HUANYU ELECTRIC

POWER SUPPLY AND ENERGY

PRODUCT CATALOG

HUANYU HIGH TECH CO.,LTD.
huyuelectric.com

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19-74P

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HYIC3 Series of Intelligent Integrated Power Capacitor Compensation Devices

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Power Management

75-126P

DDS881 Series Electronic Single-phase Energy Meters

DSS881, DTS881 Series of Electronic Three-phase Three-wire And Three-phase Four-wire Active Energy Meters

DSSF881, DTSF881 Series of Electronic Three-phase Three-wire And Three-phase Four-wire Multi-rate Energy Meters

DDSY881, DTSY881 Series of Single-phase Prepaid Energy Meters And Three-phase Four-wire Prepaid Energy Meters

DSSD881, DTSD881 Series Electronic Three-phase Multi-function Energy Meter

DTS881-4 (E1201) Single Phase Static kWh Meter

DTS881-4(E3401) Three Phase Static kWh Meter

HY3 Series Digital Display

HY3 Series Three-phase Multi-function Digital Display Meter

FM2S Single Phase Smart Meter

DDSU881 Series Guide Rail Table

DDSYU881 Series Guide Rail Table

DTSU881/DSSU881 Series Guide Rail Table

DTS881-VAP (D1206) Single Phase Voltage/Current Protective Energy Meter

DDS881-1(D1102) Single Phase Din Rail Type Energy Meter

DDS881-2 (D1201) Single Phase Din Rail Type Energy Meter

DDS881-1-W1(D1107) Single Phase Din Rail Type Wifi Remote Control Smart Switch (IVAP)

DDS881-1-W2(D1108) Single Phase Din Rail Type Wifi Remote Control Smart Switch

DDS881-4 W(D1408) Single Phase Three Wire Din Rail Type RS485 Energy Meter

DDS881-4 WIFI(D1415) Single Phase Din Rail Type WIFI Remote Control Energy Meter(IVAP)

DDS881-4 WIFI(D1413) Single Phase Three Wire Din Rail Type WIFI Remote Control Energy Meter

DDS881-4(D1401) Single Phase Din Rail Type Energy Meter

DTS881-4(D3401) Three Phase Din Rail Type Energy Meter

DTS881-7(D3701) Three Phase Din Rail Type Energy Meter

6L2, 42L6, 85L1, 59L1, 44L1, 99T1 Series current, voltage, frequency, power factor, power

BH-0.66 Series Current Transformer

BH(SDH)-0.66 II Series Current Transformer

BH-0.66III Series Current Transformer

LMZ(J)1-0.5 Series Current Transformer

LMZ(J)1-0.66 Series Current Transformer

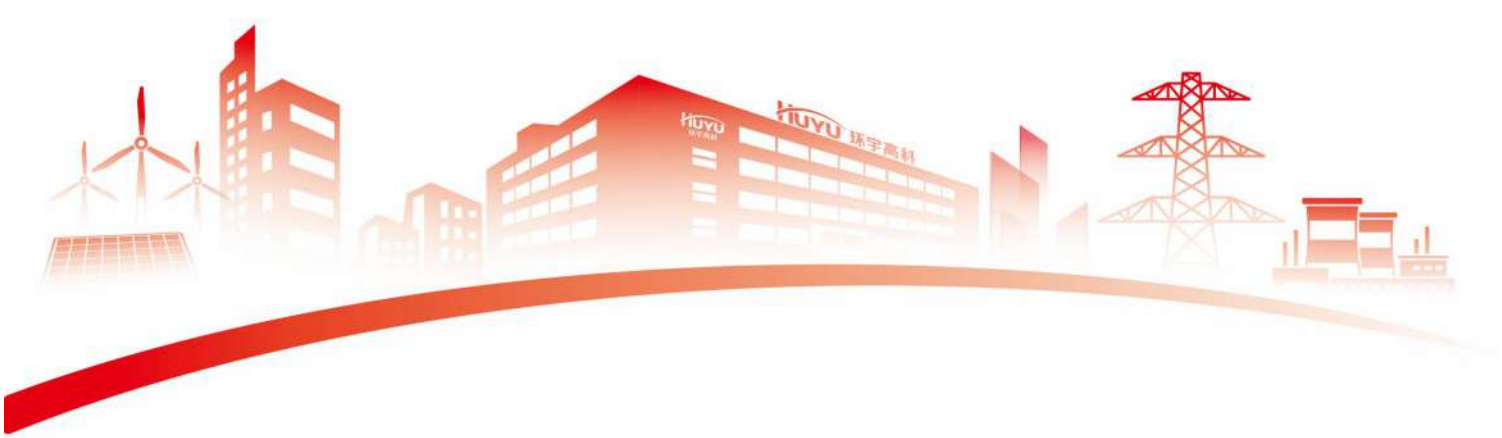
LFZ1D-GHY3, LMZ(1D-4D)-GHY3 Series Current Transformer

GTFP-200 Square Meter Sockets

GYFD Combination Meter Sockets

Hy□ □Series Electricity Metering Box

HUJX-F Series Stainless Steel Metering Box



HYRT3Z

DC Fuse Holder

Application Scope

HYRT3Z series DC fuse holder is a fuse assembly that integrates isolator and switch functions. It must be used with fuse cores of corresponding specifications. It is prohibited to operate with load. It has obvious current limiting characteristics and can be used for short-circuit and overload protection in electrical devices to achieve the best safety guarantee of the line.

This series of products is designed and manufactured in accordance with IEC 60947-3 standard, with a rated current of up to 32A and a rated voltage of up to 1000V DC.

Applicable to:

-Photovoltaic DC combiner
-Inverter system
-Low-voltage DC distribution line

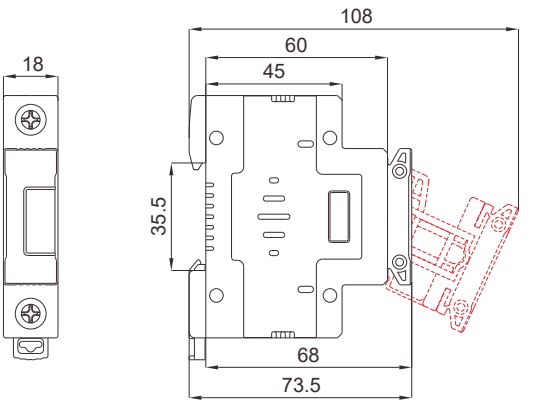
Main functions:

-Overcurrent protection
-Effective circuit disconnection

Main Technical Parameter

Fuse Base Model	Compatible Fuse Size	Rated Voltage	Rated Current (Max)	Power Loss
HYRT3Z-32	10×38mm	1000V DC	32A	6W
HYRT3Z-32L (with light)				

Product Dimensions



HYRT3Z-1038

Applicable Fuse Model

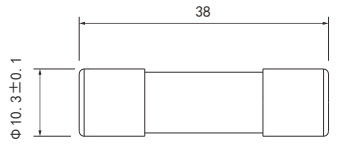
Technical Specifications

Standards: IEC 60269-6, UL 248-19
Rated Voltage: 1000V DC
Rated Current: 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 16, 20, 25, 30, 32A
Breaking Capacity: 33kA
Construction: Cylindrical body with enforced arc-quenching design

Main Technical Parameter

Model	Fuse Size	Rated Voltage	Rated Current	Breaking Capacity
HYRT3Z-1038	10×38mm	1000V DC	1, 2, 3, 4, 5, 6,8, 10, 12, 15, 16,20, 25, 30, 32A	33kA

Product Dimensions



HYRT2Z
DC Fuse Holder

Application Scope

The HYRT2Z series DC fuse holder is a DC fuse component that integrates the functions of an isolator and a switch. It must be used with a fuse link, features a clear current-limiting characteristic, and complies with the IEC60947-3 standard.

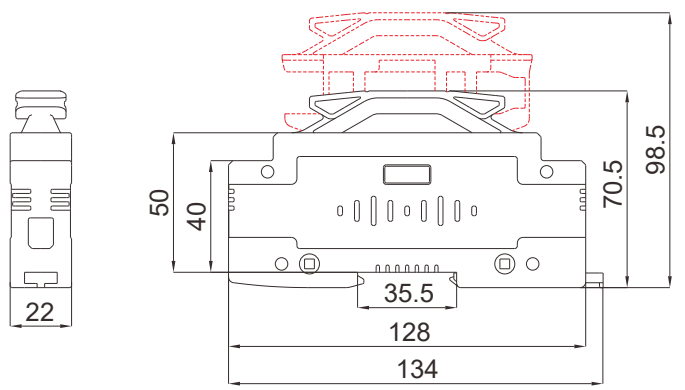
Main Functions:
-Short-circuit and overload protection
-Overcurrent protection
-Effective circuit disconnection (non-load operation)

Applications:
-Photovoltaic (PV) DC combiner boxes
-PV inverters
-Low-voltage DC distribution lines and systems (rated up to 50A, 1500V DC)

Main Technical Parameter

Fuse Base Model	Compatible Fuse Size	Rated Voltage	Rated Current (Max)	Power Loss
HYRT2Z-50	10x85mm	1500V DC	35A	16W
	14x85mm		50A	

Product Dimensions



HYRT2Z-1085
HYRT2Z-1485
Applicable Fuse Model

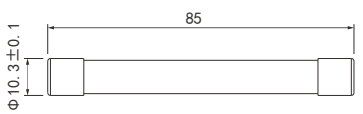
Technical Specifications

Standard: IEC60269-6, UL248-19
Rated voltage: 1500V DC
Rated current: (HYRT2Z-1085) 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 16, 20,
(HYRT2Z-1485) 15, 16, 20, 25, 32, 32, 25, 40, 45, 50A
Breaking capacity: 50kA
Structure: cylindrical, with forced arc extinguishing characteristics

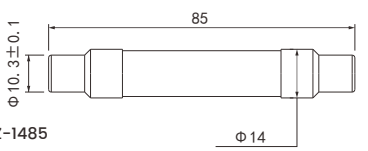
Main Technical Parameter

Model	Fuse Size	Rated Voltage	Rated Current	Breaking Capacity
HYRT2Z-1085	10×85mm	1500V DC	1, 2, 3, 4, 5, 6,8, 10, 12, 15, 16,20, 25, 30, 32, 35A	50kA
HYRT2Z-1485	14×85mm		15, 16,20, 25, 30, 32, 35, 40, 45A	

Product Dimensions



HYRT2Z-1085



HYRT2Z-1485

EXU3DC-I+II

DC Surge Protective Device

Application Scope

Installed at lpz0-1 and above, it protects low-voltage equipment from lightning and surge damage, and is suitable for various power supply systems of PSD I+II (B+C)
Designed according to IEC 61643-1

Main functions:

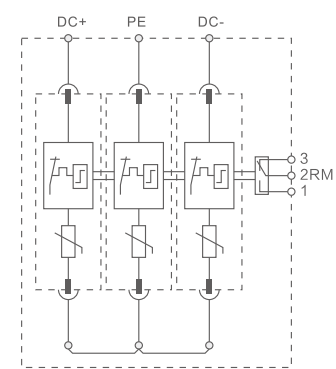
-Pluggable module for easy installation and maintenance
-Large discharge capacity and fast response
-Dual thermal disconnect device for more reliable protection
-Multi-function terminal for wire and busbar connection
-When a fault occurs, the green window turns red, and a remote alarm terminal is triggered.

Main Technical Parameter

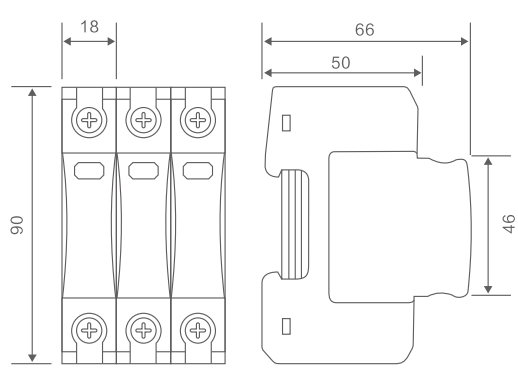
model	EXU3DC-I+II /3P
Maximum continuous operating voltage	800VDC/1000VDC/1200VDC
Surge current	7kA
Nominal discharge current	20kA
Maximum discharge current	50kA
Voltage protection level	4.2kV/4.5kV/5.0kV
Continuous current	32A fuse will not be triggered at 2kA rms 255V
Response time	≤100ns
Maximum backup fuse	200A gL/gG
Maximum backup fuse	125A gL/gG
TOV voltage	355V/5sec
Operating temperature range (parallel circuit)	-40℃...+80℃
Operating temperature range (series circuit)	-40℃...+60℃
Installation wire cross-sectional area	35mm² solid/50mm² flexible
Installation method	35mm DIN rail
Casing material	Purple (module)/ light gray (base) thermoplasti,UL94-V0
Specification	2 mods
Test standard	IEC 61643-1; YD/T 1235.1
Certification	CE ROHS IS09001 CQC TUV
Remote signal installation connection type	Switching contact
Exchange capacity	250V/0.5A
Exchange capacity	250V/0.1A; 125V/0.2A; 75V/0.5A
Remote signal end wire cross-sectional area	Max.1.5mm² solid/flexible

model	EXU3DC-I+II /3P
Packing unit	1pc(s)
Weight	288g

Product Dimensions/Schematic Diagram



Dimensional Drawing



Schematic Circuit Diagram

EXU3DC-II

DC Surge Protective Device

Application Scope

Installed at lpz0 -1 and above, protecting low voltage equipment from lightning and surge damage
Applicable to various power supply systems of PSD I+II (B+C)
Designed according to IEC 61643-1

Main functions:

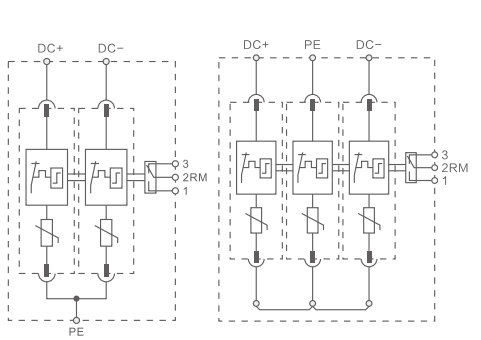
-Pluggable module for easy installation and maintenance
-Large discharge capacity and fast response
-Dual thermal disconnect device for more reliable protection
-Multi-function terminal for wire and busbar connection
-When a fault occurs, the green window turns red and a remote alarm terminal is triggered

Main Technical Parameter

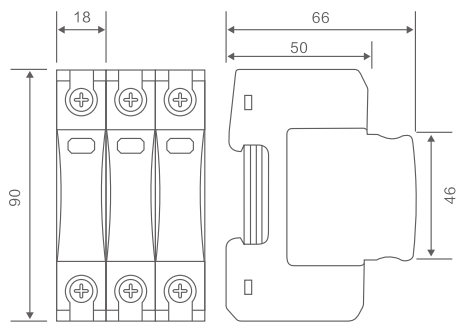
model	EXU3DC-II/2P	EXU3DC-II/3P
Maximum continuous operating voltage	800VDC/100VDC/1200VDC	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	3.2kV/4.0kV/4.4kV	
Response time	≤25ns	≤25ns
Maximum backup fuse	125A gL/gG	125A gL/gG
Operating temperature range (parallel circuit)	-40℃...+80℃	-40℃...+80℃
Installation wire cross-sectional area	1.5mm²~ 25mm² solid/35mm² flexible	
Installation method	35mm DIN rail	
Casing material	Purple (module)/light gray (base) thermoplastic, UL94-V0	
Specification	1 mod	
Test standard	IEC 61643-1;YD/T 1235.1	
Certification	CE ROHS IS09001 CQC TUV	
Remote signal installation connection type	Switching contact	
Exchange capacity	250V/0.5A	
Exchange capacity	250V/0.1A; 125V/0.2A; 75V/0.5A	
Remote signal end wire cross-sectional area	Max.1.5mm² solid/flexible	

model	EXU3DC-II/2P	EXU3DC-II/3P
Packing unit	2pc(s)	1pc(s)
Weight	206g	283g

Product Dimensions/Schematic Diagram



Dimensional Drawing



Schematic Circuit Diagram

EXU3DC-II+III

DC Surge Protective Device

Application Scope

Installed at lpz0 -1 and above, protecting low voltage equipment from lightning and surge damage
Applicable to various power supply systems of PSD I+II (B+C).
Designed according to IEC 61643-1

Main functions:

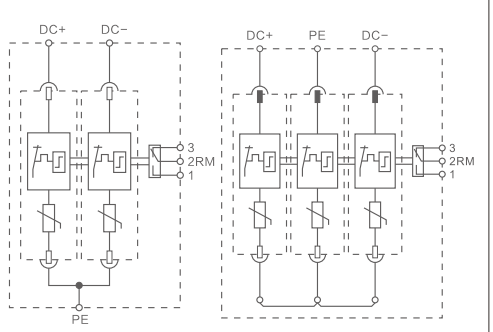
-Pluggable module for easy installation and maintenance
-Large discharge capacity and fast response
-Dual thermal disconnect device for more reliable protection
-Multi-function terminal for wire and busbar connection
-When a fault occurs, the green window turns red and a remote alarm terminal is triggered.

Main Technical Parameter

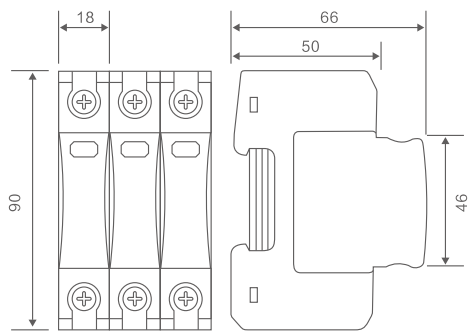
model	EXU3DC-II+III/2P	EXU3DC-II+III/3P
Maximum continuous operating voltage	800VDC/1000VDC/1200VDC	
Nominal discharge current	10kA	
Maximum discharge current	40kA	
Voltage protection level	3.2kV/4.0kV/4.4kV	
Response time	≤25ns	≤25ns
Maximum backup fuse	125A gL/gG	125A gL/gG
Operating temperature range (parallel circuit)	-40℃...+80℃	-40℃...+80℃
Installation wire cross-sectional area	1.5mm²~ 25mm² solid/35mm² flexible	
Installation method	35mm DIN rail	
Casing material	Purple (module)/light gray (base) thermoplastic, UL94-V0	
Specification	1 mod	
Test standard	IEC 61643-1;YD/T 1235.1	
Certification	CE ROHS IS09001 CQC TUV	
Remote signal installation connection type	Switching contact	
Exchange capacity	250V/0.5A	
Exchange capacity	250V/0.1A; 125V/0.2A; 75V/0.5A	
Remote signal end wire cross-sectional area	Max.1.5mm² solid/flexible	

model	EXU3DC-II+III/2P	EXU3DC-II+III/3P
Packing unit	2pc(s)	1pc(s)
Weight	198g	297g

Product Dimensions/Schematic Diagram



Dimensional Drawing



Schematic Circuit Diagram

EXG3DC-32/EXBG3DC-32

PV Switch-disconnector

Application Scope

EXG3DC series photovoltaic DC disconnect switches are suitable for power systems with rated voltage DC1200V and below and rated current 32A and below. The product can be used for infrequent connection and disconnection, and can isolate and disconnect lines, and can disconnect 1~4 MPPT lines at the same time. It is suitable for isolating lines in DC transmission and distribution systems, such as cutting off the DC circuit between solar panels and inverters.

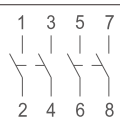
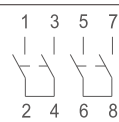
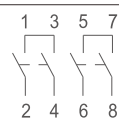
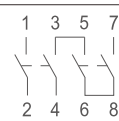
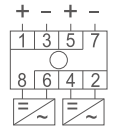
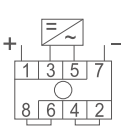
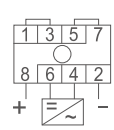
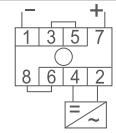
Main functions:

-IEC/EN 60947-3 and AS 60947.3 standards
-Use category: DC-PV1, DC-PV2
-Non-polarity
-Protection level: Rail type (Ip20), housing (IP66) UV resistant
-Lockable
-UV resistant and V0 flame retardant materials
-Arc extinguishing time 2ms

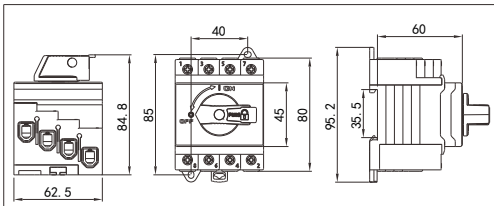
Main Technical Parameter

Model	EXG3DC-32 / EXBG3DC-32
Function	Isolation, control
Standard	IEC60947-3, AS60947.3
Use category	DC-PV1 / DC-PV2
Level	4P
Rated frequency	DC
Rated operating voltage (Ue)	300V/600V/800V/1000V/1200V
Rated insulation voltage (Ui)	1200V
Rated short-time withstand current (Icw)	1KA/1S(4, 4S,4B) , 1.7KA/1S(2H)
Rated impulse withstand voltage (Uimp)	8.0KV
Overvoltage category	II
Polarity	Mechanically non-polar, "+" and "-" polarity can be interchanged.
Service life/number of operations	
Mechanical life	9700
Electrical life	300
Installation Environment	
Protection level	IP20
Storage temperature	-40℃~+85℃
Installation type	Vertical or horizontal
Degree of pollution	3

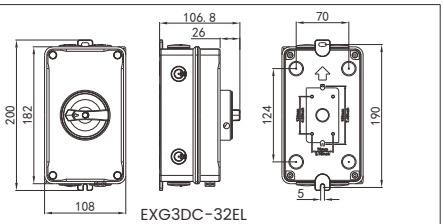
Wiring interchange-corresponding Diagram:

	4-Poles	4 pole with input and output on top	4 pole with input and output on bottom	4 pole with input on top and output on bottom
Specifications	4P	2T	4B	4S
Contacts Wiring Graph				
Switching Example				

Product Dimensions



EXG3DC-32



EXG3DC-32EL

EXEB1S

PV Combiner Box Enclosure

Application Scope

The base and cover are made of high-quality new PC material; the transparent front cover is also made of new PC material. These components feature excellent toughness, high strength, good impact resistance, and long service life.

-Suitable for indoor and outdoor environments, with waterproof, dustproof, and corrosion-resistant performance.
-Standards complied: GB/T 17466.1, GB/T 17466.24, IEC 60529 IP65
-Patent Numbers:202221500007.6, 202230368813.1, 202230368814.6

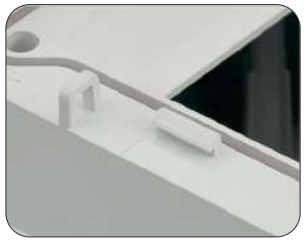
Model and Meaning

EX EB 1 S-□

- Number of circuits
- Product Opening Method
  - S: Vertical Opening
- Product Model
- Company Code

Product Advantages Description

IP65 Protection Design
Sealed design, screws inside for better waterproofing



Latch Structure
Stronger locking structure

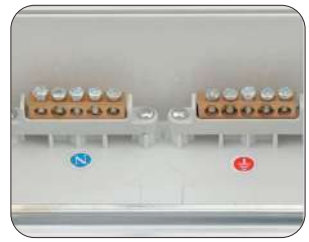
Label Position Reserved
Reserved space for control function labels

Lock Slot Design
Supports anti-theft lock installation

Circuit Partition Design
Removable left/right baffles for easy wiring

Captive Screws
Screws stay in place when loosened

Flexible Knockout Openings
Free to open cable entry holes



Copper Terminal Assembly
Passed 960°C glow wire test

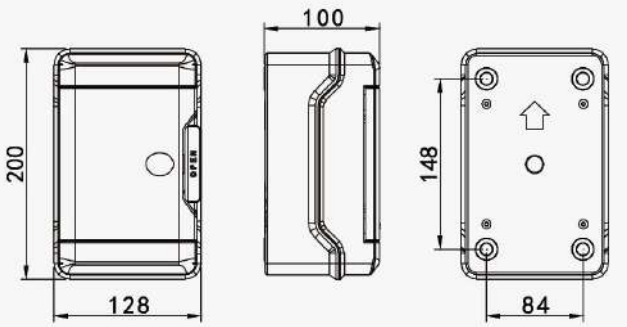
EXCB1S Series Surface Mounted Waterproof Distribution Box Product Data Summary Table

Model	Number of Circuits	Rows	Dimensions (mm) (H × W × D)	Zero and Ground Row Configuration	Mounting Method
EXEB1S-4	4 Circuits	1	128*200*100	Zero row: 3 holes Ground row: 3 holes	Surface / Wall-mounted
EXEB1S-6	6 Circuits	1	164*200*100	Zero row: 5 holes Ground row: 5 holes	Surface / Wall-mounted
EXEB1S-9	9 Circuits	1	218*200*100	Zero row: 5 holes Ground row: 5 holes	Surface / Wall-mounted
EXEB1S-13	13 Circuits	1	296*230*120	Zero row: 8 holes Ground row: 8 holes	Surface / Wall-mounted
EXEB1S-15	15 Circuits	1	332*230*120	Zero row: 8 holes Ground row: 8 holes	Surface / Wall-mounted
EXEB1S-18	18 Circuits	1	386*230*120	Zero row: 8 holes Ground row: 8 holes	Surface / Wall-mounted
EXEB1S-26	26 Circuits	2	296*390*130	Zero row: two 8 holes Ground row: two 8 holes	Surface / Wall-mounted
EXEB1S-39	39 Circuits	3	296*550*130	Zero row: two 8 holes Ground row: two 8 holes	Surface / Wall-mounted

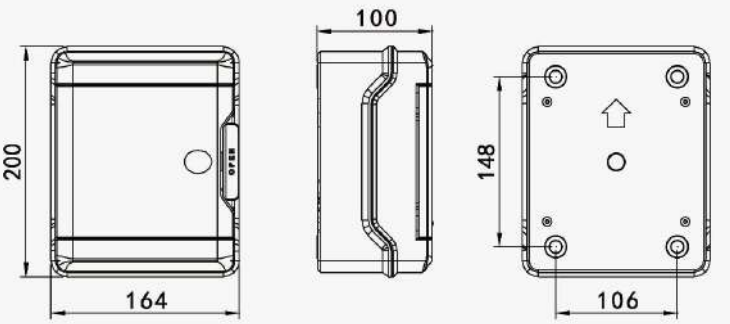
EXEB1S

PV Combiner Box Enclosure

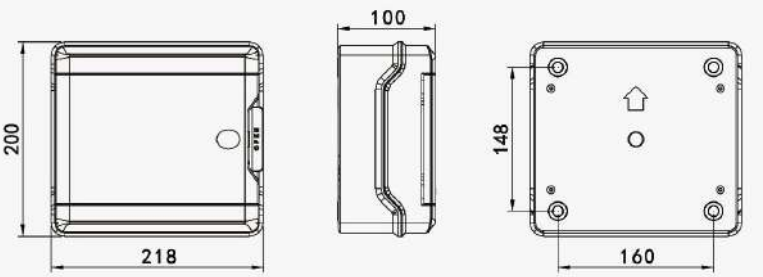
EXEB1S-4



EXEB1S-6



EXEB1S-9



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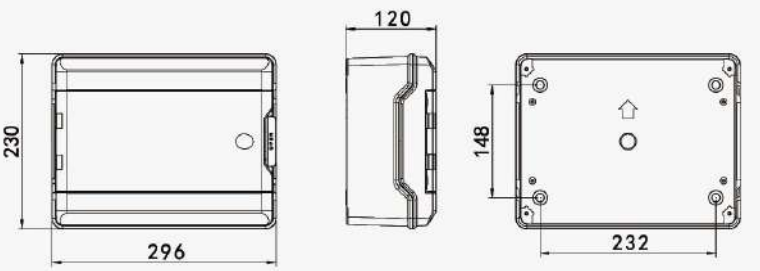
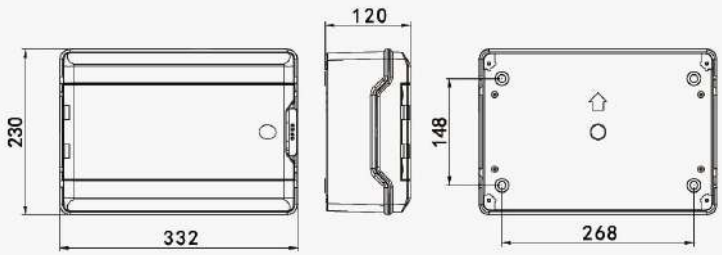


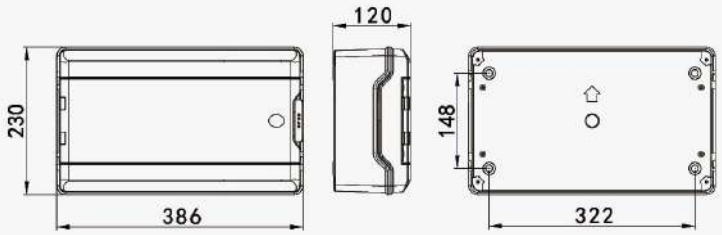
EXEB1S

PV Combiner Box Enclosure

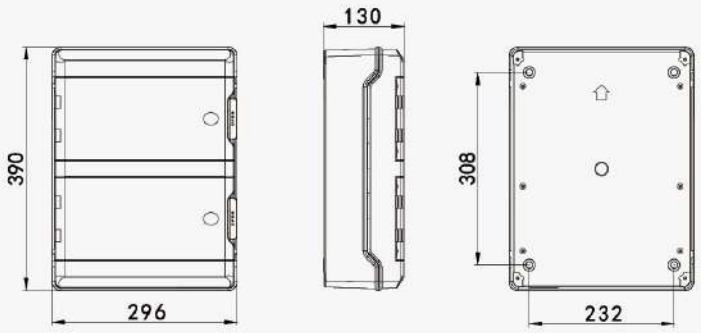
EXEB1S-15



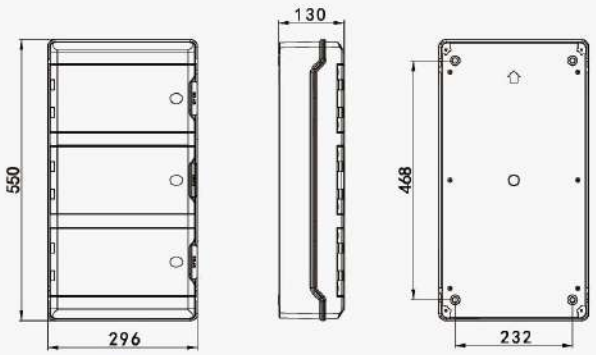
EXEB1S-18



EXEB1S-26



EXEB1S-39



EXEB1H

PV Combiner Box Enclosure

Application Scope

The bottom case and front frame are made of virgin ABS, while the transparent cover is made of virgin PC. They offer excellent toughness, strength, impact resistance, and a long service life.
Suitable for indoor and outdoor use, including waterproofing, dustproofing, and corrosion resistance.

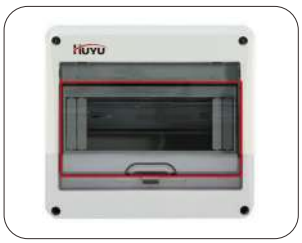
- Compliant with: GB/T 17466.1; GB/T 17466.24; IEC 60529 IP65
- Patent Number: 202230220346.8

Model and Meaning

EX EB 1 H-□

- Number of circuits
- Product Opening Method
  - H: Horizontal Opening
- Product Model
- Company Code

Product Advantages Description

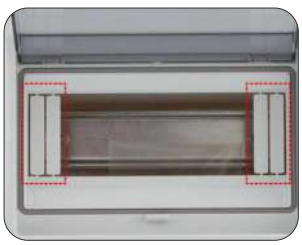


IP65 Protection
Sealed cover and base for strong waterproofing.

Buckle
Reinforced for secure fastening.

Hinged Cover
Opens ≥115°, stable, ≥500 cycles.

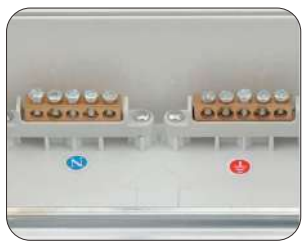
Installation Kit
4 expansion tubes
4 self-tapping screws.



Circuit Baffles
Built-in, retractable, removable.

Face Frame
Captive screws outside waterproof strip.

Knockout Holes
Marked for easy sizing, with positioning hole.



Copper Terminals
Passed 960 °C glow-wire test.

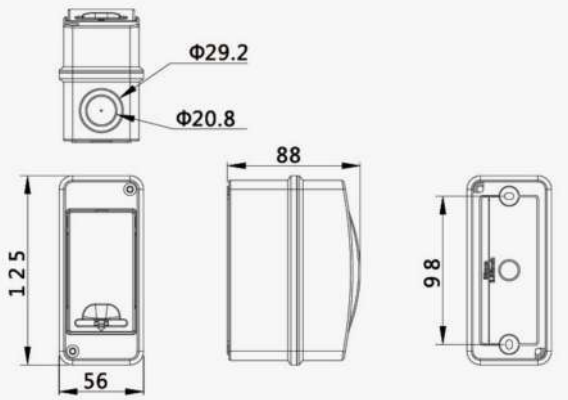
EXCB1H Series Surface Mounted Waterproof Distribution Box Product Data Summary Table

Model	Number of Circuits	Rows	Dimensions (mm) (H × W × D)	Zero and Ground Row Configuration	Mounting Method
EXEB1H-2	2 Circuits	1	56*125*88	/	Surface / Wall-mounted
EXEB1H-5	5 Circuits	1	129*170*95	Neutral bar: 3 holes Earth bar: 3 holes	Surface / Wall-mounted
EXEB1H-8	8 Circuits	1	183*170*95	Neutral bar: 5holes Earth bar: 5 holes	Surface / Wall-mounted
EXEB1H-12	12 Circuits	1	255*200*105	Neutral bar: 8 holes Earth bar: 8 holes	Surface / Wall-mounted
EXEB1H-15	15 Circuits	1	309*200*105	Neutral bar: 8 holes Earth bar: 8 holes	Surface / Wall-mounted
EXEB1H-18	18 Circuits	1	363*200*110	Neutral bar: 8 holes Earth bar: 8 holes	Surface / Wall-mounted
EXEB1H-24	24 Circuits	2	270*360*110	Neutral bar: 2 pcs × 8 holes Earth bar: 2 pcs × 8 holes	Surface / Wall-mounted

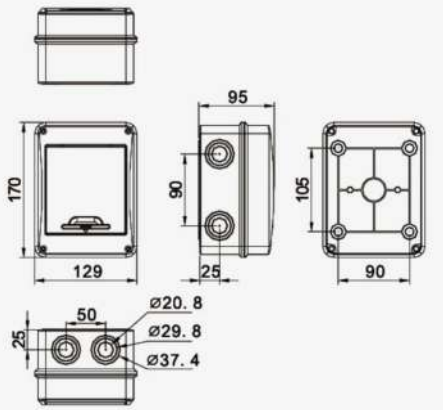
EXEB1H

PV Combiner Box Enclosure

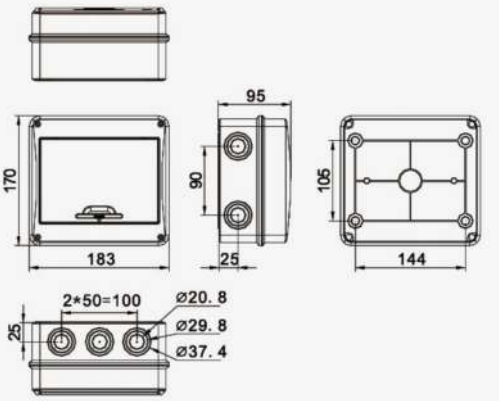
EXEB1H-2



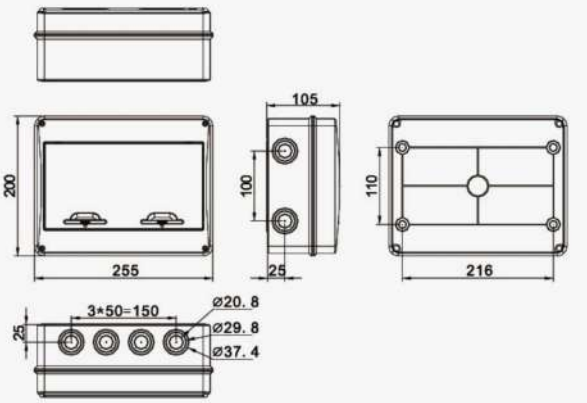
EXEB1H-5



EXEB1H-8



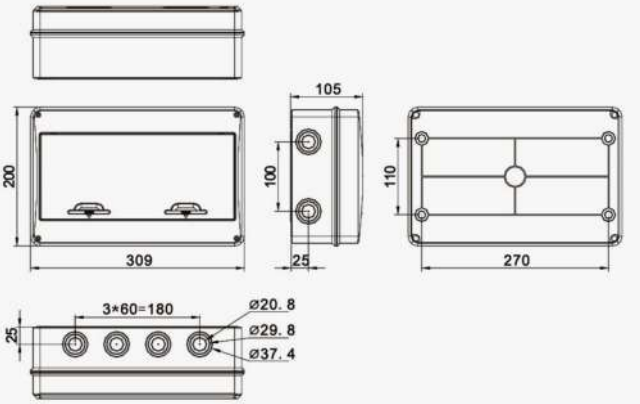
EXEB1H-12



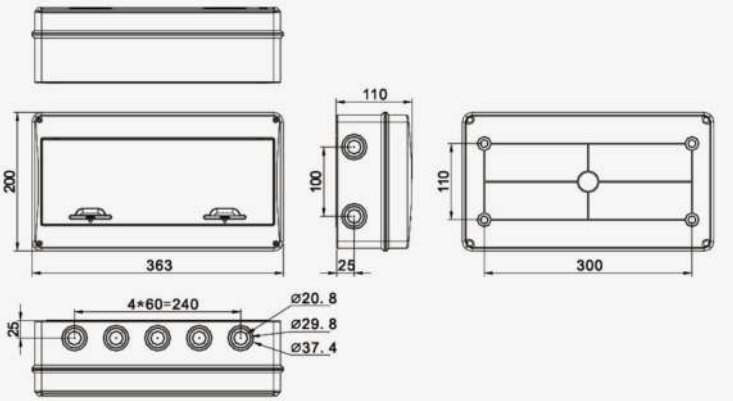
EXEB1H

PV Combiner Box Enclosure

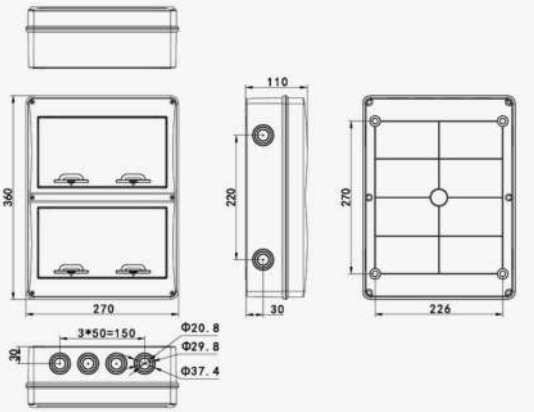
EXEB1H-15



EXEB1H-18



EXEB1H-24



EXEB3S

PV Combiner Box Enclosure

Application Scope

Features

-IP66 waterproof, dustproof, and anti-corrosion protection
-UV resistant
-Withstands 650 °C glow-wire test

Customization & Installation

-Openings can be customized to customer requirements
-Complete range of specifications
-Easy and convenient installation

Standards

-IEC 60670-24，GB/T 17466.24

Model and Meaning

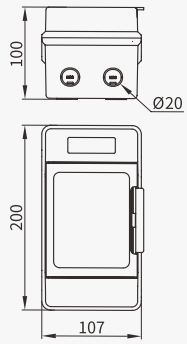
EX EB3 S-□-□

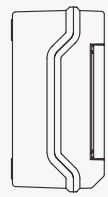
- Number of rows
- Number of circuits
- Product Opening Method
  - S: Vertical Opening
- Product Model
- Company Code

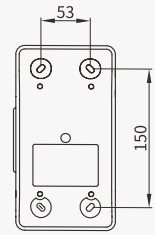
EXCB3S Series Surface Mounted Waterproof Distribution Box Product Data Summary Table

Model	Number of Circuits	Rows	Dimensions (mm) (H × W × D)	Zero and Ground Row Configuration	Mounting Method
EXEB3S-4	4 Circuits	1	200*107*100	Zero row: 3 holes Ground row: 3 holes	Surface / Wall-mounted
EXEB3S-6	6 Circuits	1	200*165*100	Zero row: 5 holes Ground row: 5 holes	Surface / Wall-mounted
EXEB3S-9	9 Circuits	1	200*219*100	Zero row: 5 holes Ground row: 5 holes	Surface / Wall-mounted
EXEB3S-12	12 Circuits	1	229*273*109	Zero row: 8 holes Ground row: 8 holes	Surface / Wall-mounted
EXEB3S-18	18 Circuits	1	229*381*109	Zero row: 8 holes Ground row: 8 holes	Surface / Wall-mounted
EXEB3S-24	24 Circuits	2	381*274*109	Zero row: 8 holes Ground row: 8 holes	Surface / Wall-mounted
EXEB3S-36-2	72 Circuits	2	397*381*125	Zero row: two 8 holes Ground row: two 8 holes	Surface / Wall-mounted
EXEB3S-36-3	108 Circuits	3	532*274*109	Zero row: two 8 holes Ground row: two 8 holes	Surface / Wall-mounted

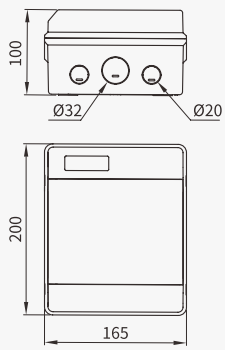
EXEB3S-4

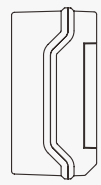


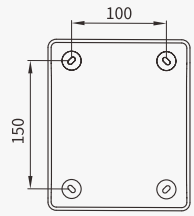




EXEB3S-6



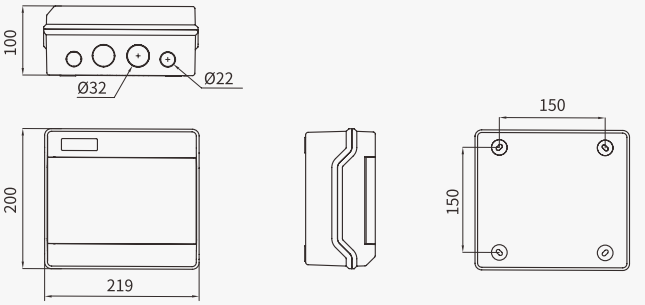




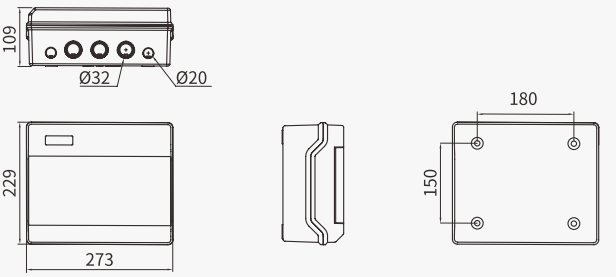
EXEB3S

PV Combiner Box Enclosure

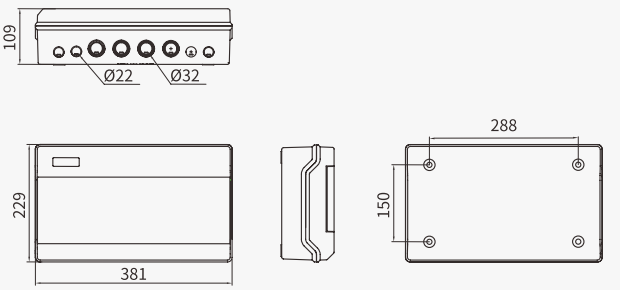
EXEB3S-9



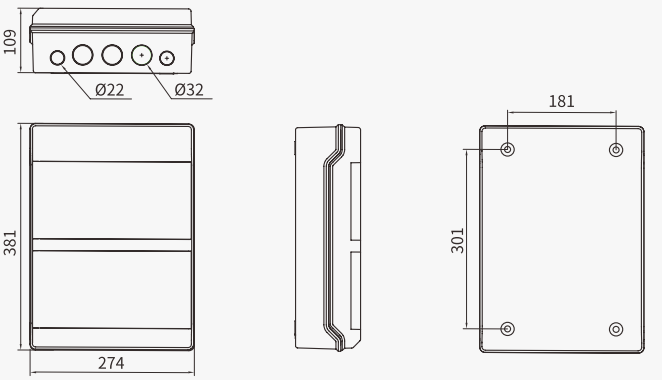
EXEB3S-12



EXEB3S-18



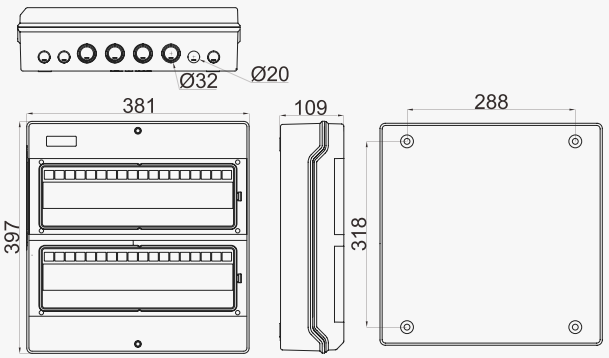
EXEB3S-24



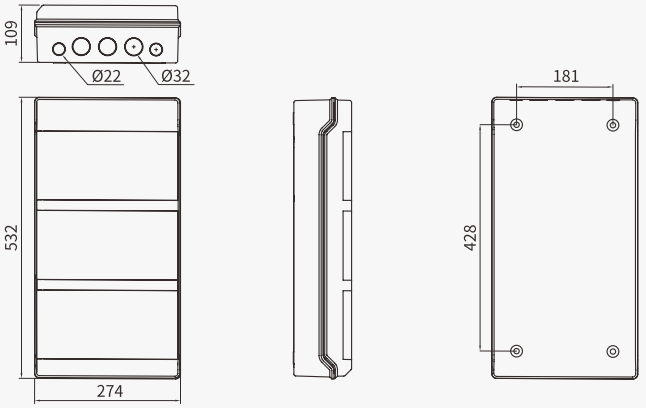
EXEB3S

PV Combiner Box Enclosure

EXEB3S-36-2



EXEB3S-36-3



EXEB3H

PV Combiner Box Enclosure

Application Scope

Protection

-IP66 waterproof and dustproof
-UV resistant
-Compliant with 650°C glow wire test

Customization & Specifications

-Customizable knockouts available upon request
-Available in various specifications
-Easy and flexible installation

Model and Meaning

EX EB3 H-□-□

- Number of rows
- Number of circuits
- Product Opening Method
  H: Horizontal Opening
- Product Model
- Company Code

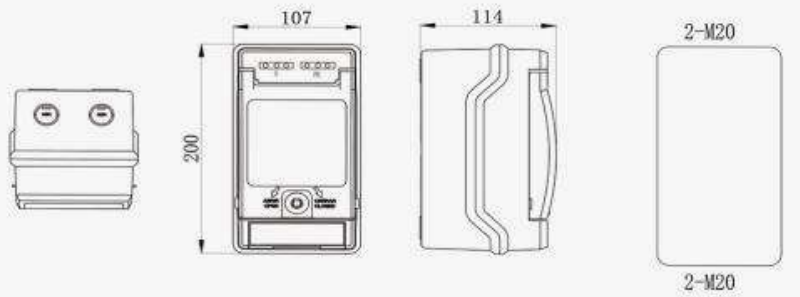
Applications & Standards

-Suitable for demanding environments requiring waterproof, dustproof, and anti-corrosion protection
-Complies with IEC 60670-24 and GB/T 17466.24 standards

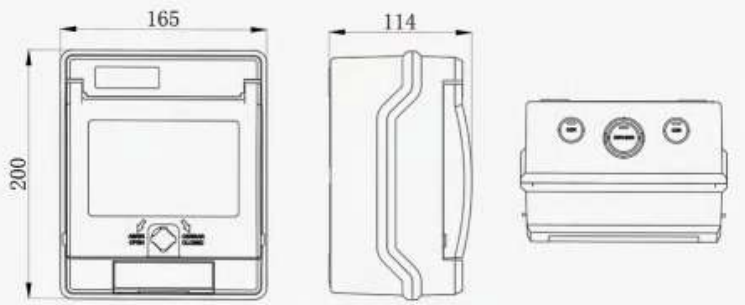
EXCB3 Series Surface Mounted Waterproof Distribution Box Product Data Summary Table

Model	Number of Circuits	Rows	Dimensions (mm) (H × W × D)	Zero and Ground Row Configuration	Mounting Method
EXEB3H-4	4 Circuits	1	200*107*114	Zero row: 3 holes Ground row: 3 holes	Surface / Wall-mounted
EXEB3H-6	6 Circuits	1	200*165*114	Zero row: 5 holes Ground row: 5 holes	Surface / Wall-mounted
EXEB3H-9	9 Circuits	1	200*219*114	Zero row: 5 holes Ground row: 5 holes	Surface / Wall-mounted
EXEB3H-12	12 Circuits	1	229*272.5*125	Zero row: 8 holes Ground row: 8 holes	Surface / Wall-mounted
EXEB3H-18	18 Circuits	1	229*381*125	Zero row: 8 holes Ground row: 8 holes	Surface / Wall-mounted
EXEB3H-24	24 Circuits	1	379*272.5*125	Zero row: 8 holes Ground row: 8 holes	Surface / Wall-mounted
EXEB3H-36-2	72 Circuits	2	397*381*125	Zero row: two 8 holes Ground row: two 8 holes	Surface / Wall-mounted
EXEB3H-36-3	108 Circuits	3	529*272.5*125	Zero row: two 8 holes Ground row: two 8 holes	Surface / Wall-mounted

EXEB3H-4



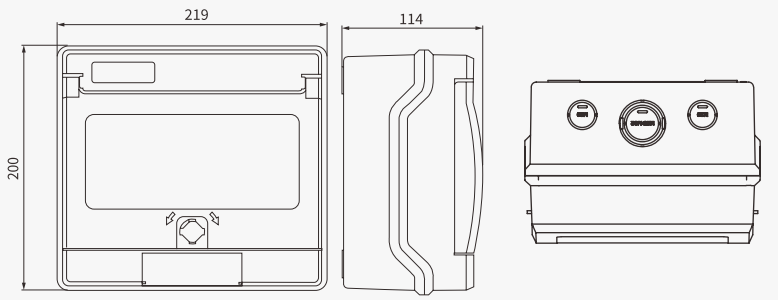
EXEB3H-6



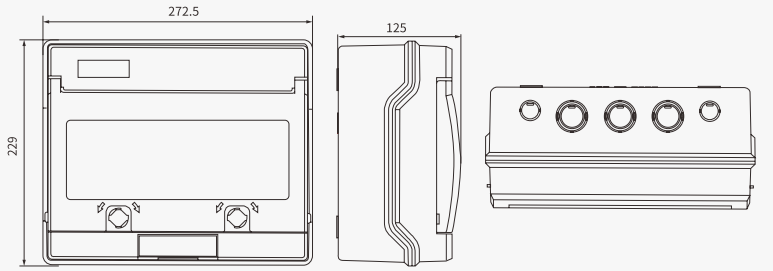
EXEB3H

PV Combiner Box Enclosure

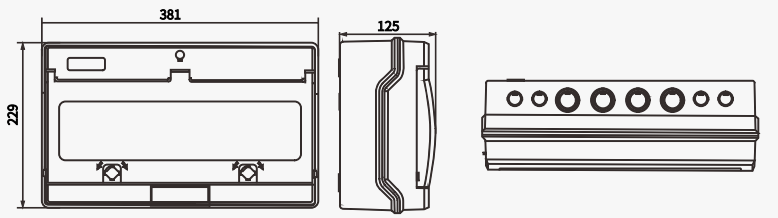
EXEB3H-9



EXEB3H-12



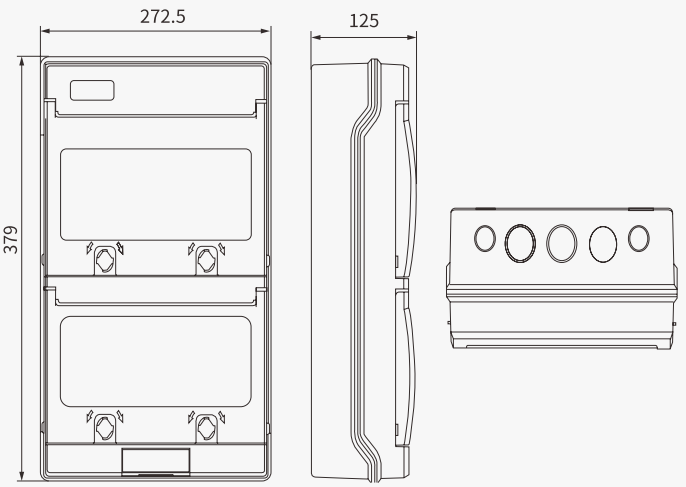
EXEB3H-18



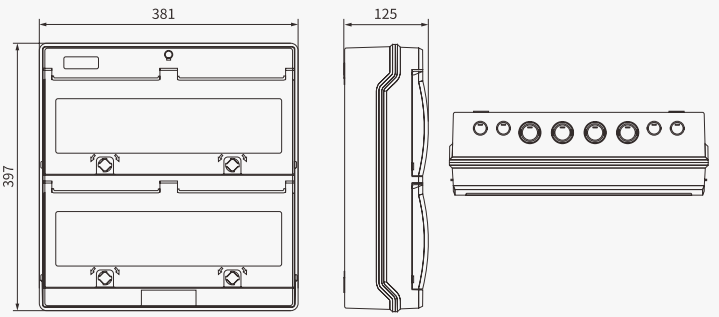
EXEB3H

PV Combiner Box Enclosure

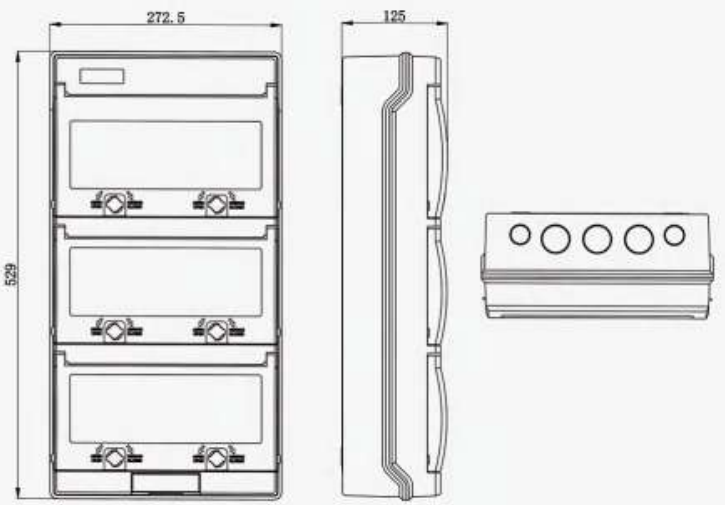
EXEB3H-24



EXEB3H-36-2



EXEB3H-36-3



TJD(SVC)

Series of High-precision Fully Automatic AC Voltage Stabilizers

Application Scope

This series of high-precision fully automatic AC voltage stabilizers is designed and manufactured based on the automatic voltage regulation principle currently widely used internationally. Its key parts and components are all imported. It has the characteristics of high voltage stabilization accuracy, small output waveform distortion, low power consumption, small size, and light weight. It can be widely used in computer rooms, laboratories, factories and other occasions to provide stable AC voltage for high-end electrical equipment and electrical appliances that require stable voltage. At the same time, it can also provide 110V stable voltage for imported electrical equipment. Compared with other AC voltage stabilizers, it has a higher performance-price ratio and is currently an ideal AC voltage stabilizer.

