CHORDN

Three phase power analyser user manual

Product description

Three phase power analyser with key-in setting is especially applicable to variables display and parameter measurement in the primary loop and the secondary loop.
Panel mounting. Panel protection level: IP40.
Alarm output with over current and over voltage;

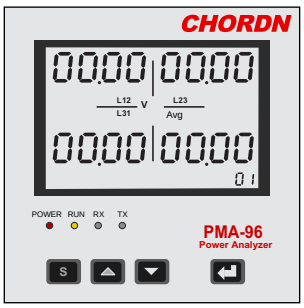
Application

Multi-function smart meter is mainly used in three-phase four-wire power system, can measure voltage, current, frequency, power factor, active power, reactive power, apparent power, electric energy and so on. By communicating with the main computer through RS485 communication interface and cooperating with the main computer, it forms a large and medium-sized data acquistion system.

Features

High accuracy timely measurment, good reliability, good protective performance.
Measurement method: TRMS type. Wave form: distorted wave. RS485 output.
CT5(10)AAC and PT conncetion.

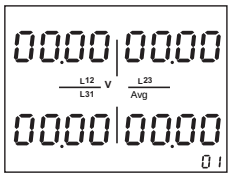
Display panel instruction



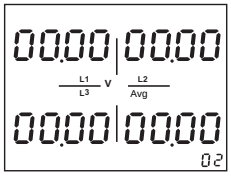
Measuring display panel instruction

When the power analyser connects to the power and the power indicator lights up, it occurs the measuring display panel. Press ▲ or ▼ key to scroll the display, 14 pages in total.

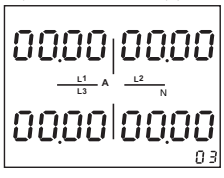
1. Three-phase line voltage and average voltage displayed



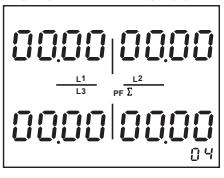
2. Three-phase voltage and average voltage displayed



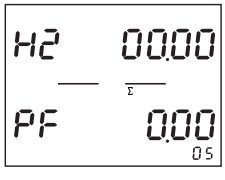
3. Three-phase current and netural current displayed



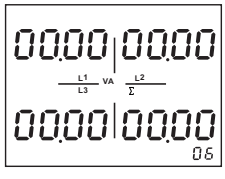
4. Three-phase power factor and its average displayed



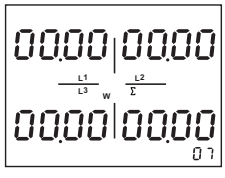
5. Frequency and total power factor displayed



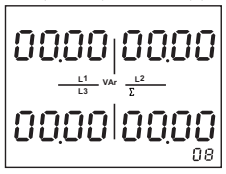
6. VA of each phase and the total displayed



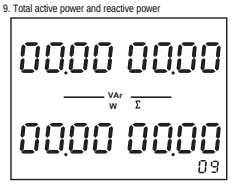
7. Active power of each pahse and the total displayed



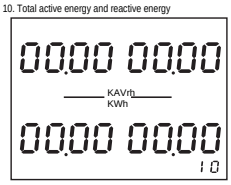
8. Reactive power of each phase and the total displayed



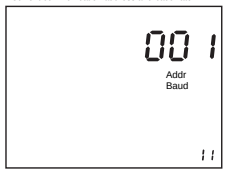
9. Total active power and reactive power



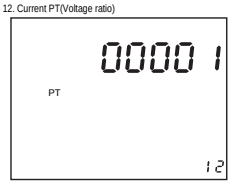
10. Total active energy and reactive energy



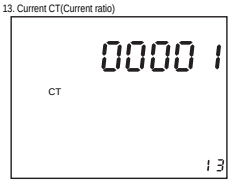
11. Current communication address and baud rate



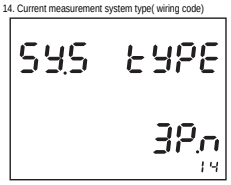
12. Current PT(Voltage ratio)



13. Current CT(Current ratio)



14. Current measurement system type(wiring code)

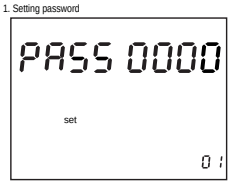


Parameter setting

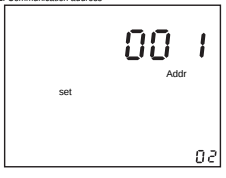
Press ↵ to access to the setting interface, press "s" to corresponding character blink,use ▲ or ▼ to modify value. Then press "s" to the next character, press ↵ to confirm after completing input action, default password is "0000". If the password is not "0000", please input the actual password.
If the password is correct, press ▲ or ▼ switch different interfaces. Setting the paramete of the interface, press "s", then press ▲ or ▼ to modify the value and press ↵ to confirm. Press "s" and ▲ to return to the measurement interface after setting all the parameters.

