Acrel

DTSD1352-xSyD Series Rail Type Multiloop Powermeter

CE

General

DTSD1352-xSyD series rail type multi-loop power meters are mainly used for measuring the full electric parameters of multiple three-phase circuits,Up to X three-phase loopand Y one-phase loop current inputs can be connected simultaneously.It Can measure voltage and current, power, power factor, phase angle, unbalance, harmonic and other parameters.

Product Specification

◆ Topic module naming rule

DTSD1352-xSyD

- x-channel three-phase current circuit、y-channel single-phase current circuit
- Ankeri product series

◆ Specification and model of matching transformer

Voltage specification	Instrument model	Current specification	Matching current transformer	note
3×220/380V	DTSD1352 - xSyD	3×250A	AKH-0.66/W-20Y Class 0.2	For three phase
		3×100A	AKH-0.66/Z-15Y Class 0.2	For three phase
		1×100A	AKH-0.66/W-12Y Class 0.2	For single phase

◆ Technical parameter

Auxiliary power supply		AC/DC 85～265V;power consumption≤10VA	
Input signal	Frequency	45～65Hz	
	voltage	Rated value:AC 3×220V/380V	
		Overload:1.2 times rated value（continuous）	
		2 times rated value/1 second	
		Power consumption:≤ 0.5VA（per channel）	

| Input signal	Current	Rated value:AC 250A,100A;(external closed port transformer)
		Overload:1.2 times rated value（continuous）
		10times rated value/1 second
		Power consumption:≤ 0.5VA（per channel）
Measurement accuracy		Frequency 0.05Hz,voltage and current class 0.5, active energy class 1,reactive energy class 2
		2-31 harmonic accuracy：±1%
Function	Pulse output	Output mode:optocoupler pulse with open collector (one out of two with active input)
Function	Communication	RS485 interface、Modbus-RTU protocol/QZTT 1017-2015 technical specification for China Tower smart meter
		Baud rate 1200～38400
	Switch-ing value	Input	4-channels passive dry contact input,built-in power supply
			2-channels active wet node input,identify engine oil and power connection(or pulse output)
		Output	Output mode:relay normally open contact output
			Contact rating:AC 250V/3A DC 30V/3A
Security	Power frequency withstand voltage	>AC 2kV/1min
	Insulation resistance	Input and output end to housing
Environment		Working temperature:-20℃～+60℃
		Storage temperature:-40℃～+70℃
		Relative humidity:≤95% no condensation
		Altitude:≤2500m
Electromagnetic compatibility		Better than level 3

◆ Product function

Function	Description
Measurement of energy	All electrical parameters of x-channel three-phase and y-channel single-phase circuits are measured
Electrical parameters	U、I、F、P、Q、S、PF
Harmonic	2-31st voltage and current harmonic
Extreme value record	U、I、P
Alarm output	Over voltage、Over current、Phase break、DI linkage
Rate setting	4 rate time zone 14
Pulse output	Output mode：optocoupler pulse with open collector(one out of two with active input)
communication	RS485 interface、Modbus-RTU Baud rate 1200～38400
DI	4-channels passive dry contact input,built-in power supply 2-channels active wet node input,identify engine oil and power connection(or pulse output)
DO	Output mode:relay normally open contact output Contact rating：AC 250V/3A DC 30V/3A；

Installation and operation instruction
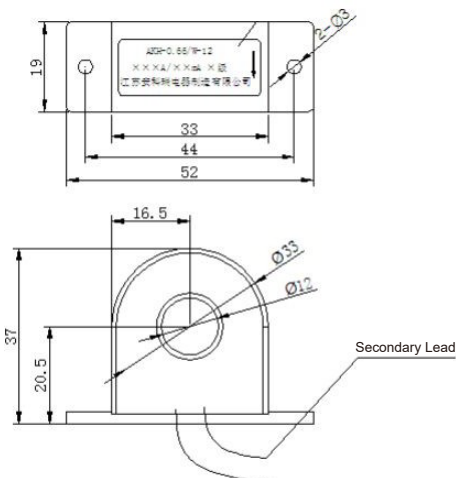
◆ Dimension and installation

