



ME1zr.



ME3zr.



ME4zrt

Function

Watt hour meters (rms) designed for the measurement of watt hours consumed by an electrical circuit, single-phase or three-phase, with or without a distributed neutral.

ME1

Single-phase watt hour meter.

ME1z

Single-phase watt hour meter with partial meter.

ME1zr

Single-phase watt hour meter with partial meter and remote transfer of metered impulses.

ME3

Three-phase watt hour meter without neutral.

ME3zr

Three-phase watt hour meter without neutral with partial meter and remote transfer of metered impulses.

ME4

Three-phase watt hour meter + neutral.

ME4zr

Three-phase watt hour meter + neutral with partial meter and remote transfer of metered impulses.

ME4zrt

Three-phase watt hour meter with or without neutral, with partial meter and remote transfer of metered impulses, associated with external CTs (not supplied).

Common technical data

- Accuracy class: 2.
- Frequency: 50/60 Hz.
- Consumption: 2.5 VA.
- Total meter:
 - on a phase (single-phase network), on the 3 phases (three-phase network)
 - capacity :
 - ME1, ME1z, ME1zr, ME3, ME3zr, ME4, and ME4zr: 999.99 MWh
 - ME4zrt associated with a CT rating ≤ 150 A: 999.99 MWh
 - ME4zrt associated with a CT rating > 150 A: 9 999.9 MWh.
- Display: in kWh or MWh with 5 significant digits.
- Partial meter:
 - on a phase (single-phase network), on the 3 phases (three-phase network)
 - with RESET
 - capacity:
 - ME1z, ME1zr, ME3zr, and ME4zr: 99.99 MWh
 - ME4zrt associated with a CT rating ≤ 150 A: 99.99 MWh
 - ME4zrt associated with a CT rating > 150 A: 999.9 MWh.
- Display: in kWh or MWh with 4 significant digits.
- Flashing meter indicator (yellow) on front panel.
- Operating temperature: -25°C to $+55^{\circ}\text{C}$.
- Connection using tunnel terminals:
 - top connection: 6 mm^2
 - bottom connection: 16 mm^2 .
- Conform to IEC 1036 standard (with a sealable enclosure).

Specific data

ME1 and ME1z

- Direct measurement up to 63 A.
- Meter indicator: 1000 flashes per kWh.
- Wiring error indicator.

ME1zr

- Direct measurement up to 63 A.
- Meter indicator: 1000 flashes per kWh.
- Remote transfer by impulse contact NO:
 - ELV insulation voltage: 4 kV, 50 Hz
 - 18 mA (24 V DC), 100 mA (230 V AC)
 - 1 impulse of 200 ms (contact closing) per kWh.
- Wiring error indicator.

ME3

- Direct measurement up to 63 A per phase.
- Meter indicator: 100 flashes per kWh.

ME3zr

- Direct measurement up to 63 A per phase
- Meter indicator: 100 flashes per kWh
- Remote transfer by impulse contact NO:
 - ELV insulation voltage: 4 kV, 50 Hz
 - 18 mA (24 V DC), 100 mA (230 V AC)
 - 1 impulse of 200 ms (contact closing) every 10 kWh.

ME4

- Direct measurement up to 63 A per phase.
- Meter indicator: 100 flashes per kWh.

ME4zr

- Direct measurement up to 63 A per phase.
- Meter indicator: 100 flashes per kWh.
- Remote transfer by impulse contact NO:
 - ELV insulation voltage: 4 kV, 50 Hz
 - 18 mA (24 V DC), 100 mA (230 V AC)
 - 1 impulse of 200 ms (contact closing) every 10 kWh.

ME4zrt

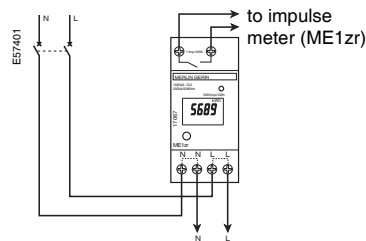
- CT measurement: ratio 40/5 to 6000/5 (configurable).
- TI ratings (see page 92068E.fm/2).
- Consumption of each measured input: 0.05 VA to 5 A.
- Meter indicator: 10,000/x flashes per kWh (x = CT rating),
example: CT 500/5 = 10,000/500 flashes per kWh = 20 flashes per kWh.
- Remote transfer by impulse contact NO:
 - ELV insulation voltage: 4 kV, 50 Hz
 - 18 mA (24 V DC), 100 mA (230 V AC)
 - 10/x impulse of 200 ms per kWh (x = CT rating) = x/10 kWh per impulse,
example: CT 500/5 → 500/10 kWh per impulse = 50 kWh per impulse.

