DSSY858/DTSY858型

three-phase electronic pre-paid meter



1.Application

DSSY858/DTSY858 series three-phase electronic prepaid meter,conforms to standard of IEC 62053-21-2003,IDT,Using single chip process system to make data collect ,process and storage. This product is applied to measure rated frequency 50Hz or 60Hz three-phase active electricity. Main characteristic: applied to computer management,first pay then use. Within the rated current range,it can limit max using power rate (by power -supply department).One meter with one card for special using,and loss card can be reapplied without losing electricity. The card can bidirectionally transfer data. It can automatically cut power off to alarm user to purchase electricity. When the electricity is running off,it automatically breaks and cut power off. And it has certain antitheft function design.

This meter is suitable to ambient temperature -20°C~+50°C,relative humidity shall no more than 85%.

2.Main technical parameter

Model No.	Type	Reference voltage Un	Rated current In	make and break function
DSSY858	3-phase 3-line	3×100V	3×1.5(6)A	external AC contact or shunt release
			3×3(6)A	
		3×380V	3×1.5(6)A	
			3×3(6)A	
			3×2.5(10)A	Internal control switch
			3×5(20)A	
			3×10(40)A	
			3×15(60)A	
			3×20(80)A	
			3×30(100)A	external AC contact or shunt release
DTSY858	3-phase 4-line	3×57.7/100V	3×1.5(6)A	
			3×3(6)A	
		3×220/380V	3×1.5(6)A	
			3×3(6)A	
			3×2.5(10)A	Internal control switch
			3×5(20)A	
			3×10(40)A	
			3×15(60)A	
			3×20(80)A	
			3×30(100)A	external AC contact or shunt release

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basic error(Balance load error limit)

current		power factor(COSΦ)	basic error%	
direct connect	through transformer		1	2
0.05Ib≤I<0.1Ib	0.02Ib≤I<0.05Ib	1.0	±1.5	±2.5
0.1Ib≤I≤Imax	0.05Ib≤I≤Imax	1.0	±1.0	±2.0
0.1Ib ≤ I <0.2Ib	0.05Ib ≤ I <0.1Ib	0.5(inductive)0.8(capacitive)	±1.5	±2.5
0.2Ib ≤ I <Imax	0.1Ib ≤ I <Imax	0.5(inductive)0.8(capacitive)	±1.0	±2.0

Note: Ib for rated current,Imax for max current

Voltage range

normal operate voltage	0.9Un-1.1Un
ultimate operate voltage	0.8Un-1.15Un

Power consumption

voltage circuit consumption	≤2W 和 10VA
current circuit consumption	≤4.0VA

start

under reference voltage,reference frequency and COSΦ=1.0,meter of load current is 0.004Ib(1 level),0.005Ib(2 level) can constantly measure.

shunt running

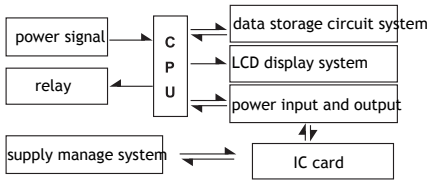
when voltage circuit with 115% rated voltage,current circuit have no current, meter test output shall no more than 1 impulse.

3.Operate principle

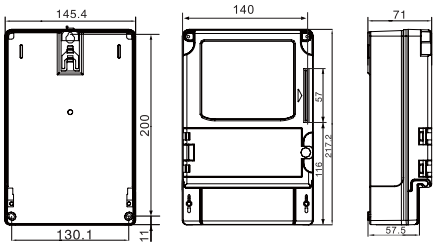
DSSY858/DTSY858 three-phase electronic type prepaid meter adopts large scale circuit,16 bit A/D convert, Digital multiplier, Digital sampling and processing technology and SMT technology.

◆ operate principle diagram

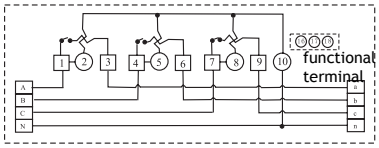
In the Meter, Collecting voltage sample and current sample by voltage divider and current divider,through multiplier,to have voltage current multiple signal,through frequency convert to produce one count impulse which frequency is proportional to the product of voltage and current.



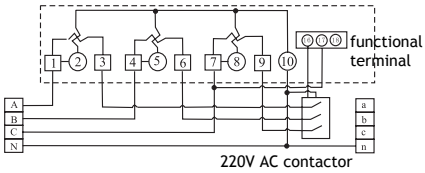
4.Install and shape dimension



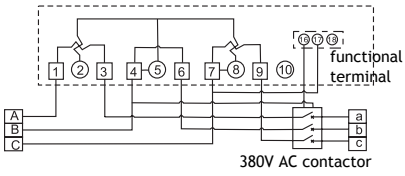
shape dimension diagram



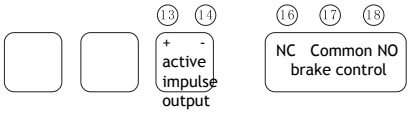
3-phase 4-line direct wiring diagram
(with internal control switch)



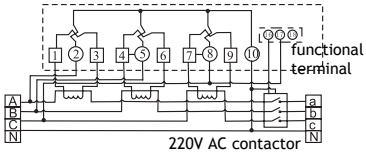
3-phase 4-line direct wiring diagram



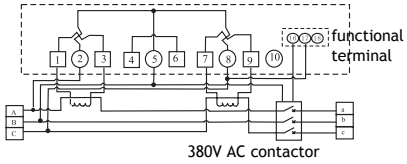
3-phase 3-line direct wiring diagram



functional terminal wiring



3-phase 4-line transformer type wiring diagram



3-phase 3-line transformer type wiring diagram