The product meets the requirements of standards SB/T 10266 and JB/T 10089.

Model and Meaning

T J D □

- Capacity (VA)
- Number of Phases: D-Single Phase
- Contactor
- Automatic Voltage Regulator

Main Technical Parameter

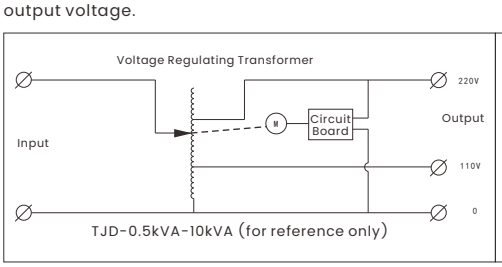
Model	Input Voltage Range	Rated Output Voltage
TJD(SVC)-0.5kVA	140V-250V	220V/110V
TJD(SVC)-1kVA		
TJD(SVC)-1.5kVA		
TJD(SVC)-2kVA		
TJD(SVC)-3kVA		
TJD(SVC)-5kVA		
TJD(SVC)-7.5kVA		
TJD(SVC)-10kVA		
TJD(SVC)-15kVA	140V-250V	220V
TJD(SVC)-20kVA		
TJD(SVC)-30kVA		

Performance Indicators

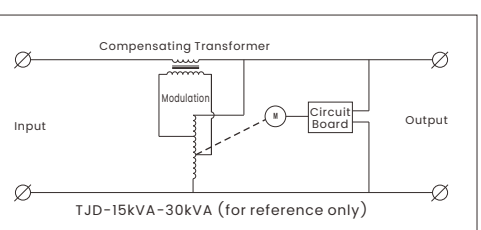
Voltage Regulation Accuracy	±3%
Frequency	50Hz-60Hz
Voltage Regulation Speed	>10V/s
Ambient Temperature	-5℃~+10℃
Winding Temperature Rise	<80℃ (under full load condition)
Relative Humidity	<90%(at 25℃)
Waveform Distortion	<1%
Efficiency	>90%
Withstand Voltage	1500V/min No breakdown
Protection Performance	When the output voltage is 246V±4V, the circuit board protection unit should be activated, and the execution unit cuts off the output or input. (TJD(SVC)-0.5kVA, 1kVA, 1.5kVA, 2kVA, 3kVA, 5kVA, 7.5kVA have no protection function)

How it Works

This product consists of a contact voltage regulator, sampling and control circuits, and a servo motor, forming a closed-loop system.When input voltage or load changes, the system samples and compares the output with a reference, amplifies the error signal, and drives the servo motor to adjust the regulator, ensuring a stable rated output voltage.



TJD-0.5kVA-10kVA (for reference only)



TJD-15kVA-30kVA (for reference only)

TJD(SVC)

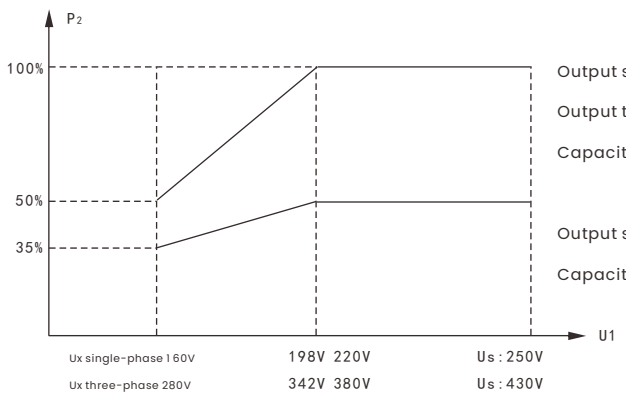
Series of High-precision Fully Automatic AC Voltage Stabilizers

User Instructions

Place the machine in a dry and ventilated place indoors, plug in the power plug or connect the wires according to the machine's logo. After checking that everything is correct, turn on the machine's power switch, the machine works, and observe the output voltage meter indication. It should correctly indicate 220V, then turn on the electrical equipment used, the machine can automatically adjust the voltage and supply power normally. When the input voltage or load changes, the servo motor in the machine will automatically rotate and adjust the output voltage. The rotation sound emitted is a normal phenomenon. After use, turn off the power switch of the electrical equipment first, and then turn off the power switch of the voltage stabilizer. Please do not use the power switch of the voltage stabilizer as the switch of all electrical appliances. This voltage stabilizer uses a fuse or automatic air switch as an overload or short circuit protection. Before turning on the machine, check whether it is intact. This voltage stabilizer should not be used for a long time under overload conditions. The time limit regulations for different overloads are shown in the table below.

Overload %	Exceeding time is not allowed (minutes)
20	60
40	30
60	5

When this voltage stabilizer is used in areas where the grid voltage is generally low, it should be noted that the effective capacity used should be reduced proportionally. The relationship is shown in the figure below:



Output single-phase 220V

Output three-phase 380V

Capacity curve

Output single-phase 110V and 220V

Capacity curve

P2-output capacity;

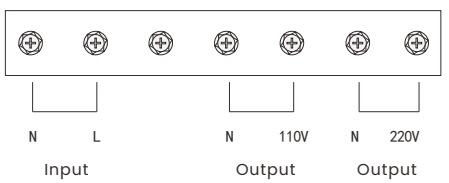
U1-input voltage;

Ux-lower limit of the allowable input voltage range;

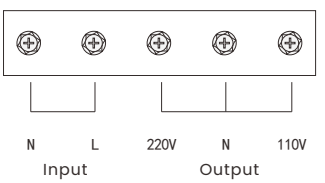
Us-upper limit of the allowable input voltage range

Output capacity curve

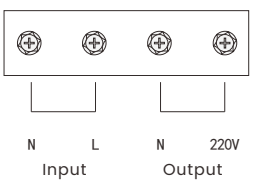
Wiring Diagram



TJD-(2-3)kVA wiring diagram



TJD-(5-10)kVA wiring diagram



TJD-(15-30)kVA wiring diagram

TJD(SVC)

Series of High-precision Fully Automatic AC Voltage Stabilizers

Appearance and Installation Dimensions

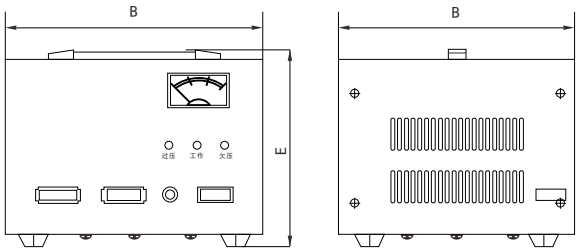


Figure 1

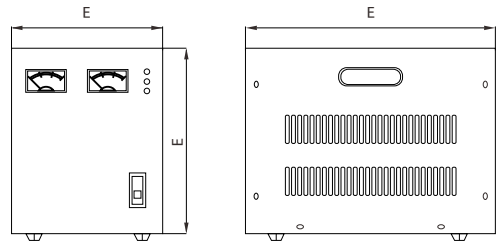


Figure 2

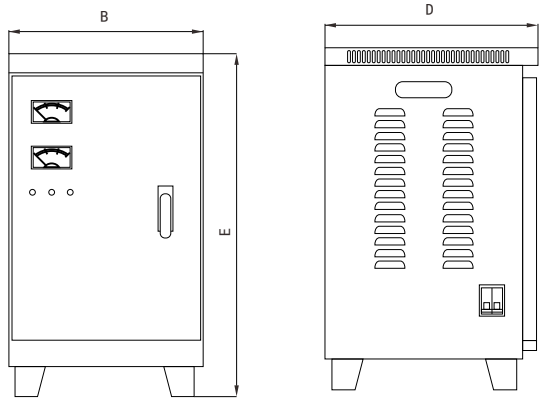


Figure 3

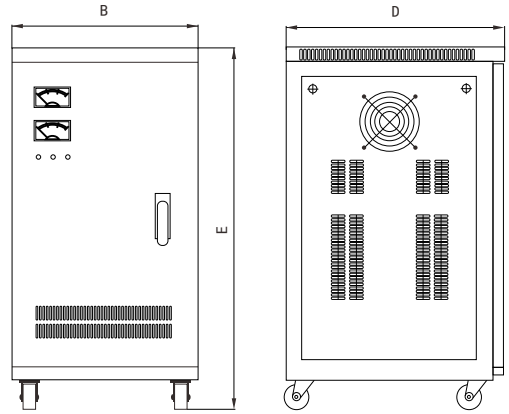


Figure 4

Model Specifications		Dimensions (mm)		Figure No
	B	D	E	
TJD(SVC)-0.5kVA	190	170	145	Figure 1
TJD(SVC)-1kVA	210	200	160	
TJD(SVC)-1.5kVA	210	200	160	
TJD(SVC)-2kVA	235	310	235	Figure 2
TJD(SVC)-3kVA	230	330	245	
TJD(SVC)-5kVA	225	380	285	
TJD(SVC)-7.5kVA	225	380	370	
TJD(SVC)-10kVA Desktop	240	440	370	
TJD(SVC)-10kVA Cabinet	315	345	555	Figure 3
TJD(SVC)-15kVA	380	380	620	Figure 4
TJD(SVC)-20kVA	380	450	745	
TJD(SVC)-30kVA	430	490	880	

TJS(SVC)

Series of High-precision Fully Automatic AC Voltage Stabilizers

User Instructions

TJS series three-phase high-precision fully automatic AC voltage stabilizer is designed and manufactured by our company based on single-phase servo current stabilized power supply. It is an AC voltage stabilizer for three-phase electrical appliances. It has reliable structure, excellent performance, high voltage stabilization accuracy, low waveform distortion, and long-term continuous operation. It is your ideal power supply equipment. The input and output of this series of products adopt "Y" connection mode, which can provide you with 380V and 220V power supplies at the same time, and can meet the needs of single-phase and three-phase electrical appliances. It is widely used in industrial and agricultural production. The product meets the requirements of standards SB/T 10266 and JB/T 10089.

Model and Meaning

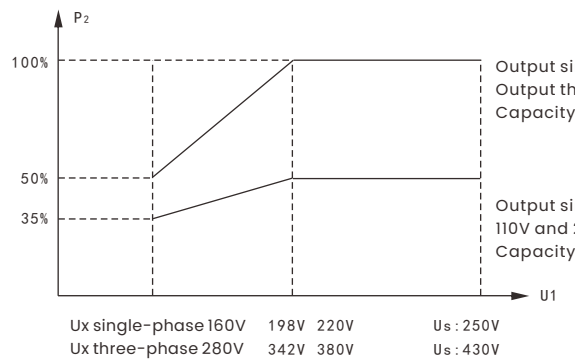
T J S □

- Capacity (VA)
- Number of Phases: S - Three-Phase
- Contactor
- Automatic Voltage Regulator

Performance Indicators

Performance Indicators	TJS-1.5kVA-50kVA
Input Line Voltage Range	242V ~ 433V
Output Voltage	Phase voltage 220V or line voltage 380V
Grid Frequency	50Hz ~ 60Hz
Voltage Accuracy	±3%
Voltage Regulation Environment	>20V/S
Ambient Temperature	-5℃ ~ +40℃
Insulation	>5MΩ
Withstand Voltage	1500V/min without breakdown
Output Waveform Distortion	<1.0%
Voltage Indication	Three voltmeters indicate the voltage of each phase respectively
Protection Performance	When the output line voltage is higher than 426V±7V, the circuit board protection unit should be activated and the execution unit should cut off the input. (TNS-1.5kVA, 3kVA, 4.5kVA, 6kVA, 9kVA, 15kVA have no protection function)

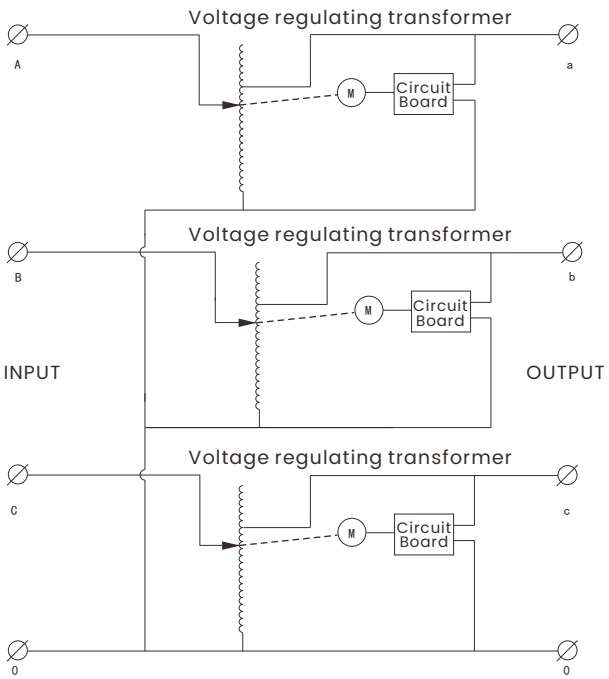
User Instructions



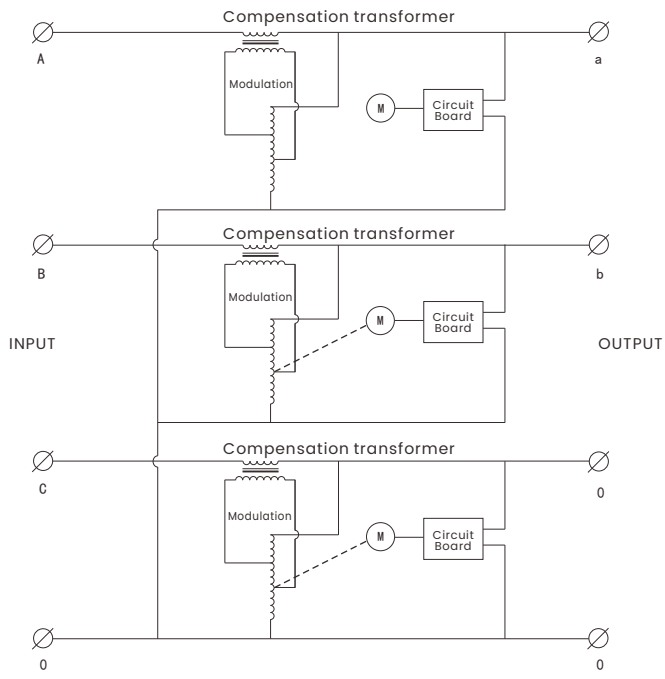
TJS(SVC)

Series of High-precision Fully Automatic AC Voltage Stabilizers

Electrical Schematic

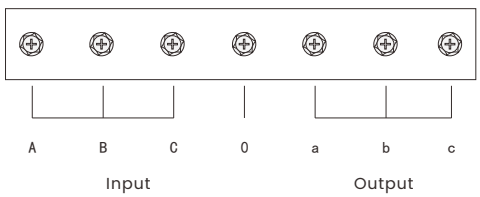


TJS-(1.5-30)kVA electrical schematic diagram (for reference only)

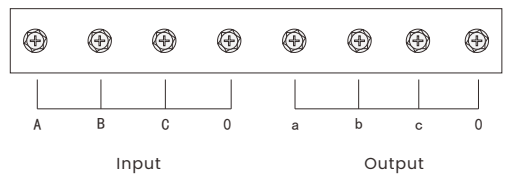


TJS-(40-50)kVA (for reference only)

Wiring Diagram



TJS-(1.5-30)kVA wiring diagram



TJS-(40-50)kVA wiring diagram

TJS(SVC)

Series of High-precision Fully Automatic AC Voltage Stabilizers

Appearance and Installation Dimensions

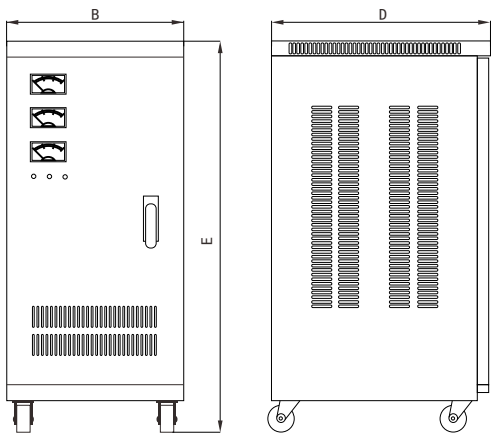


Figure 1

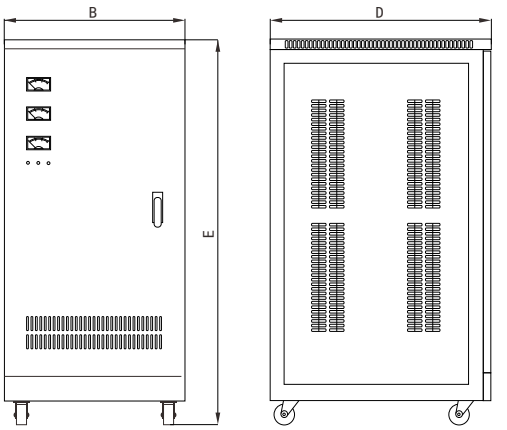


Figure 2

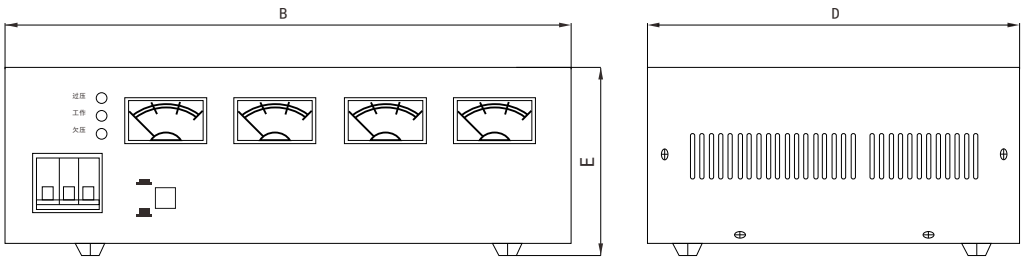


Figure 3

Model Specifications	Dimensions (mm)			Figure No
	B	D	E	
TJS(SVC)-1.5kVA	485	335	175	Figure 3
TJS(SVC)-3kVA	485	335	175	
TJS(SVC)-4.5kVA	485	335	175	
TJS(SVC)-6kVA	270	350	680	Figure 1
TJS(SVC)-9kVA	320	390	780	
TJS(SVC)-15kVA	360	445	780	Figure 2
TJS(SVC)-20kVA	390	520	855	
TJS(SVC)-30kVA	490	490	980	
TJS(SVC)-50kVA	540	655	1175	

SBW

Series Three-phase Compensated AC Power Stabilizer

Application Scope

SBW, SBW-F series compensated AC power voltage stabilizers (hereinafter referred to as voltage stabilizers) are designed by our company to stabilize AC voltage by absorbing domestic new technologies and combining the actual situation of the power grid. When the external power supply network fluctuates, it can automatically maintain the stability of the output voltage.

Compared with other types of voltage stabilizers, this series of products has large capacity, high efficiency, no waveform distortion, stable voltage regulation, strong control function, complete variety, wide application load, ability to withstand instantaneous overload, long-term continuous work, manual/automatic switching at will, and according to different use requirements, it has the options of AC/voltage-stabilized output, overvoltage, undervoltage, overcurrent, phase sequence, mechanical failure and other automatic protection devices, as well as small size, light weight, easy to use and install, and reliable operation.

This series of products can be widely used in large-scale electromechanical equipment, metal processing equipment, production lines, engineering equipment, elevators and medical machinery, computer rooms, computer control equipment, embroidery and textile equipment, air conditioners, radio and television, hotels, household appliances and lighting in the fields of industry, agriculture, transportation, post and telecommunications, military, railways, scientific research and culture, and all places that require voltage stabilization.

Normal Working Conditions

1. Ambient temperature range: -15℃~+45℃;
2. Altitude not exceeding 1000m;
3. Relative humidity ≤90%;
4. The installation site should be free of gases, steam, chemical deposits, dust, dirt and other explosive and corrosive media that seriously affect the insulation of the voltage stabilizer;
5. The installation site should be free of severe vibration or bumps;
6. Any special use conditions that do not meet the above requirements should be determined by the user and our company through consultation.

Model and Meaning

SBW - □ - □ □

- With protective cover; with digital display
- 30-2000kVA
- None: Three-phase regulation; F: Split-phase regulation
- Three-phase compensated voltage stabilizer

Structural Features

The voltage stabilizer consists of a compensation transformer, a voltage regulator, a transmission mechanism, a brush contact system, a box and a control system. The surface of the cylindrical winding of the voltage regulating transformer is polished, the insulation is removed, and it is a smooth conductor surface to facilitate good contact of the brush. The transmission mechanism consists of a servo motor, a sprocket and a chain.

Product features:

1. When the input power supply is missing, the voltage stabilizer can automatically detect and cut off the output.
2. The use of "mains power direct technology" reduces the number and capacity of AC contactors and improves the reliability of the operation of the voltage stabilizer.
3. It has output voltage, over-voltage and under-voltage protection and alarm functions: in the voltage stabilization state, when the input voltage exceeds the upper limit of the voltage stabilizer input (456V) and reaches a certain value or other reasons cause the output voltage of the voltage stabilizer to be higher than (426±8V), the output is cut off and an alarm is sounded. When the output voltage decreases, it automatically returns to normal.
4. It has a call recovery function: when the power supply is restored after the power grid is out of power, the voltage stabilizer has two optional functions: automatic power recovery and manual start.
5. It has a power-on delay function: in the voltage-stabilizing state, turn on the start button, and when the voltage stabilizer adjusts itself to a stable value (a few seconds), KM3 will be energized and there will be voltage output.

SBW

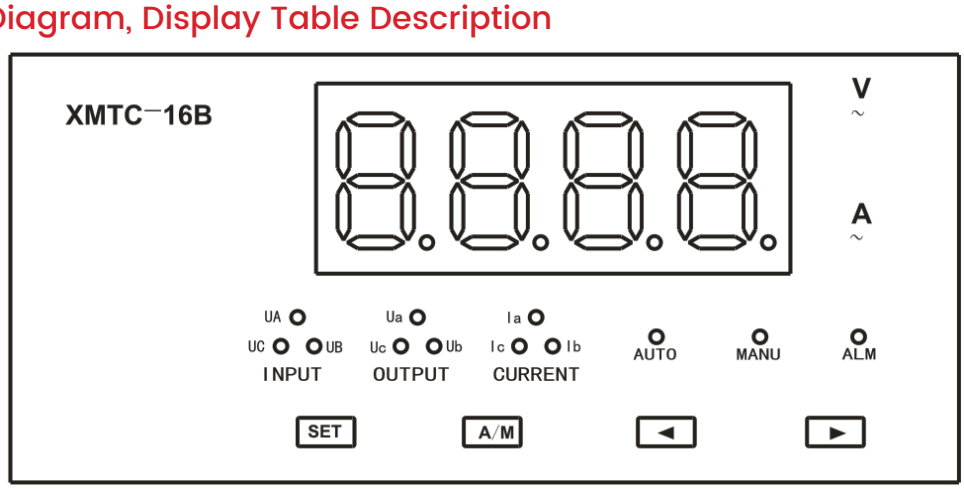
Series Three-phase Compensated AC Power Stabilizer

Main Technical Parameters

Model	Rated Capacity (kVA)	Output Current (A)	Input Voltage (V)	Output Voltage (V)	Insulation Resistance (MΩ)	Efficiency	Waveform Distortion	Operating Frequency (Hz)	Withstand Voltage V	Voltage Regulation Accuracy	Loudness Time (s)
SBW-30	30	46	380V±20% (customizable)	380V±5% Settable	≥2	⩾98%	⩽0.1%	50～60	2000V One minute No breakdown	±(1-5)% Adjustable	When the input voltage changes by 10% relative to the rated value, the stabilization time is ≤1.5s
SBW-50	50	76									
SBW-80	80	122									
SBW-100	100	152									
SBW-150	150	228									
SBW-200	200	273									
SBW-250	250	342									
SBW-300	300	486									
SBW-350	350	608									
SBW-400	400	760									
SBW-500	500	912									
SBW-600	600	1216									
SBW-800	800	1520									
SBW-1000	1000	1823									
SBW-1200	1200	2127									
SBW-1600	1600	2431									
SBW-2000	2000										
SBW-F-50	50		400V±20% (customizable)	Rated voltage ±5%Settable	≥2	⩾98%	⩽0.1%	50～60	2000V One minute No breakdown	±(2-5)% Adjustable	When the input voltage changes by 10% relative to the rated value, the stabilization time is ≤1.5s
SBW-F-80	80										
SBW-F-100	100										
SBW-F-150	150										
SBW-F-200	200										
SBW-F-250	250										
SBW-F-300	300										
SBW-F-350	350										
SBW-F-400	400										
SBW-F-500	500										
SBW-F-600	600										
SBW-F-800	800										

Schematic Diagram, Display Table Description

Panel layout



1. UAB, UBC, UCA are input line voltages, Uab, Ubc, Uca are output line voltages, Ia, Ib, Ic are input currents;
2. Auto is the automatic inspection mode (according to the time specified in menu T), and Man is the manual inspection mode;
3. Alm is the alarm indication. When the voltage or current reaches the alarm condition, Alm is displayed and the buzzer sounds (the alarm relay is activated at the same time);
4. The SET key is the key for adjusting functions and setting parameters;
5. The A/M key is the manual/automatic display switching key, indicated by the corresponding light-emitting tube;
6. The key is used in manual state and function parameter adjustment.

Note: The SET key parameter setting is valid in the Man manual inspection mode.

SBW

Series Three-phase Compensated AC Power Stabilizer

Terminal Layout

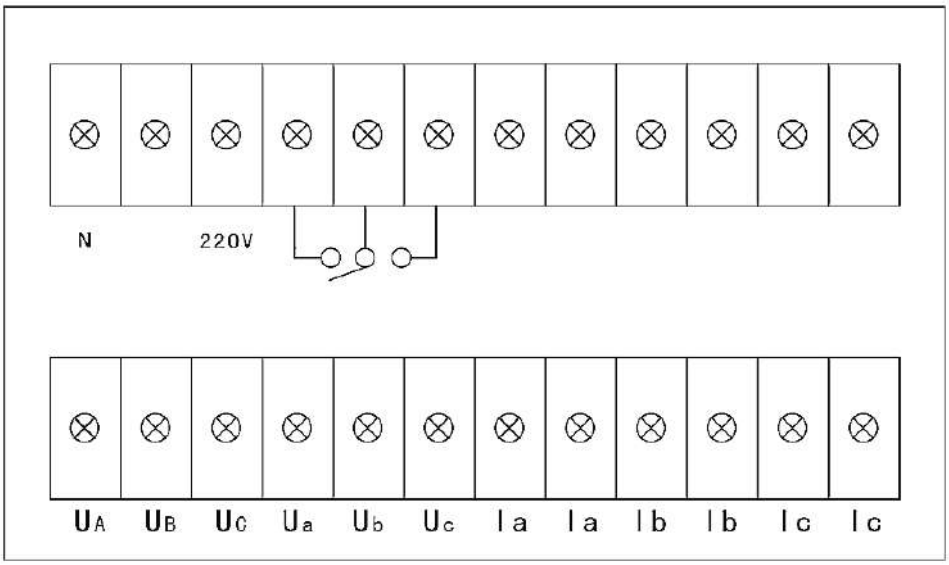
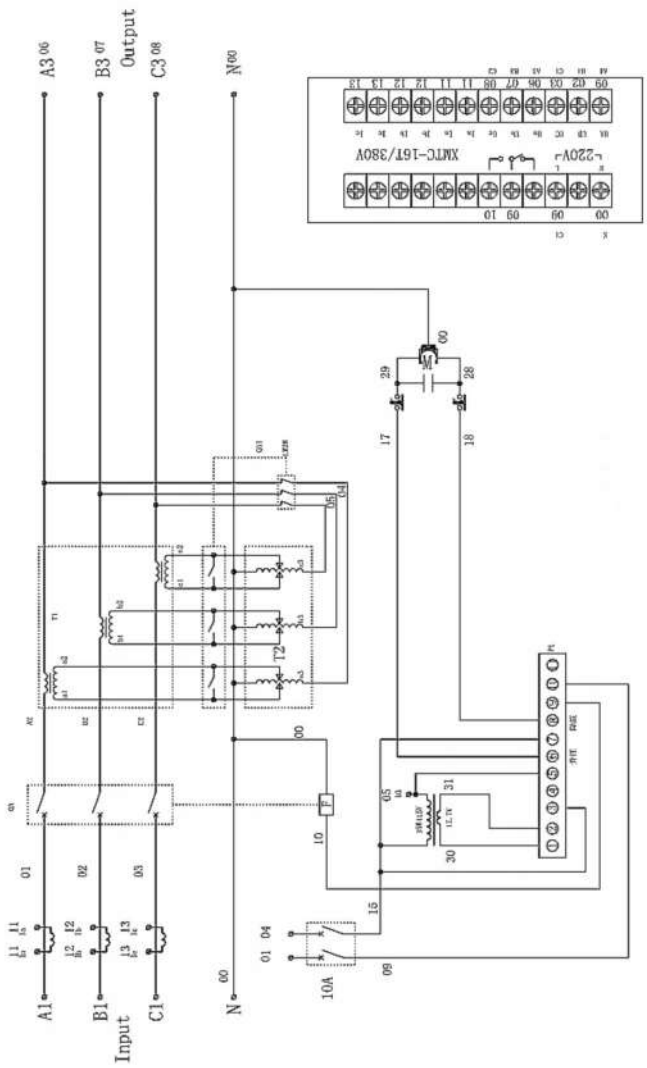


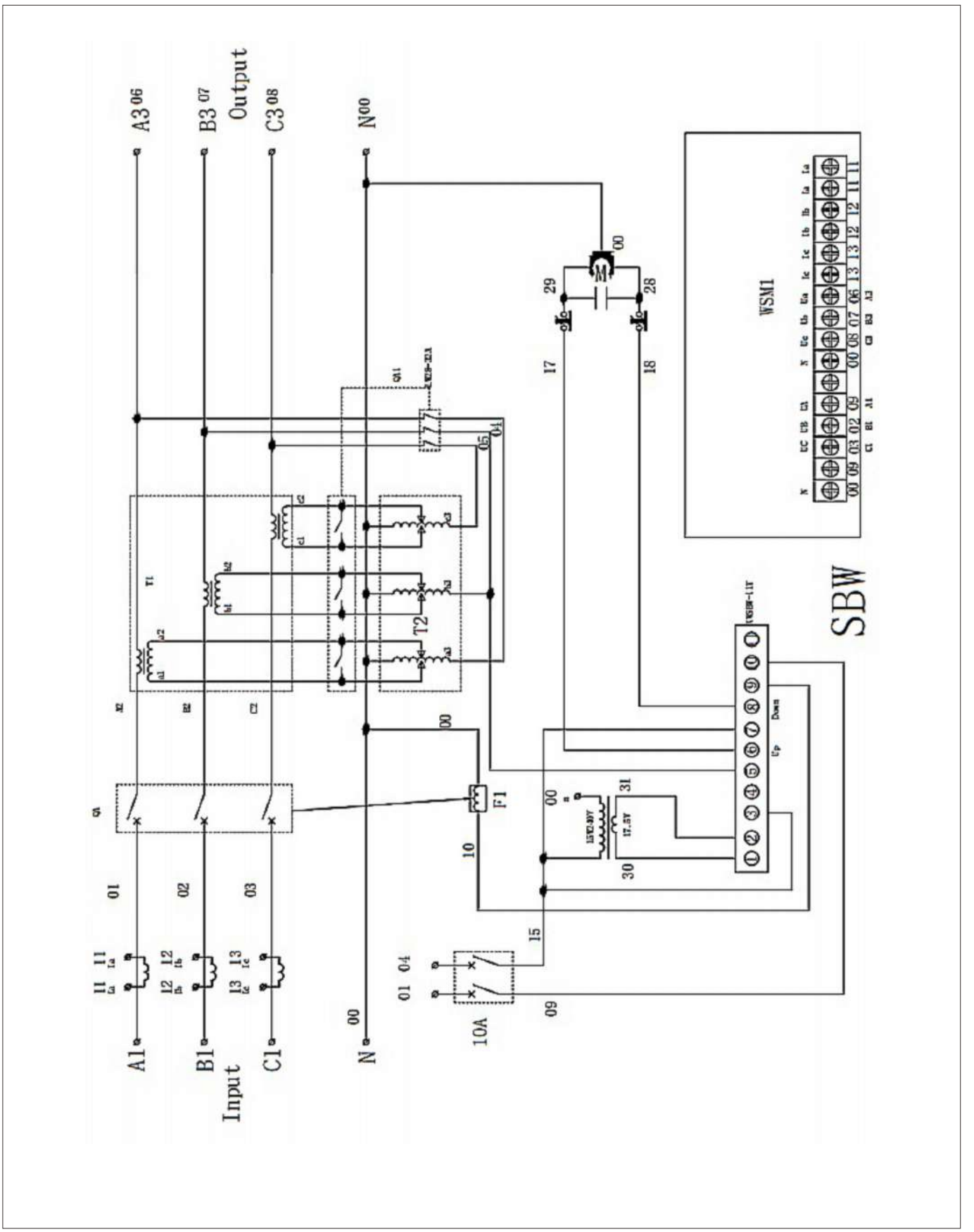
Figure D1 SBW Electrical Principle



SBW

Series Three-phase Compensated AC Power Stabilizer

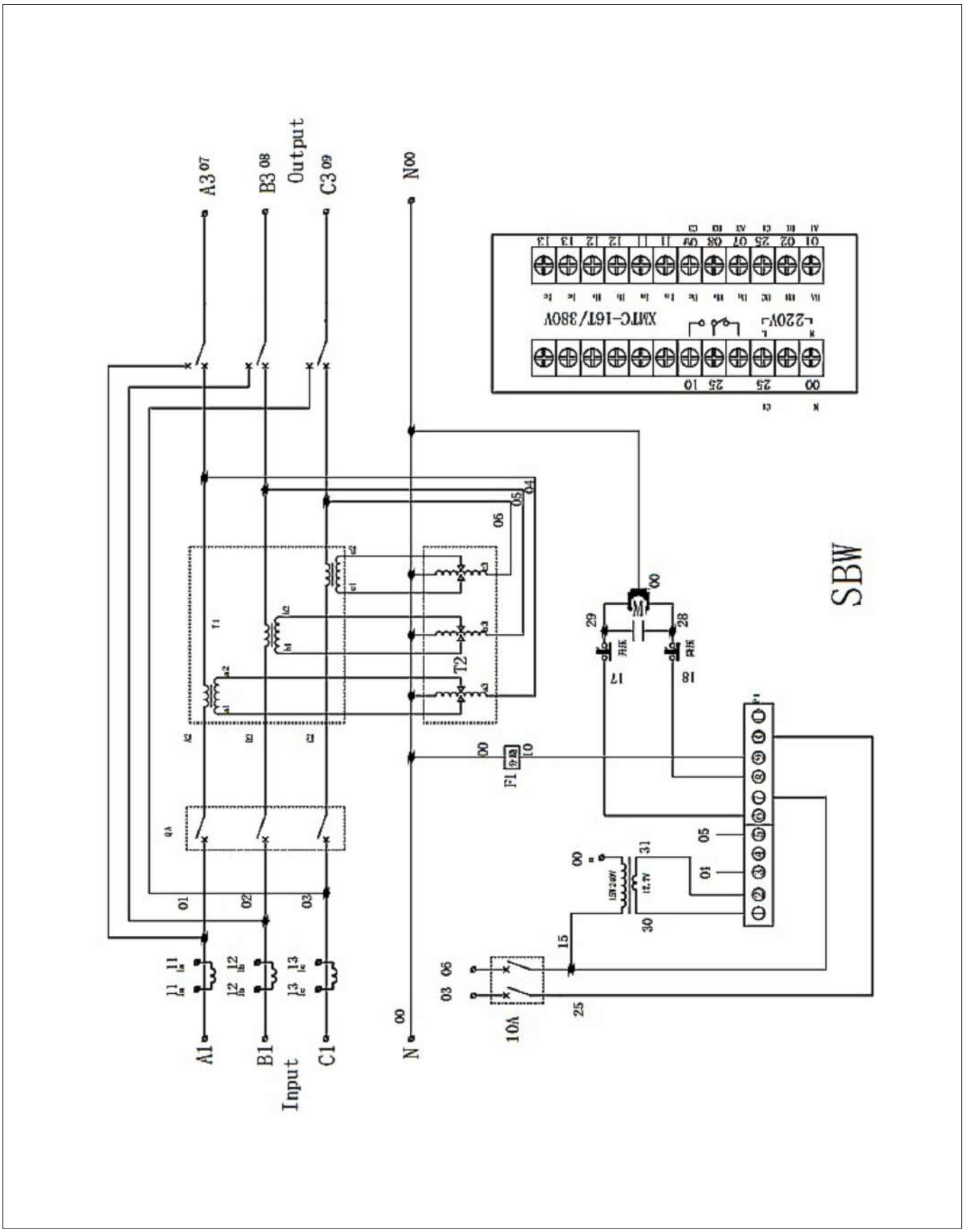
Figure D2 SBW Electrical Principle



SBW

Series Three-phase Compensated AC Power Stabilizer

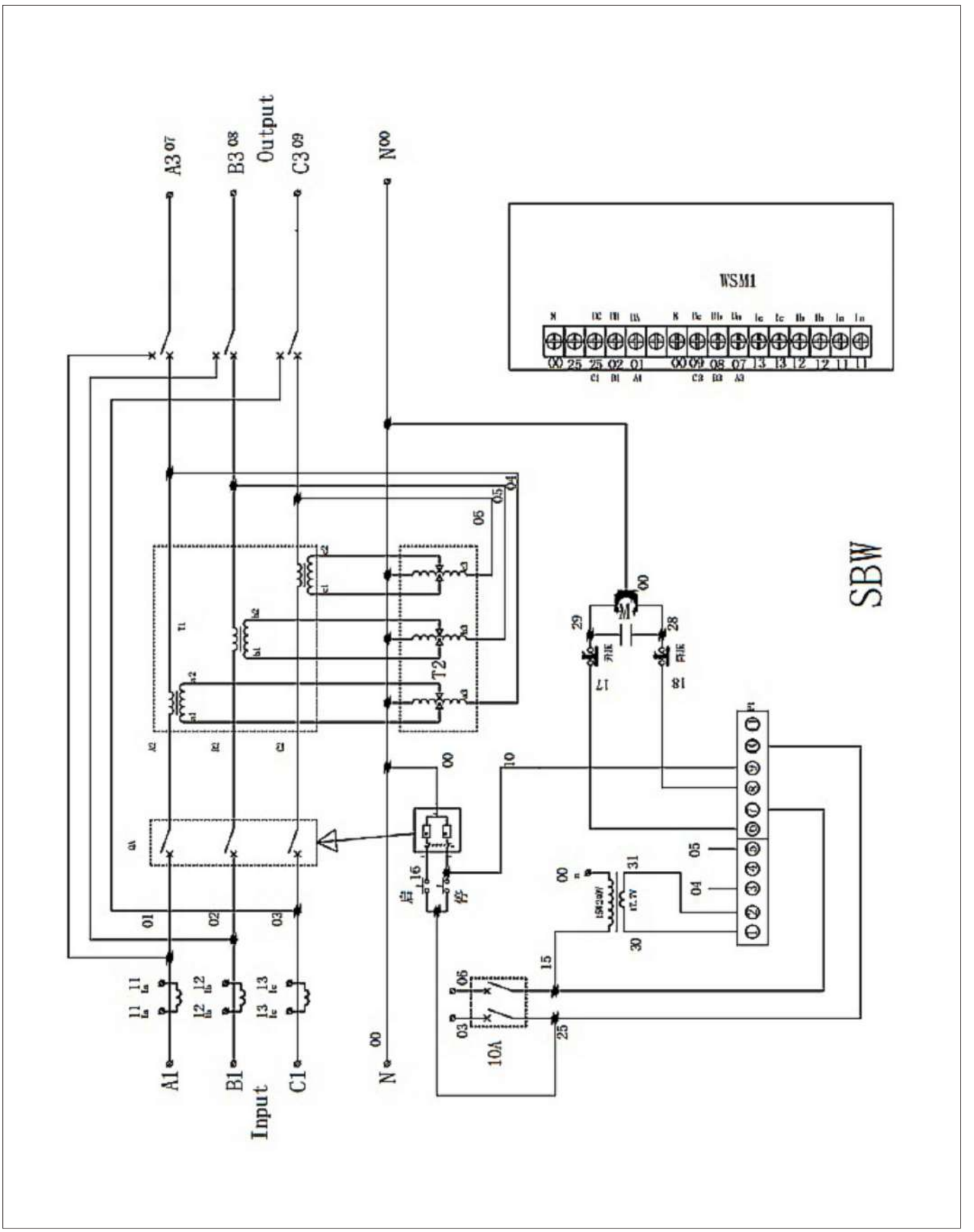
Figure D3 SBW Electrical Principle



SBW

Series Three-phase Compensated AC Power Stabilizer

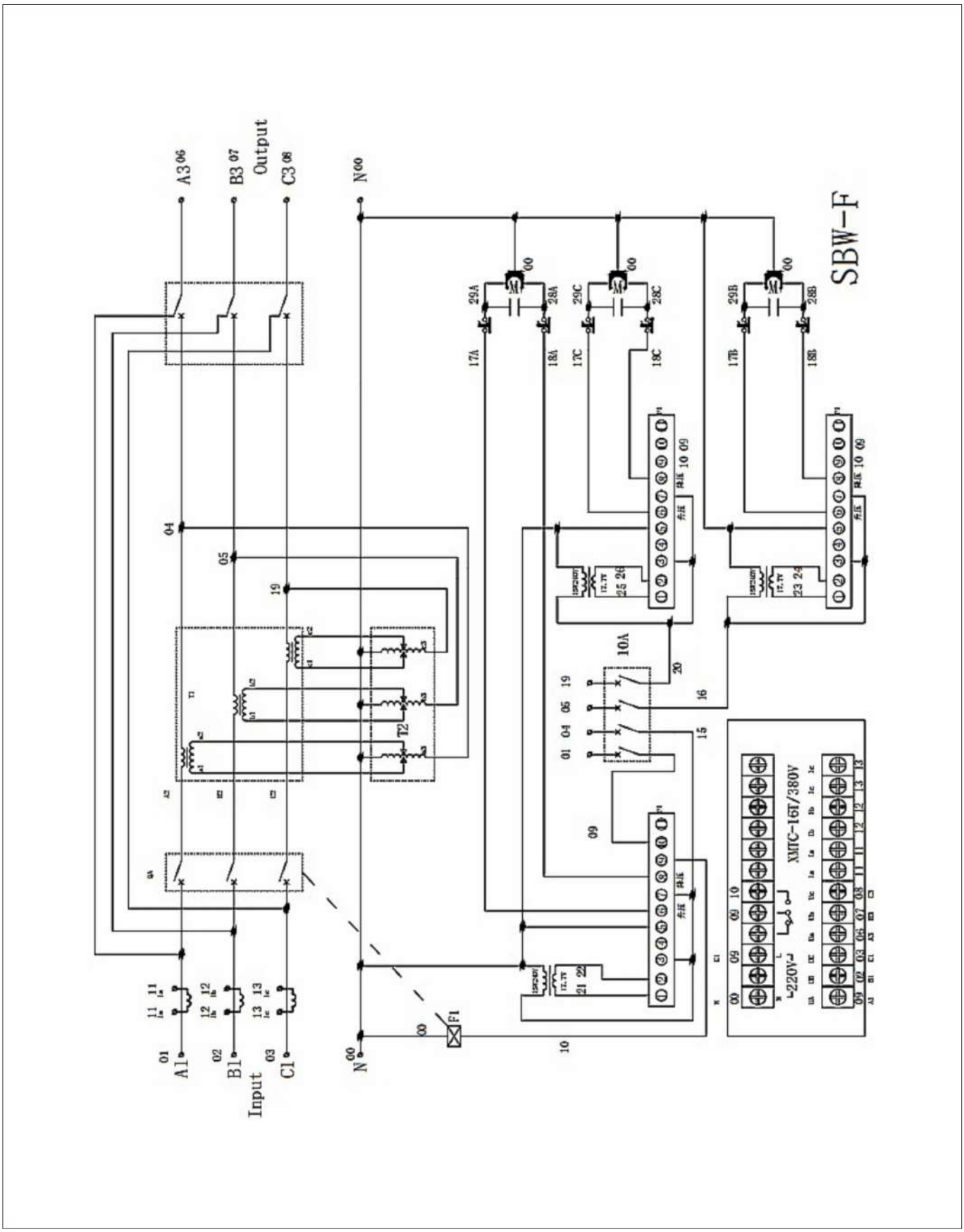
Figure D4 SBW Electrical Principle



SBW

Series Three-phase Compensated AC Power Stabilizer

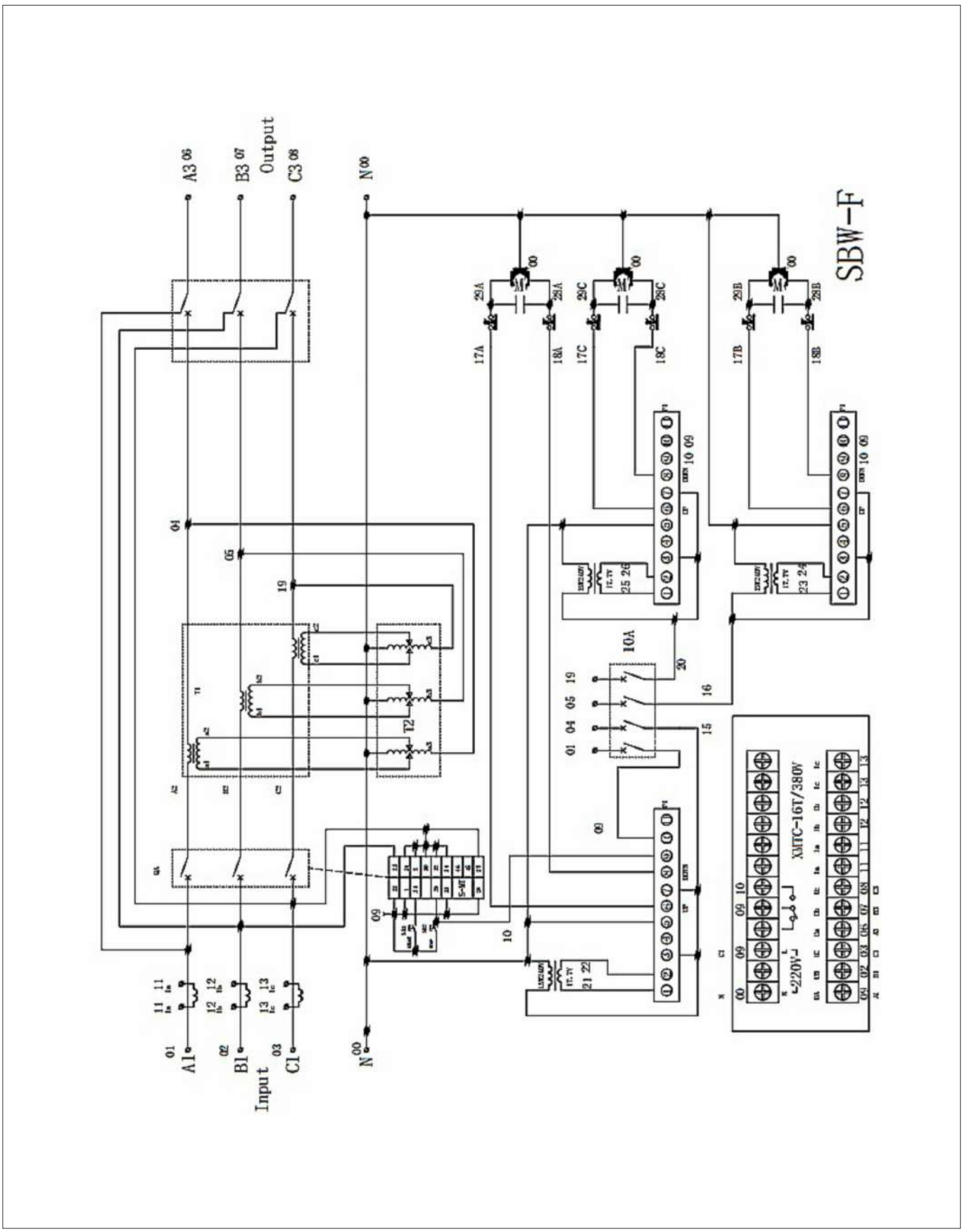
Figure D5 SBW-F Electrical Principle



SBW

Series Three-phase Compensated AC Power Stabilizer

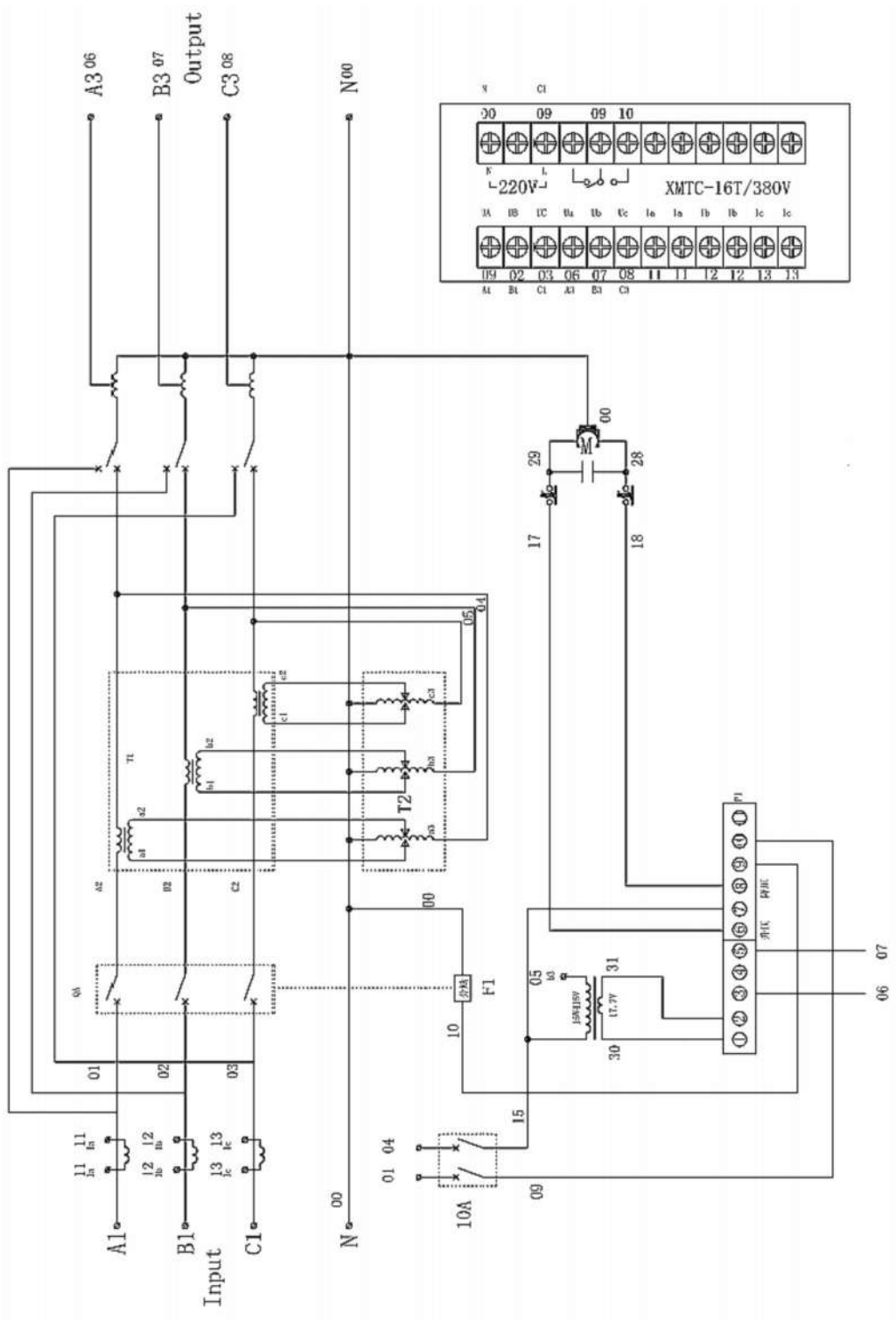
Figure D6 SBW-F Electrical Principle



SBW

Series Three-phase Compensated AC Power Stabilizer

Figure D7 SBWSG Electrical Principle



BK
Series Control Transformer

Application Scope

The BK series control transformers are suitable for use in AC circuits operating at 50-60 Hz and voltages up to 500V. They are used to control general electrical appliances in various machine tools and mechanical equipment, as well as to power local lighting and indicator lights.
These products comply with JB/T5555 standards.

