

DB2

DIGITAL THREE-PHASE WATT-HOUR METER

DB2 is a three-phase four-tariffs class 1 or 2 digital watt-hour meter. Meter is intended for four wires direct connection in domestic applications. Meter **DB2** is placed in polycarbonate case having mains connector with switch clock and RCR module.

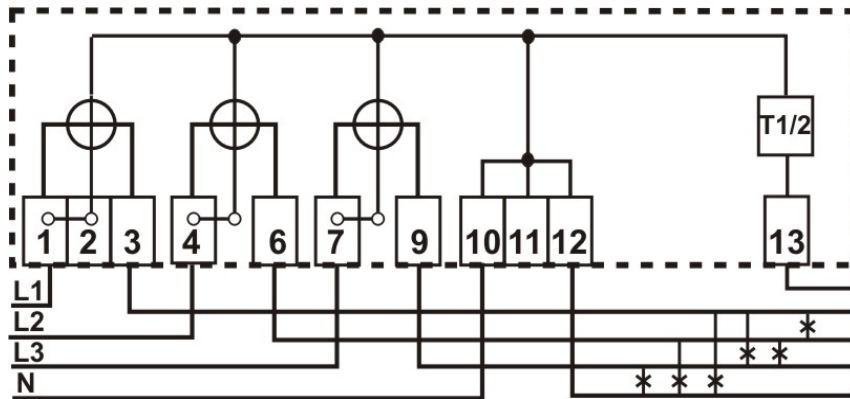
Current and voltage operating ranges are 3x40A or 3x60A (base current 10A or 5A), and 3x230/400V.

Measured values of active energy in different tariffs and date and time, are shown on LCD indicator, cyclically.

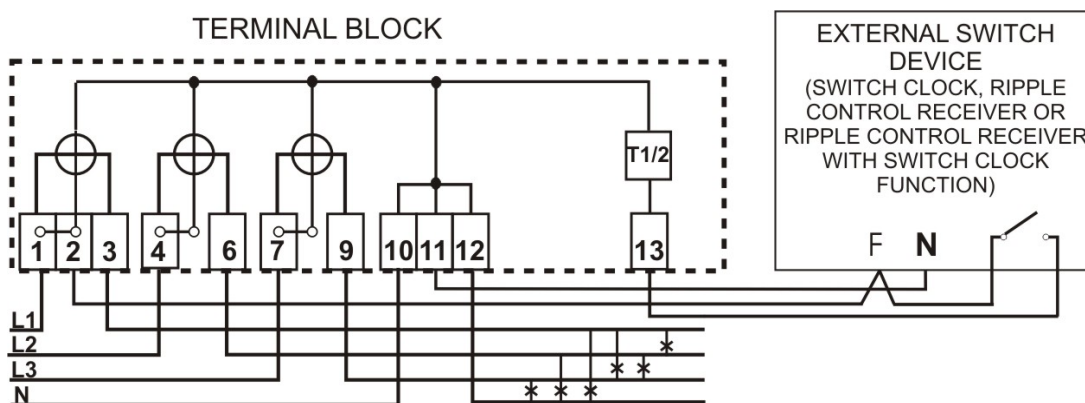
Watt-hour meter **DB2** is a multiprocessor system based on digital processing of input currents and voltages obtained by A/D converters.

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

Connection diagram



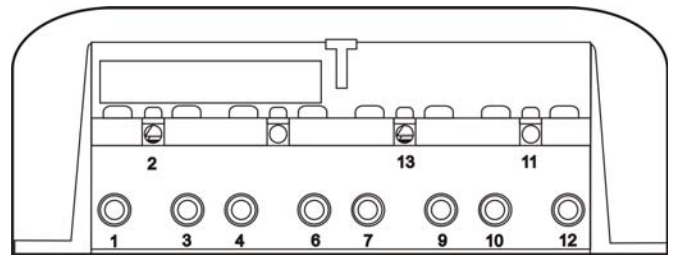
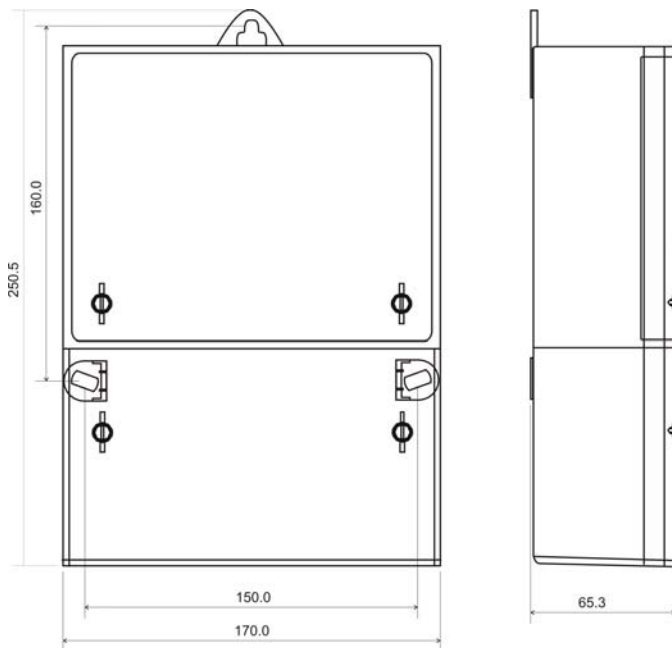
Connection of external tariff device with DB2 meter



Technical characteristics

Type	DB2	AC voltage withstand	4kV, 50Hz, 1 minute
Rated voltage V_n	3x230/400V (+15%, -20%)	Impulse voltage withstand	6kV, 1.2/50 μ s
Rated frequency f_n	50 Hz	Operating temperature range	-20°C, +70°C
Base current I_B	10A or 5A	Ambient relative humidity	<90%
Maximum current I_M	40A, 60A, 80A ili 100A	Case dimensions	250.5x170.0x65.3 mm
Constant of meter	1000 impulses/kWh	Hole for wire	6.5 mm diameter
Class of accuracy	IEC 1036 class 1 or 2	Weight	1.0 Kg
Error limits:		Function of switch clock	
$0.05I_B \div I_M \cos\varphi=1$	$\pm 1\%$, $\pm 2\%$	Real time clock stability	± 1 minute/month
$0.2I_B \div I_M \cos\varphi=0.5$	$\pm 1\%$, $\pm 2\%$	Expected battery life	> 15 years
Starting current threshold	< 20mA/phase	Function of ripple receiver	
Pulse out:	optocoupled, S0, IEC 62053-31, Class B, 1Wh/pulse	Mains frequency f_n	50-60Hz
voltage (max)	15V	Carrier frequency f_0	on request
current (max)	15mA	Filter Q factor	20
duration	30ms	Threshold voltage V_{op}	$0.1 \div 4.5\% V_n$
Power consumption:		Nonoperative threshold voltage V_{on}	$0.1 \div 4.5\% V_n$
voltage circuit at V_n	< 1W (9VA)/phase	Time delays	0s to 99999s
current circuit	< 0.5VA/phase		

Assembling data



Ordering information

DB2 **US** **MTK** **60A** **2** **2T**
 model switch ripple max. class two
 clock receiver current tariffs

Additional data and price list are available upon request.

“ENEL” d.o.o. Beograd, Petrovaradinska 26, 11000 Beograd
 Phone: ++381 11 285 0 582, Fax: ++381 11 285 0 580
 e-mail: enel@EUnet.yu, <http://www.enel.co.yu>