Power Meter

EPM 7200

Introduction

About Power Meter EPM 7200

EPM 7200 power meter is conceptualized as an intelligent and revolution the to the traditional single function power meters. This EPM 7200 is a new compact (96 x 48mm), electronically advanced and programmable rotating display metering device. Provide on-site multiple choice display. One machine for multiple purposes.

Environmental Impact & Cost Saving

The EPM7200 is able to replace many units of conventional analog or digital instruments. The parameters such as Volt, Freq, A, KVA, KW, PF, KWH, KVarH, can be displaying by set through the communication terminal on the front of the meter.(Please pay attention to the measurement cycle reference voltage frequency. If the voltage is not input, the Nominal frequency will be used for calculation). This saves on the wiring material usage and reduces the cost on metering needs.

More Convenience

The EPM7200 is specifically designed to be compatible with DIN standard panel instruments (It fits the DIN 92 x 44 mm panel cut out holes).
The power meter EPM 7200 is greatly reduced cabling complexity and time. It is also a standardize hardware suitable for either 3 phase 3 wires or 3 phase 4 wires networks.

Improved Technical Superiority and Reliability

The EPM7200 is built-in with specialties such as overload capabilities, accuracy levels, long term stability, readout dependability etc. To overcome the critiques of traditional digital meters, the power meter EPM 7200 supports a LCD screen with "8" digitals readouts.

Programmability

The programmable EPM 7200 is able to set e.g. CT and PT ratio, meter's display, etc. either through maintain port on the front panel with a communication module RX-024 made by HCE..

*Communication converter needs to be order separately.

Memory for all setup and energy data

With this EPM7200, all of the meter status setting and energy data are retaining in memory while power failure situation. The EPM 7200 records including the watt-hour that been measured, PT and CT ratio, the measured system configuration, displaying setting, and related parameters.

Features

- Multi-page display on Switchgear
- Maximum 580V
- True RMS conversion
- LCD display
- Field programmable PT / CT ratio
- Memory for all setup and energy data
- Low input burden 0.2VA (5A/120V)
- Wide power supply range 80~260V AC / DC
- Compact physical configuration
- Compatible for DIN&ANSI cutout
- 2KV RMS input / power isolation

HSIANG CHENG ELECTRIC CORP.
4F., No.11, Ln. 235, Baoqiao Rd., Xindian Dist., New Taipei City 231, Taiwan
TEL : 886-2-29175865~9 FAX : 886-2-29173946 E-mail : expo.sales@hc.com.tw

Model & Ordering Number

Model : EPM 7200

Ordering : EPM 7200 — A — 5.0A — H

Version

Current Input
1.0A
5.0A

Power
H : AC 80-260V, DC 80-330V
L : DC 24-60V

Specification

Programmable measurements / Accuracy / Display readouts

Parameter	Digital	Display (maximum)	Accuracy	L1	L2	L3	Total	Average
V x 3	4	9.9.9.9. V / KV	0.5% fs	V1	V2	V3		VE
A x 3	4	9.9.9.9. A / KA	0.5% fs*	A1	A2	A3		AE
Watts	4	9.9.9.9. W / KW / MW / GW	1% fs	W1	W2	W3	W	
Vars	4	9.9.9.9. Var / KVar / MVar / GVar	1% fs	Var1	Var2	Var3	Var	
VA	4	9.9.9.9. VA / KVA / MVA / GVA	1% fs	VA1	VA2	VA3	VAE	
PF	3	0.999	1% fs	PF1	PF2	PF3	PF	
WH	8	9.9.9.9.9.9.9.9. WH / KWH / MWH	1% rd				WH	
VarH	8	9.9.9.9.9.9.9.9. VarH / KVarH / MVarH	1% rd				VarH	
LN	4	9.9.9.9. A / KA	1% fs					
Hz*	4	70.00	0.05% rd					

- Accuracy : Corresponding to each auto-range scale
- L1-L2 / L2-L3 / L3-L1 : Line to line voltage
  L1 / L2 / L3 : Line to neutral voltage
- L1-cos θ / L2-cos θ / L3-cos θ :
  Related conversion elements
- LN (neutral current, only for 3 phase 4 wires)

*Requires voltage input >10V

- Accuracy performance range for WH / VarH / PF
  Cos θ : 1-0.5 for WH / PF
  Sin θ : 1-0.5 for VarH
  Voltage $\geqq$ 75V, Current $\geqq$ 5% of rating
- Phase rotation
  P : positive sequence
  n : negative sequence

Input

◎ Range

Voltage : 10-580V

Current : Suitable for CT secondary rating (option)

