DELIXI ELECTRIC

New generation

606 series of electric energy meters

Accurate measurement is more reliable

◎ Selected high-precision measurement chip, more accurate measurement

◎ Full automatic calibration check, more reliable quality

◎ Manufacturers, verification, installation of three layers of lead seal, more secure to prevent electricity theft

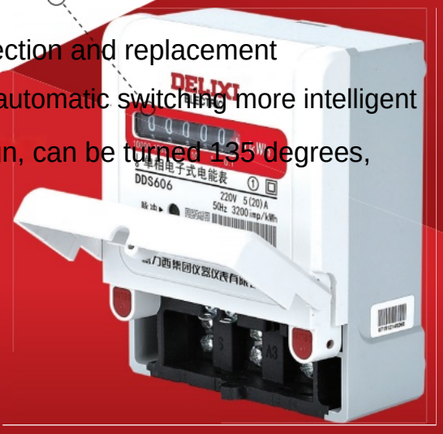
Elaborate design is more convenient

◎ Wide current range, more convenient selection and replacement

◎ DL/T645-07/97 Dual protocol compatibility, automatic switching more intelligent

◎ The first tail cover convex point limit design, can be turned 135 degrees, more convenient wiring

Digital experience, scan code to obtain information can be traced

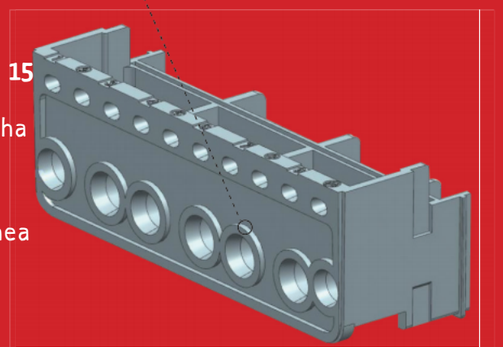


The best of the best is better

◎ Environment-friendly PC alloy material, end button box PBT+GF

◎ Low temperature rise: less than 15K ◎ Low power consumption: less than 0.5W

◎ High flame retardant: 960 High heat deformation temperature: 200



Delicate and small, more beautiful

◎ "D" design concept, classic red element logo

◎ The volume is reduced by 50%, and the box space is saved

◎ Nameplate laser engraving, information more clear and lasting

Functions and features
A new generation of 606 series energy meters

Product introduction

The new generation of 606 series is designed and manufactured according to the power management needs of many types of users with modern advanced level of energy metering products. With high-quality, intelligent and convenient products for a variety of high and low voltage metering cabinets, terminal metering boxes, residential areas, shopping malls and other places to achieve intelligent energy metering, management and use.

The new generation 606 series includes:

DDS606 single phase electronic energy meter
DDSY606 single-phase electronic prepaid energy meter
DTS606, DSS606 three-phase electronic energy meter
DTSY606, DSSY606 three-phase electronic prepaid energy meter
DT(S)SF606 three-phase electronic multi-rate watt-hour meter
DT(S)S(X)606 three-phase electronic active-reactive combined watt-hour meter

Selection guide

Product name	voltage	Accuracy class	1) Specifications	2) Functional option
DDS606	M	2	6M4	HL
DDS606	M：220V	1：1级 2：2级	6M4：1.5（6）A ... 100M10：10（100）A	H: Mutual inductance CD: Liquid crystal 4:485 Default: Direct and meter display L: Pilot series

Product name	voltage	Accuracy class	1) specification	2) Functional option
DTS606	MQ	1	6M4	HL
DTS606 DSS606	MQ：220/380V WY：57.7/100V Y：100V Q：380V	1：1级 2：2级	6M4：1.5（6）A ... 100M10：10(100)A	H: Mutual inductance CD: LCD, infrared, 485 Default: direct and meter display L: Pilot series

Product name	voltage	Accuracy class	1) specification	2) Functional option
DDSY606	M	1	6M4	485L
DDSY606	M：220V	1：1 level 2：2 level	6M4：1.5（6）A ... 80M4：20（80）A	Default: LED display, none 485 CD: LCD, infrared 4:485 Communication ports L: Pilot series

