



## **KWh**

# THREE-PHASE ACTIVE ENERGY METER

### **DIRECT INPUT**

through cables with internal 36 - 72 - 140 - 240 Amp. CTs

three-phase, 380 Volt POWER SUPPLY

**MEASURING SIGNAL** and power are supplied by simply tightening 3 screws on the instrument front

simplified WIRING SYSTEM

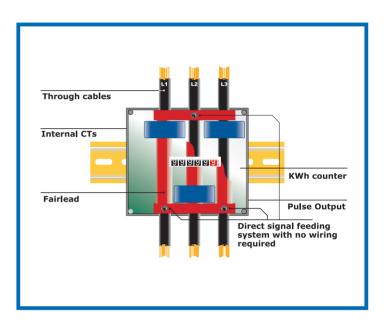
## **ENERGY 3 KWh**

The considerable increase in electricity costs determines the need of carefully investigating the energy consumed by individual cost centres, products, production lines, departments or homes; our three-phase active energy meter keeps track of your energy consumptions in single- and three-phase systems. Our energy meter installed in power feeding lines, distribution panels or directly upstream from the utilities, records consumption data and allows you to precisely allocate costs.

Specially designed for assembly on a 6-module DIN rail, it is compact, strong and easy to read. Ideally suited for use in industrial systems, leisure-time facilities and homes, this unit makes it easier to allocate consumption costs that are normally defined according to standard procedures.

By placing some internal CTs, this instrument uses a revolutionary wiring system with a direct input and through cables for currents up to 240 Amps., which ensures a faster and easier wiring.





#### **THREE-PHASE MODELS with through cables**

•ENERGY3 KWh 5/36A direct measure up to 36 A
•ENERGY3 KWh 72A direct measure up to 72 A
•ENERGY3 KWh 140A direct measure up to 140 A
•ENERGY3 KWh 240A direct measure up to 240 A
•ENERGY3 KWh 5AxK reading kWh x K

Optional pulse output 100 pulses/1 KWh for connection to Elcomem24

### **SINGLE-PHASE MODELS with through cables**

•ENERGY2 KWh 5/36A direct measure up to 36 A
•ENERGY2 KWh 72A direct measure up to 72 A
•ENERGY2 KWh 140A direct measure up to 140 A
•ENERGY2 KWh 240A direct measure up to 240 A
•EL5/30A KWh - 1 module direct measure up to 36 A
•ENERGY2 KWh 5AxK reading KWh x K
Optional pulse output 100 pulses/1 KWh for connection to

Elcomem24

#### THREE-PHASE MODELS with external CT/5

•ENERGY3 kWh 500A direct measure with ext. CT 500/5
•ENERGY3 kWh 1000A direct measure with ext. CT 1000/5
•ENERGY3 kWh 1500A direct measure with ext. CT 1500/5

Optional pulse output 10 pulses/1 KWh for connection to Elcomem24

## ELCOMEM24 PULSE COUNTER with RS485 output

It can be connected to 24 ENERGY3 or ENERGY2 meters and store up to one hundred million pulses which can be downloaded as required into a PC. It calculates consumption costs.

#### SINGLE-PHASE MODELS with external CT/5

•ENERGY2 kWh 500A direct measure with ext. CT 500/5
•ENERGY2 kWh 1000A direct measure with ext. CT 1000/5
•ENERGY2 kWh 1500A direct measure with ext. CT 1500/5

Optional pulse output 10 pulses/1 KWh for connection to Elcomem24

## RS 485/232 INTELLIGENT CONVERTER suitable for connection of Elcomem24 to a PC

Intelligent conversion module used to transmit pulses from one ELCOMEM24 to a PC located within a distance of 1000 metres.

## MONITORING & CALCULATING COSTS OF KWh as well as WATER/GAS CONSUMPTIONS

Monitoring consumptions is a matter of concern for more than one energy manager.

Much has been said to achieve a solution that meets the requirements of today's life and of the cost centres.

Our wide range of 36-72-140-240 Amp. single- and three-phase kWh meters provided with a pulse output can be successfully used to keep electrical consumptions under control even in those cases where a great number of users is involved.

