

People Electric Instrument and Meter Selection Guide









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 and Fuzhou four manufacturing bases, 12 wholly owned subsidiaries, 85 holding member enterprises, over 800 cooperated processing enterprises and over 3000 sales companies

The products are popularly sold to over 70 countries and regions, which are widely used in Pudong Airport, Beijing-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 36.708 billion Yuan.

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



Power and energy

- Power
- Petroleum and petrochemical
- Transportation



Commercial network

- Bank insurance
- Public construction
- Community facility



Industry and machinery

- Mining / building materials
- Water / water treatment
- Ca



Building

- Official building
- Industrial building
- · Basic facility



Date center

- IT
- High technology
- Internet



Residence

- Residential construction
- Public construction
- Community facility

More safety

Ensure the safety of life and property

More reliale

Supply the power uninterruptedly

More efficient

Reducing the consumption of energy and the cost, shorten the time of supply

More economic

Optimize the process of the machinery and factory, improving the comfortability of use.

More ecofriendly

Supply the energy through the renewable energy, reducing the carbon emissions

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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
	A	50mA~50A	Connect directly
AC Ammeter	Α	10~800/5A	By 5A secondary current CT
	kA	1kA~10kA	by on secondary current or
AC Voltmeter	V	5V~750V	Connect directly
AC VOILITIELES	kV	1kV~450kV	By 100V secondary voltage VT
	μΑ	50μΑ ~500μΑ	
	mA	1mA~500mA	Connect directly
DC Ammeter	Α	1A~10A	
	^	15A~750A	External shunt
	kA	1kA~10kA	External Shunt
DC Voltmeter	V	1V~750V	Connect directly
DC volumeter	kV	1kV~450kV	External device
Frequency Meter	Hz	45Hz~55Hz 45Hz~65Hz 55Hz~65Hz 100V 220V 380V	By 100V secondary voltage VT
Power meter	kW	100V 380V 5A 380V~380kV/100V 5A~10KA/5	By 5A secondary current CT By 100V secondary voltage VT
Power factor meter	COSφ	COSφ=0.5-1-0.5 100V, 220V, 380V 5A	By 5A secondary current CT By 100V secondary voltage VT

Installation Type Panel Meter



42 Series

6L2 Series



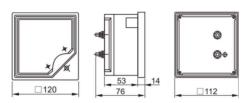
72 Series

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-COSp.



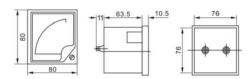
6L2 Series installation type panel meter

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.



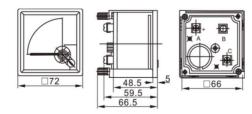
72 Series installation type panel meter

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-COS ϕ .



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 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.



99 Series







85 Series installation type panel meter



85 Series

Installation dimension: 56×64mm

Accuracy: class 2.5

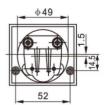
Functions: Ammeter, Voltmeter, Power meter, Frequency meter, Power factor meter.

Series: 85L1-A, 85C1-A, 85L17-A, 85C17-A, 85C1-V, 85C1-V, 85L17-V, 85C17-V, 85L11-W, 85L17-W, 85L17-

 $85 \text{L}1\text{-Var}, 85 \text{L}17\text{-Var}, 85 \text{L}1\text{-Hz}, 85 \text{L}17\text{-Hz}, 85 \text{L}1\text{-COS}\phi, 85 \text{L}17\text{-COS}\phi.$







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 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,
2	DC Voltmeter	45C 8-2101-V	100mV-500V-3kV	Directly connect, external with resistor above 750V	rudder angle, temperature, and pressure, etc.
3	AC Ammeter	45L 8 2102-A	1-10A-10kA	Directly connect, through CT above 10A	Secondary current 5A, overload 2, 3, 6 times
4	AC Voltmeter	45L 8 2102-V	50-450V-42kV	Directly connect, through PT above 450V	Secondary voltage 100V
5	High resistance meter	45L ⁸ -2103-MΩ	0-5ΜΩ	127V, 200V, 1mA, through PT380V/100V	Integrated head, JDB,ZCB equipped with insulation monitor
6	Three phase power meter	45L 8 2105-W	3kW-6MW	Through PT/100V, CT/5A	Integrated head, negative power as scale of 10-20%
7	Reactive power meter	45L 8 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 2108-Hz	45-55-65Hz 350-480Hz	100V, 220V, through PT380V/100V	Integration of head and convertor
10	Three phase synchronizer meter	45T 8 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)

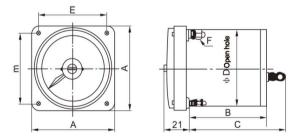
No.	Product name	Model No.	Measuring range	Connecting mode	Note
1	DC Ammeter	63C 18 · 2181-A	0.5mA-1A-7.5kA	Directly connect, external with shunt above 10A	It can be extended to other non-electricity indication meter such as rotation rate.
2	DC Voltmeter	63C 18 · 2181-V	100mV-500V-3kV	Directly connect, external with resistor above 500V	rudder angle, temperature, and pressure, etc.
3	AC Ammeter	63L 18 · 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 18 · 2182-V	50-450V-42kV	Directly connect, through PT above 450V	Secondary voltage 100V
5	Three phase power meter	63C 18 · 2185-W	3kW-6MW	Through PT/100V, CT/5A	External with convertor, negative power as scale of 10-20%
6	Reactive power meter	63L 18 · 2186-Var	2.5Kvar-5Mvar	Through PT/100V, CT/5A	External with convertor
7	Power factor meter	63L 18 · 2187-COSφ	Capacitive 0.5-1-0.5 inductive	Through PT380V/100V CT/5A	Integration of head and convertor
8	Frequency meter	63L 18 · 2188-Hz	45-55-65Hz	220V, 380V, through PT380V/100V	Integration of head and convertor
9	DC Ammeter	63C1 ¹⁸ ·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	В	С	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.

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
	Three-phase voltage	√	*	V	√	√	√	√	\checkmark
	Three-phase current	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark
Real-time measurement	Active/reactive power	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
mododromoni	Power factor	\checkmark	√	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark
	Frequency	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Active electric energy	\checkmark	· V	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark
Electric energy measurement	Reactive electric energy	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	V
mododromoni	Two-way measurement	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Electric energy pu	lse output	1	2	2	2	1	2	2	2
Switching value in	put	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Switching value or	utput	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Transmitting output	ut	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Communication in	terface	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

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

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

Digital meter



RM858F-□K1



RM858PF-□K1



RM858P-□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°C~+50°C, humidity: \leq 85% 9.Storage environment: -30°C~+60°C, humidity: \leq 70%

10. Withstand voltage: > 2kV, 1min

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(C or L) 6.Consumption: <3.2VA 7.Max signal consumption: <0.3VA

8.Operating environment: -10°C~+50°C, humidity: ≤85% 9.Storage environment: -30°C~+60°C, humidity: ≤70%

10. Withstand voltage: > 2kV, 1min

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 ranges6.Consumption: <3.2VA

7.Max signal consumption: < 0.3VA

8.Operating environment: -10°C~+50°C, humidity: ≤85% 9.Storage environment: -30°C~+60°C, humidity: ≤70%

10.Withstand voltage: > 2kV, 1min

RDN series

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



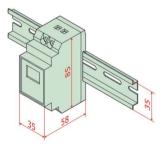
Measuring Range:0~600v Signal Input:AC 0~600v Accuracy Class:±(0.5%FS+1 digit) Auxillary Power:AC220V,50/60Hz

RDN-G3k1-F

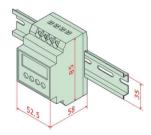


Measuring Range:30~99Hz Signal Input:AC 30~500v Accuracy Class:±(0.5%FS+1 digit) Auxiliary Power:AC220V,50/60Hz

Dimension and Installment







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
	1.5(6)A	
	2.5(10)A	
	5(20)A	
DD862	10(40)A	Based on spec. of nameplate
	15(60)A	
	20(80)A	
	30(100)A	

Working condition

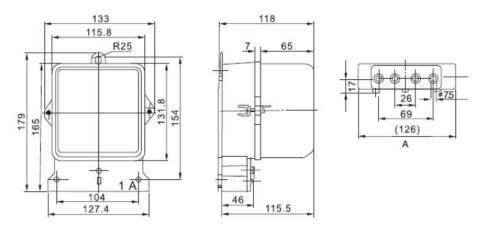
Working temperature: -20℃~+50℃ Extreme working temperature: -30℃~+60℃