unit:mm

(1)DTSD1352 - xSyD series main part dimensions
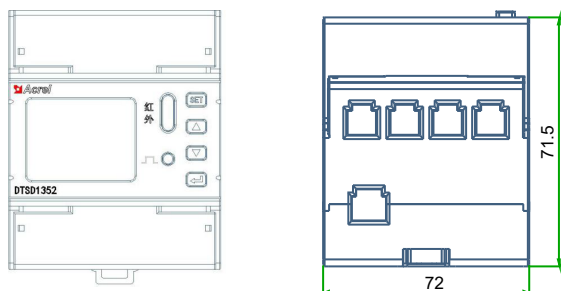
unit:mm

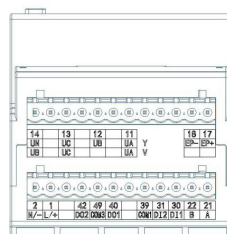| Single module	Dimension				Rail size	tolerance
	long	width	high	Withterminal length		
	87.8	72	71.5	97.7	35	±1

(2)dimension of transformer

unit:mm

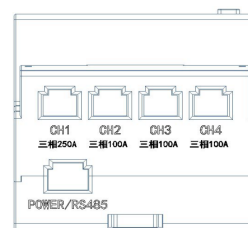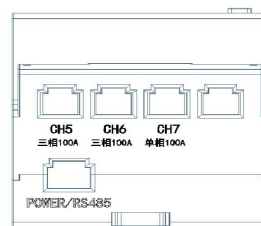Note: three transformers of three-phase circuit share the same harness.

◆ Wiring
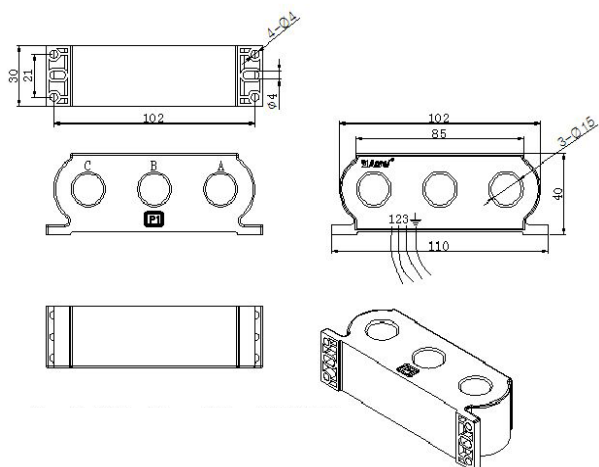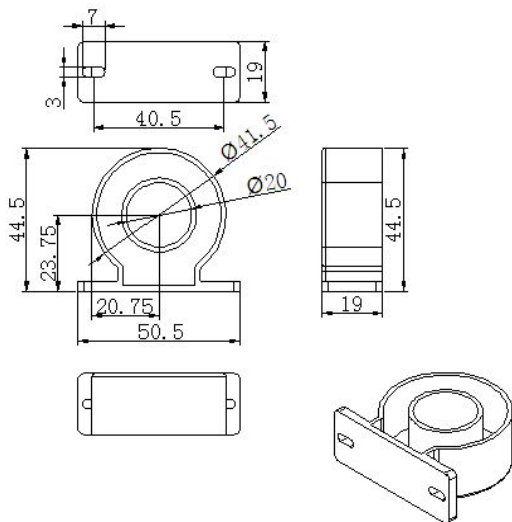
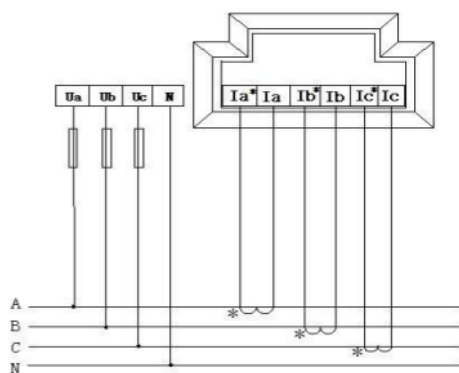Upper terminal of module   Lower terminal block of module 1
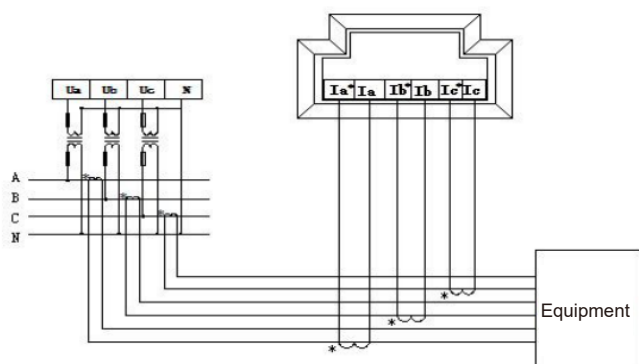

