

## Scope

Three-phase static electricity meters **AMT B3x-FA4SET** are determined for measurement of active energy, instantaneous active power for consumption and supply, voltage, current and power factor in 3-phase 4-wires network in direct connection. They enable measurement of energy in rates controlled by internal clock (up to 4 rates) or externally controlled in two rates.

The measured values stored into special registers according to the OBIS codes are displayed on LCD in cyclic or step mode. The data are stored in non-volatile memory during power outage, which can be viewed on the LCD. The electricity meters can be parametrized and readout by using optical probe AMOS type and software supplied by the manufacturer. The testing pulses proportional to the consumed energy are signalling by a red LED. 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”).

## Highlights

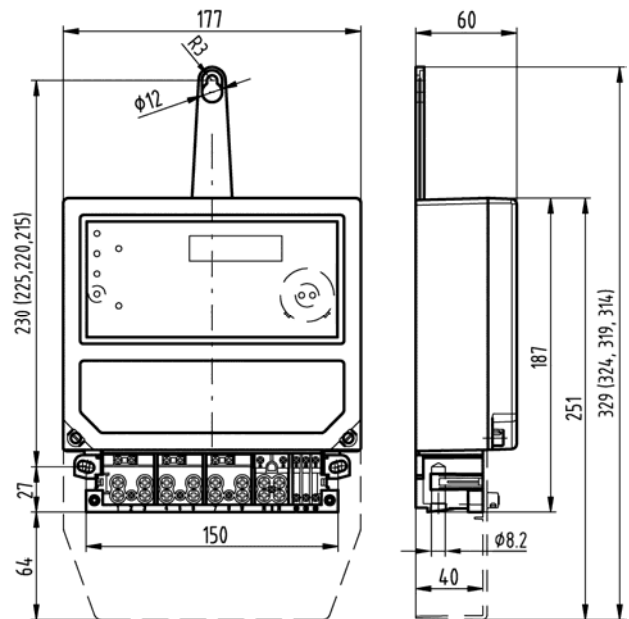
- Measurement of energy, power, voltage, current, power factor... (A+, A-, P+, P-, U, I, PF...);
- Historical records of the selected registers, created in the end of month - maximum 15 month historical records (A+, A-);
- Number of events records (about influence of magnetic field, missing voltage, covers removal...);
- Event records in separate logbooks (logbook 1 - 3);
- Passive impulse SO outputs for remote transmission;
- Communication interface: optical and RS485;
- Welded case on customer request;
- 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 (MID);
- Supplied initially verified for the billing measurement of active energy.

## Technical data

<b>Accuracy class</b>	A, B
<b>Reference voltage [V]</b>	3 x 220/380, 3 x 230/400, 3 x 240/415 (-30,+15%), 220, 230, 240
<b>Reference frequency [Hz]</b>	50
<b>Reference current I<sub>ref</sub> [A]</b>	5 and 10
<b>Transient current I<sub>tr</sub> [A]</b>	0,5 and 1
<b>Starting current I<sub>st</sub> [A]</b>	≤ 0,02 and 0,04
<b>Minimal current I<sub>min</sub> [A]</b>	0,25 and 0,5
<b>Maximal current I<sub>max</sub> [A]</b>	40, 50, 60, 80, 100
<b>Power consumption - voltage circuit [VA/W]</b>	≤ 7,7/ 1,2
<b>Power consumption - current circuit [VA]</b>	≤ 0,006 (for 5 A); 2,25 (for 100 A)
<b>Impulse constant [imp/kWh] for test output k<sub>TO</sub></b>	1000
<b>Transistor output SO</b>	24 V / 30 mA
<b>Operating temperature</b>	- 40 °C up to + 70 °C
<b>Mean temperature coefficient [%/K]</b>	≤ 0,04
<b>Terminals current ; auxiliary [mm]</b>	ø8 ; ø3
<b>Degree of protection meter case / terminal block</b>	IP54 / IP53
<b>Meter dimensions w x h/h' x d [mm]</b>	177 x 187 / 251 x 60
<b>Fixing holes distance w x h [mm]</b>	150 x 215-230
<b>Weight [kg]</b>	≤ 1,23



## Dimensional drawing



## Marking of meters

### AMT B3x-FA4SET x<sub>12</sub>

AMT B3.. type designation

x<sub>5</sub> ..... overload capacity: **4** - 400 %, **5** - 500 %, **6** - 600 %, **8** - 800 %, **A** - 1000 %, **B** - 1200 %, **D** - 1600 %, **E** - 2000 %

F ..... basic version: multifunctional electricity meter with LCD and RTC

A ..... measured energy: active

4 ..... network connection: 3-phase 4-wire

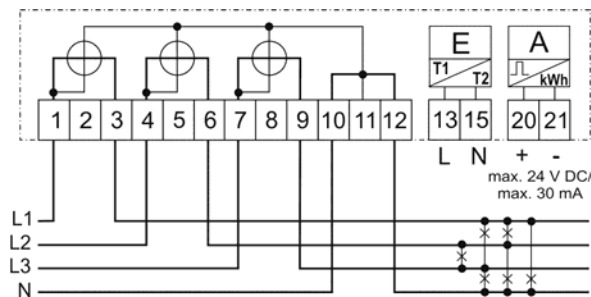
S ..... current converter: shunt

E ..... case version: up to 100 A, with drilling of current terminals ø 8 mm

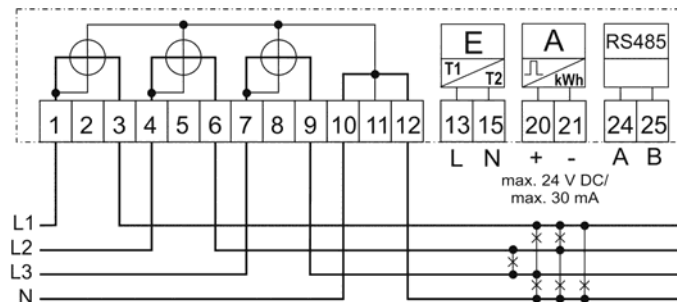
T ..... used processor

x<sub>12</sub> ..... special modules: **E** - external control of the second rate; **4** - RS 485 interface; **without mark** - internal control of the rates (ToU), **Y** – internal relay coupled with RTC (250 V AC /DC, 2 A)

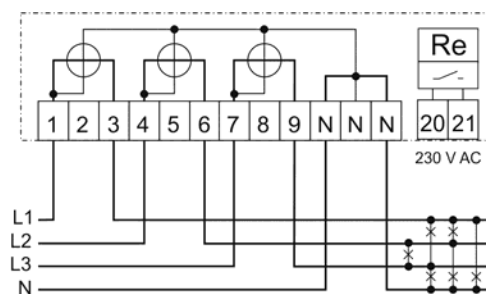
## Connection diagrams - examples



Double-rate electricity meters with output SO



Double-rate electricity meters with output SO and RS485 interface



Single-rate electricity meters with relay

## Ordering data

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