Functions and features
A new generation of 606 series energy meters

Selection guide

Product name	voltage	Accuracy class	1) specification	2) Functional option
DTSY606	MQ	1	6M4	HL
DTSY606 DSSY606	MQ：220/380V WY：57.7/100V Y：100V Q：380V	1：1level 2：2level	6M4：1.5(6)A ... 100M10：10 (100) A	H：Mutual inductance type N: direct internal power off W: direct external power off CD: liquid crystal, infrared 4:485 Communication ports L: Pilot series

Product name	voltage	Accuracy class	1) specification	Functional option
DTSF606	MQ	1	6M4	HCD4L
DTSF606 DSSF606	MQ:220/380V WY:57.7/100V Y:100V Q:380V	1:1级 2:2级	6M4:1.5(6)A ... 100M3:30(100)A	H: Mutual inductance CD: liquid crystal, infrared 4:485 L: Pilot series

Product name	voltage	Accuracy class	1) specification	Functional option
DTSX606	MQ	1	6M4	HL
DTS(X)606 DSS(X)606	MQ:220/380V WY:57.7/100V Y:100V Q:380V	1:1级 2:2级	6M4:1.5(6)A ... 100M3:30(100)A	H: Mutual inductance CD: liquid crystal, infrared 4:485 L: Pilot series

Main application

Home and home

Workshop

Tenement

Mall

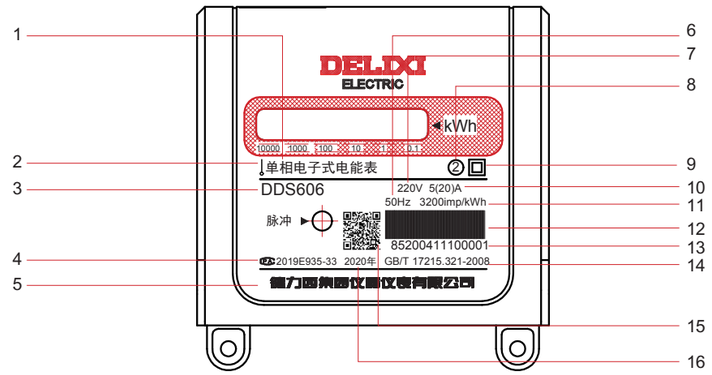
School

Long stay apartment

Nameplate introduction
A new generation of 606 series energy meters

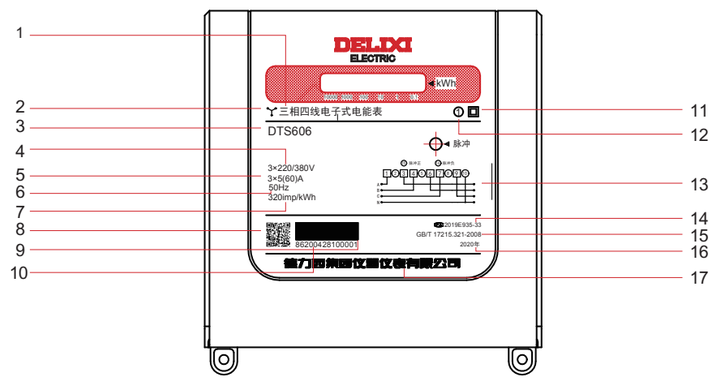
Nameplate introduction

DDS606



1	Product name	7	Voltage specification	13	Serial number
2	Product type	8	Accuracy level	14	Execute standard QR code
3	Product model	9	Protection level	15	Year of production
4	Product certification	10	Current specification	16	
5	manufacturer	11	Pulse constant		
6	Operating frequency	12	Bar code		

DTS606



1	Product name	7	Pulse constant	13	Wiring diagram
2	Product type	8	Two-dimensional code	14	Product certification
3	Product model	9	Bar code	15	Executive standard
4	Voltage specification	10	Serial number	16	Year of production
5	Current specification	11	Class of protection	17	manufacturer
6	Operating frequency	12	Accuracy class		

