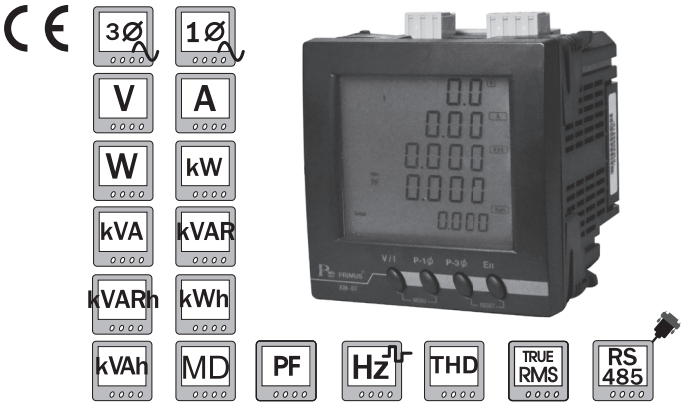


TECHNICAL SPECIFICATION

Power Supply		230VAC ±15 % 50-60 Hz
Power Consumption		2.5VA
Display		LCD
Input	Type	Voltage (TRUE RMS)
	Direct Phase and Neutral	10 to 290 VAC
	Direct Between Phase	10 to 500 VAC
	Primary Voltage	Up to 72000 VAC
	Secondary Voltage	60, 100, 110, 173, 190, 240 VAC
	PT Ratio	1-300
	Accuracy	± 0.2 % FS.
	Type	Current (TRUE RMS)
	Direct	20 mA to 10 A
	Primary Current	Up to 10000 A
	Secondary Current	20 mA to 5 A
	Accuracy	±0.2% FS.
	Type	Power
	Accuracy	± 0.5 % (FS)
	Type	Power Factor
	Accuracy	± 0.2 % (FS)
	Type	Frequency
	Accuracy	45 to 65 Hz ± 0.1Hz
	Active Energy Accuracy	Class 0.5
	Reactive Energy Accuracy	Class 1.0
	THD	Volt, Current
Digital Output	Speed	32 Pulse/sec
	Volt Operate	10-48 VDC
Communication	Protocol	MODBUS RTU
	Baud Rate	2400, 4800, 9600, 19200 38400 bps
	Parity	None, Even, Odd
	Stop Bits	1, 2
	Data Bits	8 Bits
	Support Device Node	128
Ambient Operation	Temperature	-10 °C to 60 °C
	Humidity	85 % RH Non-Condensing
Ambient Storage	Temperature	-20 °C to 80 °C
	Humidity	85 % RH Non-Condensing
Protection Degree	Front Protection Rating	IP52
	Case Protection Rating	IP30
Installation		Panel Mounting
Material		ABS-V0
Size		96 x 96 x 76.6 mm.
Weight		465 g.

DESCRIPTION

- KM-07 is a power meter. Can measure V(Line), V (Phase), A (Phase) kW, kVA, kVar, kWh, kVAh, kVarh, PF, Hz, kW Demand, Peak Demand, THO (Harmonic) for 1 Phase/ 3 Phase
- LCD display
- Potential Transformer Ratio (PT) and Current Transformer Ratio (CT) can be set.
- Pulse output, Analog 4-20 mA
- Can communicate via RS-485 port, MODBUS RTU PROTOCOL

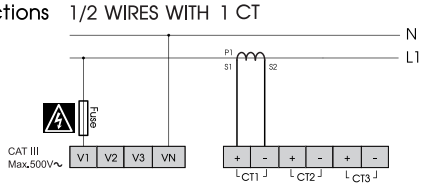
OPERATION

KM - 07 is a meter that can measure Volt, Amp, Watt, var, VA, kWh, kvarh and kVAh. It can measure the phase angle between current and voltage and THO% of Volt and Amp. RS - 485 communication with MODBUS RTU PROTOCOL. Measures kWh, kvarh and kVAh 13 digits (9,999,999,999,999)

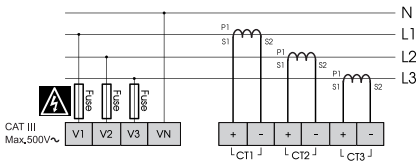
WIRING DIAGRAM

The circuit of KM - 07 can be connected according to the diagram below. When the current transformer (CT) is removed from the KM - 07. Short circuit on secondary side of CT All to protect against CT damage

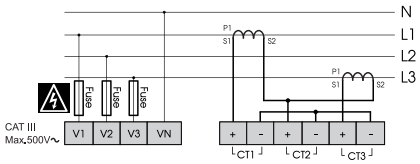
Connections 1/2 WIRES WITH 1 CT



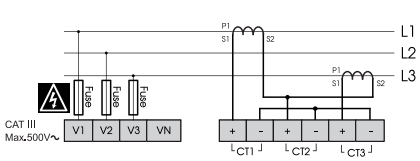
3/4 WIRES WITH 3 CTs



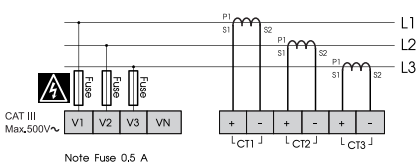
3/4 WIRES WITH 2 CTs



3/3 WIRES WITH 2 CTs



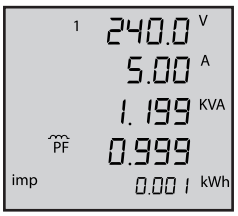
3/3 WIRES WITH 3 CTs



Note Fuse 0.5 A

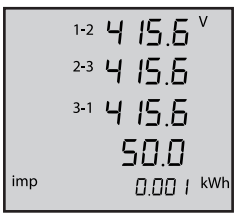
DISPLAY AND KEY PAD FUNCTION

• Phase (key V/1)



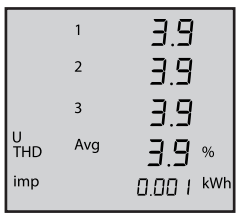
Volt Phase - Neutral Display Amp Phase, kVA and PF of Phase By pressing the V / I button, the front number changes accordingly. Phase displayed if Loop Page is set. The display will only loop at this Page.

