ=0.5(inductive) | ±2.5 | |
| 0.2Ib-Imax | | ±2.0 | |

# D86 series

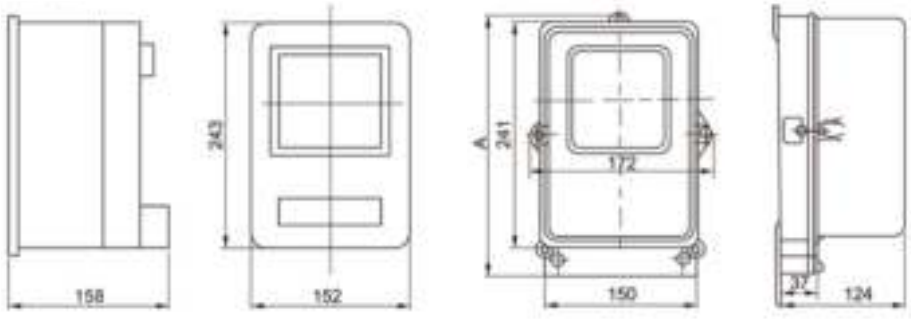
Three-phase mechanical meter

| Load current | Power factor | Basic error range | |
|---|---|---|---|
| | | 2 class | 3 class |
| 0.1Ib | Sinφ=1.0(inductive) | | ±3.0 |
| 0.2Ib-Imax | | | ±3.0 |
| 0.5Ib-Imax | Sinφ=0.5(inductive) | | ±3.0 |

## Unbalanced load

| Load current | Power factor | Basic error range | |
|---|---|---|---|
| | | 2 class | 3 class |
| 0.2Ib-Ib | Cosφ=1.0 | ±3.0 | |
| ＞Ib-Imax | Cosφ=1.0 | ±3.0 | |
| Ib | Cosφ=0.5(inductive) | ±3.0 | |
| 0.2Ib-Ib | Sinφ=1.0(inductive) | | ±3.0 |
| Ib | Sinφ=0.5(inductive) | | ±3.0 |

## Outline & mounting size




Embedded type

Direct connection

# DDS858 series

## Single-phase electronic energy meter

## Application

DDS858 single phase electronic energy meter adopts micro-electronic,computer,SMT manufacturing technology,can measure positive/reverse active power of each phase directly and accurately.
It conforms to the standard IEC62053-21.

## Technical features

| Model | Category | Reference voltage | Rated current In | Impulse constant |
|---|---|---|---|---|
| DDS858 | Single phase | 220V | 1.5(6)A (CT type) | Based on nameplate |
| | | | 3(6)A (CT type) | |
| | | | 1.5(6)A(Direct connection) | |
| | | | 3(6)A(Direct connection) | |
| | | | 2.5(10)A | |
| | | | 3x20(80)A | |
| | | | 5(20)A | |
| | | | 10(40)A | |
| | | | 15(60)A | |
| | | | 20(80)A | |
| | | | 30(100)A | |

## Basic Error

Basic error limit when balanced load

| Load current | Power factor | Basic error range | |
|---|---|---|---|
| | | 1 class | 2 class |
| 0.05Ib≤I＜0.1Ib | 1 | ±1.5 | ±2.5 |
| 0.1Ib≤I≤Imax | 1 | ±1.0 | ±2.0 |
| 0.1Ib≤I＜0.2Ib | 0.5(inductive)/0.8(capacitive) | ±1.5 | ±2.5 |
| 0.2Ib≤I≤Imax | 0.5(inductive)/0.8(capacitive) | ±1.0 | ±2.0 |

## Workin Parameter

| | |
|---|---|
| Data saving time after power failure | ≥10 years |
| Electrical Parameter | |
| Norma working voltage | 0.8~1.2 Rated voltage |
| Isolation voltage | ≥2000V(AC) |
| Voltage cycle power consumption | ≤1W |
| Battery consumption after power failure | ≤10μA |

# DDS858 series

Single-phase electronic energy meter

## Working condition

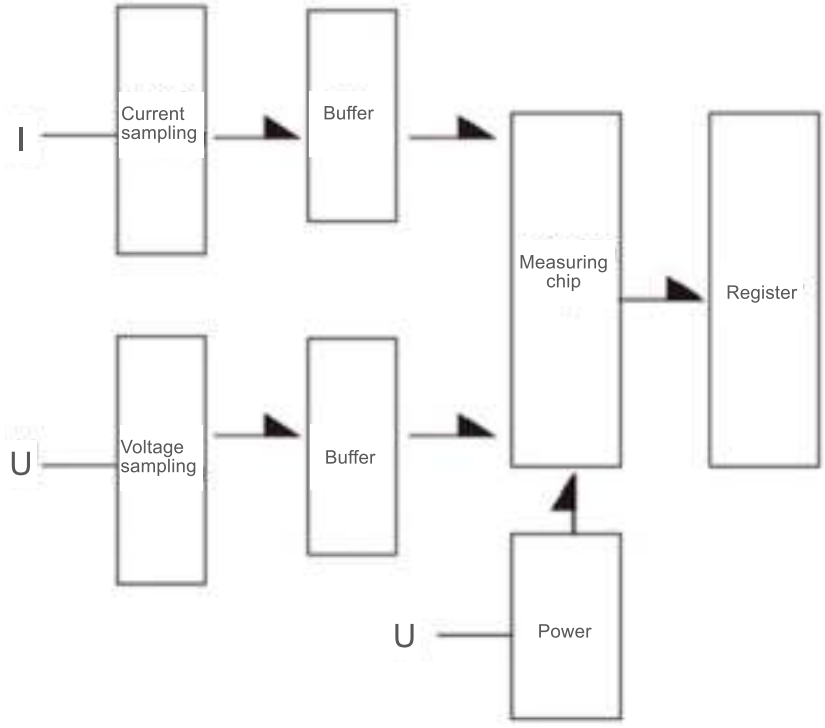
Normal working temperature: -20℃~-50℃

Extreme working temperature: -30℃~+60℃

Storage & transport temperature: -25℃~+70℃

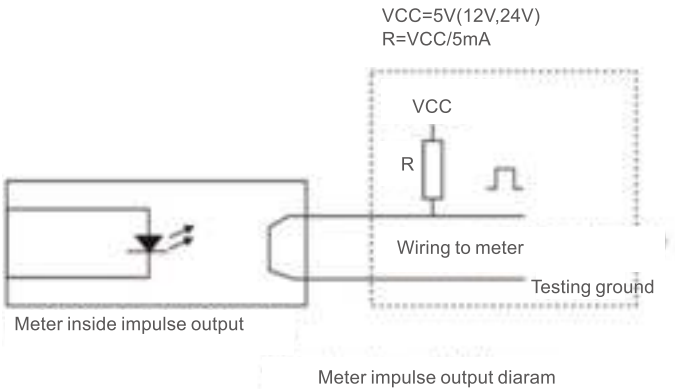
Annual average humidity ≤75%

## Working theory




## Terminal wiring diagram

Active energy testing port diagram

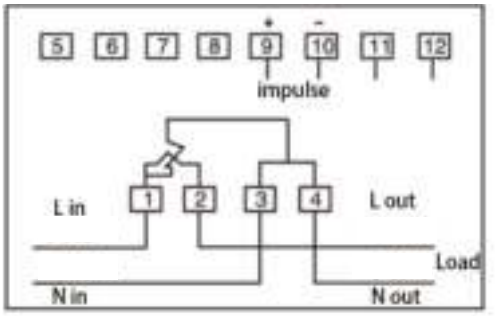



Meter impulse output diaram

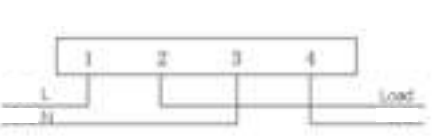
# DDS858 series

Single-phase electronic energy meter

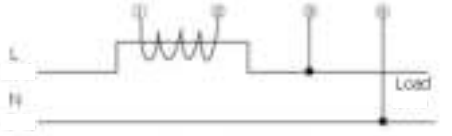
## Function wiring terminals (A type)




## Function wiring terminals (C type)

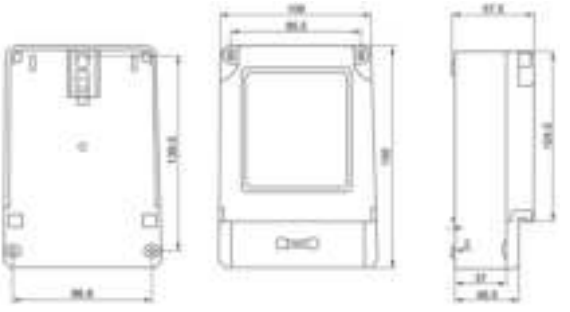



Direct connection type power terminals wiring

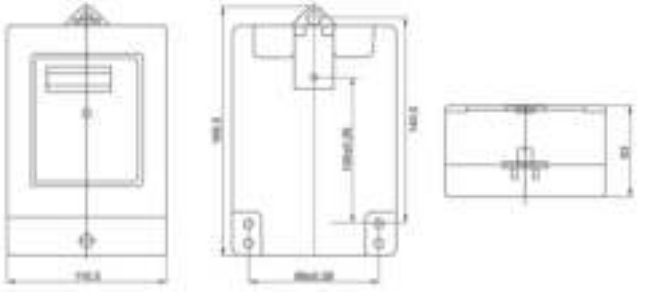



CT type power terminals wiring

## Outline & mounting size



A type



C type

# DSS858/DTS858

## Three-phase electronic energy meter

## Application

DSS858/DTS858 three-phase electronic energy meter adopts large scale integrated circuit,16-bit A/D conversion,digital multiplier,digital sampling and SMT technology,can measure positive/reverse active power of 3-phase directly and accurately and indicate by LCD. With extra additional infrared and Rs485 communication function.

Stable and reliable, with exellent anti-electromagnetic interference performance,low consumption, high accuracy,anti electric -stealing.

It conforms to the standard IEC61036.

## Technical features

| Model | Category | Reference voltage | Rated current In | Impulse constant |
|---|---|---|---|---|
| DSS858 | 3 phases 3 wires | 3x100V | 3x1.5(6)A | Based on nameplate |
| | | | 3x3(6)A | |
| | | 3x380V | 3x1.5(6)A | |
| | | | 3x3(6)A | |
| | | | 3x2.5(10)A | |
| | | | 3x5(20)A | |
| | | | 3x10(40)A | |
| | | | 3x15(60)A | |
| | | | 3x20(80)A | |
| | | | 3x30(100)A | |
| DTS858 | 3 phases 4 wires | 3x57.5/100V | 3x1.5(6)A | |
| | | | 3x3(6)A | |
| | | | 3x1.5(6)A | |
| | | | 3x3(6)A | |
| | | | 3x2.5(10)A | |
| | | | 3x5(20)A | |
| | | | 3x10(40)A | |
| | | | 3x15(60)A | |
| | | | 3x20(80)A | |
| | | | 3x30(100)A | |

| | |
|---|---|
| Normal working voltage | 0.8~1.2 rated voltage |
| Isolation voltage | ≥2000V(AC) |
| Voltage cycle power consumption | ≤2W,10VA |
| Accuracy | 1.0 class; 2.0 class |
| Outline size | 230x145x90mm |
| Weight | About 3Kg |

# DSS858/DTS858

Three-phase electronic energy meter

## Actuation

Cos φ=1.0(Sinφ=1.0), load current is 0.004Ib(1.0 class), 0.005Ib(2.0 class), meter can continously measure energy.

## False actuation

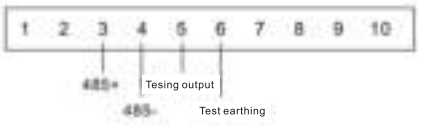
115% of rated voltage on loop, energy impulse shouldn't output when current loop break

## Working condition

Normal working temperature: -20℃~-50℃
Storage & transport temperature: -25℃~+70℃
Extreme working temperature: -30℃~+60℃
Annual average humidity ≤75%

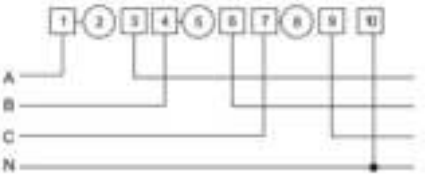
## Terminal wiring diagram

Function terminals wiring

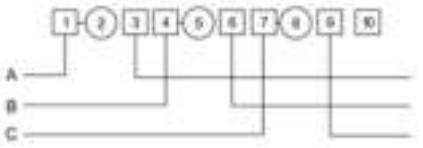



Meter impulse signal terminal wiring

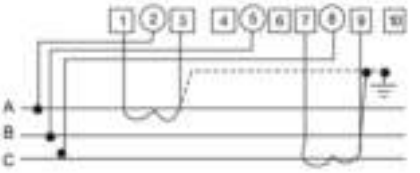
Power terminals wiring



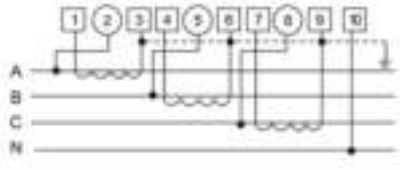

3-phase 4 wires direct connection type wiring




3-phase 3 wires direct connection type wiring



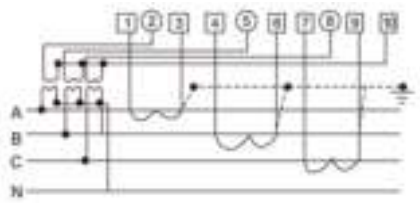

3-phase 3 wires CT connection type wiring



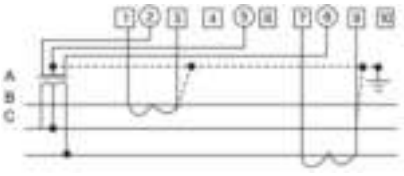

3 phase 4 wires CT connection type wiring

# DSS858/DTS858

Three-phase electronic energy meter

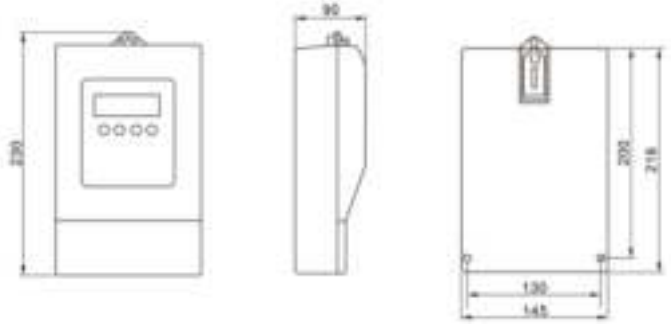



3 phase 4 wires CT, voltage transformer connection type wiring

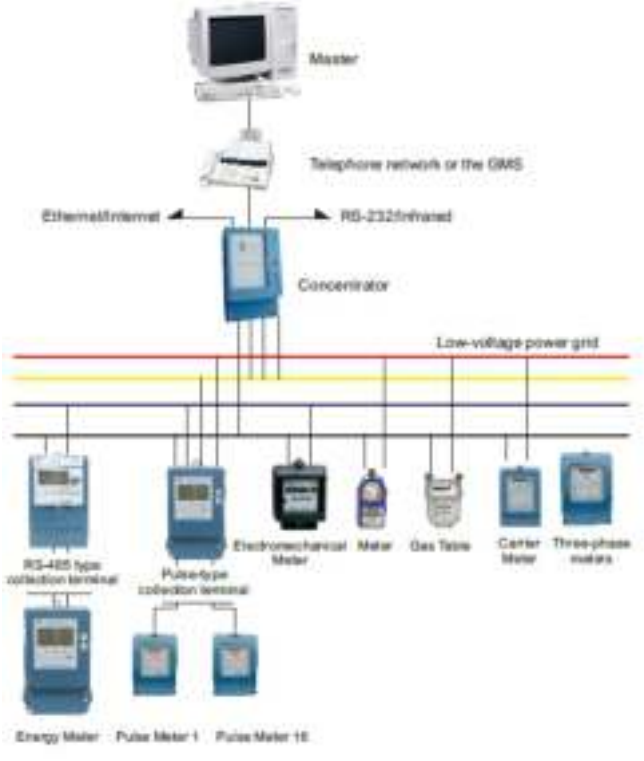



3 phase 3 wires CT, voltage transformer connection type wiring

## Outline & mounting size




## Communication diagram



# DDSY858 series

## Single-phase electronic prepaid energy meter

## Application

DDSY858 single phase electronic prepaid energy meter(hereinafter referred to as the meter)Uses microelectronic technology to measure the electric energy.It comforms to the standard of IEC 62053-21:2003.Using fully shielded,sealed structure,and advanced single-chip microcomputer processing systems for data collection,processing and preservation.With the future of good anti-electromagnetic interference, low comsumption and power saving, high-precision without calibration,prevention of electricity stealing, high overload, and long life.

## Technical features

Form 1; overload multiples,basic current & rotating speed

| Model | Rated current In | Basic rotating speed |
|---|---|---|
| DDSY858 | 1.5(6)A | Based on spec. of nameplate |
| | 2.5(10)A | |
| | 5(20)A | |
| | 10(40)A | |
| | 15(60)A | |
| | 20(80)A | |
| | 30(100)A | |

| Load current | Power factor COS | Basic error % | |
|---|---|---|---|
| | | Class 1. 0 | Class 2. 0 |
| 0.15Ib | 1 | ±1.5 | ±2.5 |
| 0.1Ib-Imax | 1 | ±1.0 | ±2.0 |
| 0.1Ib | 0.5 L/0.8 C | ±1.5 | ±2.5 |
| 0.2Ib | 0.5 L/0.8 C | ±1.0 | ±2.0 |
| Note: Ib is rated current,Imax is maximum current. | | | |

## Working condition

Frequency: 50/60Hz
Ambient temperature: -20□ ~+50□
Relative humidity: not more than 85%
The surrounding air shall not contain corrosive gas,and avoid the influence of dust,salt fog, condensation,etc.

## Demension

# DTSY858 series

Three-phase electronic prepaid energy meter

## Application

DSSY858/DTSY858 Series three-phase electronic prepaid energy meter(hereinafter referred to as the meter)Uses microelectronic technology to measure the electric energy.It comforms to the standard of IEC 62053-21:2003.Using fully shielded,sealed structure,and advanced single-chip microcomputer processing systems for data collection,processing and preservation.With the future of good anti-electromagnetic interference, low comsumption and power saving, high-precision without calibration,prevention of electricity stealing, high overload, and long life.

## Technical features

Form 1; overload multiples,basic current & rotating speed

| Model | Category | Reference voltage | Rated current In | Impulse constant |
|---|---|---|---|---|
| DSSY858 | 3 phases 3 wires | 3x100V | 3X 1.5(6)A | External with AC contatcor or shunt tripping |
| | | | 3X 3(6)A | |
| | | 3x380V | 3X 1.5(6)A | |
| | | | 3X 3(6)A | |
| | | | 3X 2.5(10)A | Built-in switch control |
| | | | 3X 5(20)A | |
| | | | 3X 10(40)A | |
| | | | 3X 15(60)A | |
| | | | 3X 20(80)A | |
| | | | 3X 30(100)A | |
| DTSY858 | 3 phases 4 wires | 3X 57.7/100V | 3X 1.5(6)A | External with AC contatcor or shunt tripping |
| | | | 3X 3(6)A | |
| | | 3x380V | 3X 1.5(6)A | |
| | | | 3X 3(6)A | |
| | | | 3X 2.5(10)A | Built-in switch control |
| | | | 3X 5(20)A | |
| | | | 3X 10(40)A | |
| | | | 3X 15(60)A | |
| | | | 3X 20(80)A | |
| | | | 3X 30(100)A | External with AC contatcor or shunt tripping |

## Basic Error

| Current value | | Power factor(COSφ) | Basic error range | |
|---|---|---|---|---|
| Direct connection meter | Instrument transformer | | 1 class | 2 class |
| 0.05Ib≤I<0.1Ib | 0.02Ib≤I<0.5Ib | 1 | ±1.5 | ±2.5 |
| 0.1Ib≤I≤Imax | 0.05Ib≤I≤Imax | 1 | ±1.0 | ±2.0 |
| 0.1Ib≤I<0.2Ib | 0.05Ib≤I<0.1Ib | 0.5(sensibility)/0.8(capacitive) | ±1.5 | ±2.5 |
| 0.2Ib≤I≤Imax | 0.1Ib≤I≤Imax | 0.5(sensibility)/0.8(capacitive) | ±1.0 | ±2.0 |

Not:Ib=Rated current; max=Maximum current

# DTSY858 series

Three-phase electronic prepaid energy meter

## Voltage range

| | |
|---|---|
| Normal working voltage | 0.9Un~1.1Un |
| Limit working voltage | 0.8Un~1.15Un |

## Power consumption

| | |
|---|---|
| Power consumption of voltage circuit | ⩽2W and 10VA |
| Power consumption of current circuit | ⩽4.0VA |

## Starting current

Under the condition of the rated voltage,rated frequency,and COSΦ=1,meter with load current of 0.004Ib(Class 1)and 0.005Ib(Class 2)can measure electric energy continuously.

## Creeping

When the meter line without current,but voltage loop circuit with 115% rated voltage,the output pulse is not more than one.

## Working condition

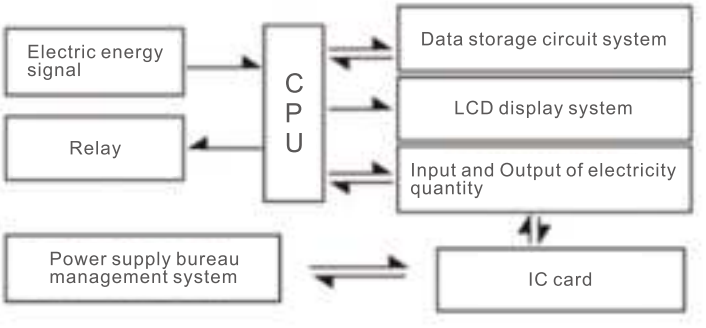
Frequency: 50/60Hz
Ambient temperature: -20℃~+50℃
Relative humidity: not more than 85%
The surrounding air shall not contain corrosive gas,and avoid the influence of dust,salt fog, condensation,etc.

## Working principles

DSSY858/DTSY858 three phase electronic type prepaid meter adopts the imported special large scale integrated circuit, 16 bit A/D conversion, digital multiplier, application of digital sampling processing technology and SMT manufacturing technology.

## Working principle diagram

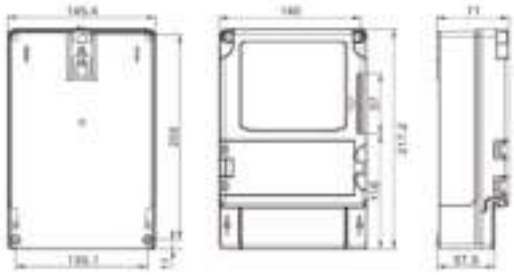
The meter obtains voltage sampling signal by voltage divider, obtains current sampling signal by current transformer, obtains voltage and current product signal by multiplier, and through the frequency conversion to generate a counting pulse that frequency is proportional to the product of voltage and current.

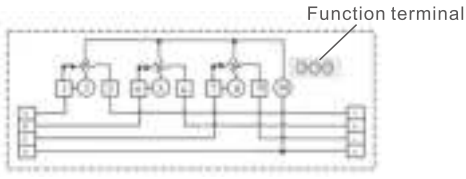


# DTSY858 series

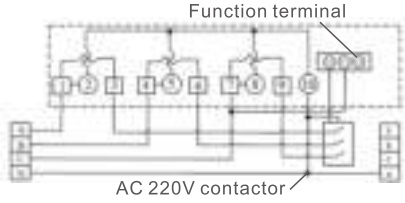
Three-phase electronic prepaid energy meter

## Demension

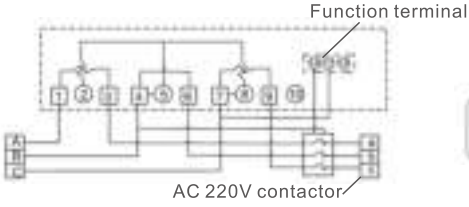





Wiring diagram of 3-phase 4-wire dircret-type (with controller inside)

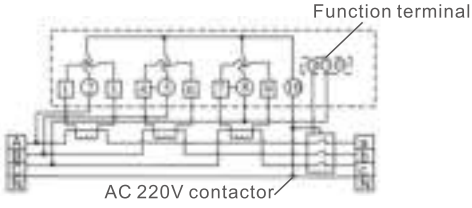



Wiring diagram of 3-phase 4-wire dircret-type

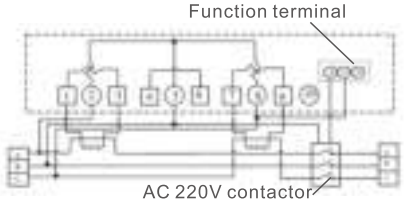



Wiring diagram of 3-phase 3-wire dircret-type


Wiring diagram of function terminal




Wiring diagram of 3-phase 4-wire transformer-type




Wiring diagram of 3-phase 3-wire transformer-type

# DDZY858 series

## Single-phase tariff control intelligent watt-hour meter

## Application

DDZY858 single-phase tariff control intelligent watt-hour meter is used for measuring the AC single-phase active energy with a rated frequency of 50 Hz,and realizes the management function of paying electricity after paying first.This product is manufactured by international advanced special large-scale integrated circuit and SMT process. The key components are low-power and long-life devices of international famous brands. The whole machine design adopts various anti-interference technologies to improve the reliability of the products. Sex and service life, the data display uses a large screen Chinese LCD, convenient for meter reading.This rate measurement can store the total energy of 12 settlement days and the energy data of each rate. Has an event recording function. Support 6 annual time zones, 2 daily timetables, 12 daily time slots, and 4 rates. At the same time, it also has infrared and RS485 communication functions, which can realize remote meter reading, and the communication protocol follows DL/T 645-2007. Its conforms to GB/T 17215.321-2008 and GB/T18460.3-2001 standards. The product can directly measure the positive and negative active power directly, and carry out multi-time measurement according to the corresponding rate setting.