Maximum 6A for 5A rating

Maximum 1.2A for 1A rating

Frequency : 40-70 Hz

◎ Burden

Voltage < 0.5VA at 580V

Current < 0.2VA at rating

◎ Overload rating

Current	Voltage
2 x rated continuous	750V continuous
10 x rated 30 seconds	1000V 10 seconds
25 x rated 2 seconds	1200V 3 seconds
50 x rated 1 second	

Measured system

◎ Suitable for 3 phase 4 wires / 3 phase 3 wires

◎ Select by input wiring & software configuration

Programmability

◎ System selection : 3 phase 4 wires / 3 phase 3 wires

◎ PT : 1 - 5000.0 ; CT : 1-5000.0

◎ Readout display control

4 digits / auto scan

◎ Memory : all of energy date and status setting

Display

LCD 0.3" display, 1 rows of "8" digitals

Dielectric strength

IEC 255-5

2KV AC rms 1 minute between input / power

Impulse and surge test

ANSI/IEEE C37.90.1-1989 (3KV) SWC test

IEC 255-22-1 classⅢ SWC test

IEC 255-22-4 classⅣ (IEC 801-4) SWC test

IEC 255-5 1.2 x 50us (4KV) impulse test

Stability

Temperature range -10 to +55℃, maximum 100 ppm/℃

Long term stability 0.15% drift maximum per year

Operating condition

Temperature range -10 to +60℃, RH 20 - 95% non-condensed

Storage condition

Temperature range -25 to +70℃, RH 20 - 95% non-condensed

Power supply

AC 80 - 260V, 40 - 70 Hz, DC 80 - 330V

DC 24 - 60V ±10%

Dissipation maximum 2 VA for AC and 1 Watts for DC

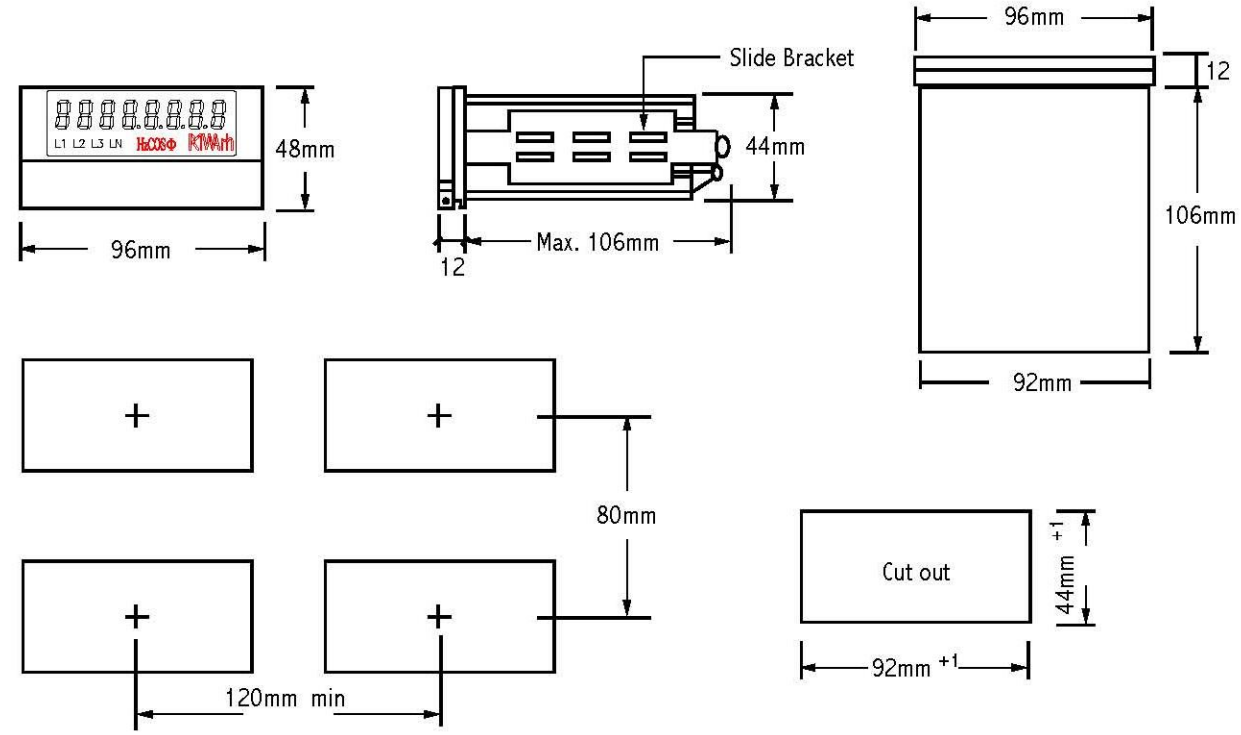
Mounting / Dimension

Panel type mounting

Size : 118 x 96 x 48 mm

Cut out : 92 x 44 mm

Dimension



The minimum distance between meters

Cutout Layout

Wiring