• Volt Between Line - Line (key V/I)



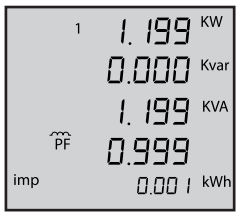
Displays Volt line to line and system frequencies. The numbers are 1-2, 2-3 and 3-1 in front.

• % THD-V/ THD-I (key V/I)



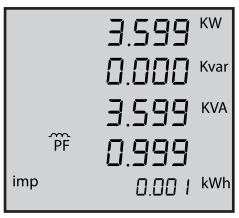
When the THD-V is displayed, the U and THO icons appear. When the THO - I value is displayed, icons I and THO appear.

• Power (key P-1Ø)



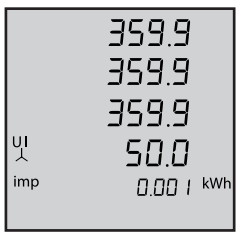
Show the kWatt, kvar, kVA and PF values of each phase. By pressing P - 1Ø, the front number changes according to the displayed phase.

• Total Power (key P-1Ø)



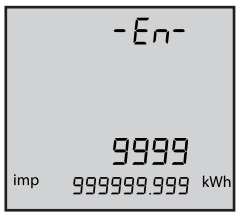
Show total kWatt, kvar, kVA, and PF total of systems. (To display total value, there will be no figure showing the front phase.)

• Phase Angle Between V&I (key P-1Ø)



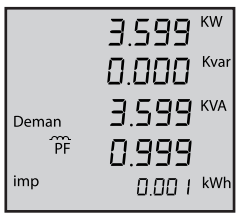
Displays the Phase Angle between Volt & Current and the Freq value of the system

• Energy (key P-3Ø & key En)



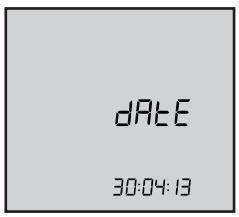
Display the Energy Value in the 10th to 13th of the Energy Value. And Energy Core 1 - 9 of Energy By pressing the key, En shows the Energy Imp, Exp, total of kWh, kvarh, and kVAh.

• Total Demand (key P-3Ø)



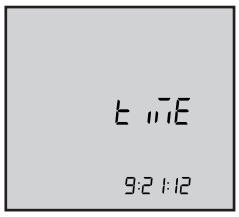
Display Demand Total kWatt, kvar, kVA, and PF total. (In the Total display, no numbers are shown on the front.)

• Date (key P-3Ø)



Display the date/ month / year on the Meter

• Time (key P-3Ø)



Display hours: minutes: seconds on Meter

• Hours Counter (key P-3Ø)

Display Meter working Hours . Unit is hour (Count only when measured at kVA > 0)

SERAIL COMMUNICATIONS

Communication with MODBUS RTU

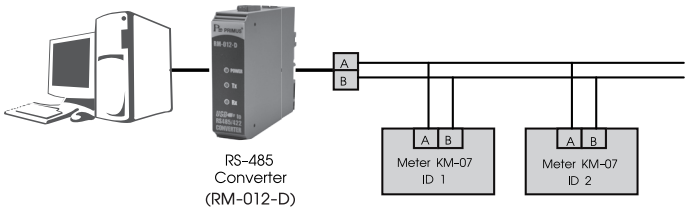
Meter KM - 07 can read parameter values measured in real time With the RS -485 BUS system, PROTOCOL is used for communication. MODBUS RTU

0x04 : Read Multi Input Register

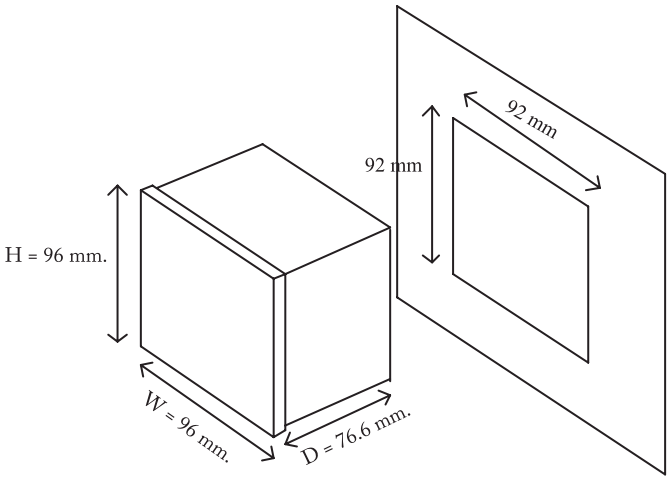
0x06 : Preset Single Register

0x10 : Preset Multi Register

Circuit for RS - 485 communication interface



DIMENSION



ORDERING CODE

KM-07 – □ – □

Metering	
A	Total kWh
B	Total, Import, Export kWh

Output	
None	Pulse Output
1	Analog Output, Pulse Output
2	RS-485, Pulse Output
3	RS-485, Analog Output, Pulse Output