Normal Operating Conditions

1. Altitude: No more than 2500m above sea level
2. Ambient Air Temperature: Minimum temperature not less than -25°C
3. Relative Humidity: Maximum monthly average relative humidity of 90% in the wettest month, with a minimum monthly average temperature of +25°C
4. Location free from severe vibration and impact
5. In a medium free of exposure hazards, gases and conductive dust that are corrosive to metals and damage insulation
6. Location protected from rain, snow, and water

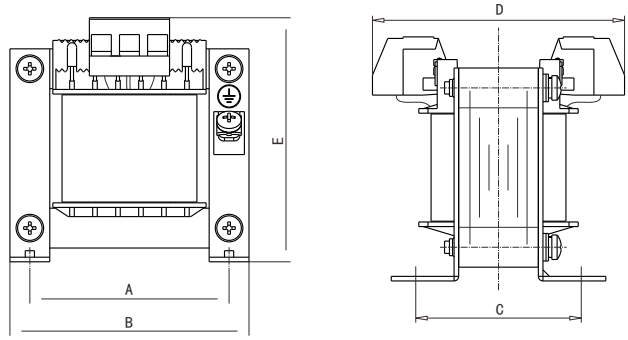
Model and Meaning

BK- □ □ □

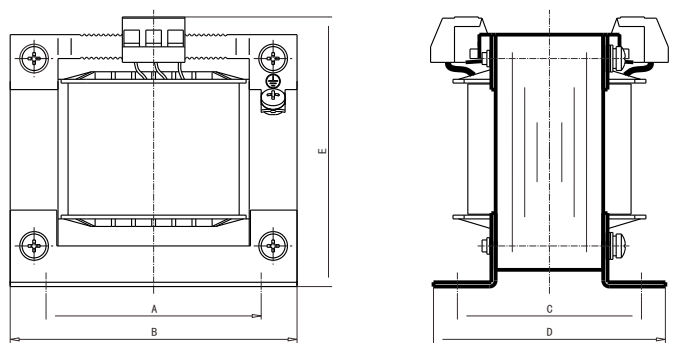
- Protection Type Code: TH - Wet Tropical Zone, TA - Dry Tropical Zone
- Not specified for aluminum wire, T: Copper wire
- Rated Capacity (VA)
- Machine Tool Control Category
- Transformer

Appearance and Installation Dimensions

1. BK-25~250 Type Control Transformer

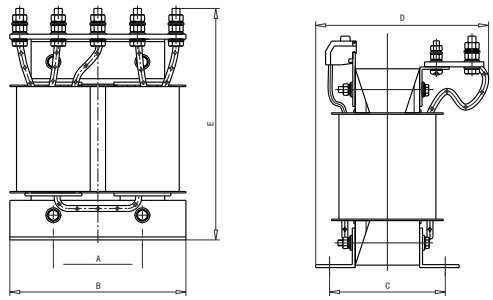


2. BK-300~1000 Control Transformer



BK
Series Control Transformer

3. BK-1500~5000 Type Control Transformer



Appearance and Installation Dimensions of BK Series Control Transformer

Model	Primary voltage (V)	Secondary Voltage (V)	Installation Dimensions (AxC)	Mounting holes	Dimensions (B×D×E)
BK-25	220 380 or According To User Requirements	6 12 24 36 110 127 220 380	65 x 55	5.5x10	78×83×80
BK-50			65 x 55		78×83×80
BK-100			85 x 59	6x10	102×86×98
BK-150			85 x 69		102×96×98
BK-200			85 x 74		102×101×98
BK-250			90 x 72	8x14	128×113×142
BK-300			90 x 77		128×118×142
BK-400			110 x 99	8x26	146×156×142
BK-500			110 x 99		146×156×142
BK-700			125 x 92	8x22	171×151×165
BK-1000			125 x 112		171×171×165
BK-1500			90 x 115	11x25	180×125×240
BK-2000			100 x 115		200×200×270
BK-2500			100 x 115		200×200×270
BK-3000			100 x 122		200×210×290
BK-4000			120 x 136		240×220×310
BK-5000			120 x 146		240×230×310

Appearance and Installation Dimensions of BK-T Series Control Transformer

Model	Primary voltage (V)	Secondary Voltage (V)	Installation Dimensions (AxC)	Mounting holes	Dimensions (B×D×E)
BK-25T	220 380 or According To User Requirements	6 12 24 36 110 127 220 380	65×55	5.5×10	78×83×80
BK-50T			65×55		78×83×80
BK-100T			85×59	6×10	102×86×98
BK-150T			85×69		102×96×98
BK-200T			85×74		102×101×98
BK-250T			85×79		102×106×98
BK-300T			90×77		120×98×113
BK-400T			110×78	7×12	132×103×124
BK-500T			110×83		132×108×124
BK-600T			125×85		150×115×140
BK-700T			125×95		150×125×140
BK-800T			125×95		150×125×140
BK-1000T			125×100		150×130×140
BK-1500T			90×115	11×25	180×125×240
BK-2000T			100×115		200×200×270
BK-2500T			100×115		200×200×270
BK-3000T			100×122		200×210×290
BK-4000T			120×136		240×220×310
BK-5000T			120×146		240×230×310

BKZ

Series Silicon Rectifier Power Supply Device

Application Scope

The BKZ series silicon rectifier power supply is suitable for converting 50Hz/60Hz AC power with a voltage below 500V to 24V DC.

Normal Operating Conditions

The transformer will operate reliably under the following environmental conditions.

3.1 Altitude not exceeding 2000m

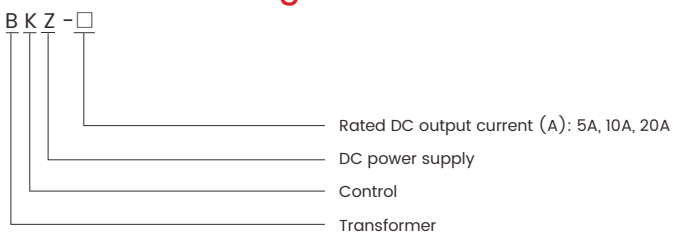
3.2 The upper limit of the ambient air temperature is 40°C, and the lower limit is -5°C. (If the user requires operation in an environment above 40°C or below -5°C, this must be specified when ordering. This will be custom-made.)

3.3 At a maximum temperature of 40°C, the relative humidity must not exceed 50%. At lower temperatures, higher relative humidity is permitted, for example, up to 90% at 20°C. Special measures should be taken to address occasional condensation caused by temperature fluctuations.

3.4 The ambient air must be free of harmful gases or dust that could corrode metals or damage insulation. During operation, the transformer must not be exposed to water, rain, or snow.

3.5 The power supply voltage waveform must be approximately sinusoidal.

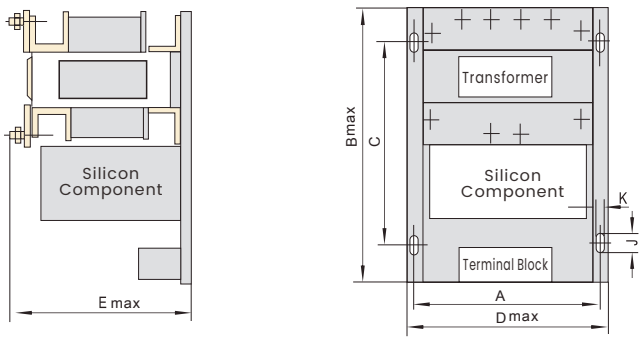
Model and Meaning



Structural Features

This rectifier device primarily consists of a control transformer, silicon rectifier components, and wiring terminals. It features a simple structure, ease of use, and reliable performance.

Appearance and Installation Dimensions



Model	Dimensions (Bmax x Dmax x Emax)	Installation dimensions (AxC)	Mounting holes
BKZ-5A	220x145x135	130x150	6x9
BKZ-10A	270x180x175	165x170	6x9
BKZ-20A	330x180x180	165x210	6x9

JBK

Series Machine Tool Control Transformer

Application Scope

The JBK series machine tool control transformers are suitable for use in AC 50-60Hz circuits with input voltages not exceeding 660V and output voltages not exceeding 220V. They serve as control power supplies for various machine tools, mechanical equipment, and other general electrical appliances, as well as for local lighting and indicator lights.

This product complies with JB/T5555 "Machine Tool Control Transformers."

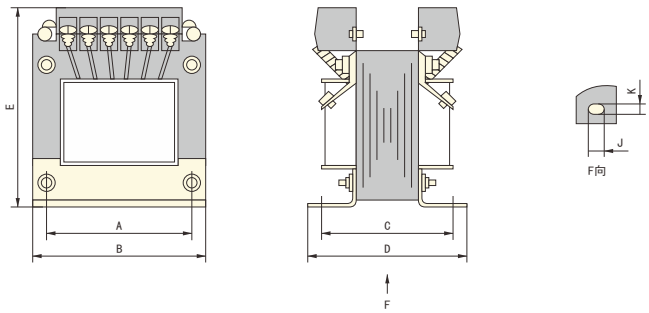
Model and Meaning

J B K □ - □ □

- Core Type: C-Laminate, E-Twist-Laminate
- Rated Capacity
- Design Number (1, 2, 3, 4)
- Control
- Transformer
- Machine Tool

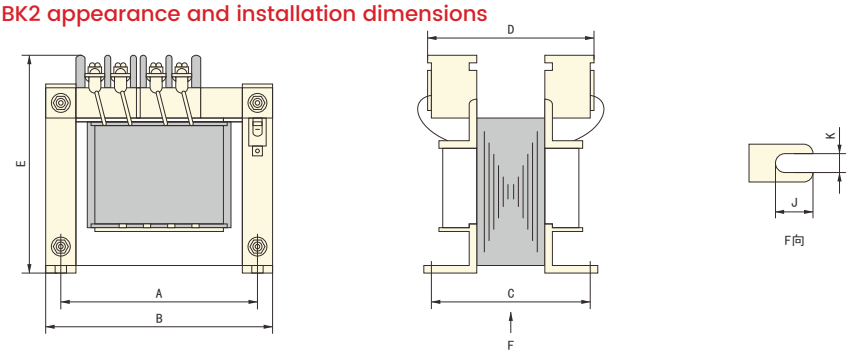
Appearance and Installation Dimensions

1. JBK1 Appearance and Installation Dimensions



Model/ Specification(VA)	Installation Size (±5mm)		Mounting Hole (mm)		Dimensions (±5mm)			Remark
	A	C	K	J	B	D	E	
JBK1-40-63	82	54	6	9	96	81	108	The appearance and installation dimensions are for reference only. If the customer does not make any requirements, the JBK3 series will be used.
JBK1-100	82	66	6	9	96	82	108	
JBK1-160	92	88	8	14	126	110	130	
JBK1-250	92	112	8	14	126	135	130	
JBK1-400	110	100	8	14	150	125	146	
JBK1-630	110	110	8	14	150	135	146	
JBK1-1000	130	120	8	14	182	146	173	
JBK1-1600	150	142	10	16	200	166	188	
JBK1-2000	150	156	10	16	200	181	188	

2. JBK2 appearance and installation dimensions

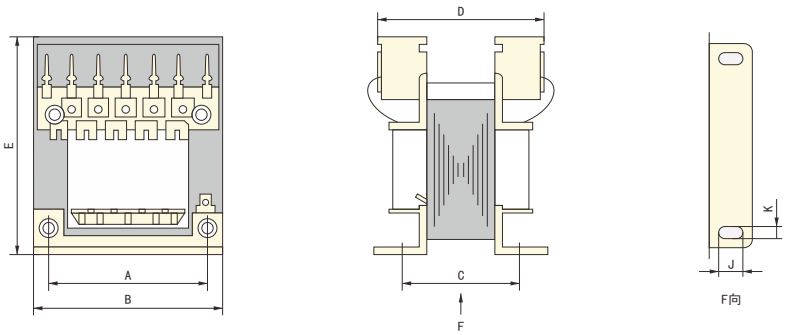


Model/ Specification(VA)	Installation Size (±5mm)		Mounting Hole (mm)		Dimensions (±5mm)			Remark
	A	C	K	J	B	D	E	
JBK2-40-63	78	64.5	6	12	90	84	97	The appearance and installation dimensions are for reference only. If the customer does not specify otherwise, the JBK3 series appearance will be used.
JBK2-100	78	75.5	6	12	90	94	97	
JBK2-160	90	76	6	12	108	94	112	
JBK2-250	90	87.5	6	12	108	105	112	
JBK2-400	105	83	8	16	126	108	127	
JBK2-630	120	95.5	8	16	144	120	142	

JBK

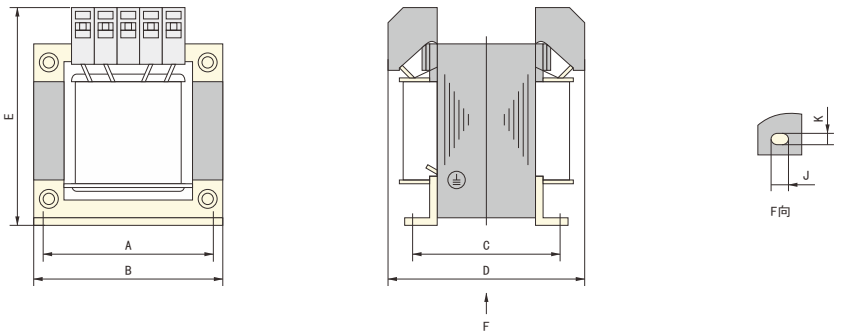
Series Machine Tool Control Transformer

3. JBK3 Appearance and Installation Dimensions



Model/ Specification(VA)	Installation Size (±5mm)		Mounting Hole (mm)		Dimensions (±5mm)		
	A	C	K	J	B	D	E
JBK3-40-63	56	47	5	9	82	76	92
JBK3-100	64	65.5	5	9	86	90	98
JBK3-160	84	71.5	6	9	98	96	112
JBK3-250	84	85	6	9	98	110	112
JBK3-400	90	90	8	14	122	112	130
JBK3-630	122	85	8	14	152	110	150
JBK3-1000	158	145	7	14	200	165	150
JBK3-1600	185	155	7	14	225	185	155
JBK3-2500	210	175	7	14	265	210	175

4. JBK4 Appearance and Installation Dimensions



Model/ Specification(VA)	Installation Size (±5mm)		Mounting Hole (mm)		Dimensions (±5mm)			Remark
	A	C	K	J	B	D	E	
JBK4-40-63	56	47	5	9	80	80	88	The appearance and installation dimensions are for reference only. If the customer does not specify otherwise, the JBK3 series appearance will be used.
JBK4-100	64	65.5	5	9	86	96	92	
JBK4-160	84	71.5	6	9	98	98	110	
JBK4-250	84	85	6	9	98	112	110	
JBK4-400	90	90	8	14	122	112	128	
JBK4-630	122	85	8	14	152	108	150	

JMB(BJZ,DG,BZ)

Series Lighting Transformers

Application Scope

The JMB (BJZ, DG, BZ) series lighting transformers are suitable for use in AC circuits operating at 50-60 Hz and voltages up to 660V. They are used as power supplies for general electrical control, local lighting, and indicator lights in various machine tools and mechanical equipment.
This product complies with JB/T5555 "Machine Tool Control Transformers."

Normal Operating Conditions

1. Altitude: No more than 2500m above sea level
2. Ambient Air Temperature: Minimum temperature not less than -25°C
3. Relative Humidity: Maximum monthly average relative humidity of 90% in the wettest month, with a minimum monthly average temperature of +25°C
4. Location free from severe vibration and impact
5. In a medium free of exposure hazards, gases and conductive dust that are corrosive to metals and damage insulation
6. Location protected from rain, snow, and water

Model and Meaning

J M B - □
- Rated Capacity (VA)
- Transformer
- Lighting
- Local

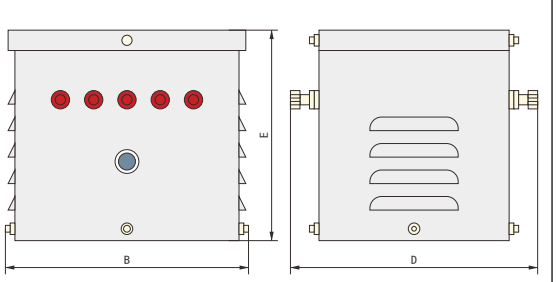
B J Z - □
- Rated Capacity (VA)
- Lighting
- Local
- Transformer

D G - □
- Rated capacity (VA)
- Dry-type transformer
- Single-phase

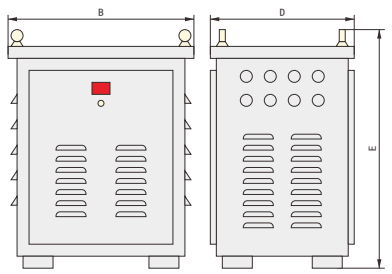
B Z - □ H
- "H" type
- Rated capacity
- Lighting
- Transformer

Appearance and Installation Dimensions

1. JMB (BJZ, DG)-25VA~5000VA



2. JMB (BJZ, DG)-6kVA~15kVA



Model/	Primary voltage (V)	Secondary Voltage (V)	Dimensions (B×D×E)
JMB(BJZ,DG)-25	220, 380 or depending on user needs		145×160×160
JMB(BJZ,DG)-50			150×130×130
JMB(BJZ,DG)-100		6	150×130×130
JMB(BJZ,DG)-150		12	150×130×130
JMB(BJZ,DG)-200		24	150×130×130
JMB(BJZ,DG)-250		36	170×150×150
JMB(BJZ,DG)-300		110	170×150×150
JMB(BJZ,DG)-400		127	200×180×170
JMB(BJZ,DG)-500		220	200×180×170
JMB(BJZ,DG)-700		380	220×285×180
JMB(BJZ,DG)-1000		or	230×210×180
JMB(BJZ,DG)-1500		depending on user needs	230×210×180
JMB(BJZ,DG)-2000			280×250×220
JMB(BJZ,DG)-3000			280×250×220
JMB(BJZ,DG)-5000			350×290×280

SG, SBK, ZSG

Series Three-phase Dry-type Transformers

Application Scope

The SG and SBK series three-phase dry-type transformers are indoor, air-cooled transformers suitable for use in circuits operating at 50Hz AC and voltages up to 1140V. They are ideal for low-voltage complete sets of equipment and electrical transmission and control equipment. They can also be used as three-phase power transformers for general electrical appliances, lighting, and small power supplies.

The ZSG series three-phase dry-type rectifier transformers are designed for use in rectifier equipment. After rectification, they are used for charging, voltage regulation, and DC power supply.

The SG, SBK, and ZSG series three-phase dry-type transformers are available in open and protected versions, offering low losses, low noise, excellent fire resistance, and environmental friendliness.

These products comply with the GB/T 1094.11 IEC60076-11 standard for "Transformers for Electrical Control Equipment."

Normal Operating Conditions

1. Altitude: No more than 2000m above sea level
2. Ambient temperature: Upper limit not exceeding +40°C, lower limit not less than -5°C
3. Relative humidity not exceeding 90% (at 25°C)
4. The medium must be free of explosive gases and conductive dust that could corrode metals or damage insulation.
5. The installation site must be free of vibration and turbulence.
6. The power supply voltage waveform must be sinusoidal, with three-phase power approximately symmetrical.

Model and Meaning

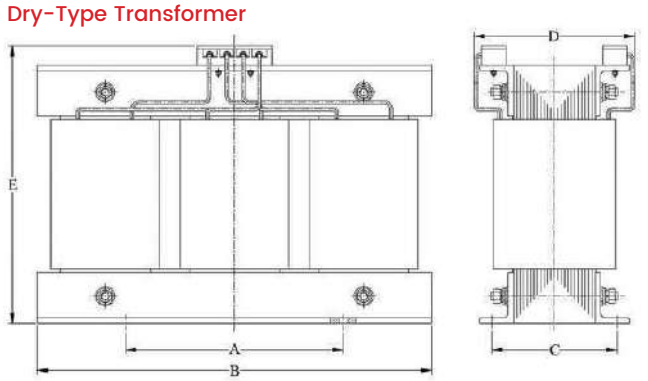
S G - _ / _
- Voltage level (KV)
- Rated capacity (KVA)
- Dry type
- Three-phase

S B K - _ / _
- Voltage level (KV)
- Rated capacity (KVA)
- Controller
- Transformer
- Three-phase

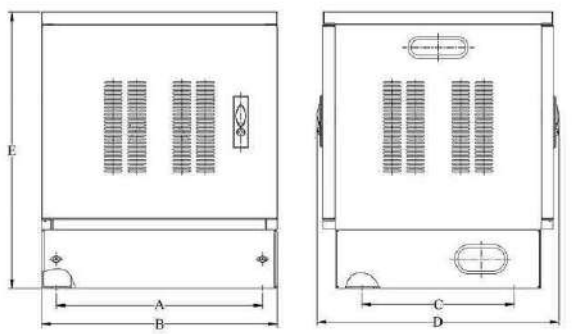
Z S G - _ / _
- Voltage level (KV)
- Rated capacity (KVA)
- Dry type
- Three-phase
- Rectification

Appearance and Installation Dimensions

1. Open-Type Dry-Type Transformer



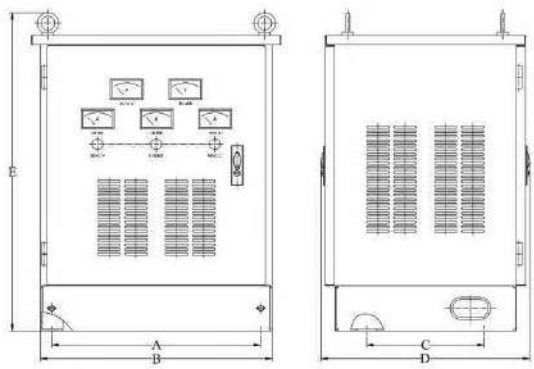
2. Protective Dry-Type Transformer (0.3kVA to 3 kVA)



SG, SBK, ZSG

Series Three-phase Dry-type Transformers

3. Protective Dry-Type Transformer (5kVA to 100 kVA)



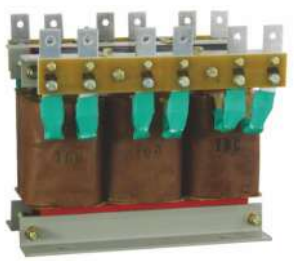
Capacity (KVA)	Rated voltage (V)		Connection Group Number	Dimensions (mm)			Installation Size (mm)	
	Input	Output		Opening Type	Protective		Opening	Protective
				B×D×E	B×D×E		A×C	A×C
0.05~0.08	660 400 380 200	380 220 110 36	Y/yno (Y/Yo) Y/d (Y/△) D/y (△/Y) D/d (△/△)	120×80×100	402×400×470	Figure 2	60×55	352×260
0.15				150×90×120			80×60	
0.3				180×95×140			100×65	
0.5				180×105×140			100×75	
0.75				240×105×175			120×75	
1				240×110×175			120×80	
1.5				270×110×195			120×80	
2				270×120×195			120×90	
2.5				270×140×220	553×450×700	Figure 3	150X100	463×260
3				270×150×220			150X110	
4				270×160×220			150X120	
5				36 0×170×265	603×480×790		210X110	513×260
6				360×180×265			210X130	
8				360×190×265			210X140	
10				360×200X265			210×150	
12				360×210×265			210X160	
15				420×200X315	693×490×820		260X150	603×260
20				420×220X315			260X170	
25				420×230X315			260X180	
30				480×225×365	693X490X920		260X175	
40				480×245×365			260X195	
50				480×260X365			260X210	
60				/	/		/	
80				/	/		/	
100				/	/		/	
125				/	/		/	
160				/	/		/	
200				/	/		/	

Notes:

1. Dimensions not listed in the table are subject to change based on user requirements and are for reference only. Products with output currents greater than 300A are custom orders and may require different dimensions.
2. The rated input and output voltages listed in the table can be combined as desired.
3. Voltages and dimensions other than those listed in the table can be determined based on user requirements.

QZB

Series Auto-voltage Transformer



Application Scope

The QZB series auto-step-down transformer is suitable for reducing the voltage of three-phase squirrel-cage induction motors operating at 50 Hz, rated voltage up to 660 V, and rated output power up to 300 kW in the AC-3 utilization category under infrequent operating conditions. This transformer utilizes the transformer's step-down characteristics to reduce the motor's starting current, thereby minimizing the impact of motor starting on the power transmission network.

This product complies with GB/T 14048.4.

Normal Operating Conditions

1. Altitude not exceeding 2000 m
2. Ambient medium temperature not exceeding +40°C and not below -5°C
3. Relative humidity not exceeding 85%
4. The medium must be free of explosive gases and conductive dust that could corrode metals or damage insulation.

Model and Meaning

Q Z B - □

- Control motor rated power (kW)
- Transformer
- Autotransformer
- Reduced-voltage starter

Structural Characteristics

The transformer operates in a short-duty mode and is not suitable for prolonged or frequent operation.

Autovoltage transformers have two starting voltage ratio taps: 65% (60%) and 80%. The 65% (60%) tap can be selected for lower starting torque, while the 80% tap can be selected for higher torque. This product can be installed as a key component in the JJ1 series autovoltage transformer starting control cabinet. The starting time for autovoltage transformers of all classes and operating modes must not exceed 15 seconds, and the number of starting cycles per hour should be evenly distributed.

Autovoltage transformers are permitted to be started twice consecutively from a cold state, with an interval of 30 seconds.

After two rapid starts of an autovoltage transformer, the transformer should not be started again until it has cooled to ambient air temperature.

Main Technical Parameters

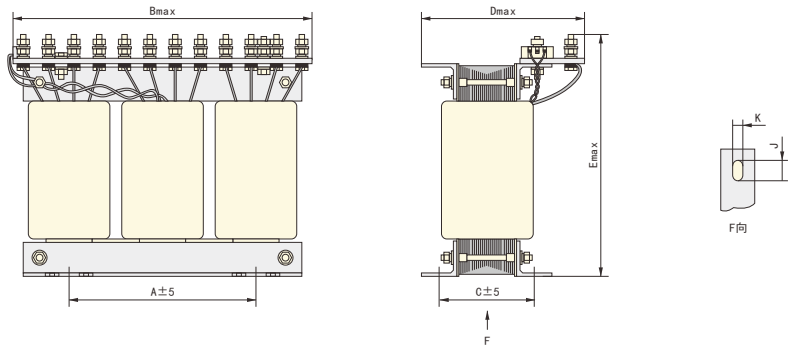
Model	Controlled Motor Power (kW)	Rated Operating Current
QZB-14	14	28
QZB-17	17	34
QZB-22	22	42
QZB-30	30	57
QZB-45	45	85
QZB-55	55	103
QZB-75	75	140
QZB-100	100	188
QZB-115	115	220
QZB-135	135	250
QZB-160	160	294
QZB-190	190	370
QZB-225	225	420
QZB-260	260	480
QZB-300	300	565

QZB

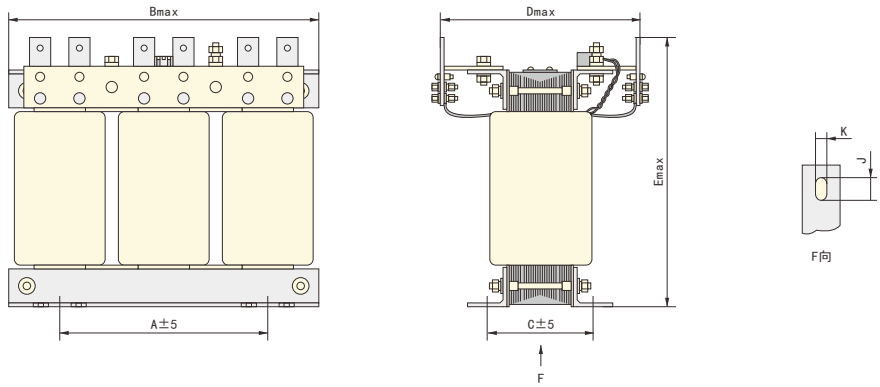
Series Auto-voltage Transformer

Appearance and Installation Dimensions

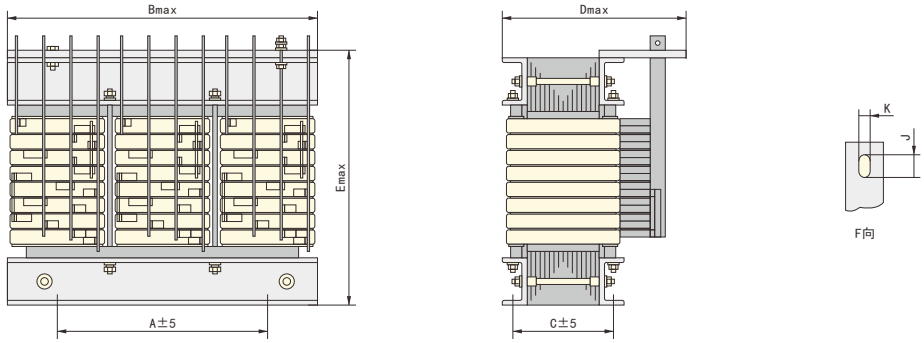
1. QZB-14~75KW



2. QZB-100~190KW



3. QZB-225~300KW



Model	Control Motor Power (kW)	Dimensions			Installation Dimensions		Mounting hole (K×J)
		Bmax	Dmax	Emax	A ±5	C ±5	
QZB-14	14	330	180	270	210	96	11×25
QZB-17	17						
QZB-22	22						
QZB-30	30	330	185	270	210	100	
QZB-45	45	330	195	290	210	110	
QZB-55	55	330	205	295	260	116	
QZB-75	75	385	220	315	260	126	
QZB-100	100	400	300	360	260	136	
QZB-115	115	400	310	360	260	146	
QZB-135	135	400	310	360	260	151	
QZB-160	160	425	300	395	260	146	
QZB-190	190	425	300	395	260	151	
QZB-225	225	595	290	430	320	145	Φ12
QZB-260	260	595	300	430	320	150	
QZB-300	300	595	310	430	320	160	

TDGC2, TSGC2, TDGC2J, TSGC2J

Series Contact Voltage Regulator

Application Scope

The TDGC2, TSGC2, TDGC2J, and TSGC2J series contact-type voltage regulators feature undistorted waveforms, compact size, light weight, high efficiency, ease of use, reliability, and long-term operation. They are widely used in industries (such as chemical engineering, metallurgy, instrumentation, electromechanical manufacturing, and light industry), scientific experiments, public utilities, and household appliances to achieve voltage regulation, temperature control, speed regulation, light dimming, and power control. They are ideal AC voltage regulators. This product complies with JB/T 8749.3.

Normal Operating Conditions

1. Altitude: The installation site must not exceed 1000 meters above sea level.
2. Ambient Temperature: Maximum temperature +40°C, maximum daily average temperature +30°C, maximum annual average temperature +20°C, minimum temperature -5°C.
3. Relative Humidity: The average relative humidity in the wettest month is 90%, and the average temperature in that month is 25°C.
4. Power Supply Voltage Waveform: The power supply voltage waveform is approximately sinusoidal.
5. The installation site must be free of gases, vapors, chemical deposits, dust, dirt, and other explosive and corrosive media that could seriously affect the voltage regulator's insulation.
6. The installation site must be free of severe vibration and turbulence.
7. For indoor use; parallel operation is prohibited.

Model and Meaning

T □ G C 2 J - □ □

- Protection Type Code: TH - Wet Tropical Zone, TA - Dry Tropical Zone
- Rated Capacity (kVA)
- Economic Type
- Retrofit Design Number, Indicates the 1982 National Unified Design
- Contact Type (Ring-Shaped)
- Dry Self-Cooling
- Number of Phases: D - Single Phase, S - Three Phase
- Regulator Characteristic Code

Main Technical Parameters

Model	Rated Capacity (kVA)	Rated Output Current(A)	Number of Phases	Rated Frequency(Hz)	Rated Input Voltage(V)	Rated Output Voltage(V)
TDGC2-0.2	0.5	0.8	1	50	220	0～250
TDGC2, TDGC2J-0.5	0.5	2				
TDGC2, TDGC2J-1	1	4				
TDGC2, TDGC2J-2	2	8				
TDGC2, TDGC2J-3	3	12				
TDGC2, TDGC2J-5	5	20				
TDGC2J-7	7	28				
TDGC2, TDGC2J-10	10	40				
TDGC2, TDGC2J-15	15	60				
TDGC2J-20	20	80				
TDGC2J-30	30	120				
TDGC2J-40	40	160				
TSGC2-1.5	1.5	2	3		380	0～430
TSGC2, TSGC2J-3	3	4				
TSGC2, TSGC2J-6	6	8				
TSGC2, TSGC2J-9	9	12				
TSGC2, TSGC2J-15	15	20				
TSGC2J-20	20	27				
TSGC2J-30	30	40				
TSGC2J-40	40	54				

Note: The model number with "J" in the lower right corner indicates an economical transition product.

TDGC2, TSGC2, TDGC2J, TSGC2J

Series Contact Voltage Regulator

Appearance and Installation Dimensions

Figure 5

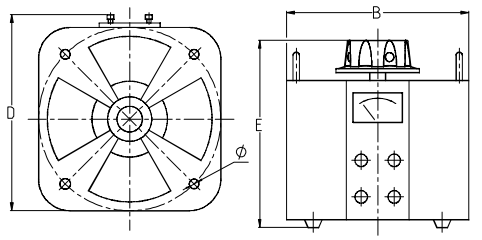


Figure 6

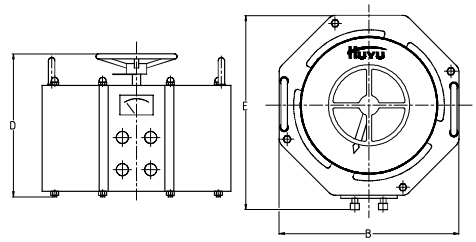


Figure 7

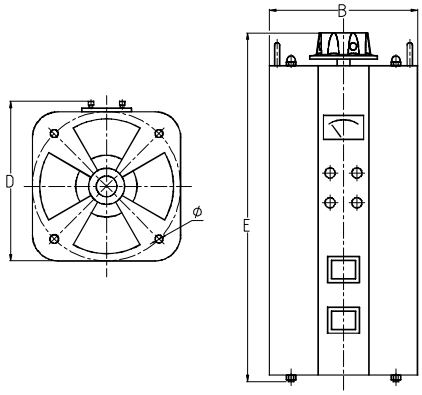
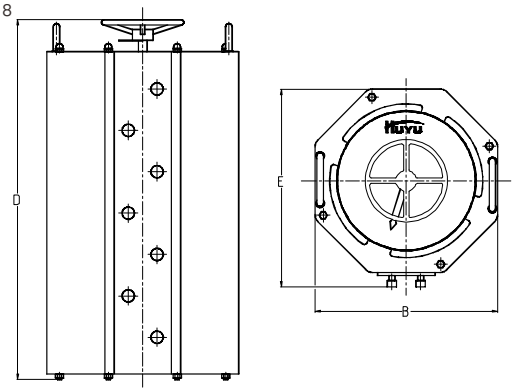


Figure 8



Model	Dimensions			Installation Dimensions (Md, A×C)	Weight (kg)	Figure No.
	B	D	E			
TDGC2-0.2	116	130	130	M4，80×80	2.3	Figure 5
TDGC2-0.5	135	156	136	M4，93×93	3	
TDGC2-1	182	207	172	M5，130×130	6.0	
TDGC2-2	182	207	190	M5，130×130	8.0	
TDGC2-3	210	235	210	M5，158×158	11	
TDGC2-5	245	280	260	M5，179×179	18	
TDGC2-10	245	335	430		45	Figure 7
TDGC2-15	245	335	650		70	
TSGC2-1.5	135	180	340		9.7	
TSGC2-3	182	245	480		18	
TSGC2-6	182	245	480		26	
TSGC2-9	210	255	480		34	
TSGC2-15	245	335	650		70	
TDGC2J-0.5	132	148	185	Φ6，103×103	4.2	
TDGC2J-1	186	205	216	M5，130×111	6.4	Figure 6
TDGC2J-2	230	245	214	M5，170×145	9.0	
TDGC2J-3	266	285	214	M5，198×172	12	
TDGC2J-5	350	390	265		24	
TDGC2J-7	350	390	280		28	
TDGC2J-10	350	430	420		34	
TDGC2J-15	350	430	585		80	
TDGC2J-20	350	430	615		100	Figure 8
TDGC2J-30	350	460	1080		160	
TDGC2J-40	350	460	1120		190	
TSGC2J-3	186	220	520		22	
TSGC2J-6	230	260	520		29	
TSGC2J-9	266	285	520		39	
TSGC2J-15	350	430	585		80	
TSGC2J-20	350	430	615		100	
TSGC2J-30	350	430	1080		160	
TSGC2J-40	350	460	1120		190	

HYIC3

Series of Intelligent Integrated Power Capacitor Compensation Devices

Application Scope

The HYIC3 series intelligent integrated power capacitor compensation device is based on two or more sets (type) or one or more sets (Y type) of low-voltage power capacitors. It integrates advanced technologies such as modern measurement and control, power electronics, network communications, and automated control. It replaces traditional complete reactive power compensation devices, which consist of separate components such as controllers, fuses, combination switches or mechanical contactors, thermal relays, low-voltage capacitors, and indicator lights connected by wires within a cabinet.

This low-voltage reactive power compensation device features flexible compensation methods, excellent compensation results, a compact size, low power consumption, easy installation and maintenance, a long service life, strong protection features, and high reliability. It also offers true zero-crossing switching, meeting users' actual needs and meeting the higher requirements of modern power grids for reactive power compensation equipment.

Implementation standard: GB/T 15576 "Low-voltage Complete Reactive Power Compensation Device."

Main Technical Parameters

Environmental Conditions:

Transport and Storage Temperature: -40°C to 70°C

Ultimate Operating Temperature: -25°C to 60°C (-40°C to 60°C available for custom products)

Relative Humidity: 20% to 90%

Altitude: ≤ 2000m (≤ 5000m for custom products)

Other Requirements: The installation site must be free of gases or conductive media that may corrode metal or damage insulation, contain no explosive media, be free of strong vibration and shock, and be free of severe mold.

Power Requirements

Operating Voltage: AC 400V

Voltage Tolerance: ±30%

Operating Frequency: 50 ± 1.5Hz

Voltage Harmonics: Total Voltage Distortion Rate ≤ 5%

Network Quantity: ≤ 48 units per group

Model and Meaning

HY Ic3 □ □/□-□

- Rated Capacity (kvar)
- Rated Voltage (V)
- None: Micro-break type; M: Molded Case type
- S: Three-phase compensation, F: Split-phase compensation, H: Hybrid compensation
- Design Code
- Company Code

Structural Characteristics

1 Modular Structure

The intelligent capacitor features a modular design, compact size, simple wiring, and easy maintenance. Capacity expansion only requires adding more modules.

2 Zero-Cross Switching

Core components enable “zero-cross switching,” achieving zero-voltage connection and zero-current disconnection, reducing power loss with no inrush current, overvoltage, or arcing.

3 Protection Functions

Equipped with overvoltage, undervoltage, power loss, short-circuit, and over-temperature protection to extend service life. Temperature protection automatically shuts down the unit when internal temperature exceeds safe limits.

4 Control Technology

Switching is based on power factor and reactive power, using prediction and delayed multi-point sampling to ensure stable, oscillation-free compensation, with sufficient reactive power under heavy load.

5 Intelligent Networking

Supports independent or networked operation. Faulty units automatically exit without affecting the system. Using RS-485 communication, capacitors form an automatic network with adaptive master-slave switching for stable operation.

HYIC3

Series of Intelligent Integrated Power Capacitor Compensation Devices

Product General Model Specification Table

Compensation Methods	Specifications and models	Capacity (kvar)	Height (mm)
Single-Phase Compensation (Split Compensation)	HYIC3F(M)/250-32	32	320
	HYIC3F(M)/250-30	30	320
	HYIC3F(M)/250-25	25	320
	HYIC3F(M)/250-21	21	290
	HYIC3F(M)/250-20	20	290
	HYIC3F(M)/250-16	16	290
	HYIC3F(M)/250-15	15	290
	HYIC3F(M)/250-10	10	230
	HYIC3F(M)/250-5	5	230
	HYIC3F(M)/250-2.5	2.5	230
Three-Phase Compensation (Combined Compensation)	HYIC3S(M)/450-25+25	50(25+25)	350
	HYIC3S(M)/450-25+20	45(25+20)	350
	HYIC3S(M)/ 450-25+15	40(25+15)	350
	HYIC3S(M)/450-20+20	40(20+20)	290
	HYIC3S(M)/450-20+15	35(20+15)	290
	HYIC3S(M)/450-20+10	30(20+10)	290
	HYIC3S(M)/450-16+16	32(16+16)	290
	HYIC3S(M)/450-15+15	30(15+15)	290
	HYIC3S(M)/450-15+10	25(15+10)	290
	HYIC3S(M)/450-12+12	24(12+12)	290
	HYIC3S(M)/450-15+5	20(15+5)	290
	HYIC3S(M)/450-10+10	20(10+10)	290
	HYIC3S(M)/450-10+5	15(10+5)	230
	HYIC3S(M)/450-5+5	10(5+5)	230
Mixed compensation (one point one total)	HYIC3H(M)/250-20+450-20	40(20+20)	350
	HYIC3H(M)/250-20+450-10	30(20+10)	320
	HYIC3H(M)/250-10+450-20	30(10+20)	290
	HYIC3H(M)/250-10+450-10	20(10+10)	290
	HYIC3H(M)/250-10+450-5	15(10+5)	290
	HYIC3H(M)/250-5+450-10	15(5+10)	230
	HYIC3H(M)/250-5+450-5	10(5+5)	230

Note: The width and depth of smart capacitors of different capacities are consistent, only the height is different.

Appearance and Installation Dimensions

1. Appearance Description

Required accessories: Mounting bracket, network cable, instruction manual

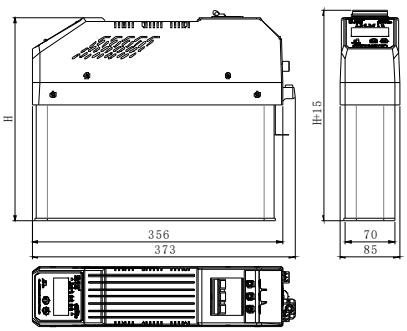
Optional accessories: Secondary transformer

HYIC3

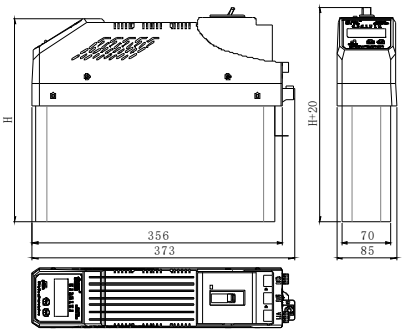
Series of Intelligent Integrated Power Capacitor Compensation Devices

2. Dimensions

Dimensions (L x W x H): 373 x 85 x H (H is related to capacity)

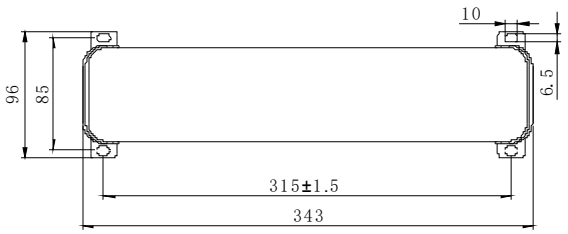


Micro-break type

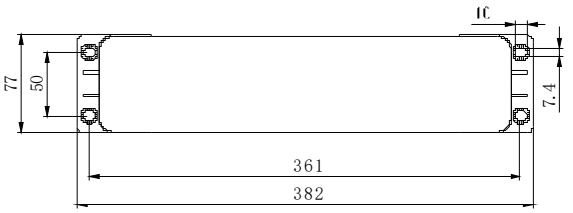


Molded shell type

3. Installation dimensions



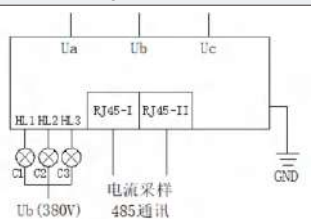
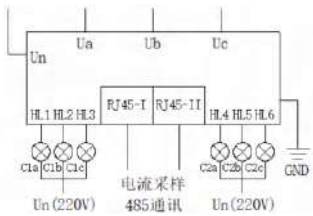
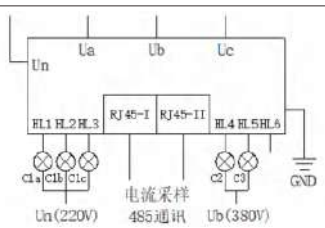
Metal tripod: 315×85mm



Plastic tripod: 361×50mm

Note: The default delivery is a metal tripod. If you need a plastic tripod, please make a note when placing an order.

Product Wiring Instructions

Compensation Methods	Wiring Schematic	Wiring Instructions
Three-Phase Compensation		1. C1—1st capacitor group; C2—2nd capacitor group; C3—3rd capacitor group; 2. For common compensation, there are only two capacitor groups. Terminal HL3 does not need to be connected to an indicator light. (C3 is not connected)
Single-Phase Compensation		1. C1a—1st capacitor group for phase A; C1b—1st capacitor group for phase B; C1c—1st capacitor group for phase C; C2a—2nd capacitor group for phase A; C2b—2nd capacitor group for phase B; C2c—2nd capacitor group for phase C; 2. For split compensation, there is only one capacitor group. Terminals HL4, HL5, and HL6 are not present.
Mixed Compensation (Separate + Common)		1. C1a—1st capacitor group for phase A; C1b—1st capacitor group for phase B; C1c—1st capacitor group for phase C; C2—2nd capacitor group; C3—3rd capacitor group; 2. For split compensation, there are only two capacitor groups. Terminal HL5 does not need to be connected to an indicator light. (C3 is not connected)

Description:

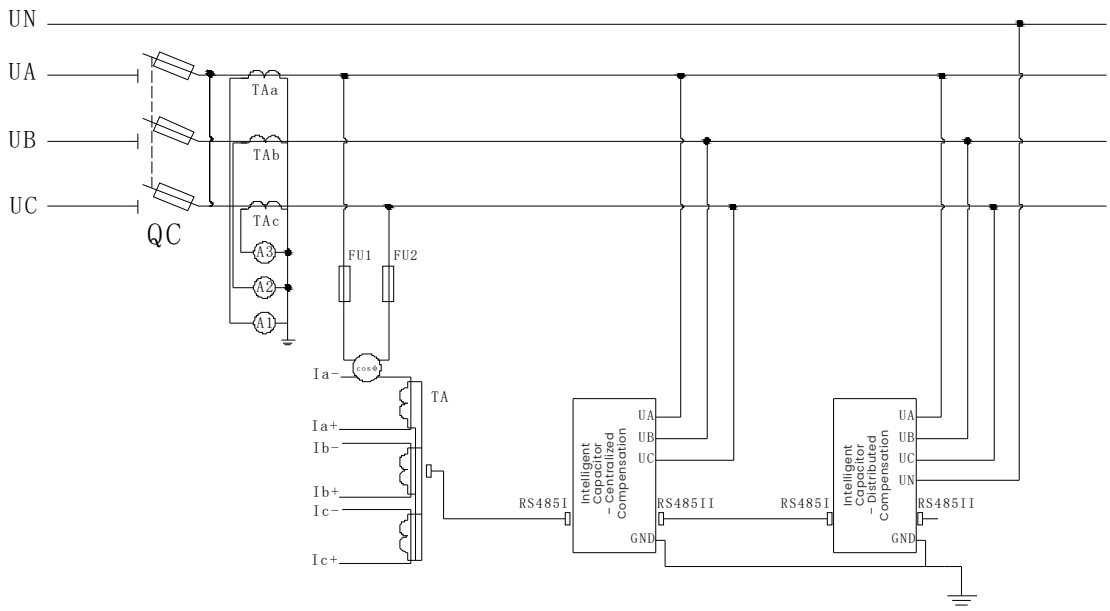
1. RS485-I: For networking communication;
2. RS485-II: For communication with on-site distribution transformers and other intelligent devices
3. Internal communication between RJ45-I and RJ45-II, including current sampling and primary and secondary RS485 communication.

HYIC3

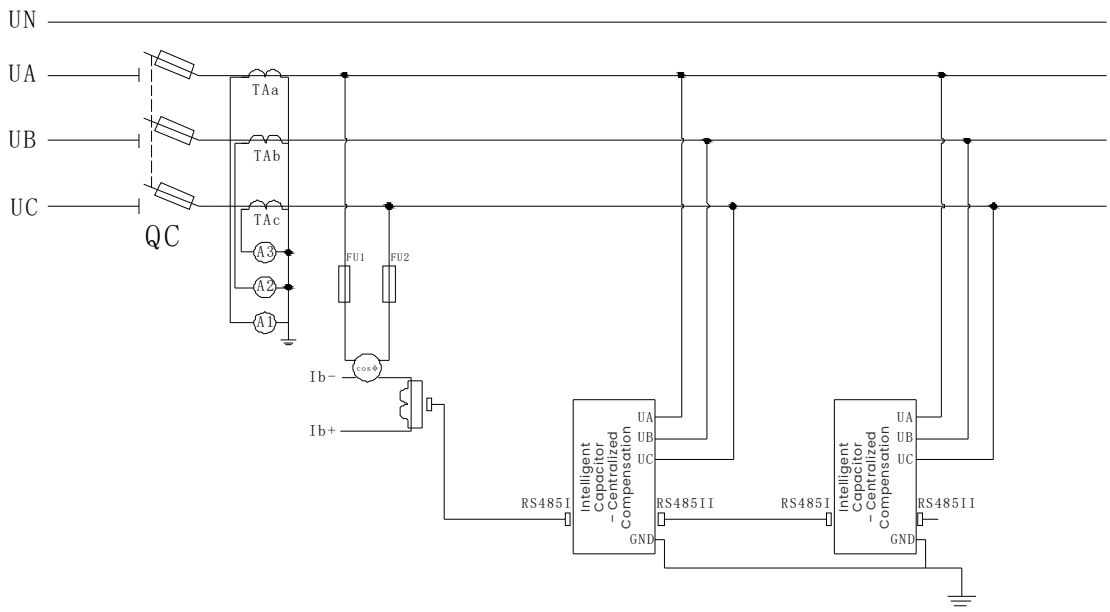
Series of Intelligent Integrated Power Capacitor Compensation Devices

Electrical Connection Diagram

1. Electrical wiring diagram for hybrid compensation application (when there is separate compensation and common compensation in the compensation system, a CT-3 secondary current transformer is required to sample the A, B, and C three-phase currents separately)



2. Electrical wiring diagram for common compensation application (when only common compensation is used in the compensation system, the CT-1 secondary current transformer can be used to sample only the B-phase current)



HYIC3X

Series of Intelligent Integrated Anti-harmonic Power Capacitor Compensation Devices

Application Scope

The HYIC3X series intelligent integrated anti-harmonic power capacitor compensation device utilizes low-voltage power capacitors as its core, integrating advanced technologies such as modern measurement and control, power electronics, network communications, and automated control. It replaces traditional reactive power compensation devices, which consist of separate components such as controllers, fuses, combination switches or mechanical contactors, thermal relays, low-voltage capacitors, and indicator lights, all connected by wires within a cabinet.

This intelligent anti-harmonic low-voltage capacitor is primarily used for reactive power compensation in applications with severe harmonics. It operates reliably, does not resonate, does not amplify harmonics, and can absorb and eliminate them to a certain extent. The device with a 7% series reactor is suitable for electrical environments where the dominant harmonic is the fifth harmonic, while the device with a 14% series reactor is suitable for electrical environments where the dominant harmonic is the third harmonic.

Compliant standard: GB/T 15576, "Low-voltage Complete Reactive Power Compensation Device."

Main Technical Parameters

Environmental Conditions:

Transport and Storage Temperature: -40°C to 70°C

Ultimate Operating Temperature: -25°C to 60°C (-40°C to 60°C available for custom products)

Relative Humidity: 20% to 90%

Altitude: ≤ 2000m

Other Requirements: The installation site must be free of gases or conductive media that may corrode metal or damage insulation, contain no explosive media, be free of strong vibration and shock, and be free of severe mold.

Power Requirements

Operating Voltage: AC 400V

Voltage Tolerance: ±30%

Operating Frequency: 50 ± 1.5Hz

Voltage Harmonics: Total Voltage Distortion Rate ≤ 5%

Network Quantity: ≤ 48 units per group

Model and Meaning

HY IC3 X □□/□-□-□

- Reactance: 7%, 14%
- Rated Output (kvar)
- Rated Voltage (V)
- None: Micro-break type; M: Molded case type
- S: Three-phase compensation, F: Split-phase compensation, H: Hybrid compensation
- X: Anti-harmonics
- Design Code
- Company Code

Structural Features

1. Modular Structure

Smart capacitors use a modular design—compact, easy to wire and maintain. System capacity can be expanded by adding modules.

2. Zero-Cross Switching

Zero-cross relays enable zero-voltage connection and zero-current disconnection, reducing power loss with no inrush current, overvoltage, or arcing.

3. Protection

Features overvoltage, undervoltage, power loss, short-circuit, and over-temperature protection. Internal temperature protection shuts down the unit if it overheats, extending service life.

4. Control Technology

Switching is based on power factor and reactive power, using predictive and delayed sampling to ensure stable, oscillation-free compensation, even under heavy loads.

5. Intelligent Networking

Supports standalone or networked operation. Faulty units automatically exit without affecting the system. RS-485 communication enables automatic master-slave networking for reliable operation.