Technical parameter
A new generation of 606 series energy meters

Energy meter percentage error limit value

Load current	Power factor cosΦ	Basic error limit (%)	
		1级	2level
0.05Ib ⩽ I < 0.1Ib	1	±1.5	±2.5
0.1Ib ⩽ I ⩽ Imax	1	±1.0	±2.0
0.1Ib ⩽ I < 0.2Ib	0.5L0.8C	±1.5	±2.5 (0.8C not required)
0.2Ib ⩽ I ⩽ Imax	0.5L0.8C	±1.0	±2.0 (0.8C not required)

Ib indicates the basic current and Imax indicates the maximum current

Operating voltage range
Specified operating voltage range: (0.9~1.1) Reference voltage extended operating voltage range: (0.8~1.15) Reference voltage Limit Operating voltage range: (0.0~1.15) Reference voltage

Power dissipation
Voltage line power consumption ≤2W/10VA, current line power consumption ≤4VA

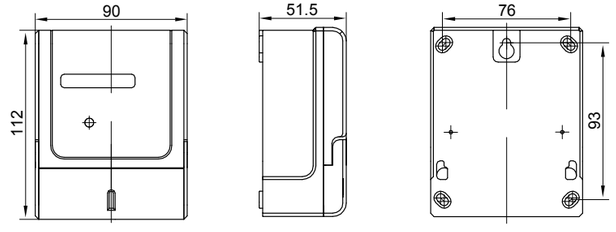
Temperature range
Specified operating temperature range: -10~+45 Limit operating temperature range: -25~+55

Humidity range
The average annual relative humidity is < 75%

Safety performance
The product meets the requirements of GB/T 17215.321-2008 on safety indicators

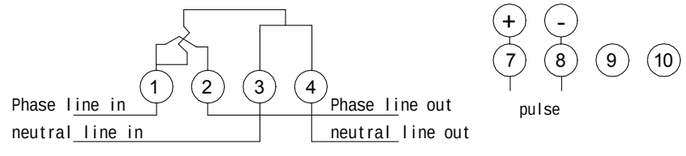
Outline and mounting dimensions drawing

Dimensional drawing (meter version)



Size diagram (LCD version) Install the same size as the meter version

Wiring diagram



Note: Please disconnect the power supply during installation of the energy meter to avoid accidents.

Basic error with balance load percentage error limit

S606

Current value		Active power Level 1		Active powerLevel2	
Direct access instrument	By instrument transformer	Power factor cosΦ	error%	Power factor cosΦ	error%
0.05Ib ⩽ I < 0.1Ib	0.02In ⩽ I < 0.05In	1	±1.5	1	±2.5
0.1Ib ⩽ I ⩽ Imax	0.05In ⩽ I ⩽ Imax	1	±1.0	1	±2.0
0.1Ib ⩽ I < 0.2Ib	0.05In ⩽ I < 0.1In	0.5L	±1.5	0.5L	±2.5
		0.8C	±1.5	0.8C	±2.5
0.2Ib ⩽ I ⩽ Imax	0.1In ⩽ I ⩽ Imax	0.5L	±1.0	0.5L	±2.0
		0.8C	±1.0	0.8C	±2.0

Operating voltage range

Specified operating voltage range: (0.9~1.1) Reference voltage

Extended operating voltage range: (0.8~1.15) Reference voltage

Limit operating voltage range: (0.0~1.15) Reference voltage

Power dissipation

Voltage line power consumption ≤2W/10VA, current line power consumption ≤4VA

Temperature range

The specified operating temperature range: -10~+45

Limit operating temperature range: -25~+55

Humidity range

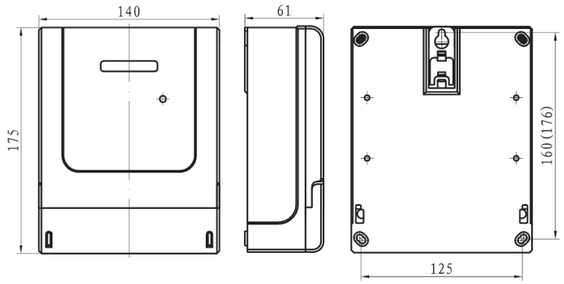
The average annual relative humidity is < 75%

