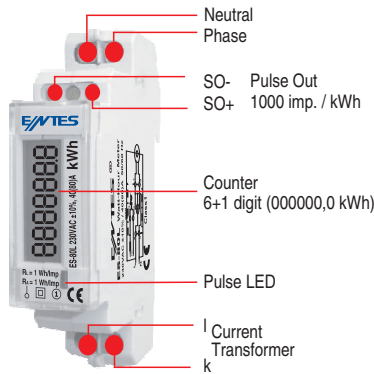
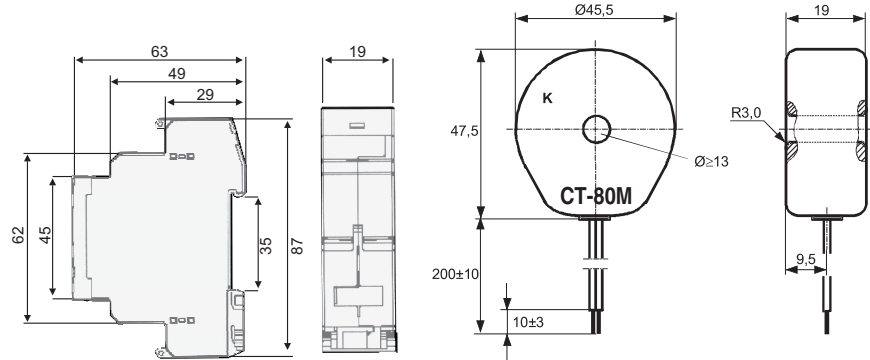


## HOUSING

### Front Panel:



### Dimensions:



## FEATURES

ES-80L measures the active kilowatt hour consumption via current transformer and error free in single phase systems and it displays the total kilowatt hour consumption. The most important features of the device are its reliability, small size, light weight, modern design, and easy installation.

- Pulse output for remote reading and central data storage.
- Flashing LED on the front panel makes it possible to observe whether the measuring is active or not.
- The LCD display on the front panel makes easy and accurate energy reading possible.

## APPLICATION AREAS :

- Factories
- Shopping Malls
- Airports
- Railway Stations
- Stores
- Building Complexes
- Hotels
- Hospitals
- Schools
- Holiday Villages
- Marinas
- Industrial Exhibition Halls
- Cost center applications.

## TECHNICAL SPECIFICATIONS (EN62053-21)

### HOUSING

Protection Class	: IP 20 (EN 60529)
Weight	: 60 gr (Main unit) : 74 gr (CT-80M)
Display	: 6+1 digit = (999999,9 kWh)

### MEASUREMENT

Operating Voltage (Un)	: 230 VAC (127 VAC optional)
Operating Frequency	: 50/60 Hz.
Power Consumption	: < 2 VA
Rated Current (In)	: 40 (80) A
Current Range ( $\Delta I$ )	: 0.08-80A
Intermittent Overload	: 20 In
Accuracy	: Class 1

### MEMORY

Data retention duration	: > 40 years
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### PULSE OUTPUT

Pulse LED	: (When the current is more than 0.08A it blinks proportional to the consumed energy)
Pulse Out	: 1000 Pulse / kWh
Pulse Out Feature	: Optical isolated NPN transistor
Pulse width	: 20 mS.(EN 62053-31)

### AMBIENT CONDITIONS

Operating Temperature	: (-20 °C) - (+65 °C)
Humidity Class	: 90%

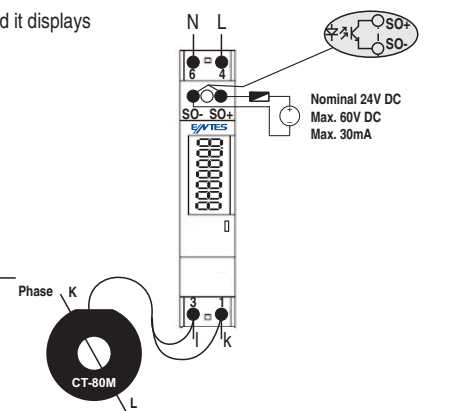
### CONNECTIONS

Mounting	: Standart DIN mount (DIN EN60715)
Terminals	: Screw type terminals with socket
Input Cable Crossection	: 4 mm <sup>2</sup>

## CAUTIONS

1. Connect the ES-80L's terminals as shown in connection diagram.
2. ES-80L does not require any periodical maintenance.
3. Installing, repairing and operation should be performed by authorized person.
4. User can not reset index. If the value of index exceed 999999,9, it is resetted automatically and continue to count,
5. During current transformer connection; Connect the red cable to the "k" terminal and black cable to the "I" terminal.

## Connection Diagram:



## Current Transformer

Turns Ratio	: 1/2500
RB	: 6.25 $\Omega$
Frequency	: 50 /60 Hz
Accuracy	: Class 1
Operating Temperature	: -40°C...+70°C
Case	: UL 94 -V0