HYIC3X

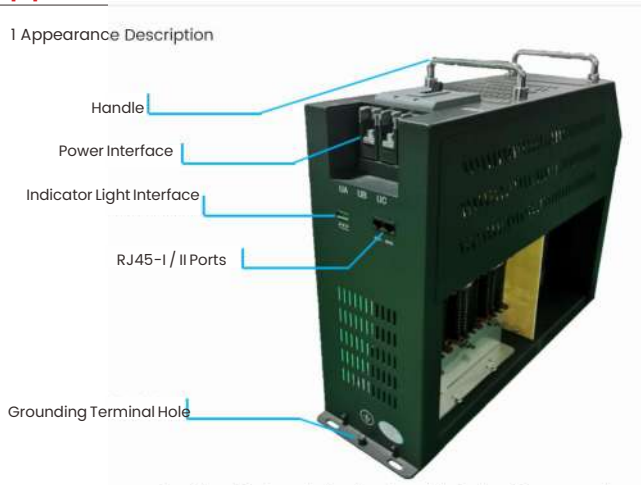
Series of Intelligent Integrated Anti-harmonic Power Capacitor Compensation Devices

Product General Model Specification Table

Compensation Modes	Specifications	Reactance	Capacity (kvar)	Overall dimensions: Length x Width x Height (mm)
Single-Phase Compensation (Distributed)	HY1C3XF	7%	5~30	453x168x382
Three-Phase Compensation (Centralized)	HYIC3XS	7	5~40	
Single-Phase Compensation (Distributed)	HY1C3XFM	7	5~30	525x155x425
		14%	5~30	525x175x422
Three-Phase Compensation (Centralized)	HYIC3XSM	7%	5~40	525x155x425
			45~50	525x150x445
		14%	5~50	525x155x492

Appearance and Installation Dimensions

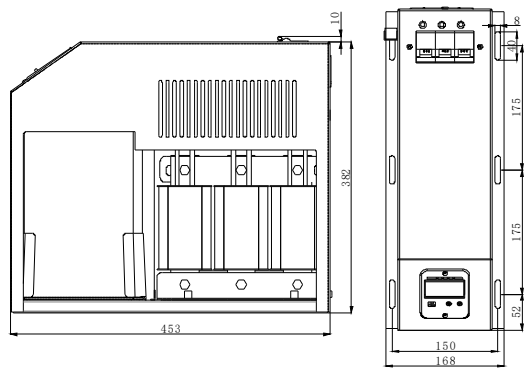
1 Appearance Description



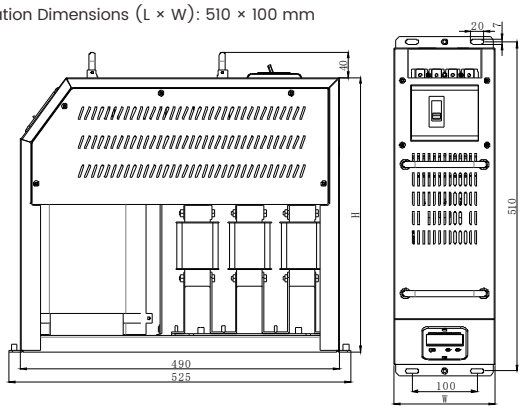
Required accessories: Mounting bracket, network cable, instruction manual
Optional accessories: Secondary transformer

2. Dimensions

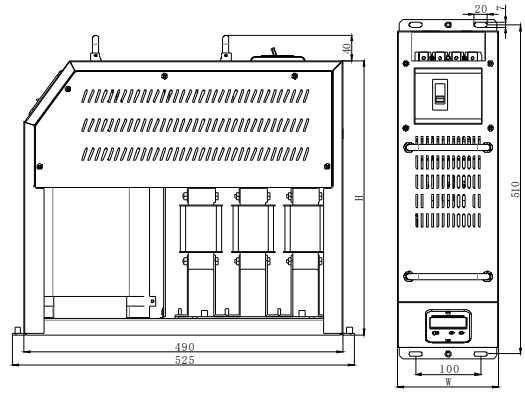
HYIC3X Micro-break Anti-harmonic Intelligent Capacitor (Reactance 7%)
Dimensions (L×W×H): 453×168×382mm
Installation Dimensions (L×W): 175×150mm



HYIC3X Molded Case Anti-Harmonic Intelligent Capacitor (Reactance 7%)
Dimensions (L × W × H): Width (W) and height (H) depend on the compensation method and capacity.
Single-Phase Compensation: 525 × 155 × 425 mm
Three-Phase Compensation: 525 × 155 × 425 mm (5-40 kvar);
525 × 150 × 445 mm (45-50 kvar)
Installation Dimensions (L × W): 510 × 100 mm



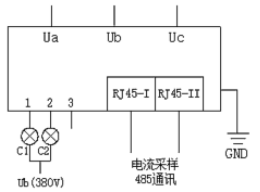
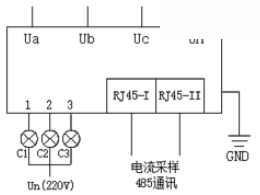
HYIC3X Molded Case Anti-Harmonic Intelligent Capacitor (Reactance 14%)
Dimensions (L × W × H): Width (W) and height (H) depend on the compensation method and capacity.
Single-Phase Compensation: 525 × 175 × 422 mm
Three-Phase Compensation: 525 × 155 × 492 mm
Installation Dimensions (L × W): 510 × 100 mm



HYIC3X

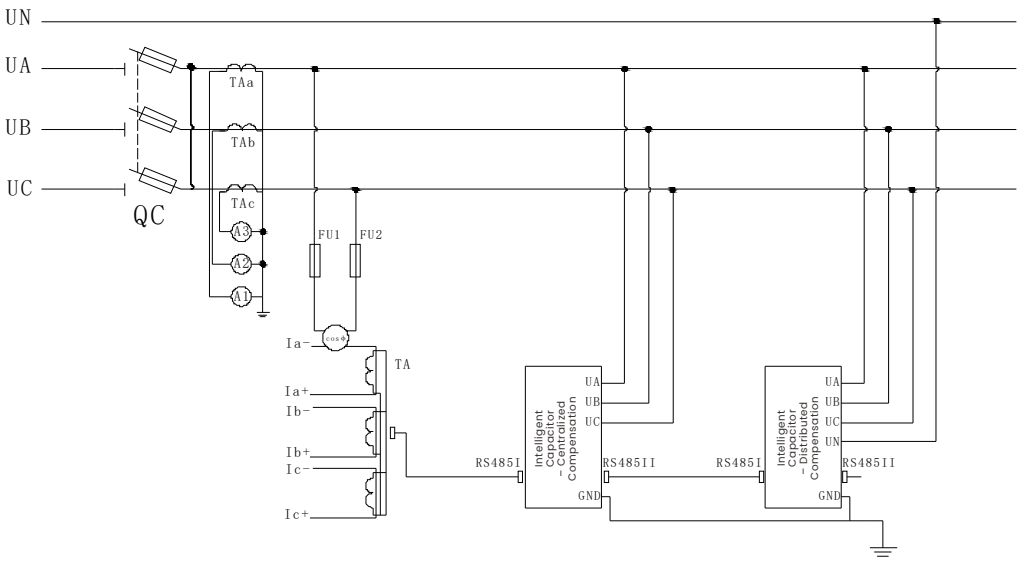
Series of Intelligent Integrated Anti-harmonic Power Capacitor Compensation Devices

Product Wiring Instructions

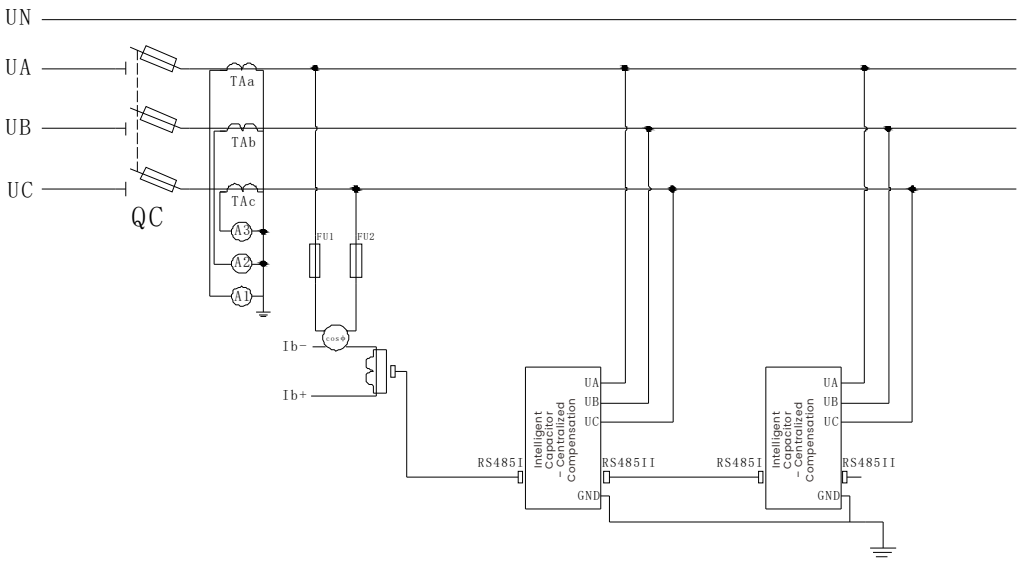
Compensation method	Wiring Schematic	Wiring Instructions
Three-phase compensation	 Current sampling 485 communication	1. Common-compensation indicators C1 and C2 represent capacitor groups 1 and 2, respectively. Dual-reactor products require connecting indicators C1 and C2; other products only require connecting indicator C1. 2. For separate-compensation intelligent capacitors, the capacitor switching indicators C1, C2, and C3 indicate the addition or removal of capacitors for phases A, B, and C, respectively.
Single-phase compensation	 Current sampling 485 communication	

Electrical Connection Diagram

1. Electrical wiring diagram for hybrid compensation application (when there is separate compensation and common compensation in the compensation system, a CT-3 secondary current transformer is required to sample the A, B, and C three-phase currents separately)



2. Electrical wiring diagram for common compensation application (when only common compensation is used in the compensation system, the CT-1 secondary current transformer can be used to sample only the B-phase current)



JKW(G)

Series Reactive Power Automatic Compensation Controller

Application Scope

The JKW(G) series controller is designed to automatically adjust capacitor banks to meet reactive power compensation needs. It helps improve transformer efficiency, reduce line losses, enhance voltage quality, and deliver better economic performance.

Normal Operating Conditions

1. Altitude: ≤ 2,500 meters
2. Ambient Temperature: -25°C to +50°C
3. Relative Humidity: ≤ 50% at 40°C; ≤ 90% at 20°C
4. Environment: No corrosive gases, conductive dust, or flammable/explosive substances
5. Installation Site: Free from strong vibration

Functional Features

1. Accurate capacitor switching based on reactive power.
2. Precise power factor measurement, wide display range.
3. Auto-detects current polarity—no manual setup needed.
4. Supports both PF and reactive power control.
5. Easy-to-use interface.
6. Fully digital and adjustable settings.
7. Auto/manual modes available.
8. Overvoltage & undervoltage protection.
9. Power-off memory protection.
10. Ultra-low input impedance (≤ 0.01Ω).

Main Technical Parameters

1. Basic Technical Parameters

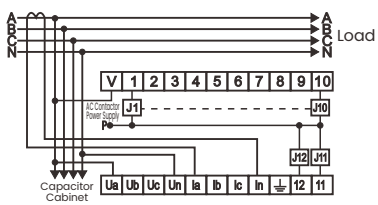
Rated operating voltage	AC 220V or 380V 50Hz
Rated operating current	AC 0-5A 50Hz
Output contact capacity	AC 220V 7A 50Hz
Power factor display	0.001 lag - 0.001 lead
Reactive power measurement	0-9999kvar
Undervoltage protection value	170 or 300V
Control mode sensitivity	60mA
Protection level	Enclosure Ip40

2. Adjustable range of control parameters and factory setting values

Technical Parameters	Parameter Values
Model	JKW5C, JKWD5
Power-on Threshold	Lag 0.70 - Lead 0.90
Power-off Threshold	Lag 0.7 - Lead 0.90
Power-on Delay	1-250s
Power-off Delay	1-250s
Overvoltage Threshold	220-270 or 380-480V
Circuit Configuration	1-12 circuits

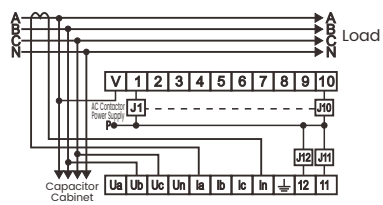
Wiring Method

JKW5C-12 Wiring Diagram (Sampling Voltage 220V)
Cutout Dimensions: 113 x 113 mm (Figure 1)



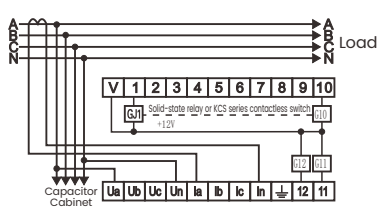
JKW5C (Figure 1): Ua, Un Voltage Signal Inputs;
Ia, In Current Signal Inputs; V Control Output Common Terminal.

JKW5C-12 Wiring Diagram (Sampling Voltage 380V)
Cutout Dimensions: 113 x 113 mm (Figure 2)



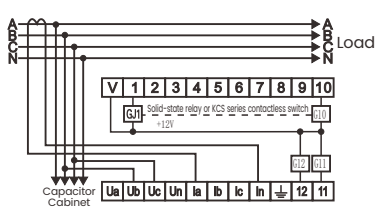
JKW5C (Figure 1): Ub, Uc Voltage Signal Inputs;
Ia, In Current Signal Inputs; V Control Output Common Terminal.

JKWD5 Wiring Diagram
Cutout Dimensions: 113 x 113 mm (Sampling Voltage: 220V) (Figure 3)



JKWD5: Ua, Un Voltage Signal Inputs
Ia, In Current Signal Inputs
V Control Signal Common Terminal +12V
I-12 Output Control Signal -12V

JKWD5 Wiring Diagram
Cutout Dimensions: 113 x 113 mm (Sampling Voltage: 380V) (Figure 4)



Ub, Uc Voltage Signal Inputs
Ia, In Current Signal Inputs
V Control Signal Common Terminal +12V
I-12 Output Control Signal -12V

JKW-24

Series Intelligent Reactive Power Compensation Controller

Application Scope

The JKW-24 Intelligent Reactive Power Compensation Controller is a new type of power distribution measurement and control device that integrates data acquisition, reactive power compensation, and grid parameter analysis. It is suitable for monitoring and reactive power compensation control in 0.4kV AC, 50Hz low-voltage distribution systems.

Based on a high-speed digital signal processor, the JKW-24 Intelligent Reactive Power Compensation Controller utilizes AC sampling and features a large 128x64 dot-matrix LCD display. It features power distribution monitoring, reactive power compensation, harmonic analysis, and an adaptive frequency algorithm. The input signal operates between 45Hz and 55Hz.

Normal Operating Conditions

1. Air Temperature: Air temperature must not exceed +65°C and not fall below -25°C.
2. Atmospheric Conditions: Air humidity must not exceed 90% at 20°C. Higher relative humidity is permitted at lower temperatures.
3. Altitude: Not exceeding 2500 meters.
4. Environmental Conditions: The surrounding medium must be free of explosion hazards, corrosive gases, conductive dust, rain, or snow. The installation location must be free of severe vibration.

Features

Real-time data monitoring

1. Voltage, current, power factor
2. Capacitor bank switching status
3. Active power, reactive power
4. Voltage total harmonic distortion, current total harmonic distortion, system frequency
   3rd, 5th, 7th, 9th, 11th, and 13th voltage harmonic content
   3rd, 5th, 7th, 9th, 11th, and 13th current harmonic content

The sampled physical quantity is reactive power, with no switching oscillation.

△-type compensation method

Main Technical Parameters

1. Basic Technical Parameters

Power supply voltage	AC 380V ± 20%
Sampling voltage	AC 380
Power supply frequency	50Hz ± 5%
Sampling current	0-5A
Maximum power consumption	20W (depending on the power of the controlled switch)
Control output contacts	24 channels, DC 12V x 30mA per channel

2. Measurement Accuracy

Voltage	±0.5%
Current	±0.5%
Active Power	±1.0 %
Reactive Power	±1.0 %
Frequency	±0.5%
Power Factor	±1.0 %

3. Control parameters

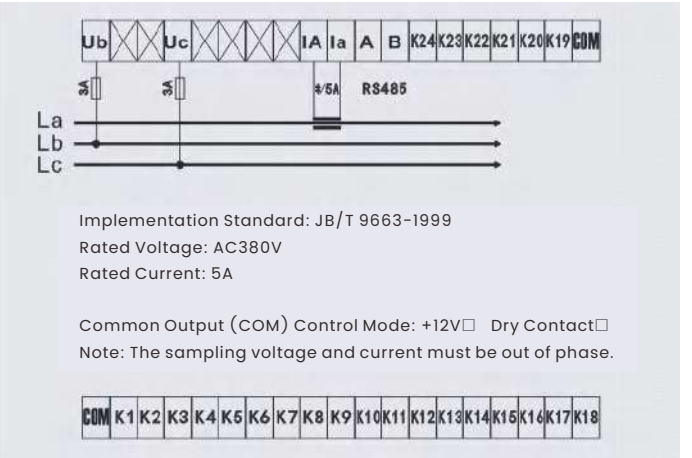
Control sensitivity	30mA
Target COSφ(1)	0.85 ~ 1.00, 0.01 steps, factory preset: 1.00
Target COSφ(2)	0.00 ~ 0.60, 0.01 steps, factory preset: 0.20
Threshold coefficient	0.5 ~ 1.2, 0.1 steps, factory preset: 1.00
On/Off delay(1)	00s ~ 600s, 1/0.02 steps, factory preset: 30s
On/Off delay(2)	00s ~ 300s, 1 steps, factory preset: 180s
Overvoltage protection	400V ~ 480V, 1V steps, factory preset: 430V
Undervoltage protection	300V ~ 360V, 1V steps, factory preset: 330V
Harmonic voltage over limit	00.0% ~ 25.0%, 0.5% steps, factory preset: 05.0%
Harmonic current over limit	00.0% ~ 100.0%, 0.5% steps, Factory default setting: 20.0%

JKW-24

Series Intelligent Reactive Power Compensation Controller

Wiring Diagram

1. Wiring diagram



Implementation Standard: JB/T 9663-1999
Rated Voltage: AC380V
Rated Current: 5A

Common Output (COM) Control Mode: +12V□ Dry Contact□
Note: The sampling voltage and current must be out of phase.

2. Installation Dimensions

External Dimensions: 144*144*95mm
Opening Dimensions: 138*138mm
Installation Depth: 110mm

HYIC3-K

Series Reactive Power Automatic Compensation Controller

Application Scope

The HYIC3-K reactive power compensation controller, used in conjunction with the HYIC3 series intelligent low-voltage capacitors, collects and displays electrical measurement data, including statistics on maximum reactive power shortages and peak voltages. It also statistically stores data such as power factor, active power, reactive power, and operating events before and after compensation. It monitors and displays the operating conditions and switching status of the intelligent capacitors, including capacitor voltage, current, temperature, and capacitor unit number. It also allows for manual capacitor switching and automatic switching of electromagnetic zero-crossing capacitors based on reactive power and target power factor.

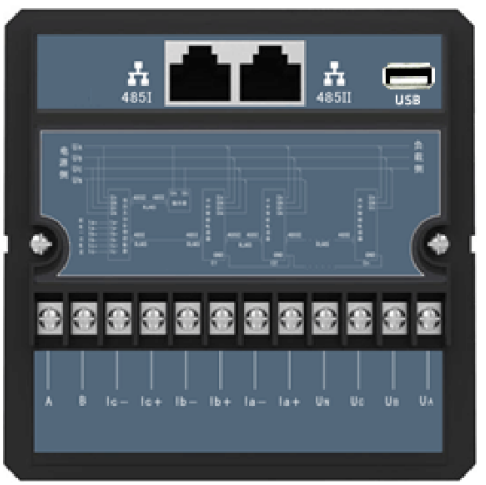
Structural Features

1. Storage function: It can store the maximum, minimum, and average (once daily) values of the three-phase power factor, active power, and reactive power data before and after compensation, as well as device operating events.
2. The controller and capacitors form an intelligent, automatic network. If a controller sampling failure occurs, the intelligent capacitor network automatically becomes the master and performs compensation, preventing loss of reactive power compensation due to controller failure.
3. The controller analyzes each branch capacitor, including its properties, switching status, compensation current, and real-time temperature.
4. It communicates with external maintenance equipment via an RS-485 interface.
5. Data can be downloaded via a USB port and viewed on a PC.
6. It can display the load power factor curve for a more intuitive display.

Main Technical Parameters

1. Working Environment	3. Measurement Accuracy
(1) Ambient temperature: -40℃ ~ 70℃	(1) Voltage: ≤0.5%
(2) Relative humidity: 20 ~ 90% at 40℃	(2) Current: ≤0.5%
(3) Atmospheric pressure: 79.5 ~ 106.0kPa	(3) Reactive Power: ≤1%
(4) Altitude: not more than 2000m	(4) Active Power: ≤1%
(5) Surrounding environment: no flammable or explosive media, no conductive dust or corrosive gas	(5) Power Factor: ±0.01
2. Power supply	**4. Capacity Control**
(1) Working voltage: AC 50HZ, 380V±20%	(1) Three-phase Compensation: ≤48 units
(2) Power consumption: ≤2W	(2) Split-phase Compensation: ≤48 units
(3) Current sampling: AC 0 ~ 5A	(3) Hybrid Compensation: ≤48 units

Appearance and Installation Dimensions

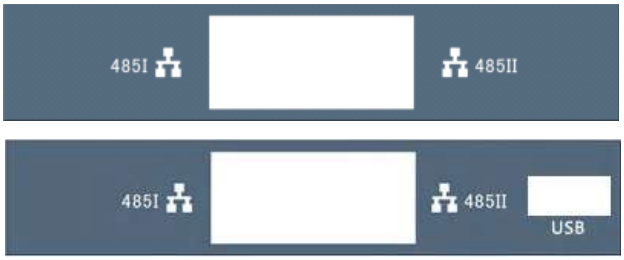
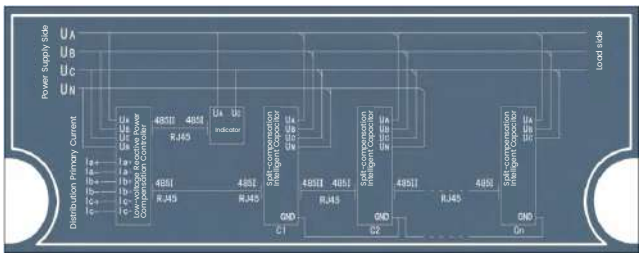
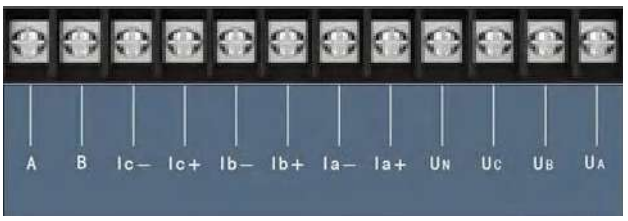


Dimensions (W x H x D)	Mounting hole dimensions (W x H)
120mm x 120mm x 95mm	112mm x 112mm (actual dimensions)

HYIC3-K

Series Reactive Power Automatic Compensation Controller

Product Installation Instructions

1. Network cable connection	
	1. RJ45 communication interfaces (RJ45-I and RJ45-II) serve as the communication interface between the controller and the smart capacitor. 2. The USB port can be connected to a USB flash drive for exporting statistical data, alarm event logs, and other files, and importing program upgrade files.
2. Voltage sampling and current sampling line wiring	
	

The specific wiring diagram is shown below:

1. A and B are backup 485 communication interfaces.
   The RS485 communication interface consists of two ports, A and B, which connect to the 485 communication lines A and B, respectively.
   As backup RS485 communication interfaces, they can communicate with external devices such as terminal communication.
2. Ia+, Ia-, Ib+, Ib-, Ic+, and Ic- connect to the three-phase currents A, B, and C, respectively.
   The current flows into Ia+, Ib+, and Ic+, and outflows from Ia-, Ib-, and Ic-.
3. Ua, Ub, and Uc connect to the three-phase voltages A, B, and C, respectively. Un connects to the neutral line.

HYFK

Series Low Voltage Compound Switch

Application Scope

The HYFK combination switch consists of three independent combination switches with a rated operating voltage of AC380V, 220V±20%, suitable for on-off control of low-voltage reactive compensation capacitor banks. The basic operating principle of the combination switch is to connect a thyristor (SCR) in parallel with a magnetic latching relay. This combination switch combines the advantages of SCR zero-crossing switching during the switching on and off phases with the power-saving advantages of a contactor switch during normal switching.

This product complies with GB 14048.4-2010, Low-Voltage Switchgear and Controlgear, Part 4-1: Contactors and Electric Starters (Electromechanical Contactors and Motor Starters (Including Motor Protectors)).

Model and Meaning

HY FK - △ / Y□V - □A

- Rated current: 45A: 20 kvar; 60A: 30 kvar
- △400V: Three-phase common compensation, delta connection
- Y250V: Three-phase split compensation, star connection
- Integrated compound switch
- Company code

1. Product Categories: Common Compensation (capacitors connected in a delta configuration); Split Compensation (capacitors connected in a star configuration).
2. Product Models: See the table below.

Model Specifications	Capacitor Wiring Methods	Rated Current	Rated capacity
HYFK-△400-45A	Delta Connection, Common Compensation	45A	20 kvar
HYFK-Y250-45A	Star Connection, Split Compensation	45A	3 × 6.7 kvar
HYFK-△400-60A	Delta Connection, Common Compensation	60A	30 kvar
HYFK-Y250-60A	Star Connection, Split Compensation	60A	3 × 10 kvar

Structural Characteristics

1. Zero-crossing switching: The HYFK composite switch is a combination of intelligent chips, digital circuits, and magnetic latching relays to achieve voltage zero-crossing conduction and current zero-crossing disconnection, so that the switch can completely cross zero-crossing switching at the moment of connection and disconnection without generating overvoltage. The switch has many advantages such as no inrush current, extremely low power consumption, long life, and low failure rate, and is widely used in the field of low-voltage reactive power compensation.
2. Protection function: The microprocessor is used to monitor the operating conditions of the switch relay, input power supply, and load, and has perfect protection functions.
   (1) Grid overvoltage and undervoltage protection: When overvoltage or undervoltage occurs, it will automatically disconnect and the power light will flash to warn;
   (2) Phase loss protection: When any phase is lost, it will automatically disconnect and the power light will flash to warn;
   (3) Power failure protection: If a sudden power failure occurs after connection, it will automatically disconnect;
   (4) No-load protection: When no load is connected, it will refuse to close and the indicator light will flash to warn; the split-compensation composite switch will continuously cycle to detect the phase, and the indicator light will scan and flash in a cycle.
   (5) Phase indicator switch status: Power light, long on for normal; flashing for overvoltage, undervoltage or phase loss; A/B/C phase status light, long on for switch closed; flashing for a phase for a phase fault, or a phase capacitor is in the discharge delay;
   (6) Self-diagnosis fault: If any phase fails, the switch will refuse to operate and the indicator light will flash as a warning;
3. The composite switch does not need to be connected to the neutral line (N line);
4. Low power consumption: The magnetic latching relay consumes power only at the moment of switching, and consumes almost no power at other times, thus achieving energy saving and consumption reduction;
5. Auxiliary contacts with switch status feedback are available to facilitate the controller to collect the online status of the composite switch;
6. Working safety: All control input signals are safely isolated from the internal circuit: At the same time, it adopts advanced intelligent control technology, and has extremely high performance advantages in inrush current and safety reliability compared with similar products. The input signal is optically isolated from the composite switch, with high EMC protection measures and strong anti-interference ability: It works safely and reliably.

HYFK

Series Low Voltage Compound Switch

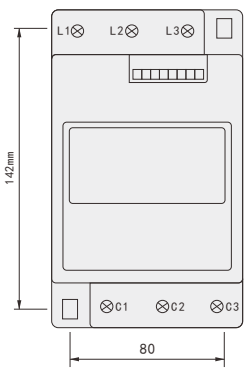
Main Technical Parameters

1. Product Categories: Common Compensation (capacitors connected in a delta configuration);
   Split Compensation (capacitors connected in a star configuration).
2. Product Models: See the table below.

Model Specifications	Capacitor Wiring Methods	Rated current	Rated capacity
HYFK- 400-45A	Delta connection, common compensation	45A	20kvar
HYFK-Y250-45A	Star connection, split compensation	45A	3 x 6.7kvar
HYFK-△400-60A	Delta connection, common compensation	60A	30kvar
HYFK-Y250-60A	Star connection, split compensation	60A	3 x 10kvar

1. Ambient temperature: -20°C to +55°C	12. Power consumption: ≤1.5VA
2. Relative humidity: 20% to 90% at 40°C	13. Contact voltage drop: ≤10mV
3. Rated voltage: 380V/220V three-phase four-wire AC, 50Hz	14. Contact withstand voltage: >1600V
4. Tolerance: Synchronous variation of three-phase voltages not exceeding ±20%	15. Response time: ≤1000ms
5. Voltage distortion: Less than 5%	16. Interval between each on/off switch: ≥5 seconds
6. Rated frequency: 50Hz	17. Interval between two consecutive on/off switches: ≥35 seconds
7. Rated current: ≤60A	18. Control signal: DC12V±20%; AC/communication (optional)
8. Service life: 100,000 cycles	19. Input impedance: ≥6.8K
9. Number of phases: Three-phase (△ connection) Single-phase (Y connection)	20. On-resistance: ≤0.003
10. Three-phase control capacity: ≤30kvar	21. Inrush current: Less than 1.5 times the rated current
11. Single-phase control capacity: ≤10kvar	22. Feedback contact rated current: 1A (ON = ON)

Appearance and Installation Dimensions



The incoming wiring for this combination switch should be made of appropriate multi-core copper conductors based on the total three-phase capacity of the product. For total capacities less than 30 kvar, 10 mm² multi-core copper conductors can be used. For capacities of 30 kvar and above, 16 mm² or larger multi-core copper conductors should be used. When crimping the connectors, be sure to tighten the screws to ensure they are secure.

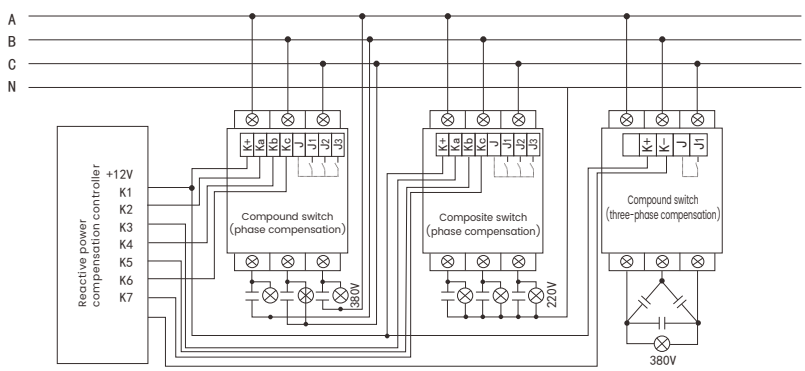
Dimensions (L/W/D)	Mounting Hole Spacing (L/W)
160 x 96 x 95 mm	142 x 80 mm

Auxiliary contact feedback terminal status: When the compound switch is enabled, the common terminal J is connected to the feedback terminals J1/J2/J3.

	K+	K-	J	J1

K+	Ka	Kb	Kc	J	J1	J2	J3

Wiring Diagram



For example: there is one group of interphase compensation and one group of phase compensation, and the following wiring is for common compensation as shown in the figure above; K+ in the figure is connected to the +12V terminal of the dynamic reactive power compensation controller; K- or Ka, Kb, Kc are connected to the control output point (negative potential) of the dynamic compensator; J and J1, J2, J3 are auxiliary contacts for switch status feedback.

BSMJN

Series Self-healing Low Voltage Shunt Capacitors

Application Scope

The BSMJN series self-healing low-voltage shunt capacitors are suitable for use in industrial frequency AC power systems with nominal voltages of 1000V and below, improving power factor, reducing reactive power losses, and improving voltage quality.

Self-healing low-voltage shunt power capacitors comply with the GB/T12747-2017 standard.

Model and Meaning

B S MJ N / □-□-□

- Number of Phases (1: Single-Phase Compensation; 3: Three-Phase Compensation; 3YN: Split-Phase Compensation)
- Rated Capacity (kvar)
- Rated Voltage (kv)
- Special Code (N: New Model)
- Metalized Polypropylene Film
- Dielectric Code (S - Microcrystalline Wax)
- Shunt Capacitor

Structural characteristics

1. Operating Conditions: Ambient temperature -25°C to 45°C, humidity ≤85%, altitude 2000m
2. Rated voltage (Un): 0.12 to 1.2kV
3. Rated output (Qn): 1 to 100kvar
4. Capacitance tolerance: -5 to +10%, filtering 0 to +3°C. The ratio of the maximum to minimum capacitance measured between any two line terminals of a three-phase capacitor must not exceed 1.07.
5. Loss tangent: At power frequency voltage and 20°C, for phase-to-phase and common-compensation capacitors up to 30kvar: tgδ ≤ 0.08%; for capacitors above 30kvar: tgδ ≤ 0.10%. For split-compensation capacitors up to 20kvar: tgδ ≤ 0.10%; for capacitors up to 40kvar: tgδ ≤ 0.15%.
6. AC withstand voltage: 2.15 Un, 10 s between poles; 3600 V, 10 s between poles and shells
7. Maximum operating voltage: 1.1 times the rated voltage is permitted.
8. Maximum operating current: 1.3 times the rated current is permitted.
9. Self-discharge characteristics: 3 minutes after the capacitor is disconnected from power, the residual voltage drops from √2 Un to 0.1 Un or less.
10. Implementation standards: GB/T12747.1-2017, IEC60831.1:2014.
11. Unit power consumption: ≤ 0.2 W/kvar (including discharge resistor ≤ 0.35 W/kvar)

Main Technical Parameters

Serial number	Product Model	Rated voltage (kV)	Rated capacity (kvar)	Rated Capacitance (μF)	Rated current (A)	Housing Dimensions L×W×H (mm)	Installation Dimensions (mm)	Figure Number
1	0.23-5-3YN	0.23	5	301.0	7.2	167*57*130	184*40	5
2	0.23-10-3YN	0.23	10	602.0	14.4	167*57*180	184*40	5
3	0.23-15-3YN	0.23	15	903.0	21.6	167*57*245	184*40	5
4	0.23-20-3YN	0.23	20	1204.0	28.9	180*95*210	200*70	2
5	0.23-25-3YN	0.23	25	1505.0	36.2	180*95*250	200*70	2
6	0.23-30-3YN	0.23	30	1806.0	43.5	180*95*290	200*70	2
7	0.25-5-3YN	0.25	5	254.8	6.7	167*57*130	184*40	5
8	0.25-6-3YN	0.25	6	305.7	8.0	167*57*130	184*40	5
9	0.25-10-3YN	0.25	10	509.6	13.3	167*57*180	184*40	5
10	0.25-15-3YN	0.25	15	764.3	20.0	167*57*245	184*40	5
11	0.25-20-3YN	0.25	20	1019.1	26.7	18 0*95*210	200*70	2
12	0.25-24-3YN	0.25	24	1222.9	32.0	180*95*250	200*70	2
13	0.25-25-3YN	0.25	25	1273.9	33.3	180*95*250	200*70	2
14	0.25-30-3YN	0.25	30	1528.7	40.0	180*95*250	200*70	2
15	0.25-40-3YN	0.25	40	2038.2	53.3	180*95*330	200*70	2
16	0.28-5-3YN	0.28	5	203.1	6.0	167*57*130	184*40	5
17	0.28-6-3YN	0.28	6	243.7	7.1	167*57*130	184*40	5
18	0.28-10-3YN	0.28	10	406.2	11.9	167*57*180	184*40	5
19	0.28-15-3YN	0.28	15	609.3	17.9	167*57*245	184*40	5
20	0.28-20-3YN	0.28	20	812.4	23.8	180*95*210	200*70	2
21	0.28-24-3YN	0.28	24	974.9	28.6	180*95*250	200*70	2
22	0.28-25-3YN	0.28	25	10 15.5	29.8	180*95*2 50	200*70	2
23	0.28-30-3YN	0.28	30	1218.6	35.7	180*95*250	200*70	2
24	0.28-40-3YN	0.28	40	1624.9	47.6	180*95*330	200*70	2

BSMJN

Series Self-healing Low Voltage Shunt Capacitors

Main Technical Parameters

Serial Number	Product Model	Rated voltage (kV)	Rated capacity (kvar)	Rated Capacitance (μF)	Rated current (A)	Housing Dimensions L×W×H (mm)	Installation Dimensions (mm)	Figure Number
25	0.3-5-3YN	0.3	5	176.9	5.6	167*57*130	184*40	5
26	0.3-6-3YN	0.3	6	212.3	6.7	167*57*130	184*40	5
27	0.3-10-3YN	0.3	10	353.9	11.1	167*57*180	184*40	5
28	0.3-15-3YN	0.3	15	530.8	16.7	167*57*245	184*40	5
29	0.3-20-3YN	0.3	20	707.7	22.2	180*95*250	200*70	2
30	0.3-24-3YN	0.3	24	849.3	26.7	180*95*250	200*70	2
31	0.3-25-3YN	0.3	25	884.6	27.8	180*95*250	200*70	2
32	0.3-30-3YN	0.3	30	1061.6	33.3	180*95*250	200*70	2
33	0.3-40-3YN	0.3	40	1415.4	44.4	180*95*330	200*70	2
34	0.4-5-3	0.4	5	99.5	7.2	167 57*115	186*40	4
35	0.4-6-3	0.4	6	119.5	8.7	167*57*115	186*40	4
36	0.4-10-3	0.4	10	199.0	14.4	167*57*130	186*40	4
37	0.4-12-3	0.4	12	238.9	17.3	167*57*180	186*40	4
38	0.4-15-3	0.4	15	298.5	21.6	167*57*180	186*40	4
39	0.4-16-3	0.4	16	318.5	23.1	167*57*180	186*40	4
40	0.4-18-3	0.4	18	358.2	25.9	167*57*210	186*40	4
41	0.4-20-3	0.4	20	398.0	28.9	167*57*210	186*40	4
42	0.4-25-3	0.4	25	497.6	36.1	167*57*245	186*40	4
43	0.4-30-3	0.4	30	597.1	43.3	180*70*250	206*50	6
44	0.4-40-3	0.4	40	796.2	57.7	180*95*250	200*70	1
45	0.4-50-3	0.4	50	995.2	72.1	180*95*290	200*70	1
46	0.45-1-3	0.45	1	15.7	1.3	167*57*115	186*40	4
47	0.45-2-3	0.45	2	31.4	2.6	167*57*115	186*40	4
48	0.45-3-3	0.45	3	47.2	3.9	167*57*115	186*40	4
49	0.45-4-3	0.45	4	62.9	5.1	167*57*115	186*40	4
50	0.45-5-3	0.45	5	78.6	6.4	167*57*115	186*40	4
51	0.45-6-3	0.45	6	94.3	7.7	167*57*115	186*40	4
52	0.45-7-3	0.45	7	110.1	9.0	167*57*115	186*40	4
53	0.45-8-3	0.45	8	125.8	10.3	167*57*115	186*40	4
54	0.45-10-3	0.45	10	157.3	12.8	167*57*130	186*40	4
55	0.45-15-3	0.45	15	235.8	19.2	167*57*180	186*40	4
56	0.45-16-3	0.45	16	251.5	20.5	167*57*180	186*40	4
57	0.45-20-3	0.45	20	314.5	25.6	167*57*210	186*40	4
58	0.45-25-3	0.45	25	393.0	32.0	167*57*245	186*40	4
59	0.45-30-3	0.45	30	471.6	38.4	180*70*250	206*50	6
60	0.45-35-3	0.45	35	550.4	44.9	180*95*250	200*70	1
61	0.45-40-3	0.45	40	629.0	51.3	180*95*250	200*70	1
62	0.45-50-3	0.45	50	786.0	64.1	180*95*290	200*70	1
63	0.48-5-3	0.48	5	69.1	6.0	167*57*115	186*40	4
64	0.48-6-3	0.48	6	82.9	7.2	167*57*115	186*40	4
65	0.48-10-3	0.48	10	138.2	12.0	167*57*130	186*40	4
66	0.48-15-3	0.48	15	207.3	18.0	167*57*180	186*40	4
67	0.48-16-3	0.48	16	221.2	19.2	167*57*180	186*40	4
68	0.48-20-3	0.48	20	276.5	24.1	167*57*210	186*40	4
69	0.48-25-3	0.48	25	345.6	30.1	167*57*245	186*40	4
70	0.48-30-3	0.48	30	414.7	36.1	180*70*250	206*50	6
71	0.48-40-3	0.48	40	552.9	48.1	180*95*250	200*70	1
72	0.48-50-3	0.48	50	691.1	60.1	180*95*290	200*70	1
73	0.525-5-3	0.525	5	57.8	5.4	167*57*115	186*40	4
74	0.525-10-3	0.525	10	115.5	10.9	167*57*130	186*40	4
75	0.525-15-3	0.525	15	173.2	16.4	167*57*180	186*40	4
76	0.525-20-3	0.525	20	231.0	21.9	167*57*210	186*40	4
77	0.525-25-3	0.525	25	288.7	27.4	167*57*245	186*40	4
78	0.525-30-3	0.525	30	346.5	32.9	180*70*250	206*50	6
79	0.525-40-3	0.525	40	462.0	43.9	180*95*250	200*70	1
80	0.525-50-3	0.525	50	577.5	54.9	180*95*290	200*70	1
81	0.69-5-3	0.69	5	33.4	4.1	167*57*115	186*40	4
82	0.69-10-3	0.69	10	66.9	8.3	167*57*130	186*40	4
83	0.69-15-3	0.69	15	100.3	12.5	167*57*180	186*40	4
84	0.69-25-3	0.69	25	167.2	20.9	167*57*245	186*40	4
85	0.69-30-3	0.69	30	200.7	25.1	180*70*250	206*50	6
86	0.69-40-3	0.69	40	267.6	33.4	180*95*250	200*70	1
87	0.69-50-3	0.69	50	334.4	41.8	180*95*290	200*70	1

BSMJN

Series Self-healing Low Voltage Shunt Capacitors

Appearance and Installation Dimensions

Figure 1

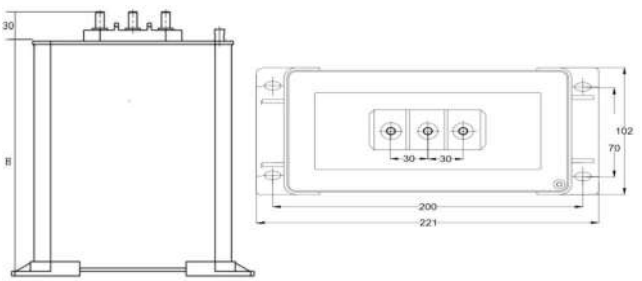


Figure 2

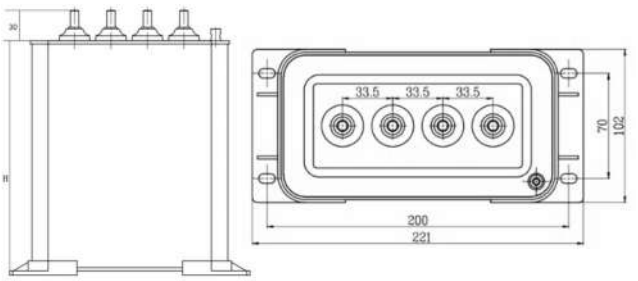


Figure 3

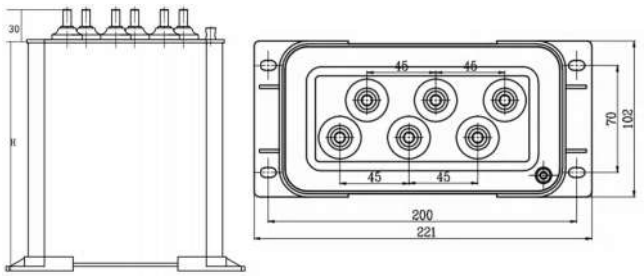


Figure 4

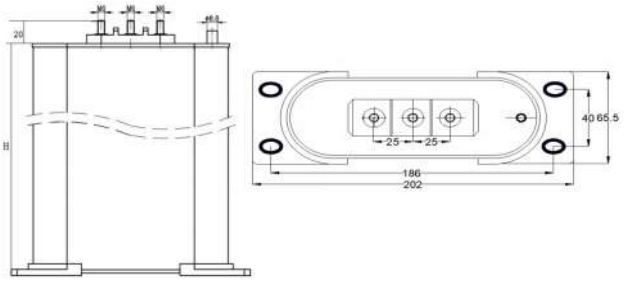


Figure 5

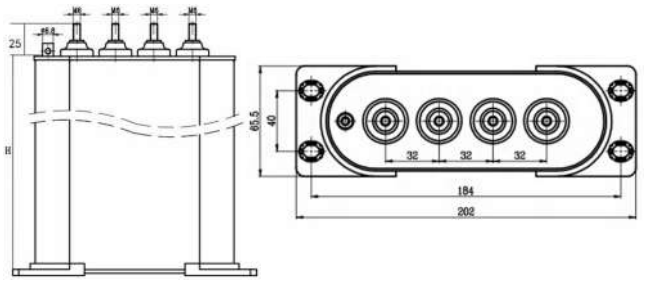
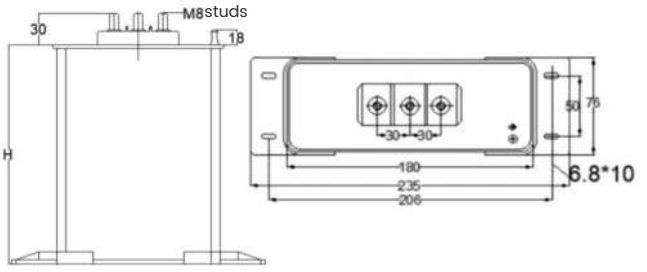


Figure 6



CKSG/CKDG

Series Low-Voltage Reactor

Application Scope

When compensating for capacitive reactive power, capacitors are often affected by harmonic currents, closing inrush currents, and operational overvoltages, causing damage to the capacitors and reducing the power factor. Therefore, it is necessary to install a series reactor in front of the capacitor to suppress and absorb harmonics and protect the capacitor from the influence of harmonic voltage and current and impact voltage and current, improve power quality, increase system power factor, extend capacitor life, and ensure safe operation of the power grid.

Model and Meaning

CK □ □-□ / □-□

- Rated Reactance Ratio XL/Xc (%)
- Applicable Capacitor Rated Line Voltage (KV)
- Reactor Three-Phase Capacitance (Kvar)
- G: Dry Air Cooling C: Epoxy Casting
- S: Three-Phase D: Single-Phase
- Filter Reactor

Main Technical Parameters

1. Applicable capacitor voltages: 0.4kV, 0.45kV, 0.4BkV, 0.525V, 0.66kV, 0.69kV.
2. Reactance: 1%, 4.5%, 5%, 5.67%, 6%, 7%, 12%, 13.8%, 14%.
3. Withstand voltage: 5kV/min, insulation grades: B, F, H, noise ≤ 30dB, overload capacity ≤ 1.35 times continuous operation.
4. Installing a series reactor causes a system voltage increase. The calculation formula is: $Ug = \left(\frac{n}{n^2-1}\right) X\ Un$

   (Capacitor bank operating voltage: Ug; System rated operating voltage: Un; Reactor tuning times: n) $\frac{XL}{Xc}$
5. The conversion formulas for reactor capacity, capacitance, reactance, and inductance are: $UL = Uc\ \frac{UL}{1X0.314}$ phase x L = $\frac{XL}{Xc}$

   (Capacitor capacity: Qc; Reactor capacity: Qw; Reactor terminal voltage: UL)

Inductance: L; Reactor current: I; Capacitor phase voltage: Uc phase; Qw = Qc phase x Reactance ratio = $\frac{XL}{Xc}$

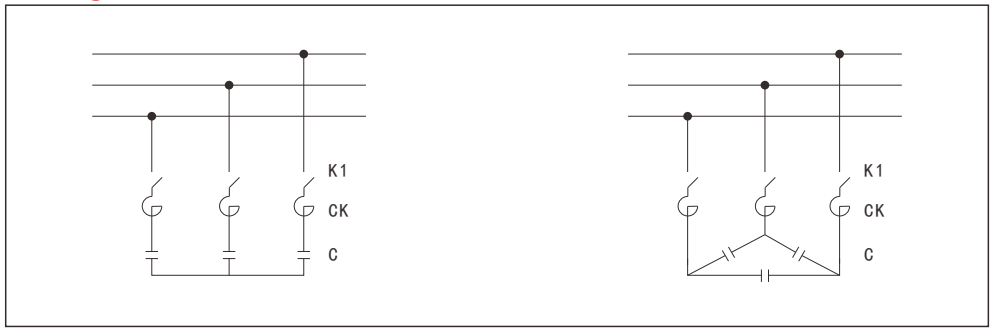
Structural Characteristics

1. This product is available in three-phase and single-phase versions and is a dry-type iron core.
2. The iron core is made of high-quality cold-rolled silicon steel sheets, punched and sheared by a high-speed punch press. This results in minimal burrs, uniform lamination, and neat and beautiful lamination, ensuring low temperature rise and low noise during operation.
3. The coil utilizes high-quality insulated wire and is wound by a dedicated machine, resulting in excellent flatness and an attractive appearance.
4. During the reactor assembly process, all clamps undergo corrosion protection treatment, and key clamps are made of non-magnetic materials. A pre-baking, vacuum impregnation, and heat curing process ensures that the reactor coil and iron core are firmly integrated. This significantly reduces temperature rise and noise during operation, effectively improving the reactor's quality factor and reducing harmonics.
5. The reactor's dimensions are designed based on standard cabinet dimensions, resulting in a compact size, convenient wiring, and significant savings in cabinet investment.

Usage Environment

1. Altitude not exceeding 2000 meters.
2. Operating ambient temperature -25°C to 45°C, relative humidity not exceeding 90°C.
3. The surrounding area must be free of harmful gases and flammable or explosive materials.
4. The surrounding environment must have good ventilation. If installed in a cabinet, ventilation equipment must be installed.

Wiring Method



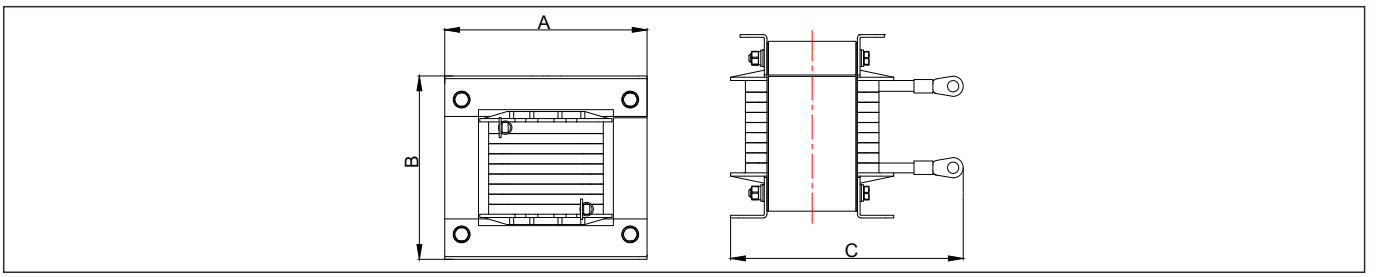
CKSG/CKDG

Series Low-Voltage Reactor

Parameters and Dimensions

Model Specifications	Matching Capacitor Capacity(Kvar)	Reactor Capacity (kvar)	Inductance (mH)	Dimensions Length x Width x Height (mm)	Installation dimensions (mm)
CKDG-0.6/0.23-12%	5	0.6	6.0	155x160x160	105x115.4-Φ8
CKDG-0.9/0.23-12%	7.5	0.9	4.013	155x165x175	105x115.4-Φ8
CKDG-1.2/0.23-12%	10	1.2	2.996	170x180x180	120x125.4-Φ8
CKDG-1.44/0.23-12%	12	1.44	2.484	170x185x195	120x125.4-Φ8
CKDG-1.68/0.23-12%	14	1.68	2.140	170x195x185	120x135.4-Φ8
CKDG-1.8/0.23-12%	15	1.8	1.987	170x195x185	120x135.4-Φ8
CKDG-1.9/0.23-12%	16	1.92	1.873	170x210x185	120x145.4-Φ8
CKDG-2.4/0.23-12%	20	2.4	1.498	170x215x200	120x145.4-Φ8
CKDG-2. 88/0.23-12%	24	2.88	1.261	190x210x240	140x155.4-Φ8
CKDG-3.0/0.23-12%	25	3.0	1.185	190x210x240	140x155.4-Φ8
CKDG-3.36/0.23-12%	28	3.36	1.070	190x210x260	140x155.4-Φ8
CKDG-3.6/0.23-12%	30	3.6	0.994	190x215x280	140x155.4-Φ8
CKDG-3.84/0.23-12%	2	3.84	0.936	190x215x295	140x155.4-Φ8
CKDG-4.32/0.23-12%	36	4.32	0.841	190x235x290	140x165.4-Φ8
CKDG-4.8/0.23-12%	40	4.8	0.749	190x235x310	140x165.4-Φ8
CKDG-5.4/0.23-12%	45	5.4	0.650	190x240x320	140x165.4-Φ8
CKDG-6.0/0.23-12%	50	6.0	0.611	210x250x330	140x165.4-Φ8

Note: Reactors with other voltage levels, capacities, and reactance ratios can be manufactured according to user requirements. CDDG type, 230V single-column, XL/XC = 12%, matching capacitor voltage: 280V; Reactors with other capacities can be manufactured according to user requirements.

