



AEL.KC.021

AEL.KC.021 — Three-phase directly connected active-reactive combined meter. It operates at 3×230/400 V reference voltage over a 5(100) 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

50 Hz ±5%

5(100) A

Direct connection

Class C

Active accuracy (0.5)

IP54

-40...+70 °C outdoor

4 Tariffs**KEY FEATURES**

- ◆ 3×230/400 V, 50 Hz · 0.25–5(100) A
- ◆ Three-phase four-wire, multi-tariff combined metering
- ◆ Inductive / capacitive reactive records (1000 imp/kvarh)
- ◆ Demand reset and call buttons · RS485
- ◆ IP54, M1/E2, outdoor
- ◆ 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
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)	5 A
Maximum current (Imax)	100 A
Starting current (Ist)	0.02 A (0.04 × Itr)
Minimum current (Imin)	0.15 A
Transitional current (Itr)	0.5 A
Accuracy class	Active C (0.5) · opt. B (Class 1) — Reactive 2
Meter constant	1000 imp/kWh · 1000 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 and voltage: 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 (optional)
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

