

Scope

Three-phase static electricity meters **AMT B0x-FA4T** are determined for single-rate and multi-rate measurement of the active energy in direct or indirect connection.

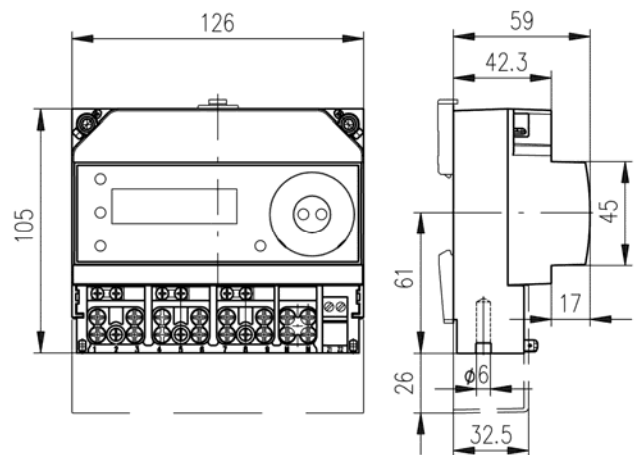
The measured values are stored in registers according to the OBIS codes are displayed on LCD in cyclic or stepping mode. They enable to record of the selected energy registers contents (total registers and rates registers) and the maximum demands (MD) registers contents per billing period (max. 6 records). It is also possible to record number of power failure and reverse energy flow occurrences. They enable measurement of energy in rates controlled by internal clock (up to 4 rates) or externally controlled in two rates. The data are stored in non-volatile memory during power outage.

The meters can be parametrized and readout using optical probe AMOS and softver AMsoft supplied by the manufacturer.

The test pulses indicated by red LED are proportional to the consumed energy. The meters can be produced in version with measurement in summary mode (measurement „using an unidirectional mechanical register“) or with measurement in separation mode (measurement of “consumption – supply”).



Dimensional drawing



Highlights

- Meter case width 7M (1M = 18 mm);
- Intended for indoor mounting on DIN rail (35 mm);
- Passive transmitting pulse SO output for remote transmission;
- Indication of voltage presence, reverse energy flow and phase sequence;
- Complies with IEC/EN 62052-11 + IEC/EN 62053-21; EN 50470-3 and with requirements of European Parliament and EC Directive 2014/32/EU;
- Supplied initially verified for the billing measurement of active energy.

Technical data

Accuracy class	B (MID), 1
Reference voltage [V]	3 x 230/400 (-30,+15%)
Reference frequency [Hz]	50 or 60
Reference current I_{ref} [A] direct connection	5
Nominal current I_n [A] indirect connection	5
Adjustable ratios (multiplier CTR values)	1, 10, 12, 15, 20, 24, 25, 30, 40, 50, 60, 80, 100, 120, 150, 160, 200, 240, 250, 300, 400, 480, 500, 600
Transient current I_{tr} [A] direct / indirect connection	0,5 / 0,25
Starting current I_{st} [A] direct / indirect connection	≤ 0,02 / 0,01
Minimal current I_{min} [A] direct / indirect connection	0,25 / 0,05
Maximal current I_{max} [A] direct / indirect connection	65 / 10
Power consumption - voltage circuit [VA/W]	≤ 7,5 / 0,65
Power consumption - current circuit [VA]	≤ 0,1
Impulse constatnt for test output k_{TOA} [imp/kWh]	1600
Impulse constatnt for impulse output k_{SOA} [imp/kWh]	1600 /R _{SO} (1 - 255)
Transistor output SO	24 V / 30 mA
Operating temperature	- 40 °C up to + 70 °C
Mean temperature coefficient [%/K]	≤ 0,04
Terminals current ; voltage ; auxiliary [mm]	∅ 6 ; ∅ 3 ; ∅ 3
Degree of protection	IP51
Meter dimensions w x h/h' x d [mm]	126 x 105/131 x 59
Weight [kg]	≤ 0,85

Marking of meters

AMT B0x₅-FAx₈Tx₁₀

AMT B0..... type designation

x₅ overload capacity: **3** – 200 %, **C** – 1300 %

F basic version: electricity meter with LCD and RTC

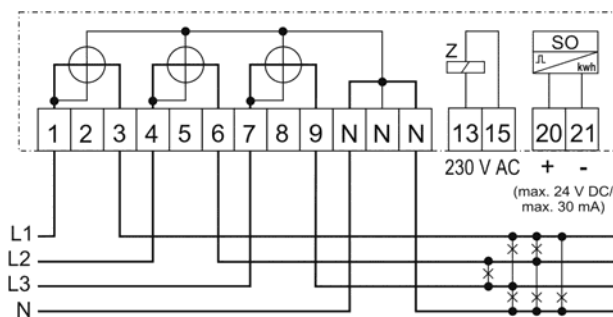
A measured energy: active

x₈ network connection: **2** – 2-phase 3-wire, **4** – 3-phase 4-wire

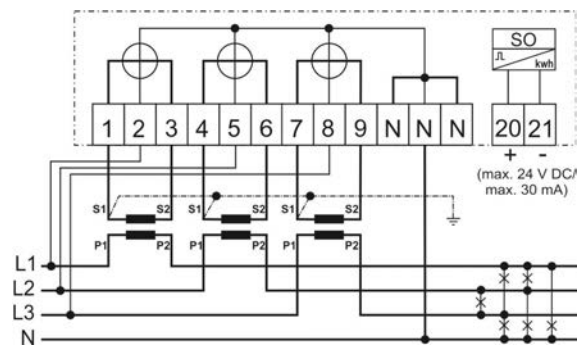
T current converter: transformer

x₁₀ special modules: **F** - transformer ratio setting by light beam, **H** - transformer ratio setting by pushbutton, **E** – external control of the second rate, **G** - transformer ratio setting by light beam + external control of the second rate, **I** - transformer ratio setting by pushbutton + external control of the second rate

Connection diagrams - examples



AMT B0C-FA4T
(direct, double-rate connection
with external control of the second rate)



AMT B03-FA4T
(indirect, single-rate connection)

Ordering data

- Type and version marking;
- Reference voltage and current range I_{ref}/I_n , I_{max} ;
- Reference frequency;
- Number of units;
- Required delivery terms.