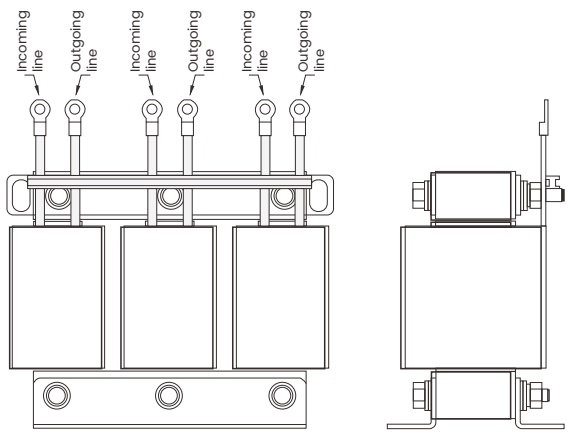


Model Specifications	System Voltage (kW)	Rated Reactance	Dimensions (mm< ±2mm)	Installation Dimensions (mm< ±2mm)	Aperture
CKSG-0.6/0.4-6			210x120x190	110x95	8
CKSG-0.9/0.4-6			210x120x190	110x95	8
CKSG-1.2/0.4-6			210x125x190	110x95	8
CKSG-1.5/0.4-6	0.4	1%	240x140x220	133x120	10
CKSG-1.8/0.4-6	0.45	5.67%	240x140x225	133x120	10
CKSG-2.1/0.4-6	0.48	6%	240x145x230	133x120	10
CKSG-2.4/0.4-6	0.525	7%	240x145x230	133x120	10
CKSG-3.0/0.4-6	0.66	12%	310x170x260	190x130	10
CKSG-3.6/0.4-6	0.69	13.8%	320x170x265	190x130	10
CKSG-4.8/0.4-6		14%	340x175x270	210x130	10
CKSG-5.4/0.4-6			340x180x270	210x130	10
CKSG-6.0/0.4-6			350x190x290	210x135	10
CKSG-7.2/0.4-6			350x200x290	210x135	10
CKSG-9.0/0.4-6			350x220x290	210x140	10

Note: The above parameters are typical values for reference only and can be customized according to customer requirements. The company reserves the right to change the data.

CKSG/CKDG

Series Low-Voltage Reactor



Model Specifications	Matching Capacitor Capacity(Kvar)	Reactor Capacity (kvar)	Inductance (mH)	Dimensions Length x Width x Height (mm)	Installation size (mm)
CKDG-0.3/0.23-6%	5	0.3	2.389	135x155x140	95x105.4-Φ8
CKDG-0.45/0.23-6%	7.5	0.45	1.592	135x165x155	95x105.4-Φ8
CKDG-0.6/0.23-6%	10	0.6	1.194	170x175x160	120x115.4-Φ8
CKDG-0.72/0.23-6%	12	0.72	0.987	170x180x170	120x115.4-Φ8
CKDG-0.84/0.23-6%	14	0.84	0.860	170x190x175	120x125.4-Φ8
CKDG-0.9/0.23-6%	15	0.9	0.796	170x195x180	120x125.4-Φ8
CKDG-0.96/0.23-6%	16	0.96	0.732	155x195x200	105x135.4-Φ8
CKDG-1.2/0.23-6%	20	1.2	0.592	155x195x200	105x135.4-Φ8
CKDG-1.44/0.23-6%	24	1.44	0.510	155x205x210	105x145.4-Φ8
CKDG-1.5/0.23-6%	25	1.5	0.478	155x205x210	105x145.4-Φ8
CKDG-1.68/0.23-6%	28	1.68	0.414	155x210x220	105x145.4-Φ8
CKDG-1.8/0.23-6%	30	1.8	0.398	155x210x220	105x145.4-Φ8
CKDG-1.92/0.23-6%	32	1.92	0.382	155x215x250	105x145.4-Φ8
CKDG-2.16/0.23-6%	36	2.16	0.325	190x225x260	140x155.4-Φ10
CKDG-2.4/0.23-6%	40	2.4	0.306	190x235x265	140x155.4-Φ10
CKDG-2.7/0.23-6%	45	2.7	0.268	190x255x275	140x175.4-Φ10
CKDG-3.0/0.23-6%	50	3.0	0.239	190x260x280	140x175.4-Φ10

Note: Reactors with other voltage levels, different capacities, and different reactance ratios can be manufactured according to user requirements. CDDG type, 230V single lintel, XL/XC=6%, matching capacitor voltage: 250V.

XD 1

Series Current Limiting Reactors

Application Scope

The XD1 series current-limiting reactors are dry-type reactors molded from unsaturated polyester resin. They are suitable for use in 50Hz AC circuits with a rated voltage of 0.4kV. They are used in low-voltage power supply systems to limit the closing inrush current of low-voltage capacitors and increase the breaking capacity of closing switches.

These products comply with GB/T1094.6 standards.

Model and Meaning

XD 1 - □ / 0.4

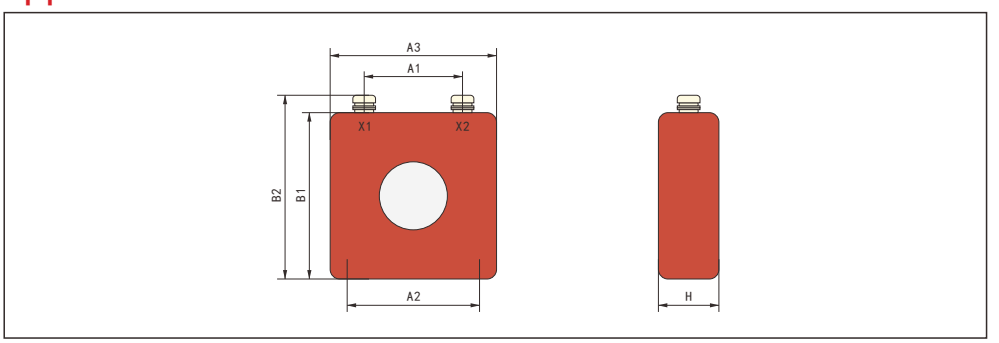
- 0.4 — System Rated Voltage (kV)
- □ — Capacitor Capacity
- 1 — Design Number
- XD — Current-Limiting Reactor

Main Technical Parameters

1. Rated Current, Capacitor Capacity
2. Power Frequency Test Voltage: 3kV for 1 minute, no breakdown or flashover
3. Temperature Rise: Case ≤ 65K, Coil ≤ 65K

Model	Rated current (A)	Current Limiting Ratio	Capacitor Capacity (Kvar)	A1	A2	A3	B1	B2	H
XD1-12/0.4	23	≥50	12	50	70±0.5	90	90	93	32
XD1-14/0.4	25	≥50	14	50	70±0.5	90	90	93	32
XD1-15/0.4	30	≥50	15	50	70±0.5	90	90	93	32
XD1-16/0.4	31	≥50	16	50	70±0.5	90	90	93	32
XD1-20/0.4	38.5	≥50	20	64	84±0.5	106	105	108	39
XD1-25/0.4	48.7	≥50	25	64	84±0.5	106	105	108	39
XD1-30/0.4	58.9	≥50	30	64	84±0.5	106	105	108	39
XD1-40/0.4	79.1	≥50	40	64	84±0.5	106	105	108	39

Appearance and Installation Dimensions



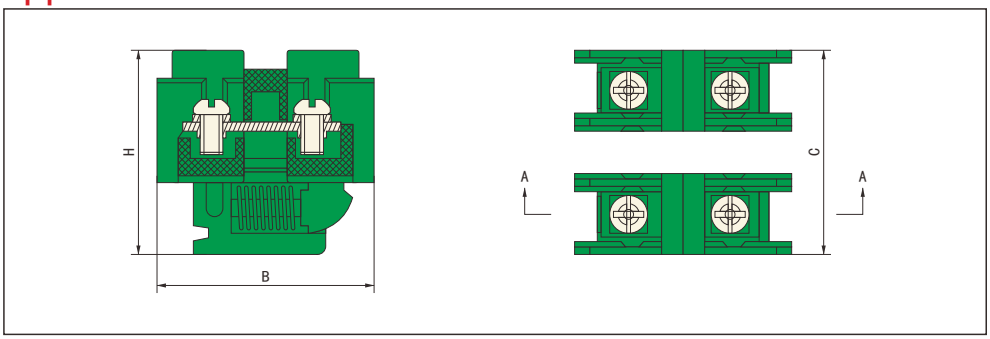
JF5
Series Terminal Block

Application Scope

The JF5 series terminal blocks are suitable for connecting round conductors with a rated voltage of up to 690V (660V) at 50Hz (or 60Hz) or 440V DC, and a rated cross-sectional area of 0.5 to 25mm². They utilize convenient combination screw connections, accept TU and TO terminals, and are compatible with universal G-type mounting rails.

They comply with GB14048.7 and IEC60947-7-1 standards.

Appearance and Installation Dimensions



Model	B	C	H	Mounting rail type
JF5-1.5/1	30	8	28.5	G
JF5-1.5/2	30	19.5	28	
JF5-1.5/3	30	28.5	28	
JF5-1.5/5	30	46.5	28	
JF5-1.5/2L	18.5	17	11	
JF5-1.5/3L	27.5	17	10	
JF5-1.5B	31	11	30	
JF5-2.5/1	35	11	31	
JF5-2.5/2	35	24.5	31	
JF5-2.5/3	35	36	31	
JF5-2.5/5	35	59	31	
JF5-2.5/2L	19.5	18	10	
JF5-2.5/3L	30	20	10	
JF5-2.5B	36.5	11	52	
JF5-2.5S1	60.5	10.5	54	
JF5-2.5S2	41	10	39	
JF5-2.5S3	60.5	10.5	54	
JF5-2.5RD	46	20	51.5	
JF5-2.5JD	35	12	39	
JF5-6/1	45	15	41	
JF5-10/1	50	17	47.5	
JF5-10/2	50	38	48	
JF5-10/5	50	91	48	
JF5-25/1	59	21.5	50	
JF5-25/2	59.5	50	50	

JH2

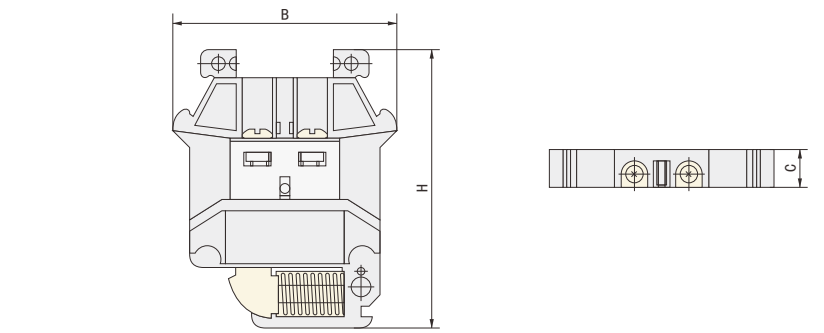
Series Terminal Block

Application Scope

The JH2 series terminal blocks are suitable for connecting round conductors with a rated voltage up to 690V (660V) at 50Hz (or 60Hz) AC or 440V DC, and a rated cross-sectional area up to 35mm². They utilize a step-locking barrel-type screw connection structure, providing secure, vibration-resistant, and loose-proof crimping. Multi-stranded conductors should be crimped onto tubular terminals before connection.

This product complies with GB14048.7 and IEC60947-7-1 standards.

Appearance and Installation Dimensions



Model	Dimensions (mm)			Mounting rail type
	B	C	H	
JH2-1.5	33	6	42	G
JH2-1.5L	33	6	42	
JH2-2.5	41	7	43	
JH2-2.5L	41	7	43	
JH2-2.5S	61	6	53	
JH2-2.5SL	73	6	76.5	
JH2-2.5RD	46	20	51	
JH2-6	41	8	47	
JH2-6L	41	8	47	
JH2-16	43	11.5	54.5	
JH2-35	44	18	65	

JH6

Series Terminal Block

Application Scope

The JH6 series terminal blocks utilize special wire clamps and a stepped-lock barrel-type screw connection structure, ensuring secure wire clamping and preventing vibration and loosening.

This product complies with GB14048.7 and IEC60947-7-1 standards.

Appearance and Installation Dimensions

Model	Dimensions (mm)			Mounting rail type
	B	C	H	
JH6-1.5	30	6	42	G
JH6-2.5	37	6	48	
JH6-2.5L	37	6	48	
JH6-2.5RD1 (with light)	60	17	68	
JH6-2.5S	56	10	53	
JH6-2.5SL	56	10	53	
JH6-4	40	7	53	
JH6-4L	40	7	53	
JH6-6	40	8	53	
JH6-6L	40	8	53	
JH6-10	40	10	53	
JH6-10L	40	10	53	
JH6-16	51	12	58	
JH6-16L	51	12	58	
JH6-B	37	10	45	
JH6-35	59	16	69	
JH6-35L	59	16	69	

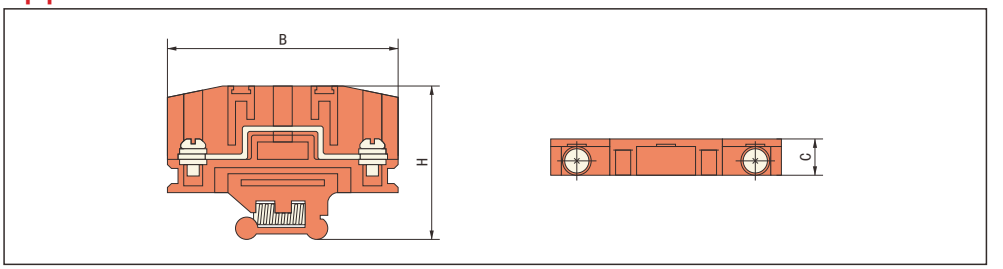
NJD
Series Terminal Block

Application Scope

The NJD series terminal blocks are suitable for low-voltage circuits operating at 50Hz (or 60Hz), with a rated voltage up to 690V (660V) and a rated current up to 20A. They are used for line connection, branching, and testing. This series can completely replace the B1 series terminal blocks.

These products comply with GB14048.7 and IEC60947-7-1 standards.

Appearance and Installation Dimensions



Model		Dimensions (mm)		Mounting rail type
	B	C	H	
NJD-7P	62	10	42	G
NJD-7L	62	10	42	
NJD-7S	62	12.5	50	
NJD-10D	62	10	42	

H
Series Terminal Block

Technical Specifications

The H series terminal blocks are suitable for connecting conductors in circuits with rated voltages up to 690V (660V) and rated currents up to 115A.

They comply with GB14048.7 and IEC60947-7-1 standards.

Appearance and Installation Dimensions

Model		Dimensions (mm)		Mounting rail type
	B	C	H	
H-2611	33	7	42	G
H-2624	34	7.5	42	
H-2600	40	7	49.5	
H-2629	40	7	49	
H-2638	41	10	47	
H-2643	41	10	50	
H-2601	55	18	61	
H-2626	53	10	55	
H-3852	54	13	59	
H-3853	54	13	59	

HP-175-□-□P

Power Distribution Terminal Blocks

Application Scope

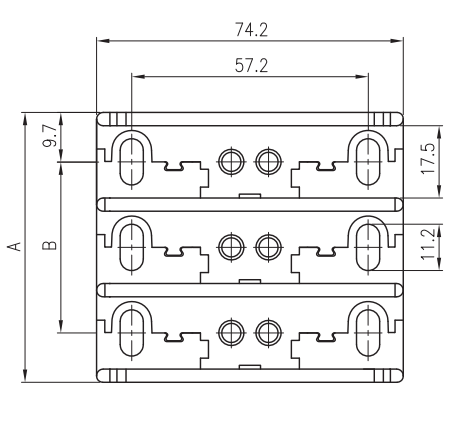
Electrical Ratings: 600 Volts, 175 Amps
Poles:1-3 poles
Compliance:IEC 60947-7-1
Insulator base:Thermoplastic (PBT G30%)
Flammability rating of insulator base UL 94V-0
Connector: Aluminum, tin plated
Lines: steel, trivalent chromium plated
Loads: steel, trivalent chromium plated
RoHS compliant

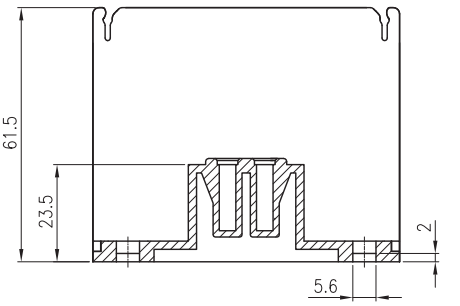
Serial Information

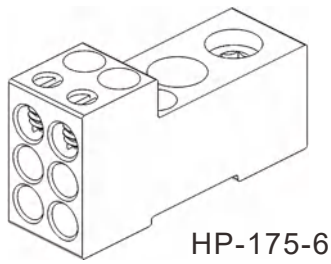
Models	Line Wire Range	Load Wire Range	Cover
HP-175-6	2/0~14AWG CU	4~14AWG CU	0/3
HP-175-7	1/4 OR M6 STUD	4~14AWG CU	0/3

Dimensions - mm

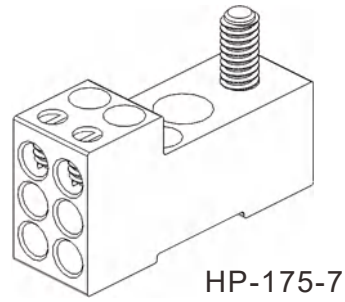
POLES	1	2	3
LENGTH	23.9	44.6	65.3
PITCH	—	20.7	41.4







HP-175-6



HP-175-7

HUP7-B2

Push-button Switch and Indicator

Product Overview

HUP7-B2, B4, B5, B7 series buttons are suitable for industrial control circuits with AC 50Hz or 60Hz, rated working voltage up to 380V and DC working voltage up to 250V, and are used as the control of electromagnetic starters, contactors, relays and other electrical circuits.

Environmental characteristics

Conform to standards:IEC 60947-5-1
Ambient temperature: -25°C ~+ 55°C
Vibration resistance: < 500Hz, amplitude about 1.0mm
Impact resistance: ≥10g
Protection level: Ip40, can be customized to Ip65

Contact characteristics

Contact action: slow action (normally closed or normally open); normally closed contact is directly disconnected
Contact resistance: ≤50mQ.
Mechanical life: self-resetting button>3 million times, emergency stop button>300,000 times
Electrical life: >1 million times (DC24V, power factor 0.5)
Short circuit protection: RT16-10A
Wiring: screw-in terminal, wiring capacity: minimum 1x0.5mm²;
maximum, with or without terminal piece; 2x 1.5mm² or 1x2.5mm²

Technical Parameters

Rated insulation voltage Ui (V)	690				
Agreed free air heating current Ith (A)	10				
Rated operating voltage Ue (V)	-	380	250	240	125
Rated operating current Le (A)	AC-15	2.5	-	3	-
	DC-13	-	0.27	-	0.55

Button Box

Protection level	IP40, can be customized IP65
Cable entry	Knockout hole, suitable for PG 13.5 cable gland

Lamp Bead Specifications

Lamp bead type	LED Light Emitting Diode		
Rated voltage	AC/DC 6V	AC/DC 12V	AC/DC 24V、36V、48V
	AC/DC 110V	AC/DC 220V	AC380V
Lamp bead life	≥50,000 hours		
Lamp bead color	○ ● ● ● ●		
Voltage limit	0.85Ue≤U≤1.1Ue		

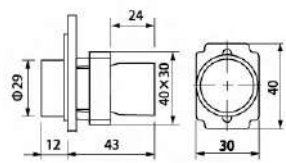
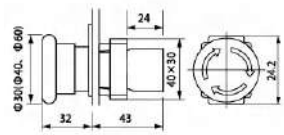
Materials of Parts

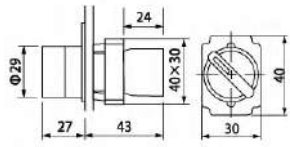
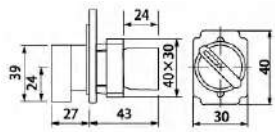
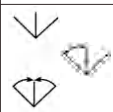
Model	Head	Middle seat	Contact	Switch housing
HUP7-B2-B Metal Series	Zinc alloy	Zinc alloy	Silver alloy	PBT
HUP7-B2-E Plastic Series	Nylon	Nylon		
HUP7-B4-B Metal Series	Zinc alloy	Zinc alloy		Nylon
HUP7-B5-A Plastic Series	Nylon	Nylon		Nylon

HUP7-B2

Push-button Switch and Indicator

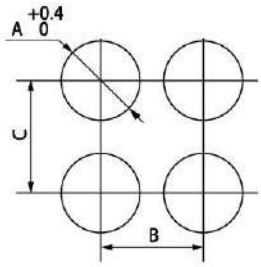
Product Overview

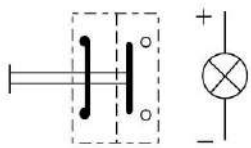
Picture	Product name	Model	Color	Contact type	Structure Drawing
	Flat Push Button Switch	HUP7-B2-BA31	●	1 –	
		HUP7-B2-BA61	●	1 –	
		HUP7-B2-BA22	●	– 1	
	Emergency stop push button switch Φ30mm Φ40mm Φ60mm	HUP7-B2-BS542	●	– 1	

Picture	Product name	Model	Functions	Contact type	Structure Drawing
	2 Position select switch	HUP7-B2-BD21	∨	1 –	
	2 Position with long handle	HUP7-B2-BJ21	∨	– 1	
	3 Position with long handle	HUP7-B2- Bj33		2 –	

Mounting Hole Product Dimensions

Mounting panel thickness is 1~6mm





1, 2 are normally closed contacts NC
3, 4 are normally open contacts NO

Type	A	B	C	Notes
Normal		> 50	> 35	1. Unit: mm 2. B and C refer to the minimum product size diagram
Knob	Φ22.3	> 50	> 35	
Mushroom		> 50	> 42	
Large Mushroom		> 70	> 70	

Model specification of multi-layer contact module

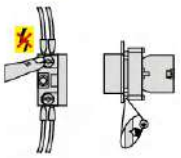
Left-Side Installation			Right-Side Installation	
First layer	Model	Description	Model	Description
	1	Install one BE101 on the left	6	Install one BE101 on the right
	2	Install one BE102 on the left	7	Install one BE102 on the right
	3	Install two BE101s		
	4	Install two BE102s		
	5	BE101 on the left, BE102 on the right	9	BE102 on the left, BE101 on the right
Second layer	Model	Meaning	Model	
	1	Install one BE101 on the left	6	Install one BE101 on the right
	2	Install one BE102 on the left	7	Install one BE102 on the right
	3	Install two BE101s		
	4	Install two BE102s		
	5	BE101 on the left, BE102 on the right	9	Be102 on the left, BE101 on the right
Third layer		And so on		and so on

Taking the direction of the center seat positioning pin as a reference, the positioning pin (1.3 position) is left-facing, and (2.4 position) is right-facing.

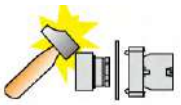
HUP7-B2

Push-button Switch and Indicator

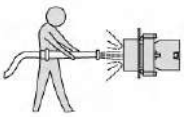
Features



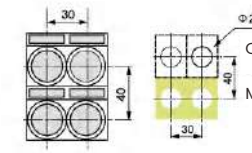
- Automatic grounding
- Finger-safe design



- Chrome-plated metal head and base
- Vibration-proof screw terminal
- mechanical lifespan: 3,000,000 times
- LED indicator lifespan: ≥50,000 hours



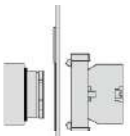
- High Protection Level: IP 65
- Easy Installation
- Customization Acceptable



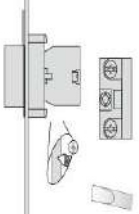
CENELEC En50007

Mounting Panel Thickness: 1-5mm

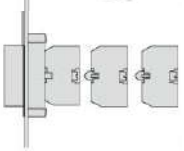
Installation Description



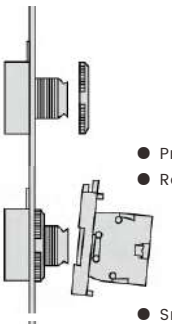
- The button head is automatically retained in the mounting hole.
- Rotate the button head to a certain angle to snap it into the base.



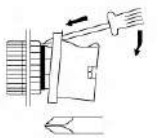
- Fastened with two metal screws
- Vibration-resistant
- Automatic Grounding
- Open-type terminal, no need to pre-loosen the screw

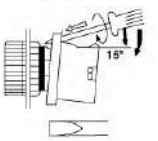


- Maximum contact module: 6

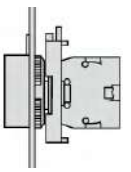


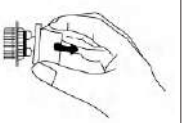
- Protection Level: Ip65
- Rear nut fastening



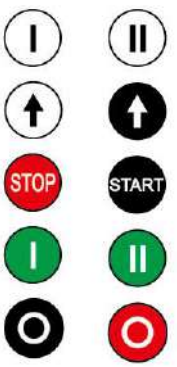


- Snap-in mounting of the contact and base
- Tool-free

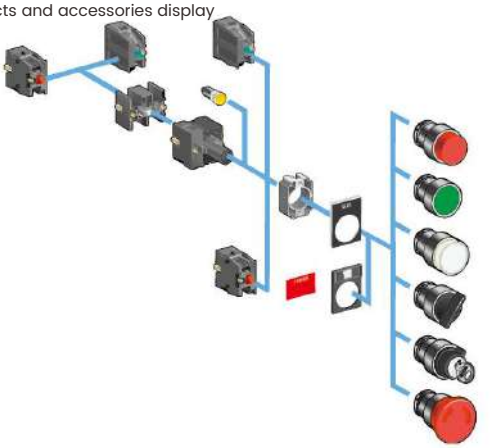




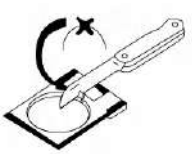
Full range of marking/ tailored to suit diverse needs



B2 series products and accessories display



Choices for Label Marking



- Size
- Shape
- Clolor
- Words

DDS881

Series Electronic Single-phase Energy Meters

Application Scope

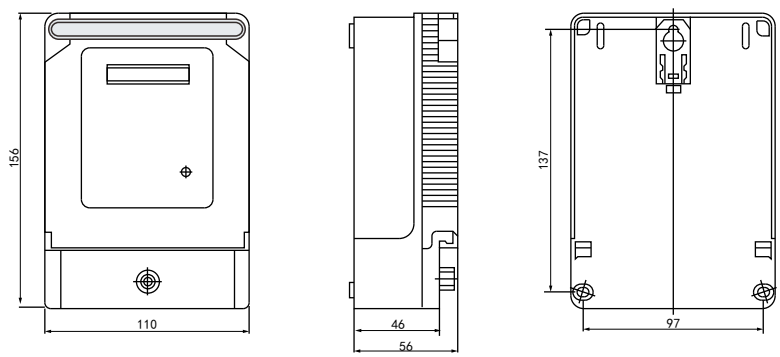
The DDS881 series static (electronic) single-phase energy meter utilizes high-quality large-scale integrated circuits and SMT technology.
A stepper motor drives the mechanical counter, ensuring data is not lost during power outages. This meter is one of the latest energy meter designs in China.
This product measures single-phase active energy at a voltage of 220V and a reference frequency of 50Hz.
It complies with the GB/T 17215.321-2021 standard.

Main Technical Parameters

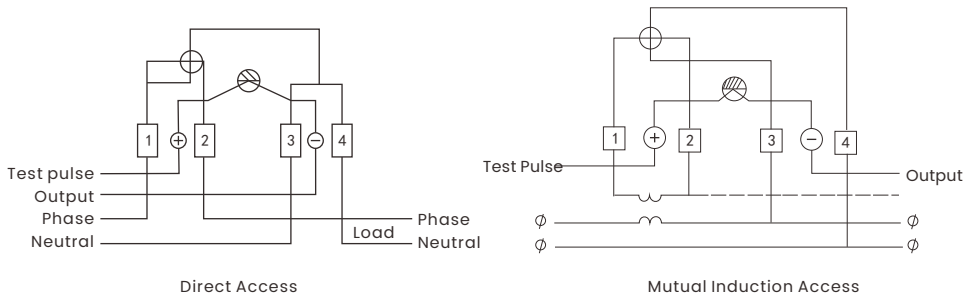
Reference voltage	Reference frequency	Rated current (A)	Accuracy Level	Starting Current	Creep The voltage is 115% of	Weight (kg)
220V	50Hz	0.25–0.5(60)A 0.25–0.5(80)A	Level 1 Level 2	Level 1 0.4%Ib Level 2 0.5%Ib	the reference voltage. The current line open test output emits no more than one pulse. (This product has anti-creep logic design)	Approximately 0.6

Appearance and Installation Dimensions, Wiring Diagram

1. Dimensional drawing



2. Wiring diagram



DSS881, DTS881

Series of Electronic Three-phase Three-wire And Three-phase Four-wire Active Energy Meters

Application Scope

The DSS881 and DTS881 series active energy meters are electronic Class 1 active energy meters designed to measure three-phase active energy in 50Hz AC circuits. They fully comply with the technical requirements of the national standard GB/T 17215 for Class 1 energy meters. Their features include:

1. Bidirectional metering accurately measures power in both forward and reverse directions, requiring no adjustment for long-term operation. It accumulates energy in one direction and features an anti-theft feature.
2. Operating with a three-phase power supply, metering accuracy remains unaffected even if one or two phases are disconnected.
3. Utilizing optoelectronic isolation technology, they output energy pulse signals, use LEDs to indicate power usage, and include a phase loss indicator.

This product complies with GB/T 17215.321-2021.

Model and Meaning

D □ S 881

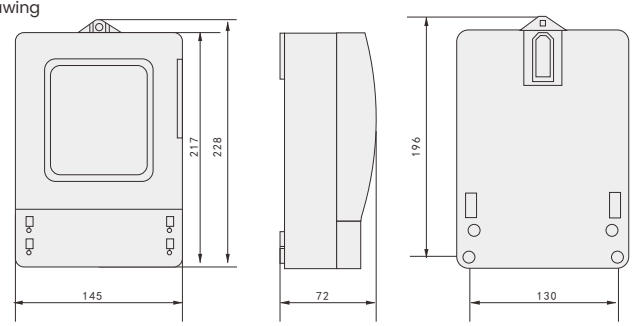
- Design Number
- Electronic
- T - Three-phase Four-wire, S - Three-phase Three-wire
- Electricity Meter

Main Technical Parameters

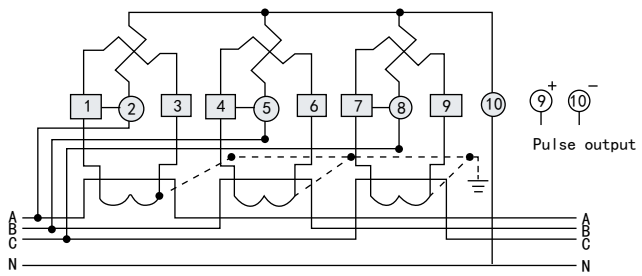
Reference voltage	3×220/380V, 3×100V, 3×380V, 3×57.7/100V
Base current	0.015–0.075(6)A,0.25–0.5(60)A,0.25–0.5(80)A
Accuracy class	Class 1 Class 2
Pulse constant	As marked on the nameplate
Power consumption	≤2W and 10VA
Design life.	10 years

Appearance and Installation Dimensions, Wiring Diagram

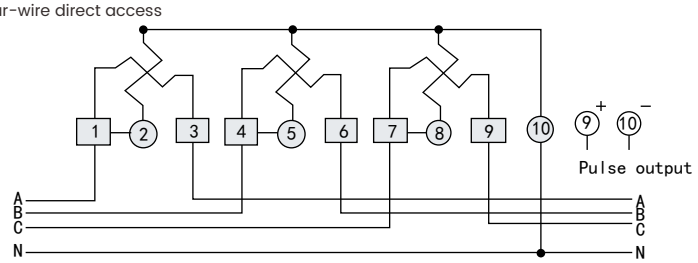
1. Dimensional drawing



2. Wiring diagram
Three-phase four-wire transformer access type



2. Wiring diagram
Three-phase four-wire direct access



DSSF881, DTSF881

Series of Electronic Three-phase Three-wire And Three-phase Four-wire Multi-rate Energy Meters

Application Scope

The DSSF881 and DTSF881 series multi-rate energy meters are fully electronic, designed to measure peak, average, valley, and total energy consumption in three-phase, four-wire power grids with a reference frequency of 50 Hz.

They comply with GB/T 15284-2022, GB/T 17215.321-2021 standards.

Model and Meaning

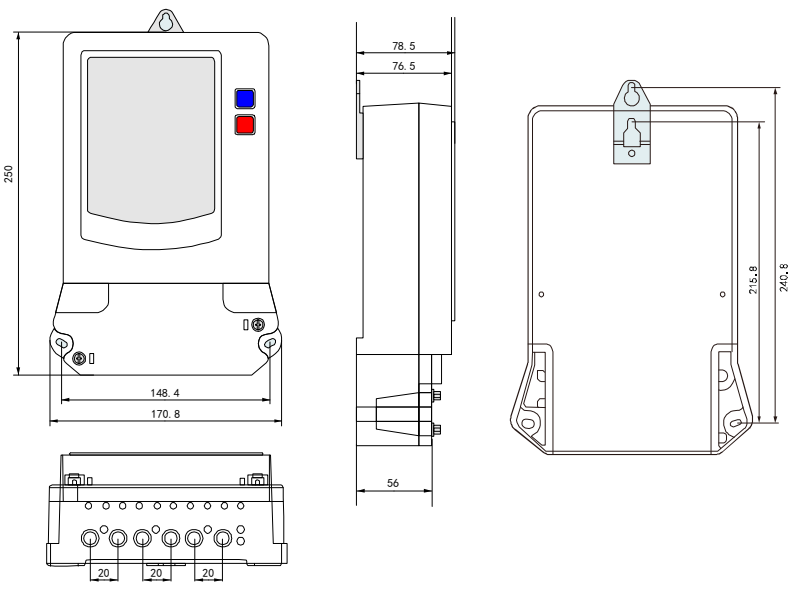
D □ S F 881

- 881 — Serial Number
- F — Multi-rate
- S — Electronic
- □ — T - Three-phase Four-wire, S - Three-phase Four-wire
- D — Electricity Meter

Main Technical Parameters

Electrical Parameters	
Normal Operating Voltage	0.9Un~1.1Un
Maximum Operating Voltage	0.7Un~1.2Un
Voltage Line Power Consumption	≤2W and 5VA
Current Line Power Consumption	≤1VA
Data Backup Battery Voltage	3.6VDC
Tariff operating parameters	
Clock accuracy (daily error)	≤0.5s/day (23°C)
Battery capacity	≥1200mAh
Data retention time after power outage	≥10 years
Climatic conditions	
Normal operating temperature	-20°C to +50°C
Extreme operating temperature	-30°C to +60°C
Storage and transport temperature	-40°C to +70°C
Storage and operating humidity	≤85%
Technical parameters	
Tariff number	4
Number of time periods	14
Metering range	0~999999.99kW·h
Display	LCD
Communication baud rate	RS485 port: 1200\2400\4800\9600bps (configurable) Modulated infrared: 1200bps (fixed)

Appearance and Installation Dimensions

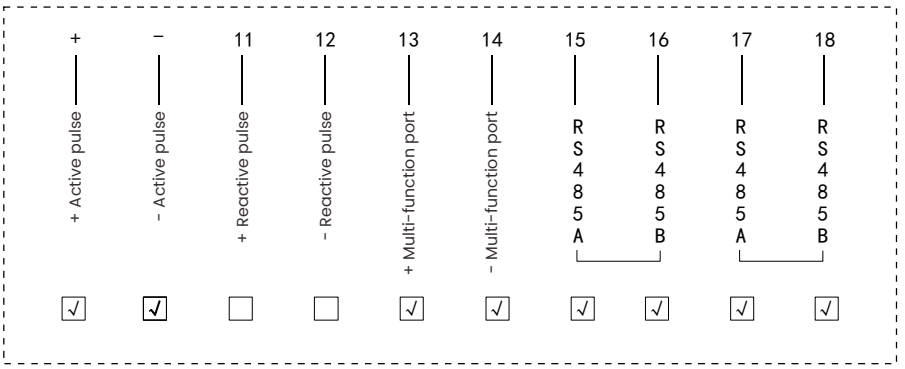


DSSF881, DTSF881

Series of Electronic Three-phase Three-wire And Three-phase Four-wire Multi-rate Energy Meters

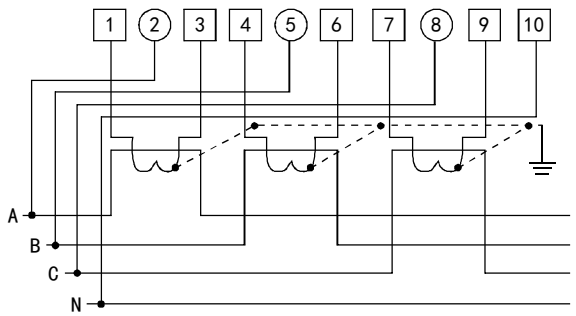
Wiring Diagram

1. Function terminal wiring diagram

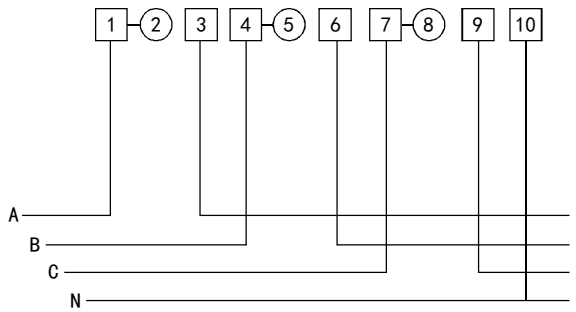


2. Three-phase four-wire power terminal wiring diagram

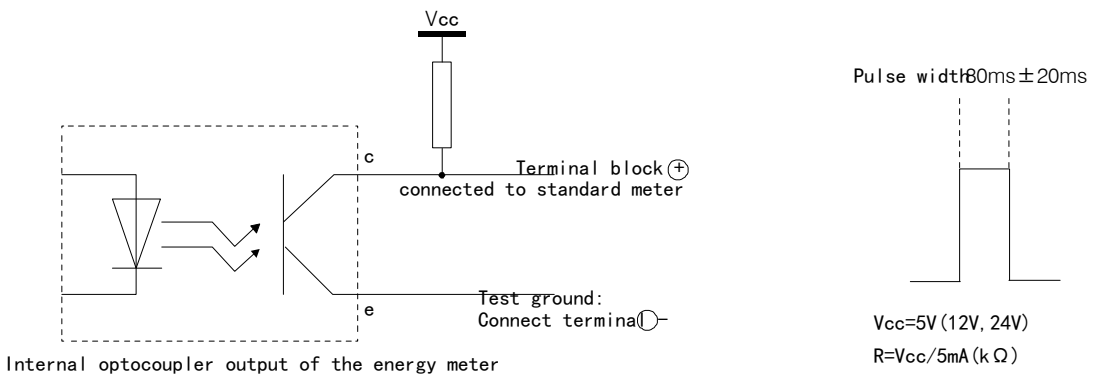
a. Current mutual induction type: 3×220/380V, ≤3×3 (6)A



b. Direct type: 3×220/380V, ≥3×5 (20)A



Schematic diagram of active pulse test port



DDSY881, DTSY881

Series of Single-phase Prepaid Energy Meters And Three-phase Four-wire Prepaid Energy Meters

Key Features

Secure & Reliable – Power remains on even if the IC card is lost.
Post-Use Billing – Allows prompt bill collection by the power company.
Low Power Alert – At 10% remaining, the meter alarms and cuts power to remind the user to recharge.
Capacity Control – Limits maximum usage, alarms, and cuts power when exceeded.
Anti-Theft – Detects reverse wiring and monitors for unauthorized usage.
Easy Monitoring – Users can check meter status; the power company can query usage with an inquiry card.
Durable – Operates from -25°C to +55°C , compliant with GB/T18460.3-2001 .

Model and Meaning

D □ S Y 881

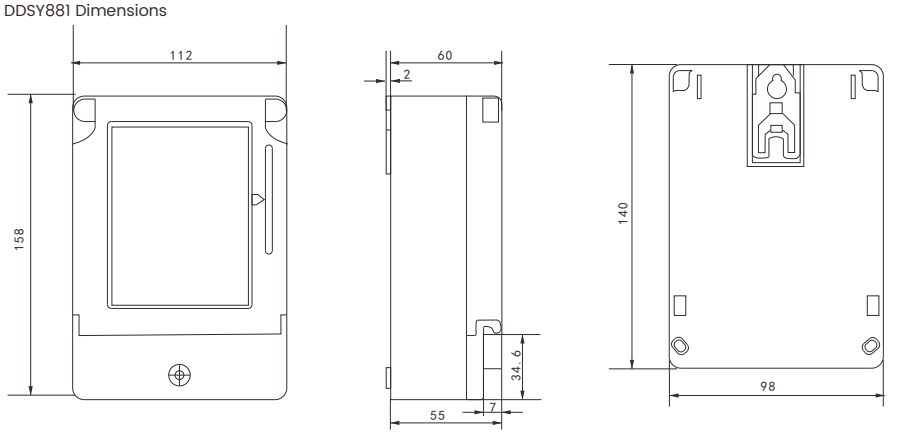
- 881 – Design Number
- Y – Prepaid
- S – Electronic
- □ – D - Single Phase S - Three Phase Three Wire T - Three Phase Four Wire
- D – Electricity Meter

How To Use

IC Card Electricity Meter – Quick Guide
1.Inspection & Sealing
- The meter must pass factory inspection and be sealed before use.
- If the seal is missing or the meter has been stored for a long time, it must be re-calibrated and re-sealed.
2. Installation
- Install in a dry, well-ventilated location.
- Mount on a sturdy, fire-resistant, vibration-resistant wall, about 1.8 m high.
- Follow the wiring diagram, tighten terminal screws and the connection plate inside the terminal box.
3. Purchasing & Using Electricity
- Before purchasing, insert the IC card into the meter's right-side slot to transfer data.
- When selling electricity, insert the IC card into the reader/writer to load user info, purchase amount, capacity limit, and power limit.
- To use, insert the IC card into the meter; it will read automatically and display:
- Remaining power (3 seconds)→ Total after adding purchase (12 seconds).
- Keep the IC card safe.
4. Checking Power & Capacity Limit
- To check remaining power, insert the IC card into the meter.
- If usage exceeds capacity, the limit indicator flashes, then after 30 seconds the power cuts for 3 minutes.
- Inserting the IC card restores power immediately.
5. IC Card Management
- Each meter has its own IC card; cards are not interchangeable.
- If lost, contact the power supply department for replacement.
6. Low Power & Overdraft
- At ≤10% remaining, the meter cuts power and the power indicator lights. Insert the card to restore.
- If power reaches 0 and the overdraft indicator lights, purchase electricity immediately and notify the power supply department.

Appearance and Installation Dimensions

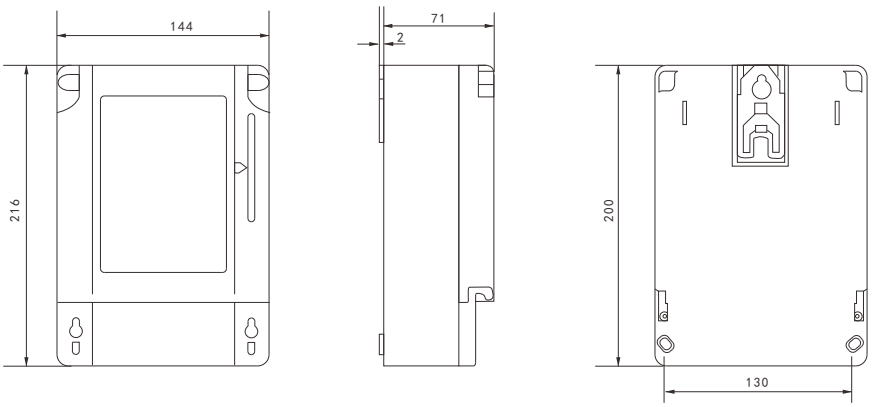
1. DDSY881 Dimensions



DDSY881, DTSY881

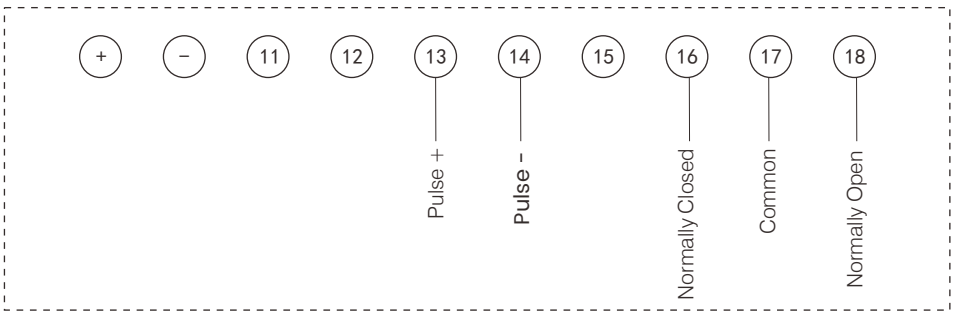
Series of Single-phase Prepaid Energy Meters And Three-phase Four-wire Prepaid Energy Meters

2. DTSY881 Dimensions

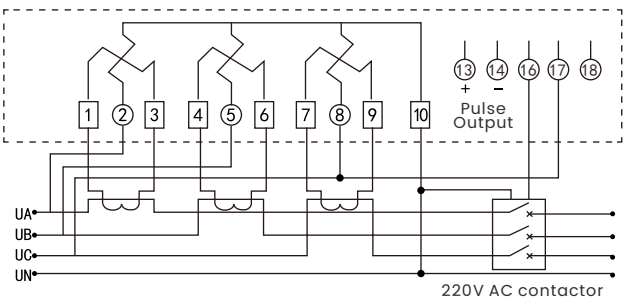


Wiring Diagram

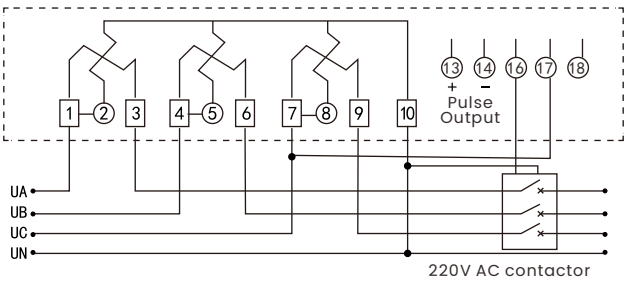
1. Three-phase four-wire functional terminal wiring diagram



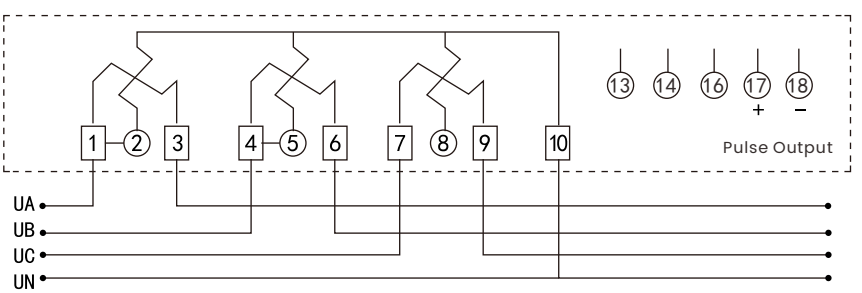
2. Three-phase four-wire connection through transformer wiring diagram



3. Three-phase four-wire direct wiring diagram



4. Direct type (with built-in control switch) wiring diagram



DSSD881, DTSD881

Series Electronic Three-phase Multi-function Energy Meter

Application Scope

1. Metering: Measures forward and reverse active energy, inductive and capacitive reactive energy, and four-quadrant reactive energy.
2. Time-of-Use Metering: Offers four tariff rates, 12 time zones, and 10 daily time periods per day, with four sets of daily time periods available.
3. Monthly Energy Statistics: Provides total energy consumption and time-of-use totals, as well as total energy consumption for the previous day and the month before.
4. Maximum Demand: Records maximum demand and its occurrence time. The default demand cycle is 15 minutes, and the default slip time is 1 minute.
5. Clock and calendar (automatic conversion to daylight saving time every 10 years).
6. Power outage display (optional).
7. Event Recording: Records the occurrence time and status of various events, such as phase failure, power outage, programming, reset, and battery status.
8. Communication: Communicates with a PDA, computer, or infrared remote control using an RS485 communication interface or infrared port.

Model and Meaning

D T SD881 D S S D 881

- 881 — Design number
- D — Multi-function
- S — Electronic
- S — Three-phase three-wire
- D — Three-phase four-wire
- T — Electric energy meter
- D — Electric energy meter

Main Technical Parameters

Standard	GB/T 17215.321-2021, GB/T 17215.323-2022, GB/T 17215.301-2024,DT/T 645-1997, DT/T 645-2007
Pulse constant	According to nameplate standards
Reference frequency	50Hz ±5%
Clock error	≤0.5s/day (23°C + 2°C)
MTBF	≥50,000 hours
Power consumption	<2W, 4VA
Normal operating voltage	(0.8-1.1)Un
Extreme operating voltage	(0.75-1.2)Un
Ambient temperature	(-20-55°C)
Extreme temperature	(-25-70°C)
Relative humidity	≤75% (annual average humidity)
Design life	15 years
Backup battery life	10 years (with new battery)
Pulse output parameters	Pulse width: (80±20)ms Voltage amplitude: ≤24VDC

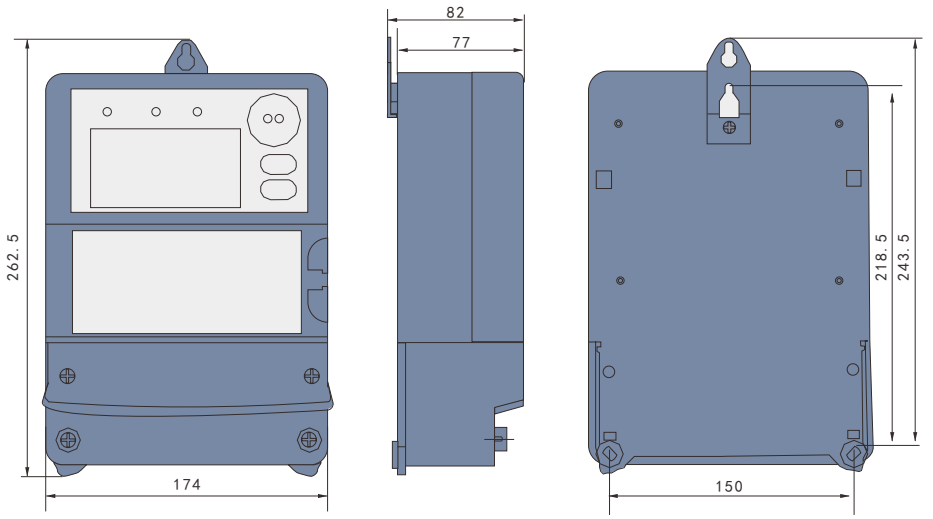
Model	Wiring method	Reference voltage	Basic current	Accuracy Levels
DSSD881	Three-phase three-wire	3 x 100V	3×1.5(6)A	Active power: 0.5S, Level 1
DTSD881	Three-phase four-wire	3 x 57.7/100V 3 x 220/380V	3×3(6)A	Reactive power: Level 2.0

DSSD881, DTSD881

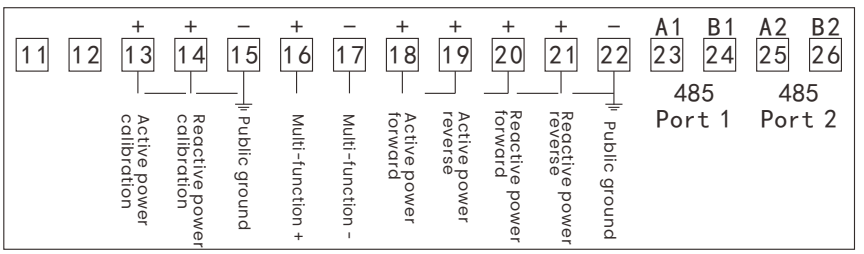
Series Electronic Three-phase Multi-function Energy Meter

Appearance, Installation Dimensions, and Wiring Diagram

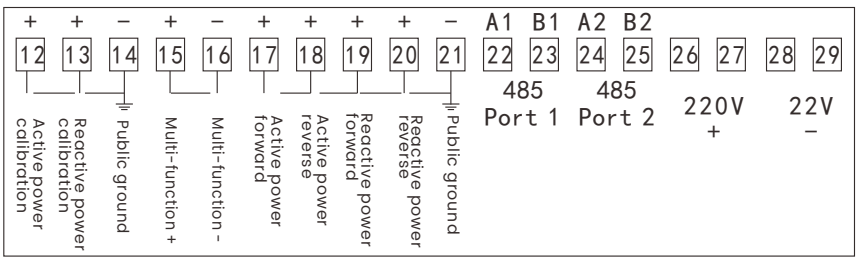
1. Installation dimension drawing of three-phase multi-function electric energy meter



2. Three-phase multi-function energy meter function terminal wiring diagram



1.0 level three-phase multi-function meter function terminal wiring diagram



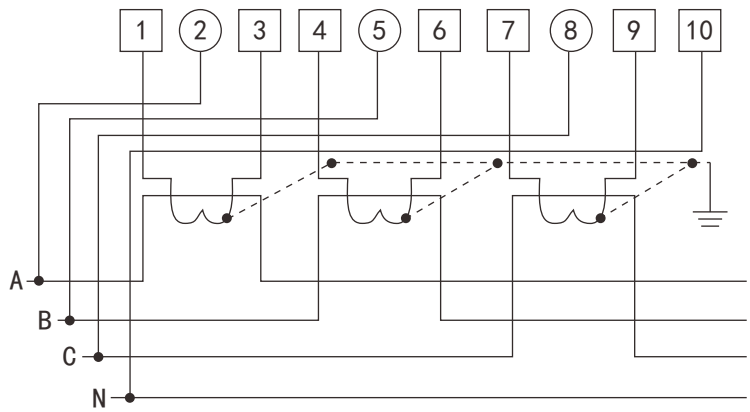
0.5S class three-phase multi-function meter function terminal wiring diagram

DSSD881, DTSD881

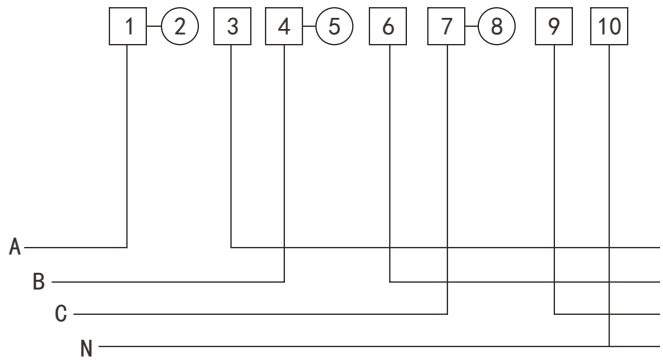
Series Electronic Three-phase Multi-function Energy Meter

3. Three-phase four-wire power terminal wiring diagram

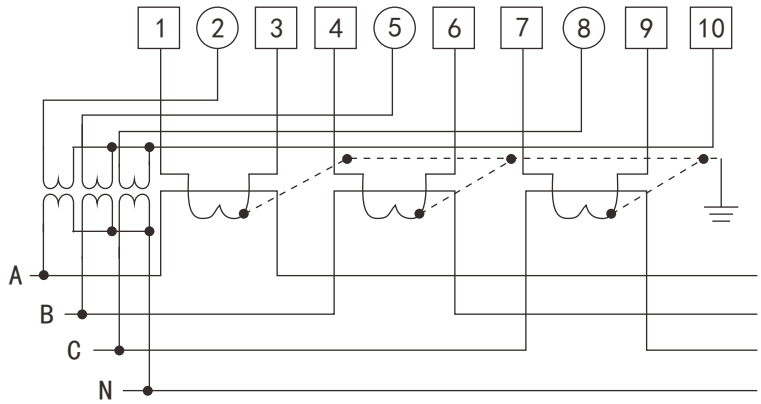
a. Current mutual induction type: 3×220/380V, 3×1.5(6)A, 3X3(6)A



b. Direct type: 3×220/380V, ≥3×5 (20)A

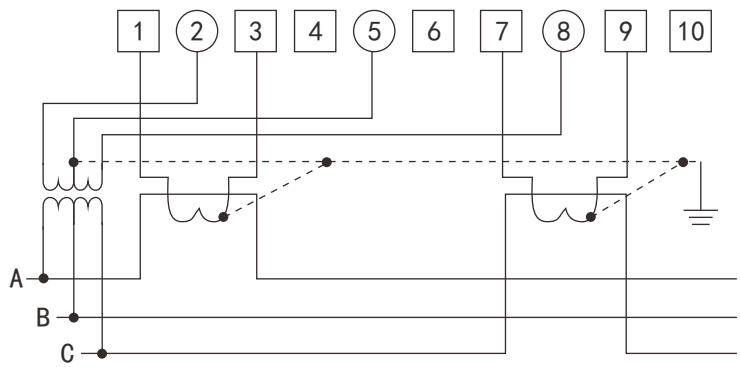


c. Current and voltage mutual induction type: 3×57.7/100V, 3×1.5 (6)A



4. Three-phase three-wire power supply terminal wiring diagram

Current and voltage mutual induction type: 3×100V, 3×1.5 (6)A



DTS881-4 (E1201)

Single Phase Static kWh Meter

E1201-1

E1201-2

E1201-3

E1201-4

Application Scope

This meter is designed to measure single-phase, two-wire AC active energy. It uses advanced LSI and SMT technology, with key components from trusted international brands. It complies with IEC62053-21 standards for Class 1 single-phase energy meters, offering high stability, low power loss, strong overload capability, and long service life in a compact design.