## Technical features

Form 1; overload multiples,basic current & rotating speed

| Access method | Accuracy level | Rated voltage V | Maximum current A | Constant |
|---|---|---|---|---|
| Single phase straight through | 2.0 class | 220 | 20 | 3200 |
| | | 220 | 30 | 2400 |
| | | 220 | 40 | 1600 |
| | | 220 | 50 | 1600 |
| | | 220 | 60 | 1200 |
| | | 220 | 80 | 800 |
| Single phase straight through | 2.0 class | 220 | 100 | 800 |
| | | 220 | 120 | 600 |
| Single phase transformer | 2.0 class | 220 | 6 | 12000 |

Basic error

| Load current | Power factor | Power factor |
|---|---|---|
| | | 2.0 class |
| 0.05Ib~0.1Ib | 1.0 | ±1.5 |
| 0.1Ib~Imax | 1.0 | ±1.0 |
| 0.1Ib~0.2Ib | 0.5L 0.8C | ±1.5 |
| 0.2~Imax | 0.5L 0.8C | ±1.0 |

## Working condition

Frequency: 50/60Hz

Ambient temperature: -25℃~+60℃

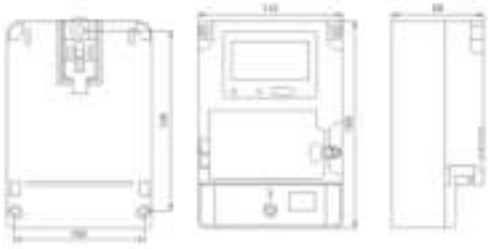
Relative humidity: not more than 75%

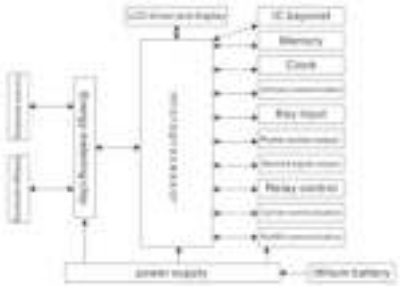
The surrounding air shall not contain corrosive gas,and avoid the influence of dust,salt fog, condensation, etc.

# DDZY858 series

Single-phase tariff control intelligent watt-hour meter

## Demension



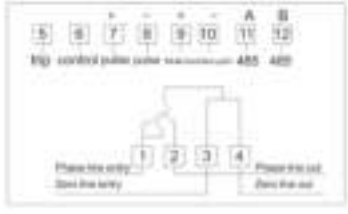


Working principle diagram

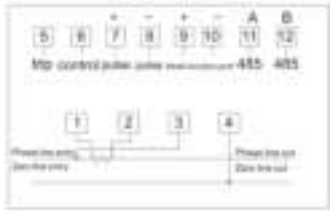
The electric energy meter is composed of two main functions: one is the electric energy metering part, the other is the microprocessor control part, and the electric energy metering part uses the shunt multiplication circuit to generate a pulse sequence indicating how much electricity is used, and sends it to the microprocessor for energy metering, micro The processor transfers data through the electrical card interface to implement various control functions.

### Wiring

The energy meter should be wired according to the wiring diagram on the terminal box, preferably with a copper wire or copper terminal.



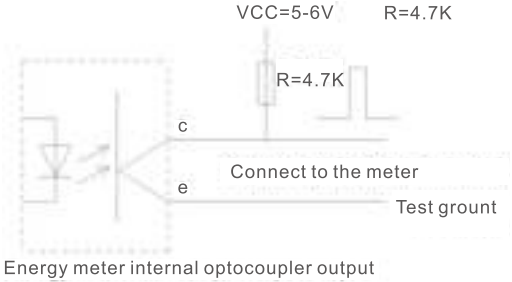
Direct access wiring diagram



Transformer access wiring diagram

### Test

This series of electric energy meters are equipped with opto-coupled test output ports,which are located at the terminals, as indicated by c and e in the figure. The wiring is as follows:




Energy meter internal optocoupler output

# DTZY858 series

## Three-phase tariff control intelligent watt-hour meter

## Application

DTZY858 three-phase four-wire tariff control intelligent watt-hour meter is a new generation of intelligent electric energy metering product developed by our company. It is composed of measuring unit, data processing unit, communication unit and so on. It has electric energy metering, information storage and processing, real-time monitoring, etc. Watt-hour meter with automatic control, information exchange and other functions; developed by using modern microelectronic technology, computer technology, electric measurement technology and data communication technology; can accurately measure electrical data in power grid, All kinds of events occurred in the power supply and power supply process can be traced back correctly and the disease has the function of load control. The user can request the internal relay or the external relay to control the load in advance. It has RS-485 communication interface of pulse output, wireless remote communication mode, optional remote or local cost control mode, simple and convenient maintenance, and is an ideal measuring instrument for power department in the construction of smart grid.

## Technical features

Accuracy class 1. 0 active power class 2. 0, reactive power class 0. 0 rated power 50Hz

shape dimensions 290mm (high) × 170mm (width) × 85mm (thick)weight about 3kg

basic specification type and pulse constant comparison table

| Type | classification | Parameter voltage | Rated Current | Pulse constant (Imp/kWh or imp/kvarh) |
|---|---|---|---|---|
| DTZY858 | Three-phase four-wire | 3×220/380V | 3×1.5(6)A | 800 |
| | | | 3×5(60)A | 400 |
| | | | 3×20(80)A | 200 |
| | | | 3×30(100)A | 200 |

Electrical parameters

| | |
|---|---|
| normal working voltage | 0.8Un~1.2Un(Single Phase)0.70Un~1.2Un (Combined element) |
| Limit working voltage | 0.60Un~1.3Un |
| Voltage line power consumption (per phase) | ⩽1.5W,1.3Un |
| Power consumption of voltage line in remote communication | ⩽8W |
| Current line power (each phase) | ＜0.2VA |
| Clock cell | 3.6VDC⩾1200mAh |
| Blackout meter reading battery | 6VDC⩾1400mAh |

Electrical parameters

| | |
|---|---|
| Clock accuracy | ⩽0.5s/d(23℃) |
| Counting range | 0.999999.99kWh,0.999999.99kxarh |
| Remote communication mode | 485 communication.Wireless communication |
| Cost control mode | Local, remote |
| Communication baud rate | RS:1200bps~9600bps,acquiescent 2400bps Infrared communication:1200bps,2400bps |
| Communication protocol | 《DL/T645-2007 Communication Protocol of Multi-Function Watt-hour Meter and filing document |

# DTZY858 series

## Three-phase tariff control intelligent watt-hour meter

Climatic conditions

| | |
|---|---|
| normal working temperature | -25℃~+60℃ |
| Limit working voltage | -40℃~+70℃ |
| Storage and transport temperature | -40℃~+70℃ |
| Storage and working humidity | Annual average＜75% |

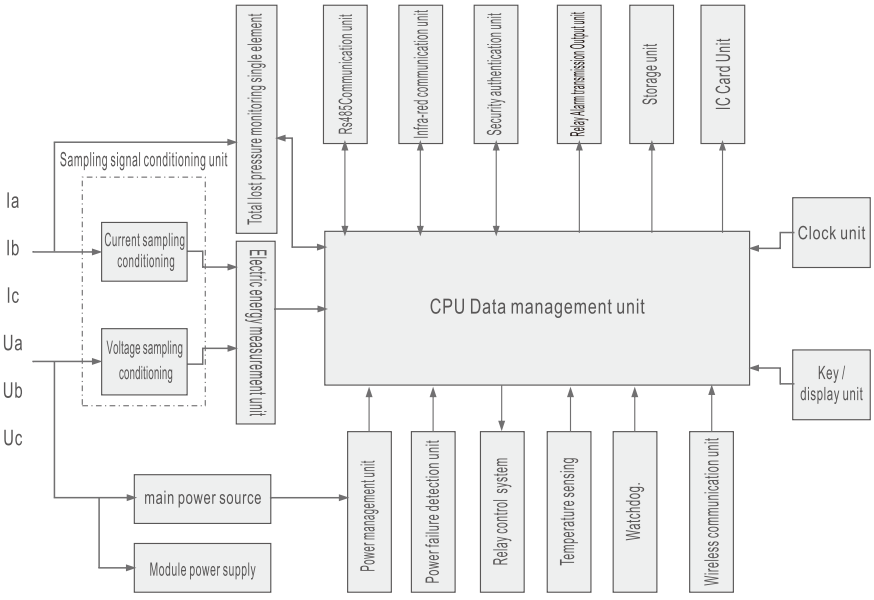
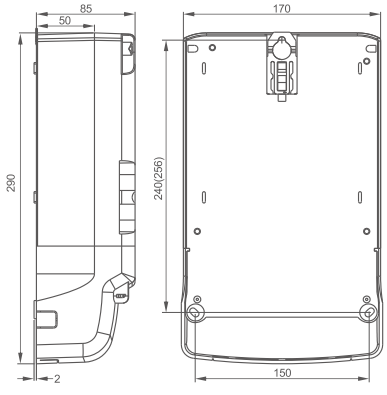



Table1 Working schematic diagram

The power measurement unit processes the sampling value of the measurement signal, obtains the voltage and current value by the integral of the sampling value and the software filtering operation, obtains the corresponding instantaneous power by the product operation of the sampling value, and obtains the integral of the instantaneous power by the integral of the instantaneous power. After obtaining the energy for a period of time, the fundamental electric energy and the 221st harmonic content data of voltage and current are calculated by Fourier transform. The CPU data management unit is the core of the system. It synthesizes the data returned by each unit and generates the electric energy data needed by the user. The functions of time-sharing accounting management, power consumption event management, user data display management, historical data management, user data communication management, ammeter data security management, control management and so on are completed.




Installation size

Drawing2 Installation dimensions of watt-hour meters

## Installation method

Installation method

1.Select suitable installation environment for watt-hour meters, such as ammeter cabinets, ventilated and dry rooms, etc.
2.Remove the watt-hour meter and remove the bottom cover of the meter;
3.Find a suitable base on the installed meter cabinet to drill 3 installation holes according to the installation size.
Note: The base shall be fixed to a solid, refractory, There are no hook screw holes in the watt-hour meter and two fixing holes in the lower part of the meter, which are fixed with PA4 × 10 or PA4 × 12 self-tapping screws.

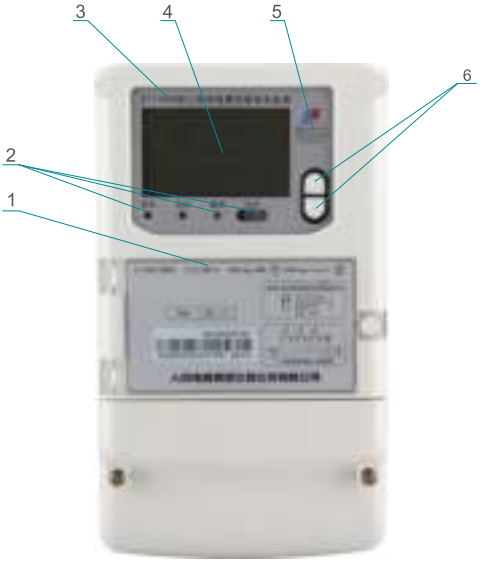
# DTZY858 series

Three-phase tariff control intelligent watt-hour meter

## Wiring method

Strictly follow the following wiring diagram to ensure that the input voltage and current is less than the limit parameters of the meter more than a dozen, so as to avoid the watt-hour meter working differently.
Regular or damaged. In the areas where thunderstorms are more frequent, the necessary lightning protection measures should be adopted.

Figure description




| No. | Explanation |
|---|---|
| 1 | Parameters such as rated current, rated voltage, meter constant and so on.It is expressed as the accuracy grade; it indicates that the electric energy meter is a class II protective insulation sealing instrument. |
| 2 | Location of indicator lights and infrared communication ports (by function) |
| 3 | Indicating the name information of the watt-hour meter |
| 4 | Liquid crystal region: LCD screen visible size of 85mm (long) × 50mm (wide) |
| 5 | Communication protocol |
| 6 | Up and down buttons to query the settings display items |

# Din Rail Type

## Electronic watt-hour meter

## Applications

Din rail type electronic watt-hour meter, completely accords with relevant technical requirements of class 1and class 2 accuracy. It can accurately and directly measure active energy consumption. It also can display total energy consumption by step type impulse register or LCD display. This watt-hour meter conforms.
EN62053-21 standard.

| | Single phase | Three phase |
|---|---|---|
| Accuracy(EN62053-21) | class 1,2 | class 1,2 |
| Frequency | 50/60Hz | 50/60Hz |
| Rated voltage | 120V/230V | 230V/400V |
| Rated impulse voltage | Uimp 6KV-1.2/50S | Uimp 10KV-1.2/50S |
| Power consumption | ⩽1.5W/6VA per phase | ≤2W/10VA per phase |
| Temperature range | -10℃~+50℃ | -10℃~+50℃ |

## Specification

Mounting: DIN rail EN 50022

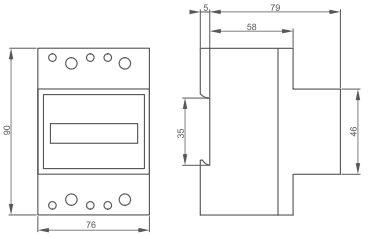
| Type | Rating | Voltage | Class | Designation |
|---|---|---|---|---|
| DS977-25S<br>DS977-25SC<br>(LCD) | 2.5(10)A | AC120V/230V | 1.0/2.0 | Single Phase 1 module |
| | 3(15)A | | | |
| | 5(25)A | | | |
| | 5(30)A | | | |
| DS977-65S | 2.5(10)A | AC120V/230V | 1.0/2.0 | Single Phase 2 module |
| | 3(15)A | | | |
| | 5(30)A | | | |
| | 10(40)A | AC230V | | |
| | 15(60)A | | | |
| DS977-100S | 2.5(10)A | AC120V/230V | 1.0/2.0 | Single Phase 4 module |
| | 5(30)A | | | |
| | 10(50)A | | | |
| | 15(60)A | 230V | | |
| | 20(100)A | | | |
| DS977-100S<br>(LCD) | 5(30)A | 230V | 1.0 | Single Phase 4 module |
| | 10(60)A | | | |
| | 15(90)A | | | |
| | 20(100)A | | | |
| DS977-100T | 1.5(6)A CT | 230/400V | 1.0 | Three Phase 7 module |
| | 3(6)A CT | | | |
| | 5(30)A | 230/400V | 1.0 | |
| | 10(60)A | | | |
| | 15(90)A | | | |
| | 20(100)A | | | |

# Din Rail Type

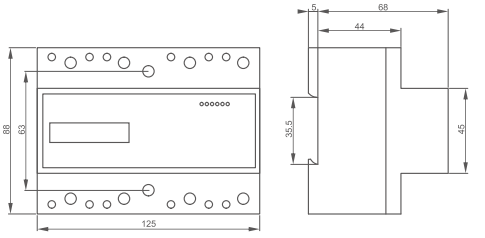
Electronic watt-hour meter

| Type | Rating | Voltage | Class | Designation |
|---|---|---|---|---|
| DS977-100TC (LCD) | 1.5(6)A CT | 230/400V | 1.0 | Three Phase 7 module |
| | 3(6)A CT | | | |
| | 5(30)A | | | |
| | 10(60)A | | | |
| | 15(90)A | | | |
| | 20(100)A | | | |

## Dimension




Single Phase




Three Phase

# XMT-8000 series

Intelligent digital temperature controller

XMTA-8000

XMTD-8000

## Type

XMT □ -8 □ □ □ □ * □ □

**8.The second alarm type(ALM2)**

N: not set alarm

A: upper limit deviation alarm

B: lower limit deviation alarm

C: upper and lower limit deviation alarm

D: within range alarm

E: upper limit deviation alarm with standby

F: lower limit deviation alarm with standby

G: upper and lower limit deviation alarm with standby

H: upper limit input value alarm

J: lower limit input value alarm

K: upper limit input value alarm with standby

L: upper limit input value alarm with standby

**7.The first alarm type(ALM1)**

**6.Input type**

1: Thermocouple input(TC)

2: Thermal resistance input(RTD)

3: Voltage signal input(mV,V)

4: Resistance signal input(oM)

5: Current signal input(mA)

**5. Alarm**

1: the first channel alarm output

2: the second channel alarm output

**4. The second control mode and output type**

0: ON/OFF relay contact output

4: PID relay contact output

5: PID voltage pulse output

7: PID single-phase SCR zero-crossing trigger signal output

**3. The first control mode and output type**

0: ON / OFF relay contact output

4: PID relay contact output

5: PID voltage pulse output

**2. Intelligent level: 8000 series is all-purpose input**

**1. Meter size**

# XMT-8000 series

## Intelligent digital temperature controller

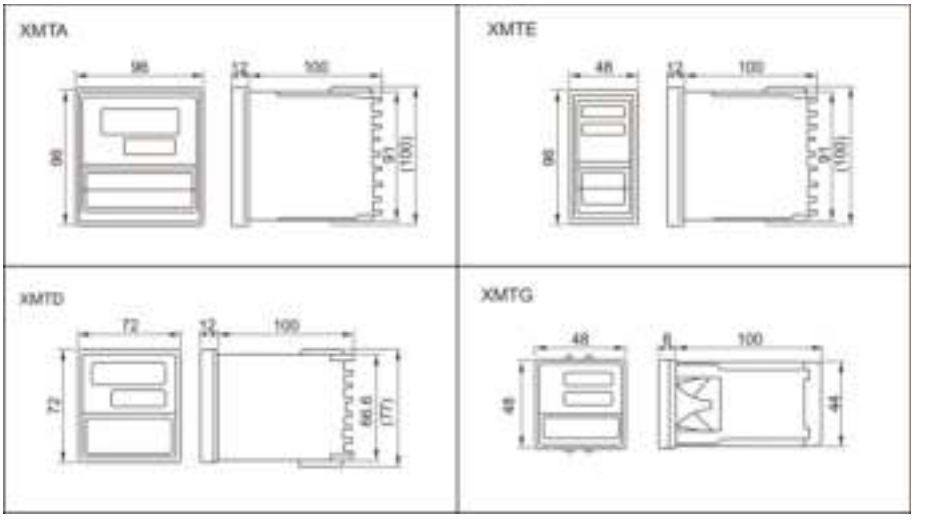
XMTE-8000

XMTG-8000

## Outline and hole size unit:mm

| Type | Face frame | Outline | Hole size |
|---|---|---|---|
| XMTG | 48×48 | 45×45×100 | (44+0.5)×(45+0.5) |
| XMTE | 48×96 | 43×91×100 | (43+1)×(91+1) |
| XMTD | 72×72 | 67×67×100 | (67+1)×(67+1) |
| XMTA | 96×96 | 91×91×100 | (91+1)×(91+1) |

## Dimension




## Technical index

### Input

Thermocouple (TC), thermal resistor (RTD), standard Current and voltage signals.

| Display | E | J | r | S | b | E | n | T | Pt | Cu | 0-20 | 4-20 | 0-5 | 1-5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Input type | (TC) | | | | | | | | (RTD) | | CURRENT VOLTAGE | | | |
| | K | J | R | S | B | E | N | T | PT 100 | CU 50 | oM | mV | mA | V |

**Accuracy**

Measuring accuracy:±0.5%FS

Error of cold junction compensation: ±2℃(can be amend by software within 0～50℃)

Resolution: 14 Bit

Sampling period: 0.5 Sec

**Display**

(PV), (SV): -1999～+9999

Output, alarm, auto tuning status display: LED

**Control Modes:**

1.PID control (including ON/OFF, position PID and continuous PID)

2. Auto tuning control

# XMT-8000 series

## Intelligent digital temperature controller

**Control output:**

1.Current output: DC 0～10mA, 4～20mA(RL<500Ω)

2. Voltage output: DC 0～5V, 1～5V(RL>10K)

3. Relay output: contact capacity 250VAC 3A (resistive loads)

4. Voltage pulse output :0～12V(apply to SSR)

5. SCR output: zero-cross trigger or phase shift trigger (resistive load)

6. Alarm output: One alarm or two alarms, 12 modes

Output contact capacity: 250VAC 3A (resistive load)

**Setting range**

Setting value (SV): Measured Present Value (PV)

Proportional band (P):0～whole measured range (When set P to 0, it will be ON/OFF control)

Integral time (I):0～3600Sec(when the time is 0,without integral action)

Derivative time (D):0～3600Sec(when the time is 0,without derivative action)

Proportional term:1～100Sec

**Other:**

1. Insulation resistance :> 50MΩ (500VDC)

2. Insulation strength: 1500VAC/1min

3. Power consumption: <10VA

4. Ambient: 0～50℃, 30～85%RH, non- corrosive gas

# XMT-7000 series

Intelligent digital temperature controller

## Type

XMT □ -7 □ □ □

**Input signal:**

1-thermocouple(mv)K,E,J,S, etc.

2-thermal resistor(Ω): Cu50,Pt100, etc.