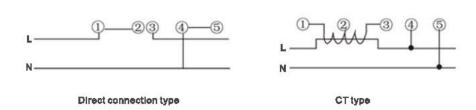
Relative humidity: ≤75%

DD862 series

Outline & mounting size

Single phase mechanical meter





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 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
				3x1.5(6)A
				3x3(8)A
DS862(class 2)				3x5(20)A
	Three phase		3x380V	3x10(40)A
	three wires active energy	2 class		3x15(60)A
	meter			3x20(80)A
				3x30(100)A
			2040034	3x1.5(6)A
			3x100V	3x3(8)A
			3x57.7/100V	3x1.5(6)A
				3x3(6)A
				3x1.5(6)A
	Three phase			3x3(6)A
DT864	three wires active energy	3 class		3x5(20)A
	meter		3x220/380V	3x10(40)A
				3x15(80)A
				3x20(80)A
				3x30(100)A
Dynea	Thron obose		2.2007	3x1.5(6)A
	Three phase four wires	2 class	3x380V	3x3(6)A
DX862	reactive energy	3 class	5-40014	3x1.5(6)A
	meter		3x100V	3x3(6)A

Balanced load

Load current	Power factor	Basic error range		
	Power factor	2 class 3 cla		
0.05lb	Cosφ=1.0	±2.5		
0.1lb-imax		±2.0		
0.1lb	Connell Effectiveline	±2.5		
0.2lb-lmax	Cosφ=0.5(inductive)	±2.0		

D86 series

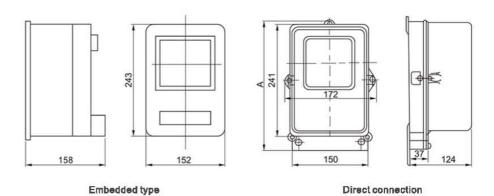
Three-phase mechanical meter

	Power for the	Basic error range	
Load current	Power factor	2 class	3 class
0.1lb	Cina-4 O/industion		±3.0
0.2lb-lmax	Sinφ=1.0(inductive)		±3.0
0.5lb-lmax	Sinφ=0.5(inductive)		±3.0

Unbalanced load

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

Outline & mounting size



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
	1.5(6)A (CT type) 3(6)A (CT type)	1.5(6)A (CT type)	1.5(6)A (CT type)	
		3(6)A (CT type)		
			1.5(6)A(Direct connection)	
	DD\$858 Single phase	3(6)A(Direct connection)	3(6)A(Direct connection)	
			2.5(10)A	
DD\$858		220V	3x20(80)A	Based on nameplate
			5(20)A	
			10(40)A	
			15(60)A	
				20(80)A
			30(100)A	

Basic Error

Basic error limit when balanced load

10-00-00-00-00-00-00-00-00-00-00-00-00-0		Basic error range	
Load current	Power factor	1 class	2 class
0.05lb≤l<0.1lb	1	±1.5	±2.5
0.1ib≼i≼imax	1	±1.0	±2.0
0.1lb≤l<0.2lb	0.5(inductive)/0.8(capacitive)	±1.5	±2.5
0.2lb≤l≤lmax	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	≤10 µ A	

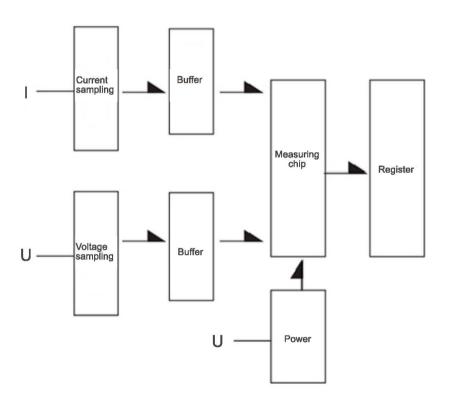
DDS858 series

Single-phase electronic energy meter

Working condition

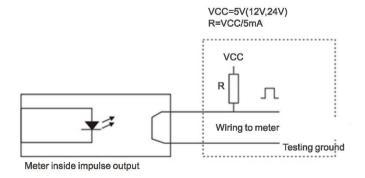
Normal working temperature: -20℃~-50℃ Storage & transport temperature: -25℃~+70℃ Extreme working temperature: -30℃~+60℃ Annual average humidity ≤75%

Working theory



Terminal wiring diagram

Active energy testing port diagram

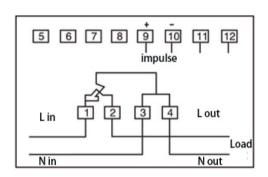


Meter impulse output diaram

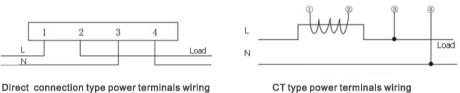
DDS858 series

Single-phase electronic energy meter

Function wiring terminals (A type)

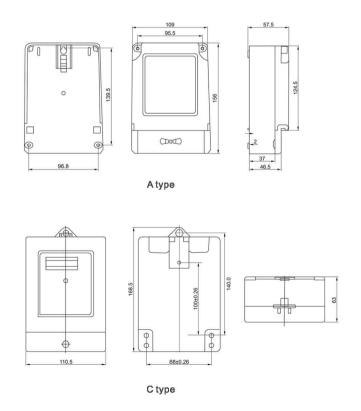


Function wiring terminals (C type)



Direct connection type power terminals wiring

Outline & mounting size



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	
		3x100V	3x1.5(6)A		
		321000	3x3(6)A		
			3x1.5(6)A		
			3x3(6)A		
DSS858	3 phases		3x2.5(10)A		
D33030	3 wires	3x380V	3x5(20)A		
	SXSGUV	3x.	3x360 V	3x10(40)A	
			3x15(60)A		
		3x20(80)A			
			3x30(100)A	Based on	
			3x1.5(6)A	nameplate	
			3x3(6)A		
			3x1.5(6)A		
			3x3(6)A		
DTS858	3 phases	3x57.5/100V	3x2.5(10)A		
D13030	4 wires	3837.371000	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

 $\cos \phi = 1.0 (\sin \phi = 1.0)$, load current is 0.004 lb(1.0 class), 0.005 lb(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%

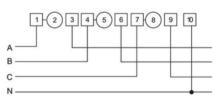
Terminal wiring diagram

Function terminals wiring

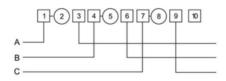


Meter impulse signal terminal wiring

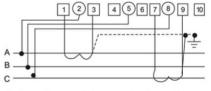
Power terminals wiring



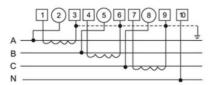
3-phase 4 wires direct connection type wiring



3-phase 3 wires direct connection type wiring



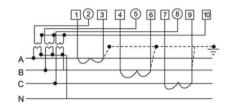
3-phase 3 wires CT connection type wiring

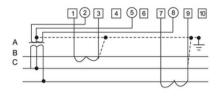


3 phase 4 wires CT connection type wiring

DSS858/DTS858

Three-phase electronic energy meter

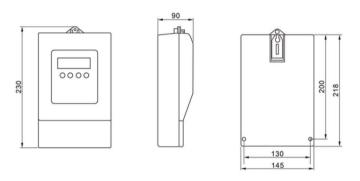




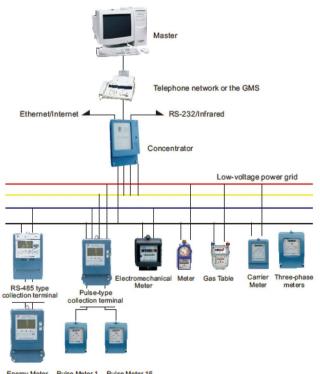
3 phase 4 wires CT, voltage transformer connection type wiring

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
	1.5(6)A	
	2.5(10)A	
	5(20)A	
DDSY858	10(40)A	Based on spec. of nameplate
	15(60)A	
	20(80)A	
	30(100)A	

