Power Factor Meter

UMP

Features

True power system design complaints
ANSI-IEEE, IEC & VDE standards
High over capability to assure reliable operation
High accuracy 0.5%
Display with super rate LED

Applied rules & standards

Measuring & conversion	IEC 688
Dielectric strength	IEC 688
Impulse & Surge test	ANSIC37.90/1989, IEC 255-3
Adaptability-power system	IEC 0110
Measuring reliability	VDE 3540

Description

Model UMP Power factor meter, designed of a balance type with universal & flexible application feature, can be applied to measure single phase 2 wires, 3 phase 3 wires & 3 phase 4 wires only under the specified terminal connection. The units accept ac voltage & current inputs with detection of phase relation between the measured phase voltage & phase current of power factor COSΦ for UMP .
The designed specifications compliant ANSI, DIN & VDE standards with full protection for unusual surge intrusion and input over assuring reliable operation.

Specification

Accuracy (23±3℃)	0.5%fs + 0.2° > 20% input current, 0.5%fs + 0.4° > 10% input current
Stability	Temperature coefficient < 50 ppm per degree c, long term draft < 0.2% per year
Display & resolution	0.56" super rate LED, 0.0001-1.0000 for PF
Response time	Sample rate 1 of per sec. typically
Input over	Current input : 3 x rating - continuous, 10 x rating - 30 sec., 25 x rating - 3 sec. Voltage input : maximum continuous 750V or 1.5 rating which ever great
Frequency	40-70 Hz
Dielectric strength	2.5 KVrms / 1 minute input / power / case
Surge test	ANSI C37.90/1989, IEC 255-3 (1989)
Impulse	Voltage 1.2 x 50us 4KV, oscillation wave 0.5us-100KHz 3KV or 1MHz-0.25 ms 2.5KV
operating condition	Temperature range -10 to 55℃, 0-99% RH non-condensed, storage -25 to 70℃
Auxiliary power	AC/DC version < 3.5VA, DC option 24V ±20% < 5 watts

HSIANG CHENG

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Power Factor Meter UMP

Order form

System / Function / Models

1 phase 2 wires
3 phase 3 wires
3 phase 4 wires
Power Factor UMP □ □ □

Frame (in mm)

96 x 48	U

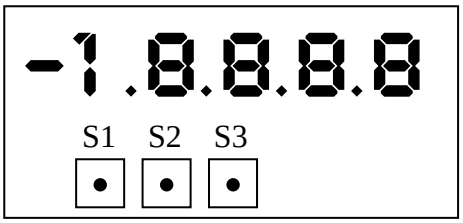
Auxiliary Power

AC / DC 30~250V	S
DC 24V ±20%	1

Voltage & Current input

Defined range	Effective range	
75~280V / 0.5~5A	50~300V / 0.25~7.5A	1
75~280V / 0.1~1A	50~300V / 0.25~1.25A	2
180~500V / 0.5~5A	150~600V / 0.25~7.5A	3
180~500V / 0.1~1A	150~600V / 0.25~1.25A	4

Function Key



S1 : Exit the setting and return to mode of measurement

S2 : Increasing value or Select Type

S3 : Enter the setting or next figures

ɹ : Keying Sx (S1、S2、S3)

Enter Setting：

1. Enter Password

ɹS3 → PS → ɹS3 → 0000

2. Write Password (0011)

0 ɹS3 → 0 ɹS3 → 1 ɹS2 → ɹS3 → 1 ɹS2 → ɹS3

3. Select Type

(UMP) 3 φ 4W 3-4

ɹS2 ↓ ɹS2

(UMP) 3 φ 3W 3-3

4. Escape Setting and Save

ɹS1

PS : When system is 1 phase 2 wires, the type select to 3 φ 4W

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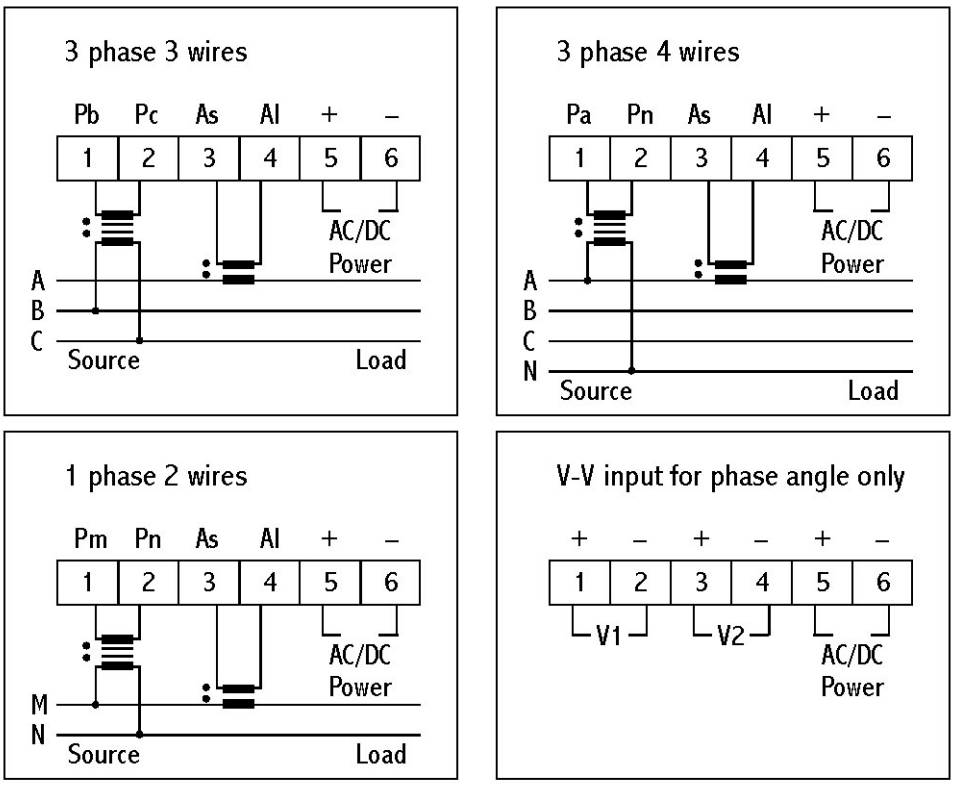
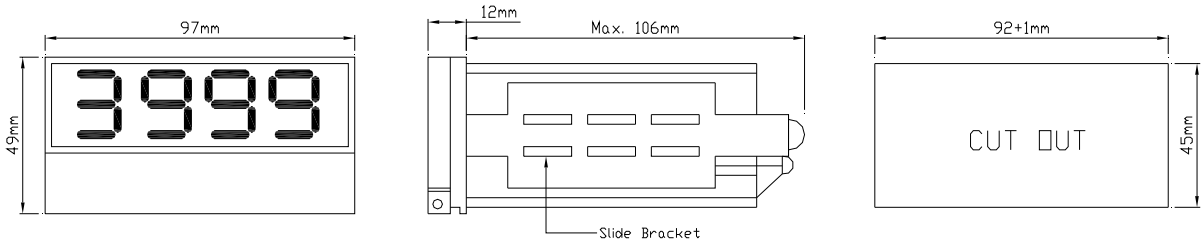
Wiring



Dimension

U type



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