Safety performance

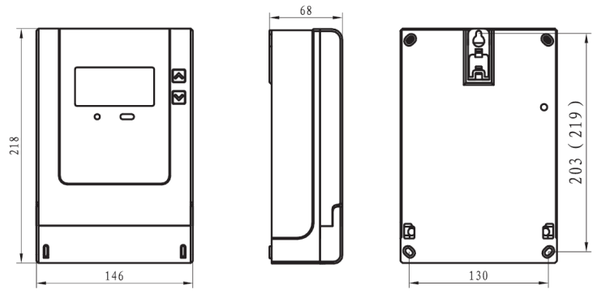
The product meets the requirements of GB/T 17215.321-2008 on safety indicators

Outline and mounting dimensions dr

Dimensional drawing (meter version)



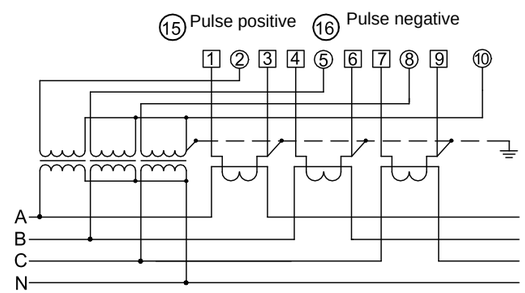
Size drawing (LCD version)



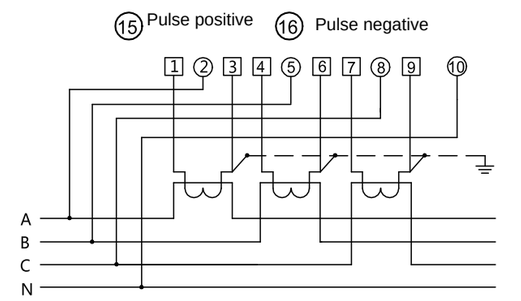
Outline and installation dimensions diagram

wiring diagram

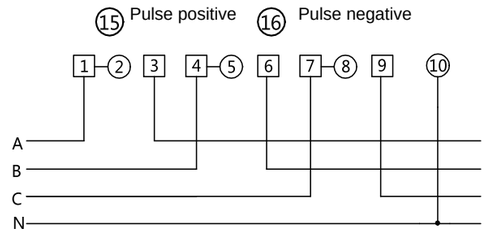
■ Three-phase four-wire current and voltage transformer access wiring diagram (3×57.7/100V 3×1(10)A、3×1.5(6)A、3×3(6)A)



■ Three-phase four-wire current transformer access wiring diagram (3×220/380V 3×1(10)A、3×1.5(6)A、3×3(6)A)



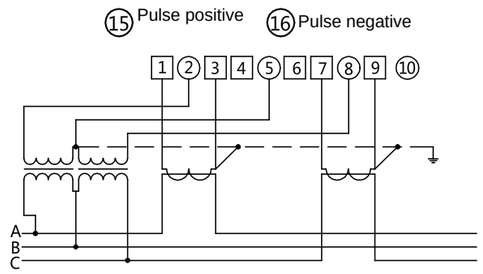
■ Three-phase four-wire direct access wiring diagram 3×220/380V ≥3×5(20)A)



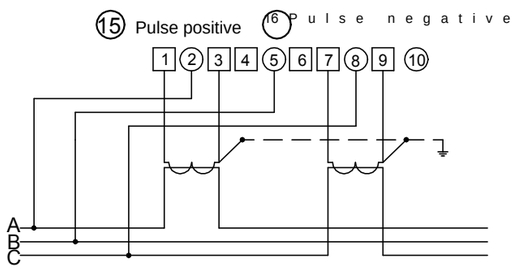
Outline and installation dimensions diagram

wiring diagram

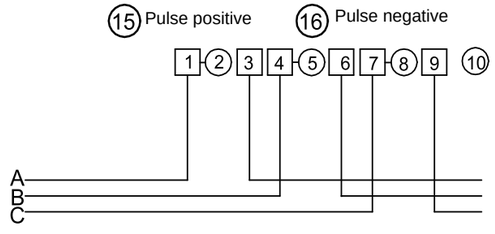
■ Three-phase three-wire current and voltage mutual inductance access wiring diagram　3×100V 3×1(10)A、3×1.5(6)A、3×3(6)A)