Basic Functions

-Mechanical register (5+1) or LCD display (5+2 or 6+1)
-Measures total active energy in both directions (forward and reverse)
-LED indicators:
  Mechanical type: 2 LEDs (impulse, reverse)
  LCD type: 3 LEDs (impulse, power, reverse)
-Pulse output via optical isolation
-Reverse LED shows reverse current or wrong wiring
-LCD models store energy data for over 15 years without power
-Available in two case types: Class I or Class II protection

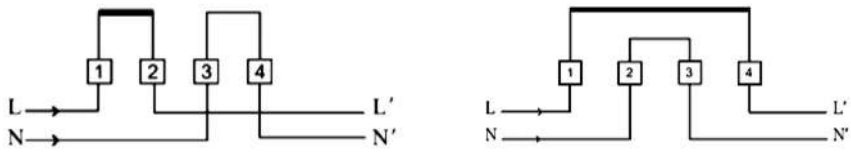
Optional Features

-Built-in battery for display when power is off
-Super capacitor keeps display for 48 hours without power
-Ultrasonic welded housing (no screws)
-Anti-tamper function: detects bypass, grounding, or resistor tampering
-Measures even if load imbalance >12.5% between phase and neutral
-Magnetic tamper detection indicator

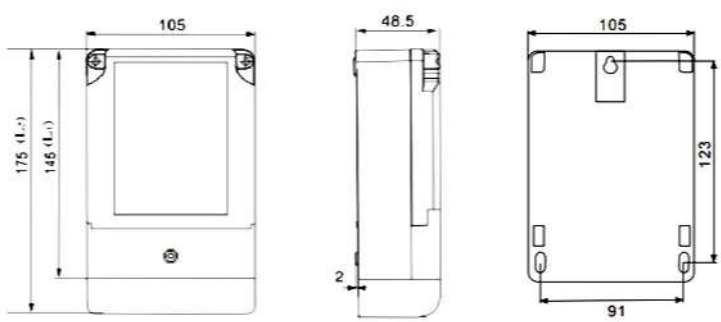
Technical Data

Rated voltage	110V,120V,220V,230,240V(0.8 ~ 1.2Un)
Rated Current	10(40)A, 5(60)A, 10(100)A, customization acceptable
Frequency	50Hz or 60Hz
Connection mode	Direct type
Accuracy class	1.0
Power consumption	<1W/10VA
Start current	0.004Ib
Withstand Voltage(AC)	4000V/25mA for 60 sec
Impulse Voltage	6kV 1.2 μ s waveform
IP Rating	IP51 or IP54
Constant	800 ~ 6400 imp/kWh
Pulse output	Passive pulse, pulse width is 80 ± 5 ms
Complying Standard	IEC61036, IEC62053-21, IEC62052-11
Working Temperature	-30℃ ~ 70℃
Plastic case	Anti-fire and ultraviolet rays PC raw material
Outline dimension L*M*H	145*105*50.5mm (short terminal cover L1)
	175*105*50.5mm (Long terminal cover L2)

Wire connection



Outline dimension



DTS881-4(E3401)

Three Phase Static kWh Meter

3401-1

3401-2

3401-3

3401-4

Application Scope

This meter is designed to measure single-phase, two-wire AC active energy. It adopts advanced LSI and SMT technologies, with key components sourced from internationally recognized long-life brands. All functions comply with the technical requirements for Class 1 single-phase watt-hour meters, as specified in IEC 62053-21. The meter offers a long service life and features high stability, strong overload capacity, low power consumption, and a compact design.

Basic Features

-Available with mechanical step register (5+1), or LCD display (5+2 or 6+1)
-Bi-directional total active energy measurement; reverse energy is included in the total active energy
-For analogue type: two LEDs indicate impulse and reverse connection
-For LCD type: three LEDs indicate impulse, power status, and reverse connection
-Pulse LED shows meter operation; pulse output is optically isolated
-Reverse LED indicates reverse current direction or incorrect wiring
-For LCD types, energy data is stored in memory and retained for over 15 years after power loss
-Two housing options available: Class I and Class II protective enclosures

Optional Features

-Battery backup to display data when power is off
-Supercapacitor to support display for up to 48 hours after power loss
-Ultrasonic welding between meter cover and base—no screws used—for enhanced sealing
-Anti-tamper function: the meter continues to measure energy even in cases of earth connection, bypassing, or resistor insertion. Tamper detection is triggered when the phase and neutral line loads differ significantly

Technical Data

Rated Voltage	DTS881-4 three phase four wire 3x57.7/100V, 3x127/220V,3x120/208V, 3x220/380V, 3x230/400V, 3x240/415V
	DTS881-4 two phase three wire 1 three phase three wire 2X120/208V, 3x127/220V, 3x220V, 3x380V
Operating Voltage Range	0.8 ~ 1.2Un
Rated Current	5A/CT, 1.5(6)A, 5(30)A, 10(40)A, 5(60)A, 20(80)A, 10(100)A, 5(100)A, or other as required
Frequency	50Hz or 60Hz
Connection mode	CT type or Direct type
Accuracy class	1.0
Power consumption	<0.5W/8VA each phase
Start current	0.004Ib
Withstand Voltage(AC)	4000V/25mA for 60 sec
Impulse Voltage	6kV 1.2 μ s waveform
IP Rating	IP51 or IP54
Impulse Rate	400 ~ 6400 imp/kWh
Pulse output	Passive pulse, pulse width is 80±5 ms
Standards Compliance	IEC62053-21, IEC62052-11
Working Temperature	-30℃ ~ 70℃
Enclosure Material	Fire-retardant and UV-resistant PC (polycarbonate)
Outline dimension L*M*H	215x145x62.5mm (short terminal cover L1)
	260x145x62.5mm (long terminal cover L2)

HY3
Series Digital Display

Application Scope

The HY3 series digital meters are modularly designed and manufactured using SMT technology. Available in voltage, current, frequency, and combination models, they can be equipped with various output modules to create versatile digital meters that integrate measurement, alarm, digital input, digital output, transmission, and communication functions. They are widely used in power generation, industrial and mining enterprises, and equipment manufacturing. The product standard complies with GB/T 22264.1.

Product Features

- A variety of optional module functions;
- Utilizes high-precision, professional metering chips;
- Digital display for clearer readings and easier use;
- Standard RS485 and Modbus-RTU communication interfaces;
- Silicone keypad design for a pleasant tactile feel and long service life;
- Snap-on mounting bracket for easy installation and removal;
- Plug-in terminals for convenient and reliable connection and installation.

Model and Meaning

HY3 -□□-□□/□/□

- Optional Functions:
  Communication Interface: R with 485 communication
  Digital Input: In (n=1 means 1 channel, n=2 means 2 channels, maximum 4 channels)
  Relay Output: On (n=1 means 1 channel, n=2 means 2 channels, maximum 3 channels)
  Analog Output: An (n=1 means 1 channel, n=2 means 2 channels, maximum 3 channels)
- Combination Type:
  (For combination meters only, no code for non-combination meters)
  3VA (three-phase voltage + three-phase current)
  VAP (voltage + current + active power),
  3VAP (three-phase voltage + three-phase current + active power)
  VAF (voltage + current + frequency),
  3VAF (three-phase voltage + three-phase current + frequency)
- Display Type: S (digital tube), Y (LCD)
- Meter Appearance

Appearance code	Frame Dimensions (mm)	Cutout Dimensions (mm)
48	48 x 48	45 x 45
49	48 x 96	45 x 92
72	72 x 72	68 x 68
80	80 x 80	76 x 76
96	96 x 96	92 x 92
120	120 x 120	111 x 111

- Product Function Code: A (single-phase ammeter), A3 (three-phase ammeter)
  V (single-phase voltmeter), V3 (three-phase voltmeter)
  F (frequency meter)
  H (combination meter)
- Signal Input Method: No code (AC), DC (direct current)
- Company Characteristic Code

Selection Example: 50 single-phase ammeters are required, with a 96x96 size, digital display, and communication capabilities.

The model number is: HY3-A-96S/R (50 units)

HY3

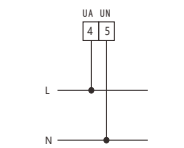
Series Digital Display

Main Technical Parameters

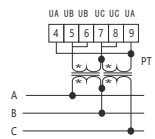
Item		Parameters
	Wiring	Single-phase/three-phase
Signal Input	Current	Single-phase/three-phase
	Voltage	Single-phase/three-phase
Power Supply		AC220V or AC/DC80-270V <5VA
Communications		RS485 communication interface, physical layer isolation MODBUS-RTU protocol compliant with international standards Communication speed 4800-38400 Calibration method N81, E81, O81, N82
Analog Output		0/4-20mA or 0-5/10V transmitter output Programmable transmitter item and corresponding value
Relay Output		Programmable remote control/alarm relay output Capacity 5A/250VAC 5A/30VDC Programmable alarm level, switch input, analog input, or remote control
Telemetry Switch		Telemetry switch input measurement, passive dry contact input Programmable linked alarm output
Display Mode		Single-row/three-row digital or LCD display
Environment		Operating temperature: -10-55°C Storage temperature: -20-75°C
Safety		Insulation: Signal, power, and output terminal-to-case resistance >5M Withstand voltage, signal input, power supply, and output >AC2KV

Product Wiring Diagram

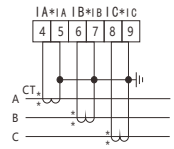
Note: If there is any discrepancy between the wiring diagram on the instrument housing and the wiring diagram on the instrument housing, please refer to the wiring diagram on the instrument housing.



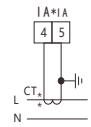
Single-phase voltmeter



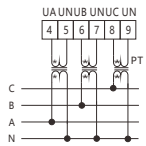
High voltage:
three-phase four-wire



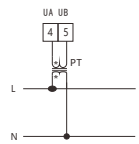
High voltage:
three-phase three-wire



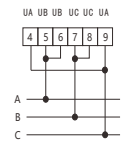
High voltage:
single-phase voltmeter



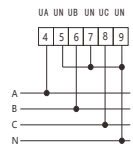
Three-phase ammeter



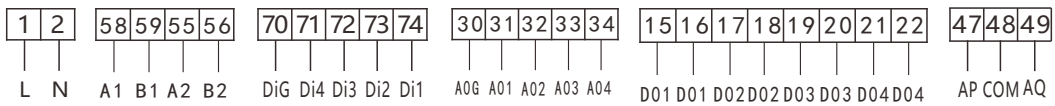
Three-phase
three-wire voltmeter



Single-phase ammeter



Three-phase
four-wire voltmeter



HY3

Series Three-phase Multi-function Digital Display Meter

Application Scope

This three-phase multi-function digital display meter simultaneously measures current, voltage, frequency, active power, reactive power, apparent power, energy, and power factor in the power grid. It can be widely used in factory automation and building automation, and can be conveniently applied to measurement and data recording for AC switches of various ranges and distributed measurement and control systems for industrial power supplies. This multi-function digital display meter features a serial port (RS-485), allowing connection to open computer networks. It utilizes the Modbus communication protocol for convenient computer programming and data reading. It complies with the GB/T 22264.1 standard for mounted digital electrical measuring instruments.

Features

- Directly input signals from current and voltage transformers, allowing for flexible PT/CT ratio settings.
- High-end LCD and LED display, user-friendly interface, and convenient parameter settings.
- Programmable alarm relay output and 4-20mA transmitter output.
- Optional two-way RS-485 communication interface, standard MODBUS-RTU communication protocol.
- High-precision chips and components for strong anti-interference capabilities.
- Silicone keypad design for a pleasant tactile feel and long service life.
- Snap-on mounting bracket for easy installation and removal.
- Plug-in connectors for convenient and reliable connection and installation.

Model and Meaning

HY3 - D - □□/□

- Optional Functions:
  Communication Interface: No code defaults to 1 channel, R2 indicates 2 channels
  Switch Input: In (n=1 indicates 1 channel, n=2 indicates 2 channels, maximum 4 channels)
  Relay Output: On (n=1 indicates 1 channel, n=2 indicates 2 channels, maximum 4 channels)
  Analog Output: An (n=1 indicates 1 channel, n=2 indicates 2 channels, maximum 4 channels)
- Display: S (digital tube), Y (LCD)
- Instrument Appearance

Appearance code	Frame Dimensions (mm)	Cutout Dimensions (mm)
72	72x72	68x68
80	80x80	76x76
96	96x96	92x92
120	120x120	111x111

- Product Function Code: D (Multi-function Digital Display)
- Enterprise Characteristic Code

Example: Requires 50 multi-function digital displays with a 96x96 footprint, digital display, and one communication channel. Requires two digital inputs, one analog output, and four alarm relay inputs.

The model number is: HY3-D-96S/I2 O1 A1 (50 units)

HY3

Series Three-phase Multi-function Digital Display Meter

Main Technical Parameters

Item			Parameters
Signal Input	Wiring		Three-phase four-wire Y34 / Three-phase three-wire V33
	Voltage	Range	400V/100V
		Overload	Continuous: 1.2x; Instantaneous: 2x
		Power Consumption	<1VA
	Current	Range	5A/1A
		Overload	Continuous: 1.2x; Instantaneous: 2x
		Power Consumption	<1VA
	Frequency		40-65Hz
Power Supply			AC220V or AC/DC80-270V <5VA
Energy Pulse			Passive optocoupler collector output Fixed pulse width 80mS ±20%
Communication			RS485 communication interface, physical layer isolation Compliant with international MODBUS-RTU protocol Communication speed 4800-38400 Parity check methods N81, E81, O81, N82
Analog Output			0/4-20mA or 0-5/10V output Programmable output items and corresponding values
Relay Output			Programmable remote control/alarm relay output Capacity: 5A/250VAC, 5A/30VDC Programmable alarm level, switch input, analog input, or Remote control
Telemetry Switch			Remote measurement: switch input measurement, passive dry contact input Programmable linked alarm output
Measurement Level			Power level: 0.5 Frequency: ± 0.1Hz Active energy: 0.5s Reactive energy: 1 Analog input: 0.5
Display Mode			High-definition LCD display or high-end integrated digital display module
Environment			Operating temperature: -10-55°C Storage temperature: -20-75°C
Safety			Insulation: Signal, power, and output terminal-to-shell resistance >M Withstand voltage: >AC2kV between signal input, power, and output

HY3

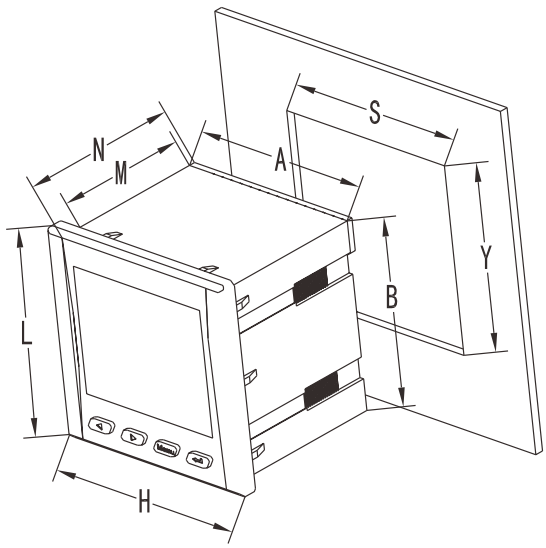
Series Three-phase Multi-function Digital Display Meter

Appearance and Installation Dimensions

Installation dimensions: A×B

Cutout dimensions: S×Y

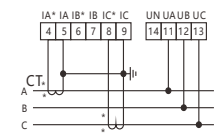
Instrument panel dimensions: L×H



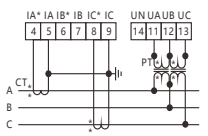
Dimensions (L x H) Unit (mm)	Panel Mount Dimensions(AX B) Unit (mm)	Cutout Dimensions(SXY) Unit (mm)	Total Length(N) Unit (mm)	Depth (M) Unit (mm)
48 x 48	44 x 44	45 x 45	93	84
48 x 96	44 x 90	45 x 92	93	78
72 x 72	67 x 67	68 x 68	93	78
80 x 80	75 x 75	76 x 76	93	78
96 x 96	91 x 91	92 x 92	93	78
120 x 120	110 x 110	111 x 111	93	78

Appearance and Installation Dimensions

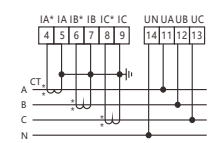
Note: If there is any discrepancy between the wiring diagram on the instrument housing and the wiring diagram on the instrument housing, please refer to the wiring diagram on the instrument housing.



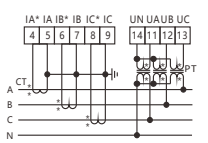
Low voltage: three-phase three-wire



High voltage: three-phase three-wire

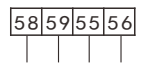


Low voltage: three-phase four-wire

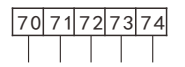


High voltage: three-phase four-wire

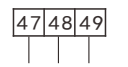
Auxiliary power supply



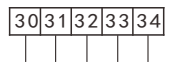
Communication interface



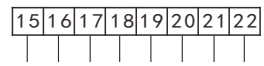
Switch input



Pulse output



Transmitter output



Relay signal output

FM2S

Single Phase Smart Meter

Application Scope

Single phase smart ANSI meter is designed for 1P2W(FM1S) or 1P3W(FM2S) users. Max current up to 200A. It's ultra low power consumption and have large LCD display.The meter also equipped with one RF\Lora\Bluetooth remote communication port. which can be used for remote data collecting and load control. This smart meter can help the Utility company build smart home and AMI system easily.

Introduction

1. Device description

Type	Un	Ib (Imax)	fn	Imp/kWh	Accuracy Class
FM1S	120V	10(100)A	50/60Hz	2000	CA0.5/CA1.0
FM1S	240V	10(100)A	50/60Hz	1000	CA0.5/CA1.0
FM2S	240V	10(100)A	50/60Hz	800	CA0.5/CA1.0
FM2S	240V	30(200)A	50/60Hz	400	CA0.5/CA1.0

NOTES:Other specifications are customizable.

2. Standards and References

Standard	Description
ANSI C12.10-2011	American National Standar for Physical Aspects of Watthour Meters-Safety Standard
ANSI C12.20-2015	American National Standar For Electricity Meters-0.2 and 0.5 Accuracy Classes
ANSI C12.1-2014	American National Standar for Electric Meters Code for Electricity Mteering
IEC62056-21-2002	Direct local data exchange
IEC 62056-6-2-2016	COSEM interface classes
IEC 62056-61-2006	Object identification system (OBIS)

3. Characteristics

>>Measurement

Item	Description
Import absolute and active energy	Total and last 12 months tariff energy(optional)
Import active energy	Total and last 12 months tariff energy(optional)
Export active energy	Total and last 12 months tariff energy(optional)

>>Instantaneous value measurement
Voltage: Three integers, one decimal, unit V, accuracy ± 1%.
Current: Three integers, one decimal, unit A, accuracy ± 1%.
Active power: Two integers, one decimal, unit kW, accuracy ± 1%.

>>Stability and reliability:
- High quality, reliable and robust
- 15-year lifetime

>>Tampering detection:
- Detection of current circuit reversal
- Detection of current by-pass

>>Communication ports:
- Modular communication unit for remote meter access, providing flexible uplink communication options including RF, Lora or Bluetooth, applicable to various AMR or AMI solutions.
- Optical port (IEC 62056-21 Mode C) for local meter reading and programming

>>Communication protocols:
- IEC62056-21 mode C

>>Display:
- Full segment LCD test
- Auto and manual scroll
- No-power read.

>>Event: logs:
- Comprehensive meter event logs tampering detection, power quality and other general events
- Configurable event alarming system
- Meter error state indication on LCD.

>>Billing data:
- Up to 12 billing records
- What values can be stored in the billing profile is configurable.

>>Load profile(Optional):
- Interval of each load profile is configurable, and independent from each other
- What values can be stored in each load profile is configurable

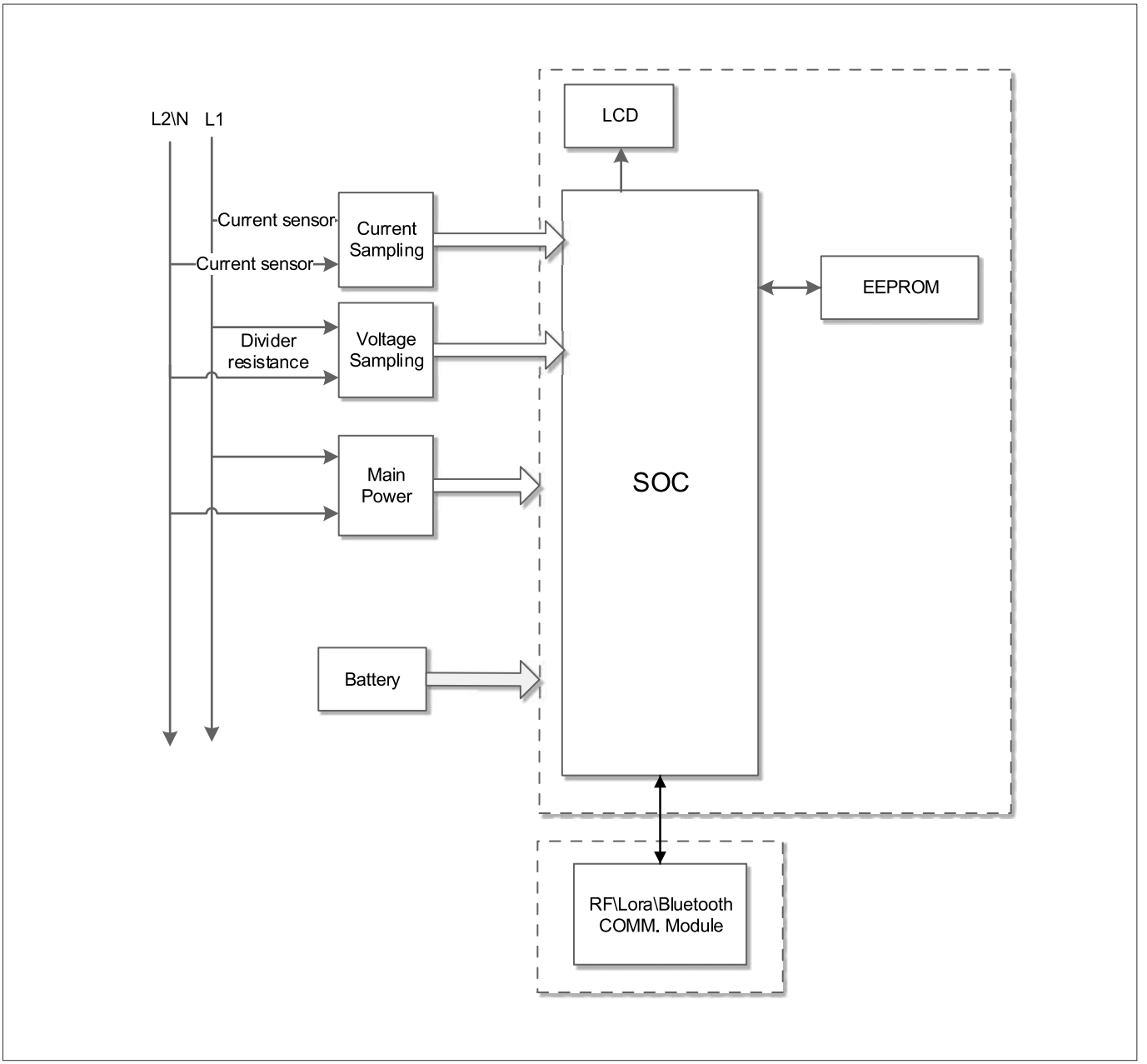
>>Time of Use
- Up to 4 tariff operations

Memory organization of TOU could accommodate a maximum structure of 12 season tables, 12 week tables, 8 day tables and 10 day entries in each day table.

FM2S

Single Phase Smart Meter

Block schematic diagram



The meter is mainly comprised of current sampling unit, voltage sampling unit, MCU, main power supply, backup power supply, LEDs, LCD, memory, and communication module.

The meter processes voltage and current sampling through SHUNTor CTand voltage sampling circuit, upon which the integrated energy data is used to drive the pulse output and passed to energy registration. Relevant controlling and meter reading function are all based on the registered energy data.Besides the mains power supply, there are power backup which comprises of the internal super-cap and the replaceable battery. All together they provides a reliable power management scheme to fulfill the power requirement of a smart meter.

FM2S

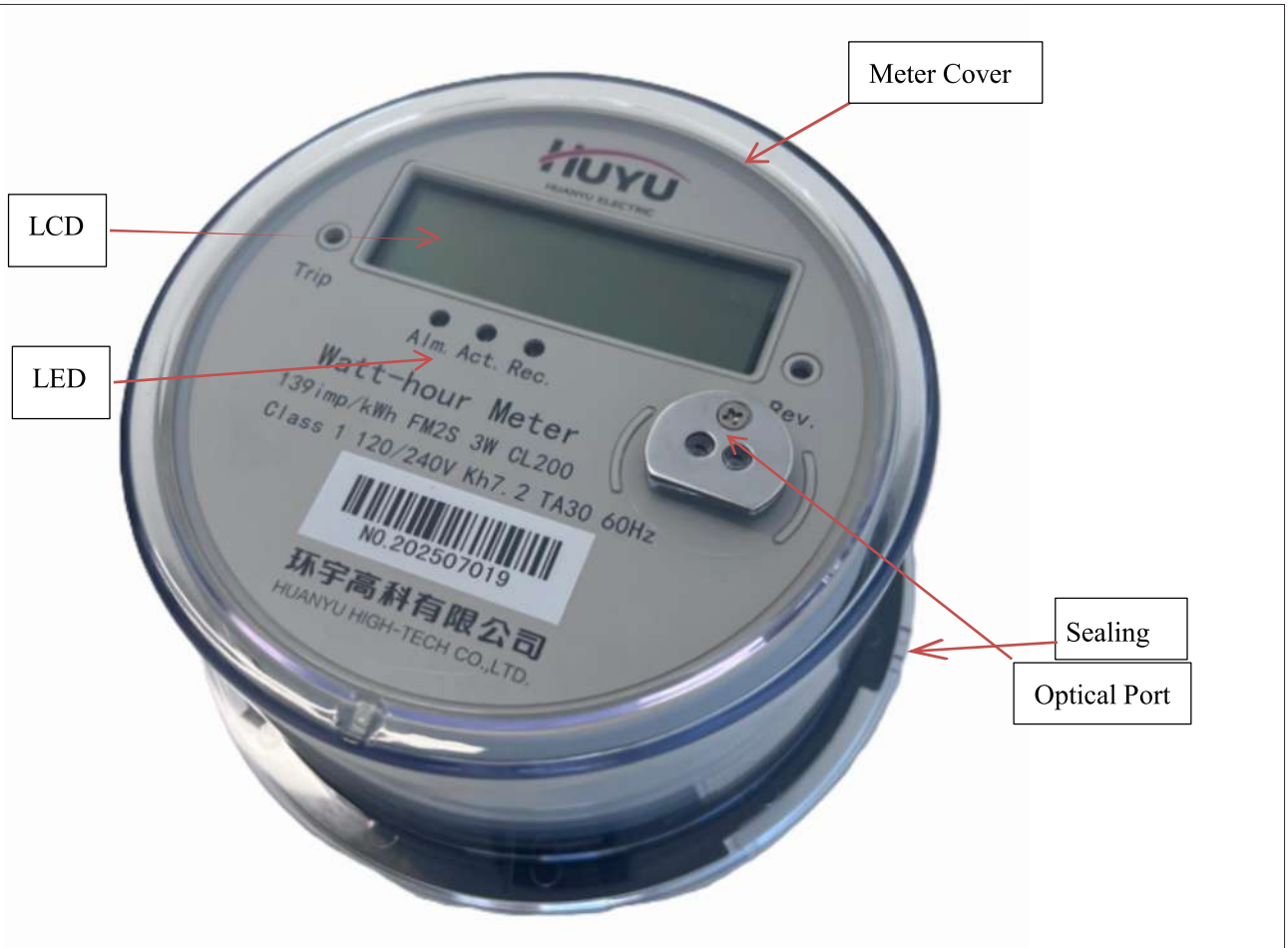
Single Phase Smart Meter

Standards and References

Description	Values
Meter Type	Single Phase Smart ANSI Meter
Active Accuracy	CA0.5/CA1.0
Nominal Voltage Un	120V/240V(optional)
Current Range	10(100)A/15(100)A/30(200)A(optional)
Grid Frequency	50/60 Hz
Starting Current	0.4% In
Meter Constant	40010002000imp/kWh(by default)
Start-up Time	≤5s
Power Consumption of Base Meter	Voltage circuit≤0.15W, 10VA Current circuit at Ib:≤4VA
Operating Voltage Range	0.8Un~1.2Un
Operating temperature range	-25°C~+60°C
Extreme operating temperature range	-40°C~+70°C
Storage and transportation limited temperature range	-45°C~+80°C
Relative Humidity	Up to 95% non-condensing
Insulation	AC voltage test subjected to 4kV
Life expectancy	15 years
Dimensions	177mm (D) x 128mm(H)
Weight	0.8kg (Approx.)

Meter Construction

1. Appearance



The mechanical housings are made of recyclable PC (UV light and solvent vapors resistant), subjected to class II insulation. The meter offers IP54 (non-suction) ingress protection level, compliant to IEC 60529.1 lead seals are used to protect the meter housing. Without breaking the seals it's impossible to access the internal parts of the meter.

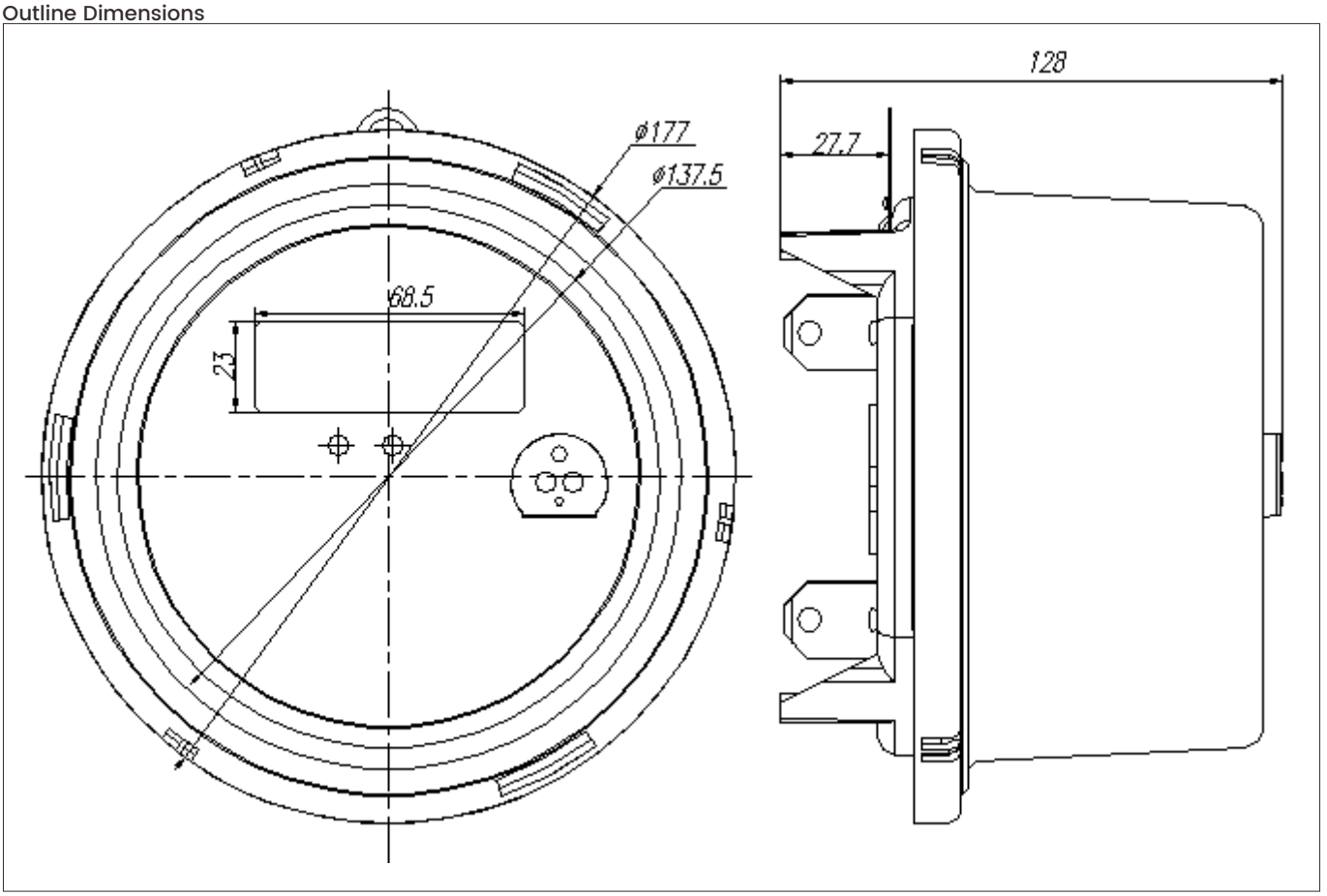
There are nameplates in the meter cover, providing sufficient spaces for the utility to attach device and customer information.

FM2S

Single Phase Smart Meter

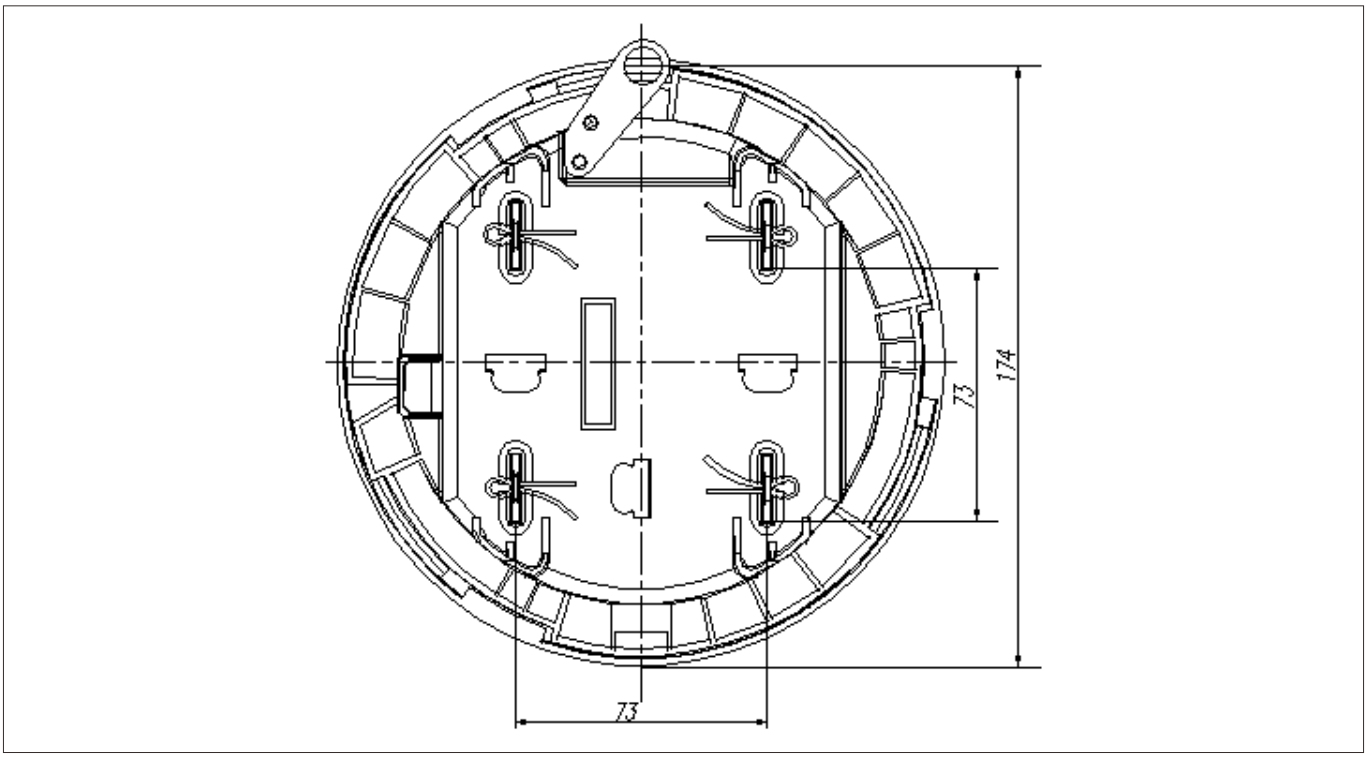
2. Dimensions

Outline Dimensions



Dimension size: 177*128mm (D*H)

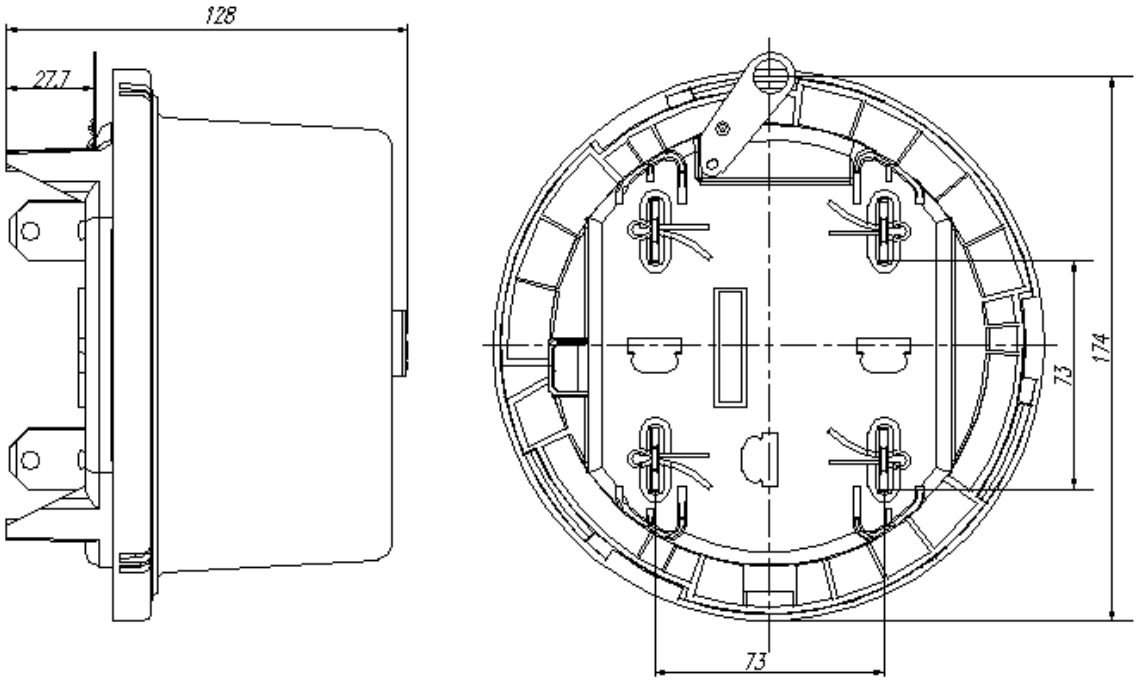
Installation Dimensions



FM2S

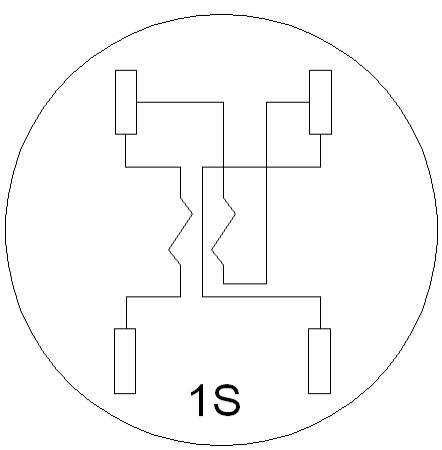
Single Phase Smart Meter

Terminal Block Dimensions

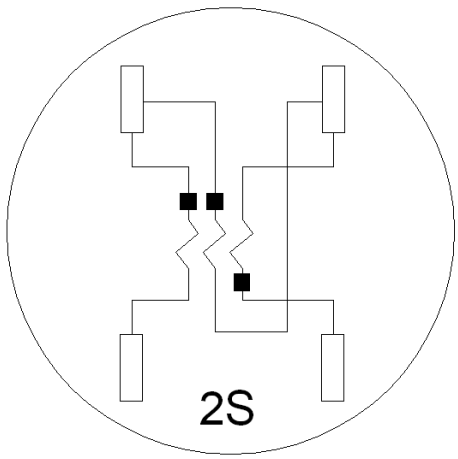


3. Wiring Diagrams

Main Wiring



1P2W(FM1S), Direct connected



1P3W(FM2S), Direct connected

FM2S

Single Phase Smart Meter

Meter Functionalities

1. Function List

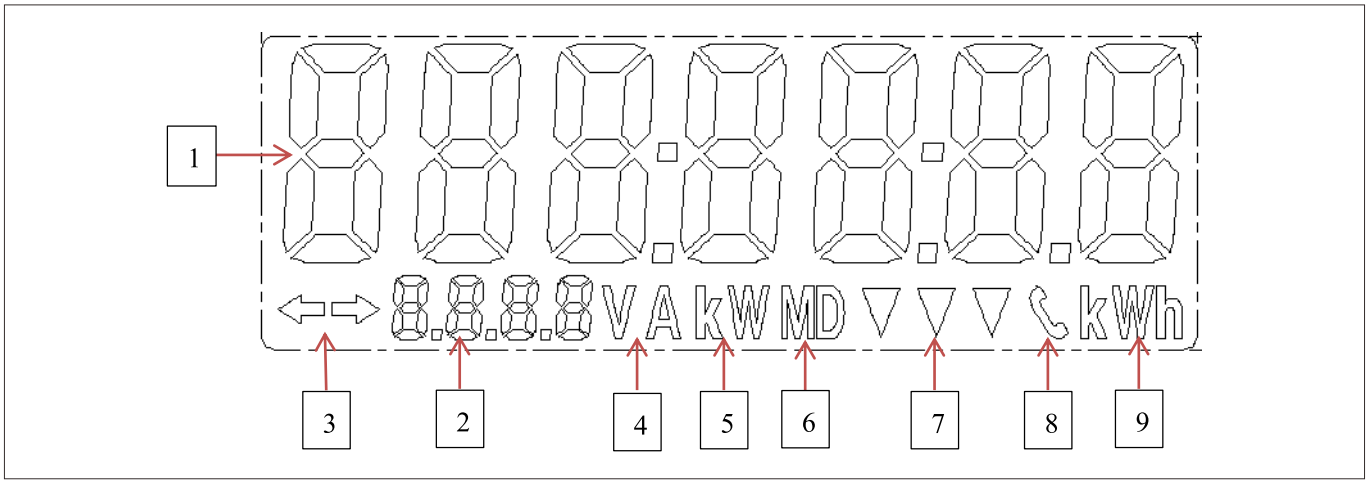
Item	Sub-item	Parameter
LED & Display	LED	1 x Active pulse 1 x Temper LED
	Energy Data Format	Active/Reactive: 7 digits with decimal point
	Instantaneous Value Format	Power: XX.XX, unit:kW Voltage: XXX.X, unit:V Current: XXX.X, unit:A Demand: XX.XX, unit:kW
	LCD	Size of LCD: 71 x 26mm(WxH) Size of digit:t 7 x 16mm (WxH)
	Dis play Modes	-Auto scroll mode: interval by default is 6 seconds(configurable:1-99s). -No power display(optional).
	Default Display List	-Total absolute sum of active energy -L1 Voltage -L1 Current -Power -Demand
	Display Symbol	-Tamper indicator -Direction of current -Communication Status -Other special event indicator
Measurement	Active Energy	Import Active Energy= |+A| Export Active Energy= |-A|
	Instantaneous	Phase Voltage (V) Phase Current (A) Active Power (kW) Demand
Communication	Optical Port	IEC 62056-21 compliant
	Optical Port Protocol	IEC 62056-21 Mode C
	Communication Unit	RF/Lora/Bluetooth
	Protocol for Communication Unit	IEC 62056-21 Mode C
Clock	TOU(optional)	-Up to 4 tariff operations -Up to 12 season entries, each assodiated with a weekly switching table -Up to 8 tables, each with up to 10 day entries -50 configurable special days
	RTC Accuracy	≤0.5 s/day (at 23°C)
	Backup Battery	-Battery for no-power RTC and display -10-year battery lifetime
	Time Synchronization	Through communi cation command
Maximum Demand & Billing	Maximum Demand	Optional average or sliding demand calculation Configurable demand interval: 5,10,15,20,30 or 60 minutes
	Billing(Maximum Demand Reset)	Three type of blling operations: -Blling through communication command. -Billing based on calendar.
	Capacity of Stored Value (Billing Profile)	Up to 12 entries Number of captured objects up to 30
Load Profile (optional)	Number of Profiles	What values can be stored in each load profile is configurable
	Capacity of Profiles	Can be configurable
	Profile Interval	Interval of each load profile is configurable, and independent from each other
Event Function (optional)	Number of Profiles	10 different types of event logs
	Standard Event Log	Types of logs include: -Clock setting -Battery low -Meter programming -System reset
	Tampering Detection Log	Types of logs include: -Current reversal
	Power Quality Log	Types of logs include: -Power outage -Under voltage -Over voltage -Over current -Over load
Security	Access level	Up to 2 access levels protected by password

FM2S

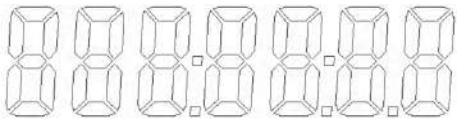
Single Phase Smart Meter

2. Display

LCD Display Information



Symbol descriptions:

NO.	Display Symbol	Description
1		Meter value
2		Instantaneous measurement value
3		Direction of current
4		Units
5		Units
6		Demand
7		Other special event indicator
8		In communication
9		Units

LCD Display Modes

The meter has 2 display modes:

Main display area:

1) When power on: Display total active energy;

2) When power off: Display total active energy;

Auxiliary display area:

1) When power on: Voltage, current, active power, maximum demand, Auto-scroll interval of 6s.

2) When power off: No display.

LEDS

There are 2 LEDs on the meter.

One energy pulse LED is used for active accuracy verification.

Alarm LED is used to indicate alarm state(configurable, current reversal by defult).

FM2S

Single Phase Smart Meter

3. Measurement

Energy Pulse

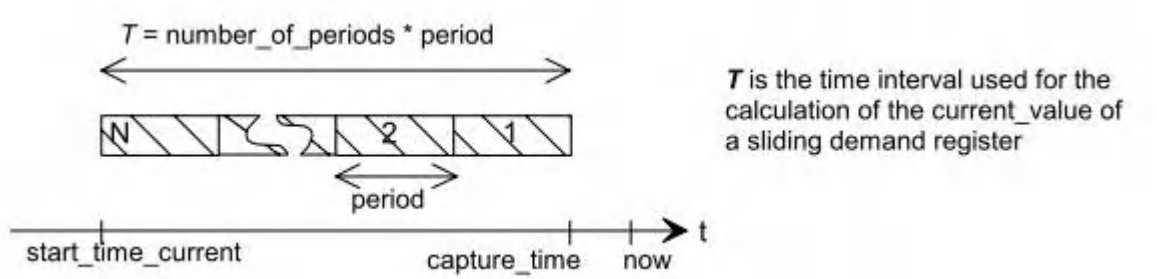
Active energy pulse is output to relevant LED for accuracy verification. By default the meter constants are configured as 1000imp/kWh, which are also configurable based on application.

Energy Values

Electric meter can measure and store the following energy quantities:
-Import active energy (+A),
-Export active energy (-A),
-Absolute active energy (|+A| + |-A|),
-Algebraic sum active energy (|+A| - |-A),
-Multi- tariff energy
After the energy value reaches the maximum display limit, which is 999999.9 [kWh], it will overflow and reset to zero, meanwhile the overflow counter increments by one.

Demand

The method used for demand calculation of the meter could be either average demand or sliding demand. By default it's configured as average demand.
For sliding demand the interval "T" used for demand calculation is determined by the two parameters: period and number_of_period, illustrated below:



For average demand, it can be regarded as a special type of "sliding demand" where the number of period is always 1.
Through the configuration of the above two parameters, the demand interval of the meter is defined.
The following table shows the value range of the parameters.

Calculation method	Demand internal (min)	period(min)	Number of period
Sliding	1~60	1~60	1~60
Interval	1~60	1~60	1

Maximum demand is captured based on corresponding demand register value.
The meter has the following demand/maximum demand registers:

Demand type	Measurement content
Import active demand (A+)	Current demand register (1.4.0)
	Demand of last interval register (1.5.0)
	Maximum demand registers - total and per tariff (1.6.x)
Export active demand (A-)	Current demand register (2.4.0)
	Demand of last interval register (2.5.0)
	Maximum demand registers - total and per tariff (2.6.x)

Instantaneous Values

The meter measures the following instantaneous values:
- Instantaneous current: 1-digit decimal, unit: A.
-Instantaneous voltage: 1-digit decimal, unit: V.
-Import active power (A+): 2-digit decimal, unit: kW.
-Export active power (A-): 2-digit decimal, unit: kW.

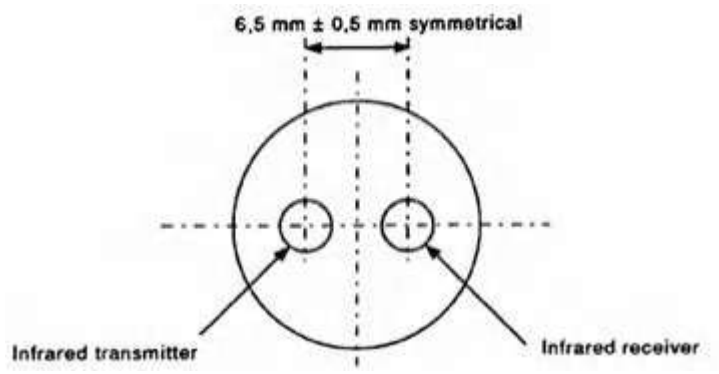
FM2S

Single Phase Smart Meter

4. Communication

The meter offers 2 independent communication interfaces, which include an optical port, and a modular communication unit used for uplink communication.

Optical Interface



Optical front view

-Compliant to ANSI C12.18 optical communication physical interface
-Conform to IEC62056-21 standards (mode C)
-Configured as 300bps, 7 bits, 1 even parity by default
-Communication speed up to 9600bps
-PC software and HHU can be used for local data exchange through optical interface.

Uplink Communication Interface

-Configured as 8 bits, no parity by default
-IEC62056-21 protocols
-Various communication options including RF/Lora/Bluetooth

5. Time of Use(Optional)

General Description

The meter offers up to 4 tariff operations, which feature is driven by its internal real time clock. The time table used for the tariff switching consists of the season tables, the day tables and the special day tables.