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

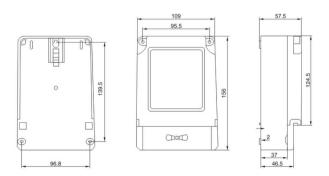
Working condition

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	
			3X 1.5(6)A		
		3x100V	3X 3(6)A	External with AC	
			3X 1.5(6)A	contatcor or shun tripping	
			3X 3(6)A		
DSSY858	3 phases		3X 2.5(10)A		
	3 wires	3x380V	3X 5(20)A		
		3x360 V	3X 10(40)A	Built-in switch	
				3X 15(60)A	control
		3X 20(80)A			
			3X 30(100)A		
	3X 57.7/100V	2V E7 7/400V	3X 1.5(6)A		
		3X 3(6)A	External with AC contatoor or shun		
			3X 1.5(6)A	tripping	
			3X 3(6)A		
			3X 2.5(10)A		
DTSY858	3 phases		3X 5(20)A	5- 121/ C 124/ C	
D131030	4 wires	3x380V	3X 10(40)A	Built-in switch control	
	3,3500	3X 15(60)A			
		3X 20(80)A			
		3X 30(100)A	External with AC contatcor or shur tripping		

Basic Error

Current value		Ballian factor(COS)	Basic error range	
Direct connection meter	Instrument transformer	Power factor(COSφ)	1 class	2 class
0.05lb≤l<0.1lb	0.02lb≤l<0.5lb	1	±1.5	±2.5
0.1lb≤l≤lmax	0.05lb≤l≤lmax	1	±1.0	±2.0
0.1lb≤l<0.2lb	0.05lb≤l<0.1lb	0.5(sensibility)/0.8(capacitive)	±1.5	±2.5
0.2lb≤l≤lmax	0.1lb≤l≤lmax	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 0.004lb(Class 1)and 0.005lb(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%

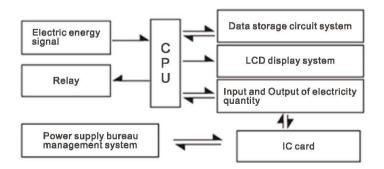
The surrounding air shall not contain corrosive gas, and avoid the influence of dust, salt fog, condensation, etc.

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

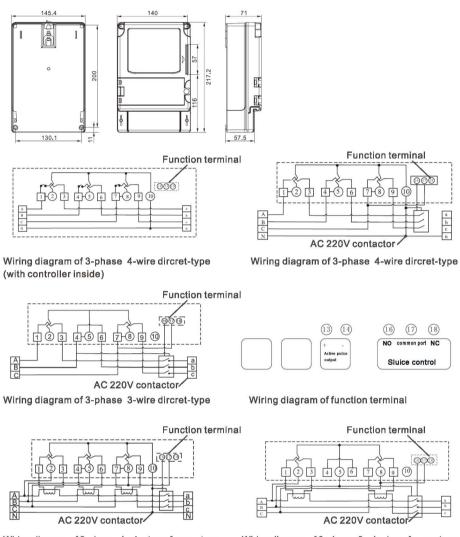
The meter obtains voltage sampling signal by voltage divider, obtains current sampling signal by current transformer, obtains voltage and current product signal by multiplier, and through the frequency conversion to generate a counting pulse that frequency is proportional to the product of voltage and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



DTSY858 series

Three-phase electronic prepaid energy meter

Demension



Wiring diagram of 3-phase 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
	2.0 class	220	20	3200
		220	30	2400
Single phase		220	40	1600
straight through		220	50	1600
		220	60	1200
		220	80	800
Single phase	ise and	220	100	800
straight through 2	2.0 class	220	120	600
Single phase transformer	2.0 class	220	6	12000

Basic error

Load current	Power factor	Power factor
	Power factor	2.0 class
0.05lb~0.1lb	1.0	±1.5
0.1lb~lmax	1.0	±1.0
0.1lb~0.2lb	0.5L 0.8C	±1.5
0.2~Imax	0.5L 0.8C	±1.0

Working condition

Frequency: 50/60Hz

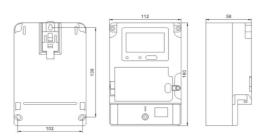
Ambient temperature: $-25\% \sim +60\%$ Relative humidity: not more than 75%

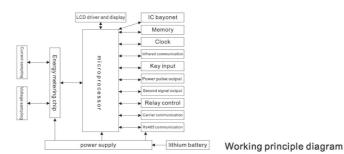
The surrounding air shall not contain corrosive gas, and avoid the influence of dust, salt fog, condensation, etc.

DDZY858 series

Single-phase tariff control intelligent watt-hour meter

Demension

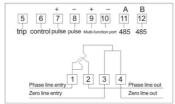




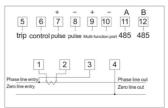
The electric energy meter is composed of two main functions: one is the electric energy metering part, the other is the microprocessor control part, and the electric energy metering part uses the shunt multiplication circuit to generate a pulse sequence indicating how much electricity is used, and sends 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.



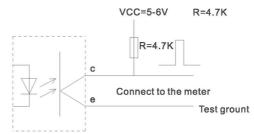
Direct access wiring diagram



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

Torre	_1;6:4:	Parameter B-1-1 C1		Pulse constant	
Туре	ype classification voltage Rated Curre		Rated Current	(Imp/kWh or imp/kvarh)	
DTZY858 Three-phase four-wire		3×1.5(6)A	800		
	Three-phase	3×220/380V	3×5(60)A	400	
	four-wire		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°C)
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%

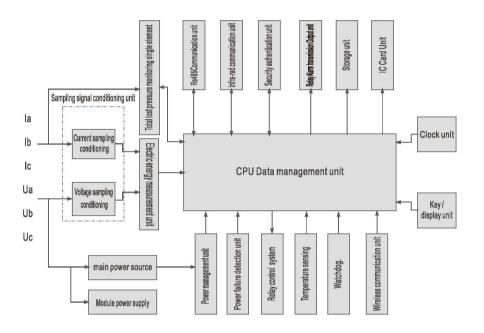
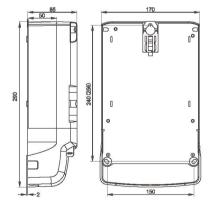


Table1 Working schematic diagram

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 \times 10 or PA4 \times 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 1 and 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

Туре	Rating	Voltage	Class	Designation
DS977-25S DS977-25SC (LCD)	2.5(10)A		1.0/2.0	Single Phase 1
	3(15)A	AC120V/230V		
	5(25)A	AC120V/230V		module
	5(30)A			
	2.5(10)A			
	3(15)A	AC120V/230V		
DS977-65S	5(30)A		1.0/2.0	Single Phase 2 module
	10(40)A	AC230V		
	15(60)A	AC230V		
	2.5(10)A		1.0/2.0	Single Phase 4 module
	5(30)A	AC120V/230V		
DS977-100S	10(50)A			
	15(60)A	230V		
	20(100)A	230 V		
	5(30)A		1.0	Single Phase 4 module
DS977-100S	10(60)A	230V		
(LCD)	15(90)A	2300		
	20(100)A			
	1.5(6)A CT	230/400V	1.0	Three Phase 7 module
DS977-100T	3(6)A CT	230/4000		
	5(30)A		1.0	
	10(60)A	220/4001/		
	15(90)A	230/400V		
	20(100)A			

Din Rail Type

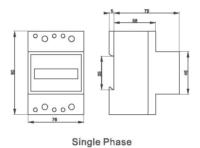
Electronic watt-hour meter

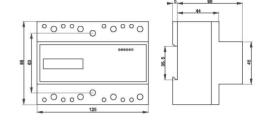




Dimension







Three Phase

XMT-8000 series

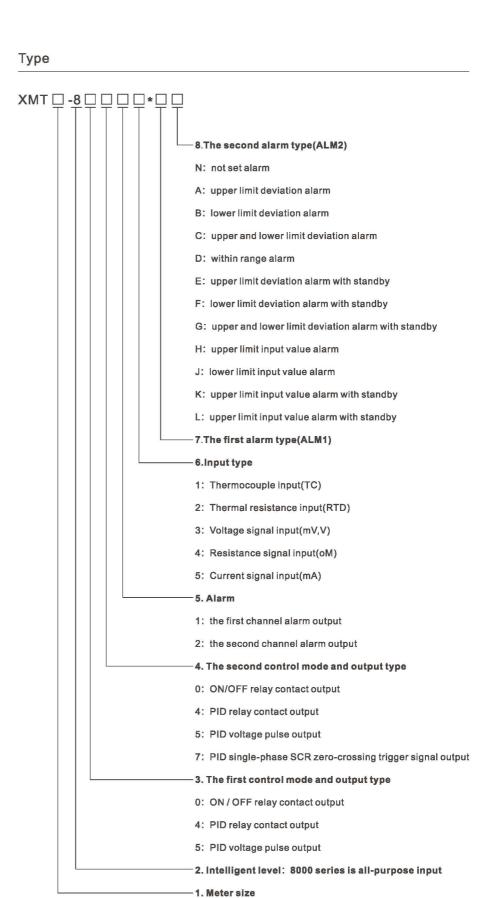
Intelligent digital temperature controller