■ Three-phase three-wire current and voltage mutual inductance access wiring diagram　3×380V 3×1(10)A、3×1.5(6)A、3×3(6)A)



■ Three-phase three-wire direct access wiring diagram　3×380V ≥3×5(20)A)



Energy meter percentage error limit value

DDSY606

Load current	Power factor cosΦ	Basic error limit (%)	
		1level	2level
0.05Ib ⩽ I < 0.1Ib	1	±1.5±1.0±	±2.5
0.1Ib ⩽ I ⩽ Imax	1	1.5±1.0	±2.0
0.1Ib ⩽ I < 0.2Ib	0.5L0.8C		±2.5 (0.8C not required)
0.2Ib ⩽ I ⩽ Imax	0.5L0.8C		±2.0 (0.8C not required)

Ib indicates the basic current and Imax indicates the maximum current

Operating voltage range

Normal operating voltage: (0.9 ~ 1.1) Reference voltage

Limit operating voltage: (0.0 ~ 1.15) Reference voltage

Insulation voltage: ≥4000VAC/min

Power consumption: ≤2W and 10VA

Temperature range

Normal operating temperature: -10 ~ +45

Limit operating temperature: -25 ~ +55

Humidity range

The average annual relative humidity is < 75%

Up to 95% humidity for 30 days of the year (naturally diffused);

The rest of the time it can be up to 85%

Operation and function

Electricity purchase

The meter is operated by a power card. When the user needs to enable the energy meter, he must first purchase electricity from the power management department with the power card. The power management department through a specially equipped "Delixi Group prepaid electricity sales management system", the user's purchased electricity encrypted and recorded on the power card, at this time, the power card is an effective power card with a certain amount of electricity. After each purchase of electricity, it is necessary to plug in the energy meter once, send the electricity into the meter, and write the use of the energy meter back to the electricity card, before it can be used again to the power supply tube.

Power input

a) Insert the card

Insert the power card into the bayonet of the energy meter as shown in FIG. 2 and FIG. 3. The direction of the side with gold-plated contact on the power card is opposite to the direction indicated by the arrow at the bayonet.

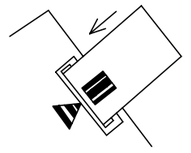


Figure 2 Insert the card

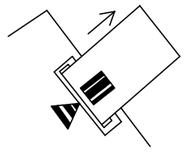


Figure 3 Removing the card

Operation and function

When the power card is fully inserted to the end, the energy meter begins to read the card, and the display information is as shown in the following figure.

Display symbol	content	explanation
[rd]	Reading the card	The card should not be removed immediately while it is being read
[AXXX]	Remaining power mark and remaining power in millions, Thousands, hundreds.	Remaining power display indication
[LXXX]	Alarm status sign and remaining power of ten million, Thousands, hundreds.	The remaining battery is lower than the alarm battery。
[UXXX]	Usage mark and usage of electricity in millions, Thousands, hundreds.	Total usage of electricity display indication
[-XXX]	Credit mark and credit number Thousands, hundreds.	The amount of credit used after the remaining amount of electricity is 0
[ErXX]	Card reading error and error code.	The card is inserted in an incorrect direction or is not a user card in this table.
[oVFL]	Power overflow.	Power card and meter remaining power and exceed99999.99kWh.

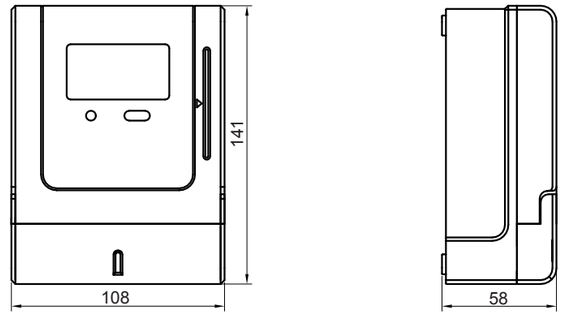
Table 2 Display information of nixie tube

