

Wattmeters & Varmeters

Wattmeters and Varmeters are suitable for the measurement of active power (Watts) or reactive power (Vars). DIN96 meters are self contained whilst all smaller units are connected to a separate converter unit and calibrated as a complete unit to individual requirements.

The converter unit has finger-proof terminal covers and can be remotely DIN rail mounted. All meters have a jewel and pivot movement which ensures reliability and accuracy. The Wattmeters and Varmeters are available in shortscales (90°) only. Scales are linear and are calibrated from zero to full scale.

Notes:

1. Ensure that current transformers are mounted such that K faces the supply and L faces the load.
2. Secondary windings of the current transformers should be earthed.
3. No isolation is provided between input AC voltage and DC output on converter unit.



Models Available

- FE48W** DIN48 Wattmeter with Converter
- FE72W** DIN72 Wattmeter with Converter
- EL96W** DIN96 Wattmeter - Self Contained

- FE48V** DIN48 Varmeter with Converter
- FE72V** DIN72 Varmeter with Converter
- EL96V** DIN96 Varmeter - Self Contained

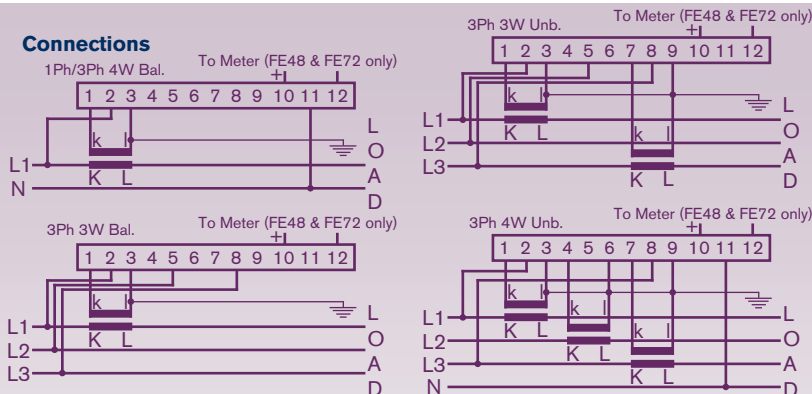
Product Features

- Active power (Watts) or Reactive power (Vars)
- Standard DIN square sizes
- Many options available (see page 22)

For dimensions see pages 23-24

Wattmeters & Varmeters – for measurement of active or reactive power

Connections



Ordering information

| Code | DIN Square Size & Movement Type | Meter Type | Input & Scaling |
|----------------|---------------------------------------|--|------------------------|
| FE48W | 48 x 48mm Shortscales (90°) Wattmeter | – | – |
| FE72W | 72 x 72mm Shortscales (90°) Wattmeter | – | – |
| EL96W | 96 x 96mm Shortscales (90°) Wattmeter | – | – |
| /1 | – | Single Phase | – |
| /2 | – | 3 Phase 3 Wire Balanced | – |
| /3 | – | 3 Phase 3 Wire Unbalanced | – |
| /4 | – | 3 Phase 4 Wire Balanced | – |
| /5 | – | 3 Phase 4 Wire Unbalanced | – |
| Specify | – | Voltage (L-N or L-L), Current (CT Ratio) | – |
| Specify | – | and/or full scale Watts/Vars | – |
| Example | EL72W | /5 | 230VL-N, 100/5A |

Specification

Accuracy:

- Class 1.5 ($\pm 1.5\%$ max. error)

Input Current, I_n :

- 0-0.2A to 0-10A direct connected
- 1A or 5A CT operated

Input Voltage, U_n :

- 110, 230 or 415V (-15% to +10%)
- (50 to 600V upon request)

Frequency:

- 50/60Hz

Scales:

- 0-1 to 0-1000 W/Var, kW/kVar or MW/MVar

Overload:

- 1.2 x I_n or U_n for 2 hours
- 6 x I_n for 5 seconds

Burden:

- Voltage circuit < 2VA per phase
- Current circuit < 1VA per phase

Response Time:

- < 1 second

Weight:

- FE48 140g, FE72 180g, EL96 320g
- Converter unit 200g

Converter Unit Enclosure:

- 55mm wide grey ABS
- Case IP40, terminals IP20
- Fixes to 35mm DIN rail (DIN-EN 50022)