XMTA-8000



XMTD-8000



XMT-8000 series

Intelligent digital temperature controller



XMTE-8000

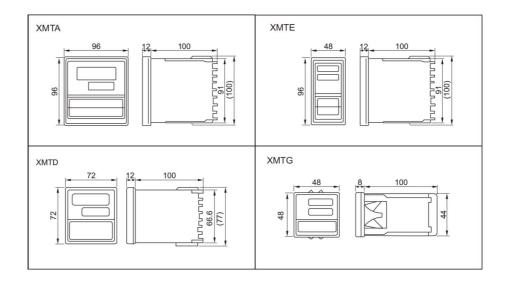


XMTG-8000

Outline and hole size unit:mm

Туре	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	8	J	٦	5	Ь	Ε		Γ	PF	CU	οŌ	57	āЯ	
Input	Input (TC)				(R	ΓD)		CURREN	T VOLTAG	SE.				
type	K	J	R	S	В	Е	Ν	Т	PT 100	CU 50	οМ	mV	mΑ	V

Accuracy

Measuring accuracy:±0.5%FS

Error of cold junction compensation: $\pm 2^{\circ}$ C(can be amend by software within $0\sim 50^{\circ}$ C)

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)

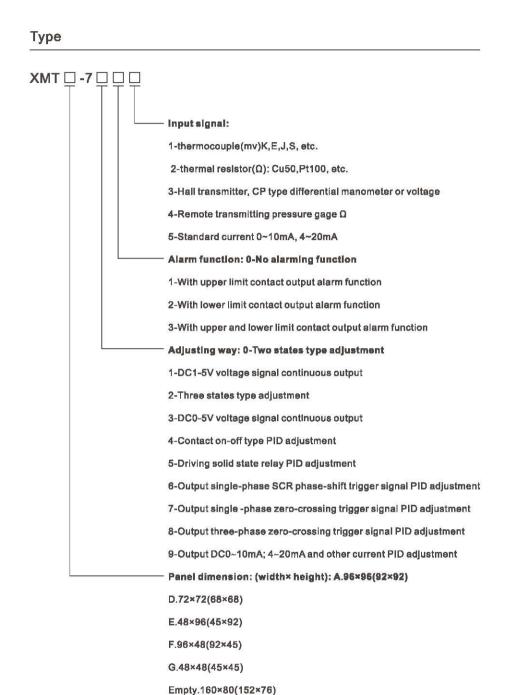
Proportional term:1~100Sec

Other:

- 1. Insulation resistance :> $50M\Omega$ (500VDC)
- 2. Insulation strength: 1500VAC/1min
- 3. Power consumption: <10VA
- 4. Ambient: 0~50°C, 30~85%RH, non- corrosive gas

XMT-7000 series

Intelligent digital temperature controller



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

Boundary dimension and hole dimension

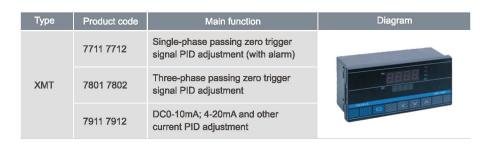
7000	Boundary code	Panel size	Meter length	Hole dimension	Installation distance
XMT	1	160×80	80	153×77	
XMTA	2	96×96	110	93×93	
XMTD	3	72×72	110	69×69	30mm
XMTE	4	48×96	110	45×93	
XMTG	6	48×48	110	45×45	

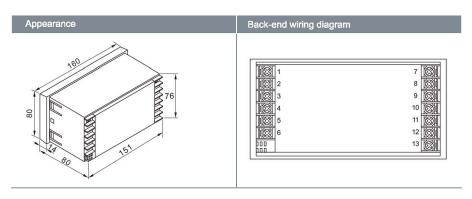
Product

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

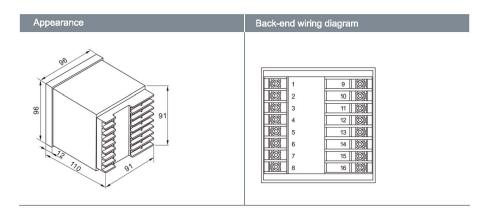
XMT-7000 series

Intelligent digital temperature controller



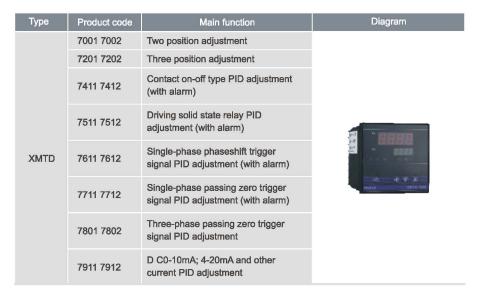


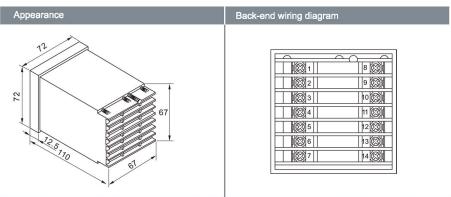
Туре	Product code	Main function	Diagram
	7001 7002	Two position adjustment	
	7201 7202	Three position adjustment	
	7411 7412	Contact on-off type PID adjustment (with alarm)	
	7511 7512	Driving solid state relay PID adjustment (with alarm)	10000
	7611 7612	Single-phase phaseshift trigger signal PID adjustment (with alarm)	##: ## ## ## ## ## ## ## ## ## ## ## ##
	7711 7712	Single-phase passing zero trigger signal PID adjustment (with alarm)	(S) W W A
	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

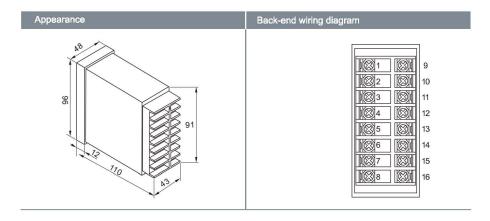




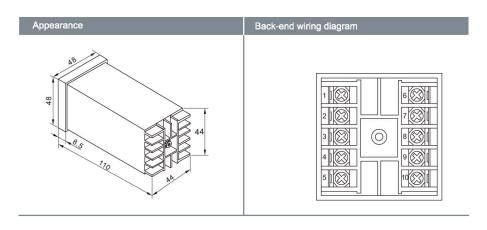
Туре	Product code	Main function	Diagram
	7001 7002	Two position adjustment	
	7201 7202	Three position adjustment	
	7411 7412	Contact on-off type PID adjustment (with alarm)	
	7511 7512	Driving solid state relay PID adjustment (with alarm)	101 2888 1-1
XMTE	7611 7612	Single-phase phaseshift trigger signal PID adjustment (with alarm)	(27)
	7711 7712	Single-phase passing zero trigger signal PID adjustment (with alarm)	d V A
	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

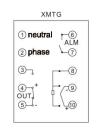
Intelligent digital temperature controller

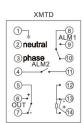


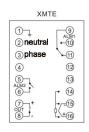
Туре	Product code	Main function	Diagram
	7001 7002	Two position adjustment	
	7201 7202	Three position adjustment	
	7411 7412	Contact on-off type PID adjustment (with alarm)	Torin
XMTG	7511 7512	Driving solid state relay PID adjustment (with alarm)	44 - 8888 404 - 8888
	7611 7612	Single-phase phaseshift trigger signal PID adjustment (with alarm)	122) 4 \$\psi\$ \$\frac{1}{2}\$
	7911 7912	D C0-10mA; 4-20mA and other current PID adjustment	

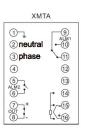


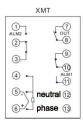
Terminal wiring diagram











XM series

Digital display temperature controller

Boundary dimension and hole dimension

Туре	Code	Panel size	Meter length	Hole size	Installation distance
XMT	1	160×80	150	152 74	
XMZ	1	160×80	150	152×74	
XMTA	2	96×96	140	92×92	
XMZA	2	96×96	140	92×92	20
XMZD	4	72×72	140	68×68	30mm
XMTD	4	72×72	140	68×68	
XMTE	5	48×96	140	44×92	
XMTG	6	48×48	140	44×44	