symbol	Instructions
Total purchase of remaining alarm power	Chinese characters, can indicate: total power, total purchased power, remaining power, alarm (flashing when remaining power is insufficient)
UaUbUcVAkWh	UaUbUc -- -- -- -- -- - A order V - ABC phase lack of phase voltage, electric current kWh -- -- -- -- -- - active power kW -- -- -- -- -- - active power
88888.8.8.88	Data display
Succeeded in reading the card failed The table ID constant was overloaded and overdrawn	Chinese character, can indicate: 1) Read the card ------ when the energy meter comm unication display 2) success------ Power meter purchased successfully 3) failed ------ The power meter fails to be purchased 4) Table number, constant 5) overload ------ The watt-hour meter load is greater than the set maximum load 6) Switch ------ the display when the relay is off, the r elay is not displayed when it is closed 7) overdraft ---- --- there is an overdraft situation of the energy meter

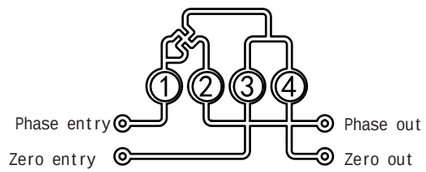
Table 3 Description of liquid crystal display symbols

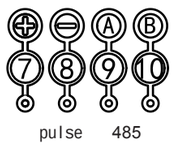
Outline and mounting dimensions drawing

Dimension drawing



Wiring diagram





Energy meter percentage error limit value

DT（S）SY606

Current value		Active power Level 1		Active power Level 2	
Direct access instrument	By instrument transformer	Power factor cosΦ	error%	Power factor cosΦ	error%
0.05Ib ⩽ I < 0.1Ib	0.02In ⩽ I < 0.05In	1	±1.5	1	±2.5
0.1Ib ⩽ I ⩽ Imax	0.05In ⩽ I ⩽ Imax	1	±1.0	1	±2.0
0.1Ib ⩽ I < 0.2Ib	0.05In ⩽ I < 0.1In	0.5L	±1.5	0.5L	±2.5
		0.8C	±1.5	0.8C	±2.5
0.2Ib ⩽ I ⩽ Imax	0.1In ⩽ I ⩽ Imax	0.5L	±1.0	0.5L	±2.0
		0.8C	±1.0	0.8C	±2.0

Ib indicates the basic current and Imax indicates the maximum current

Operating voltage range

Normal operating voltage: (0.9 ~ 1.1) reference voltage;

Limit operating voltage: (0.0 ~ 1.15) reference voltage;

Insulation voltage: ≥4000VAC/min;

Power consumption: voltage line power consumption ≤2W/10VA, current line power consumption ≤4VA

Temperature range

Normal operating temperature: -10 ~ +45;

Limit operating temperature: -25 ~ +55.

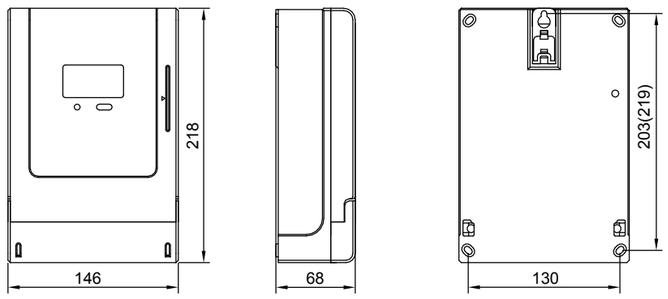
Humidity range

The average annual humidity is < 75%.

Up to 95% humidity for 30 days of the year (naturally diffused); The rest of the time it can be up to 85%.

Outline and mounting dimensions drawing

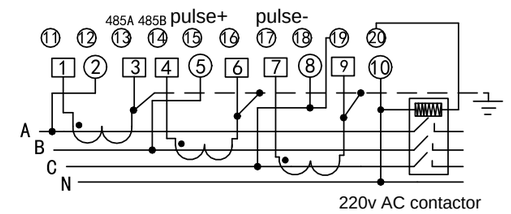
Dimension drawing



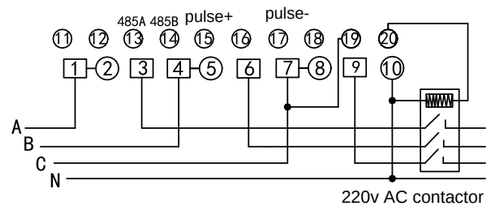
Outline and mounting dimensions drawing

Wiring diagram

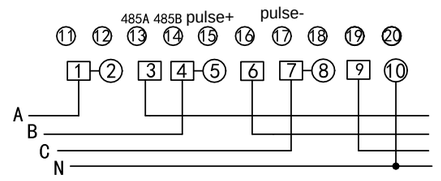
■ Current transformer access type, external AC contactor wiring diagram (3×220/380V 3×1.5(6)A、3×3(6)A、3×1(10)A)



