

# Three Phase Power Meter

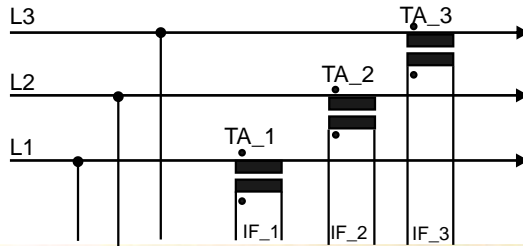
Digital measurer of electric quantities  
for mono / three phases systems  
DIN bar mounting (6)



## MGE 3

### It ACQUIRES:

**3 voltages**  
directly or  
through a VT



**3 currents**  
through AT with  
IL / 5A relation

Suitable in  
ARON  
connection

Suitable in  
Three phase  
(3P3W)  
connection

Suitable in  
Three phase  
+  
Neutral  
(3P4W)  
connection



Correct measures  
even in case of  
unbalanced  
load

Correct measures  
even in case of  
harmonic  
distortion

Power supply  
- 110 Vac  
- 230 Vac

Dimensioni reali

Serial I/O  
- RS-485  
- RS-422

### It ELABORATES and MAKES AVAILABLE THE VALUES:

- PHASE VOLTAGE (VL1-N; VL2-N VL3-N)
- LINE VOLTAGE (VL1-VL2; VL2-VL3; VL3-VL1)
- PHASE CURRENT (IL1, IL2 IL3)
- PHASE ACTIVE POWER (W\_L1÷L3)
- PHASE REACTIVE POWER (Var L1÷L3)
- PHASE APPARENT POWER (VA\_L1÷L3)
- PHASE POWER FACTOR [cos-fi\_L1÷L3]

- THREE PHASE SYSTEM VOLTAGE [V]
- THREE PHASE SYSTEM CURRENT [A]
- THREE PHASE SYSTEM POWER FACTOR[cos-fi]
- THREE PHASE SYSTEM ACTIVE POWER (P) [W]
- THREE PHASE SYSTEM REACTIVE POWER (Q) [Var]
- THREE PHASE SYSTEM APPARENT POWER (S) [VA]
- FREQUENCY (f) [Hz]

## TECHNICAL SPECIFICATIONS

**Power Meter Analyzer (settable):** mono-phase, two-phase, three-phase with neutral; three-phase without neutral; three-phase ARON

**Measurement method:** TRMS Type

**Current transformer:** prog. ratio from 1 to 999

**Voltage transformer:** prog. ratio from 1,0 to 99,9

**Input impedance:** > 1 Mohm (phase-neutral input)

**Sampling time:** 700ms

**Power supply:** 230Vac; 115Vac

**Operating Temperature:** from 0 to +50°C

**Storage Temperature:** from -10 to +60°C

**Relative humidity (non condensing):** 0-90% @40°C

**Dimensions:** see the drawings

**Weight:** circa 400g (packing included)

**Monting:** guida DIN

**Wave-form:** sinusoidal or distorted wave.

**Digital filter:** filtering range from 0 to 100; filtering coefficient from 1 to 16

**Power demand:** Prog. Integration time 1 to 30 min.

### Serial Port specifications

**RS-485** 2 or 3 wiring; **RS4-222** 4 or 5 wiring

**Baud rate:** 9600 baud

**Parity:** None; **N°Bit=** 8; **Stop Bit=**1

**Communication protocol:** MODBUS RTU

**Address:** 1 to 255

### EMC:

emissions: EN50084-1 (residential, class A)

Immunity: EN61000-6-2 (industrial, class A)

**Installation category (IEC 60664):** Cat. III

**Standards:** EN61010, IEC 60664

**Approvals:** CE

### Insulation

**AC power supply:** 4kV for 60s

**Voltage (V L1-N, V L2-N, V L3-N)** 80Vac ÷ 460 Vac Accuracy: ± 0.5%FS

**Voltage (V L1-2, V L2-3, V L3-1)** 130Vac ÷ 790 Vac Accuracy ± 1.5% FS

**Current (A L1, A L2, A L3)** 0,2A ÷ 6 A Accuracy ± 0.5% FS + 1 Lsb; da 0,03÷0,25A ± 0.5% FS + 7 Lsb

**Max over current:** 36A for 500ms

**Calculated variables: Accuracy**

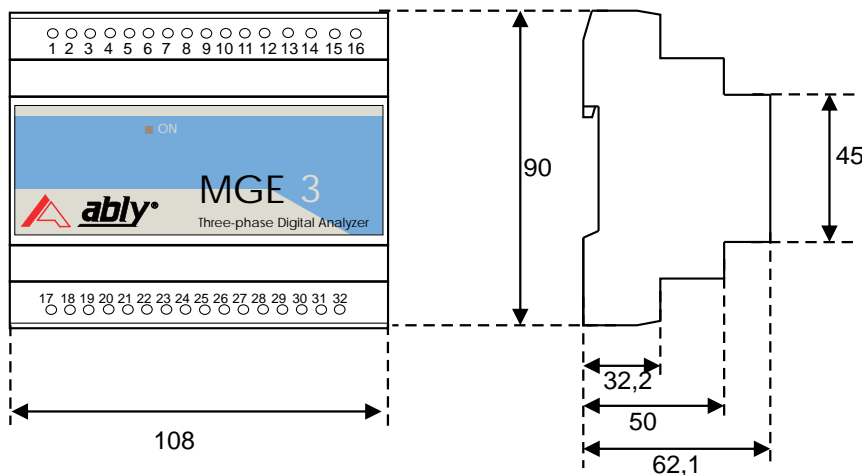
**Power (W); (VA):** ±1% FS +1 lsb from 0,25A to 6A ;±1% FS + 7 lsb from 0,03 A to 0,24A

## ORDINATION CODES

Cod. 4M000040: MGE3 3PH.DIGITAL ANALYZER 220V

Cod. TUTL10MG: SOFTWARE PRESET MULTIMETER MGE3

### DIMENSIONS (mm):



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CERTIFICATO DA DNV

UNI EN ISO 9001/2000