3-Hall transmitter, CP type differential manometer or voltage

4-Remote transmitting pressure gage Ω

5-Standard current 0~10mA, 4~20mA

**Alarm function: 0-No alarming function**

1-With upper limit contact output alarm function

2-With lower limit contact output alarm function

3-With upper and lower limit contact output alarm function

**Adjusting way: 0-Two states type adjustment**

1-DC1-5V voltage signal continuous output

2-Three states type adjustment

3-DC0-5V voltage signal continuous output

4-Contact on-off type PID adjustment

5-Driving solid state relay PID adjustment

6-Output single-phase SCR phase-shift trigger signal PID adjustment

7-Output single -phase zero-crossing trigger signal PID adjustment

8-Output three-phase zero-crossing trigger signal PID adjustment

9-Output DC0~10mA; 4~20mA and other current PID adjustment

**Panel dimension: (width× height): A.96×96(92×92)**

D.72×72(68×68)

E.48×96(45×92)

F.96×48(92×45)

G.48×48(45×45)

Empty.160×80(152×76)

Note: Values in brackets are hole dimension

# XMT-7000 series

Intelligent digital temperature controller

## Performance index

| | Tindex |
|---|---|
| Display | High brightness green and red double row nixie tube to display PV and SV |
| Input signal | Sensing signal specify an input |
| | Transducer self-correcting |
| | Sampling period: 3 times /s |
| Function | Secondary parameter lock protective function |
| | Alarm range: deviation value of upper and lower limit absolute value, full measuring range can be set freely |
| Accuracy class | ±1%FS±1 |
| | ±0.5%FS±1 |
| Power supply | Switching power supply: 85-264VAC 50/60Hz power consumption≤3W |
| | transformer supply: AC220V±10% 50/60Hz power consumption≤3W |
| Insulating strength | 2KV/50Hz/1min |
| Output | Relay contact capacity AC220V3A(resistive), 1A(inductive) |
| | Solid state relay DC 0-12V |
| | Optocoupler silicon controlled 1A/600V |
| Resolution | 1%FS,0.1%FS |
| Operating conditions | Environment temperature: 0℃-50℃, humidity 45%-85%,non-corrosiveness and without strong electromagnetic interference |
| | Altitude: ≤2500m atmospheric pressure: 80-106kpa |

## Boundary dimension and hole dimension

| 7000 | Boundary code | Panel size | Meter length | Hole dimension | Installation distance |
|---|---|---|---|---|---|
| XMT | 1 | 160×80 | 80 | 153×77 | 30mm |
| XMTA | 2 | 96×96 | 110 | 93×93 | |
| XMTD | 3 | 72×72 | 110 | 69×69 | |
| XMTE | 4 | 48×96 | 110 | 45×93 | |
| XMTG | 6 | 48×48 | 110 | 45×45 | |

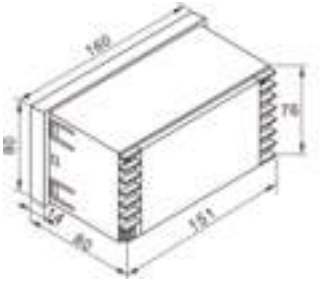
## Product

| Type | Product code | Main function | Diagram |
|---|---|---|---|
| XMT | 7001 7002 | Two position adjustment |  |
| | 7201 7202 | Three position adjustment | |
| | 7411 7412 | Contact on-off type PID adjustment (with alarm) | |
| | 7511 7512 | Driving solid state relay PID adjustment (with alarm) | |
| | 7611 7612 | Single-phase phaseshift trigger signal PID adjustment (with alarm) | |

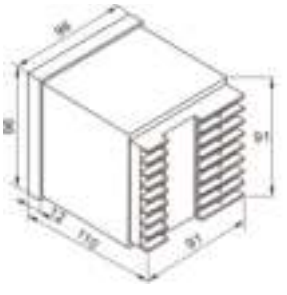
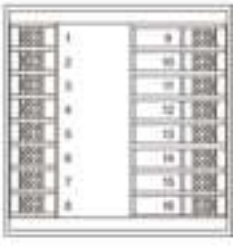
# XMT-7000 series

## Intelligent digital temperature controller

| Type | Product code | Main function | Diagram |
|---|---|---|---|
| XMT | 7711 7712 | Single-phase passing zero trigger signal PID adjustment (with alarm) |  |
| | 7801 7802 | Three-phase passing zero trigger signal PID adjustment | |
| | 7911 7912 | DC0-10mA; 4-20mA and other current PID adjustment | |

| Appearance | Back-end wiring diagram |
|---|---|
|  |  |

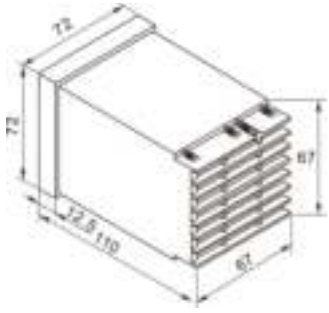
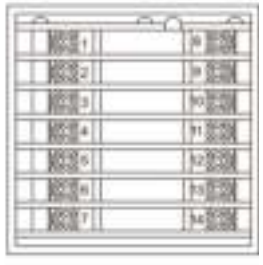
| Type | Product code | Main function | Diagram |
|---|---|---|---|
| XMTA | 7001 7002 | Two position adjustment |  |
| | 7201 7202 | Three position adjustment | |
| | 7411 7412 | Contact on-off type PID adjustment (with alarm) | |
| | 7511 7512 | Driving solid state relay PID adjustment (with alarm) | |
| | 7611 7612 | Single-phase phaseshift trigger signal PID adjustment (with alarm) | |
| | 7711 7712 | Single-phase passing zero trigger signal PID adjustment (with alarm) | |
| | 7801 7802 | Three-phase passing zero trigger signal PID adjustment | |
| | 7911 7912 | D C0-10mA; 4-20mA and other current PID adjustment | |

| Appearance | Back-end wiring diagram |
|---|---|
|  |  |

## XMT-7000 series

Intelligent digital temperature controller

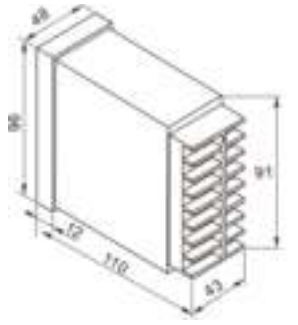
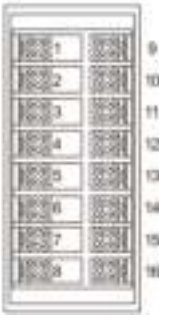
| Type | Product code | Main function | Diagram |
|---|---|---|---|
| XMTD | 7001 7002 | Two position adjustment |  |
| | 7201 7202 | Three position adjustment | |
| | 7411 7412 | Contact on-off type PID adjustment (with alarm) | |
| | 7511 7512 | Driving solid state relay PID adjustment (with alarm) | |
| | 7611 7612 | Single-phase phaseshift trigger signal PID adjustment (with alarm) | |
| | 7711 7712 | Single-phase passing zero trigger signal PID adjustment (with alarm) | |
| | 7801 7802 | Three-phase passing zero trigger signal PID adjustment | |
| | 7911 7912 | D C0-10mA; 4-20mA and other current PID adjustment | |

| Appearance | Back-end wiring diagram |
|---|---|
|  |  |

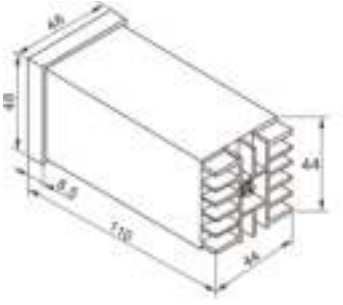
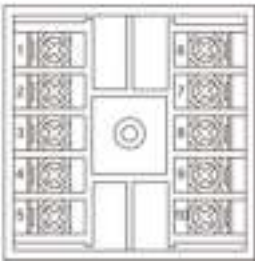
| Type | Product code | Main function | Diagram |
|---|---|---|---|
| XMTE | 7001 7002 | Two position adjustment |  |
| | 7201 7202 | Three position adjustment | |
| | 7411 7412 | Contact on-off type PID adjustment (with alarm) | |
| | 7511 7512 | Driving solid state relay PID adjustment (with alarm) | |
| | 7611 7612 | Single-phase phaseshift trigger signal PID adjustment (with alarm) | |
| | 7711 7712 | Single-phase passing zero trigger signal PID adjustment (with alarm) | |
| | 7801 7802 | Three-phase passing zero trigger signal PID adjustment | |
| | 7911 7912 | D C0-10mA; 4-20mA and other current PID adjustment | |

# XMT-7000 series

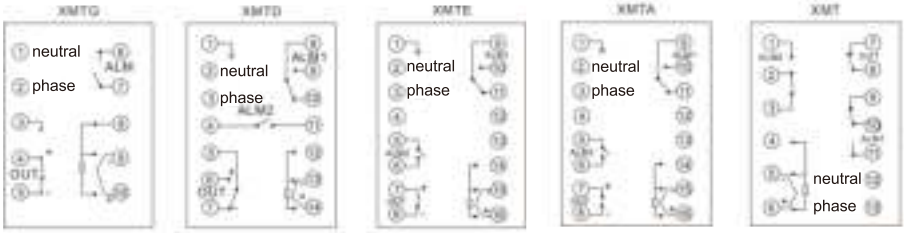
Intelligent digital temperature controller

| Appearance | Back-end wiring diagram |
|---|---|
|  |  |

| Type | Product code | Main function | Diagram |
|---|---|---|---|
| XMTG | 7001 7002 | Two position adjustment |  |
| | 7201 7202 | Three position adjustment | |
| | 7411 7412 | Contact on-off type PID adjustment (with alarm) | |
| | 7511 7512 | Driving solid state relay PID adjustment (with alarm) | |
| | 7611 7612 | Single-phase phaseshift trigger signal PID adjustment (with alarm) | |
| | 7911 7912 | D C0-10mA; 4-20mA and other current PID adjustment | |

| Appearance | Back-end wiring diagram |
|---|---|
|  |  |

## Terminal wiring diagram



# XM series

## Digital display temperature controller

### Boundary dimension and hole dimension

| Type | Code | Panel size | Meter length | Hole size | Installation distance |
|---|---|---|---|---|---|
| XMT | 1 | 160×80 | 150 | 152 74 | 30mm |
| XMZ | 1 | 160×80 | 150 | 152×74 | |
| XMTA | 2 | 96×96 | 140 | 92×92 | |
| XMZA | 2 | 96×96 | 140 | 92×92 | |
| XMZD | 4 | 72×72 | 140 | 68×68 | |
| XMTD | 4 | 72×72 | 140 | 68×68 | |
| XMTE | 5 | 48×96 | 140 | 44×92 | |
| XMTG | 6 | 48×48 | 140 | 44×44 | |

### Product

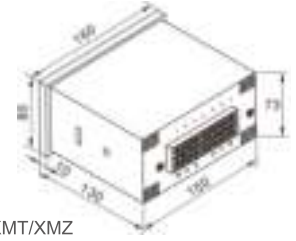
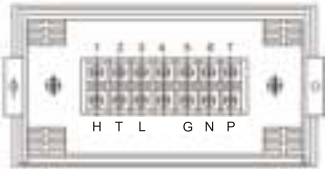
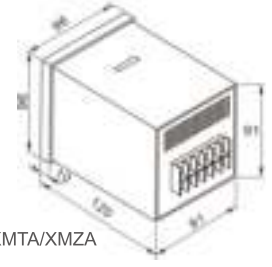
| Type | Product code | Main function | Diagram |
|---|---|---|---|
| XMT | 101 102 | Two position adjustment |  |
| | 121 122 | Three position adjustment | |
| | 131 132 | Time proportional control | |
| | 161 162 | Single phase bidirectional SCR phase shifting output | |
| | 171 172 | Single phase bidirectional SCR cross zero output | |
| | 181 182 | Three phase bidirectional SCR cross zero output | |
| | 191 192 | DC0-10mA; 4-20mA continuous PID adjust | |
| XMTA | 2001 2002 | Two position adjustment |  |
| | 2201 2202 | Three position adjustment | |
| | 2301 2302 | Time proportional control | |
| | 2601 2602 | Single phase bidirectional SCR phase shifting output | |
| | 2701 2702 | Single phase bidirectional SCR cross zero output | |
| | 2901 2902 | DC0-10mA; 4-20mA continuous PID adjust | |
| XMTD | 3001 3002 | Dial setup two position adjustment |  |
| | 2201 2202 | Potentiometer setup three position adjustment | |
| | 3301 3302 | Time proportional control | |
| | 3701 3702 | Single phase bidirectional SCR phase shifting output | |
| | 3901 3902 | Single phase bidirectional SCR cross zero output | |
| | 3601 3602 | DC0-10mA; 4-20mA continuous PID adjust | |

# XM series

## Digital display temperature controller

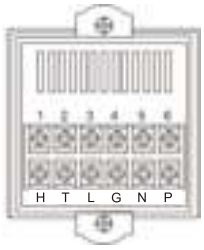
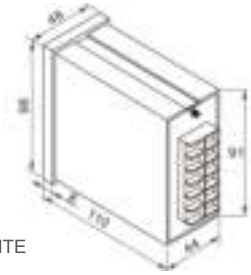
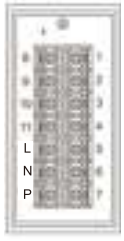
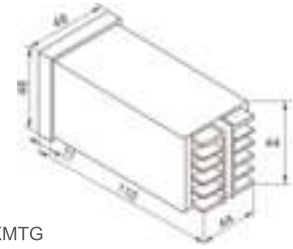
| Type | Product code | Main function | Diagram |
|---|---|---|---|
| XMTE | 2001 2002 | Dial setup two position adjustment |  |
| | 2011 2012 | Two position adjustment(with alarm) | |
| | 2301 2302 | Time proportional control | |
| | 2701 2702 | Single phase bidirectional SCR phase shifting output | |
| XMTG | 3001 3002 | Dial setup two position adjustment |  |
| | 3301 3302 | Time proportional control | |
| | 3701 3702 | Single phase bidirectional SCR phase shifting output | |
| XMZ | 101 102 | Thermocouple, thermal resistor |  |
| XMZA | 2001 2002 | Thermocouple, thermal resistor |  |
| XMZD | 2001 2002 | Thermocouple, thermal resistor |  |

## Appearance and back-end wiring diagram

| Appearance | Back-end wiring diagram |
|---|---|
|  XMT/XMZ |  Note： with thermocouple meter,1 connected positive,2connected negative. with thermal resistance meter,1,2 connected negative, 3 connected positive. |
|  XMTA/XMZA |  Note： with thermocouple meter, 1 connected positive,2connected negative. with thermal resistance meter, 1,2 connected negative, 3 connected positive |

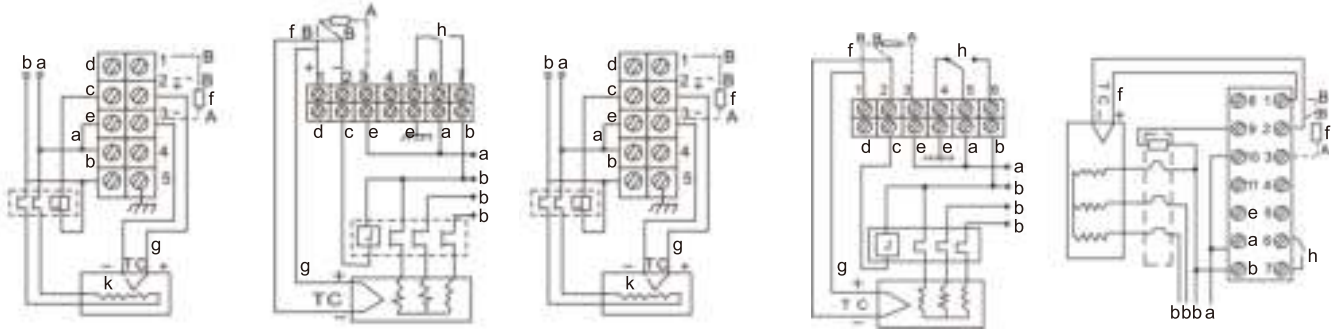
# XM series

## Digital display temperature controller

| Appearance | Back-end wiring diagram | |
|---|---|---|
|  XMTD/XMZD |   | Note：with thermocouple meter, 1 connected positive,2connected negative. with thermal resistance meter, 1,2 connected negative, 3 connected positive. |
|  XMTE |   | Note：with thermocouple meter, 1 connected positive,2connected negative. with thermal resistance meter, 1,2 connected negative, 3 connected positive. |
|  XMTG |  | Note：with thermocouple meter, 1 connected positive,2connected negative. with thermal resistance meter, 1,2 connected negative, 3 connected positive. |

## Wiring attention

Thermocouple input, the corresponding compensation wire should be used.
The thermal resistance input, three wires with low resistance and cross-sectional area and the same material length should be used.
The input signal line should be away from the power line load of theinstrument power cord to avoid noise interference.




| | | | | |
|---|---|---|---|---|
| a:neutral | c:total | e:low | g:thermocouple | k:furnace |
| b:phase | d:high | f:thermal resistance | h:alarm output | n:toplimit |

# Pointer type

Temperature controller

## Application

TDA, TDW, TEA, TED, TE, TDB series pointer type temperature controller is the new automatic instrument produced by our company. The temperature controller has feature of small volume, low weight, good-looking appearance, good reliability, anti-shake and anti-interference performance. The temperature controller equipped with thermocouple has cold-junction compensation function.

## Type

TDW- □ □ □ □
TEA
TDA
TED

**Input signal:** 1: thermocouple; 2: thermal resistance

**Alarm mode:** 0: without alarm; 1: with alarm

**Adjustment mode:**

0: two-position adjustment; 3: time proportion adjustment;

6: Single phase phase shift pulse adjustment

**Display and set mode:**

0: deviation indication; 2: rotary knob setting, full range display;

3: dial setting, full range display;

8: rotary knob setting, full scale display (TDA only)

TE- □ □

1: no alarm, thermocouple input; 2: no alarm, thermal resistance input

0: two-position adjustment without indication; 3: time proportion adjustment without indication

## Performance

| | Index |
|---|---|
| Display | Pointer type |
| Input signal | the sensor signal specifies the input |
| Function | Alarm range: alarm point is that the measured signal exceeds the set value of 2-10% (full range) |
| Accuracy | ≤±2.5% |
| | ≤±1.5% |
| Power supply | Transformer supply power: AC220V±10% 50/60Hz |
| Insulation strength | 2KV/50Hz/1min |
| Output | Relay contact capacity AC220V3A |
| | solid-state relay DC 0-12V |
| | Optocoupler silicon controlled 1A/600V |
| Operating condition | Ambient temperature: 0℃-50℃, humidity 45%-85%, without corrosivity and without strong electromagnetic interference. |
| | Altitude: ≤2500m Atmospheric pressure: 80-106kpa |

# Pointer type

Temperature controller

## Dimension and hole size

| Type | Code | Panel size | Meter length | Hole size | Installation distance |
|---|---|---|---|---|---|
| TDW | 1 | 160×80 | 150 | 152 74 | 30mm |
| TEA | 2 | 96×96 | 140 | 92×92 | |
| TDA | 3 | 60×120 | 140 | 55×115 | |
| TED | 4 | 72×72 | 140 | 68×68 | |
| TE | 6 | 48×48 | 140 | 45×45 | |

## Product

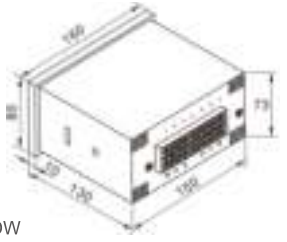
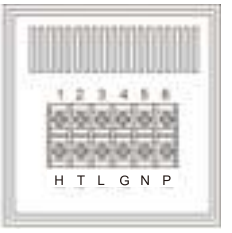
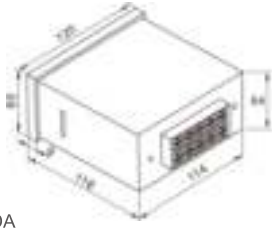
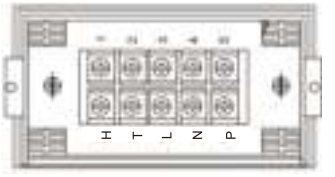
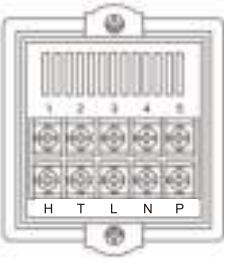
| Type | Product code | Main function | Diagram |
|---|---|---|---|
| TDW | 2001 2002 | Two position adjustment |  |
| | 2301 2302 | Time proportional adjustment | |
| | 2601 2602 | Single phase bidirectional SCR phase shifting output | |
| | 2701 2702 | Single phase bidirectional SCR cross zero output | |
| | 2901 2902 | DC0-10mA; 4-20mA continuous PID output | |
| TEA | 2001 2002 | Two position adjustment |  |
| | 2301 2302 | Time proportional adjustment | |
| | 2601 2602 | Single phase bidirectional SCR phase shifting output | |
| | 2701 2702 | Single phase bidirectional SCR cross zero output | |
| | 2901 2902 | DC0-10mA; 4-20mA continuous PID output | |
| TDA | 8001 8002 | Two position adjustment |  |
| | 8301 8302 | Time proportional adjustment | |
| | 8601 8602 | Single phase bidirectional SCR phase shifting output | |
| | 8701 8702 | Single phase bidirectional SCR cross zero output | |
| | 8901 8902 | DC0-10mA; 4-20mA continuous PID output | |
| TED | 2001 2002 | Two position adjustment |  |
| | 2301 2302 | Time proportional adjustment | |
| | 2601 2602 | Single phase bidirectional SCR phase shifting output | |
| | 2701 2702 | Single phase bidirectional SCR cross zero output | |
| | 2901 2902 | DC0-10mA; 4-20mA continuous PID output | |

# Pointer type

Temperature controller

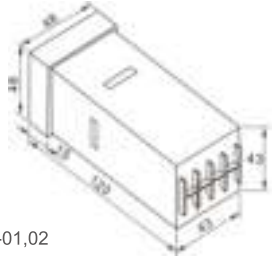
| Type | Product code | Main function | Diagram |
|---|---|---|---|
| TE | 01 02 | Two position adjustment |  |
| | 31 32 | Time proportional adjustment | |

## Appearance and back-end wiring diagram

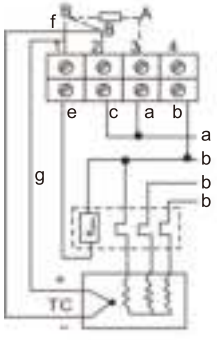
| Appearance | Back-end wiring diagram |
|---|---|
|  TDW |  Note：with thermocouple meter,1 connected positive,2connected negative. with thermal resistance meter,1,2 connected negative, 3 connected positive. |
|  TEA |  Note：with thermocouple meter, 1 connected positive,2connected negative. with thermal resistance meter, 1,2 connected negative, 3 connected positive. |
|  TDA |  Note：with thermocouple meter,1 connected positive,2connected negative. with thermal resistance meter,1,2 connected negative, 3 connected positive. |
|  TEI |  Note：with thermocouple meter, 1 connected positive,2connected negative. with thermal resistance meter, 1,2 connected negative, 3 connected positive. |

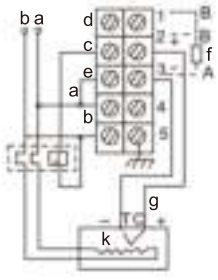
# Pointer type

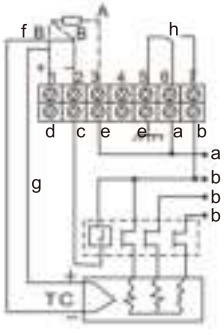
## Temperature controller

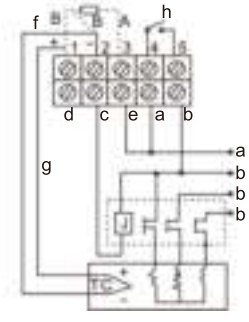
| Appearance | Back-end wiring diagram |
|---|---|
|  TE-01,02 |   Note：with thermocouple meter, 1 connected positive,2connected negative. with thermal resistance meter, 1,2 connected negative, 3 connected positive. |

### Wiring attention



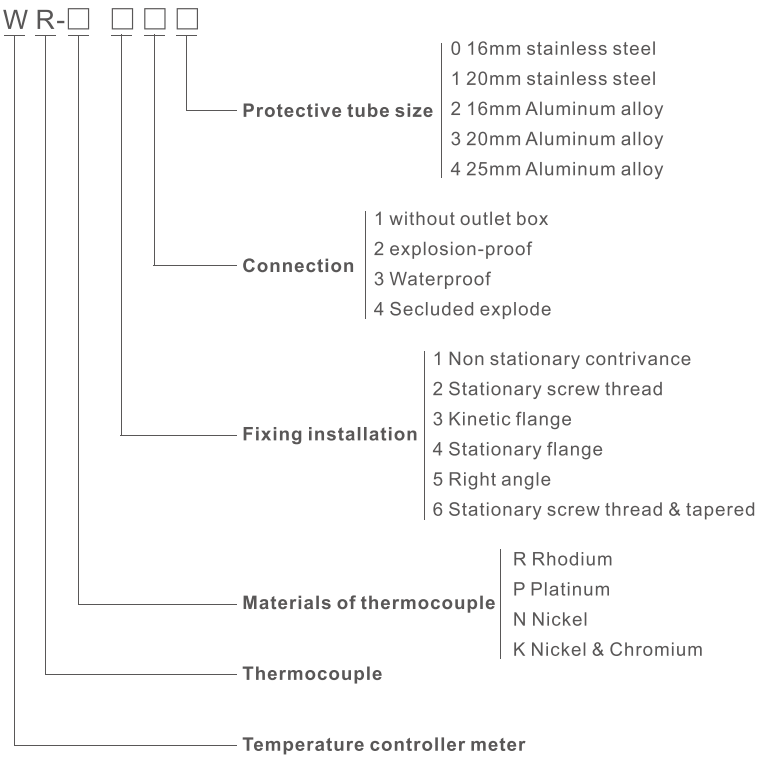



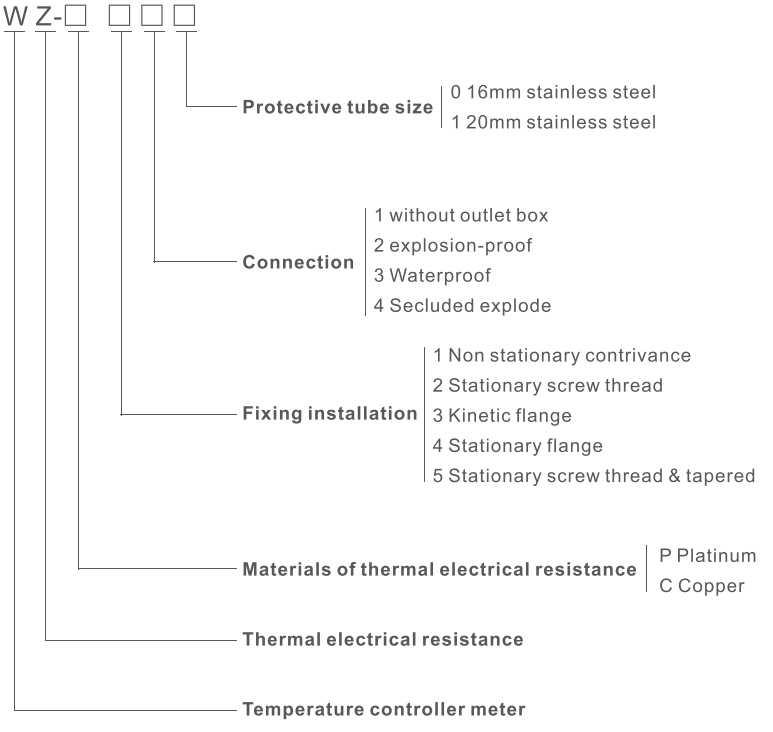

a:neutral
b:phase
c:total
d:high
e:low
f:thermal resistance
g:thermocouple
h:alarm output
k:furnace