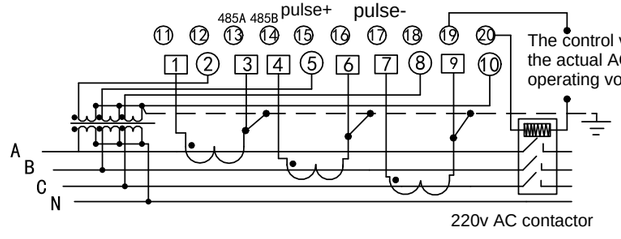
■ Direct and external AC contactor wiring diagram (3×220/380V ≥3×5(20)A)



■ Direct type, built-in power off wiring diagram (3×220/380V 3×5(20)A ~ 3×20(80)A)



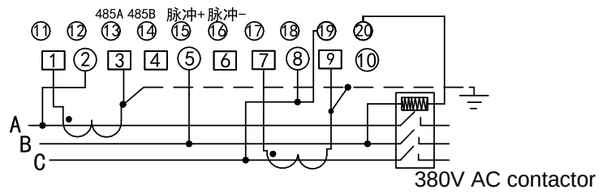
■ Voltage transformer, current transformer access type, external AC contactor wiring diagram (3×57.7/100V 3×1.5(6)A, 3×3(6)A)



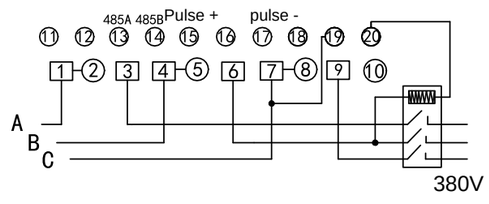
Outline and mounting

Wiring diagram

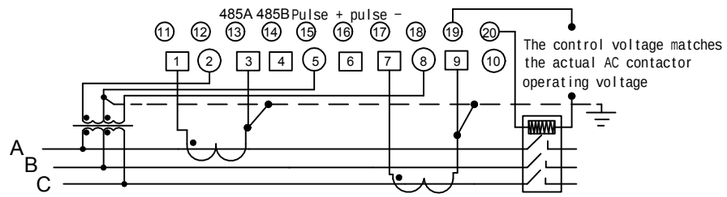
■ Current transformer Connecting type and external AC contactor wiring diagram (3×380V 3×1.5(6)A, 3×3(6)A, 3×1(10)A)



■ Direct and external AC contactor wiring diagram (3×380V ≥3×5(20)A)



■ Voltage transformer, current transformer access type, external AC contactor wiring diagram (3×100V 3×1.5(6)A, 3×3(6)A)



Attention:
a) Please disconnect the power supply when installing and wiring the energy meter to avoid accidents.
b) The external AC contactors in the figure need to be purchased by the user. All the AC contactors shown in the wiring diagram are normally open.
c) Terminals 485A and 485B in the figure are only valid in the watt-hour meter with the 485 communication function.

Technical parameter
A new generation of 606 series energy meters

Product overview

DTSF606, DSSF606 series three-phase electronic multi-rate electric energy meter, with time-sharing metering, set the settlement day automatic data transfer, remote meter reading through handheld terminal or PC, LCD display and other functions; It can be set up with 4 rates, 14 time periods, 14 time zones, etc., and has power test pulse and second pulse output. This product can be used to measure three-phase AC active energy with rated voltage and rated frequency of 50Hz, which is an ideal choice for enterprises and shops that need to measure three-phase active energy.