Product

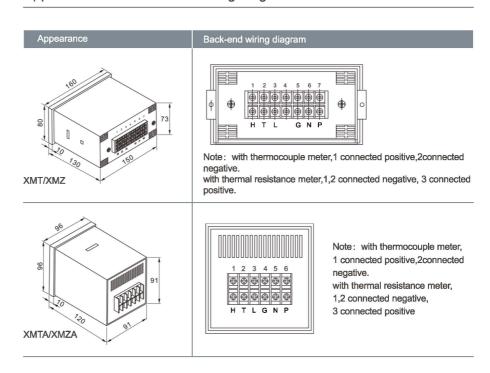
Туре	Product code	Main function	Diagram		
турс	101 102	Two position adjustment	Diagram		
12	121 122	Three position adjustment			
	131 132	Time proportional control			
	161 162	Single phase bidirectional SCR phase shifting output	XMTSHRAATE		
XMT	171 172	Single phase bidirectional SCR cross zero output	AMISSERVICIO BERCO CO C		
	181 182	Three phase bidirectional SCR cross zero output			
	191 192	DC0-10mA; 4-20mA continuous PID adjust			
	2001 2002	Two position adjustment			
	2201 2202	Three position adjustment			
XMTA	2301 2302	Time proportional control	*		
	2601 2602	Single phase bidirectional SCR phase shifting output	8.8.8.8		
	2701 2702	Single phase bidirectional SCR cross zero output	National and American Co.		
	2901 2902	DC0-10mA; 4-20mA continuous PID adjust			
	3001 3002	Dial setup two position adjustment			
	2201 2202	Potentiometer setup three position adjustment			
	3301 3302	Time proportional control	in_		
XMTD	3701 3702	Single phase bidirectional SCR phase shifting output	B.B.B.B.C		
	3901 3902	Single phase bidirectional SCR cross zero output	A CHARLEMAN CO.		
	3601 3602	DC0-10mA; 4-20mA continuous PID adjust			

XM series

Digital display temperature controller

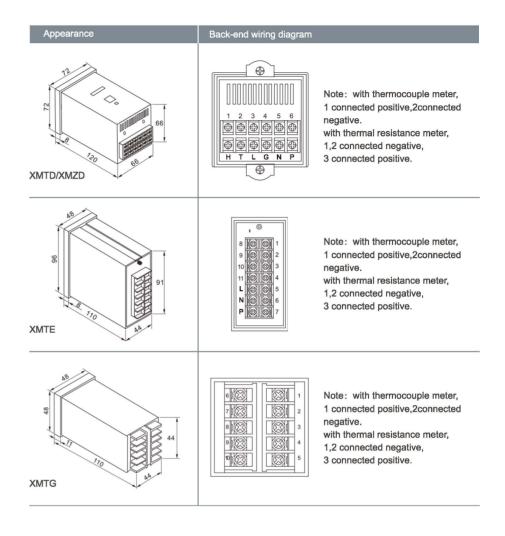
Туре	Product code	Main function	Diagram
	2001 2002	Dial setup two position adjustment	loon
	2011 2012	Two position adjustment(with alarm)	A Table
XMTE	2301 2302	Time proportional control	BBB
	2701 2702	Single phase bidirectional SCR phase shifting output	Mark (S) Mark
	3001 3002	Dial setup two position adjustment	
XMTG	3301 3302	Time proportional control	888
AWIG	3701 3702	Single phase bidirectional SCR phase shifting output	The state of the s
XMZ	101 102	Thermocouple, thermal resistor	BEBE VALUE
XMZA	2001 2002	Thermocouple, thermal resistor	XINESCON VALUE OF THE PARTY OF
XMZD	2001 2002	Thermocouple, thermal resistor	CONTRACTO OF ASSESSMENT OF ASS

Appearance and back-end wiring diagram



XM series

Digital display temperature controller

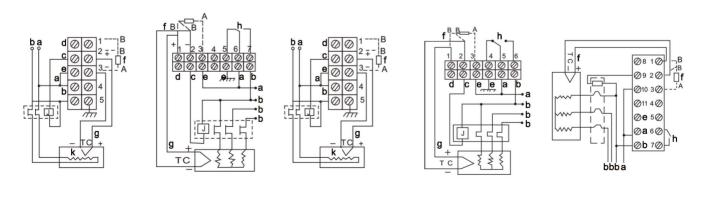


Wiring attention

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

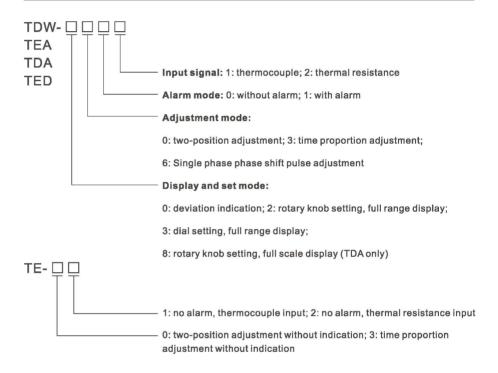
Pointer type

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



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%
Accuracy	≤±1.5%
Power supply	Transformer supply power: AC220V±10% 50/60Hz
Insulation strength	2KV/50Hz/1min
	Relay contact capacity AC220V3A
Output	solid-state relay DC 0-12V
	Optocoupler silicon controlled 1A/600V
Operating condition	Ambient temperature: 0° C-50 $^{\circ}$ C, humidity 45%-85%, without corrosivity and without strong electromagnetic interference.
	Altitude: ≤2500m Atmospheric pressure: 80-106kpa

Pointer type

Temperature controller

Dimension and hole size

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

Product

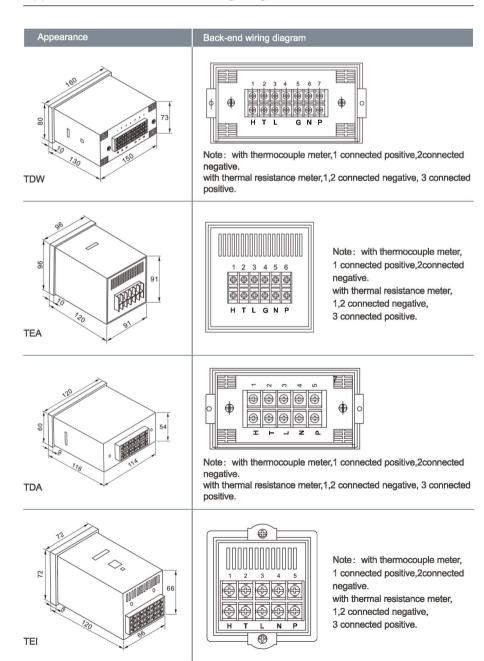
Туре	Product code	Main function	Diagram
TDW	2001 2002	Two position adjustment	
	2301 2302	Time proportional adjustment	
	2601 2602	Single phase bidirectional SCR phase shifting output	
IDW	2701 2702	Single phase bidirectional SCR cross zero output	TOWERS P
	2901 2902	DC0-10mA; 4-20mA continuous PID output	
	2001 2002	Two position adjustment	
	2301 2302	Time proportional adjustment	
TEA	2601 2602	Single phase bidirectional SCR phase shifting output	
IEA	2701 2702	Single phase bidirectional SCR cross zero output	5 0 20
	2901 2902	DC0-10mA; 4-20mA continuous PID output	- P
	8001 8002	Two position adjustment	
	8301 8302	Time proportional adjustment	
	8601 8602	Single phase bidirectional SCR phase shifting output	Carrie Carrier
TDA	8701 8702	Single phase bidirectional SCR cross zero output	IDA SHEEDE
	8901 8902	DC0-10mA; 4-20mA continuous PID output	
	2001 2002	Two position adjustment	
	2301 2302	Time proportional adjustment	
TED	2601 2602	Single phase bidirectional SCR phase shifting output	The past of the pa
	2701 2702	Single phase bidirectional SCR cross zero output	
	2901 2902	DC0-10mA; 4-20mA continuous PID output	

Pointer type

Temperature controller

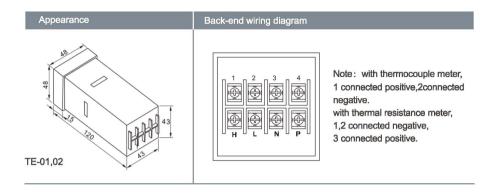
Туре	Product code	Main function	Diagram
TE	01 02	Two position adjustment	
16	31 32	Time proportional adjustment	

