

Distribution Transformer Meter

Prodigy is a genuine innovation in the field of three-phase LV CT-operated metering. It is an integrated meter with built-in current transformers, eliminating the need for external CTs and accessories. Prodigy is based on the unique concept of thread-through connections, which helps maintain overall system accuracy and revenue integrity.



Applications

- Distribution transformer (DT) metering
- Energy audit and system analysis
- Low-voltage high-current commercial metering

Benefits

- Better overall system accuracy than a traditional meter and associated CTs
- Easier to install than traditional DT metering
- Reduced cost for equipment, installation and maintenance by eliminating the need for external CTs, meter enclosure and accessories
- Increased reliability and tamper resistance compared with traditional installations
- Easy diagnosis of installation faults via a complete set of instantaneous electrical parameters

Features

- True four-quadrant metering
- Programmable time-of-use (TOU) tariffs and maximum demands (MD)
- Thread-through arrangement: field cable passes directly through the meter
- Large backlit LCD with phase indicators and parameter identification
- Display scroll lock for continuous display of desired parameters
- Logging of billing data and multi-parameter load survey
- Special load-profiling and event-logging for energy auditing
- Optional inductively-coupled external power pack for meter reading in the absence of mains supply

Technical specifications

Electrical

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|----------------------|--|
| Connection type | Direct connected |
| Wiring configuration | 3-phase 4-wire |
| Voltage range | 230-240 V (L-N) |
| Current range | 40 - 200 A |
| Accuracy | Class 1.0 |
| Mains frequency | 50 Hz \pm 5% |
| Burden | Voltage circuit: < 1.0 W, 1.5 VA per phase |
| Insulation class | Protection class II |
| Impulse withstand | 6 kV |

Compliance

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| Standards | IS 13779, IEC 62052-11, IEC 62053-21* |
|-----------|---------------------------------------|

Mechanical

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| Dimensions (W x H x D) | 272 x 364 x 192 mm (with extended terminal cover) |
| Weight | 4.5 kg (approx.) |
| Enclosure | Double-insulated glass-filled polycarbonate |
| Terminals | Thread-through design suitable for current up to 200 A |
| Sealing | Provision for sealing screws |

Environmental

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|--------------------|--|
| Ingress protection | IP 54 |
| Temperature | -10 °C to +55 °C (operating) -25 °C to +70 °C (storage) |
| Humidity | 95% non-condensing |

Features

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|----------------|--|
| Tariff | Up to 8 rates, configurable for 3 energy types |
| Maximum demand | Up to 2, configurable across 8 registers |
| Load survey | Up to 1000 parameter-days at 30-minute integration period |
| Communication | Optical Port Optional RS 232 port for remote communication Optional built in LPR (2.4 GHz) Optional built in GSM/GPRS |

* Standards compliance and communications facilities depend on product variant.