DTZY858 Type

3-phase tariff-control smart meter



1.Application

DTZY858 3-phase 4-line tariff control intelligent meter consists of measure unit,data process unit, communicate unit, has energy amount measure, data storage and process,real-time monitor,auto -control,information interactive. This product adopts the micro-electronic technology,computer technology, electric measure technology,data communicate technology. The function can be realized likes measure using energy data, kinds of events, load control by equipped with internal relay or external relay. It has impulse output,RS485 communicate port,wireless remote communicate mode,\ selectable remote or local tariff control mode, has easy using and maintains.

2.Technical index

1) Accuracy level: Active 1.0 level, 2.0 level, Reactive 2.0 level , 3.0 level
2) Rated power: 50Hz
3) Shape dimension 290mm(height) x 170mm(width) x 85mm(thickness)
4) weight: about 3kg
5) basic specification

Model No.	Type	refer voltage Un	rated current In	pulse constant (Imp/kWh imp/kvarh)
DTZY858	3-phase 4-line	3×220/380V	3×1.5（6）A	800
			3×5（60）A	400
			3×20（80）A	200
			3×30（100）A	200

◆ Electrical parameter

operate votlage	0.8Un~1.2Un (1-phase) 0.70Un~1.2Un (Combined element)
ultimate voltage	0.60Un~1.3Un
voltage circuit consumption(each phase)	≤1.5W和1.3Un
remote communicate voltage circuit consumption	≤8W
current circuit consumption(each phase)	<0.2VA
clock battery	3.6VDC≥1200mAh
power-off read battery	6VDC≥1400mAh

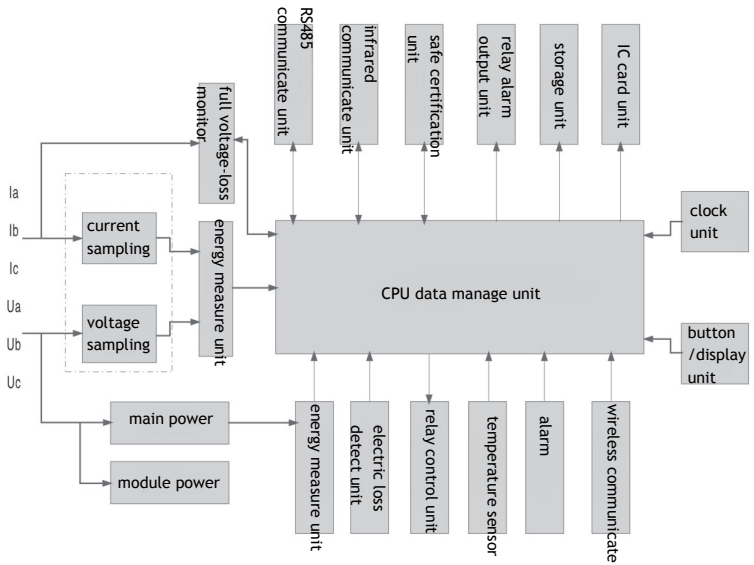
◆ Other parameter

Clock Accuracy	≤0.5s/d (23℃)
measure range	0.999999.99kWh, 0.999999.99kxarh
remote communicate mode	485 communicate,wireless communicate
tariff control mode	local, wireless
communicate wave radio	RS□：1200bps~9600bps,default2400bps infrated communicate□：1200bps、2400bps
Communicate protocol	《DL/T645-2007 》

◆ weather

normal temperature	-25℃~+60℃
ultimate temperature	-40℃~+70℃
storage and transportation temperature	-40℃~+70℃
storage and transportation humidity	<75%

3.Operate principle



Flg1 Operate principle diagram

Energy measure unit process the measure sampling value,through sample integral and software filtering calculate to have voltage,current; through samples multiple calculate to have relative instantaneous power; through the integral of instantaneous power to have the energy of one period, through the Fourier transform to calculate the basic wave energy and voltage-current 2~21 time harmonic wave data;

CPU data measure unit is core of system, integrate each unit resent date to produce the needed data of energy, amount,instantaneous measure, and to realize the function of time sharing charging management,using event manage,user data display, history data manage, user data communicate manage, meter data safety manage, control manage.