# WR/WZ series

Thermocouple series and Thermal Resistance series

## Type illustration



# WR/WZ series

## Thermocouple series and Thermal Resistance series

## Performance

Spring,Mini pin,Probe,thermocouple series

| Name | Type | Calibration | Structure characteristic |
|---|---|---|---|
| Spring | WRKT-01 | E(EA-2) | Fixed screw:M12X1.5 , M10X1.5 , M8X1<br>Head length:30X35 , 60X70 |
| | WRNT-01 | K(Eu-2) | |
| Mini.Pin | WRKX-31 | E(EA-2) | Fixed screw: M6X1 , M8X1 |
| | WRNX-31 | K | |
| Probe | WRKT-13 | E | Fixed Screw:M12X1 , M12X1.5<br>Copper tube:Φ7<br>Stainless steel:Φ6 Φ8 |
| | WRNT-13 | K | |
| | WZCT-13 | Cu50 | |
| | WZPT-13 | Pt100 | |
| Ring | WRKT-04 | E | The diammeter of the ring and the length of<br>the wire according to the customer's requirement |
| | WRNT-04 | K | |

Platinum-rhodium fabricated thermocouple series

| Name | Type | Insulation | Calibration | Protected pipe material | Diameter of pipe | Measure range℃ |
|---|---|---|---|---|---|---|
| Platinum-rhodium10-platinum | WRP-120-130 | No fixed mounting | S(LB-3) | High alumina (ceramic) | Φ16 | 0-1600℃ |
| | WRP-121-131 | | | | Φ25 | |
| | WRP-320-330 | Movable flange mounting | | | Φ16 | |
| | WRP-321-331 | | | | Φ25 | |
| Platinum-rhodium30-platinum6 | WRR-120-130 | No fixed mounting | B(LL-2) | Adamantine | Φ16 | 0-1800℃ |
| | WRR-121-131 | | | | Φ25 | |
| | WRR-320-330 | Movable flange mounting | | | Φ16 | |
| | WRR-321-331 | | | | Φ25 | |

Fabricated thermal resistance series

| Name | Type | Insulation | Calibration | Protected pipe material | Diameter of pipe | Measure range℃ |
|---|---|---|---|---|---|---|
| Nickel hro-miumnikel silicom | WRN-120-130 | No fixed mounting | K(Eu-2) | 1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti | Φ16 | 0-1100℃ |
| | WRN-121-131 | | | | Φ20 | |
| | WRN-122 | | | High alumina | Φ16 | 0-1300℃ |
| | WRN-123 | | | | Φ20 | |
| Nickel chr-omium constantan | WRK-120-130 | | E(EA-2) | 1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti | Φ16 | 0-800℃ |
| | WRK-121-131 | | | | Φ20 | |
| | WRK-122 | | | High alumina | Φ16 | |
| | WRK-123 | | | | Φ20 | |

# WR/WZ series

## Thermocouple series and Thermal Resistance series

Fabricated thermal resistance series

| Name | Type | Insulation | Calibration | Protected pipe material | Diameter of pipe | Measure range°C |
|---|---|---|---|---|---|---|
| Nickel hro-miumnikel silicom | WRN-220-230 | Fixed thread M27X2 G3/4 M33X2 | K(Eu-2) | 1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti | Φ16 | 0-1100°C |
| | WRN-221-231 | | | | Φ20 | |
| Nickel chr-omium constantan | WRK-220-230 | | E(EA-2) | | Φ16 | 0-800°C |
| | WRK-221-231 | | | | Φ20 | |

Fabricated thermal resistance series

| Name | Type | Insulation | Calibration | Protected pipe material | Diameter of pipe | Measure range°C |
|---|---|---|---|---|---|---|
| Nickel hro-miumnikel silicom | WRN-320-330 | Movable flange mounting | K(Eu-2) | 1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti | Φ16 | 0-1100°C |
| | WRN-321-331 | | | | Φ20 | |
| Nickel chr-omium constantan | WRK-320-330 | | E(EA-2) | | Φ16 | 0-800°C |
| | WRK-321-331 | | | | Φ20 | |

Fabricated thermal resistance series

| Name | Type | Insulation | Calibration | Protected pipe material | Diameter of pipe | Measure range°C |
|---|---|---|---|---|---|---|
| Nickel hro-miumnikel silicom | WRN-420-430 | Movable flange mounting | K(Eu-2) | 1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti | Φ16 | 0-1100°C |
| | WRN-421-431 | | | | Φ20 | |
| Nickel chr-omium constantan | WRK-420-430 | | E(EA-2) | | Φ16 | 0-800°C |
| | WRK-421-431 | | | | Φ20 | |

Fabricated thermal resistance series

| Name | Type | Insulation | Calibration | Protected pipe material | Diameter of pipe | Measure range°C |
|---|---|---|---|---|---|---|
| Platinum | WZP-120-130 | No fixed mounting | Pt100 BA1 BA2 Pt10 | 1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti | Φ16 | -200-500°C |
| | WZP-121-131 | | | | Φ12 | |
| Copper resistance | WZC-120-130 | | Cu50 Cu100 G | | Φ16 | -50-150°C |
| | WZC-121-131 | | | | Φ12 | |

Fabricated thermal resistance series

| Name | Type | Insulation | Calibration | Protected pipe material | Diameter of pipe | Measure range°C |
|---|---|---|---|---|---|---|
| Platinum | WZP-220-230 | Fixed thread M27X2 G3/4 G1/2 M33X2 | Pt100 BA1 BA2 Pt10 | 1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti | Φ16 | -200-500°C |
| | WZP-221-231 | | | | Φ12 | |
| Copper resistance | WZC-220-230 | | Cu50 Cu100 G | | Φ16 | -50-150°C |
| | WZC-221-231 | | | | Φ12 | |

# WR/WZ series

## Thermocouple series and Thermal Resistance series

Fabricated thermal resistance series

| Name | Type | Insulation | Calibration | Protected pipe material | Diameter of pipe | Measure range°C |
|---|---|---|---|---|---|---|
| Platinum | WZP-320-330 | Movable flange mounting | Pt100 BA1 BA2 Pt10 | 1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti | Φ16 | -200-500°C |
| | WZP-321-331 | | | | Φ12 | |
| Copper resistance | WZC-320-330 | | Cu50 Cu100 G | | Φ16 | -50-150°C |
| | WZC-321-331 | | | | Φ12 | |

Fabricated thermal resistance series

| Name | Type | Insulation | Calibration | Protected pipe material | Diameter of pipe | Measure range°C |
|---|---|---|---|---|---|---|
| Platinum | WZP-320-330 | Fixed flange | Pt100 BA1 BA2 Pt10 | 1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti | Φ16 | -200-500°C |
| | WZP-321-331 | | | | Φ12 | |
| Copper resistance | WZC-320-330 | | Cu50 Cu100 G | | Φ16 | -50-150°C |
| | WZC-321-331 | | | | Φ12 | |

Components of thermocouple and thermal resistance

| Name | Type | Insulation | Protected pipe material | Diameter of pipe | Measure range°C |
|---|---|---|---|---|---|
| Nickel hromiumnikel silicom | WRN-010 | K(Eu-2) | Slime | Φ8 Φ11 | 0-1100°C |
| Nickel chromium constantan | WRK-010 | E(EA-2) | Slime | Φ8 Φ11 | 0-800°C |

Components of thermocouple and thermal resistance

| Name | Type | Insulation | Protected pipe material | Diameter of pipe | Measure range°C |
|---|---|---|---|---|---|
| Platinum | WZP-010 | Pt100 BA1 BA2 Pt10 | Mica | Φ12 | -200-500°C |
| | | | | Φ8 | |
| | WZP-011 | | | Φ6 | |
| | WZP-012 | | Ceramic, glass metal (two/three lines) | Φ1.6 | -200-300°C |
| | | | | Φ2.2 | |
| | WZP-001 | | | Φ3 | |
| | | | | Φ4 | |
| | WZP-035S | | | Φ5 | |
| | | | | Φ6 | |
| Copper resistance | WZC-010 | Cu50 Cu100 G | Metal | Φ4 | -50-150°C |
| | WZC-001 | | | Φ8 | |

# MSQ series

## Current transformer

MSQ-30B

## Application

This series of CT can be applied to test, control, display and record the running of the electrical equipment, and to protect the equipment against the damage. In the AC circuit with the rated voltage value below 720V and the frequency of 50-60Hz. The product can be also applied to form a complete set of main transformer.
The products comply with VDE 0414,BS7626 and IEC61869-2 standard.

## Technical characteristics of current transformers

With busbar

| Type | Rated Current(A) | Rated Power(VA) | | Weight(kg) |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| MSQ-30B | 5/5 | 5-10 | 5-10 | 0.60 |
| | 10/5 | 5-10 | 5-10 | 0.60 |
| | 15/5 | 5-10 | 5-10 | 0.60 |
| | 20/5 | 5-10 | 5-10 | 0.60 |
| | 25/5 | 5-10 | 5-10 | 0.60 |
| | 30/5 | 5-10 | 5-10 | 0.60 |
| | 40/5 | 5-10 | 5-10 | 0.60 |
| | 50/5 | 5-10 | 5-10 | 0.60 |
| | 60/5 | 5-10 | 5-10 | 0.60 |
| | 75/5 | 5-10 | 5-10 | 0.60 |
| | 80/5 | 5-10 | 5-10 | 0.60 |
| | 100/5 | 5-10 | 5-10 | 0.60 |
| | 120/5 | 5-10 | 5-10 | 0.60 |
| | 125/5 | 5-10 | 5-10 | 0.60 |
| | 150/5 | 5-10 | 5-10 | 0.60 |
| | 200/5 | 5-10 | 5-10 | 0.60 |
| | 250/5 | 5-10 | 5-10 | 0.60 |

MSQ-30T

Windows type

Bar:30×10mm. Conductor: ϕ20mm.

| Type | Rated Current(A) | Rated Power(VA) | | Weight(kg) |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| MSQ-30T | 100/5 | 2.5-5 | 5 | 0.62 |
| | 125/5 | 3-5 | 5-10 | 0.62 |
| | 150/5 | 5-10 | 5-10 | 0.62 |
| | 160/5 | 5-10 | 5-10 | 0.62 |
| | 200/5 | 5-10 | 5-10 | 0.62 |
| | 250/5 | 5-10 | 5-10 | 0.62 |

# MSQ series

## Current transformer

MSQ-30

Windows type　　Bar:30×10mm.　Conductor: ϕ20mm.

| Type | Rated Current(A) | Rated Power(VA) | | Weight(kg) |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| MSQ-30 | 30/5 | – | 1. 0 | 0.4 |
| | 40/5 | – | 1. 0 | 0.4 |
| | 50/5 | – | 1. 0 | 0.4 |
| | 60/5 | – | 1. 0 | 0.4 |
| | 75/5 | 1 | 1.5 | 0.4 |
| | 80/5 | 1.5 | 2.5 | 0.4 |
| | 100/5 | 2.5 | 5. 0 | 0.4 |
| | 150/5 | 5-10 | 5-10 | 0.4 |
| | 200/5 | 5-10 | 5-10 | 0.4 |
| | 250/5 | 5-10 | 5-10 | 0.4 |
| | 300/5 | 5-10 | 5-10 | 0.4 |

MSQ-40

Windows type　　Bar:40×10mm.　Conductor: ϕ30mm.

| Type | Rated Current(A) | Rated Power(VA) | | Weight(kg) |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| MSQ-40 | 100/5 | 2.5 | 2.5 | 0.38 |
| | 150/5 | 3. 0 | 5. 0 | 0.38 |
| | 200/5 | 5. 0 | 5-10 | 0.38 |
| | 250/5 | 5-10 | 5-10 | 0.38 |
| | 300/5 | 5-10 | 5-10 | 0.38 |
| | 400/5 | 5-10 | 5-10 | 0.38 |
| | 500/5 | 5-10 | 5-10 | 0.38 |

MSQ-60

Windows type　　Bar:60×20mm.　Conductor: ϕ40mm.

| Type | Rated Current(A) | Rated Power(VA) | | Weight(kg) |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| MSQ-60 | 250/5 | 5. 0 | 5. 0 | 0.60 |
| | 300/5 | 5. 0 | 5. 0 | 0.60 |
| | 400/5 | 5-10 | 5-10 | 0.60 |
| | 500/5 | 5-10 | 5-15 | 0.60 |
| | 600/5 | 10-15 | 10-15 | 0.60 |
| | 750/5 | 10-15 | 10-15 | 0.60 |
| | 800/5 | 10-15 | 10-15 | 0.60 |
| | 1000/5 | 15. 0 | 15. 0 | 0. 60 |

MSQ-100

Windows type　　Bar:80×30mm.or 100×10mm.　Conductor: ϕ60mm.

| Type | Rated Current(A) | Rated Power(VA) | | Weight(kg) |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| MSQ-100 | 1500/5 | 15 | 15 | 0.80 |
| | 1600/5 | 15 | 15 | 0.80 |
| | 2000/5 | 15 | 15 | 0.94 |
| | 2250/5 | 15 | 15 | 0.98 |
| | 2500/5 | 15 | 15 | 1.10 |
| | 3000/5 | 15 | 15 | 1.16 |

# MSQ series

## Current transformer

MSQ-85

MSQ-125

PX-125

Windows type　　Bar:82×30mm.　Conductor: ϕ80mm.

| Type | Rated Current(A) | Rated Power(VA) | | Weight(kg) |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| MSQ-85 | 750/5 | 15 | 15 | 0.75 |
| | 800/5 | 15 | 15 | 0.82 |
| | 1000/5 | 15 | 15 | 0.89 |
| | 1200/5 | 15 | 15 | 0.99 |
| | 1500/5 | 15 | 15 | 1.02 |

Windows type　　Bar:125×57mm.or 125×10mm.　Conductor: ϕ60mm.

| Type | Rated Current(A) | Rated Power(VA) | | Weight(kg) |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| MSQ-125 | 1500/5 | 15 | 15 | 1.0 |
| | 2000/5 | 15 | 15 | 1.15 |
| | 2500/5 | 15 | 15 | 1.45 |
| | 3000/5 | 15 | 15 | 1.60 |
| | 4000/5 | 15 | 15 | 1.90 |
| | 5000/5 | 15 | 15 | 2.20 |

Windows type　　Bar:125×38mm.　Conductor: ϕ60mm.

| Type | Rated Current(A) | Rated Power(VA) | | Weight(kg) |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| PX-125 | 800/5 | 7.5 | 15 | 1.0 |
| | 1000/5 | 10 | 20 | 1.0 |
| | 1200/5 | 10 | 20 | 1.0 |
| | 1250/5 | 12.5 | 25 | 1.0 |
| | 1500/5 | 15 | 30 | 1.0 |
| | 1600/5 | 15 | 30 | 1.05 |
| | 2000/5 | 15 | 30 | 1.15 |
| | 2250/5 | 15 | 30 | 1.20 |
| | 2500/5 | 15 | 30 | 1.45 |
| | 3000/5 | 15 | 30 | 1.60 |
| | 4000/5 | 15 | 30 | 1.90 |
| | 5000/5 | 15 | 30 | 2.20 |

# MES series

## Current transformer

MES-62/20B

MES-62/20

MES-62/30

MES-62/40

## Application

The MES series of current transformer are convenient for mounting in many ways.The most current transformer need the special mounting and the MES series used the mounting of DIN typing without a lot of times.The protective cover for the terminal block used the switching device with safety and quick.

## Mes guide rail type CT

Primary current: 5A-3000A
Secondary current: 5A,1A
Standard approval:VDE0414,BS7626,IEC61869-2
Maximum voltage: 0.72/3KV
Frequency: 50-60Hz
Rated load:2.5VA,5VA,10VA,15VA
Class:0.5,1.0
Short-time thermal current: Ith=60×1h
Rated security efficient: Fs＜5

## Technical characteristics of current transformers

| Type | Rated Current(A) | Rated Power(VA) | |
|---|---|---|---|
| | | Class 0.5 | Class 1.0 |
| MES-62/20B | 5/5 | 2.5 | 5 |
| | 10/5 | 2.5 | 5 |
| | 15/5 | 2.5 | 5 |
| | 20/5 | 2.5 | 5 |
| | 25/5 | 2.5 | 5 |
| | 30/5 | 2.5 | 5 |
| | 40/5 | 2.5 | 5 |
| | 50/5 | 2.5 | 5 |
| | 60/5 | 2.5 | 5 |
| | 75/5 | 2.5 | 5 |
| | 100/5 | 2.5 | 5 |
| | 150/5 | 2.5 | 5 |
| MES-62/20 | 30/5 | – | 1 |
| | 40/5 | – | 1 |
| | 50/5 | 1. 0 | 2 |
| | 60/5 | 1. 0 | 2 |
| | 75/5 | 1.5 | 3 |
| | 80/5 | 1.5 | 3 |
| | 100/5 | 2. 0 | 3.75 |
| | 150/5 | 2.5 | 5 |
| | 200/5 | 3. 0 | 5 |

# MES series

## Current transformer

MES-80/30

MES-80/40

MES-100/60

MES-145/100

| Type | Rated Current(A) | Rated Power(VA) | |
|---|---|---|---|
| | | Class 0.5 | Class 1.0 |
| MES-62/30 | 30/5 | - | 1 |
| | 40/5 | - | 1 |
| | 50/5 | - | 1 |
| | 60/5 | - | 1.5 |
| | 75/5 | - | 1.5 |
| | 100/5 | 1.5 | 2.5 |
| | 150/5 | 2 | 3 |
| | 200/5 | 2.5 | 5 |
| MES-62/40 | 60/5 | - | 1 |
| | 75/5 | - | 1 |
| | 100/5 | 1 | 2 |
| | 150/5 | 1.5 | 2.5 |
| | 200/5 | 2.5 | 5 |
| | 250/5 | 3 | 5 |
| | 300/5 | 5 | 7.5 |
| MES-80/30 | 30/5 | - | 1 |
| | 50/5 | - | 1 |
| | 60/5 | - | 2 |
| | 75/5 | - | 2.5 |
| | 100/5 | 1.5 | 5 |
| | 150/5 | 2.5 | 5 |
| | 200/5 | 5 | 7.5 |
| MES-80/40 | 100/5 | 1.5 | 2.5 |
| | 150/5 | 2.5 | 5 |
| | 200/5 | 5 | 5 |
| | 250/5 | 5 | 5 |
| | 300/5 | 10 | 15 |
| | 400/5 | 10 | 15 |
| | 500/5 | 10 | 15 |
| MES-100/60 | 600/5 | 15 | 20 |
| | 800/5 | 15 | 20 |
| | 1000/5 | 15 | 20 |
| | 1200/5 | 15 | 20 |
| MES-145/100 | 1000/5 | 15 | 30 |
| | 1200/5 | 15 | 30 |
| | 1500/5 | 15 | 30 |
| | 1600/5 | 15 | 30 |
| | 2000/5 | 15 | 30 |
| | 2500/5 | 15 | 30 |
| | 3000/5 | 15 | 30 |

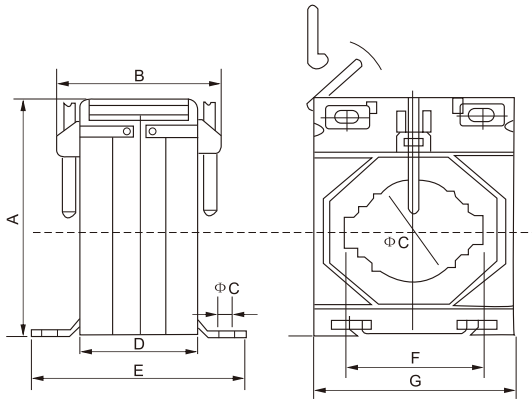
# MES series

Current transformer

## Dimension of case(mm)

| Model | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| MES-62/20B | 81 | 47 | 20B | 35 | 71 | 20B | 62 |
| MES-30/20 | 81 | 47 | 20 | 35 | 71 | 20 | 62 |
| MES-62/30 | 81 | 47 | 30 | 35 | 71 | 31 | 62 |
| MES-62/40 | 81 | 47 | 30 | 35 | 71 | 41 | 62 |
| MES-89/30 | 88 | 52 | 30 | 41 | 77 | 31 | 80 |
| MES-89/40 | 88 | 52 | 30 | 41 | 77 | 41 | 80 |
| MES-100/60 | 117 | 57 | 50 | 184 | 77 | 61 | 101 |
| MES-145/100 | 115 | 53 | 86 | 38 | 74 | 101 | 145 |

## Outline drawing

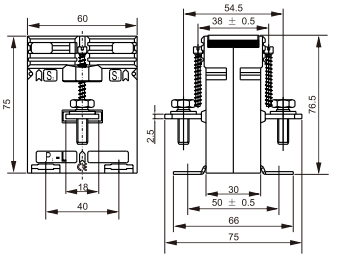


# MBO series

## Current transformer

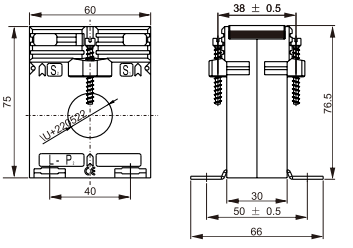
MBO-62/B

| Type | Rated Current(A) | Rated Power(VA) | |
|---|---|---|---|
| | | Class 0.5 | Class 1.0 |
| MBO-62/B | 5/5 | 2.5 | 5 |
| | 10/5 | 2.5 | 5 |
| | 15/5 | 2.5 | 5 |
| | 20/5 | 2.5 | 5 |
| | 25/5 | 2.5 | 5 |
| | 30/5 | 2.5 | 5 |
| | 40/5 | 2.5 | 5 |
| | 50/5 | 2.5 | 5 |
| | 60/5 | 2.5 | 5 |
| | 75/5 | 2.5 | 5 |
| | 100/5 | 2.5 | 5 |
| | 150/5 | 2.5 | 5 |



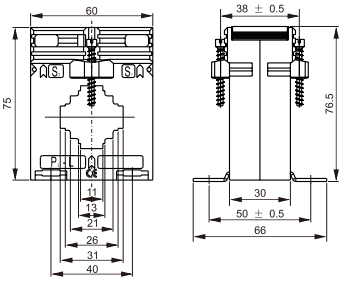

MBO-62/20

| Type | Rated Current(A) | Rated Power(VA) | |
|---|---|---|---|
| | | Class 0.5 | Class 1.0 |
| MBO-62/20 | 30/5 | – | 1 |
| | 40/5 | – | 1 |
| | 50/5 | 1 | 2 |
| | 60/5 | 1 | 2 |
| | 75/5 | 1.5 | 3 |
| | 80/5 | 1.5 | 3 |
| | 100/5 | 2 | 3.75 |
| | 150/5 | 2.5 | 5 |
| | 200/5 | 3 | 5 |



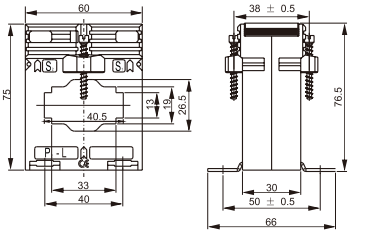

MBO-62/30

| Type | Rated Current(A) | Rated Power(VA) | |
|---|---|---|---|
| | | Class 0.5 | Class 1.0 |
| MBO-62/30 | 30/5 | – | 1 |
| | 40/5 | – | 1 |
| | 50/5 | – | 1 |
| | 60/5 | – | 1.5 |
| | 75/5 | – | 1.5 |
| | 100/5 | 1.5 | 2.5 |
| | 150/5 | 2 | 3 |
| | 200/5 | 2.5 | 5 |




MBO-62/40

| Type | Rated Current(A) | Rated Power(VA) | |
|---|---|---|---|
| | | Class 0.5 | Class 1.0 |
| MBO-62/40 | 60/5 | – | 1 |
| | 75/5 | – | 1 |
| | 100/5 | 1 | 2 |
| | 150/5 | 1.5 | 2.5 |
| | 200/5 | 2.5 | 5 |
| | 250/5 | 3 | 5 |
| | 300/5 | 5 | 7.5 |