Main functions and characteristics

● Power metering function
With two-way metering, can accurately measure the positive and reverse two directions of electricity, and can set the combined active power accordingly, the default combined total active power is equal to the positive plus reverse power. With time-sharing measurement function; The active energy accumulates and stores the peak, peak, flat and valley electric energy and the total electric energy respectively.

● Maximum demand function
Has the total maximum demand measured and the date and time it occurred, and records the current total maximum demand and the total maximum demand for the last 12 months.

● Rate and time slot features
The energy meter has two sets of rate time meter, which can be automatically converted at the agreed time; Each set of rates supports four rates: peak, peak, flat and valley. 14 time zones can be set throughout the year, and 14 periods can be programmed arbitrarily in 24h; The minimum interval is 15 minutes.

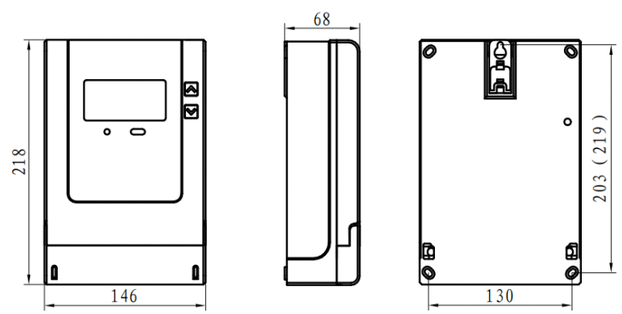
● Data storage function
It can store the total power and the power data of each rate for 12 billing days. Can store the maximum demand for the last 12 billing days and the date and time of occurrence data.

● Freezing function
Timing freezing: freezing electrical energy data at the agreed time and interval; Store each frozen quantity at least 60 times. Daily freezing: Storage of electrical energy at 00:00 every day, can store 62 days of data.

Main technical parameters

Certification certificate	CPA 2020E983-33
National standard	GB/T 17215.321、GB/T 15284-2002
International standard	IEC 62053-21
Current Specification A	3×1.5(6)、3×5(60)、3×10(100)
Reference voltage V	3×57.7/100、3×220/380、3×100、3×380
Accuracy class	1、2
Power dissipation	Voltage loop power consumption ≤2W/10VA in non-communication state, current loop power consumption ≤1VA

Appearance and mounting dimensions



Technical parameter
A new generation of 606 series energy meters

Product overview

DTS(X)606, DSS(X)606 series three-phase electronic active and reactive combined energy meter, with total active energy, reverse active energy, total reactive energy metering function, can store its data, and can set the combined active power accordingly. The product has the advantages of high precision, good reliability, wide load, low power consumption, flat error curve and strong anti-interference ability. This product can be used for active and reactive power assessment of enterprises, substations or power plants the most ideal choice, also suitable for transmission and distribution or distribution network automation meters.

Main functions and characteristics

● Power metering function
It has the function of combined active total energy, forward active energy and reverse active energy, total reactive energy measurement, and can store its data. The default combined active total power is forward plus reverse power.

● Electrical parameters
Through communication, electrical parameters such as voltage, current, instantaneous active power, instantaneous reactive power and power factors can be collected.

● Infrared /RS485 function
The physical layer of the communication channel is independent, and the damage of any communication channel does not affect the normal operation of other channels. The data in the meter is copied through the infrared /RS485 interface, and the communication follows the DL/T 645-2007 protocol.
The communication rate of the RS485 interface can be set. The standard rate is 1200bps, 2400bps, 4800bps, and 9600bps. The default rate is 2400bps.

● Display mode is LED or LCD display, in dim environment can clearly see the use of electricity.

Main technical parameters

Certification certificate	CPA 2020E987-33
National standard	GB/T 17215.321、GB/T 17215.323-2008
National standard	IEC 62053-21、IEC 62053-23
Current Specification A	3×1.5(6)、3×3(6)、3×5(20)、3×10(40)、3×5(60)、3×15(60)、3×20(80)、3×10(100)、3×30(100)
Reference voltage V	3×57.7/100、3×220/380、3×100、3×380
Accuracy class	Active power 1, 2 Reactive power 2, 3
Power dissipation	Voltage loop power consumption ≤2W/10VA in non-communication state, current loop power consumption ≤1VA

Appearance and mounting dimensions