

## General

It is designed to monitor 3 phase current, voltage and frequency values in a single device.

## Device Usage and Working Principle

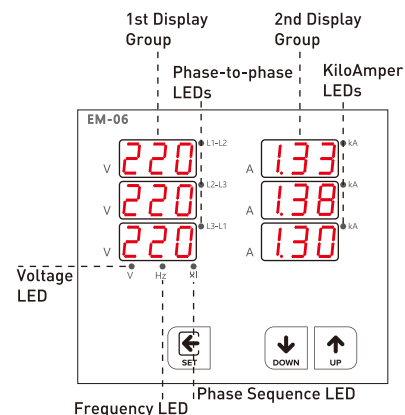
Make the connections according to the diagram. Connect the current transformers before electric charges to be connected to the system. Current transformers dont sense voltages which connected before them. Apply max 5A the current inputs.

**Setting the current transformer value (for EM-72, EM-06 and EM-06DIN):** Press the menu button once the energy given to the device. Please enter the current value that you are using by pressing up – down buttons, to save it please press menu button once again. If the current transformer value is over 1000/5A please be sure that you can see the kA leds. Under normal working circumstances when the current value is over 1000A kA led that belongs to that phase gets on.

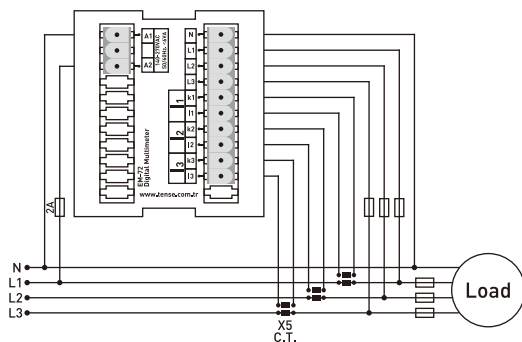
**Monitoring Voltage, Current, Frequency and Phase Sequence values:** You can observe the current values at the systm trough the second display group at the right side of the screen. You can see the frequency between phase and phase, phase and neutral at the first display group. When the voltage values is shown (V) led gets on. While pressing the up button ,phase-phase range can be seen. When the phase-phase values is shown you can see the leds on phase – phase. While pressing theup buttons you can see the frequency value and Hz led gets on.

**Phase Sequence:** If the phase sequence is reverse you can see the (↻) led gets on which take place in the 1st display group.

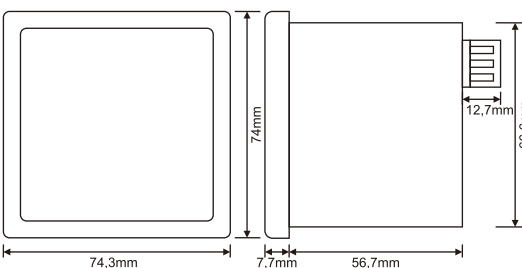
The EM-60D/250D/60DIN/250DIN models come with 3 current transformers. Only use the supplied current transformers.



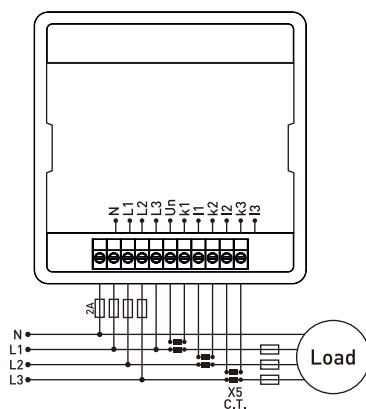
Connection Diagram for EM-72



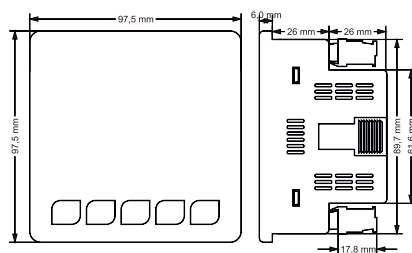
Dimensions for EM-72



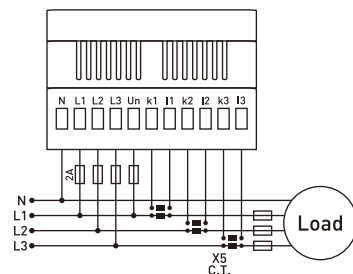
Connection Diagram for EM-XXX



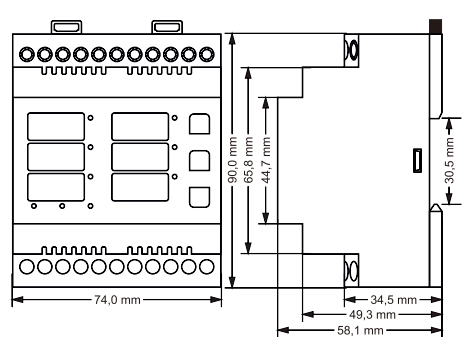
Dimensions for EM-XXX



Connection Diagram for EM-XXXDIN



Dimensions for EM-XXXDIN



## Technical Specifications

Operating Voltage : 85-240V AC 50/60Hz.

Voltage : 1V - 300V AC (L-N),

Measuring Range : 1V - 500V AC (L-L)

Current : 100mA - 5A (5/5A - 9995/5A) EM-72, EM-06 and EM-06DIN,

Measuring Range : 1A - 100A (EM-60D ve EM-60DIN),

2A - 250A (EM-250D ve EM-250DIN)

Operating Power : <6VA

Operating Temp. : -20°C.....+55°C

Display : 3 digit 6 x display + 9 LEDs (EM-72, EM-06 and EM-06DIN),  
3 digit 6 x display + 6 LEDs (EM-60D/60DIN and EM-250D/250DIN)

Connection Type : Plug-in terminal connection.

Weight : Maximum 210gr.

Panel Hole Sizes : 68x68mm (EM-72),  
91x91mm (EM-06, EM-60D ve EM-250D)

Mounting : Front panel mounting (EM-72, EM-06/60D/250D),  
Mounting on the DIN rail (EM-06DIN-60DIN-250DIN)

Operating Altitude : <2000m

Cable Diameter : 2,5mm<sup>2</sup>

IP Protection : IP41 (Front Panel), IP00 (Body)

## Maintenance

Switch off the device and release from connections. Clean the trunk of device with a swab. Don't use any conductor or chemical might damage the device. Make sure device works after cleaning.

## Warnings

- Please use the device according to the manual.
- Don't use the device in wet.
- Include a switch and circuit breaker in the assembly.
- Put the switch and circuit breaker nearby the device, operator can reach easily.
- Mark the switch and circuit breaker as releasing connection for device.