# MBO series

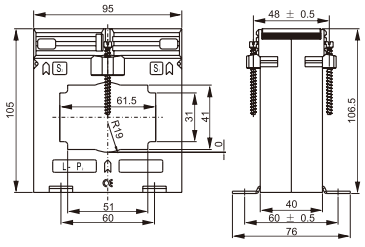
## Current transformer

MBO-60

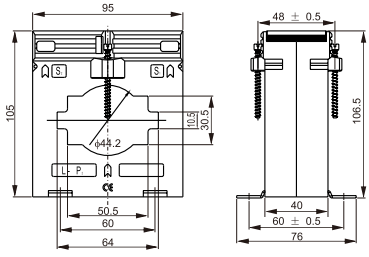
MBO-70

MBO-100

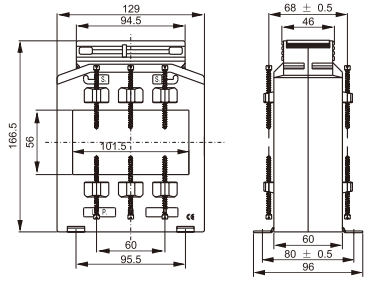
| Type | Rated Current(A) | Rated Power(VA) | |
|---|---|---|---|
| | | Class 0.5 | Class 1.0 |
| MBO-60 | 300/5 | 10 | 15 |
| | 400/5 | 10 | 15 |
| | 500/5 | 10 | 15 |
| | 600/5 | 15 | 20 |
| | 750/5 | 15 | 20 |
| | 800/5 | 15 | 20 |
| | 1000/5 | 20 | 25 |
| | 1200/5 | | 30 |




| Type | Rated Current(A) | Rated Power(VA) | |
|---|---|---|---|
| | | Class 0.5 | Class 1.0 |
| MBO-70 | 400/5 | 10 | 15 |
| | 500/5 | 10 | 15 |
| | 600/5 | 10 | 15 |
| | 750/5 | 15 | 20 |
| | 800/5 | 15 | 20 |
| | 1000/5 | 15 | 20 |
| | 1200/5 | 20 | 25 |
| | 1500/5 | 30 | 30 |
| | 1600/5 | 30 | 40 |
| | 2000/5 | 40 | 40 |
| | | | 50 |




| Type | Rated Current(A) | Rated Power(VA) | |
|---|---|---|---|
| | | Class 0.5 | Class 1.0 |
| MBO-100 | 750/5 | 15 | 20 |
| | 800/5 | 15 | 20 |
| | 1000/5 | 15 | 20 |
| | 1200/5 | 15 | 20 |
| | 1500/5 | 15 | 20 |
| | 1600/5 | 20 | 20 |
| | 2000/5 | 20 | 40 |
| | 2250/5 | 20 | 40 |
| | 2500/5 | 20 | 50 |
| | 3000/5 | | 50 |



# NSQ series

## Current transformer

NSQ-30

NSQ-35

NSQ-40

NSQ-60

NSQ-100

## Application

Primary current: 30A-3000A
Secondary current: 5A,10A
Standard approval: BS7626,IEC61869-2
Maximum voltage: 0.66KV
Frequency: 50-60Hz
Rated load: 2.5VA, 15VA
Class:0.5,1.0,3.0
Short-time thermal current: Ith=60×Ih
Rated security efficient: Fs＜5

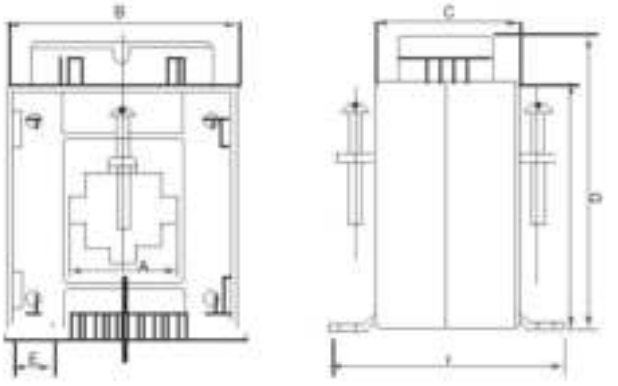
## Technical characteristics of current transformers

| Mode | Primary/ Secondary | Busbar Hole Dimension | Rated Burden(VA) | Class | Rated Voltage | Rated Frequency |
|---|---|---|---|---|---|---|
| NSQ-30 | 30/5A-300/5A | 30×10mm | 2.5-5 | 0.5/1.0 | 0.72 | 50/60Hz |
| NSQ-35 | 50/5A-400/5A | 35×10mm | 5 | 0.5/1.0 | 0.72 | 50/60Hz |
| NSQ-40 | 100/5A-600/5A | 40×10mm | 10 | 0.5/1.0 | 0.72 | 50/60Hz |
| NSQ-60 | 600/5A-1600/5A | 60×10mm | 15 | 0.5/1.0 | 0.72 | 50/60Hz |
| NSQ-100 | 800/5A-3000/5A | 100×10mm | 15 | 0.5/1.0 | 0.72 | 50/60Hz |

## Dimension of case(mm)

| Mode | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| NSQ-30 | 30 | 78 | 46 | 95 | 112 | 70 |
| NSQ-35 | 40 | 70 | 46 | 84 | 100 | 70 |
| NSQ-40 | 45 | 80 | 46 | 87 | 104 | 70 |
| NSQ-60 | 60 | 110 | 53 | 130 | 148 | 80 |
| NSQ-100 | 100 | 155 | 53 | 174 | 191 | 80 |

## Outline drawing



# TP series

## Current transformer

TP-88

TP-812

## Application

The TP series split core current transformer has been specially designed to facilitate their installation in new or already existing net works. They may be installed without opening any cable or bus-bar circuit. The connection of conventional CTs usually requires the interruption of the primary side current to pass cables or bus-bar through the transformer core to connect such cables to the primary terminals.
Standard: IEC61869-2.

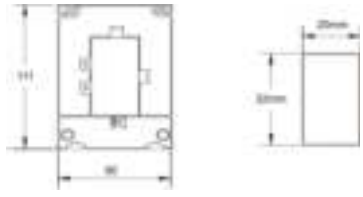
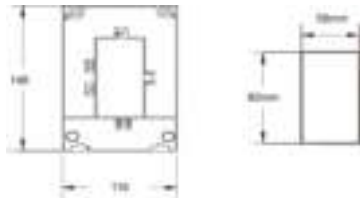
## Feature

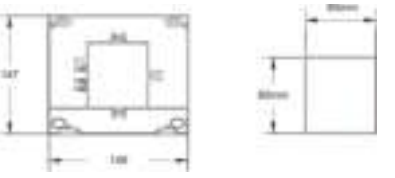
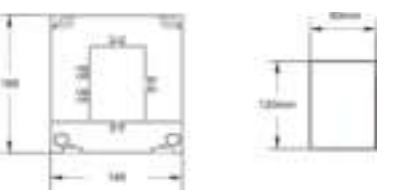
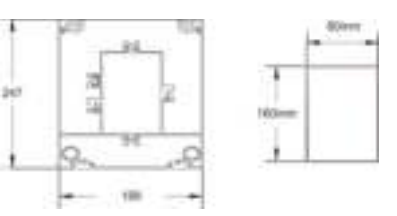
Two built in fixing methods: panel/bus-bar
Very easy to install
Wide inner window, allowing clamping of big cables or bus-bars
Wide range of sizes to accommodate all the existing installation
Primary current from 5A to 5000A

## Specifications

| | |
|---|---|
| Rated Frequency | 50/60Hz |
| Rated Test Voltage | 3Kv AC (1min) |
| Rated short-time thermal current (Ith) | 60In<br>2.5Ith |
| Rated dynamic current (Idyn) | 0.72Kv AC |
| Rated voltage(Um) | 1.2In |
| Continuous overload(Id) | -10°C~65°C |
| Operating temperature | E |
| Housing self-extinguishing class | Fs5 |
| Safety factor | 5A/1A |
| Secondary current | |

## Technical characteristics of current transformers

| Type | Rated Current(A) | Rated Power(VA) | | Outline Drawing |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| TP-23 | 100/5 | – | 1.5 |  |
| | 150/5 | – | 1.5 | |
| | 200/5 | – | 1.5 | |
| | 250/5 | – | 1.5 | |
| | 300/5 | 1.5 | 2.5 | |
| | 400/5 | 2.5 | 3.75 | |
| TP-58 | 250/5 | – | 1.5 |  |
| | 300/5 | 1.5 | 2.5 | |
| | 400/5 | 2.5 | 2.5 | |
| | 500/5 | 2.5 | 5 | |
| | 600/5 | 5 | 5 | |
| | 750/5 | 5 | 5 | |
| | 800/5 | 5 | 5 | |
| | 1000/5 | | 10 | |

| Type | Rated Current(A) | Rated Power(VA) | | Outline Drawing |
|---|---|---|---|---|
| | | Class 0.5 | Class 1.0 | |
| TP-88 | 250/5 | - | 1.5 |  |
| | 300/5 | - | 1.5 | |
| | 400/5 | - | 2.5 | |
| | 500/5 | 1.5 | 2.5 | |
| | 600/5 | 1.5 | 2.5 | |
| | 750/5 | 2.5 | 5 | |
| | 800/5 | 3.75 | 5 | |
| | 1000/5 | 5 | 7.5 | |
| TP-812 | 500/5 | - | 2.5 |  |
| | 600/5 | - | 2.5 | |
| | 750/5 | 2.5 | 5 | |
| | 800/5 | 2.5 | 5 | |
| | 1000/5 | 5 | 10 | |
| | 1200/5 | 5 | 10 | |
| | 1250/5 | 5 | 10 | |
| | 1500/5 | 5 | 10 | |
| TP-816 | 1000/5 | 5 | 10 |  |
| | 1500/5 | 7.5 | 10 | |
| | 2000/5 | 10 | 15 | |
| | 2500/5 | 15 | 20 | |
| | 3000/5 | 20 | 25 | |
| | 4000/5 | 20 | 25 | |
| | 5000/5 | 20 | 25 | |
| | 6000/5 | 20 | 25 | |

# PX1 series

## Current transformer

PX1-20

PX1-30

PX1-40

PX1-20L

PX1-30L

## Application

Model PX1-20,PX1-30,PX1-40 are available for connecting with cable,and also available for connecting with bus bar.

Maximum voltage: 0.66KV
Frequency: 50-60Hz
Class: 1.0
Short-time thermal current: Ith=60×Ih
Mounting methods: either by din rail(35mm)or by screws
Window dimensions: diameter 22mm(PX1-20,PX1-20L)
31×10mm(PX1-30,PX130L)
41×10mm(PX1-40)

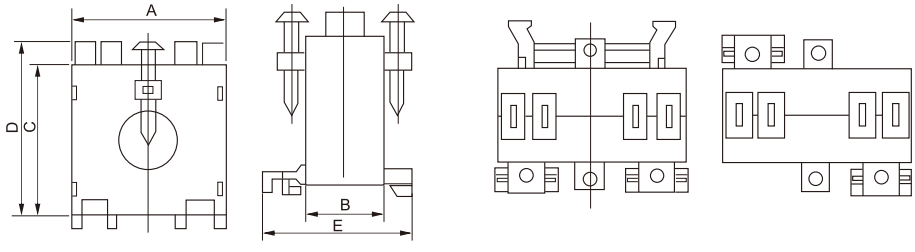
## Technical characteristics of current transformers

| Mode | Primary/Secondary | Busbar Hole Dimension | Rated Burden(VA) | Class | Rated Voltage |
|---|---|---|---|---|---|
| PX1-20 | 50/5A-150/5A | ϕ: 20mm | 1.5-2.5 | 1.0 | 660V |
| PX1-30 | 100/5A-500/5A | 30×10mm | 1.5-2.5 | 1.0 | 660V |
| PX1-40 | 150/5A-1000/5A | 40×10mm | 3-10 | 1.0 | 660V |
| PX1-20L | 50/5A-150/5A | ϕ: 20mm | 1.5-2.5 | 1.0 | 660V |
| PX1-30L | 100/5A-500/5A | 30×10mm | 1.5-.5 | 1.0 | 660V |

## Dimension of case(mm)

| Mode | A | B | C | D | E |
|---|---|---|---|---|---|
| PX1-20 | 53 | 28 | 57 | 66 | 54 |
| PX1-30 | 53 | 28 | 57 | 66 | 54 |
| PX1-40 | 71 | 45 | 73 | 81 | 65 |
| PX1-20L | 53 | 28 | 57 | 66 | 54 |
| PX1-30L | 53 | 28 | 57 | 66 | 54 |

## Outline drawing



# PS series

## Current transformer

PSM-20B

PS-30

PS-60

PS-100

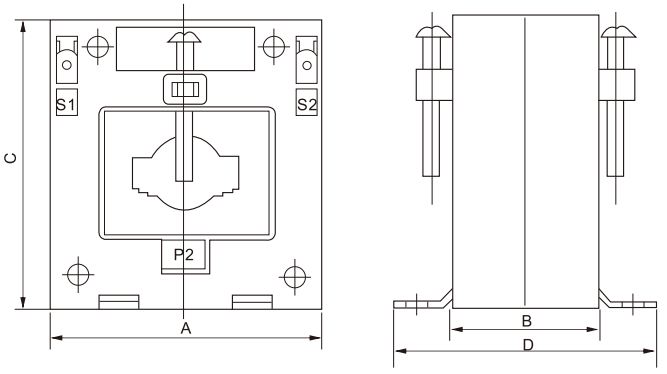
### Technical characteristics of current transformers

| Mode | Primary/ Secondary | Busbar Hole Dimension | Rated Burden(VA) | Class | Rated Voltage | Rated Frequency |
|---|---|---|---|---|---|---|
| PSM-20B | 50/5A-200/5A | - | 1.5-3 | 1.0 | 660V | 50/60Hz |
| PSM-20 | 50/5A-200/5A | 20×10mm | 1.5-3 | 1.0 | 660V | 50/60Hz |
| PSM-30 | 50/5A-200/5A | 20×10mm | 1.5-3 | 1.0 | 660V | 50/60Hz |
| PS-30 | 50/5A-300/5A | 30×10mm | 2.5-5 | 1.0 | 660V | 50/60Hz |
| PS-40 | 150/5A-800/5A | 40×10mm | 5-10 | 1.0 | 660V | 50/60Hz |
| PS-60 | 400/5A-1000/5A | 60×10mm | 10 | 1.0 | 660V | 50/60Hz |
| PS-100 | 800/5A-3000/5A | 100×10mm | 15 | 1.0 | 660V | 50/60Hz |

### Dimension of case(mm)

| Mode | A | B | C | D |
|---|---|---|---|---|
| PS-20A | 56 | 30 | 63 | 80 |
| PS-20 | 56 | 30 | 63 | 50 |
| PS-30 | 56 | 30 | 63 | 50 |
| PS-30 | 79 | 42 | 87 | 66 |
| PS-40 | 79 | 42 | 87 | 66 |
| PS-60 | 103 | 42 | 113 | 66 |
| PS-100 | 151 | 42 | 166 | 69 |

### Outline drawing



# CPS series

## Current transformer

CPS-40

CPS-60

CP8-80

CP8-100

CPS-120

## Application

Primary current: 100A-5000A
Secondary approval: 5A,1A
Standard current: BS7626,IEC61869-2
Maximum voltage: 0.72KV
Frequency: 50-60Hz
Rated load: 2.5VA-60VA
Class: 0.5,1.0,3.0
Short-time thermal current: Ith=100×Ih
Rated security coefficient: Fs＜5
-High fire retardancy and security.
-Wide range of sizes to accommodate all the existing installations.

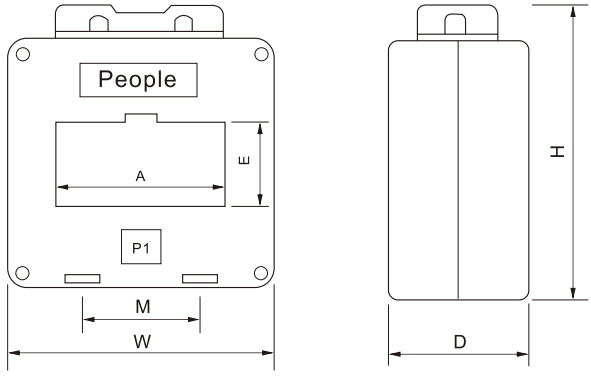
## Specification

| Mode | Primary/secondary(A) |
|---|---|
| CPS-40 | 100/5,150/5,200/5,250/5,300/5,400/5,500/5,600/5A |
| CPS-60 | 300/5,400/5,500/5,600/5,750/5,800/5,1000/5,1200/5A |
| CPS-80 | 500/5,600/5,750/5,800/5,1000/5,1200/5,1500/5,1600/5A |
| CPS-100 | 600/5,750/5,800/5,1000/5,1200/5,1500/5,1600/5,2000/5A,2500/5,3000/5A |
| CPS-120 | 1000/5,1200/5,1500/5,1600/5,2000/5,2500/5,3000/5,4000/5A,5000/5 |

## Dimension of case(mm)

| Mode | Dimensions | | | Busbar hole dimension | | Installation dimension |
|---|---|---|---|---|---|---|
| | W | H | D | A | E | M |
| CPS-40 | 75 | 105 | 45 | 42 | 32 | 45 |
| CPS-60 | 98 | 116 | 45 | 62 | 32 | 42 |
| CPS-80 | 118 | 120 | 45 | 82 | 32 | 60 |
| CPS-100 | 140 | 130 | 49 | 102 | 32 | 80 |
| CPS-120 | 165 | 152 | 49 | 102 | 53 | 80 |

## Outline drawing



# RCT series

## Current transformer

RCT-25

RCT-35

RCT-60

RCT-90

RCT-110

## Application

Primary current: 30A-3000A
Secondary current: 5A,1A
Standard approval: IEC61869-2
Maximum voltage: 0.66KV
Frequency: 50-60Hz
Rated load: 15VA
Class: 1.0
Short-time thermal current: Ith=60×Ih
Rated security efficient: Fs＜5

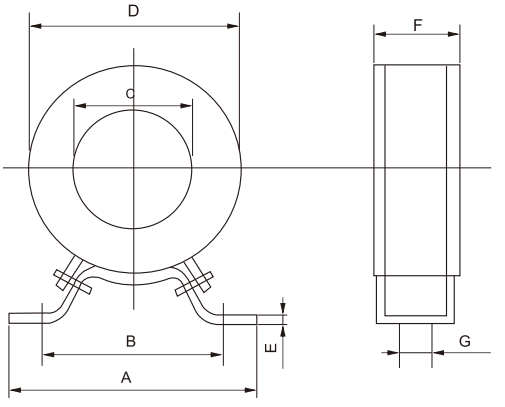
## Specification

| Mode | Primary/secondary(A) |
|---|---|
| RCT-25 | 15/5,200/5,30/5,40/5,50/5,60/5,75/5,100/5A |
| RCT-35 | 30/5,50/5,60/5,80/5,100/5,120/5,150/5,200/5A,250/5,300/5 |
| RCT-60 | 300/5,400/5,500/5,600/5,800/5,1000/5,1200/5 |
| RCT-90 | 800/5,1000/5,1200/5,1500/5,1600/5 |
| RCT-110 | 1000/5,1200/5,1500/5,1600/5,2000/5,2500/5,3000/5 |

## Dimension of case(mm)

| Mode | RCT-25 | RCT-35 | RCT-60 | RCT-90 | RCT-110 |
|---|---|---|---|---|---|
| A | 93 | 93 | 93 | 93 | 102 |
| B | 78 | 78 | 78 | 78 | 86 |
| C | 25 | 25 | 60 | 90 | 111 |
| D | 78 | 78 | 104 | 136 | 157 |
| E | 2 | 2 | 2 | 2 | 2 |
| F | 55 | 55 | 41 | 41 | 52 |
| G | 9 | 9 | 9 | 9 | 9 |

## Outline drawing



# MR series

## Current transformer

## Application

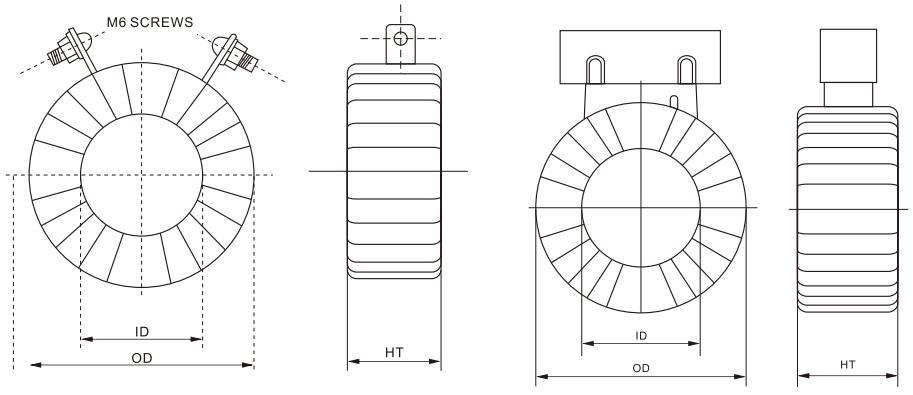
Primary current: 30A-5000A
Secondary current: 5A,1A
Standard approval: IEC61869-2
Maximum voltage: 0.72KV
Frequency: 50-60Hz
Rated load: 5VA-15VA
Class: 1.0,3.0
Short-time thermal current: Ith=60×Ih
Rated security efficient: Fs＜5

## Specification

| Mode | Specification | ID | CD | HT |
|---|---|---|---|---|
| MR-28(L) | 30/5A-60/5A | 28 | 70 | 40 |
| MR-42(L) | 100/5A-250/5A | 42 | 80 | 30 |
| MR-45(L) | 300/5A | 45 | 80 | 30 |
| MR-60(L) | 400/5A | 60 | 100 | 30 |
| MR-60(L) | 500/5A 600/5A | 60 | 100 | 30 |
| MR-85(L) | 800/5A-1600/5A | 85 | 120 | 20 |
| MR-125(L) | 2000/A-5000/5 | 125 | 165 | 20 |

Noted: For measuring current transformers,the accuracy class is designated by the highest permissible percentage current(ratio)error at the rated current prescribed for the accuracy class concerned.

## Outline drawing



# PR series

## Current transformer

## Application

Protective current transformers are required to operate over a range of current many times the circuit rating and is frequently suVacuum circuit breaker
Onboard
17,5KV
50/60hz
I.R. 1250A
ISC 12,5KA
TK 3sbjected to conditions greatly exceeding those which it would be subjected to as a measuring current transformer. When a current transformer is used to energise a protective relay, it must maintain its characteristic ratio up to some multiple of its rated current. This multiple, may be 5, 10,20 or some even higher value and is know as Accuracy Limit Factor (ALF). Therefore,the selection of Protective Current Transformers in relation to accuracy class and ALF require a close examination of relay characteristic and circuit condi-tions which includes the relay burden and the pilot wire lead burden.

