Panasonic
ideas for life

KW7M Eco-POWER METER
DIN Type

All functions needed for power measurement now in a DIN type!

1 Save Space and Install More Easily

① Can be installed in control panels
Supports DIN specification (22.5 mm) and is thinnest in industry with a display (Based on our investigation).
Installable on DIN rail

② Can be used with compact dedicated Current Transformer (CT).

2 Power Measurement Function

① Instantaneous electrical power display
② Integrated electrical energy display
③ Each phase voltage and current display

3 Multiple Inputs

① Also supports 5 A CT of secondary current input.
*When inputting a 5 A secondary current, use 2-stage configuration by combining with a dedicated CT.

② Support for 400 V AC
*Use with external voltage transformer (VT)

4 Supports Networking

① An RS485 communications port comes standard
② Comes with MEWTOCOL/Modbus (RTU).
*Modbus Protocol is a communications protocol developed for PLCs by Modicon Inc.

③ Pulse output is standard function.

KW7M Eco-POWER METER DIN Type
ARCT1B281E '07.6

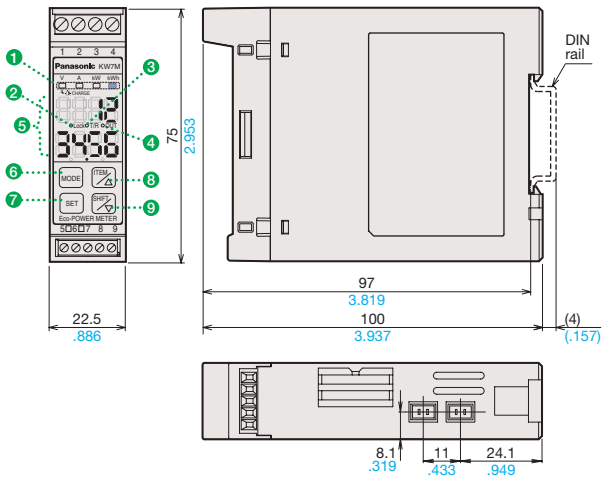
New

http://www.mew.co.jp/ac/e/

Matsushita Electric Works, Ltd.

KW7M Eco-POWER METER DIN Type

PART NAME AND DIMENSIONS



1. **Display indicator** ····· Lighting or Blinking according to the display
2. **Lock indicator** ····· Lighting while in lock mode.
3. **T/R indicator** ····· Blinking while communication
4. **OUT indicator** ····· Lighting when pulse output
5. **Value display** ····· • Displays the instantaneous electrical power, integrated electrical energy, current, voltage and electricity charge.
   • Displays the all settings.
6. **MODE key**
7. **SET key**
8. **ITEM/△ key**
9. **SHIFT/▽ key**

Terminal layouts

No.	Type
1	R
2	S
3	T
4	No connection
5	Pulse output "+"
6	Pulse output "–"
7	RS485 "+"
8	RS485 "–"
9	RS485 "E"

PRODUCT TYPES AND SPECIFICATIONS

Main unit

Phase and wire system	Rated input	Current transformer	Part No.
Single-phase two-wire system Single-phase three-wire system Three-phase three-wire system	100 to 120/200 to 240 V AC	Dedicated CT type (5 A, 50 A (common)/ 100 A/250 A/400 A)	AKW7111

Dedicated current transformer (CT)

Rated primary current	Part No.
5 A/50 A	AKW4801C
100 A	AKW4802C
250 A	AKW4803C
400 A	AKW4804C

Measurement items

Item		Unit	Data range
Instantaneous electrical power		kW	0.00 to 999999.99
Integrated electrical energy		kWh	0.00 to 999999.99 to 1000000.0 to 9999999.9
Current	L1 (CT1) phase current	A	0.0 to 999.9 to 1000 to 6000
	L2 (CT2) phase current	A	0.0 to 999.9 to 1000 to 6000
Voltage	Voltage between 1-2	V	0.0 to 999.9 to 1000 to 9999
	Voltage between 2-3	V	0.0 to 999.9 to 1000 to 9999
Electricity charge*			0.00 to 999999.99 to 1000000.0 to 9999999.9 to 10000000 to 99999999

*Eco-POWER METER is designed chiefly for managing energy saving. It is not intended to be used for billing.

Main unit

Rated operating voltage	100 to 120/200 to 240V AC
Rated frequency	50/60 Hz common
Rated power consumption	6 VA
Allowable operating voltage range	85 to 132/170 to 264V AC (85% to 110% of rated operating voltage)
Allowable power off time	10 ms
Ambient temperature	–10°C to +50°C +14°F to +122°F (Storage temperature: –25°C to +70°C –13°F to +158°F)
Ambient humidity	30 to 85%RH (at 20°C non-condensing)
Display method	7-segment LED
Power failure memory method	EEP-ROM (Over 100,000 overwrites)

Communication

Interface	Conforming to RS485
Protocol	MEWTOCOL/Modbus (RTU)
Number of connected units	Max. 99 units

Input

Input voltage	Rating	Single-phase two-wire system: 100 to 120/200 to 240 V AC (common use) Single-phase three-wire system: 100 to 120 V AC Three-phase three-wire system: 200 to 240 V AC
	Allowable measuring voltage	85% to 110% of rated operating voltage
	VT ratio	1.00 to 99.99 [External voltage transformer (VT) is required.]
	Max. displayed voltage	9999 V
Input current	Rating of primary side	• 5 A/50 A/100 A/250 A/400 A (when using dedicated CT) • 1 to 4000 A (when using secondary 5A CT)
	CT ratio	1 to 4000/5 A (Can be set in setting mode.) (Supported when dedicated CT used in 2-step configuration.)
	Max. displayed current	6000 A (When 400 A or higher, use commercial CT with 5 A rated secondary current.)
Accuracy (Not including CT error) (Not including VT error)	Basic accuracy	Instantaneous electrical power, Integrated electrical energy, Voltage, Current and Electricity charge ±2.5% F.S. ±1 digit (at 20°C rated input, rated frequency, power factor: 1), Guarantee accuracy range: 10 to 100% of a rated current of each CT
	Temperature characteristics	±1.5% F.S./10°C ±1 digit (for –10 to 50°C range, rated input and power factor: 1)
	Frequency characteristics	±1.5% F.S. ±1 digit (for ±5% frequency change, rated input and power factor: 1)

- Please read "Installation instruction" before using to ensure correct usage.
- For details, specifications and handling, please read the KW7M Eco-POWER METER user's manual.
- You can download the user's manual from http://www.mew.co.jp/ac/e.

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