



AEL.KC.811

AEL.KC.811 — Combined (active-reactive) electronic meter. It operates at 3×230/400 V — 3×57.7/100 V reference voltage over a 1(10) A current range and measures active energy to accuracy class Class C (0.5). It complies with the TEDAŞ-MLZ/2017-062.B specification and is MID approved.

3×230/400 V

3×57.7/100 V · 50 Hz

1(10) A

CT-connected

Class C

Active accuracy (0.5)

IP54

-40...+70 °C outdoor

4 Tariffs**KEY FEATURES**

- ◆ 3×230/400 V · wide current range
- ◆ Active-reactive combined metering, 4-quadrant operation
- ◆ Demand, maximum and load profile records
- ◆ RS485 · optical port · optional communication modules
- ◆ High durability for industrial installations
- ◆ Optional bidirectional (import-export) metering

MID 2014/32/EU

CE

TEDAŞ-MLZ/2017-062.B

EN 50470

TECHNICAL SPECIFICATIONS**ELECTRICAL DATA**

Reference voltage (Un)	3×230/400 V — 3×57.7/100 V
Operating voltage range	3×40 V/70 V (min) – 3×270 V/468 V (max)
Reference frequency (Fn)	50 Hz ±5%
Reference current (In/Ib)	1 A
Maximum current (Imax)	10 A
Starting current (Ist)	1 mA
Minimum current (Imin)	0.01 A
Transitional current (Itr)	0.05 A
Accuracy class	Active C (0.5) · opt. B (Class 1) — Reactive 2
Meter constant	10000 imp/kWh · 10000 imp/kvarh
Voltage circuit consumption	≤ 1 W
Current circuit consumption	≤ 1 VA

METERING AND RECORDING

Meter definition	Three-phase, 4-wire, active-reactive electronic meter
Connection type	Current: via CT, voltage: via VT or direct
Number of tariffs	4
Measurement direction	Single direction (bidirectional optional)
Data storage capacity	1 year
LCD display	9 (6+3) digits
LED pulse output	1 LED (active), 2 LED (reactive)

COMMUNICATION

Communication interface	Optical port (IEC 62056-21), RS-485
Baud rate	300 – 19,200 Baud

ENVIRONMENT AND MECHANICS

IP class	IP54 (outdoor)
Protection class	II
Operating temperature	-40 °C ... +70 °C (3K7)
Relative humidity	95% (non-condensing)
Mechanical / EM environment	M1 / E2 (2014/32/EU)
Operating environment	Non-condensing humidity
ESD withstand	Contact 8 kV · air 15 kV
Impulse voltage withstand	6 kV

BATTERY, CLOCK AND LIFE

System battery life	≥ 10 years
RTC battery life	≥ 10 years
Shelf life	≥ 4 years
Clock accuracy	±0.5 s/day (23 °C ±2 °C, EN 62054-21)

STANDARDS AND APPROVALS

Measuring instruments directive	MID 2014/32/EU · CE
Specification compliance	TEDAŞ-MLZ/2017-062.B
Standards	EN 50470-1, EN 50470-3, EN 62052-11, EN 62053-21, EN 62053-23