Real Time Clock

1. RTC features

-Automatic leap year switching
-Accuracy at 23°C less than 0.5s/day
-24-hour clock format
-If the real-time clock stops, a predefined tariff can be designated for tariff energy registration

2. RTC Backup Power

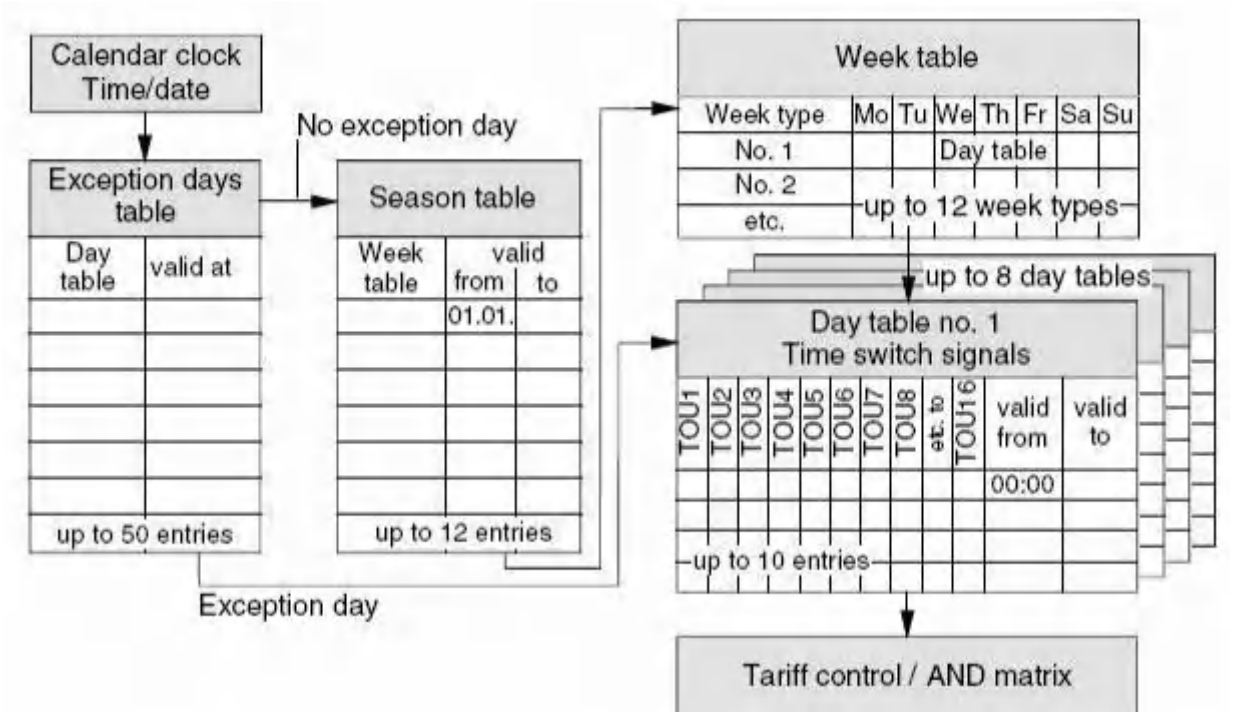
One lithium battery with 1200mAh capacity, 3.6V supply voltage battery provides backup power to the RTC

TOU Time Table

The meter has 2 sets of TOU time tables, capable of up to 4 tariff operations. Each table consists of up to 12 season entries, associated to 12 week tables respectively, and up to 8 day tables, each with up to 10 day entries. Besides, the meter can define up to 50 special days.

FM2S

Single Phase Smart Meter



Time Table Programming

The time table programming is always applied on the passive time table. The activation time of the passive time table is configurable. When the meter gets to the activation time the active and passive time table will swap. The names of active and passive time table are both configurable but cannot be the same. The time table switching can be done remotely through a communication command.

6. Billing

There is a billing profile in the meter to store the billing values. The maximum demand registers reset and a record is generated in the billing profile either the predefined billing time is due or a comunication billing operation is detected.

Billing on Predefined Schedule

By default the billing schedule is configured to trigger the billing operation at midnight on the first day of each month. The number of captured objects for each billing entry can be up to 30.

The virgin startup of the meter generates a billing entry in the profile.

If a power outage or a time adjustment skips the billing time, the meter will complement the missed billing entry either after the meter is re-powered up or after the time adjustment is completed.

Operations associated to billing

When a billing operation is conducted, the meter will do the following:

- Generate an entry in the billing profile
- Reset maximum demand resisters,
- Generate MD reset event log.

7. Load Profile(Optional)

Interval of each load profile is configurable, and independent from each other

What values can be stored in each load profile is configurable

FM2S
Single Phase Smart Meter

8. Event(Optional)

The meter detects and records events. The event log is identified with unique event number. The generated event signal will be directed to generate alarm or error indication based on relevant configuration.
Event logs, alarm and error generation:

Event Logs

The meter defines and records the following 10 type of event logs:

Type	OBIS	Description	Event Code
Power outage	0-0:99.98.0.255	When the power grid is out of power, all phase voltage is lower than the working voltage of the meter. When the power grid occurs, any phase voltage is higher than the working voltage of the meter, and it lasts more than 4s; 20 items can be recorded.	Power on: 1 Power off: 2
Over voltage	0-0:99.98.1.255	The overvoltage starts as the default voltage greater than 1.2Un, and lasts more than 60 seconds; The default voltage of overvoltage is less than 1.2Un, and lasts more than 60 seconds; 20 items can be recorded.	Start: 79 Over: 204
Under voltage	0-0:99.98.2.255	The default voltage is less than 0.78Un and lasts more than 60 seconds. The default voltage is greater than 0.78Un and lasts more than 60 seconds. 20 items can be recorded.	Start: 76 Over: 201
Over current	0-0:99.98.3.255	The overcurrent starts with the default voltage greater than 1.2IMAX, and lasts more than 60 seconds; The default voltage is less than 1.2imax and lasts more than 60 seconds. 20 items can be recorded.	Start: 95 Over: 220
Over load	0-0:99.98.4.255	Overload started as the default voltage greater than 1.2IMAX*Un, and lasted more than 60 seconds; Overload end default voltage is less than 1. 2IMAX*Un, and lasts more than 60 seconds; 20 items can be recorded.	Start: 99 Over: 224
Meter programming	0-0:99.98.5.255	Programming event for a meter; There are 10 records.	47
Clock setting	0-0:99.98.6.255	Save the time before and after the setup; 20 items can be recorded.	The time before set:4 After:5
Battery low	0-0:99.98.7.255	The battery is lower than the reasonable valve value; There are 10 records.	8
Current reversal	0-0:99.98.8.255	The current reverse starting condition is the reverse of the current and the apparent power is greater than the starting power. The reverse end condition is the current is not reversed and lasts more than 60 seconds; 20 items can be recorded.	Start: 91 Over: 216
System reset	0-0:99.98.9.255	Abnormal reset of the meter, such as the reposition of watchdog, etc.; There are 10 records.	15

Event Alarming

The alarm indication includes the alarm LED, the alarm symbol on the LCD and the display on LCD.
- Alarm LED

When an alarm event occurs, the alarm LED will flash continuously.
- Alarm symbol of LCD(By defult)

9. Data Security

The meter offers different categories of users the following 2 access levels which are protected by access password:
- Public Reading
- Meter Reading and Configuration

FM2S

Single Phase Smart Meter

Installation

It is recommended to refer to the wiring diagram for connecting the meter to the power network. If appropriate a meter cabinet can be used to protect the meter. Preferably the meter should be installed in a ventilated and environment.

1. Installation Procedures and Cautions

Installation Procedures

To ensure proper operation of the meter, follow the procedures below when install a meter:

- Pressure the meter, make sure the terminals are inserted into the socket.Make sure the meter is firmly in place, power on the meter

Cautions

Improper installation could damage the meter. Relevant verification must be done to ensure the meter is properly installed:

- Verify the operating voltage of the meter is within the range
- Verify the current range is proper for the application at the installation site
- Verify there is no visible mechanical or electrical damage on the meter
- Verify the factory seals of the meter have not been broken

2. Acceptance after Installation

After the meter is installed and power is connected, the following checking should be done on the meter:

- The phase voltage symbol on the LCD should be present
- If any load is applied on the meter the pulse LED should be flashing and the quadrant indicator should correctly indicated

3. Safety Regulations

Relevant national and international safety regulations must be complied with during the course of the meter installation. The installation must be conducted by qualified personnel.

Do not touch any of the live parts of the meter at any time when the power is on. Be aware that personal injury or equipment damage could result from improper wiring procedures.

Transportation and storage

- The meter should be transported and unpacked violently. Do not apply power on when the case has been damaged or violently dropped during handling, access and installation. Contact the supplier as soon as possible .
- Save the energy meter should be in the original packaging, the ambient temperature is -45 ~ +70 , the average relative humidity of not more than 75% of the air without corrosive gases.
- Meter stored in the warehouse, should be placed on the bench, the stack height of not more than 10 boxes, unboxing, the single package meter stacking height of not more than 10

DDSU881

Series Guide Rail Table

Application Scope

The DDSU881-4P DIN-rail mounted electronic single-phase energy meter (hereinafter referred to as the meter) uses microelectronics technology to measure electrical energy. Its technical specifications comply with GB/T 17215.321-2021. It features a fully shielded and sealed structure, offering excellent resistance to electromagnetic interference, low power consumption, high accuracy, anti-tampering measures, high overload resistance, and a long lifespan.

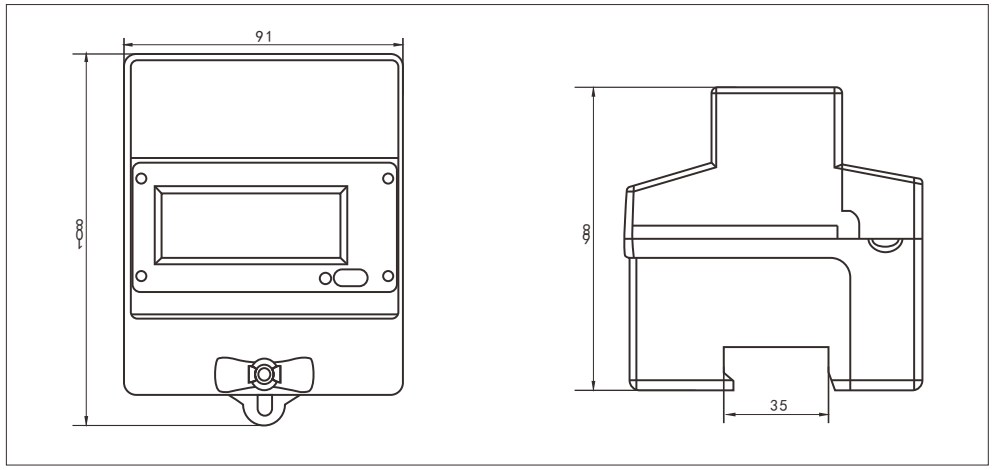
Main Functions and Features

1. Accurately measures forward and reverse active energy, with reverse active energy accumulated as forward energy.
2. The meter utilizes a stable metering chip and low-power industrial-grade components designed using advanced SMT technology.
3. Long-term use requires no calibration. DIN-rail mounting allows for compact installation and high accuracy.
4. Display: 6+2 LCD.
5. Infrared and RS485 communication interfaces facilitate data exchange.

Main Technical Parameters

Item	Technical Specifications
Accuracy Grade	Active power level 1, level 2
Voltage Specifications	220V
Current Specifications	0.25–0.5(60)A, 0.25–0.5(80)A, other specifications can be customized
Frequency	50Hz
Operating Voltage Range	Rated operating voltage range: 0.9Un ~ 1.1Un, extended operating voltage range: 0.8Un ~ 1.15Un
Operating Temperature Range	Rated operating temperature range: -25℃ ~ +55℃, extreme operating temperature range: -40℃ ~ +70℃
Power Consumption	Approximately 1W
Display Mode	LCD display
Standard	GB/T 17215.321-2021, DL/T 645-2007

Appearance and Installation Dimensions



DDSYU881
Series Guide Rail Table

Application Scope

The DDSYU881-4P DIN-rail electronic single-phase prepayment meter (infrared fee control meter) is a new infrared wireless remote control prepayment meter with multiple functions, including energy metering, load control, compact size, and easy installation. It is an ideal product for reforming the electricity consumption system, achieving electricity commercialization, resolving billing difficulties, and regulating grid load conditions.

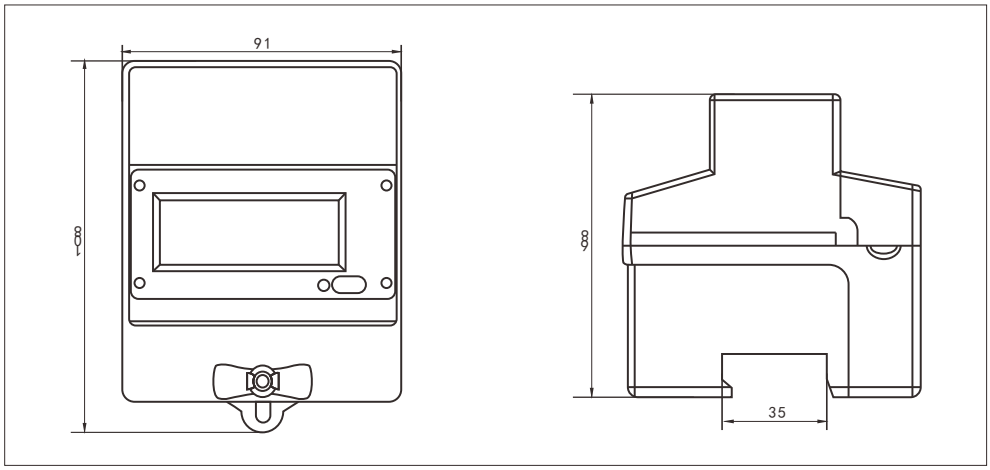
Main Functions and Features

1. Single-phase AC active energy metering, long-term operation without calibration.
2. One electricity purchase remote control per household (meter). Each remote control is encrypted and has a random password to prevent counterfeiting.
3. Expandable RS485 communication enables remote centralized meter reading and remote prepayment top-up.
4. The accompanying prepaid electricity vending management system provides comprehensive electricity vending management and usage monitoring functions.
5. If the load exceeds the set maximum current for a continuous period, the power supply circuit is disconnected and an alarm symbol flashes on the LCD. The meter automatically closes after a delay. 6. Remaining Power Display: The display has 8 digits (6 integers, 2 decimals). When the remaining power reaches the pre-alarm level, the LCD will flash to indicate the user needs to enter a new purchase amount. When the remaining power in the meter reaches zero, the meter automatically trips, interrupting power supply. At this point, the user must present their power purchase card to the electricity sales office to purchase power (the power supply office may allow for overdrafts, and inserting a power purchase card allows the user to use a certain amount of power). Only after inserting a valid power purchase card into the meter can power be restored. When the power shortage reaches a certain level, power is automatically cut off. Power is automatically restored after entering the new purchase amount (minus the overdraft amount).
7. Data is automatically saved during a power outage and restored upon power restoration.
8. A computer, dedicated infrared card reader, and billing management software form the electricity sales management system.
9. The meter can also measure correctly even if the wiring is reversed.

Main Technical Parameters

Item	Technical Specifications
Accuracy Grade	Active power level 1, level 2
Voltage Specifications	220V
Current Specifications	0.25–0.5(60)A,0.25–0.5(80)A, other specifications can be customized
Frequency	50Hz
Operating Voltage Range	Rated operating voltage range: 0.9Un 1.1Un, extended operating voltage range: 0.8Un~1.15Un
Operating Temperature Range	Rated operating temperature range: -25℃~+55℃, extreme operating temperature range: -40℃~+70℃
Power Consumption	About 1W
Display Mode	LCD display
Standard	GB/T17215.321-2021, DL/T645-2007, GB/T18460.3-2001

Appearance and Installation Dimensions



DTSU881/DSSU881

Series Guide Rail Table

Application Scope

This three-phase, four-wire (new DIN-rail type) AC active energy meter (hereinafter referred to as the energy meter) offers high accuracy and usability. This meter utilizes internationally advanced ultra-low-power large-scale integrated circuit technology and SMT manufacturing processes. It is an ideal choice for substations or power plants, and is also suitable for transmission and distribution, or for network automation. It measures three-phase AC active energy in a 50Hz reference frequency grid, and can also measure both forward and reverse energy.

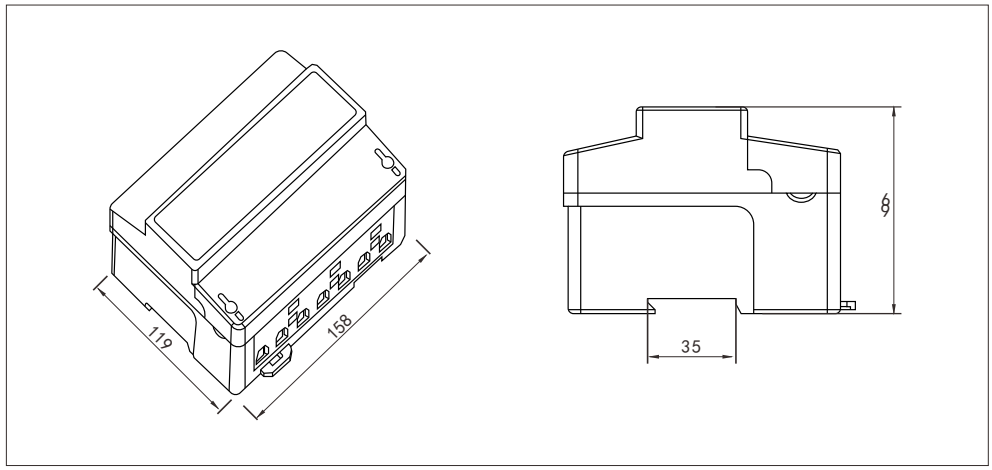
Main Functions and Features

1. Built-in high-speed, high-precision AC voltage and current acquisition modules, ensuring high sampling accuracy and real-time, accurate energy measurement.
2. It measures both forward and reverse active energy, boasting a compact size, easy installation, and high accuracy.
3. Powered by a three-phase power supply, the meter remains operational even if any two phases of the three-phase, four-wire system are powered off.
4. It displays ABC three-phase current, voltage, and power factor.
5. The meter maintains data even in the event of a loss of AC power.
6. It has infrared and RS485 communication interfaces to realize remote centralized meter reading function.

Main Technical Parameters

Item	Technical Specifications
Accuracy Grade	Active power level 1, level 2
Voltage Specifications	3×220/380V, 3×100V, 3×380V, 3×57.7/100V
Current Specifications	0.015–0.075(6)A,0.25–0.5(60)A,0.25–0.5(80)A, other specifications can be customized
Frequency	50Hz
Operating Voltage Range	Rated operating voltage range: 0.9Un ~ 1.1Un, extended operating voltage range: 0.8Un ~ 1.15Un
Operating Temperature Range	Rated operating temperature range: -25℃ ~ +55℃, extreme operating temperature range: -40℃ ~ +70℃
Power Consumption	About 3W
Display Mode	LCD display
Standard	GB/T17215.321-2021, DL/T645-2007

Appearance and Installation Dimensions



DTS881-VAP (D1206)

Single Phase Voltage/Current Protective Energy Meter

D1206

Application Scope

The DDS238-VAP is a single-phase, two-wire AC active energy meter with over-voltage, under-voltage, and over-current protection. It cuts off the load instantly during faults to protect electrical equipment. Protection thresholds are user-adjustable based on local conditions. The meter offers long service life, high stability, wide voltage range, and low power consumption.

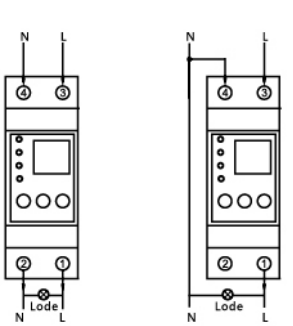
Key Features

-LCD with backlight: Displays total energy (kWh), real-time current (A), voltage (V), and active power (W).
-Protection modes include over-voltage, under-voltage, and over-current with selectable auto or manual reclosing.
-Malignant load protection (pure resistive load limit) designed for dormitories and apartments.
-Adjustable protection thresholds to safeguard equipment from voltage instability or faults.
-Automatic recovery once line voltage normalizes, preventing false trips caused by transient surges.
-LED indicators for all protection modes.
-Lightning protection and high overload capacity.
-Selectable circuit output cycle switch.
-DIN 35 mm rail mounting for easy installation.
-Each protection function can be individually enabled or disabled.

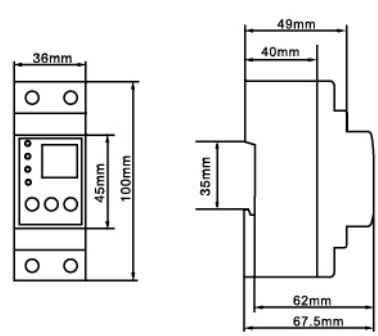
Technical Data

Input working voltage	85~300V AC
Overvoltage protection value	85-300V (default 270V)
Under voltage protection value	85-300V (default 170V)
Over current protection value	1-63A(default 40A) 1-80A(default 60A special order)
Rated frequency	50/60Hz
Delay in switch on after power off	2-512s (default 2s)
Voltage circuit power consumption	≤1W
Current circuit power consumption	<1VA
Active energy display range	0~9999.9kWh
Voltage/currentactive power accurate	+0.5%
Active energy accurate	+1% (IEC62053-21)
Operating temperature	-25℃ ~+70℃
Storage temperature	-40℃ ~+80℃
Relative humidity	≤85%
Altitude	≤2500m
Electromagnetic Environment	E2
Mechanical life	≥100000 cycles

Wire connection



Outline dimension



DDS881-1(D1102)

Single Phase Din Rail Type Energy Meter

D1102-1

Application Scope

The meter is designed to measure single phase two wire AC active energy like residential,utility and industrial application. It is a long life meter with the advantage of high stability, high over load capability, low power loss and small volume.

Basic Function

-Mechanical step register 5+1 or LCD display 5+2 or 6+1
-Bi-directional total active energy measurement, reverse active energy measure in the total active energy
-For LCD display type meter, Energy data can store in memory chip more than 15 years after power off
-Pulse LED indicates working of meter, Passive pulse output with optical coupling isolation 35mm din rail installation
-LCD display with backlight (optional function)

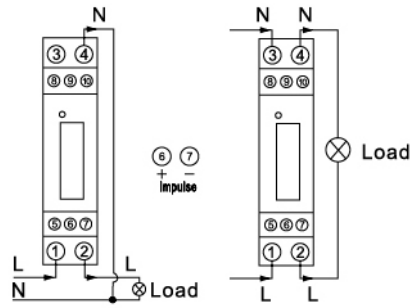
D1102-2

Technical Data

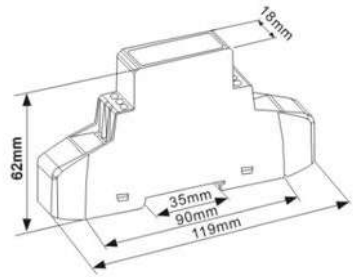
Rate-Rated	110V, 120V,220V,230,240V (0.8~1.2Un)		
Rated Current / Frequency	5(32)A, 5(40)A, 5(45)A/50Hz or 60Hz ±10%		
Connection mode	Direct type	Accuracy class	1% or 0.5%
Power consumption	<1W/10VA	Start current	0.004Ib
Withstand Voltage(AC)	4000V/25mA for 60s	Over current withstand	30Imax for 0.01s
IP Rating	IP20	Executive standard	IEC62053-21 DIN 43880
Working Temperature	-25℃ ~ 70℃	Pulse output	Passive pulse, 80±5 ms

D1102-3

Wire connection



Outline dimension



D1102-4

DDS881-2 (D1201)

Single Phase Din Rail Type Energy Meter

D1201-1

Application Scope

The meter is designed to measure single phase two wire AC active energy like residential, utility and industrial application. It is a long life meter with the advantage of high stability, high over load capability, low power loss and small volume.

Basic Function

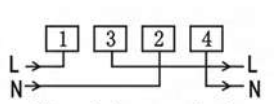
-LCD display 5+1
-Bi-directional total active energy measurement, reverse active energy measure in the total active energy
-The pulse LED indicates the meter's operation. Passive pulse output is provided with opto-coupler isolation.
-Energy data can store in memory chip more than 15 years after power off
-LCD with backlight and keypad ,resettable interval energy can be reset to zero by keypad in anytime (optional function)
-35mm din rail installation

Technical Data

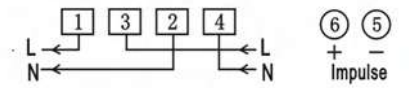
Rate-Rated voltage AC	110V,120V,220V,230,240V (0.8~1.2Un)		
Rated Current / Frequency	5(65)A, 10(100)A /50Hz or 60Hz±10%		
Connection mode	Direct type	Accuracy class	1% or 0.5%
Power consumption	< 1W/10VA	Start current	0.004Ib
Withstand Voltage(AC)	4000V/25mA for 60s	Over current withstand	30Imax for 0.01s
IP Rating	IP20	Executive standard	IEC62053-21 DIN 43880
Working Temperature	-25℃ ~ 70℃	Pulse output	Passive pulse, 80±5 ms

D1201-2

Wire connection

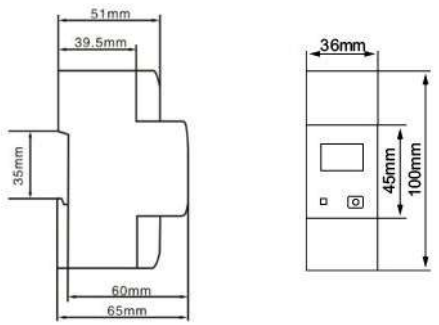


(Normal wire connection)



Note:If reverse wire connection as photo 2,the total energy still can measure

Outline dimension



DDS881-1-W1 (D1107)

Single Phase Din Rail Type Wifi Remote Control Smart Switch(IVAP)

D1107

Application Scope

The switch is designed to measure single phase two wire AC active energy and variable parameter like residential, utility and industrial application. It can remote read from WIFI communication (Smart life or Tuya smart APP). It is a long life meter with the advantage of high stability, high over load capability, low power loss and small volume.

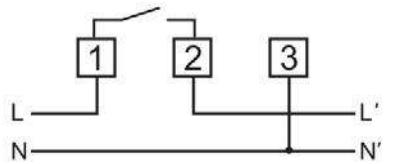
Basic Function

-Bi-directional active energy measure, import/export active energy display separately on APP
-The switch APP also display real voltage, current, active power, reactive power , power factor, frequency
-Timing and delay control by APP
-Hour/Day/Month/Year history of total/import/export active energy consumption tracking by APP, and also can output excel 30 days active energy records by email.P
-Remote control on/off by APP, it also has manual Control on/off by button under lose WIFI
-Prepayment function ,if balance used up, it will cut off automatic. This function can be on/off by hand.
-It have over-voltage and over load protection, it can set value from APP .Each protection function can be opened/closed as customer requirement
-It have active power 15minutes interval curve only one day
-Voice control on/off function
-Alarm event records and on/off operation records on APP
-App has password protected setting/Carbon emissions setting/ electric cost fee setting/ reset energy to zero setting
-35mm din rail installation

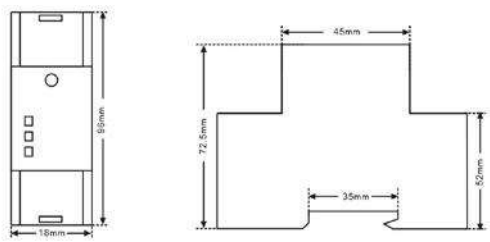
Technical Data

Rated Voltage (AC)	85 ~ 300V (L-N)		
Rated Current / Frequency	63A/50Hz or 60Hz±10%		
Wi-fi	802.11b/g/n		
Connection Mode	Direct type	Accuracy class	1% or 0.5%
Power Consumption	< 2W/10VA	Start current	20mA
Withstand Voltage(AC)	4000V/25mA for60s	Over current withstand	30Imax for 0.01s
IP Rating	IP20	Executive standard	IEC62053-21 DIN 43880
Operating Temperature	-25°C ~ 70°C	Led pulse output	Passive pulse,80±5ms

Wire connection



Outline dimension



DDS881-1-W2 (D1108)

Single Phase Din Rail Type Wifi Remote Control Smart Switch

D1108

Application Scope

The switch is designed to remote control on/off in single phase two wire AC power grid . It can remote control from WIFI communication(Smart life or Tuya smart APP) . It is a long life product with the advantage of high stability, high over load capability, low power loss and small volume.

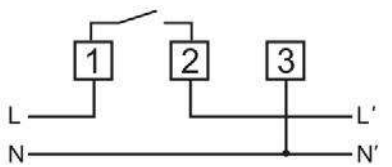
Basic Function

-Voice control: once you have this switch, you can connect it with Amazon Alexa(Amazon echo/dot/tap) or Google Assistant for voice control
-Wi-Fi Remote Control: You can use "Smart Life" APP in your smart phone to control the switch wirelessly with Wi-Fi or 4G network.no hub required
-Timing Function: Take full control of your home or office lights thanks to schedule timer that will allow you to plan the exact time to turn lights and appliances on/off automatically
-Share Device:This smart switch can have several control sites shared by different family members.one mobile phone can also control many switches
-Manual Control by button under lose WIFI
-35mm din rail installation

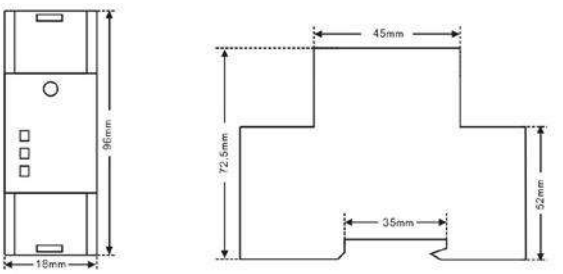
Technical Data

Rate-Rated voltage AC	85 ~ 300V (L-N)		
Rated Current / Frequency	63A/50Hz or 60Hz±10%		
Wi-Fi	802.11b/g/n		
Connection mode	Direct type	Relay type	Magnetic latching
Power consumption	< 2W/10VA	Max load	70A
Withstand Voltage(AC)	4000V/25mA for 60s	Over current withstand	30 Imax for 0.01s
IP Rating	IP 20	Work temperature	-25°C ~ 70°C

Wire connection



Outline dimension



DDS881-4 W(D1408)

Single Phase Three Wire Din Rail Type RS485 Energy Meter

D1408

Application Scope

The meter is designed to measure single phase two wire AC active energy and variable parameter like residential, utility and industrial application. It is equipped with an RS485 communication port for remote reading. It is a long life meter with the advantage of high stability, high over load capability, low power loss and small volume.

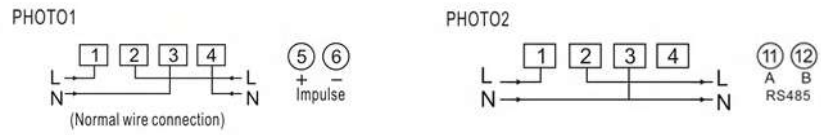
Basic Function

-LCD display, keypad for LCD display step by step
-Bi-directional total active energy, reverse active energy measure in the total active energy
-The meter also display real voltage, current, active power, reactive power , power factor, frequency, total active energy, import active energy, export active energy, reactive energy
-RS485 communication port, MODBUS-RTU protocol
-Remote control on/off with RS485 communication port and have led indication
-The active energy pulse LED indicates meter operation.
-The pulse output is electrically isolated via optical coupling.
-Energy data can store in memory chip more than 15 years after power off
-35mm din rail installation, bottom type wire connection

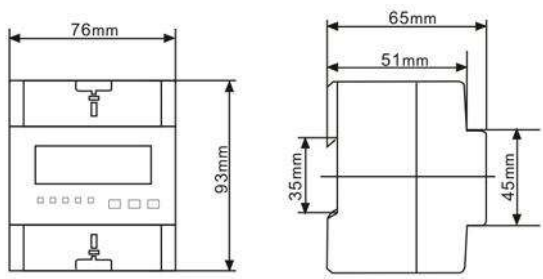
Technical Data

Rate-Rated voltage AC	110V,120V,220V,230,240V (0.8~1.2Un)		
Rated Current/Frequency	5(60)A, 20(80)A / 50Hz or 60Hz±10%		
Communication port	RS485 port, baud rate 1200~9600 bps, default is 9600bps, address 1~247, None parity, stop bits 1, data bits 8.		
Connection mode	Direct type	Accuracy class	1% or 0.5%
Power consumption	< 1W/10VA	Start current	0.004Ib
Withstand Voltage(AC)	4000V/25mA for 60s	Over current withstand	30Imax for 0.01s
IP Rating	IP20	Executive standard	IEC62053-21 DIN 43880
Working Temperature	-25℃ ~70℃	Pulse output	Passive pulse, 80±5 ms

Wire connection



Outline dimension



DDS881-4 WIFI(D1415)

Single Phase Din Rail Type WIFI Remote Control Energy Meter(IVAP)

D1415

Application Scope

The meter is designed to measure single phase two wire AC active energy and variable parameter like residential, utility and industrial application. It is equipped with an RS485 communication port for remote reading.(Smart life or Tuya smart APP). It is a long life meter with the advantage of high stability, high over load capability, low power loss and small volume.

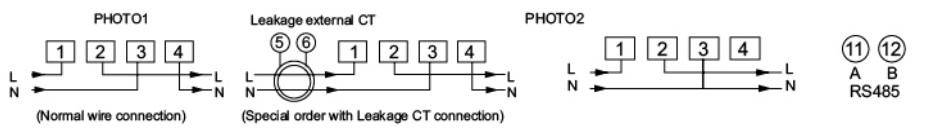
Basic Function

-LCD screen with step-by-step display using keypad
-Supports two-way energy measurement; imported and exported energy is shown separately on both the meter and the app
-Displays real-time voltage, current, active power, reactive power, power factor, frequency, temperature, imported/exported energy, and reactive energy
-Timer and delay functions can be set via the app
-Tracks energy usage history by hour, day, month, and year via the app; also supports exporting 30-day energy data to Excel by email
-View real-time voltage, current, power, and frequency through the app
-Remote on/off control via the app; manual on/off control is available via a button when Wi-Fi is unavailable
-Prepayment function: the meter will automatically shut off when the balance is used up; this feature can be manually enabled or disabled
-Built-in over-voltage, overload, and over-temperature protection; limits can be set in the app, and each function can be turned on or off as needed
-Shows active power curve in 15-minute intervals (for one day only)
-Supports voice control for switching on/off
-Event logs for alarms and on/off actions are viewable in the app
-App features include password protection, carbon emission tracking, electricity cost settings, and energy reset to zero
-Leakage protection (requires external CT, sold separately upon request)
-35mm DIN rail mounting with bottom-entry wiring

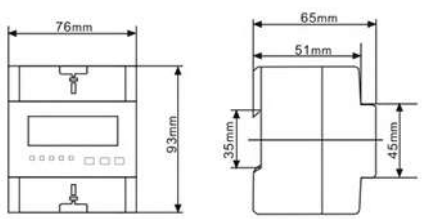
Technical Data

Rate-Rated voltage AC	90 ~ 300V (L-N)		
Rated Current/ Frequency	5(60)A / 50Hz or 60Hz±10%		
WIFI	802.11b/g/n		
Communication port	RS485 port, baud rate 1200 ~ 9600 bps, default is 9600bps, address 1 ~ 247, None parity, stiop bits 1, data bits 8.		
Connection mode	Direct type	Accuracy class	1% or 0.5%
Power consumption	<2W/10VA	Start current	0.004Ib
Withstand Voltage(AC)	4000V/25mA for 60s	Over current withstand	30Imax for 0.01s
IP Rating	IP20	Executive standard	IEC62053-21 DIN 43880
Working Temperature	-25℃ ~ 70℃	Pulse output	Passive pulse, 80±5 ms

Wire connection



Outline dimension



DDS881-4 WIFI(D1413)

Single Phase Three Wire Din Rail Type WIFI Remote Control Energy Meter

D1413

Application Scope

The meter is designed to measure single-phase three-wire AC active energy and various electrical parameters, making it suitable for residential, utility, and industrial applications. It supports remote reading via Wi-Fi using the Smart Life or Tuya Smart app. This compact meter offers long service life, high stability, strong overload capacity, and low power consumption.

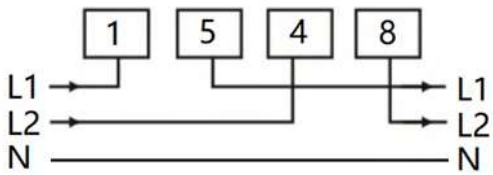
Basic Function

-LCD display with button control for step-by-step navigation
-Bi-directional total active energy measurement; reverse energy is included in the total active energy
-The meter displays real-time values such as phase voltage, active power, frequency, and L1/L2 current on both the LCD and the mobile app
-The app shows total active energy, remaining balance, and supports remote ON/OFF control via a high-capacity magnetic relay for L1/L2 circuits
-Timing and delay control available through the app
-The app shows total active energy, remaining balance, and supports remote ON/OFF control via a high-capacity magnetic relay for L1/L2 circuits
-Timing and delay control available through the app
-Hourly, daily, monthly, and yearly tracking of total import/export active energy via the app, with an option to export the past 30 days of records as an Excel file via email
-Remote ON/OFF control via app; manual ON/OFF control is also available via button if Wi-Fi is unavailable
-Prepayment function: power is automatically cut off when balance is depleted. This function can also be manually enabled or disabled
-15-minute interval active power curve available for one day
-Voice control for ON/OFF switching
-Event log for alarms and ON/OFF operations viewable in the app
-App supports password protection, carbon emissions tracking, electricity cost settings, and energy reset to zero
-35mm DIN rail mounting design

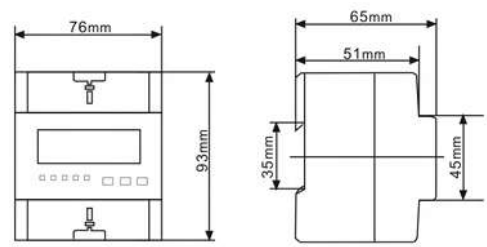
Technical Data

Rate-Rated voltage AC	110/220V (L1-L2 90 ~ 300V) FM2S The meter is designed for L1 and L2 line connection only; the neutral (N) line does not pass through the meter.		
Rated Current / Frequency	10(100)A / 50Hz or 60Hz±10%		
WIFI	802.11b/g/n		
Connection mode	Direct type	Accuracy class	1% or 0.5%
Power consumption	< 2W/10VA	Start current	40mA
Withstand Voltage(AC)	4000V/25mA for 60s	Over current withstand	30Imax for 0.01s
IP Rating	IP20	Executive standard	IEC62053-21 DIN 43880
Working Temperature	-25℃ ~70℃		

Wire connection



Outline dimension



DDS881-4(D1401)

Single Phase Din Rail Type Energy Meter

D1401-1

D1401-2

D1401-3

D1401-4

Application Scope

The meter is designed to measure single-phase, two-wire AC active energy for residential, utility, and industrial applications. It offers long service life with advantages such as high stability, strong overload capacity, low power consumption, and compact size.

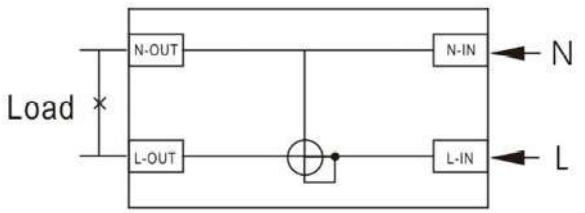
Basic Function

-Available with mechanical step register (5+1) or LCD display (6+1)
-Bi-directional total active energy measurement; reverse energy is included in total active energy
-For LCD type, energy data is stored in memory and retained for over 15 years after power loss
-Pulse LED indicates meter operation
-Suitable for 35mm DIN rail mounting

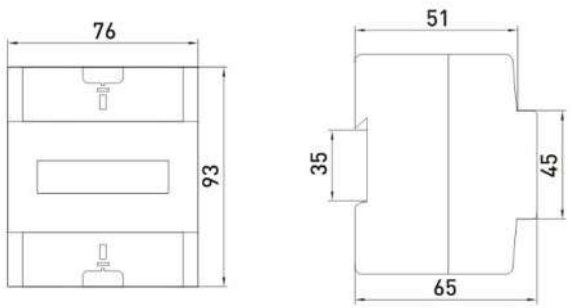
Technical Data

Rate-Rated voltage AC	110V,120V,220V,230,240V (0.8 ~ 1.2Un)		
Rated Current / Frequency	5(60)A, 10(100)A / 50Hz or 60Hz±10%		
Wiring Method	Direct type	Accuracy class	1% or 0.5%
Power Consumption	< 1W/10VA	Start current	0.004Ib
Withstand Voltage(AC)	4000V/25mA for 60s	Over current withstand	30Imax for 0.01s
IP Rating	IP20	Executive standard	IEC62053-21 DIN 43880
Working Temperature	-25℃ ~ 70℃	Pulse output	Passive pulse, 80±5 ms

Wire connection



Outline dimension



DTS881-4 (D3401)

Three Phase Din Rail Type Energy Meter

D3401-1

D3401-2 5A/CT

Application Scope

The meter is used in three phase four wire /three phase three wire /two phase three wire power grid. The meter is designed to measure AC active energy. All of its functions comply with the relative technical requirement for class 1 three phase watt hour meter in IEC62053-21. The meter features long service life, high stability, strong overload capacity, low power consumption, and a compact design.

Basic Function

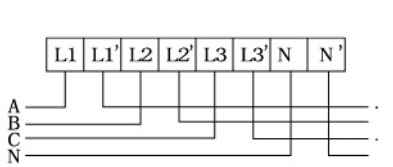
-LCD display: 6+1 digits (default) or 5+2 digits
-Bi-directional total active energy measurement; reverse energy included in total energy
-Pulse LED indicates meter operation; pulse output is optically isolated
-LED indicators for phase loss and reverse connection
-DIN rail mounting (35 mm) for easy installation

Technical Data

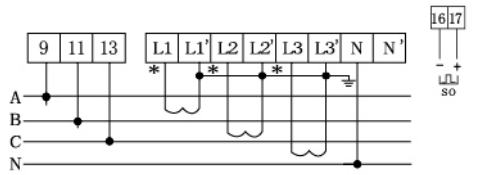
Rated Voltage AC	DTS881-4 three phase four wire 3x120/208V, 3x220/380V, 3x230/400V (0.8~1.2Un)		
	DTS881-4 three phase three wire(two phase three wire) 2x120/208V, 3x220V, 3x380V, 3x400V (0.8~1.2Un)		
Rated Current / Frequency	5A/CT ,1.5(6)A ,5(60)A, 10(100)A / 50Hz or 60Hz±10%		
Connection mode	CT or Direct type	Accuracy class	1% or 0.5%
Power consumption	<1W/10VA	Start current	0.004Ib
Withstand Voltage(AC)	4000V/25mA for 60s	Over current withstand	30Imax for 0.01s
IP Rating	Ip20	Standards Compliance	IEC62053-21 DIN 43880
Working Temperature	-25℃ ~ 70℃	Pulse output	Passive pulse, 80±5 ms

Wire connection

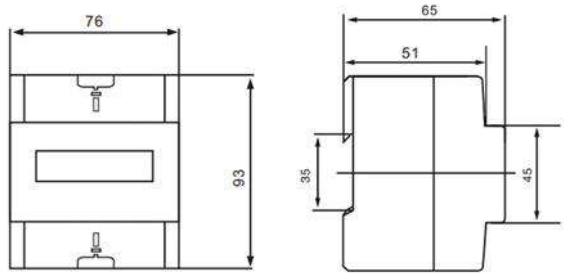
(1)three phase four wire direct connection



(2)three phase four wire through current transformer connection



Outline dimension



DTS881-7 (D3701)

Three Phase Din Rail Type Energy Meter

D3701-1

Application Scope

The meter is used in three phase four wire/three phase three wire /two phase three wire power grid.The meter is designed to measure AC active energy. It offers long service life with the advantage of high stability, high over load capability, low power loss and small volume.

Basic Function

-Available with mechanical step register or LCD display
-Bi-directional total active energy measurement; reverse energy is included in total energy
-Pulse LED indicates meter operation; optically isolated pulse output for enhanced reliability
-LED indicators for phase loss and reverse wiring
-For LCD type: energy data stored in memory and retained for over 15 years after power loss
-Compatible with 35 mm DIN rail mounting for quick and easy installation

D3701-2 5A/CT

Technical Data

Rated Voltage Ac	DTS881-7 three phase four wire 3x120/208V, 3x220/380V,3x230/400V, 3x240/415V
	DTS881-7 three phase three wire(two phase three wire) 2x120/208V, 2x127/220, 3x220V, 3x380V, 3x400V
Operating Voltage Range	0.8~1.2Un
Rated Current	5A/CT, 1.5(6)A, 5(60)A, 10(100)A, or other as required
Frequency	50Hz or 60Hz
Connection Mode	CT type or Direct type
Display	LCD
Accuracy Class	1.0
Power Consumption	<0.5W/5VA/each phase
Start Current	0.004Ib
Withstand Voltage(ac)	4000V/25mA for 60 sec
Impulse Voltage	6kV 1.2 s waveform
Ip Rating	IP20
Impulse Rate	400~6400 imp/kWh
Pulse Output	Passive pulse, pulse width is 80±5 ms
Standard Compliance	DIN 43880, IEC62053-21, IEC62052-11
Working Temperature	-30℃~70℃
Outline Dimension L*M*H	126x93x65mm

Environment

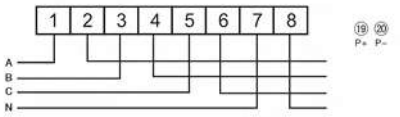
Operating temperature	-25℃ ~55℃
Storage temperature	-40℃ ~80℃
Reference temperature	23℃ ±2℃
Relative humidity	0 to 95%, non-condensing
Altitude	Up to 2500m
Warm up time	10s
Mechanical Environment	M1
Electromagnetic Environment	E2
Degree of pollution	2

DTS881-7 (D3701)

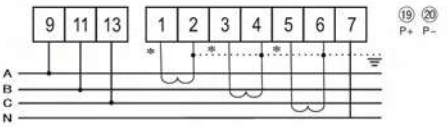
Three Phase Din Rail Type Energy Meter

Wire connection

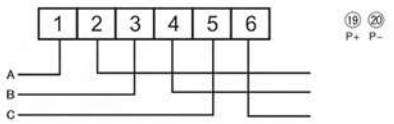
(1)three phase four wire direct connection



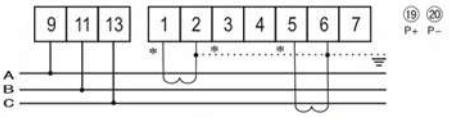
(2)three phase four wire through current transformer connection



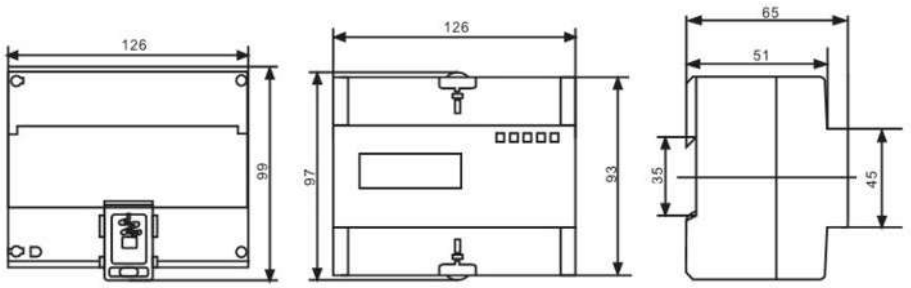
(3)three phase three wire direct connection



(4)two phase fthree wire direct connection



Outline dimension



6L2, 42L6, 85L1, 59L1, 44L1, 99T1

Series current, voltage, frequency, power factor, power

Application Scope

Current, voltage, frequency, power factor, power, series panel meters and other products are suitable for measuring current, voltage, frequency, phase and power factor in AC and DC circuits.

Model and Meaning

□ □ □ – □

- A represents current, V represents voltage, and Hz represents frequency. cos represents power factor, kW represents power, and kVar represents reactive power.
- Design number
- T represents AC electromagnetic system, L represents AC rectifier system, C represents DC system, and D represents AC motor system.
- Instrument type

Main Technical Parameters

1. Basic technical parameters

Accuracy	Operating Conditions	Mechanical Properties	Dielectric Strength	Voltage Effect	Working position
Grade 1.5 Grade 2.5	-20°C to +40°C Relative Humidity 25% to 85%	Withstands acceleration of 30 m/s Impact frequency of 80-120 times per minute Two-hour transportation vibration	AC voltage 50Hz 2kV 1min	When the rated value varies by ±15%, the error in the indicated value does not exceed the basic error.	Vertical

2. Current and voltage meter measurement range

Name	Common Specifications (Measurement Range)	Notes
AC ammeter	0A-50A	Direct connection
	10A-10kA/5A, 10A-40kA/1A	Connection via current transformer
AC voltmeter	1V-600V	Direct connection
	380V-380kV/100V	Secondary voltage 100V via voltage transformer
DC ammeter	50μA-20A	Direct connection
	20A-10kA/75mV	External shunt 75mV
DC voltmeter	1-750V	Direct connection
	450V-450kV/1mA,/20mA	Connection via resistor

3. Frequency, power factor (phase) measurement range

Name		Quantity limit
Frequency meter	Hz	45～55Hz 45～65Hz 55～65Hz 100V 220V 380V
Power factor meter	COSΦ	COSΦ=0.5C-1～0.5L 100V 220V 380V 5A
Power meter measurement range	kW	5A-10kV/5A 100V 220V 380V 380V-380kV/100V 5A

6L2, 42L6, 85L1, 59L1, 44L1, 99T1

Series current, voltage, frequency, power factor, power

4. Measurement range of three-phase power meter

Rated current (via current transformer with secondary current of 5A)A	Measuring range	Rated voltage (V)										
		DC access		Accessed via voltage transformer (secondary voltage is 100V)								
		100	200	380	3K	6K	10K	15K	35K	110K	220K	380K
5	KW	0.8	2	3	25	50	80	120	300	1	2	3
7.5		1.2	3	5	40	80	120	200	500	1.5	3	5
10		1.5	4	6	50	100	150	250	600	2	4	6
15		2.5	6	10	80	150	250	400	1.2	3	6	10
20		3	8	12	100	200	300	500	2	4	8	12
30		5	12	20	150	300	500	800	2	6	12	20
40		6	15	25	200	400	600	1	2.5	8	15	25
50		8	20	30	250	500	800	1.2	3	10	20	30
75		12	30	50	400	800	1.2	2	5	15	30	50
100		15	40	60	500	1	1.5	2.5	6	20	40	60
150		25	60	100	800	1.5	2.5	4	10	30	60	100
200		30	80	120	1	2	3	5	12	40	80	120
300		50	120	200	1.5	3	5	8	20	60	120	200
400		60	150	250	2	4	6	10	25	80	150	250
600		100	250	400	3	6	10	15	40	120	250	400
750		120	300	500	4	8	12	20	50	150	300	500
800		120	300	500	4	8	12	20	50	150	300	500
1K		150	400	600	5	10	15	25	60	200	400	600
1.5K		250	600	1	8	15	25	40	100	300	600	1000
2K		300	800	1.2	10	20	30	50	120	400	800	1200
3K		500	1.2	2	15	30	50	80	200	600	1200	2000
4K		600	1.5	2.5	20	40	60	100	250	800	1500	2500
5K		800	2	3	25	50	80	120	300	1000	2000	3000
6K	MW	1	2.5	4	30	60	100	150	400	1200	2500	4000
7.5K		1.2	3	5	40	80	120	200	500	1500	3000	5000
10K		1.5	4	6	50	100	150	250	600	2000	3500	6000

5. Measurement range of three-phase reactive power meter

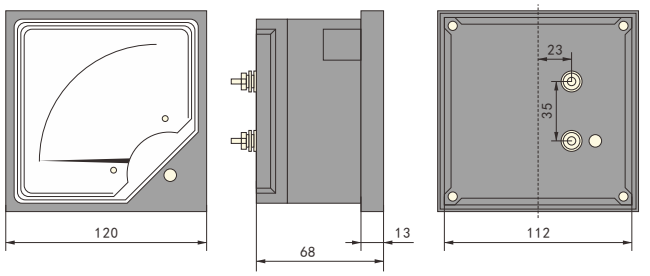
Rated current (via current transformer with secondary current of 5A)A	Measuring range	Rated voltage (V)										
		DC access		Accessed via voltage transformer (secondary voltage is 100V)								
		100	220	380	3K	6K	10K	15K	35K	110K	220K	380K
5	kVar	0.6	1.5	2.5	20	40	60	100	250	800	1.5	2.5
7.5		1	2.5	4	30	60	100	150	400	1.2	2.5	4
10		1.2	3	5	40	80	120	200	500	1.5	3	5
15		2	5	8	60	120	200	300	800	2.5	5	8
20		2.5	6	10	80	150	250	400	1	3	6	10
30		4	10	15	120	250	400	600	1.5	5	10	15
40		5	12	20	150	300	500	800	2	6	12	20
50		6	15	25	200	400	600	1	2.5	8	15	25
75		10	25	40	300	600	1	1.5	4	12	25	40
100		12	30	50	400	800	1.2	2	5	15	30	50
150		20	50	80	600	1.2	2	3	8	25	50	80
200		25	60	100	800	1.5	2.5	4	10	30	60	100
300		40	100	150	1.2	2.5	4	6	15	50	100	150
400		50	120	200	1.5	3	5	8	20	60	120	200
600		80	200	300	2.5	5	8	12	30	100	200	300
750		100	250	400	3	6	10	15	40	120	250	400
800		100	250	400	3	6	10	15	40	120	250	400
1K		120	300	500	4	8	12	20	50	150	300	500
1.5K		200	500	800	6	12	20	30	80	250	500	800
2K		250	600	1	8	15	25	40	100	300	600	1000
3K		400	1	1.5	12	25	40	60	150	500	1000	1500
4K		500	1.2	2	15	30	50	80	200	600	1200	2000
5K		600	1.5	2.5	20	40	60	100	250	800	1500	2500
6K		800	2	3	25	50	80	120	300	1000	2000	3000
7.5K	mVar	1	2.5	4	30	60	100	150	400	1200	2500	4000
10K		1.2	3	5	40	80	120	200	500	1500	3000	5000

6L2, 42L6, 85L1, 59L1, 44L1, 99T1

Series current, voltage, frequency, power factor, power

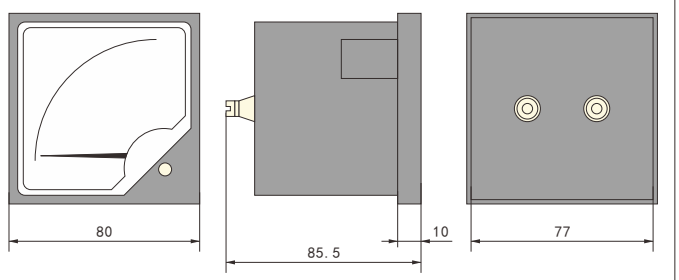
Appearance and Installation Dimensions

1. 42L6, 42C3 type plate meter



2. 6L2, 6C2 type plate meter

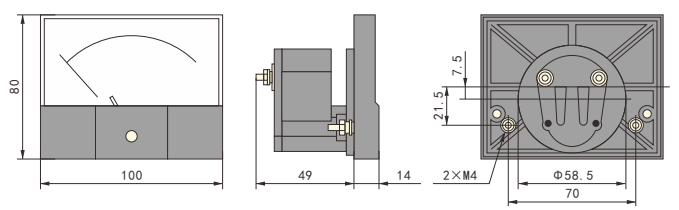
H (see table)



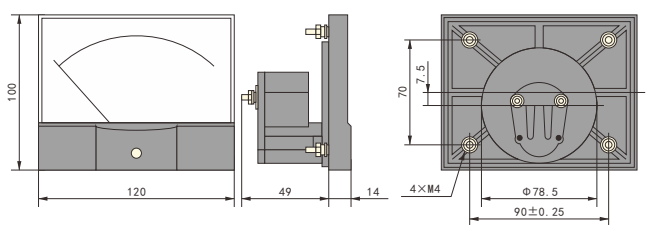
H Table

Models	H
6L(C)2-A, 6L(C)2-V, 6L2-HZ	70
6L2-COSφ	85
6L2-KW, 6L2-KVAR	102

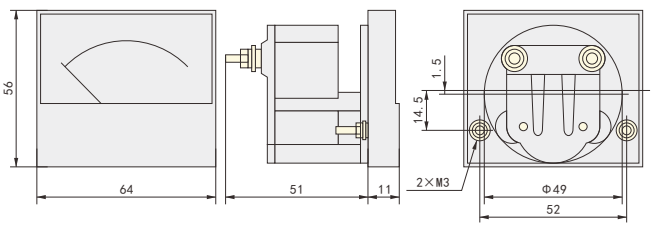
3. 44L1, 44C2 type plate



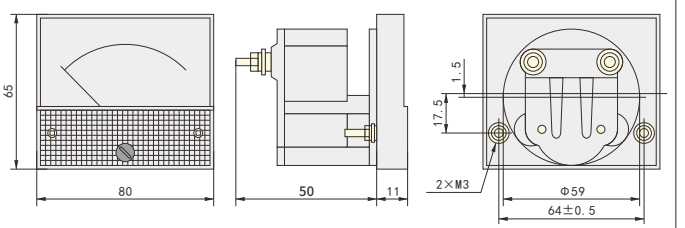
4. 59L1, 59C2 type plate meter



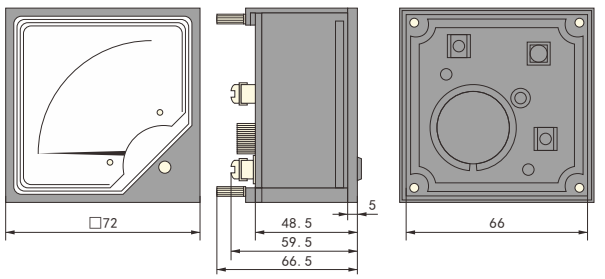
5. 85L1, 85C1, 85L17, 85C17 plate



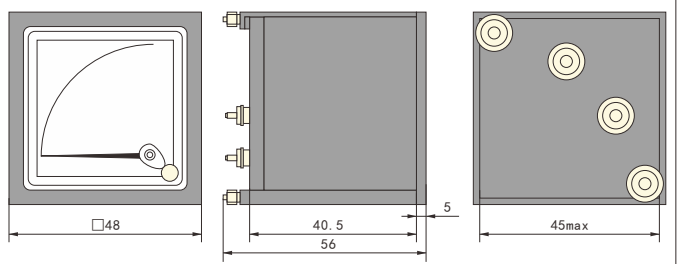
6. 69L9, 69C9, 69L17, 69C17 plate



7. 72L1, 72C1, 72T1 plate meter



8. 99L1, 99C1, 99T1 plate meter



BH-0.66

Series Current Transformer

Application Scope

The BH-0.66 series current transformers are designed for indoor use and are suitable for current and energy measurement and relay protection in AC circuits with a rated voltage of 660V and a rated frequency of 50Hz. This product complies with GB 20840.1 and GB 20840.2.