Appearance and back-end wiring diagram

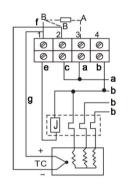


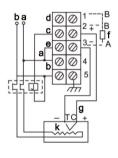
Pointer type

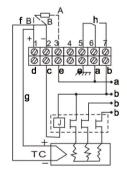
Temperature controller

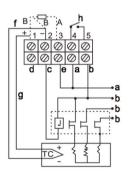


Wiring attention







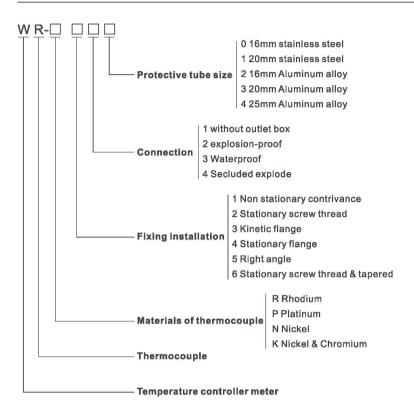


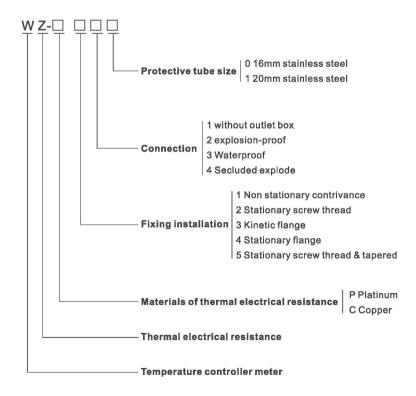
a:neutral
b:phase
c:total
d:high
e:low
f:thermal resistance
g:thermocouple
h:alarm output
k:furnace

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	Туре	Calibration	Structure characteristic
Spring	WRKT-01	E(EA-2)	Fixed screw:M12X1.5 , M10X1.5 , M8X1
Opining	WRNT-01	K(Eu-2)	Head length:30X35 , 60X70
Mini.Pin	WRKX-31	E(EA-2)	Fixed screw: M6X1 , M8X1
WIIII.FIII	WRNX-31	K	FIXEU SCIEW. WICKT, WICKT
	WRKT-13	E	
Probe	WRNT-13	K	Fixed Screw:M12X1 , M12X1.5 Copper tube:Ф7
FIODE	WZCT-13	Cu50	Stainless steel:Ф6 Ф8
	WZPT-13	Pt100	
Ring	WRKT-04	E	The diammeter of the ring and the length of
King	WRNT-04	K	the wire according to the customer's requirement



Name	Туре	Insulation	Calibration	Protected pipe material	Diameter of pipe	Measure range℃
	WRP-120-130	No fixed			Ф16	0-1600℃ 0-1800℃
Platinum- rhodium10	WRP-121-131	mounting	S(LB-3)	High alumina (ceramic)	Ф25	
-platinum	WRP-320-330	Movable flange	3(LD-3)		Ф16	
	WRP-321-331	mounting			Ф25	
	WRR-120-130	No fixed mounting	B(LL-2)		Ф16	
Platinum- rhodium30 -platinum6	WRR-121-131			Adamantine	Ф25	
	WRR-320-330	Movable flange	D(LL-2)	Adamanune	Ф16	
	WRR-321-331	mounting			Ф25	



Fabricated thermal resistance series

Name	Туре	Insulation	Calibration	Protected pipe material	Diameter of pipe	Measure range°C
	WRN-120-130			1Cr18Ni9Ti Stainless Steel	Ф16	0-1100℃
Nickel hro- miumnikel	WRN-121-131	No fixed mounting	K(Eu-2)	1Cr18Ni9Ti	Ф20	0-1100 C
silicom	WRN-122		N(Lu-2)	High alumina	Ф16	0-1300°C
	WRN-123				Ф20	
	WRK-120-130		E(EA-2)	1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti	Ф16	
Nickel chromium constantan	WRK-121-131				Ф20	
	WRK-122		L(L/1-2)	High alumina	Ф16	
	WRK-123				Ф20	



WR/WZ series

Thermocouple series and Thermal Resistance series



Fabricated thermal resistance series

Name	Туре	Insulation	Calibration	Protected pipe material	Diameter of pipe	Measure range°C
Nickel hro- miumnikel	WRN-220-230	Fixed thread M27X2 G3/4 M33X2 K(Eu-2)		Ф16	0-1100℃	
silicom	WRN-221-231		N(LU-Z)	1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti	Ф20	0-1100 C
Nickel chr- omium constantan	WRK-220-230		E(EA-2)		Ф16	0-800℃
	WRK-221-231				Ф20	0-800 C

Fabricated thermal resistance series

|--|

Name	Туре	Insulation	Calibration	Protected pipe material	Diameter of pipe	Measure range℃
Nickel hro- miumnikel	WRN-320-330		V/E., 2)		Ф16	0-1100℃
silicom	WRN-321-331	Movable flange K(Eu-2)	1Cr18Ni9Ti	Ф20	0-1100 C	
Nickel chr-	WRK-320-330	mounting	E(EA-2)	Stainless Steel 1Cr18Ni9Ti	Ф16	0-800℃
omium constantan	WRK-321-331				Ф20	

Fabricated thermal resistance series



Name	Туре	Insulation	Calibration	Protected pipe material	Diameter of pipe	Measure range℃
Nickel hro- miumnikel	WRN-420-430			1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti	Ф16	0-1100℃
silicom	WRN-421-431	Movable flange mounting			Ф20	
Nickel chr- omium constantan	WRK-420-430		E(EA-2)		Ф16	0-800℃
	WRK-421-431		L(LA-Z)		Ф20	

Fabricated thermal resistance series



Name	Туре	Insulation	Calibration	Protected pipe material	Diameter of pipe	Measure range℃
Platinum	WZP-120-130		Pt100 BA1		Ф16	-200-500℃
riauliulii	WZP-121-131 No fixed BA2 Pt10	BA2 Pt10	1Cr18Ni9Ti Stainless Steel	Ф12	-200-300 C	
Copper	WZC-120-130	mounting	Cu50 Cu100	1Cr18Ni9Ti	Ф16	-50-150℃
resistance	WZC-121-131		G		Ф12	

Fabricated thermal resistance series



Name	Туре	Insulation	Calibration	Protected pipe material	Diameter of pipe	Measure range℃
Platinum	WZP-220-230				Ф16	-200-500℃
Platifium	WZP-221-231	Fixed thread M27X2 G3/4		1Cr18Ni9Ti	Ф12	
Copper	WZC-220-230	G1/2 M33X2	Cu50 Cu100	Stainless Steel 1Cr18Ni9Ti	Ф16	-50-150℃
resistance	WZC-221-231		G		Ф12	

WR/WZ series

Thermocouple series and Thermal Resistance series



Fabricated thermal resistance series

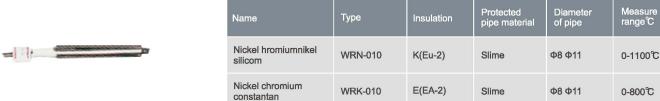
Name	Туре	Insulation	Calibration	Protected pipe material	Diameter of pipe	Measure range℃
Platinum	WZP-320-330	Movable flange mounting	Pt100 BA1	1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti	Ф16	-200-500℃
riauliulii	WZP-321-331		BA2 Pt10		Ф12	
Copper	WZC-320-330		Cu50 Cu100 G		Ф16	-50-150℃
resistance	WZC-321-331				Ф12	-50-150 C

Fabricated thermal resistance series

|--|

Name	Туре	Insulation	Calibration	Protected pipe material	Diameter of pipe	Measure range℃
Platinum	WZP-320-330	Fixed flange	Pt100 BA1	1Cr18Ni9Ti Stainless Steel 1Cr18Ni9Ti	Ф16	-200-500℃
rialiliuili	WZP-321-331		BA2 Pt10		Ф12	
Copper	WZC-320-330		Cu50 Cu100		Ф16	-50-150℃
resistance	WZC-321-331		G		Ф12	-50-150 C

Components of thermocouple and thermal resistance





Components of thermocouple and thermal resistance

Name	Туре	Insulation	Protected pipe material	Diameter of pipe	Measure range℃
	WZP-010			Ф12	
			Mica	Ф8	-200-500℃
	WZP-011			Ф6	
	W/7D 040	Pt100 BA1 BA2 Pt10	Ceramic, glass metal	Ф1.6	202 202
Platinum	WZP-012			Ф2.2	
	14/70 004			Ф3	
	WZP-001		(two/three lines)	Ф4	-200-300℃
	WZP-035S		iiries)	Ф5	
	WZP-0355			Ф6	
Conner registence	WZC-010	Cu50 Cu100	Metal	Ф4	-50-150℃
Copper resistance	WZC-001	G	ivietai	Ф8	



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

Туре	Rated Current(A)	Rated Power(VA)		\Moight/kg\
	Nated Current(A)	Class 0.5	Class 1.0	Weight(kg)
	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
MSQ-30B	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

Windows type

Bar:30 × 10mm. Conductor: φ 20mm.