## Dimensions(mm)

CI:10P5 15VA

| Spec. | 60/5A | 100/5A | 150/5A | 200/5A | 250/5A | 300/5A | 400/5A | 500/5A | 600/5A |
|---|---|---|---|---|---|---|---|---|---|
| OD | 100 | 100 | 100 | 100 | 96 | 96 | 100 | 100 | 100 |
| ID | 34 | 34 | 34 | 34 | 34 | 34 | 60 | 60 | 65 |
| HT | 148 | 98 | 68 | 58 | 68 | 68 | 68 | 48 | 58 |

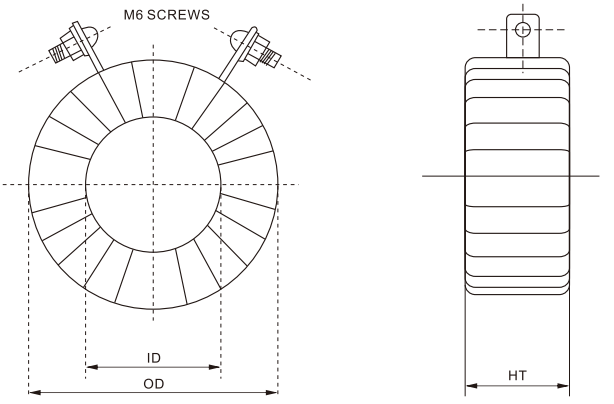
CI:5P10 15VA

| Spec. | 100/5A | 150/5A | 200/5A | 250/5A | 300/5A | 400/5A | 500/5A | 600/5A | 800/5A | 1000/5A | 1200/5A | 1600/5A | 2000/5A | 2500/5A | 3000/5A | 3500/5A | 4000/5A | 5000/5A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OD | 100 | 100 | 100 | 96 | 96 | 96 | 102 | 110 | 120 | 120 | 123 | 123 | 123 | 178 | 178 | 182 | 182 | 184 |
| ID | 34 | 34 | 34 | 45 | 45 | 45 | 62 | 68 | 85 | 85 | 82 | 82 | 125 | 125 | 125 | 120 | 120 | 118 |
| HT | 180 | 130 | 110 | 110 | 110 | 90 | 110 | 88 | 88 | 68 | 68 | 60 | 40 | 40 | 40 | 35 | 35 | 38 |

CI:10P10 15VA

| Spec. | 100/5A | 150/5A | 200/5A | 300/5A | 400/5A | 500/5A | 600/5A | 800/5A | 1000/5A | 1200/5A | 1600/5A | 2000/5A | 2500/5A | 3000/5A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OD | 100 | 100 | 100 | 96 | 96 | 102 | 110 | 120 | 120 | 123 | 123 | 178 | 178 | 178 |
| ID | 34 | 34 | 34 | 45 | 60 | 60 | 70 | 85 | 85 | 82 | 82 | 125 | 125 | 125 |
| HT | 168 | 108 | 88 | 108 | 108 | 88 | 68 | 68 | 58 | 60 | 50 | 38 | 38 | 38 |

## Outline drawing



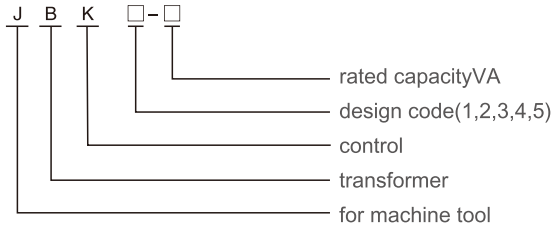
# JBK series

Control transformer

## Application

JBK series machine tool control transformer is applied to circuit of AC50Hz/60Hz, output voltage up to 660V,as control power-supply of kinds of machine tool and mechannical equipments,Power supply for local illumination indicator lamp.
This production conforms to standards of IEC/EN61558.

## Model No.




## Structure

This production has the advantage of stable operation,low consumption,small volume,safe connection,large application.

## Main technical parameter

JBK series control transformer voltage type see Table1

Table1

| specification | first voltage V | secondary voltage V | | |
|---|---|---|---|---|
| | | control | illumination | indicator |
| 40VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 63VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 100VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 160VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 250VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 400VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 630VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 1000VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 1600VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 2000VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |
| 2500VA | 220V或380V | 110(127)(220) | 24(36) (48) (12) | 6 |

## Appearance and install dimension

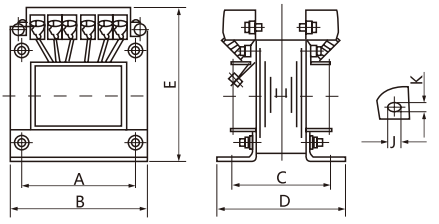



Fig1 JBK1 series production shape and install dimension(see Table2)

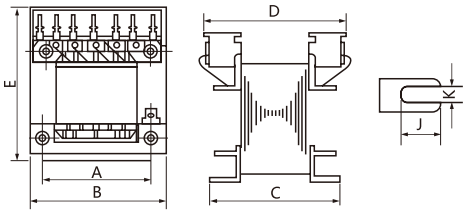



Fig2 JBK2 series production shape and install dimension(see Table3)

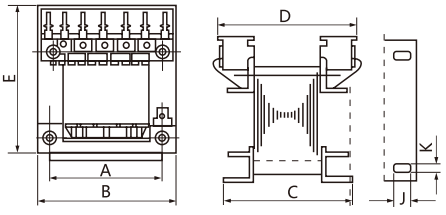



Fig3 JBK3 series production shape and install dimension(see Table4)

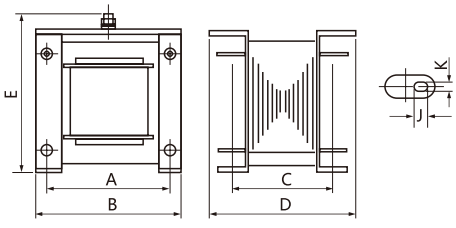



Fig4 JBK4 series production shape and install dimension(see Table5)

JBK1 series production appearance dimension

Table2

| model No. | install dimension mm | | install bore mm | | shape mm | | | notice |
|---|---|---|---|---|---|---|---|---|
| | A | C | K | J | B | D | E | |
| JBK1-40VA | 83 | 55 | 6 | 10 | 96 | 80 | 108 | shape and install dimension for reference only,if any special requirements,please note it in the order. |
| JBK1-63VA | 83 | 55 | 6 | 10 | 96 | 80 | 108 | |
| JBK1-100VA | 83 | 70 | 6 | 10 | 96 | 94 | 108 | |
| JBK1-160VA | 90 | 90 | 7 | 13 | 126 | 130 | 110 | |
| JBK1-250VA | 90 | 114 | 7 | 13 | 126 | 130 | 136 | |
| JBK1-400VA | 110 | 100 | 8 | 14 | 150 | 146 | 126 | |
| JBK1-630VA | 110 | 110 | 8 | 14 | 150 | 176 | 136 | |
| JBK1-1000VA | 130 | 120 | 8 | 14 | 180 | 176 | 146 | |
| JBK1-1600VA | 150 | 140 | 9 | 16 | 196 | 193 | 166 | |
| JBK1-2000VA | 150 | 154 | 9 | 16 | 196 | 233 | 180 | |

JBK2 series production appearance dimension

Table3

| model No. | install dimension mm | | install bore mm | | shape mm | | |
|---|---|---|---|---|---|---|---|
| | A | C | K | J | B | D | E |
| JBK2-40VA | 78 | 65 | 6 | 12 | 90 | 84 | 97 |
| JBK2-63VA | 78 | 65 | 6 | 12 | 90 | 84 | 97 |
| JBK2-100VA | 78 | 78 | 6 | 12 | 90 | 94 | 97 |
| JBK2-160VA | 90 | 78 | 6 | 12 | 108 | 94 | 112 |
| JBK2-250VA | 90 | 88 | 6 | 12 | 108 | 105 | 112 |
| JBK2-400VA | 105 | 84 | 8 | 16 | 136 | 108 | 127 |
| JBK2-630VA | 120 | 95 | 8 | 16 | 144 | 120 | 142 |

JBK3 series production appearance dimension

Table4

| model No. | install dimension mm | | install bore mm | | shape mm | | |
|---|---|---|---|---|---|---|---|
| | A | C | K | J | B | D | E |
| JBK3-40VA | 55 | 50 | 6 | 9 | 80 | 78 | 90 |
| JBK3-63VA | 55 | 50 | 6 | 9 | 80 | 78 | 90 |
| JBK3-100VA | 65 | 65 | 6 | 9 | 87 | 95 | 92 |
| JBK3-160VA | 85 | 76 | 6 | 9 | 96 | 99 | 106 |
| JBK3-250VA | 85 | 90 | 6 | 9 | 100 | 106 | 102 |
| JBK3-400VA | 102 | 85 | 8 | 14 | 125 | 108 | 126 |
| JBK3-630VA | 130 | 82 | 8 | 14 | 155 | 107 | 145 |
| JBK3-1000VA | 155 | 125 | Φ8 | Φ8 | 205 | 155 | 155 |
| JBK3-1600VA | 185 | 157 | Φ8 | Φ8 | 220 | 180 | 150 |
| JBK3-2500VA | 174 | 200 | 7 | 12 | 210 | 265 | 175 |

JBK4 series production appearance dimension

Table5

| model No. | install dimension mm | | install bore mm | | shape mm | | |
|---|---|---|---|---|---|---|---|
| | A | C | K | J | B | D | E |
| JBK4-40VA | 55 | 50 | 6 | 9 | 78 | 80 | 92 |
| JBK4-63VA | 55 | 50 | 6 | 9 | 78 | 80 | 92 |
| JBK4-100VA | 65 | 65 | 6 | 9 | 84 | 96 | 95 |
| JBK4-160VA | 85 | 71 | 6 | 9 | 96 | 100 | 110 |
| JBK4-250VA | 85 | 82 | 6 | 9 | 96 | 112 | 110 |
| JBK4-400VA | 102 | 86 | 8 | 14 | 12 | 106 | 128 |
| JBK4-630VA | 110 | 110 | 8 | 14 | 150 | 104 | 150 |

JBK5 series production appearance dimension

Table6

| model No. | install dimension mm | | shape mm | | | weight kg |
|---|---|---|---|---|---|---|
| | A | C | B | D | E | |
| 40VA | 56 | 46 | 78 | 72 | 90 | 1.09 |
| 63VA | 56 | 46 | 78 | 72 | 90 | 1.18 |
| 100VA | 64 | 62 | 84 | 92 | 96 | 1.98 |
| 160VA | 84 | 73 | 96 | 92 | 106 | 2.55 |
| 200VA | 84 | 85 | 96 | 108 | 106 | 3.15 |
| 250VA | 84 | 85 | 96 | 108 | 106 | 3.44 |
| 300VA | 93 | 84 | 120 | 95 | 122 | 4.76 |
| 400VA | 93 | 84 | 120 | 100 | 122 | 5 |
| 500VA | 93 | 99 | 120 | 115 | 122 | 6.8 |
| 630VA | 125 | 92 | 150 | 115 | 155 | 8.16 |
| 800VA | 125 | 105 | 150 | 130 | 155 | 9.08 |
| 1000VA | 140 | 158 | 160 | 195 | 145 | 11.25 |
| 1600VA | 155 | 180 | 184 | 225 | 145 | 13.6 |
| 2500VA | 165 | 210 | 200 | 250 | 171 | 22.35 |

## Product overview

RDBK series control transformer (hereafter called as “transformer”) is manufactured using internationally advanced design and production techniques. It delivers excellent performance, reliable operation, and broad applicability, making it well-suited for using in machine tool control systems, local lighting, and indicator light power supplier.
This series of transformers is designed for AC 50/60Hz circuit with voltage up to 1000V and can operate continuously under rated load for extended periods. The product conforms to the IEC/EN61558 standard.

## Selection guide

| RDBK | 25 |
|---|---|
| Model | Capacity |
| Control transformer | 25 : 25VA<br>...<br>5000 : 5000VA |

## Normal operating an d inst allation conditions

- Altitude not exceeding 2000m
- Ambient air temperature: Maximum temperature does not exceed +40°C, minimum temperature not below -5°C.
- Relative humidity: The average maximum humidity in a month is 90%, and the average maximum temperature should not exceed 35°C within 24 hours
- The installation place should not have severe vibration and impact
- In a memium without explosion hazard, and without gases or conductive dust that can corrode metals and damage insulation
- The place protected from rain and snow
- The power supply voltage waveform is close to a sine wave

## Transformer structure

The coils of this series transformer can bear the full ra ted capacity when thereis only one winding on the primary and secondary sides.If there are multiplewindings,the capacity should be allocated according to the capacitythat eachwinding can bear. However, the sumof the capacities of the various windingsshall not exceed the total capacity, see Figures 1, 2, 3 an d 4.

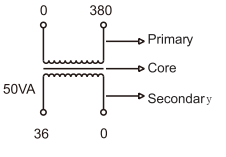


Figure 1 Single wi nding

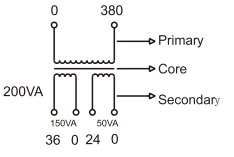


Figure 2 Separate windings

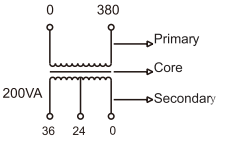


Figure 3 Hybrid winding

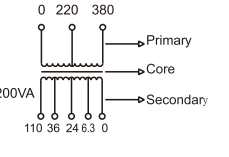


Figure 4 Conti nuous intermediate tapped winding

## Outline dimensions and installati on dimension

| Capacity(VA) | Overall dimensions L×W×H(mm ) | Installation dimensions L×W(mm) |
|---|---|---|
| 25 | 78 × 72 × 89 | 56 × 54 |
| 50 | 78 × 72 × 89 | 56 × 54 |
| 100 | 95 × 95 × 100 | 85 × 70 |
| 150 | 102 × 100 × 98 | 77 × 80 |
| 200 | 102 × 107 × 110 | 77 × 83 |
| 250 | 114 × 115 × 112 | 90 × 88 |
| 300 | 114 × 120 × 112 | 90 × 92 |
| 400 | 120 × 125 × 120 | 90 × 95 |
| 500 | 132 × 129 × 150 | 100 × 92 |
| 700 | 150 × 150 × 175 | 120 × 115 |
| 1000 | 150 × 160 × 175 | 120 × 120 |
| 1500 | 181 × 215 × 185 | 145 × 135 |
| 2000 | 200 × 220 × 200 | 150 × 160 |
| 2500 | 225 × 240 × 225 | 169 × 175 |
| 3000 | 225 × 240 × 225 | 169 × 175 |
| 5000 | 283 × 265 × 270 | 215 × 180 |

Note : The outline dimensions and installation dimension of specially customized transformers should be subject to the actual product.

# BSMJ(Y)/BZMJ

Series Self-healing Shunt Capacitor

## Application

BSMJ(Y),BCMJ(Y) series self-healing low-voltage shunt capacitor,is applicable for AC power system of voltage up to 1000V, is used for improving lowvoltage network power factor and voltage quality and decreasing reactive power consumption.
This production conforms to the Standard of IEC60831-1996.

## Model No.

B S MJ(Y) 0.4-15-3 YN

- Three Phases Y connection, (Non for delta connection)
- Phase
- Rated capacity kVAR
- Rated voltage kV
- Cylindrical
- Metallized polypropylene
- C- Salad oil impregnated,Z-Mineral oil impregnated, G-Silicone oil S-olefin impregnated,K-Resin impregnated
- Shunt power capacitor

## Characteristic

3.1 Characteristic
3.1.1 Small volume,realiable quality
3.1.2 Applicable for the high temperature and large system voltage wave location
3.1.3 Good sealing.
3.1.4 Firm,conveninet installation
3.1.5 convenient connecting terminal.
3.1.6 Anti-corrosion metal shell
3.2 Notice
3.2.1 Overvoltage and overheating would shorten life of capacitor.
3.2.2 The following situation should be attention,when install shunt capacitor in the system.
a it can not install shunt capacitor directly under serious harmonic. (anti-harmonic reactor need to install)
b when transformer does no-load running,capacitor should quit operating.
3.2.3 capacitor connecting to circuit needs to delay 3mins and above. Only after breaking power-supply and discharging by short-circuit,it can be touched and measured.
3.2.4 MCB should be choosen according to 2-3 times of capacitor rated current.

# CAPACITOR

Table1

| rated voltage | 250VAC、400VAC、450VAC、<br>525VAC、690VAC、750VAC |
|---|---|
| rated capacity | 1-50kVAR |
| error | 0～+10% |
| low dissipation factor | lower than 0.10% |
| junction withstand voltage | 1.75Vn10s junction shell 3kVA10s |
| insulation | junction shell 500VDC 1 min bigger than 100M |
| Max overload voltage | 110%of rated voltage |
| Max overload current | 130%of rated current |
| self-discharge feature | 1min after poweroff,residual voltage decreases to 50V and below |

Table2

| specification | rated voltage(kV) | nominal capacity(Kvar) | Total capacity(uF) | Rated current(A) | Shape and High(mm) |
|---|---|---|---|---|---|
| BSMJ0.4-3-3 | 0.4(50HZ) | 3 | 59 | 4.3 | A type H=115 |
| BSMJ0.4-5-3 | | 5 | 99 | 7.2 | |
| BSMJ0.4-7.5-3 | | 7.5 | 149 | 10.8 | A type H=135 |
| BSMJ0.4-8-3 | | 8 | 158 | 11.5 | |
| BSMJ0.4-10-3 | | 10 | 198 | 14.4 | A type H=175 |
| BSMJ0.4-12-3 | | 12 | 238 | 17.3 | |
| BSMJ0.4-14-3 | | 14 | 278 | 20.2 | A type H=215 |
| BSMJ0.4-15-3 | | 15 | 298 | 21.7 | |
| BSMJ0.4-16-3 | | 16 | 318 | 23.1 | |
| BSMJ0.4-18-3 | | 18 | 358 | 26.0 | A type H=245 |
| BSMJ0.4-20-3 | | 20 | 398 | 28.9 | |
| BSMJ0.4-25-3 | | 25 | 498 | 36 | B type H=215 |
| BSMJ0.4-30-3 | | 30 | 597 | 43.3 | B type H=245 |
| BSMJ0.4-40-3 | | 40 | 796 | 57.7 | B type H=300 |
| BSMJ0.4-50-3 | | 50 | 995 | 72.2 | C type H-230 |

Table3

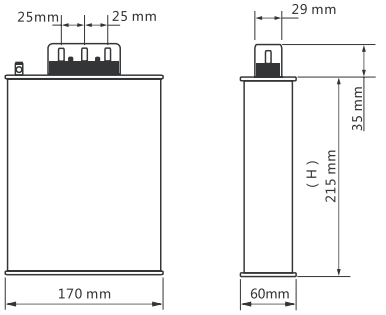
| specification | rated voltage(kV) | nominal capacity(Kvar) | Total capacity(uF) | Rated current(A) | Shape and High(mm) |
|---|---|---|---|---|---|
| BSMJ0.45-3-3 | 0.45(50HZ) | 3 | 47 | 3.8 | A type H=115 |
| BSMJ0.45-5-3 | | 5 | 78 | 6.4 | |
| BSMJ0.45-7.5-3 | | 7.5 | 118 | 9.6 | A type H=135 |
| BSMJ0.45-8-3 | | 8 | 126 | 10.3 | |
| BSMJ0.45-10-3 | | 10 | 157 | 12.8 | A type H=175 |
| BSMJ0.45-12-3 | | 12 | 188 | 15.4 | |
| BSMJ0.45-14-3 | | 14 | 220 | 18 | A type H=215 |
| BSMJ0.45-15-3 | | 15 | 236 | 19.2 | |
| BSMJ0.45-16-3 | | 16 | 251 | 20.5 | |

Table3

| specification | rated voltage(kV) | nominal capacity(Kvar) | Total capacity(uF) | Rated current(A) | Shape and High(mm) |
|---|---|---|---|---|---|
| BSMJ0.45-18-3 | | 18 | 283 | 23 | A type H=245 |
| BSMJ0.45-20-3 | | 20 | 314 | 25.7 | |
| BSMJ0.45-25-3 | | 25 | 393 | 32 | B type H=215 |
| BSMJ0.45-30-3 | | 30 | 471 | 38.5 | B type H=245 |
| BSMJ0.45-40-3 | | 40 | 629 | 51.3 | B type H=300 |
| BSMJ0.45-50-3 | | 50 | 786 | 64.2 | C type H=230 |

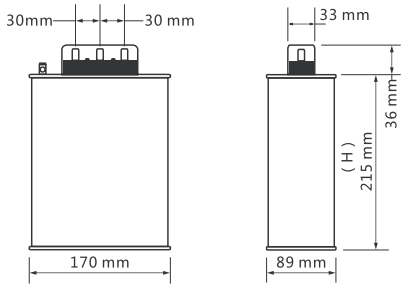
## Overall and mounting dimension

A Type



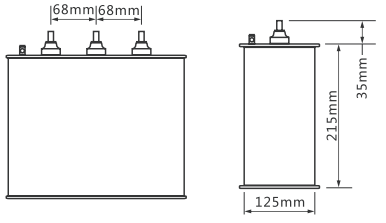

1-6(kvar) H=115mm
7.5-8(kvar) H=135mm
10-12(kvar) H=175mm
14-16(kvar) H=215mm
18-20(kvar) H=245mm

B Type



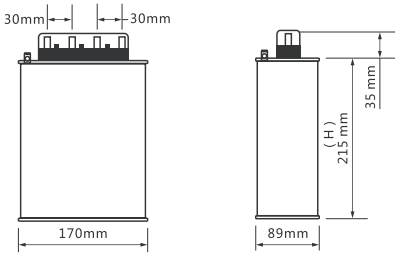

22-25(kvar) H=215mm
30(kvar) H=245mm
40(kvar) H=300mm

C Type



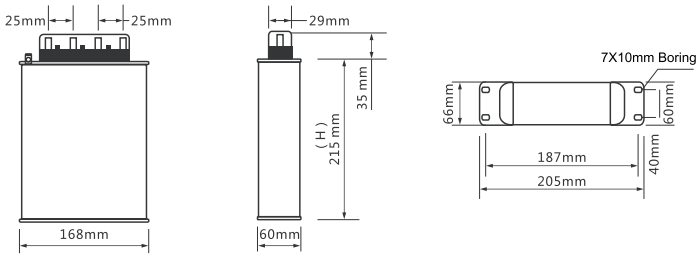

BSMJ0.4-50-3

D Type



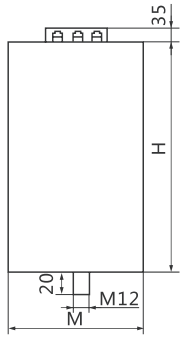

BSMJ0.23-X-3YN
X=12(kvar) H=160mm
X=15, 18(kvar) H=215mm
X=21(kvar) H=245mm
X=24(kvar) H=300mm

E Type




BSMJ0.23-X-3YN
X=3,6(kvar) H=135mm
X=9(kvar) H=215mm

BSMJ(Y)、BZMJ(Y)




| Model No. BSMJ(Y),BZMJ(J) | shell radius M(mm) | shell high H(mm) |
|---|---|---|
| 0.4-10-3 | 76 | 240 |
| 0.4-12.5-3 | 76 | 240 |
| 0.4-14-3 | 86 | 240 |
| 0.4-15-3 | 86 | 240 |
| 0.4-16-3 | 86 | 240 |
| 0.4-18-3 | 96 | 240 |
| 0.4-20-3 | 96 | 240 |
| 0.4-25-3 | 116 | 280 |
| 0.4-30-3 | 116 | 280 |
| 0.45-10-3 | 76 | 240 |
| 0.45-12.5-3 | 76 | 240 |
| 0.45-14-3 | 86 | 240 |
| 0.45-15-3 | 86 | 240 |
| 0.45-16-3 | 86 | 240 |
| 0.45-18-3 | 96 | 240 |
|  | 96 | 240 |
|  | 106 | 240 |
|  | 116 | 280 |

# Motor Run

## Capacitor

### Application

Motor run capacitor has features of small size, light weight and small tangent in waste angle. Applicable to start and operate with 50/60Hz A.C single motor, the items are specially suitable for micro pump, baric pump, micro motor and all kinds of domestic electric appliance.

### Specifications

| Rated voltage | Nominal Capacity(μf) |
|---|---|
| AC250V | 4,5,6,8,10,12,14,16,18,20,22,25,30,31.5,35,40,45,50,60,70,80,85,90,95,100 |
| AC450V | |

| | |
|---|---|
| Ambient Temperature | -40~+70°C |
| Rated Voltage | 250V AC 400V AC |
| Test Voltage | T-T:1.5Un T: 10S T-C:2000V AC T:10 |
| Capacitance Tolerance | ±5% ±10% |
| Insulation Resistance | T-T≥3000MΩ μF T-C≥100MΩ |
| Dissipation Factor | tgδ ≤0.004(50Hz) |
| Standard | SJ2600.1-85 |

# CBB series

## Capacitor

### Description

Brand of CBB60 and CBB65 self-healing type AC capacitors, Which made of the advanced metallized film, are widely applied to household electric appliances such as fan, washing machine, refrigerator, air conditioner, oil vapor exhausting machine, etc. Each technic target of the device complies with GB/T3667-93 Standard.

### Specifications

| Voltage | | Capacitance(μf) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dimension | | 4.7 | 5 | 6 | 8 | 8.5 | 9 | 10 | 12 | 15 | 16 | 20 | 25 | 30 | 40 | 50 | 60 |
| 230~300VAC | D | 30 | | | 34 | | | 42 | | | | | 50 | | 60 | | |
| | H | 60 | | | | | | 80 | | | | | 100 | | 120 | | |
| | A | 11 | | | 12 | | | 15 | | | | | 18 | | | | |
| 350~500VAC | D | 42 | | | | | | 50 | | | | | 60 | | | | |
| | H | 80 | | | | | | 100 | | | | | 150 | | | | |
| | A | 12(15) | | | 15(18) | | | 18 | | | | | | | | | |

# S,D,T,Q series

## Switching Power Supplies

- Utilizes im ported components to ensure high reliability
- Features a built-in EMI filter for excellent anti-interference performance.
- Offers low DCoutput ripple and high efficiency
- Incorporates a soft start circuit to limit ACinrush current.
- Provides excellent heat dissipation, resulting in low operating temperatures and a long service life.
- Wide input voltage range complies with global usage standards.
- Exhibits high insulation performance and dielectric strength.
- Includes comprehensive protection against short-circuits, overloads, and overvoltage
- Undergoes 100% full-oad burn in testing at high temperature.