Lower terminal block of module 2
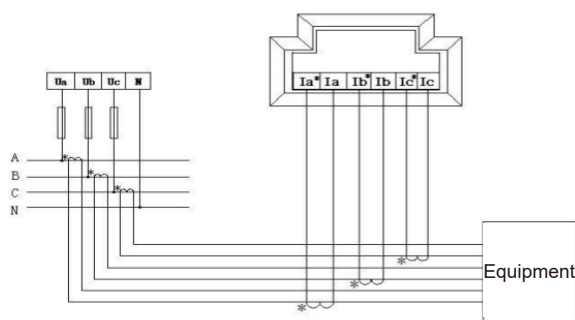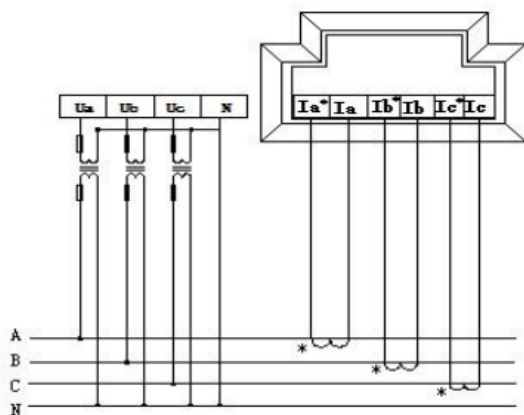

Three phase four wire (current secondary input)

Installation and operation instruction

Three phase four wire (direct current input)
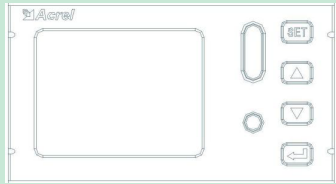

Three phase four wire (secondary connection of voltage and current)

Three phase four wire (direct connection of voltage and current)
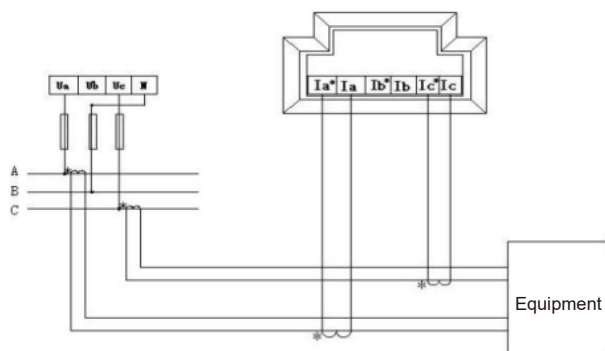
Three phase three wire (current connected through transformer)

Three phase three wire
(voltage and current connected through transformer)

◆ Operation guide

Panel description

SET key	In measurement mode, press this key to enter programming mode. The meter prompts for a password. After entering the correct password (0001), the meter can be programmed. In programming mode, it is used to return to the previous menu.
Up key(▲)	In measurement mode, for switching circuits; In programming mode, it is used to switch the number of digits in the same level menu or data
Down key(▼)	In measurement mode, it is used to switch display items; In programming mode, it is used to switch the menu of the same level or increase the number of digits.
ENTER key	In measurement mode, it is used to switch display items; In programming mode, it is used to confirm the selection of menu items and confirm the modification of parameters.

Installation and operation instruction