Туре	Rated Current(A)	Rated Pov		· Weight(kg)
	Rated Current(A)	Class 0.5	Class 1.0	weight(kg)
	100/5	2.5-5	5	0.62
	125/5	3-5	5-10	0.62
MEO 20T	150/5	5-10	5-10	0.62
MSQ-30T	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-30T

CURRENT TRANSFORMER

MSQ series

Current transformer



MSQ-30



MSQ-40



MSQ-100

Windows type

Rated Power(VA) Rated Current(A) Weight(kg) Туре Class 0.5 1.0 30/5 0.4 40/5 1.0 0.4 50/5 1.0 0.4 60/5 1.0 0.4 75/5 1.5 0.4 MSQ-30 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

5-10

5-10

5-10

5-10

250/5

300/5

Bar:30 × 10mm. Conductor: \$ 20mm.

0.4

0.4

Bar:40 x 10mm. Conductor: \$ 30mm.

Windows type

Туре	Rated Current(A)	Rated P	ower(VA)	Mai-bille
	Nated Current(A)	Class 0.5	Class 1.0	Weight(kg)
	100/5	2.5	2.5	0.38
MSQ-40	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

Windows type

Windows type			Bar:60 × 20mm.	Conductor: ϕ 40mm.	
Туре	Rated Current(A)	Rated Po	ower(VA)	Weight(kg)	
туре	Class 0.5		Class 1.0	**Cigndag/	
	250/5	5. 0	5. 0	0.60	
	300/5	5. 0	5. 0	0.60	
	400/5	5-10	5-10	0.60	
MCO 60	500/5	5-10	5-15	0.60	
MSQ-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	

Windows tupo

Windows type		Bar:80 × 3	0mm.or 100 × 10mm.	Conductor:	
Туре	Rated Current(A)	Rated Po	ower(VA)	\A/=:mb#/lc=\	
Туре	Nated Current(A)	Class 0.5	Class 1.0	Weight(kg)	
	1500/5	15	15	0.80	
	1600/5	15	15	0.80	
MSQ-100	2000/5	15	15	0.94	
MSQ-100	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



Windows type

Bar:82 × 30mm. Conductor: ϕ 80mm.

Туре	Rated Current(A)	Rated Po	Weight(kg)	
	Rated Current(A)	Class 0.5	Class 1.0	vveignit(kg)
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

Donat	0F E7	4OF	4 A	Camalinatan	1 00
Dar I	/2 X 2/11111	1 Dr 1/5	× IUmm	. Conductor:	m DUITIN

Туре	Rated Current(A)	Rated Po	Weight(kg)	
Туре	Rated Current(A)	Class 0.5	Class 1.0	weight(kg)
	1500/5	15	15	1.0
	2000/5	15	15	1.15
M00 405	2500/5	15	15	1.45
MSQ-125	3000/5	15	15	1.60
	4000/5	15	15	1.90
	5000/5	15	15	2.20

Windows type

Bar:125 x 38mm.	Conductor:	ф 60mm
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Туре	Rated Current(A)	Rated Po	Rated Power(VA)	
	Nated Current(A)	Class 0.5	Class 1.0	Weight(kg)
	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
PX-125	1600/5	15	30	1.05
FA-125	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

CURRENT TRANSFORMER

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: lth=60×1h Rated security efficient: Fs<5

Technical characteristics of current transformers

ime	Rated Current(A)	Rated Po	ower(VA)
уре	Rated Current(A)	Class 0.5	Class 1.0
	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
ES-62/20B	30/5	2.5	5
E3-02/20B	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
	30/5	1=	1
	40/5	-	1
	50/5	1.0	2
	60/5	1.0	2
ES-62/20	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

		Rated Power(VA)	
Туре	Rated Current(A)	Class 0.5	Class 1.0
	30/5	-	1
	40/5		1
	50/5	()	1
MED 00/00	60/5	r _ n	1.5
MES-62/30	75/5	-	1.5
	100/5	1.5	2.5
	150/5	2	3
	200/5	2.5	5
	60/5	-	1
	75/5	-	1
	100/5	1	2
MES-62/40	150/5	1.5	2.5
	200/5	2.5	5
	250/5	3	5
	300/5	5	7.5
	30/5	=	1
	50/5	t - t	1
	60/5		2
MES-80/30	75/5		2.5
	100/5	1.5	5
	150/5	2.5	5
	200/5	5	7.5
	100/5	1.5	2.5
	150/5	2.5	5
	200/5	5	5
MES-80/40	250/5	5	5
	300/5	10	15
	400/5	10	15
	500/5	10	15
	600/5	15	20
	800/5	15	20
MES-100/60	1000/5	15	20
	1200/5	15	20
	1000/5	15	30
	1200/5	15	30
	1500/5	15	30
MES-145/100	1600/5	15	30
	2000/5	15	30
	2500/5	15	30
	3000/5	15	30

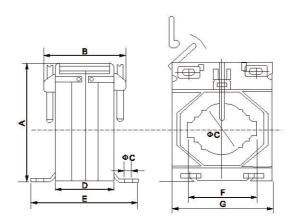
CURRENT TRANSFORMER

MES series

Current transformer

Dimension of case(mm)

Model	A	В	С	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



MBO series

Current transformer



MBO-62/B



MBO-62/20



MBO-62/30



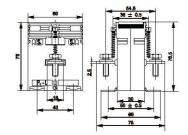
MBO-62/40

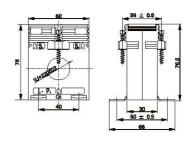
Туре	Rated	Rated Po	ower(VA)
Туре	Current(A)	Class 0.5	Class 1.0
	5/5	2.5	5
	10/5	2.5	5
	15/5	2.5	5
	20/5	2.5	5
	25/5	2.5	5
MDO COID	30/5	2.5	5
MBO-62/B	40/5	2.5	5
	50/5	2.5	5
	60/5	2.5	5
	75/5	2.5	5
	100/5	2.5	5
	150/5	2.5	5

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

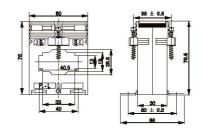
元 200	Rated	Rated Power(VA)	
Туре	Current(A)	Class 0.5	Class 1.0
	30/5	_	1
	40/5	-	1
	50/5	-	1
	60/5	=	1.5
MBO-62/30	75/5	-	1.5
	100/5	1.5	2.5
	150/5	2	3
	200/5	2.5	5

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





* GO	38 ± 0.5
	######################################
P.1. (1)	30
28 28 31 40	50 ± 0.5 68



CURRENT TRANSFORMER

MBO series

Current transformer



MBO-60



MBO-70



MBO-100

Туре	Rated	Rated Power(VA)		
1300	Current(A)	Class 0.5	Class 1.0	
	300/5	10	15	
	400/5	10	15	
	500/5	10	15	
MBO-60	600/5	15	20	
MBO-60	750/5	15	20	
	800/5	15	20	
	1000/5	15	25	
	1200/5	20	30	

	1200/5	20	30
Туре	Rated	Rated Po	ower(VA)
Type	Current(A)	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	25
	1200/5	20	30

