



# NEO3

## Three-phase electricity meter

Static electricity meter for three-phase four-wire networks. Allows direct (NEO3tdgr) or indirect (NEO3atdgr) measurement of active and reactive energy in four rate plans, switched by a built-in real-time clock. Universal meter for a wide range of applications.



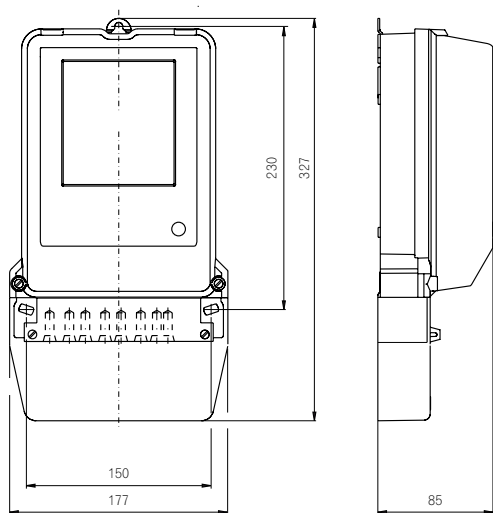
### FEATURES

- Unidirectional, bidirectional or reverse active energy measurement
- Two-quadrant or four-quadrant measurement of reactive energy
- Measurement of instantaneous power, logging maximum power for a billing period
- Recording load profile (configurable averaging period)
- Measurement of power grid parameters
- Manual and automatic ending of a billing period
- Memory of 16 billing periods data
- Real-time clock with a calendar to switch between four rate plans
- Calendar allowing to define special days, permanent and movable holidays for 20 years forward
- Communication via an optical port and serial port (RS-485 or RS-232)
- Pulse output for active and reactive power
- Extensive event logging
- Dedicated LCD display, signalling proper connection of current circuit and voltage circuit and signalling the presence of voltage and current
- Capability to connect an additional external power supply (230V AC/100-300V DC) for parameterisation/readout of the measurement data if there in case of power outage
- Separation of current and voltage circuits
- KomPaf maintenance software (software protection dongle available as an option)

Multipurpose, Robust,  
Universal

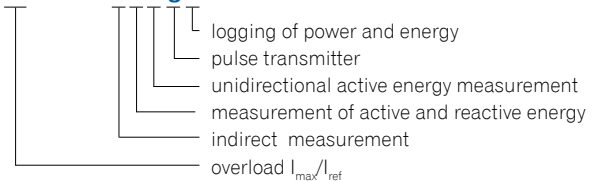
# TECHNICAL DATA

| Model  |            | NEO3tdgr  | NEO3atdgr  |
|--|------------|---|--|
| Connection method                                |            | direct  | indirect, semi-indirect                                  |
| Rated voltage $U_n$                              | [V]        | 3x230/400   | 3 x 58/100, 3 x 230/400                                  |
| Reference current $I_{ref}$                      | [A]        | 5   | 1 or 5   |
| Maximum current $I_{max}$                        | [A]        | 80 or 100   | 6 or 10  |
| Measurement accuracy of active energy            |            | B or A  | 0,5 or 1   |
| Measurement accuracy of reactive energy          |            | 2 or 3  | 2  |
| Power consumption in current circuit (per phase) | [VA]       | <0,01   | <0,02  |
| Power consumption in voltage circuit (per phase) | [W] / [VA] | <1 / <10  |  |
| Electric strength                                | [kV]       | 4 (AC 50 Hz), 6 (surge 1,2/50 $\mu$ s)  |  |
| Impulse frequencies                              | [imp/kWh]  | typically: 500  | typically: 5000  |
| Timer  |            | Internal, accuracy better than 0.5s/24h at 23°C, synchronised by a digital output signal  |  |
| Communication                                    |            | Optical port, serial port (RS-485 or RS-232) Configurable baud rate from 300 Bd to 9600 Bd. Protocol support: EN 62056-21 (IEC1107).  |  |
| Outputs  |            | Two pulse outputs for active and reactive power. Optional relay output  |  |
| Event logging                                    |            | End of a billing period, power loss and return, parameterisation, reset, removal of the terminal box cover, opening the casing, software restart, internal error, along with power values, date and time stamp. Influence of magnetic field with date and time stamp, length of the interference period and the amount of energy drawn. Operation time of the meter without mains power supply. |  |
| Display  |            | A dedicated LCD display, 8 digits, data presented in the form of OBIS codes (EN 62056-61), two configurable message lists.  |  |
| Temperature of operation                         |            | from -25°C to 55°C or from -40°C to 70°C  | from -30°C to 70°C                                       |
| Casing   |            | IP 55, class II insulation  |  |
| Standards  |            | EN 50470-1<br>EN 50470-3<br>EN 62052-11<br>EN 62053-23  | EN 62052-11<br>EN 62053-21<br>EN 62053-22<br>EN 62053-23 |



## TYPE DESIGNATION

### 20 NEO3 a t d g r



This publication has been made exclusively for information purposes and shall not constitute an offer under the civil law. The designs are presented as an example; functions of the meter can be customised.

