

DB2

DIGITAL THREE-PHASE WATT-HOUR METER

DB2 is a three-phase two-tariff class 1 or 2 digital watt-hour meter. Meter is intended for four wires direct connection in domestic and industrial applications.

Current and voltage operating ranges are 3x40A, 3x60A, 3x80A or 3x100A (Base current 10A or 5A), and 3x230/400V.

Meter **DB2** has pulse output, and LED diodes for pulse out and tariff indication.

Measured values of active energy, maximum of power, active tariff, phase powers, voltages and currents, are shown on LCD indicator, cyclically.

Meter **DB2** can be equipped by:

- external inputs for control up to four tariffs;
- maximum demand indicators of 15-minute mean active power and generator 900s/9s ;
- switch clock for tariff control which is programmable by Psion (software PSIRTC) or by PC (software RTCTIME);
- optical infrared port which provides meter reading and programming by Psion (software PSIDB2) or by PC (software DB2IEC);

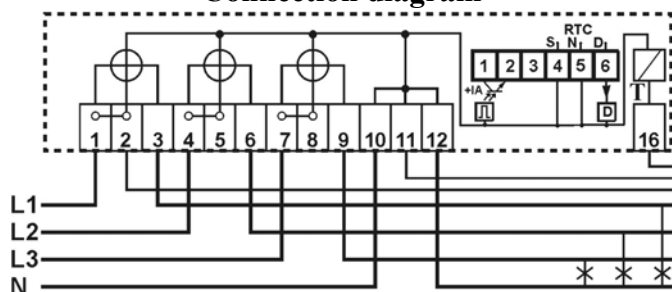
Meter **DB2** can register and record:

- values of active energy counters and maximum demand indicators on the first day of month at 00.00h, for 16 months. Data could be accessible through display and optical port;
- values of active energy counters and maximum demand indicators at up to 40 arbitrary points with resolution of 1h. Data are accessible trough optical port.

Watt-hour meter **DB2** is a multiprocessor system based on digital processing of input current and voltage obtained by A/D converters. Power of microcomputers provides application of complex algorithms for tariff, load management, data processing, tests and communications.

Device **DB2** is realized in VLSI CMOS technology having reliability, low power consumption, operation in wide range of ambient temperatures, and low aging.

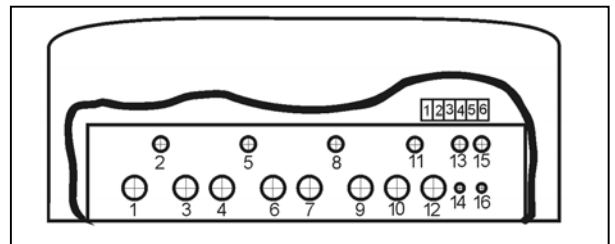
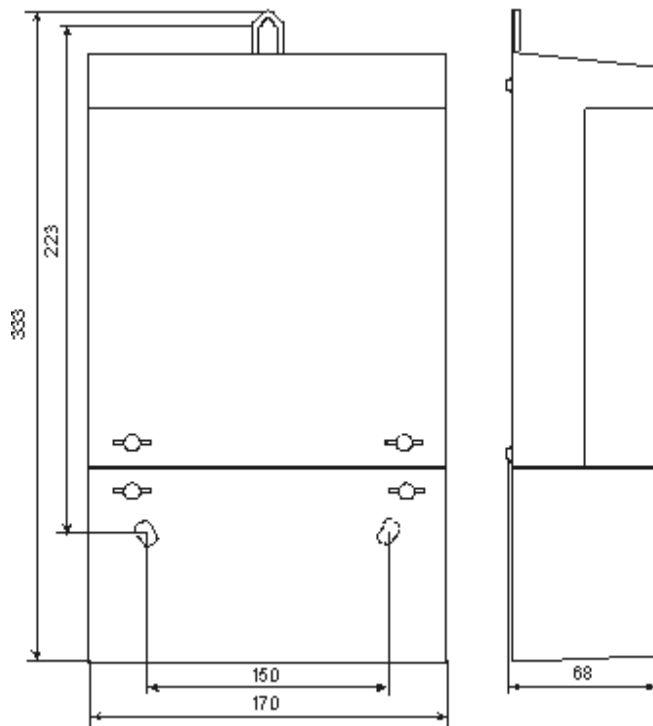
Connection diagram



Technical characteristics

Type	DB2	Power consumption:	
Rated voltage V_n	3x230/400V (+15%, -20%)	voltage circuit at V_n	< 1W (9VA)/phase
Rated frequency f_n	50 Hz	current circuit	< 0.5VA/phase
Base current I_B	10A	AC voltage withstand	4kV, 50Hz, 1 minute
Maximum current I_M	100A direct connection	Impulse voltage withstand	6kV, 1.2/50 μ s
Constant of meter	1000 impulses/kWh or 250 impulses/kWh	Operating temperature range	-20°C, +60°C
Class of accuracy	IEC 1036 class 1 or 2	Ambient relative humidity	<90%
Error limits:		Case dimensions	333x170x68 mm
0.05 $I_B \div I_M \cos\phi=1$	$\pm 1\%$, $\pm 2\%$	Hole for wire	6.5 mm diameter
0.2 $I_B \div I_M \cos\phi=0.5$	$\pm 1\%$, $\pm 2\%$	Weight	1.5 Kg
Starting current threshold	< 50mA/phase	Function of maximum demand indicator of class 1	IEC 211 class 1
Pulse out:	optocoupled, S0, IEC 62053-31, Class B, 1Wh/pulse	Class of accuracy	
voltage(max)	15V	Measurement period for mean power measurement	15 minute
current (max)	15mA	Reset time	9s
duration	30ms	Function of switch clock	
Optical infrared port	IEC 61107, Mode A	Real time clock stability	± 1 minute/month
		Expected battery life	> 17 years
		Optical infrared port	IEC 61107, Mode A

Assembling data



Ordering information

DB2 US 60A 2 MAX OC 4T
 model switch max. class max. dem. optical four
 clock current indicator port tariffs

Additional data and price list are available upon request.

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