Main technicaldata

Technical data of S-15W

| | |
|---|---|
| External dmensions | 99x97x35mm |
| Input voltage range | 85-264VAC,47-63Hz;120~370VDC |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 300ms, 50ms,80ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | Five 9.5mm terminal blocks |
| Weight/Package | 0.39kg,45 pieces percarton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-15-5 | 5V 0~3.0A | ±2% | 50mV | 65% |
| S-15-12 | 12V 0~1.3A | ±1% | 50mV | 68% |
| S-15-24 | 24V 0~0.7A | ±1% | 100mV | 72% |

Technical data of S-25W

| | |
|---|---|
| External dmensions | 99x97x35mm |
| Input voltage range | 85-264VAC,47-63Hz;120~370VDC |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 300ms, 50ms,80ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | Five 9.5mm terminal blocks |
| Weight/Package | 0.39kg,45 pieces percarton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-25-5 | 5V 0~3.0A | ±2% | 50mV | 72% |
| S-25-12 | 12V 0~1.3A | ±1% | 50mV | 76% |
| S-15-24 | 24V 0~0.7A | ±1% | 100mV | 80% |

Technical data of S-35W

| | |
|---|---|
| External dmensions | 129x98x38mm |
| Input voltage range | 85-132VAC,47-63Hz;170~264VDC |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms, 100ms,30ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | Five 9.5mm terminal blocks |
| Weight/Package | 0.41kg,45 pieces per carton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-35-5 | 5V 0~7.0A | ±2% | 75mV | 70% |
| S-15-12 | 12V 0~2.4A | ±1% | 100mV | 78% |
| S-35-24 | 24V 0~1.5A | ±1% | 100mV | 78% |

Technical data of S-50W

| | |
|---|---|
| External dmensions | 159x98x38mm |
| Input voltage range | 85-132VAC,47-63Hz;170~264VDC |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms, 100ms,30ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | Five 9.5mm terminal blocks |
| Weight/Package | 0.39kg,45 pieces percarton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-25-5 | 5V 0~10A | ±2% | 75mV | 71% |
| S-25-12 | 12V 0~4.2A | ±1% | 100mV | 78% |
| S-15-24 | 24V 0~2.1A | ±1% | 100mV | 82% |

Technical data of S-60W

| | |
|---|---|
| External dmensions | 159x98x38mm |
| Input voltage range | 85-264VAC,47-63Hz;120~370VDC |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 300ms, 60ms,80ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |

# SWITCHING POWER SUPPLY

| | |
|---|---|
| EMC standards | Complies with CE standards |
| Connection method | Five 9.5mm terminal blocks |
| Weight/Package | 0.51kg,30 pieces percarton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-60-5 | 5V 0~12A | ±2% | 120mV | 73% |
| S-60-12 | 12V 0~5A | ±1% | 150mV | 76% |
| S-60-24 | 24V 0~2.5A | ±1% | 150mV | 79% |

Technical data of S-75W

| | |
|---|---|
| External dmensions | 159x98x38mm |
| Input voltage range | 85~132VAC/180~264VAC switch selection 47~63Hz;255-370VDC |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms, 100ms,30ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | Five 9.5mm terminal blocks |
| Weight/Package | 0.52kg,30 pieces per carton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-75-5 | 5V 0~15A | ±2% | 80mV | 72% |
| S-75-12 | 12V 0~6.3A | ±1% | 80mV | 77% |
| S-75-24 | 24V 0~3.2A | ±1% | 100mV | 80% |

Technical data of S-100W

| | |
|---|---|
| External dmensions | 199x98x38mm |
| Input voltage range | 85~132VAC/180~264VAC switch selection 47 63Hz;255-370VDC |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms, 100ms,30ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | Seven 9.5mm terminal blocks |
| Weight/Package | 0.62kg,30 pieces percarton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-100-5 | 5V 0~20A | ±2% | 75mV | 71% |
| S-100-12 | 12V 0~8.5A | ±1% | 100mV | 81% |
| S-100-24 | 24V 0~4.5A | ±1% | 100mV | 84% |
| S-100-48 | 48V 0~2A | ±1% | 100mV | 84% |

Technical data of S-145W

| | |
|---|---|
| External dmensions | 199x98x38mm |
| Input voltage range | 85~132VAC/180~264VAC;47-63Hz; Switch selection |
| Surge current | Cold start current:15A/110V,30A/230V |

| | |
|---|---|
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms, 100ms,30ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | Seven 9.5mm terminal blocks |
| Weight/Package | 0.7kg,30 pieces per carton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-145-5 | 5V 0~20A | ±2% | 120mV | 78% |
| S-145-12 | 12V 0~8.5A | ±1% | 150mV | 81% |
| S-145-24 | 24V 0~6A | ±1% | 150mV | 84% |

Technical data of S-75W

| | |
|---|---|
| External dmensions | 199x110x50mm |
| Input voltage range | 88~132VAC/176~264VAC；47~63Hz;255-370VDC |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 100ms,50ms,20ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | Seven 9.5mm terminal blocks |
| Weight/Package | 0.8kg,20 pieces per carton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-150-5 | 5V 0~15A | ±2% | 150mV | 78% |
| S-150-12 | 12V 0~6.3A | ±1% | 180mV | 82% |
| S-150-24 | 24V 0~3.2A | ±1% | 240mV | 85% |

Technical data of S-200W

| | |
|---|---|
| External dmensions | 199x110x50mm |
| Input voltage range | 90~132VAC/180~264VAC；47~63Hz;Switch selection |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms,50ms,20ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | Seven 9.5mm terminal blocks |
| Weight/Package | 0.8kg,20 pieces per carton |

# SWITCHING POWER SUPPLY

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-200-5 | 5V 0~40A | ±2% | 100mV | 71% |
| S-20012 | 12V 0~16.7 | ±1% | 100mV | 79% |
| S-200-24 | 24V 0~8.4A | ±1% | 150mV | 83% |

Technical data of S-201W

| | |
|---|---|
| External dmensions | 215x115x50mm |
| Input voltage range | 90~132VAC/180~264VAC;47~63Hz; Switch selection |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms, 100ms,30ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | 9 terminals of 9.5mm connection point |
| Weight/Package | 0.92kg,20 pieces per carton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-201-5 | 5V 0~40A | ±2% | 150mV | 74% |
| S-201-12 | 12V 0~16.5A | ±1% | 150mV | 79% |
| S-201-24 | 24V 0~8.4A | ±1% | 100mV | 81% |

Technical data of S-240W

| | |
|---|---|
| External dmensions | 215x115x50mm |
| Input voltage range | 90~132VAC/180~264VAC;47~63Hz; Switch selection |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms, 100ms,30ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | 9 terminals of 9.5mm connection point |
| Weight/Package | 1.1kg,20 pieces per carton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-201-5 | 5V 0~48A | ±2% | 150mV | 74% |
| S-201-12 | 12V 0~18A | ±1% | 150mV | 79% |
| S-201-24 | 24V 0~10A | ±1% | 100mV | 81% |

Technical data of S-240W

| | |
|---|---|
| External dmensions | 215x115x50mm |
| Input voltage range | 88~132VAC/176~264VAC;47~63Hz; Switch selection |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms, 100ms,30ms |

| | |
|---|---|
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | 9 terminals of 9.5mm connection point |
| Weight/Package | 1.1kg,20 pieces per carton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-250-5 | 5V 0~50A | ±2% | 150mV | 74% |
| S-250-12 | 12V 0~20.8A | ±1% | 150mV | 82% |
| S-250-24 | 24V 0~10.4A | ±1% | 180mV | 84% |

Technical data of S-320W

| | |
|---|---|
| External dmensions | 215x115x50mm |
| Input voltage range | 90~132VAC/176~264VAC；47~63Hz;255-370VDC |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms,100ms,30ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | 9 terminals of 9.5mm connection point |
| Weight/Package | 1.1kg,20 pieces per carton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-320-5 | 5V 0~15A | ±2% | 150mV | 79% |
| S-320-12 | 12V 0~6.3A | ±1% | 150mV | 86% |
| S-320-24 | 24V 0~3.2A | ±1% | 150mV | 87% |

Technical data of S-200W

| | |
|---|---|
| External dmensions | 215x110x50mm |
| Input voltage range | 90~132VAC/176~264VAC；47~63Hz;Switch selection |
| Surge current | Cold start current:15A/110V,30A/230V |
| Adjstab le range of DC voltage | 10% of the rated output voltage |
| Overload protection | 105% to 150% of the cut-off current, au tom atic recovery |
| Overvoltage protection | 115% to 135% of the output voltage |
| Start-up,ascent, holding time | 200ms,50ms,20ms |
| Pressure resistance | Between input and out put;between input and the encbsure:1.5 kV AC; between output and the encbsur:0.5 kV AC for 1 minute. |
| Working temperature and humidity | -10°C to +60°C,20% to 90% RH |
| Safety standards | Complies with CE standards |
| EMC standards | Complies with CE standards |
| Connection method | 9 terminals of 9.5mm connection point |
| Weight/Package | 1.1kg,20 pieces per carton |

| Model number | Output | Difference | Scope | Efficiency |
|---|---|---|---|---|
| S-350-5 | 5V 0~70A | ±2% | 150mV | 73% |
| S-350-12 | 12V 0~29A | ±1% | 150mV | 79% |
| S-350-24 | 24V 0~14.6A | ±1% | 150mV | 81% |

# RDI67

## Series Variable Frequency Device (VFD)

## Model No.

RD I 67 - □G / □P - □

- voltage level code A2:220V A3:380V
- P type motor capacity(kW)-fan,water pump
- G type motor capacity(kW)
- universal type design number
- Variable Frequency Device (VFD)
- company code

## Normal Working condition and installation condition

Humidity: Relative humidity shall not exceed 50% at the Max temperature 40℃, and higher humidity could be accepted at lower temperature. The condensation must be taken care which is caused by temperature change. When temperature is above +40℃, location should be well-ventilated. When environment is unstandard, please using telecontrol or electrical cabinet. Inverter working life is affected by install location. Longtime continuous using, the life electrolytic capacitor in inverter would not exceed 5 years, cooling fan life would not exceed 3 years, exchange and maintenance should be done earlier.

## Specification

Voltage type: 380V and 220V Applicative motor capacity:0.75kw to 355kw

| Vlotage | Model No. | Rated capacity (KVA) | Rated output current (A) | Adaptive motor (KW) |
|---|---|---|---|---|
| 380V three phase | RDI67-0.75G-A3 | 1.5 | 2.3 | 0.75 |
| | RDI67-1.5G-A3 | 3.7 | 3.7 | 1.5 |
| | RDI67-2.2G-A3 | 4.7 | 5.0 | 2.2 |
| | RDI67-4G-A3 | 6.1 | 8.5 | 4.0 |
| | RDI67-5.5G/7.5P-A3 | 11 | 13 | 5.0 |
| | RDI67-7.5G/11P-A3 | 14 | 17 | 7.5 |
| | RDI67-11G/15P-A3 | 21 | 25 | 11 |
| | RDI67-15G/18.5P-A3 | 26 | 33 | 15 |
| | RDI67-18.5G/22P-A3 | 31 | 39 | 18.5 |
| | RDI67-22G/30P-A3 | 37 | 45 | 22 |
| | RDI67-30G/37P-A3 | 50 | 60 | 30 |
| | RDI67-37G/45P-A3 | 61 | 75 | 37 |
| | RDI67-45G/55P-A3 | 73 | 90 | 45 |
| | RDI67-55G/75P-A3 | 98 | 110 | 55 |
| | RDI67-75G/90P-A3 | 130 | 150 | 75 |
| | RDI67-93G/110P-A3 | 170 | 176 | 90 |
| | RDI67-110G/132P-A3 | 138 | 210 | 110 |
| | RDI67-132G/160P-A3 | 167 | 250 | 132 |
| | RDI67-160G/185P-A3 | 230 | 310 | 160 |
| | RDI67-200G/220P-A3 | 250 | 380 | 200 |
| | RDI67-220G-A3 | 280 | 415 | 220 |
| | RDI67-250G-A3 | 340 | 475 | 245 |
| | RDI67-280G-A3 | 450 | 510 | 280 |
| | RDI67-315G-A3 | 460 | 605 | 315 |
| | RDI67-355G-A3 | 500 | 640 | 350 |
| 220V single phase and three phase | RDI67-0.75G-A2 | 1.4 | 4.0 | 0.75 |
| | RDI67-1.5G-A2 | 2.6 | 7.0 | 1.2 |
| | RDI67-2.2G-A2 | 3.8 | 10.0 | 2.2 |

# RDI67

## Series Variable Frequency Device (VFD)

## Appearance and mounting dimension

Shape size see fig2, fig3, fig4, operation case shape see fig 1.

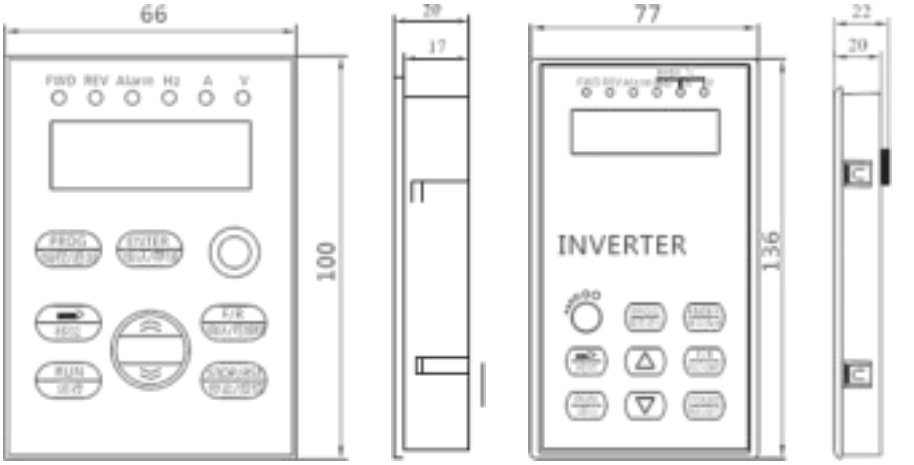



Fig 1 operation case 0.75kW-2.2kW

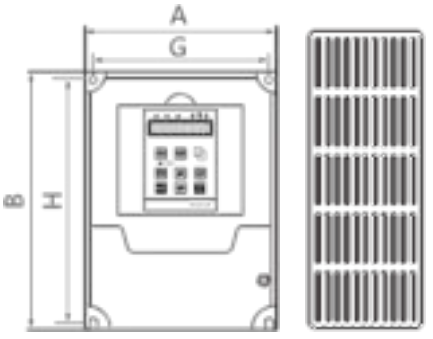



Fig 2 3.7KW-7.5KW

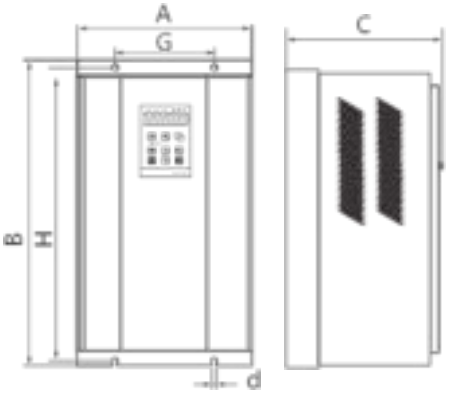



Fig 3 11KW-200KW

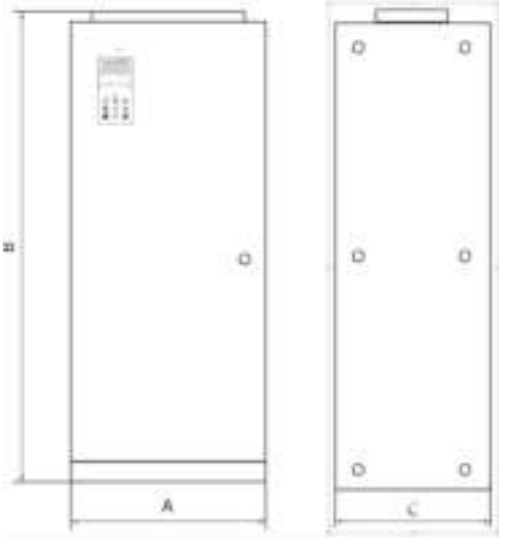



Fig 4 220KW-400KW

# RDI67

Series Variable Frequency Device (VFD)

## Single phase 220V series

| Adaptation of standard motors (KW) | Inverter model | Drawing number | Size(mm) | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 220V series | | A | B | C | G | H | The safety bolt |
| 0.75-2.2 | 0.75kV-2.2kW | | 125 | 170 | 165 | 112 | 160 | M4 |
| 3.7-4 | 3.7kW-4kW | | 150 | 220 | 175 | 137 | 205 | M5 |

## Three phase 380V series

| Adaptation of standard motors (KW) | Inverter model | Drawing number | Size(mm) | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 380V series | | A | B | C | G | H | The safety bolt |
| 0.75-2.2 | 0.75kW-2.2kW | Figure 1 | 160 | 90 | 132.5 | 81 | 147 | M4 |
| 3.7-7.5 | 3.7kW-7.5kW | Figure 2 | 240 | 140 | 178 | 130 | 230 | M5 |
| 11-15 | 11kW-15kW | Figure 3 | 357 | 200 | 205 | 152 | 330 | M8 |
| 18.5-30 | 18.5kW-30kW | | 450 | 270 | 205 | 195 | 425 | M10 |
| 37-55 | 37kW-55kW | | 560 | 320 | 275 | 240 | 535 | M10 |
| 75-110 | 75kW-110kW | | 665 | 380 | 275 | 240 | 640 | M10 |
| 132-200 | 132kW-200kW | | 775 | 500 | 290 | 360 | 738 | M10 |
| 220 | 220kW-280kW | Figure 4 | 700 | 1350 | 417 | Console cabinet installation | | |
| 250 | | | | | | | | |
| 280 | | | | | | | | |
| 315 | 315kW-400kW | | 1000 | 2000 | 600 | | | |
| 350 | | | | | | | | |
| 400 | | | | | | | | |

# RDJR6

## Series Soft-starter

## Application

AC induction-motor has advantages of low-cost,high reliablity and infrequent maintainance.
1.starting current is 5-7 times higher than rated current.And it requires that power grid has large margin,and it also would reduce the working life of electrical control device,improving maintainance cost.
2.starting torque is doule-time of normal starting torque to cause the load shock and drive components damage.
The RDJR6 soft-starter adopts the controllable thyistor module and phase shift technology to improve the voltage of motor regularly.And it can realize the requirement of motor torque,current and load by control parameter.
RDJR6 series soft-starter adopts microprocessor to control and realize functions of soft-starting and soft-stopping of AC asynchronous motor,has complete protection function,and widely used in Motor drive equipment in the fields of metallurgy,petroleum,mine,chemical industry.

## Model No.

RD J R 6 - □□

- Non:for install type, G for cabinet type
- Rated power(applicative power:kW)
- Design code
- Soft-starter
- AC motor
- Company code

## Production feature

Adopts the Microprocessor digital auto control,it has great electromagnetic performance.soft starting,soft stoping or free stoping.The starting voltage,current,soft-start and soft-stop time can be adopted according to different loads for reducing the shock of starting current.stable performance,easy operation,direct display,small volume,digital set,has telecontrol and external control functions.
Has protection against phase-loss,overvoltage,overload,overcurrent,overheating.has functions of input voltage display,operating current display,failure self-inspection,fault memory.has 0-20mA simulation value output,can realize motor current monitoring.

# RDJR6

Series Soft-starter

## Appearance and mounting dimension

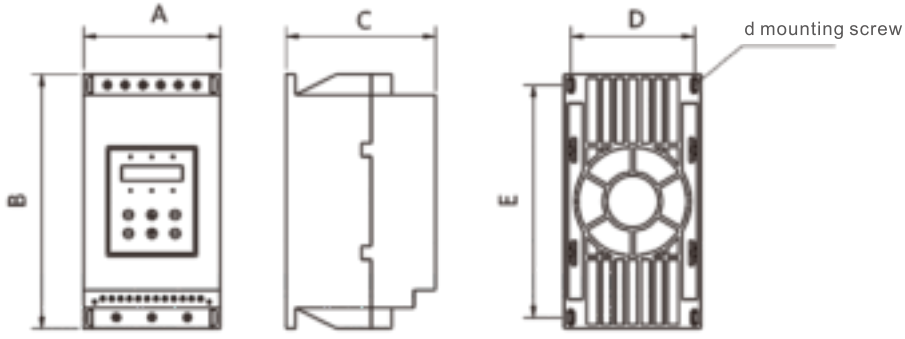



Fig1 RDJR6-5.5 to 55

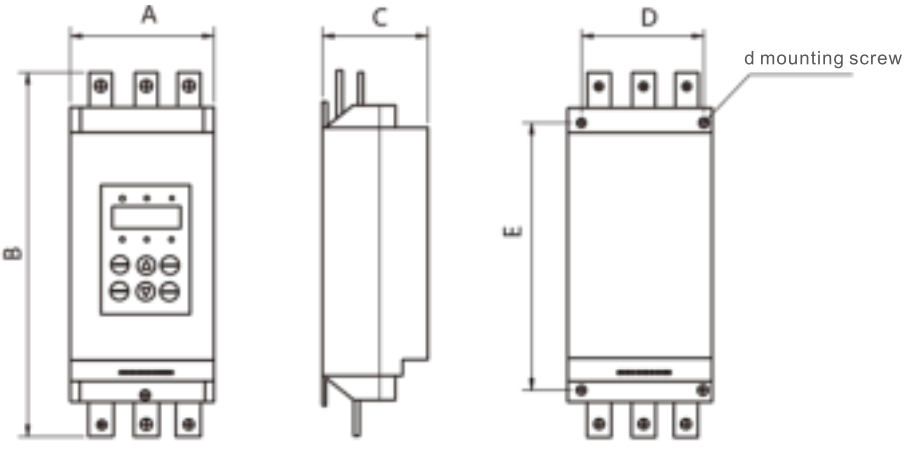



Fig2 RDJR6-75 to 200

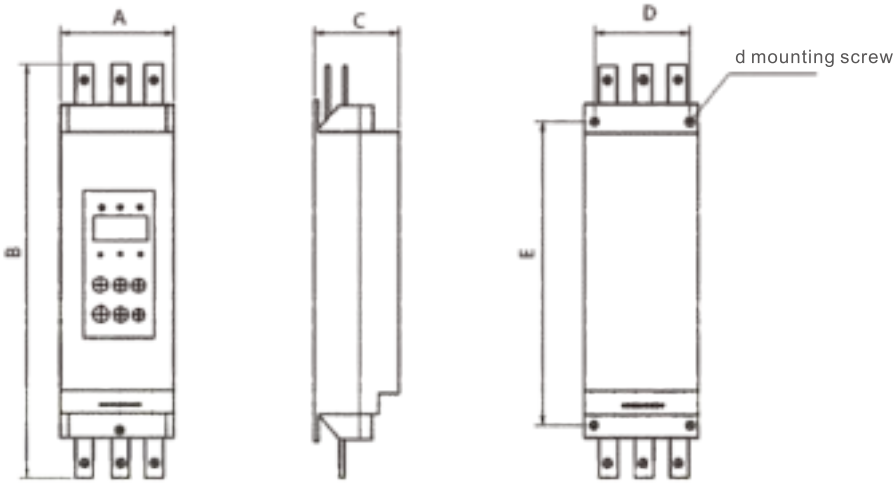



Fig3 RDJR6-250 to 320

## Production specification

| Model No. | Ratedd power (kW) | Rated current(A) | Applicative motor power(kW) | Shape size(mm) | | | | | | Weight (kg) | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | A | B | C | D | E | d | | |
| RDJR6-5.5 | 5.5 | 11 | 5.5 | 145 | 278 | 165 | 132 | 250 | M6 | 3.7 | Fig2.1 |
| RDJR6-7.5 | 7.5 | 15 | 7.5 | | | | | | | | |
| RDJR6-11 | 11 | 22 | 11 | | | | | | | | |
| RDJR6-15 | 15 | 30 | 15 | | | | | | | | |
| RDJR6-18.5 | 18.5 | 37 | 18.5 | | | | | | | | |
| RDJR6-22 | 22 | 44 | 22 | | | | | | | | |
| RDJR6-30 | 30 | 60 | 30 | | | | | | | | |
| RDJR6-37 | 37 | 74 | 37 | | | | | | | | |
| RDJR6-45 | 45 | 90 | 45 | | | | | | | | |
| RDJR6-55 | 55 | 110 | 55 | | | | | | | | |
| RDJR6-75 | 75 | 150 | 75 | 260 | 530 | 205 | 196 | 380 | M8 | 18 | Fig2.2 |
| RDJR6-90 | 90 | 180 | 90 | | | | | | | | |
| RDJR6-115 | 115 | 230 | 115 | | | | | | | | |
| RDJR6-132 | 132 | 264 | 132 | | | | | | | | |
| RDJR6-160 | 160 | 320 | 160 | | | | | | | | |
| RDJR6-185 | 185 | 370 | 185 | | | | | | | | |
| RDJR6-200 | 200 | 400 | 200 | | | | | | | | |
| RDJR6-250 | 250 | 500 | 250 | 290 | 570 | 260 | 260 | 470 | M8 | 25 | Fig2.3 |
| RDJR6-280 | 280 | 560 | 280 | | | | | | | | |
| RDJR6-320 | 320 | 640 | 320 | | | | | | | | |

## TDGC,TSGC,TDGC2,TSGC2
series voltage regulator

TDGC

TDGC2

TSGC

TSGC2

### Application

The voltage regulator features undistorted waveform, compact size, lightweight, high efficiency, user-friendly operation, and reliable long-term performance. It is widely applicable in industrial sectors (e.g., chemical, metallurgy, instrumentation,electromechanical manufacturing, light industry),scientific research, public facilities,  and household appliances to achieve voltage regulation, temperature control, speed adjustment, lighting dimming, and power control. As an ideal AC voltage regulation power supply product, it complies with the JB/T 8749.3 standard.