1500/5

1600/5

2000/5

30

30

40

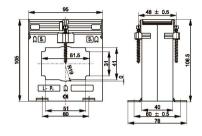
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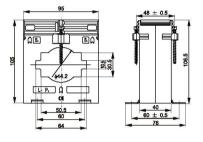
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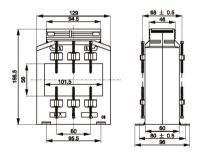
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Туре	Rated	Rated Power(VA)		
	Current(A)	Class 0.5	Class 1.0	
	750/5	15	20	
	800/5	15	20	
	1000/5	15	20	
	1200/5	15	20	
MDO 400	1500/5	15	20	
MBO-100	1600/5	20	20	
	2000/5	20	40	
	2250/5	20	40	
	2500/5	20	50	

3000/5







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

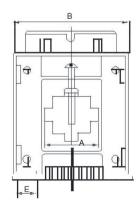
Short–time thermal current: $lth=60 \times lh$ Rated security efficient: Fs < 5

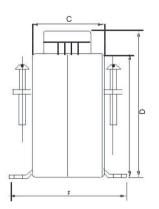
Technical characteristics of current transformers

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	В	С	D	E	Ē
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





CURRENT TRANSFORMER

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

 $\begin{array}{lll} \mbox{Rated dynamic current (Idyn)} & 2.5 \mbox{Ith} \\ \mbox{Rated voltage(Um)} & 0.72 \mbox{Kv AC} \\ \mbox{Continuous overload(Id)} & 1.2 \mbox{In} \\ \mbox{Operating temperature} & -10 \mbox{$^{\circ}$C} \end{array}$

Housing self-extinguishing class E
Safety factor Fs5
Secondary current 5A/1A

Technical characteristics of current transformers

Туре	Rated Current(A)	Rated P	ower(VA)	Outline Drawing	
туре	Nated Current(A)	Class 0.5	Class 1.0	Oddine Drawing	
	100/5	-	1.5	20mm	
	150/5	-	1.5		
	200/5	-	1.5	111 a 32mm	
TP-23	250/5	-	1.5		
	300/5	1.5	2.5	1 2 2	
	400/5	2.5	3.75	90	
	250/5	-	1.5		
	300/5	-	2.5	58mm	
	400/5	1.5	2.5		
TP-58	500/5	2.5	5	146 E 80mm	
TP-30	600/5	2.5	5		
	750/5	5	5	1 2 2	
	800/5	5	5	116 —	
	1000/5	5	10		

PEOPLE

T ₁ /20	Rated Current(A)	Rated Po	ower(VA)	Outline Drawing	
Туре	Rated Current(A)	Class 0.5	Class 1.0	- Outline Drawing	
	250/5	-	1.5		
	300/5	-	1.5	. 80mm ,	
	400/5	-	2.5		
TP-88	500/5	1.5	2.5	147 52	
17-00	600/5	1.5	2.5	80mm	
	750/5	2.5	5		
	800/5	3.75	5	140	
	1000/5	5	7.5		
	500/5	-	2.5		
	600/5	-	2.5	♣ ♦ 8 0mm	
	750/5	2.5	5		
TP-812	800/5	2.5	5	188	
17-012	1000/5	5	10	120mm	
	1200/5	5	10	1 0 1	
	1250/5	5	10	146 —	
	1500/5	5	10		
	1000/5	5	10		
	1500/5	7.5	10	80mm	
	2000/5	10	15		
TP-816	2500/5	15	20	247 II 160mm	
17-010	3000/5	20	25		
	4000/5	20	25	· Va.	
	5000/5	20	25	189	
	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: lth=60 x lh

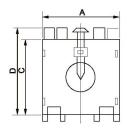
Mounting methods: either by din rail(35mm)or by screws Window dimensions: diameter 22mm(PX1-20,PX1-20L) $31\times10mm(PX1-30,PX130L)$ $41\times10mm(PX1-40)$

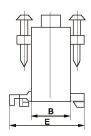
Technical characteristics of current transformers

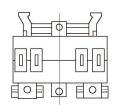
Mode	Primary/Secondary	Busbar Hole Dimension	Rated Burden(VA)	Class	Rated Voltage
PX1-20	50/5A-150/5A	φ: 20mm	1.5-2.5	1.0	660V
PX1-30	100/5A-500/5A	30×10mm	1.5-2.5	1.0	660V
PX1-40	150/5A-1000/5A	40×10mm	3-10	1.0	660V
PX1-20L	50/5A-150/5A	φ: 20mm	1.5-2.5	1.0	660V
PX1-30L	100/5A-500/5A	30×10mm	1.55	1.0	660V

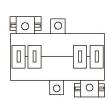
Dimension of case(mm)

Mode	Α	В	С	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









PS series

Current transformer



PSM-20B



PS-30



PS-60



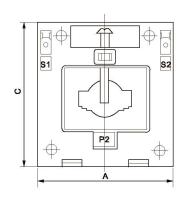
PS-100

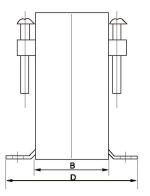
Technical characteristics of current transformers

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	А	В	С	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





CPS series

Current transformer













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.

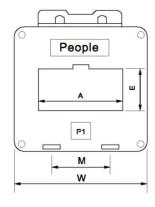
-Wide range of sizes to accommodate all the existing installations.

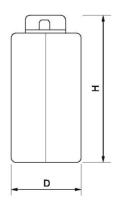
Specification

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	e dimension	Installation dimension	
Mode	W	н	D	Α	Е	М
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





RCT series

Current transformer







RCT-60





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

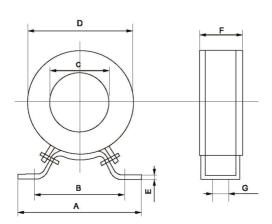
Short–time thermal current: Ith= $60 \times Ih$ Rated security efficient: Fs < 5

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
Α	93	93	93	93	102
В	78	78	78	78	86
С	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



CURRENT TRANSFORMER

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

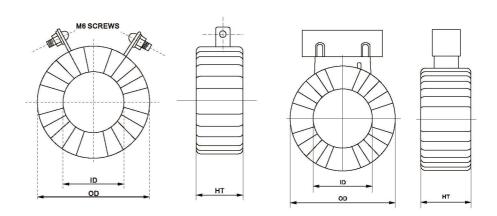
Class: 1.0,3.0

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.



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 subjected 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

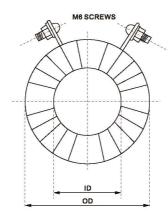
Spec.	60/5A	100/5A	150/5A	200/5A	250/5A	300/5A	400/5A	500/5A	600/5A
OD	100	100	100	100	96	96	100	100	100
ID	34	34	34	34	34	34	60	60	65
HT	148	98	68	58	68	68	68	48	58

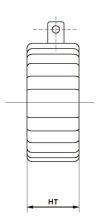
CI:5P10 15VA

Spec.				250/ 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
НТ	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





BSMJ series

Capacitor





CBB series

Capacitor



Description

Self-healing type low voltage shunt capacitor, made of advanced metallized film, is produced strictly in accordance with the National Standard and IEC Standard by the introduced advanced foreign techniques and equipment. The device is mainly suitable for low voltage electric network to improve power factor, reduce reactive loss, and better the voltage quality.

Characteristics

1.Small volume and light weight

It is only 1/4 and 1/5 of the weight and the volume of the outdated products respectively.

2.Low loss

With the actual less than 0.1%,the capacitor, itself, has low consumption of energy, little radiation, low temperature rise, long service life, and good energy conservation effect.

3.Excellent self-healing performance

When a part of the isolation is fed through due to overvoltage, it is capable of self-healing so as to continue the normal operation, therefore the reliability is improved greatly.

4.Safety

Equipped with self-discharging resistant and safety devices inside, it is safe and reliable.

5. Without oil leakage

In order to avoid oil leakage during operation so as to protect the environment, it employs the microcrystalline wax as the impregnant, which remains solid at ordinary temperature and has a drip melting point higher than 70%.

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		Cap	Capacitance(μf)														
Dimension		4.7	4.7 5 6			8.5	9	10	12	15	16	20	25	30	40	50	60
	D		30 34					42					50 60				
230~300VAC	Н					60			80			100			120		
	Α		11			12				15				18			
	D		42						50						60		
350~500VAC	Н		80						100					150			
	Α	12(12(15) 15(18)						18								

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	4,3,0,6,10,12,14,10,16,20,22,23,30,31.3,35,40,43,30,00,70,00,63,90,93,100

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 \geqslant 3000MΩ μFT–C \geqslant 100MΩ
Dissipation Factor	$tg \delta \leq 0.004(50Hz)$
Standard	SJ2600.1–85

