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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.

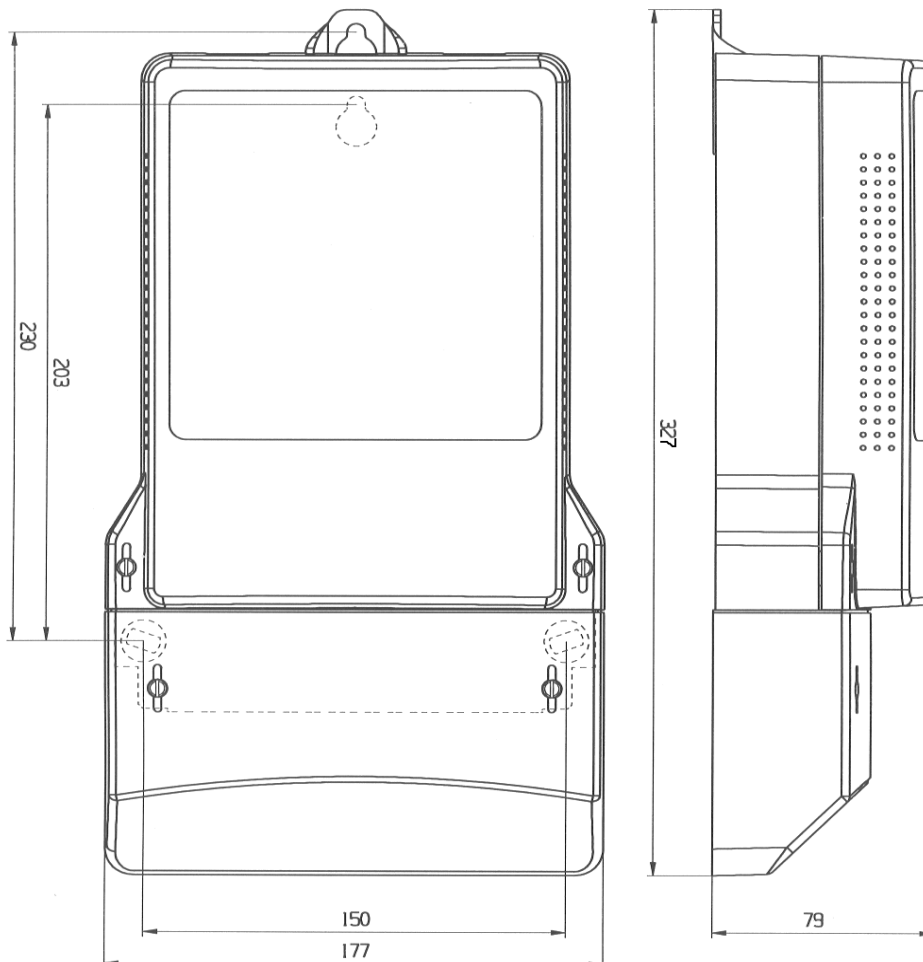
The protection level against water and dust penetration is IP53.

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