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4.Install method

◆

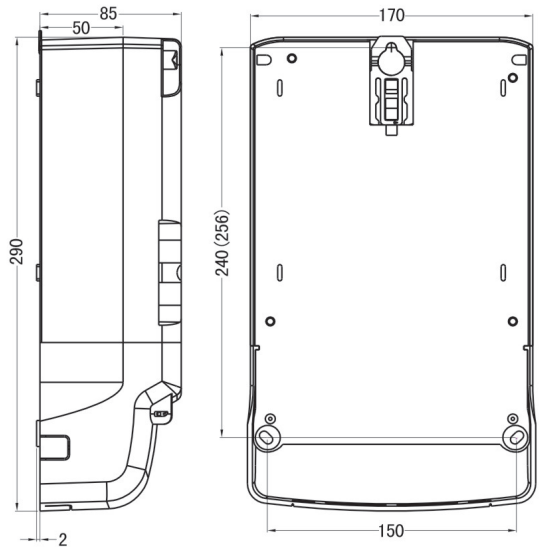


Fig2 Meter install dimension

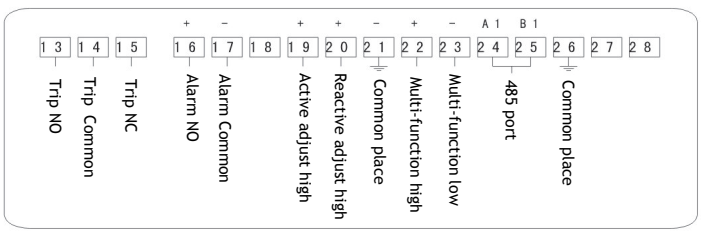
◆ install method

1. install place shall be dry, Ventilated indoors or the meter cabinet.
2. if need to remove meter,please open the meter lower shell.
3. please open 3 install holes for basic board according to install dimension
4. meter shall have no hook screw hole, fixing by M4 x 10, meter lower has 2 install holes,fixing by PA4 x 10 or PA4 x 12 self-tapping screw.

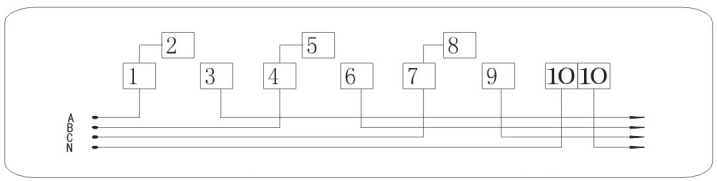
4. Wiring mode

Please wiring according to the following diagram,ensure that input voltage-current lower than meter ultimate parameter,to avoid the damage or unnormal operate. please adopts the lighten protect measure in the lighten area.

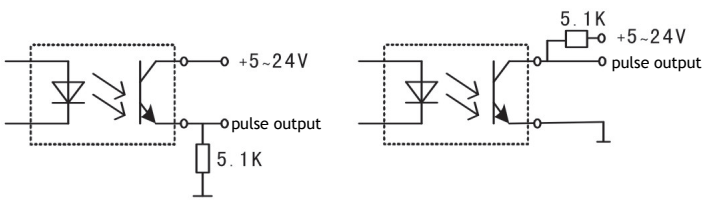
◆ functional terminal wiring diagram(for reference)



◆ 3-phase 4-line power terminal diagram



◆ Active,Reactive pulse test port wire diagram



inner Optocoupler output（Vcc=5V(12V，24V)R=Vcc/5mA(KΩ)）

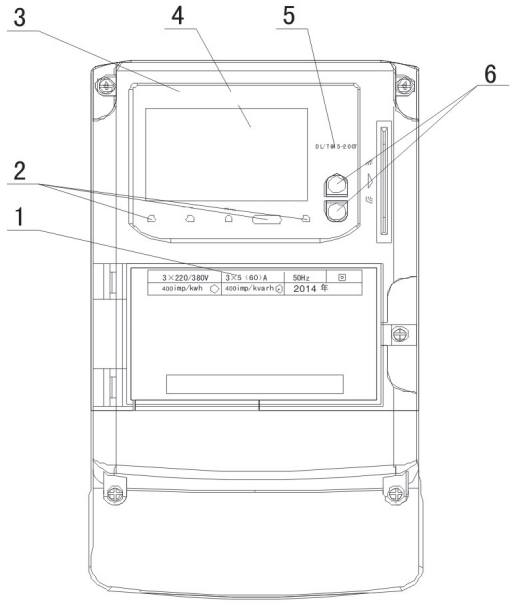
◆ Multi-function port output wire diagram

5.Date instruction

◆ shape

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No.	instruction
1	parameter indicate of rated current,voltage ,constant,etc ①② is accuracy level, □ is II type protect insulation package meter
2	indicator and infrared communicate port
3	indicate meter name and information
4	LCD area: LCD screen 85 mm(long) x 50 mm(width)
5	communicate protocol
6	up and down button, to query set the display item