Model and Meaning

BH - 0.66 □ I

- I: Category
- □: Window Width
- 0.66: Rated Voltage (kV)
- H: Current Transformer
- B: Enclosed

Main Technical Parameters

1. Insulation Requirements: Primary winding to secondary winding and ground, and secondary winding to ground, withstand power frequency voltage of 3kW for 1 minute. Insulation resistance ≥ 10MΩ.
2. Rated secondary current 5A. Rated primary current, rated capacity, and accuracy are shown in the table below.

Model	Rated Current Ratio (A)	Rated load (VA)	Accuracy grade	Rated voltage (kV)
BH-0.66 20Φ	75/5	2.5	0.5 1.5S 0.2 0.2S	0.66
	100/5	2.5		
BH-0.66 30 Type I	100/5	2.5		
	150/5	2.5		
	200/5	5		
	250/5	5		
	300/5	5		
	400/5	5		
	500/5	5		
BH-0.66 30 Type IB	50/5	2.5		
	75/5	2.5		
	100/5	2.5		
	150/5	2.5		
	200/5	5		
	250/5	5		
	300/5	5		
	400/5	5		
BH-0.66 40 Type I	150/5	2.5		
	200/5	5		
	250/5	5		
	300/5	5		
	400/5	5		
	500/5	10		
	600/5	10		
	750/5	10		
	800/5	10		
	1000/5	15		
	1200/5	20		
	1500/5	20		
BH-0.66 50 Type	200/5	5	0.2 0.2S 0.5 0.5S	
	300/5	5		
	400/5	5		
	500/5	10		
	600/5	10		
	800/5	10		
	1000/5	15		
	1200/5	20		
	1500/5	20		

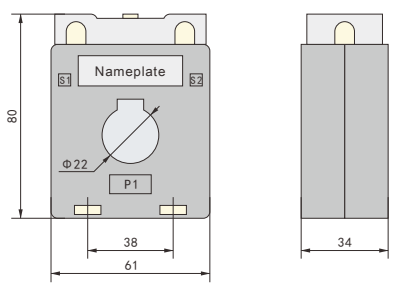
BH-0.66

Series Current Transformer

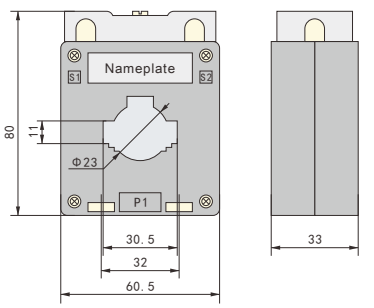
Model	Rated Current Ratio (A)	Rated load (VA)	Accuracy grade	Rated voltage (kV)
BH-0.66 60 Type I	300/5	5	0.2 0.2S 0.5 0.5S	0.66
	400/5	5		
	500/5	10		
	600/5	10		
	800/5	10		
	1000/5	15		
	1200/5	20		
	1500/5	20		
	2000/5	20		
BH-0.66 80 Type I	600/5	10		
	800/5	10		
	1000/5	15		
	1200/5	20		
	1500/5	20		
	2000/5	20		
	2500/5	20		
BH-0.66 100 Type I	1000/5	15		
	1200/5	20		
	1500/5	20		
	2000/5	20		
	2500/5	30		
	3000/5	40		
	4000/5	40		
BH-0.66 120 Type I	1500/5	20		
	2000/5	20		
	2500/5	30		
	3000/5	40		
	4000/5	40		
	5000/5	40		

Appearance and Installation Dimensions

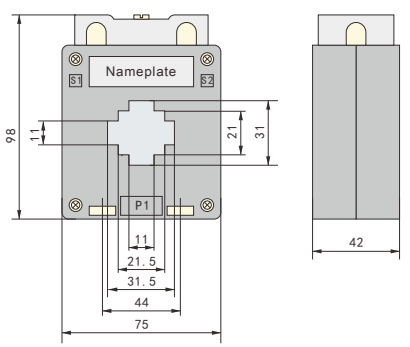
1. BH-20



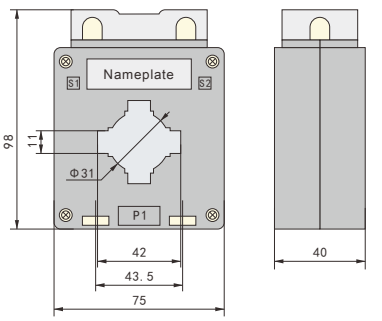
2. BH-30



3、BH-30IB



4、BH-40

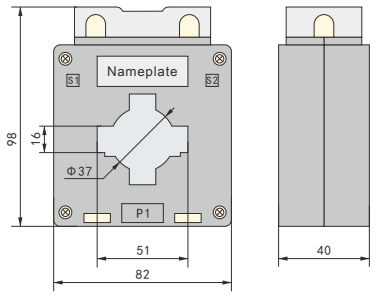


BH-0.66

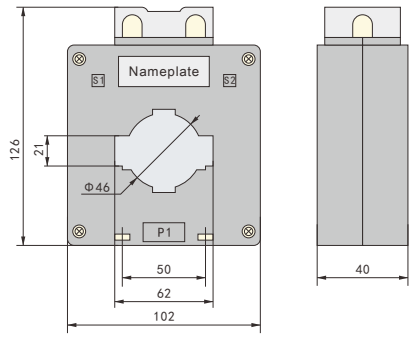
Series Current Transformer

Appearance and Installation Dimensions

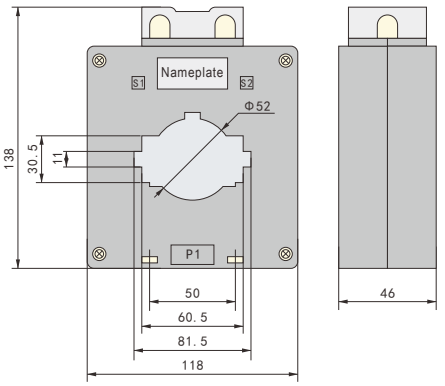
5. BH-50



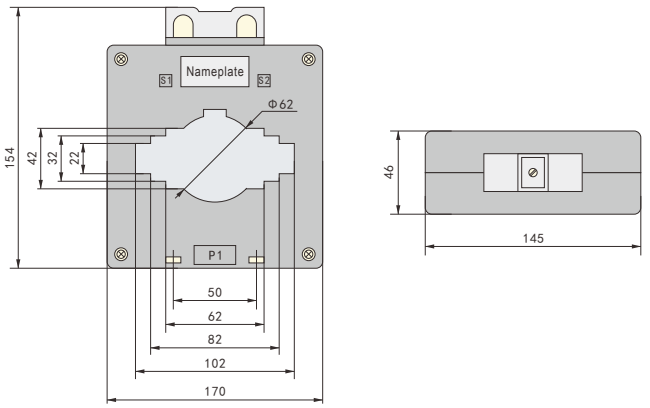
6. BH-60



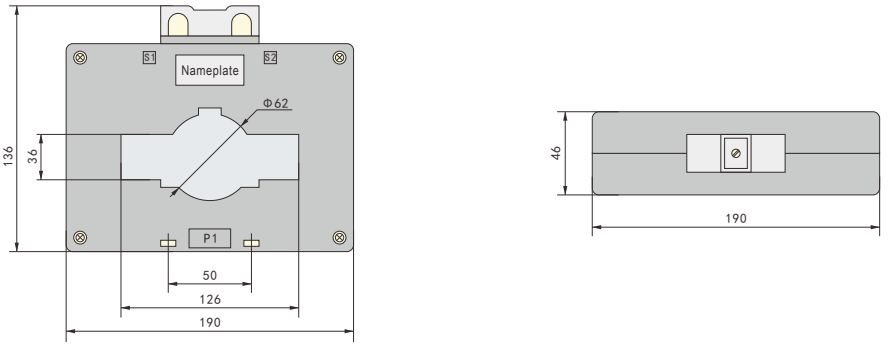
7、BH-80



8、BH-100



9、BH-120



BH(SDH)-0.66 II

Series Current Transformer

Application Scope

BH (SDH) -0.66 series current transformers are used indoors and are suitable for current and energy measurement and relay protection in AC circuits with a rated voltage of 660V and below and a rated frequency of 50Hz. The product complies with: GB/T 20840.1 GB/T 20840.2

Model and Meaning

SD H - 0.66 □ Ⅱ

- Category
- Window Width
- Rated Voltage (kV)
- Current Transformer
- For GCS Low-Voltage Withdrawable Switchgear

B H - 0.66 □ Ⅱ

- Category
- Window Width
- Rated Voltage (kV)
- Current Transformer
- Enclosed

Main Technical Parameters

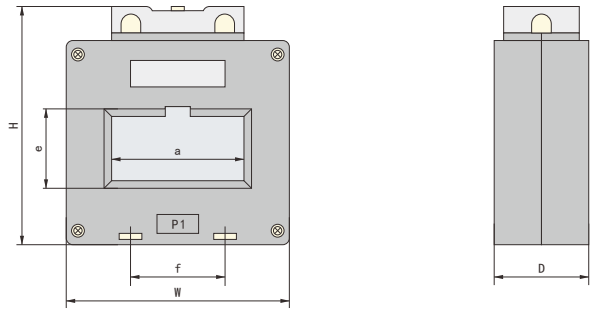
Model	Rated Current Ratio (A)	Rated load (VA)	Accuracy grade	Rated voltage (kV)
BH-0.66 30 Type II	150/5	2.5	0.5 1.5S 0.2 0.2S	0.66
	200/5	2.5		
	250/5	5		
	300/5	5		
	400/5	5		
	500/5	5		
BH-0.66 40 Type II	150/5	2.5		
	200/5	5		
	250/5	5		
	300/5	5		
	400/5	5		
	500/5	10		
	600/5	10		
	750/5	10		
	800/5	10		
	1000/5	15		
	1200/5	20		
	1500/5	20		
BH-0.66 50 Type II (SDH-0.66 50 II)	200/5	5		
	300/5	5		
	400/5	5		
	500/5	10		
	600/5	10		
	800/5	10		
	1000/5	15		
	1200/5	20		
	1500/5	20		
BH-0.66 60 Type II (SDH-0.66 60 II)	300/5	5		
	400/5	5		
	500/5	10		
	600/5	10		
	800/5	10		
	1000/5	15		
	1200/5	20		
	1500/5	20		
	2000/5	20		
BH-0.66 80 Type II (SDH-0.66 80 II)	600/5	10	0.2 0.2S 0.5 0.5S	
	800/5	10		
	1000/5	15		
	1200/5	20		
	1500/5	20		
	2000/5	20		
	2500/5	20		

BH(SDH)-0.66 II

Series Current Transformer

Model	Rated Current Ratio (A)	Rated load (VA)	Accuracy grade	Rated voltage (kV)
BH-0.66 100 Type II (SDH-0. 66 100 II)	1000/5	15	0.2 0.2S 0.5 0.5S	0.66
	1200/5	20		
	1500/5	20		
	2000/5	20		
	2500/5	30		
	3000/5	40		
	4000/5	40		
BH-0.66 120 Type II (SDH-0. 66 120 II)	1500/5	20		
	2000/5	20		
	2500/5	30		
	3000/5	40		
	4000/5	40		
	5000/5	40		
BH-0.66 130 Type II (SDH-0. 66 130 II)	1000/5	5		
	1200/5	10		
	1500/5	10		
	2000/5	20		
	2500/5	20		
	3000/5	20		
	4000/5	20		
	5000/5	20		
BH-0.66 150 Type II (SDH-0. 66 150 II)	1500/5	20		
	2000/5	20		
	2500/5	20		
	3000/5	40		
	4000/5	40		
	5000/5	40		

Appearance and Installation Dimensions



Models	H	W	D	a	e	f
BH-0.66 30 II	98	65	44	33	31	32
BH-0.66 40 II	104	78.5	47	42	31	45
BH-0.66 50 II	106	87	47	52	31	54
BH-0.66 60 II	110	102	47	62	31.5	52.5
BH-0.66 80 II	118	122	47	83	32.5	60
BH-0.66 100 II	120	140	50	102	32	74
BH-0.66 120 II	154	169	50	122	52	54
BH-0.66 130 II	160	179	47	132	61.5	48.5
BH-0.66 150 II	160	200	50	153	55	65

BH-0.66III

Series Current Transformer

Application Scope

The BH-0.66III series current transformers are designed for indoor use and are suitable for current and energy measurement and relay protection in AC circuits with a rated voltage of 660V or less and a rated frequency of 50Hz or 60Hz.

This product complies with: GB20840.1 GB20840.2

Normal Operating Conditions

1. Installation Location: Indoors
2. Ambient Temperature: Minimum -5°C, Maximum +40°C
3. Ambient Humidity: Relative Humidity not exceeding 80%
4. Altitude: Not exceeding 1000m
5. Atmospheric Conditions: No contaminants, corrosive media, or explosive media that could seriously affect the transformer's insulation

Model and Meaning

BH - 0.66 □ Ⅲ

- Classification
- Window Width
- Rated Voltage (kV)
- Current Transformer
- Enclosed

Structural Characteristics

The transformer's core is annular or rectangular, with the secondary winding evenly distributed around the core's circumference. The transformer's insulation is made of flame-retardant plastic. A window is provided in the center of the transformer for the primary busbar to pass through. The product's output terminals are marked with P1 for the primary input and P2 for the output, and S1 and S2 for the secondary output terminals. When the primary current flows in through P1 and out through P2, the secondary current flows out through S1 and then flows through the external circuit into S2, resulting in reduced polarity. The core is formed from wound silicon steel sheets, eliminating air gaps and ensuring high magnetic properties. The secondary winding is evenly wound, minimizing magnetic flux leakage, resulting in stable performance, lightweight, and easy installation.

Main Technical Parameters

1. Basic technical parameters

Rated voltage (V)	Rated frequency (Hz)	Rated primary current (A)	Rated secondary current (A)
660	50	150-5000	5

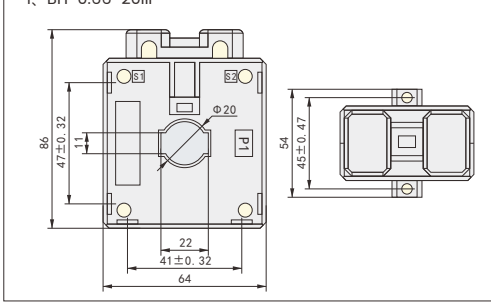
2. Insulation Level: Secondary winding insulation resistance to ground ≥ 10MΩ, short-term power frequency withstand voltage 3kV for 1 minute

3. Rated Load and Accuracy: cosΦ = 0.8 hysteresis

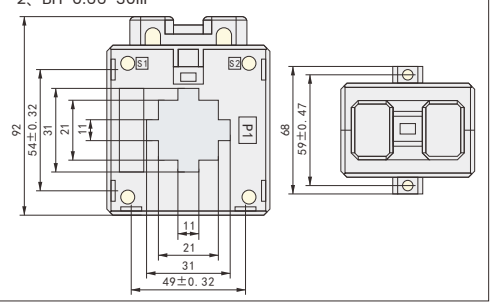
Rated primary current (A)	Rated load (VA)	Accuracy
150-250	5	0.5
300-400	10	
500-800	10	0.5S
1200-1500	20	0.2
2000-5000	40	

Appearance and Installation Dimensions

1、BH-0.66 20III



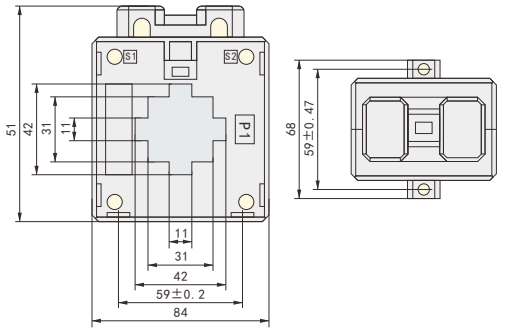
2、BH-0.66 30III



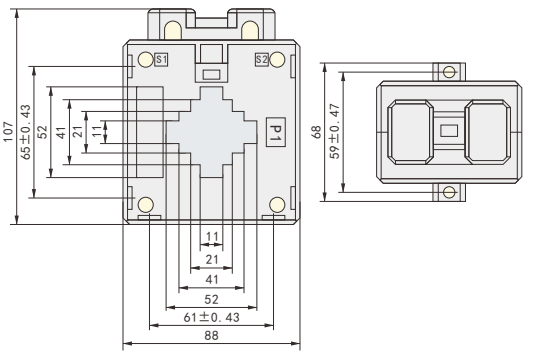
BH-0.66III

Series Current Transformer

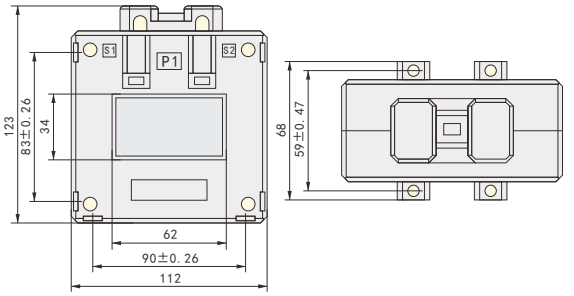
3、BH-0.66 40III



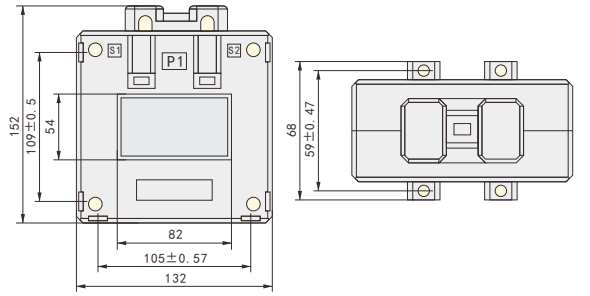
4、BH-0.66 50III



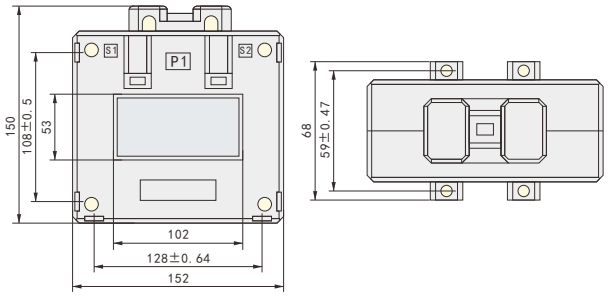
5、BH-0.66 60III



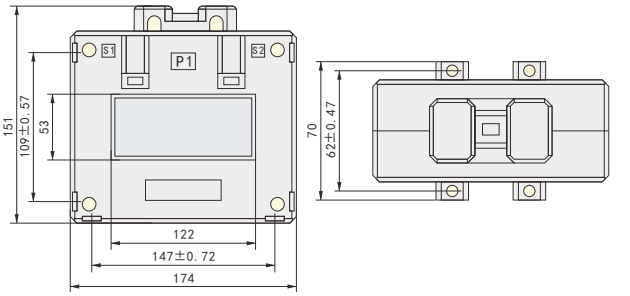
6、BH-0.66 80III



7、BH-0.66 100III



6、BH-0.66 120III



LMZ(J)1-0.5
Series Current Transformer

Application Scope

The LMZ(J)1-0.5 series current transformers are primarily designed for indoor use and are suitable for current and energy measurement or relay protection in AC circuits with a rated voltage of 0.5 kV or less and a rated frequency of 50 Hz. These are cast-type current transformers and are installed using a baseplate mounting method.

They comply with GB/T20840.1 and GB/T20840.2.

Normal Operating Conditions

1. Installation Location: Indoors
2. Ambient Temperature: Minimum -5°C, Maximum +40°C
3. Humidity: Average relative humidity within 24 hours not exceeding 95%, and average relative humidity within one month not exceeding 90%
4. Altitude: Not exceeding 1000m
5. Ambient air free of significant dust, smoke, corrosive gases, steam, or salt contamination
6. The installation site must be free of severe vibration or turbulence

Model and Meaning

L M Z (J) 1 - 0.5

- 0.5 — Rated voltage (kV)
- 1 — Design number
- (J) — Enlarged capacity
- Z — Cast insulation type
- M — Busbar type
- L — Current transformer

Main Technical Parameters

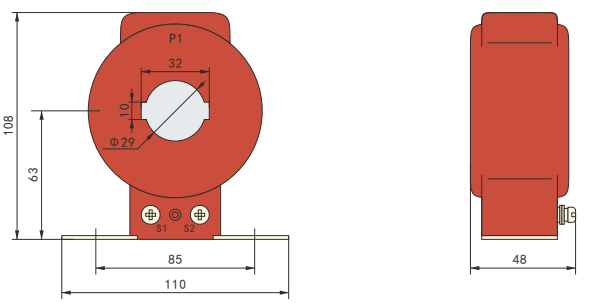
1. Basic technical parameters

Rated primary current (A)	Rated secondary current (A)	Primary winding nominal voltage (kV)	Accuracy	Rated frequency
150, 200, 250, 300, 400, 500, 600, 750 800, 1000, 1200, 1500, 2000, 2500, 3000	5	0.5	0.2、0.2S、 0.5、0.5S	50Hz

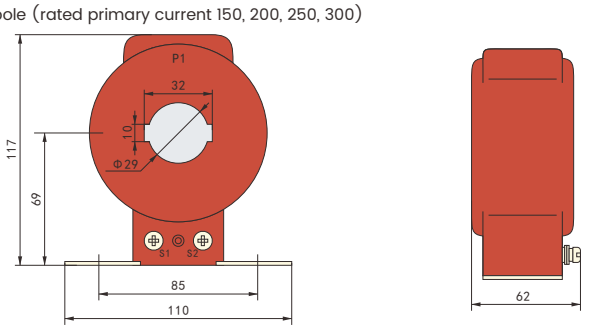
Primary Current (A)	H	H	L	A	D	D	B	C	A	B
150, 200, 250, 300	67.5	117	86	110	31	90	47	36	10	36
400, 500, 600	72	125	86	110	42	97	48	36	10	52
750, 800	71.5	120	98	128	82	140	51	-	24	37
1000, 1200, 1500	76.5	139	119	153	103	177	50	-	33	49
2000, 2500, 3000	90	165	152	185	154	230	50	-	35	70

Appearance and Installation Dimensions

1. LMZ (J) 1-0.5 (rated primary current 150, 200, 250, 300)

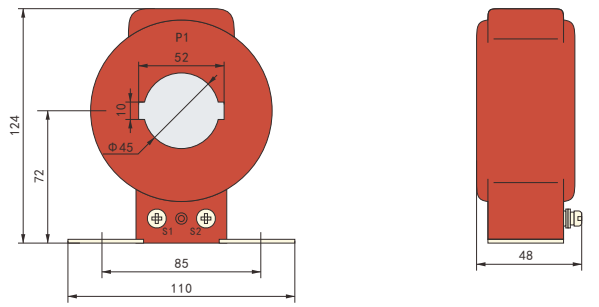


2. LMZ (J) 1-0.5S/0.2 pole (rated primary current 150, 200, 250, 300)

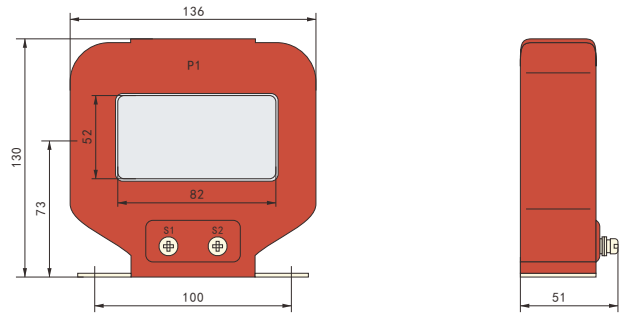


LMZ(J)1-0.5
Series Current Transformer

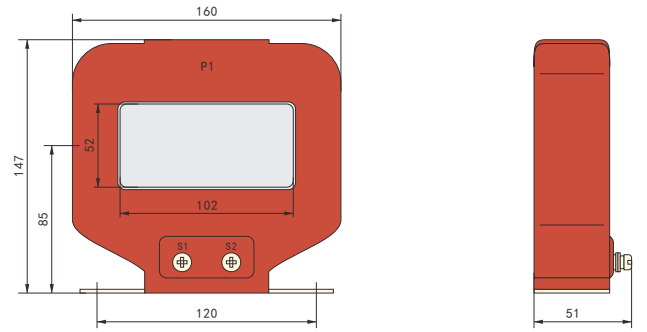
3. LMZ (J) 1-0.5 (rated primary current 400, 500, 600)



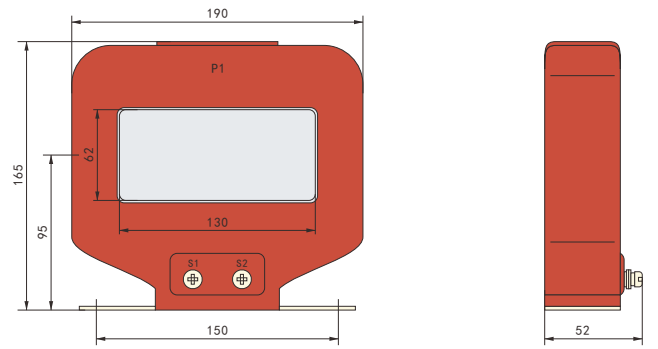
4. LMZ (J) 1-0.5 (rated primary current 750, 800)



5. LMZ (J) 1-0.5 (rated primary current 1000, 1200, 1500)



6. LMZ (J) 1-0.5 (rated primary current 2000, 2500, 3000)



LMZ(J)1-0.66
Series Current Transformer

Application Scope

The LMZ(J)1-0.66 series current transformers are primarily designed for indoor use and are suitable for current and energy measurement or relay protection in AC circuits with a rated voltage of 0.66 kV or less and a rated frequency of 50 Hz. These are cast-type current transformers and are installed using the busbar mounting method.

They comply with GB/T20840.1 and GB/T20840.2.

Normal Operating Conditions

1. Ambient Temperature: Minimum -5°C, Maximum +40°C.
2. Humidity: The average relative humidity measured over a 24-hour period shall not exceed 95%, and the average relative humidity over a month shall not exceed 90%.
3. Altitude: Not exceeding 1000 meters.
4. The ambient air must be free of significant dust, smoke, corrosive gases, vapors, or salt contamination.
5. The installation site must be free of severe vibration or turbulence.

Model and Meaning

L M Z (J) 1 - 0.66

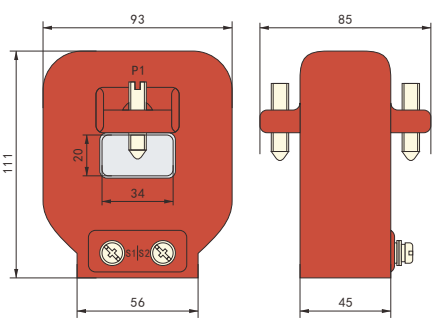
- 0.66 — Rated voltage (kV)
- 1 — Design number
- (J) — Increased capacity
- Z — Cast insulation
- M — Busbar type
- L — Current transformer

Main Technical Parameters

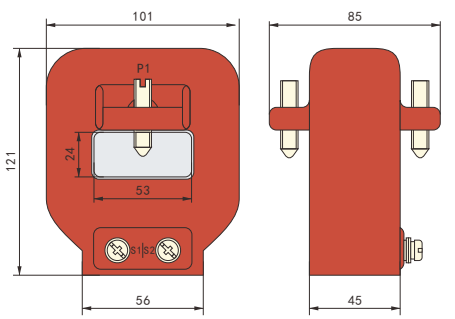
Rated primary current (A)	Rated secondary current (A)	Primary winding nominal voltage (kV)	Accuracy	Rated frequency
100, 150, 200, 250, 300, 400, 500, 600, 750, 800, 1000 1200, 1500, 2000, 2500, 3000, 4000, 5000, 6000	5	0.66	0. 5/0. 2/ 0. 2S/0. 5S	50Hz

Appearance and Installation Dimensions

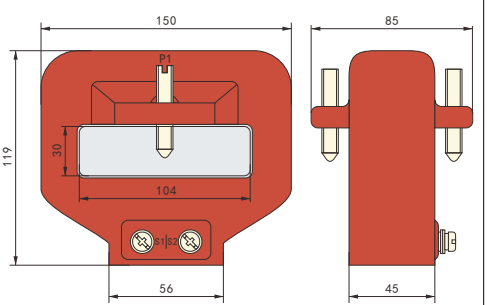
1. LMZ (J) 1-0.66 (rated primary current 100, 150, 200, 250, 300)



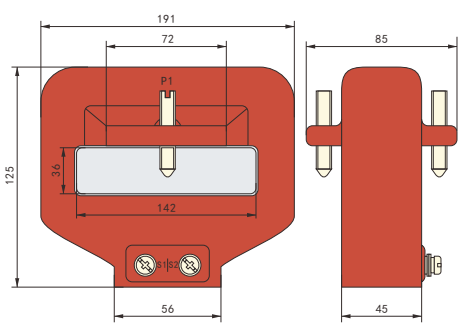
2. LMZ (J) 1-0.66 (rated primary current 400, 500, 600, 750, 800, 1000)



3. LMZ (J) 1-0.66 (rated primary current 750, 800, 1000, 1200, 1500, 2000)



4. LMZ (J) 1-0.66 (rated primary current 2000, 2500, 3000, 4000, 5000, 6000)



LFZ1D-GHY3, LMZ(1D-4D)-GHY3

Series Current Transformer

Application Scope

This type of current transformer is cast in resin and is used indoors for current and energy metering, power measurement, and relay protection in AC 50Hz circuits with a rated voltage of 400V or less.
This product complies with: GB/T20840.1, GB/T20840.2, and Q/GDW1572.

Normal Operating Conditions

1. Installation Location: Indoors
2. Ambient Air Temperature: -5°C to +40°C, with an average temperature not exceeding +35°C.
3. Ambient Humidity: Relative Humidity ≤ 85%.
4. Altitude: Not exceeding 1000 meters.
5. Atmospheric Conditions: Free from contaminants or corrosive agents that could seriously affect the transformer's insulation.

Model and Meaning

L □□□□D - □

- Design Number
- Low-voltage type for power metering
- Structural number, numbered according to the specified drawing
- Z - cast resin insulation
- M - busbar type; F - multi-turn type; W - outdoor type
- Current transformer

Main Technical Parameters

1. Accuracy: 0.2S, 0.5S.
2. Rated voltage: 400V
3. Rated frequency: 50Hz
4. Rated primary current, rated secondary current, rated load, and accuracy are shown in Table 2.
5. Insulation performance: The primary winding must withstand a short-term power frequency withstand voltage of 3kV from the primary winding to the secondary winding and ground, and from the secondary winding to ground.
6. Insulation resistance measurement: The insulation resistance from the primary winding to the secondary winding and ground must be ≥ 100MΩ.
7. The current error and phase difference of the transformer must not exceed the limits listed in Table 1.

Table 1 Basic error limits of current transformers

Accuracy Level	Ratio difference (±)						Phase difference (±)					
	Multiplication factor	Percentage value at rated current					Multiplication factor	Percentage value at rated current				
		1	5	20	100	120		1	5	20	100	120
0.55		1.2	0.45	0.3	0.3	0.3		72	27	18	18	18
0.2S		0.67	0.27	0.12	0.12	0.12		26	11	6	6	6

Structural Characteristics

The transformer core uses an iron-based nanocrystalline alloy strip with high initial magnetic conductivity efficiency and low saturation magnetic density as the 0.2S grade magnetic conductive material. The secondary winding is evenly wound. The middle window is made of engineering plastic, which greatly enhances the insulation of the product. At the same time, it serves as the positioning of the secondary coil, enhancing the appearance and insulation strength of the product. The middle window allows you to see through the primary busbar or wound soft cable.

Installation, Use and Maintenance

1. The instrument transformer can be installed vertically or horizontally.
2. The primary current of the instrument transformer should flow from P1 to the other terminal, and the secondary current should flow from S1 to S2 through an external circuit. The instrument transformer has a negative polarity. The copper wire connecting the secondary terminal to the instrument or relay should have a cross-section of no less than 2.5 mm².
3. When current is flowing through the primary winding, the secondary winding must not be open-circuited to prevent high voltage.
4. During long-term storage, the instrument transformer should be placed in an environment with an ambient temperature of -25°C to +40°C, in a well-ventilated area free of corrosive gases and media. If stored for more than one year, insulation resistance and power frequency withstand voltage tests should be performed. If any changes are observed, the instrument transformer should be dried.

LFZ1D-GHY3, LMZ(1D-4D)-GHY3

Series Current Transformer

Appearance and Installation Dimensions

Models and Specifications	Rated primary current (A)	Rated secondary current (A)	Rated secondary load (VA)	Accuracy Grade	Power factor	Notes
LFZ1D-GHY3	10-60	5	5/2.5	0.2s, 0.5s	0.8	Figure 1
LMZ1D-GHY3	75-150	5	5/2.5	0.2s, 0.5s	0.8	Figure 2
LMZ2D-GHY3	200-500	5	5/2.5	0.2s, 0.5s	0.8	Figure 3
LMZ3D-GHY3	600-800	5	10/3.75	0.2s, 0.5s	0.8	Figure 4
LMZ4D-GHY3	1000-1500	5	10/3.75	0.2s, 0.5s	0.8	Figure 5

Figure 1 LFZ1D-GHY3

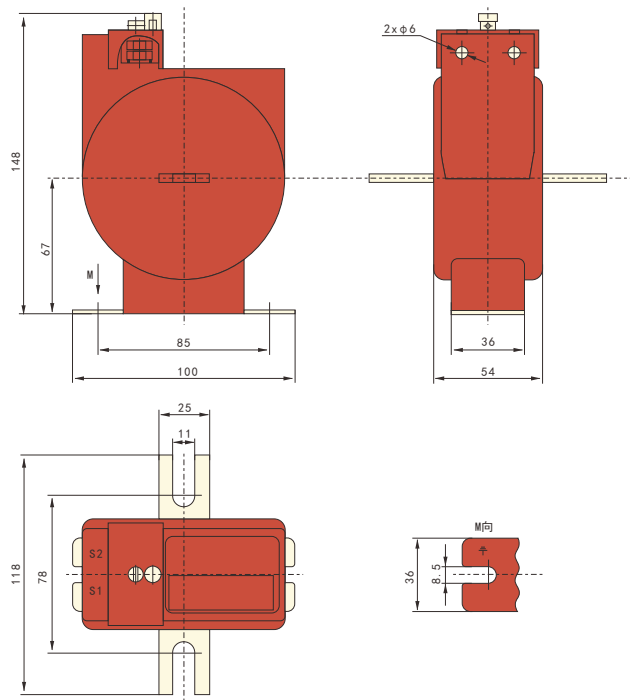


Figure 2 LMZ1D-GHY3

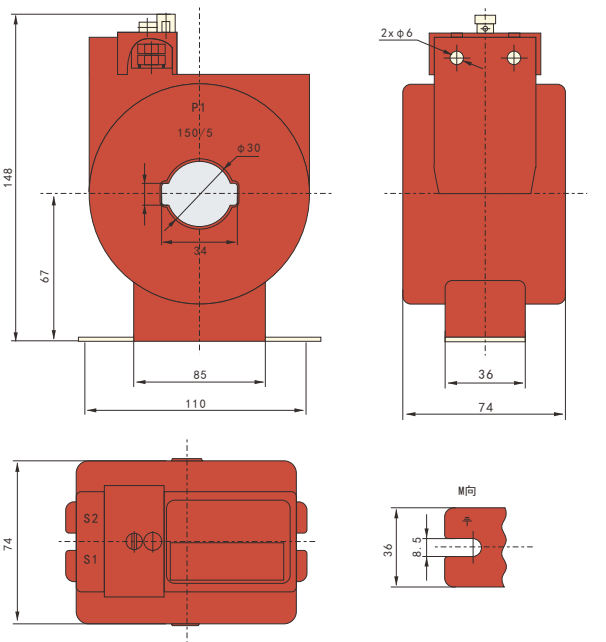


Figure 3 LMZ2D-GHY3

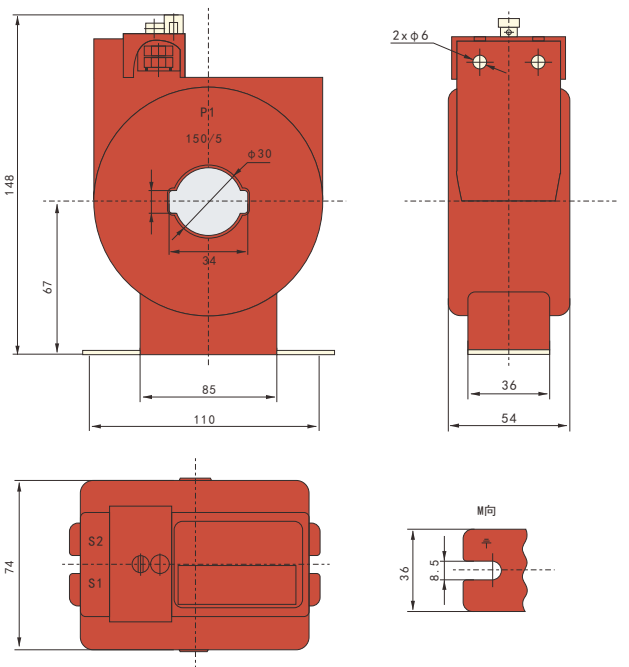
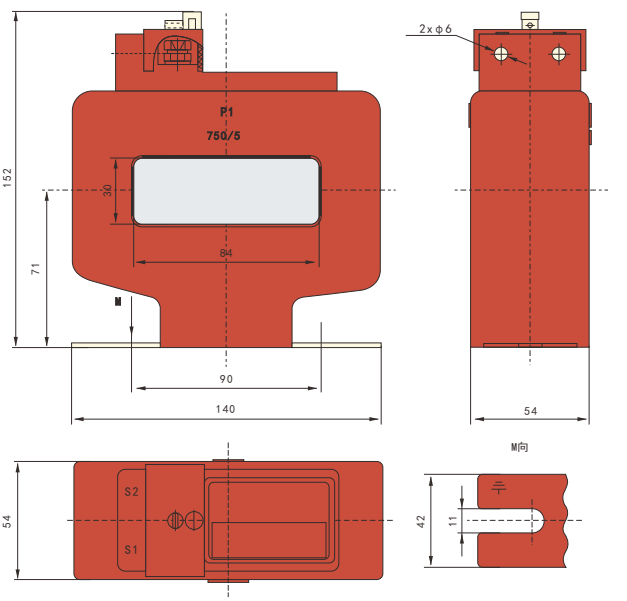


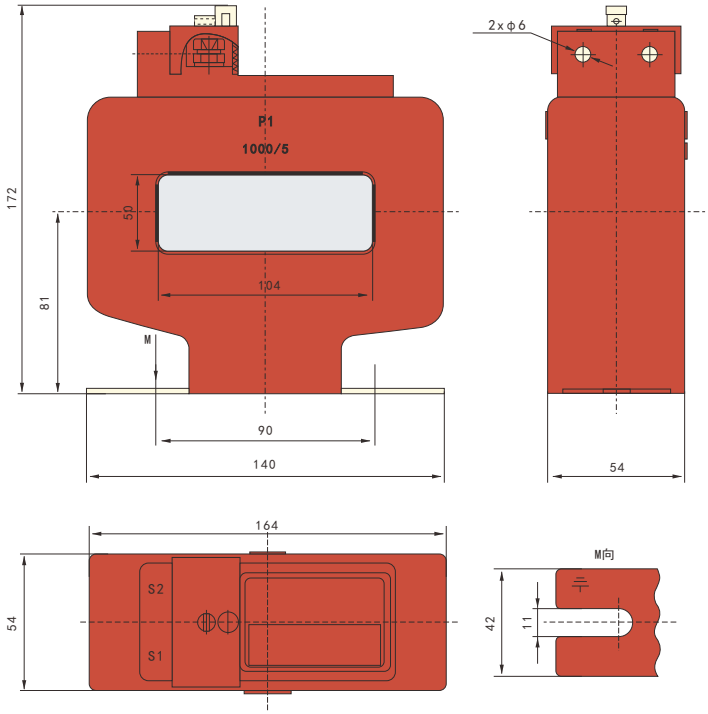
Figure 4 LMZ3D-GHY3



LFZ1D-GHY3, LMZ(1D-4D)-GHY3

Series Current Transformer

Figure 5 LMZ4D-GHY3



GTFP-200

Square Meter Sockets

GTFP-200A/4J

GTFP-200AN/4J

GTFP-200AN/5J

GTFP-125AN/7J

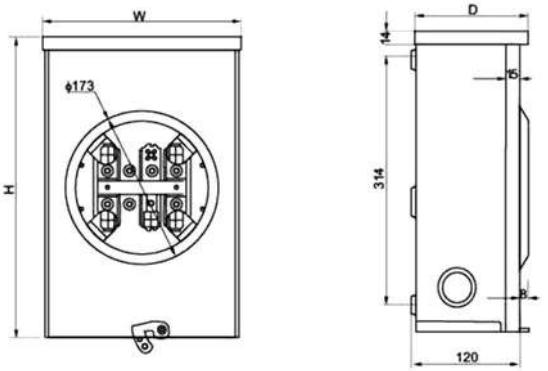
Features

Durable:
Made from 1.2–1.5 mm galvanized steel with a gray powder-coated finish for corrosion resistance.
Voltage Rating:
Supports up to 600V AC.
Spacious Design:
Provides ample room for easy wiring.
Knockouts Available:
Knockouts on the sides, back, and bottom for flexible installation.
Easy Connections:
Features lay-in terminals with pressure plates.
Conduit Sizes:
Compatible with 1" to 2.5" conduit hubs.

Specification

Product Number	Description	Outline Dimensions		
		H	W	D
GTFP-200A/4J	1 Phase, 200A.4 jaw, ring type	412	222	134
GTFP-200A/5J	1 Phase, 200A, 5 jaw, ring type	412	222	134
GTFP-200A/7J	3 Phase, 200A, 7 jaw, ring type	498	235	136
GTFP-200AN/4J	1 Phase, 200A , 4 jaw, ringless type	429	208	130
GTFP-200AN/5J	1 Phase, 200A, 5 jaw, ringless type	429	208	130
GTFP-200AN/7J	3 Phase, 200A, 7 jaw, ringless type	429	208	130
GTFP-20AN/13J	3 Phase, 20A.13 jaw, ringless type	360	210	95

Outline Dimensions



GTFP-200AN/7J

GTFP-200A/7J

GTFP-200

Square Meter Sockets

GTFP-20AN/13J

GTFP-200ARN/4J

GTFP-200AN/4J

GTFP-200ADN/7J

Replacement Block Assemblies

PB200N-4J
Use on GTFP-200AN/4J, GTFP-200A/7J

PB200-4J
Use on GTFP-200A/4J

PB200N-5J
Use on GTFP-200AN/5J

GYFD

Combination Meter Sockets

GYFD-D-125AC

Features

Standard meter sockets are constructed from 1.2-1.5 mm galvanized steel sheets and finished with a baked gray polyester powder coating for enhanced corrosion resistance.

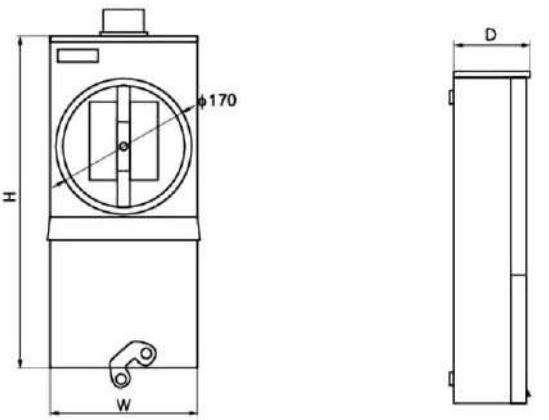
- ◆ Suitable for single-phase systems with a service voltage of 120/240VAC.
- ◆ Ample gutter space allows for easy and organized wiring.
- ◆ Convenient knockouts on the sides, back, and bottom for flexible conduit entry.
- ◆ Lay-in type terminals with pressure plates ensure quick and secure connections.
- ◆ Designed to accommodate conduit hubs ranging from 1"to2-1/2" .
- ◆ Compatible with GE-type circuit breakers.

Specification

Product Number	Description	Outline Dimensions			Matching
		H	W	D	Breaker
GYFD-D-125AC	1 Phase, 125A ,4 jaw, ring type	465	188	114	THQL 2P
GYFD-D-125A	1 Phase, 125A ,4 jaw, ring type	465	188	114	THQL 2P
GCHM2100MR2 125A	1 Phase, 125A ,4 jaw, ring type	510	188	104	THQL 2P
GYFD-S-125A	1 Phase, 125A ,4 jaw, ring type	465	188	104	THQL 2P

GYFD-D-125A

Outline Dimensions



GYFD-D-125AL

PB-GCHM2100MR2 125A

PB-GYFD-D-125A

GYFD

Combination Meter Sockets

GCHM2100MR2 125A

GCHM2100MR2 125A

GTFM-125AL/2T

Stainless Steel Sealing Ring

GSR-1

GSR-2

GSR-3

GSR-4

Product Number	Description	Thickness
GSR-1	Slip lock type	0.35mm
GSR-2	Screw type	0.35mm
GSR-3	Screw type	0.35mm
GSR-4	Screw type	1.5mm

HUB

1"

1-1/4"

1-1/2"

2"

Product Number	Description
HUB- 1"	1"
HUB- 1-1/4"	1-1/4"
HUB-1-1/2"	1-1/2"
HUB- 2"	2"

HY □□

Series Electricity Metering Box

Application Scope

The HYPX, HYSX, and HYBX series electricity meter boxes (hereinafter referred to as "meter boxes") are suitable for measuring energy in indoor power distribution circuits operating at 50 Hz, with a rated operating voltage of 400/230 V AC and a rated current up to 250 A. Circuit breakers can be installed on incoming or outgoing lines for overload, leakage, and short-circuit protection.

The HYPX, HYSX, and HYBX series electricity meter boxes comply with national standards: GB 7251.1, GB 7251.3, and Q/GDW 11008.

Normal Operating Conditions

1. The ambient air temperature must not exceed +60°C, with an average temperature not exceeding +35°C and a minimum stable temperature not below -25°C.
2. At a maximum temperature of 40°C, the relative humidity must not exceed 75%. At lower temperatures, a higher relative humidity is permitted.
3. Pollution Degree must not exceed 2.
4. The altitude must not exceed 2000 meters. 3.5 The meter box should be installed vertically in a place without obvious shaking or vibration, and should be protected from direct sunlight and rain and snow.

Main Technical Parameters

1. Meter boxes are available in polycarbonate (PC) and ABS non-metallic, SMC fiberglass reinforced plastic (SMC), and stainless steel metal versions. Customized with molded case circuit breakers, electricity meters, and miniature circuit breakers, these are available.
2. Meter boxes are available in surface-mounted or concealed-mount versions, with enclosure protection ratings of IP44 (IP20C for the operating surface).
3. A dedicated junction box is used within the meter box for simple wiring and reliable operation.
4. The meter box's incoming wiring can be single-phase or three-phase, with a rated operating voltage of 400/230V AC and a rated operating current of up to 250A.
5. Rated short-time withstand current (ICW): HYPX: 6kA, HYSX: 9kA.

Model and Meaning

HY □

- PX: PC+ABS non-metallic metering box
- SX: SMC non-metallic metering box
- BX: Stainless steel metal metering box
- Company Code

Use and Maintenance

1. If the user installs their own electricity meter in the meter box, it must comply with national standards and be calibrated. The wiring terminals must be securely fastened.
2. If the meter box is used in areas prone to thunderstorms, lightning protection measures should be implemented at the installation site to reduce the risk of component damage from lightning strikes.
3. The meter box casing should always be kept clean and dry to minimize dust intrusion.

HUJX-F

Series Stainless Steel Metering Box

Application Scope

Application – For indoor power distribution circuits (50 Hz), rated voltage 380/220 V AC, rated current up to 315 A. Supports installation of circuit breakers on incoming or outgoing lines for overload, leakage, and short-circuit protection.

Standards – Complies with GB 7251.1 and GB 7251.3.

Normal Operating Conditions

1. Ambient temperature: max 40°C, average ≤ 35°C, min stable ≥-5°C.
2. Relative humidity: ≤ 50% at 40°C; higher humidity allowed at lower temperatures.
3. No persistent conductive contaminants (e.g., conductive dust).
4. Install vertically, away from strong vibration, direct sunlight, rain, and snow.

Model and Meaning

HU JX - □

- F: Stainless steel housing
- Electricity meter box
- Company code

Main Technical Parameters

1. Construction – Stainless steel enclosure, equipped with molded case circuit breaker (MCCB), energy meter, and miniature circuit breaker (MCB) as required.
2. Mounting Options – Available in surface-mounted or concealed-mounted versions. Enclosure rating: IP40; operating surface rating: IP20C.
3. Wiring – Includes a dedicated junction box for simple wiring and reliable operation.
4. Electrical Parameters – Supports single-phase or three-phase wiring; rated voltage 380/220 V AC, rated current up to 315 A.

Operation and Maintenance

1. If the user installs their own electricity meter in the meter box, it must comply with national standards and be calibrated. The wiring terminals must be securely tightened.
2. If the meter box is used in areas prone to thunderstorms, lightning protection measures should be implemented at the installation site to reduce the risk of component damage due to lightning strikes.
3. The meter box casing should always be kept clean and dry to minimize dust intrusion.

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