### Model No.

T - □ G C □ □ - □

- protective type code(TH for humid tropics,TA for dry tropics)
- rated capacity(KVA)
- design code
- contact type(annular)
- Dry self cooling
- phase(D for single-phase,S for 3-phase)
- design code

### Normal operation and install condition

3.1 Amibent average temperature:-5℃~+40℃

3.2 Altitude:not exceed 2000m

3.3 Humidity: MAX humidy is 90%,average temperature is 25℃.

3.4 Current voltage waveform:current voltage wave is closed to sine wave.

3.5 Install location:without gas,steam,chemical dust and other explosive or corrosive medium which influences the insulation of regulator.

3.6 Locatio:without obvious vibration.

3.7 If any special requirement,please consult with us.

### Specification

Table1

| Model No. | Rated output capacity (KVA) | Phase | Input voltage (V) | Output voltage (V) | Max output current(A) |
|---|---|---|---|---|---|
| TDGC-0.5kVA | 0.5 | 1 | 220 | 0~250 | 2 |
| TDGC-1kVA | 1 | 1 | 220 | 0~250 | 4 |
| TDGC-2kVA | 2 | 1 | 220 | 0~250 | 8 |
| TDGC-3kVA | 3 | 1 | 220 | 0~250 | 12 |
| TDGC-5kVA | 5 | 1 | 220 | 0~250 | 20 |
| TDGC-10kVA | 10 | 1 | 220 | 0~250 | 40 |
| TDGC-15kVA | 15 | 1 | 220 | 0~250 | 60 |
| TDGC-20kVA | 20 | 1 | 220 | 0~250 | 80 |
| TSGC-1.5kVA | 1.5 | 3 | 380 | 0~430 | 0.6 |
| TSGC-3kVA | 3 | 3 | 380 | 0~430 | 4 |
| TSGC-6kVA | 6 | 3 | 380 | 0~430 | 8 |
| TSGC-9kVA | 9 | 3 | 380 | 0~430 | 12 |
| TSGC-15kVA | 15 | 3 | 380 | 0~430 | 20 |
| TSGC-20kVA | 20 | 3 | 380 | 0~430 | 26.7 |
| TSGC-30kVA | 30 | 3 | 380 | 0~430 | 40 |

## Appearance

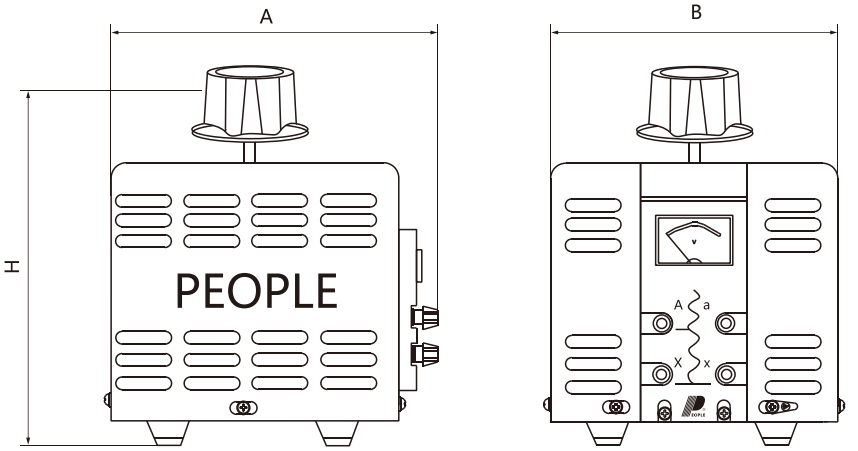



Fig1

Table2

| Model No. | shape(AxBxH mm) | Model No. | shape(AxBxH mm) |
|---|---|---|---|
| TDGC-0.5kVA | 150×130×175 | TDGC2-0.5kVA | 150×125×140 |
| TDGC-1kVA | 205×190×220 | TDGC2-1kVA | 200×175×180 |
| TDGC-2kVA | 240×235×220 | TDGC2-2kVA | 210×175×204 |
| TDGC-3kVA | 275×265×220 | TDGC2-3kVA | 230×210×205 |
| TDGC-5kVA | 380×355×250 | TDGC2-5kVA | 290×245×255 |
| TDGC-10kVA | 380×355×505 | TDGC2-10kVA | 330×255×370 |
| TDGC-15kVA | 440×350×580 | TDGC2-15kVA | 320×245×570 |
| TDGC-20kVA | 440×360×580 | TDGC2-20kVA | - |
| TSGC-1.5kVA | - | TSGC2-1.5kVA | 145×125×350 |
| TSGC-3kVA | 205×190×535 | TSGC2-3kVA | 210×175×470 |
| TSGC-6kVA | 240×235×540 | TSGC2-6kVA | 210×180×490 |
| TSGC-9kVA | 280×265×545 | TSGC2-9kVA | 230×215×500 |
| TSGC-15kVA | 390×345×580 | TSGC2-15kVA | 310×245×565 |
| TSGC-20kVA | 390×350×585 | TSGC2-20kVA | - |
| TSGC-30kVA | 440×350×1100 | TSGC2-30kVA | - |

# SVC(TND, TNS)
## series AC voltage stabilizer

### Product overview

SVC (TND, TNS) series high-precision automatic AC voltage stabilizing power supply consists of contact type autocoupling voltage regulator, servo motor, automatic control circuit, etc. When the grid voltage is unstable or the load changes, the automatic control circuit drives the servo motor according to the change of the output voltage, adjusts the position of the carbon brush on the contact type auto coupling voltage regulator, so that the output voltage can be adjusted to the rated value. The output voltage is stable, reliable, efficient, and can work continuously for a long time. Especially in areas with large fluctuation of grid voltage or seasonal variation of grid voltage, the machine can obtain satisfactory results. Suitable for normal operation of instruments, meters, household appliances and other loads. SVC (TND, TNS) series high-precision automatic AC voltage stabilizing power supply consists of contact type auto coupling voltage regulator, servo motor, automatic control circuit, etc. When the grid voltage is unstable or the load changes, the automatic control circuit drives the servo motor according to the change of the output voltage, adjusts the position of the carbon brush on the contact type auto coupling voltage regulator, so that the output voltage can be adjusted to the rated value. The output voltage is stable, reliable, efficient, and can work continuously for a long time. Especially in areas with large fluctuation of grid voltage or seasonal variation of grid voltage, the machine can obtain satisfactory results. Suitable for normal operation of instruments, meters, household appliances and other loads.
Product complies with JB/T8749.7 standard.

### Selection Guide

| SVC(TND) | 0.5 | kVA |
|---|---|---|
| Product model | Rated capacity | Capacity unit |
| SVC (TND): single-phase AC voltage regulator<br>SVC (TNS): three-phase AC voltage stabilizer | 0.5、1 … 100kVA | kVA |

### Features andscopeof application

The stabilized voltage power supply has the characteristics of beautiful appearance, low selfloss, complete protection functions, etc. It can be widely used in production, scientific research, medical and health care, air conditioners, refrigerators and other household appliances. It is an AC stabilized voltage power supply with ideal performance and price.

### Normal working conditions and installation conditions

- ☐ Ambient temperature: - 5~+40 ℃;
- ☐ Relative humidity: no more than 90% (at 25 ℃);
- ☐ Altitude: ≤ 2000m;
- ☐ Working environment: indoor without chemical deposit, dirt, harmful corrosive medium and flammable and explosive gas; It can work continuously.

## Main technical data

See Table 1 for main technical indicators

Table 1

| Project \ Number of phases | Single-phase | Three-phase |
|---|---|---|
| Input voltage range | 160~250V | 280~430V |
| output voltage | 220V±2 5% | 380±3% |
| Overvoltage protection value | 246±4 V | 246±7 V |
| Voltage regulating speed | <1s (when the input voltage changes 7.5V) | |
| Rated frequency | 50Hz | |
| Electrical strength | Withstand 50Hz sine AC 1500V in cold state for 1min | |
| Load power factor | 0.8 | |
| Efficiency | More than 90% | |

Note:

1. The technical indicators of each unit refer to those shown on the enclosure. Single phase 0.5~3kVAwith110V ±3% output voltage;
2. The in put voltage exceeds the above range, and special technical indicators can be specially ordered.

Output capacity curve; See Figure 1

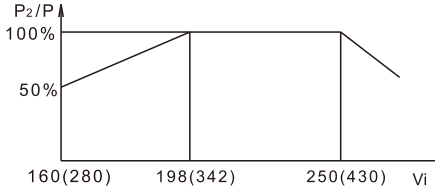



Figure 1

Figure(1)Output capacity curve

Vi: inputVoltage
P2: outputcapacity
P: Ratedoutputcapacity

## Electricalschematicdiagram

☐ The electrical schematic diagram of 0.5kVA~1.5kVA high-precision full-automatic AC voltage stabilizer is shown in Figure2;

☐ See Figure3 for electrical schematic diagram above SVC-5kVA;

☐ See Figure4 for the electrical schematic diagram of single-phase voltage regulator;

☐ The electrical schematic diagram of three-phase voltage regulator is shown in Figure5.

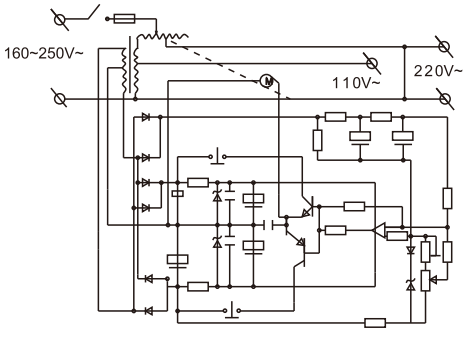



Figure 2

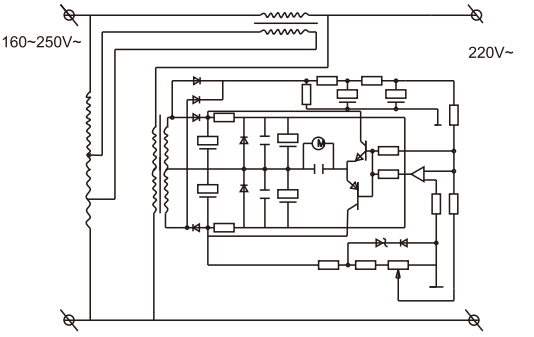



Figure 3

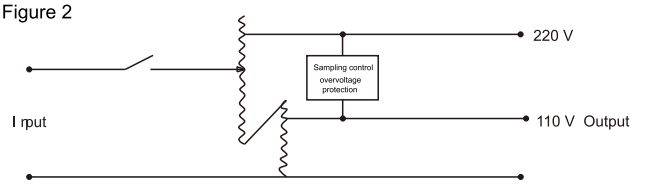



Figure 4

# VOLTAGE REGULATOR

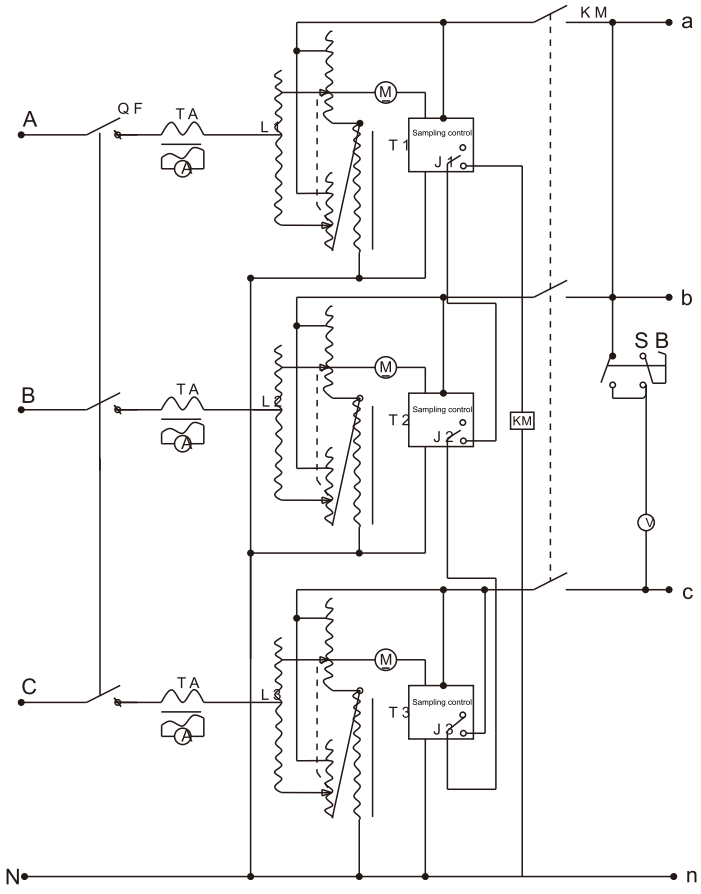
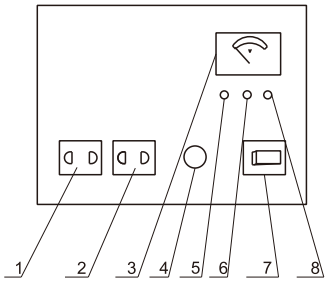
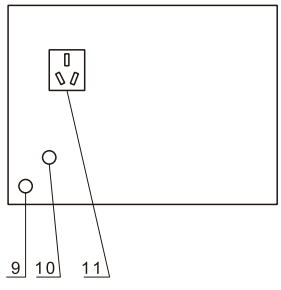



Figure 5

## Outline drawing

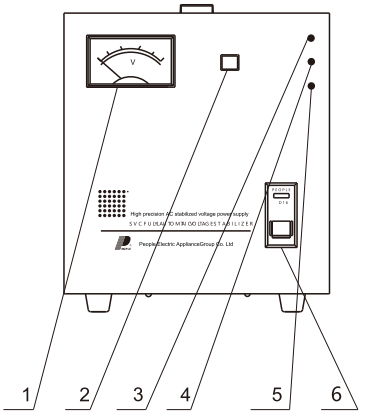
SVC-0.5kVA~1.5kVA high-precision full-automatic AC voltage regulator:



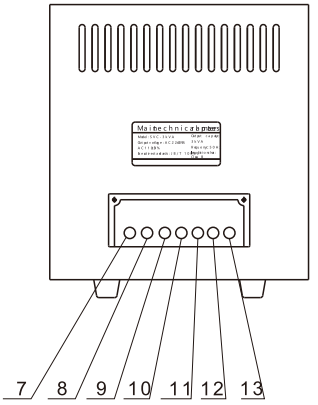




1. Output two socket ( 2 2 0 V )
2. Output two socket ( 1 1 0 V )
3. Voltmeter (output voltage)
4. Fuse holder (FU)
5. Operation indicator light (green)
6. Undervoltage indicator (yellow)
7. power switch
8. Overvoltage indicator (red)
9. Grounding
1 0. Inputpower cord
1 1. Outputthree socket（220V)

S VC-2kVA~3kVA high-precision full-automatic AC voltage regulator:




1. Voltmeter
2. Voltage measurement button
3. Overvoltage indicator (red)
4. Working indicator (green)
5. Undervoltage indicator (yellow)
6. Power switch
7. Grounding
8. Input phase line
9. Input zero line
10. Output phase line } 110V
11. Output zero line }
12. Output phase line } 220V
13. Output zero line }




Note: For the wiring mode, single-phase SVC-2kVA~5kVA, unscrew the wiring screws fixed at the back of the backplane, use the section area of the bare wire part of the conductor to meet the needs of conducting current during load, press the stripped bare wire part at the top of the conductor fully according to the wiring diagram, and tighten it. it is strictly prohibited to loosen the screws in the front row of the wiring board to fix the internal conductors and use the conductors that do not meet the actual capacity.

# VOLTAGE REGULATOR

See Figure 6 and Table 3 for product dimensions

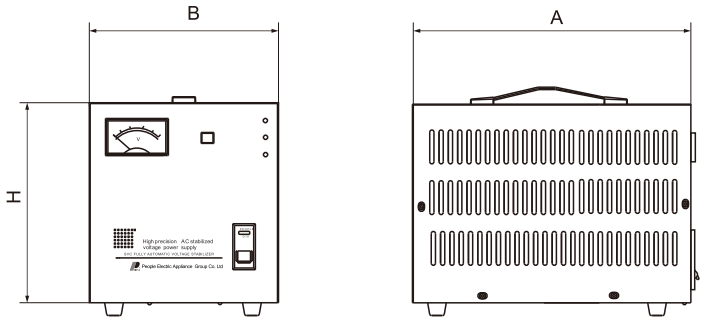



Figure 6

Table 3

| Model | Capacity | Overall dimension AxBxH (cm) |
|---|---|---|
| S VC(single-phase) | 0.5kVA | 19x18x15 |
| | 1kVA | 22x22x16 |
| | 1.5kVA | 22x22x16 |
| | 2kVA | 27x24x21 |
| | 3kVA | 24x30x23 |
| | 5kVA | 22x36x28 |
| | 7kVA | 25x41x36 |
| | 10kVA(Horizontal) | 25x41x36 |
| | 10kVA(Vertical) | 32x35x57 |
| | 15kVA | 35x39x66 |
| | 20kVA | 35x39x66 |
| | 30kVA | 50x50x96 |
| SVC(three-phase) | 1.5kVA | 49x35x17 |
| | 3kVA | 49x35x17 |
| | 4.5kVA | 49x35x17 |
| | 6kVA | 28x33x68 |
| | 9kVA | 33x33x76 |
| | 15kVA | 37x43x82 |
| | 20kVA | 37x43x82 |
| | 30kVA | 41x46x95 |
| | 50kVA | 56x60x130 |
| | 60kVA | 50x60x130 |
| | 100kVA | 66x50x129 |

# DBW, SBW series

## AC voltage regulator

### Product overview

DBW, SBW series automatic compensation voltage regulator can automatically keep the output voltage stable when the voltage fluctuation is caused by the fluctuation of grid voltage or load. The voltage regulator has the advantages of large capacity, high efficiency, stable voltage regulation, no waveform distortion, wide application load, long-term continuous work, automatic and manual switching at will, easy to use and so on. It can be widely used in industrial, agricultural, post and Telecommunications fields of large mechanical and electrical equipment and other places that need voltage stabilized power supply. The product meets the standard of JB / T 8749.8.

### Guide to selection

| S ( D ) BW | F | 50 | kVA |
|---|---|---|---|
| Product model | Derived code | Rated capacity | Capacity unit |
| S: three phase<br>D: single phase<br>B: compensation type<br>W: voltage regulator | F: split mode<br>C: LCD type<br>S: bypass output | 50<br>100<br>...<br>1800 | kVA |

### Normal working conditions and installation conditions

The voltage regulator should be used indoors, and the normal conditions of use are as follows:

- □ ambient temperature:-5°C~ + 40°C
- □ altitude: altitude not exceeding 1000m;
- □ relative humi dity: ⩽90%(20 °C);
- □ Installation environment: the installation site shall be free of gases, vapours, chemical deposits, dust, dirt and other explosive and erosive media that seriously affect the insulation of the voltage regulator;
- □ where the special conditions for use that do not meet the above provisions shall be determined by the user unit in consultation with our company.

### Product characteristics

With boot delay function
When the voltage stabilizing state is running, press the voltage stabilizing button and adjust the voltage regulator to the steady voltage rating value (for a few seconds) before there is an output voltage supply device.
It has the function of output overvoltage protection and alarm.
In the voltage stabilizing state, when the input voltage far exceeds the input voltage range (304V~456V) or other reasons cause the output voltage of the voltage regulator to overvoltage (426V ±7V), the voltage regulator cuts off the power supply and alarms, and automatically resumes its work when the output voltage is reduced. Has the function of phase sequence protection, when the input three-phase line is wrong or broken, the protective relay can act and cut off the power supply without output.
(the user needs this feature must be proposed in advance).

# VOLTAGE REGULATOR

## Main technical data

Product specifications and main technical indicators are shown in Table 1

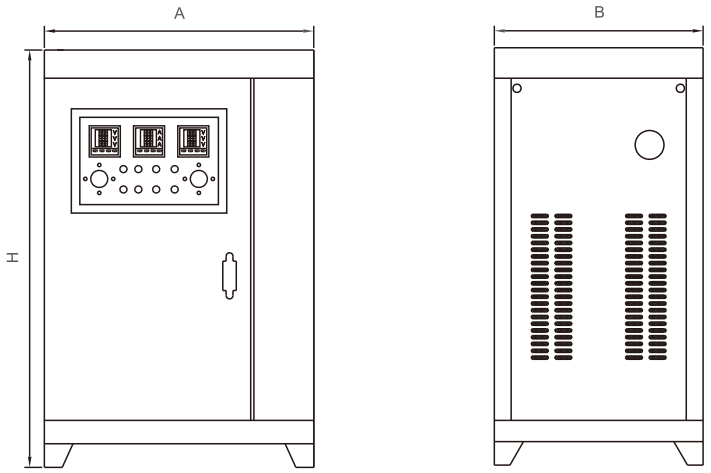
Table 1

| Type | Rated capacity kVA | Output current A | Phase number | Input voltage V | Output voltage V | Voltage stabilization accuracy | Overvoltage protection V | Withstand voltage | Insulation resistance M Ω | Efficiency | Working frequency Hz |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SBW-20 | 20 | 31 | three phase | 304 ~ 456 | 380 | ±3% | 426±7 | 2000V 1min No breakdown | ≥5 | ≥ 97% | 50 ~ 60 |
| SBW-30 | 30 | 46 | | | | | | | | | |
| SBW-50 | 50 | 76 | | | | | | | | | |
| SBW-100 | 100 | 152 | | | | | | | | | |
| SBW-180 | 180 | 273 | | | | | | | | | |
| SBW-225 | 225 | 342 | | | | | | | | | |
| SBW-320 | 320 | 487 | | | | | | | | | |
| SBW-400 | 400 | 606 | | | | | | | | | |
| SBW-600 | 600 | 910 | | | | | | | | | |
| SBW-800 | 800 | 1212 | | | | | | | | | |
| SBW-1000 | 1000 | 1515 | | | | | | | | | |
| SBW-1200 | 1200 | 1818 | | | | | | | | | |
| SBW-1800 | 1800 | 2700 | | | | | | | | | |
| DBW-20 | 20 | 91 | single phase | 176 ~ 264 | 220 | ±3% | 246±4 | 2000V 1min No breakdown | | | |
| DBW-30 | 30 | 137 | | | | | | | | | |
| DBW-50 | 50 | 228 | | | | | | | | | |
| DBW-100 | 100 | 455 | | | | | | | | | |

## OUTLINE DIMENSIONS （See table 2)

Table 2

| Model | Outline dimension(A×B×H)mm | Number of enclosures |
|---|---|---|
| SBW-20~50kVA | 800×570×1270 | 1 |
| SBW-75~100kVA | 850× 620×1370 | 1 |
| SBW-150~200kVA | 1000×700×1500 | 1 |
| SBW-250kVA | 1050×800×1600 | 1 |
| SBW-300kVA | 1100×850×1800 | 1 |
| SBW-400kVA | 1200×950×2050 | 1 |
| SBW-500~600kVA | 1100× 1300×2100 | 1 |
| SBW-800~1200kVA | 1000×1230×2050 | 3 |
| SBW-1800kVA | 1200×900×1900 | 4 |
| DBW-20~50kVA | 800×570×1270 | 1 |
| DBW-100kVA | 850×620×1370 | 1 |




Schematic diagram

## Instructions for ordering

☐ When ordering, the product model, capacity, rated output voltage, input voltage range, voltage stabilization accuracy, power input (output) distance and other operating conditions should be described.

☐ If you have any special requirements, please consult with our technical department.

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