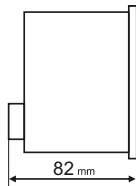
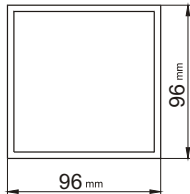
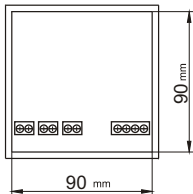


## Dimensions

KMM 01U



**KARACA®**

**KRK®**

ISO 9001  
9001:2008

## DIGITAL MULTIMETER KMM 01U



True RMS



## User Guide

## General Specifications

### KMM 01U:

KMM 01U is very advanced multimeter which gives user precise readings in 4 digits and separate CT ratio adjustments for flexible systems. It is not only measures the current pulled from the L1, L2, L3 but also voltage and frequency of those lines in True RMS.

There is 5 rows for measurement digits. Three for the currents that are showed continuously, one for the voltage that is cycling every 3 seconds ( $V_{L1}, V_{L2}, V_{L3}, V_{L1-L2}, V_{L1-L3}, V_{L2-L3}$ ) and one for the frequency of the line voltmeter shows (between phases shows the first phase's frequency).

#### Ampermeter:

Measures very accurately, the current value of the line (AC+DC) in True RMS. When the reading exceeds 9999A, it shows Err1 fault message.

- \* Each line can be measured between 0-9999A.
  - 4 digit display gives exact values.
- \* Each line can have different CT ratio.
  - This gives flexibility for further modifications of the system.
- \* CT ratio can be between 1...2000 any value,
  - This gives the opportunity of CT calibration.

#### Voltmeter:

Measures very accurately, the voltage value of the line (AC+DC) in True RMS. The values measured shown every 3 seconds ( $V_{L1}, V_{L2}, V_{L3}, V_{L1L2}, V_{L1L3}, V_{L2L3}$ ) in a cycle. If user would like to observe any of the lines value, the only thing is to select the desired value, it will show selected value for 60 seconds continuously, than begins to cycling again.

#### Frequencymeter:

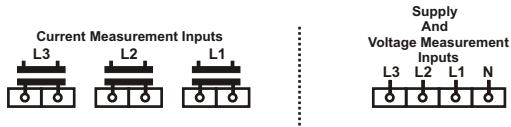
Shows the frequency of the line that voltmeter shows. When the voltmeter shows between phases values it shows first phase's frequency. For example : If the voltmeter shows L2-L3 value frequencymeter shows L2 frequency.

#### CT Ratio Adjustment:

By pressing the MENU (⌂) button on the front panel, desired current can be choosed, then CT ratio of the current shown; by pressing (⬆) adjustment digit is choosed and by pressing (➡) adjustment can be done. For saving adjusted value, just waiting for 5 seconds is enough.

## Technical Specifications:

Measurement Range	: Ampermeters	: 0...9999 A
	Voltmeter	L1 : 180...260 VAC L2 : 0...300VAC L3 : 0...300VAC
	Frequencymeter	: 30...70 Hz.
Accuracy	: Ampermeter	: ± (%1 + 1)
	Voltmeter	: ± (%1 + 1)
	Frequencymeter	: ± (% 0,2 + 0,1)
Class		: 1
CT Ratios		: 1...2000
Screen	: Ampermeter	: 3 x 4 digits
	Voltmeter	: 3 digits
	Frequencymeter	: 3 digits
Supply Voltage		: 230 Vac ± %20, 50/60 Hz
Power Consumption		: <=3W
Ambient Temperature		: -5...+55 °C
Electrical Connector		: Socketed Connectors
Connection		: Vertical or Front Panel
Dimensions		: 96 x 96 mm



**Note:** Device will be damaged when voltage is applied to the current entry or current transformer is selected smaller than needed (as over current will be applied to the device).