Parameter setting

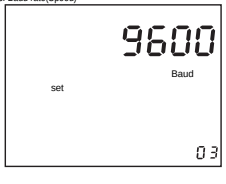
1. Setting password



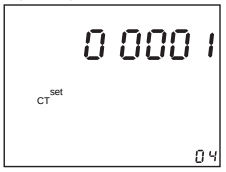
2. Communication address



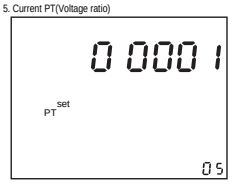
3. Baud rate(Speed)



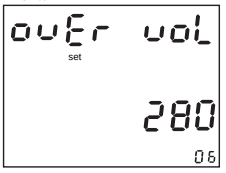
4. CT (Current ratio)



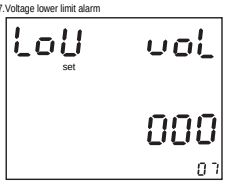
5. Current PT(Voltage ratio)



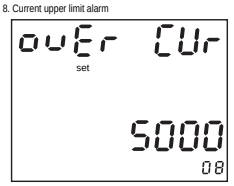
6.Voltage upper limit alarm



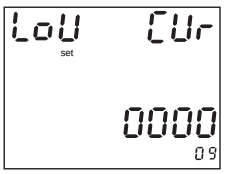
7.Voltage lower limit alarm



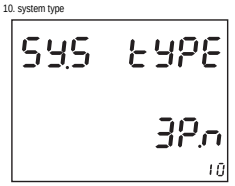
8. Current upper limit alarm



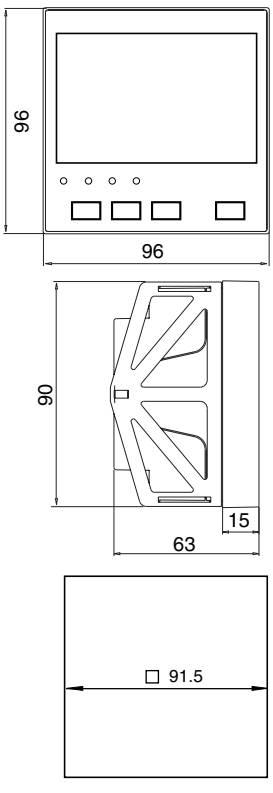
9. Current Lower Limit Alarm



10. system type



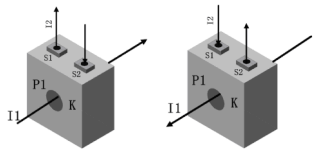
Dimensions(mm)



Pin instruction

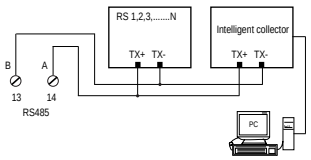
NO.	Name	Instruction
1	L	220V AC firing line
2		Useless
3	J	220VAC Neutral line
4		Earthing
5	DI1	Digital input 1
6	DI2	Digital input 2
7	DI3	Digital input 3
8	DI4	Digital input 4
9	COM	Digital input: Ground
10	DO1	Alarm output(Voltage)
11	DO2	Alarm output(Current)
12	DGND	Digital output: GND
13	B	RS485 B
14	A	RS485 A
15	N	Neutral line
16		Useless
17	L1	Three-phase four wire of A
18		Useless
19	L2	Three-phase four wire of B
20		Useless
21	L3	Three-phase four wire of C
22		Useless
23	I1+	A phase current transformer secondary output in
24	I1-	A phase current transformer secondary output out
25	I2+	B phase current transformer secondary output in
26	I2-	B phase current transformer secondary output out
27	I3+	C phase current transformer secondar output in
28	I3-	C phase current transformer secondary output out

⚠ Voltage alarm: upper limit and lower limit alarm, 0-600V adjustable.
Current alarm: upper limit and lower limit alarm, 0-6A adjustable.



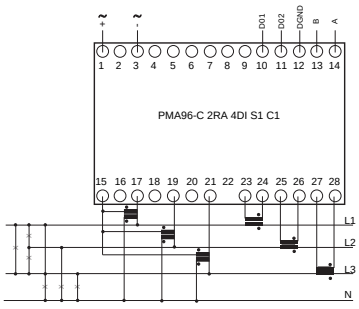
⚠ The polarity connection of the CT must be carried out according to the diagarms shown above, so that the power analyser can measure accurate data. If the measured data is abnormal, the possible reason is that the primary and the secondary line of the current transformer is reversed.

Wiring diagarm of RS485

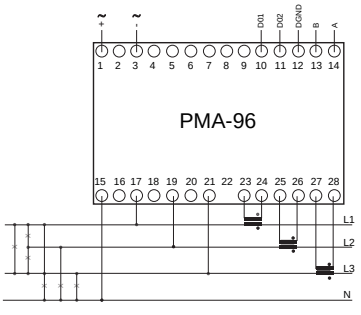


⚠ Disconnect power source before wiring.
In order to make wiring secure and steady, the torque of wiring terminal should be kept between 2Nm and 6Nm.

Wiring diagram of Three-phase four wire power system



3CT & 3PT Connection



3CT Connection