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HD%\$\$!MT300

Technical Description



7. METER ENCLOSURE

The meter enclosure consists of the meter base with integrated terminal block, meter cover and terminal cover. All parts of meter enclosure are made of high quality, self-extinguishing polycarbonate, which has excellent mechanical and insulation characteristics. Meter base and terminal cover are natural gray, meter cover is transparent.

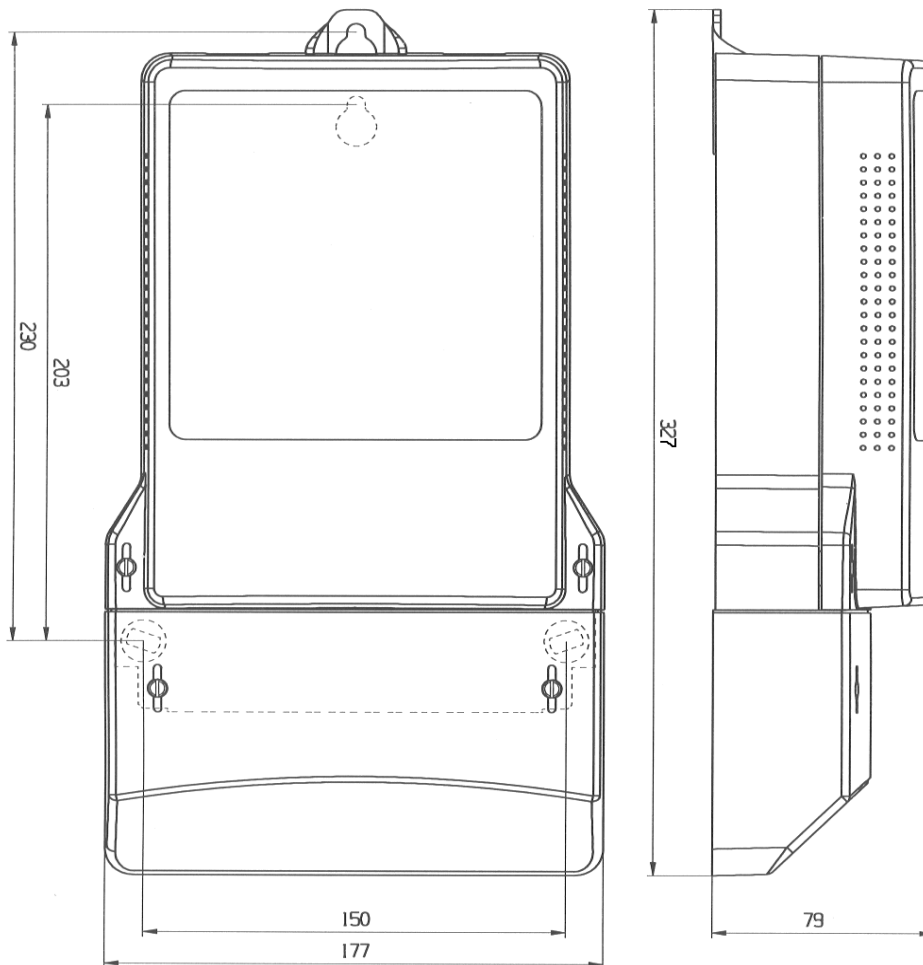
The protection level against water and dust penetration is IP53.

Internal assembly:

All internal parts of the meter (PCB, mechanical registers, measuring elements) are fixed to the meter base with the snapping pins. Aluminium name plate is fixed to the extensions of the frame of the mechanical register(s).

Meter installation, overall and fixing dimensions:

The overall and fixing dimensions correspond to the DIN 34857 standard. The meter hook is moulded as an integral part of the meter base. A meter base with fixing hook under the upper edge is available as an option, for the installations where the meter is installed directly under the ceiling of the installation cabinet.



Meter Sealing:

Both meter and terminal cover are fixed with two sealing screws, so that an access to the meter interior or terminals is not possible without breaking the seals. The sealing screws are captive.

9. TECHNICAL SPECIFICATIONS

| | | |
|---|------------------------|--|
| Accuracy class | CL | 2, 1 - for kWh-meter (IEC 61036) |
| Basic current | I_b | 5A, 10A, 15A, 20A |
| Maximum current | I_{max} | Up to 85 A or up to 120 A |
| Thermal current | I_{th} | 1.2 I _{max} |
| Starting current | | <0.005 I _b - for I _b = 5 A <0.004 I _b - for I _b = 10 A |
| Short-circuit current | | 30 I _{max} |
| Reference voltage* | U_r | 3x220/380V, 3x230/400V, 3x240/415V; 3x220 V, 3x230 V, 3x240 V |
| *other voltages on request | | 3x110/190V, 3x120/108V; 3x120 V |
| Voltage range | | 0.8 U _r ... 1.15 U _r |
| Reference frequency | F_r | 50 Hz or 60 Hz |
| Meter constants | K_m | 1000 imp/kWh, I _b =10A 1250 imp/kWh, I _b =5A |
| Operating temperature | | -40°C ... +60°C |
| Storage temperature | | -50 °C ... +80°C |
| Consumption: voltage circuit | | < 1 W / 10 VA |
| current circuit | | < 0.5 VA |
| Resistance against electromagnetic disturbances: | | |
| Dielectric strength | | 4 kV, 50 Hz (or 60 Hz), 1 min |
| Electrostatic discharge | | 15 kV (IEC 1000 – 4 - 2) |
| HF electromagnetic field | | 10 V/m (IEC 1000 – 4 - 3) |
| Burst test | | 4 kV (IEC 1000 – 4 –4) |
| Impulse voltage main terminals | | 12 kV, 1.2/50 μs (IEC 61036) |
| auxiliary terminals | | 6 kV, 1.2/50 μs (IEC 61036) |
| Impulse outputs: | | |
| S0 | | optoisolated (DIN 43864) Ti = 32 ms |
| relay - OptoMOS | | open collector - make contact Ti = 80 ms, (other Ti on request) max. switching voltage 250V AC max. switching current 100 mA max. switching power 25 VA |
| Tariff change-over inputs: | | |
| voltage controlled | | OFF ≤ 0.2 U _r ; ON ≥ 0.8 U _r |
| Overall dimensions | | 327 x 177 x 79 mm |
| Mass | | approx.: 1.2 kg |

10. CONNECTION DIAGRAMS

Direct connected meters