Current is measured by a through cable with internal CTs.

Voltage is applied by simply tightening three screws on the front panel.



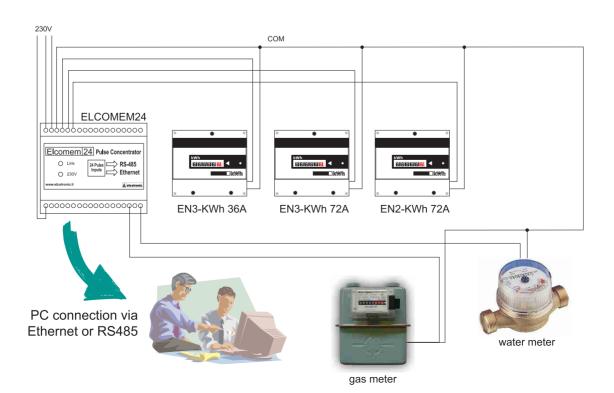


This simple procedure ensures a trouble-free operation.

Accuracy is 0.5%: the instrument is calibrated with the internal CTs incorporated, so that any possible measuring error of the current transformer is adjusted by calibration.

The following step is the installation of a pulse counter which is able to collect pulses from 24 instruments.

With the use of a specially dedicated software "ELCOMEM24LT", up to 3048 users can be monitored, including kWh, water and gas meters.



ELCOMEM24 pulse counter can store up to one thousand million pulses that can be downloaded into a PC if required, in order to calculate consumptions. When data is printed for billing operations, consumptions are automatically reset and a new counting sequence starts.

DATE: 11/11/2005 12:59

### List of consumptions & costs

Date		Name		Consumptions (KWh/m3)	Costs (KWh/m3)	Amounts	
1	11/11/2005	12.53	Antonio	KWh	0.000	€ 0.15	€ 0,
2	11/11/2005	10.29	Mario	KWh	0.090	€ 0.15	€ 0.01
3	11/11/2005	10.29	Giovann	i KWh	0.080	€ 0.15	€ 0.01
4	11/11/2005	10.29			0.000	€ 0.01	€ 0.
5	11/11/2005	10.29			0.000	€ 0.01	€ 0.
6	11/11/2005	10.29			0.090	€ 0.01	€ 0.
7	11/11/2005	10.29			0.000	€ 0.01	€ 0.
8	11/11/2005	10.29	Mario - h	not water	0.200	€ 0.40	€ 0.08
9	11/11/2005	10.29	Mario - o	cold water	0.300	€ 0.30	€ 0.09
10	11/11/2005	10.29			0.000	€ 0.01	€ 0.
11	11/11/2005	10.29			0.000	€ 0.01	€ 0.
12	11/11/2005	10.29			0.000	€ 0.01	€ 0.
13	11/11/2005	10.29			0.000	€ 0.01	€ 0.
14	11/11/2005	10.29			0.000	€ 0.01	€ 0.
15	11/11/2005	10.29	Luca	KWh	0.090	€ 0.15	€ 0.01
16	11/11/2005	10.29			0.000	€ 0.01	€ 0.
17	11/11/2005	10.29			0.000	€ 0.01	€ 0.
18	11/11/2005	10.29			0.000	€ 0.01	€ 0.
19	11/11/2005	10.29			0.000	€ 0.01	€ 0.
20	11/11/2005	10.29			0.000	€ 0.01	€ 0.
21	11/11/2005	10.29			0.000	€ 0.01	€ 0.
22	11/11/2005	10.29			0.000	€ 0.01	€ 0.
23	11/11/2005	10.29			0.000	€ 0.01	€ 0.
24	11/11/2005	10.29			l 0.000	€ 0.01	€ 0.

The above list must be filled in with the name of the different users.

The cost of each recorded pulse is to be entered in order to compute the overall consumption cost to be debited to each user.

When a customer is cleared, all relevant data is reset. Current date appears and a new metering sequence will start.

Ask for our ELCOMEM24 version which monitors energy consumptions according to time bands!



The above data is given by way of example. 04/2006 Version

**AGENT** 

**DEALER**