LANX™
AUSTRALIS

Single Phase 80A Kilowatt Hour Meter

Description

Single Phase 80A Kilowatt Hour Meter (KWH)

Performance Criteria:

□ Operating Humidity: ≤75%

□ Storage Humidity: ≤95%

□ Operating Temperature: -10° Celsius - +40° Celsius

□ Storage Temperature: -30° Celsius - +70° Celsius

□ International Standard: IEC 62053-21

□ Accuracy Class: 1

□ Protection Against Penetration of dust and water: IP51

□ Insulating encased meter of protective class: II

Technical Data:

□ Meter Type: LXEM180(LCD)

□ Nominal Voltage: 240AC

□ Operational Voltage: 201~253V AC

□ Insulation capabilities:
  -AC voltage withstand: 4KV for 1 minute
  -Impulse voltage withstand: 6KV – 1.2 μS waveform

□ Basic current(Ib): 10A

□ Maximum Rated Current(Imax): 80A

□ Operational Current Range: 0.4%IB-Imax

□ Over current withstand: 30 Imax for 0.01s

□ Operational Frequency Range: 50 or 60 Hz ± 10%

□ Internal Power Consumption: ≤2W / 10VA

□ Pulse Output Rate: 1000imp/kWh

□ Consumption Indicator (RED LED): Flashing at Loading

Warranty:

2 Year Warranty
Validated upon Proof that this Product was installed by a Licensed Electrician

MUST BE INSTALLED BY A LICENSED ELECTRICIAN

DANGER Risk of electric shock

Lanx Australis is an Australian owned company which manufactures and distributes quality electrical products throughout Australia and New Zealand. we guarantee you will be 100% satisfied with our full range of products.
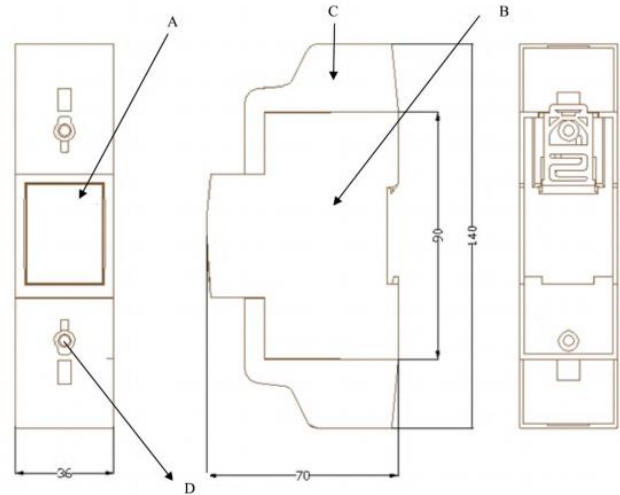
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Dimension:

- □ Height: 140 mm
- □ Height without protection cover: 90mm
- □ Width: 36mm
- □ Depth: 70mm
- □ Diameter power connection clamps: 8mm
- □ Size of the connection clamps: 8 x 8mm
- □ Weight: 0.17 Kg

Description:

- □ Register(LCD)
- □ B-Terminal Block
- □ Case
- □ Protection Cover
- □ Security Hasp

Line Diagram:

Installation:

⚡ **CAUTION**

- Turn off and if possible lock all sources supplying the energy meter and the equipment that is connected to it before working on it.
- Always use a properly rated voltage sensing device to confirm that power is off.

⚠ **WARNING**

- The installation should be performed by qualified personnel familiar with applicable codes and regulations.
- Use insulated tools to install the device.
- A fuse, thermal cut-off or single-pole circuit breaker should be fitted on the supply line and not on the neutral line.

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Operating

Consumption Indication
There is a LED which has two colors (green and red) while flashing in the front panel of LXEM145.
When consumption happens, the LED will flash and display red. The more quickly LED flash, the more consumtion there is.

Reading the meter
The LXEM145 energy meter is equipped with 5+2 LCD display, which is used as recording consumption and can't be reset to zero. The reading accuracy is 1/100 kWh.

Pulse output
The LXEM145 DIN rail energy meter is equipped with a pulse output which is fully separated from the inside circuit. That generates pulses in proportion to the measured energy for accuracy testing. The pulse output is a polarity dependant, passsive transistor output requiring an enxternal voltage source for correct operation. For this external voltage source, the voltage (Ui) should be 5-27V DC, and the maximum input current is 27mA DC. To connect the impulse output, connect 5-27V DC to connector 20 (anode), and the signal wire (S) to connector 21 (cathode).

Troubleshooting

Caution
□ During reparation and maintenance, do not touch the meter connecting clamps directly with your bare hands, with metal, blank wire or other conducting material as that will cause an electric shock and possibly cause injury, serious injury or even death.
□ Turn off and if possible lock all sources supplying the energy meter and the equipment that is connected to it before opening the protection over and working on it.
□ Turn off and lock all power supply to the energy meter and the equipment to which it is installed before opening the protection cover to prevent the hazard of electric shock.

Warning
□ Maintenance or reparation should be performed by qualified personned familiar with applicable codes and regulations
□ Use insulated tools to maintain or repair the meter
□ Make sure the protection cover is in place after maintenance or reparation
□ The case is sealed, failure to observe this instruction can result in damage to the meter

Problem	Check	Solution
No Light for the power supply indicator?	☐ Is AC Power supply connected to the meter?	☐ Check switch or circuit-breaker and fuse or thermal cut-off
	☐ Is the 1 and 4 connecting correct?	☐ Reinstall terminal screws on the 1 and 4. Make sure all screws are fixed. Then there should be a 230V 50Hz AC voltage between the terminal screws on the 1 and 4 when power supply is input.
	☐ Maybe there is a fault in the inside circuit	☐ Please contact your technical supporter to replace this meter.
No Light for the Consumption indicator?	☐ Is the load running?	☐ Only when load is running, this LED will flash
	☐ Is the operating power too low?	☐ If the operating power is too low, the spacing interval of flashing will take some more time, this is why it seems like LED isn't burning
	☐ Maybe there is a fault in the inside circuit	☐ Please contact your technical supporter to replace this meter.
The register can't run	☐ Is there a power supply inside the meter?	☐ Check that the power supply indicator is burning.
	☐ Is the operating power too low?	☐ If the operaring power is too low, the spacing interval of the pulses will take some more time, this is why it seems like the meter won't count.
	☐ Maybe there is a fault inside the meter circuit.	☐ Please contact you technical supporter to replace this meter
No Pulse Output	☐ Is DC power supply connected to the meter?	☐ Check the external voltage source (Ui) is 5-27 V DC
	☐ Is the connecting correct?	☐ Check correct connecting: Connect 5-27V DC to connector 20(anode), and the signal wire (S) to connector 21(cathode)
	☐ Maybe there is a fault inside the meter circuit.	☐ Please contact you technical supporter to replace this meter
Pulse output rate wrong	Maybe there is a fault in the inside circuit	Please contact your technical supporter to replace the meter.