



## EDMK Three Phase Kilowatt Hour Meter

The **EDMK** three-phase electronic energy meter is capable of measuring consumed and generated energy (four quadrants): Active energy (consumed and generated), inductive reactive energy (consumed and generated) and capacitive reactive energy (consumed and generated), plus metering partial energies. Measurements are in true effective value, via three AC voltage and neutral inputs and three AC current inputs. (via .../5A, .../1A ) CTs.

### Power Supply

Single phase: 230 V a.c.  
or  
85..265 VAC / 95...300 VDC  
Voltage tolerance: -15 %... +10 %  
Frequency: 45...65 Hz  
Maximum burden: 5 V·A  
Operating temperature: -20 °C...+60 °C  
Humidity (without condensation): 5 %...95 %  
Maximum altitude: 2.000 m

### Mechanical Features

Casing material: Self extinguishing VO plastic  
Protection assembled device (front) IP 51  
Protection non assembled device IP 31  
Supply and voltage measure wires: Minimum section 1 mm<sup>2</sup>  
Secondary current transformers wire: Minimum section 2.5 mm<sup>2</sup>  
Dimensions (mm): 85 x 52 x 70 (3 steps)

### Class

Accuracy class in active energy  
Class 1 - EN62053-21  
Accuracy class in reactive energy  
Class 2 - EN62053-23

### Standards

EN62052-11, EN62053-21, EN62053-23, EN61010-1

### Models

**EDMK-ITF-C2 M31741** LCD 1 - kW·h, kvarL·h, kvarC·h  
**EDM3k-ITF-C2 M31743** LCD 3 - kW·h, kvarL·h, kvarC·h  
**EDMK-ITF-RS485 M31751** LCD 1 RS-485 kW·h, kvarL·h, kvarC·h



### Measurement Circuit

Rated voltage: 300 VAC P-N / 500 VAC P-P  
Frequency: 45...65 Hz  
Rated current: .../5A or .../1A  
Permanent overload: 1.2 I<sub>n</sub>  
Voltage circuit burden per phase: 0.3 VA  
Current circuit burden per phase: 0.3 VA at 5 A. or  
0.06 VA at 1 A

### Pulse Output Transistor Features

Opto-insulated transistor (open collector): NPN  
Maximum operating voltage: 24 V c.c.  
Maximum operating current: 50 mA  
Maximum frequency: 5 imp / s  
Pulse length: 50 ms

### Transistor Outputs Connections

Output 1: Terminal 9 - 8  
Output 2: Terminal 7 - 8

### Maximum Counter Value

9999999 kW

### Safety

Category III EN61010-1.  
Class II double