Catalogue numbers

Type	Rating (A)	Voltage (V AC)	Width in mod. of 9 mm	Cat. no.
Single-phase network (1P+N)				
ME1	63	230	4	17065
ME1z	63	230	4	17066
ME1zr	63	230	4	17067
Three-phase network (3P)				
ME3	63	3x400-3x230	8	17075
ME3zr	63	3x400-3x230	8	17076
ME4zrt	40...6000	3x400-3x230	8	17072
Three-phase + neutral network (3P+N)				
ME4	63	3x230/400	8	17070
ME4zr	63	3x230/400	8	17071
ME4zrt	40...6000	3x230/400	8	17072

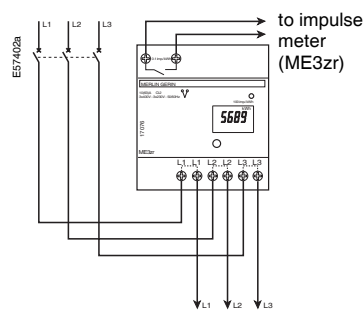
Connection

Single-phase network

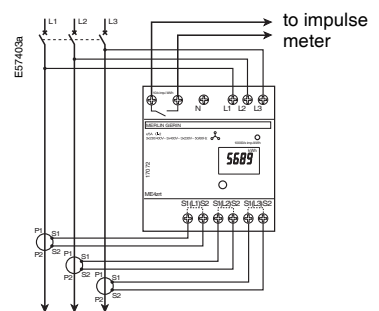


ME1 / ME1zr.

Three-phase network

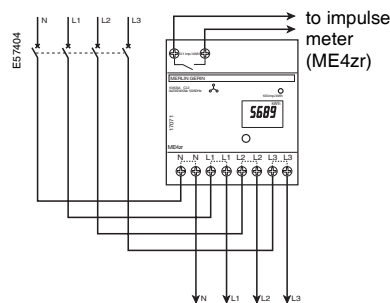


ME3 / ME3zr.

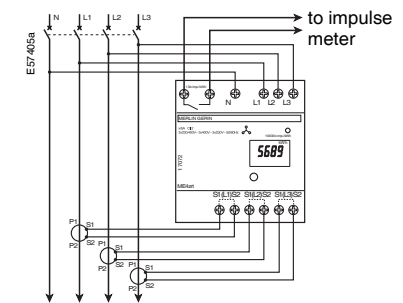


ME4zrt.

Three-phase + neutral network



ME4 / ME4zr.

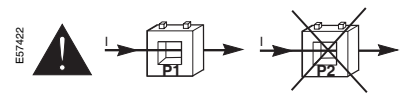
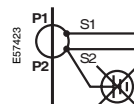


ME4zrt.

Caution:

- do not earth the CT secondary (S2)
- networks greater than 5 A: measurements require use of current transformers with a 5 A secondary.

- it is essential to comply with routing direction of power cables in the current transformer primary. The cables enter in "P1" and leave in "P2" in the direction of the loads.



Kilowatt Hour Meter

Seri EN Dan ME

PWMET A



Data Teknis Seri EN

- Kelas akurasi : 1
- Konsumsi energi : < 10 VA
- Suhu operasi : -25 C s/d 55 C
- Standard : IEC 62053-21 dan IEC 61557-12
- Display : Elektromekanik
- Pulsa output : Hanya tersedia untuk tipe EN40P (referensi 15239)



Panorama Produk Seri EN

Tipe	Referensi	Tegangan (V)	Rating Arus (A)	Harga (Rp)	SS
1 Phasa (1L + N)					
EN40	15238	230	40	508,000	2
EN40P	15239	230	40	560,000	1



Data Teknis Seri ME

- Kelas akurasi : 1
- Konsumsi energi : 2.5 VA
- Suhu operasi : -25 C s/d 55 C
- Standard : IEC61557-12 dan IEC 62053-21
- Display : Digital
- Pulsa output : Tersedia untuk semua tipe ME

Panorama Produk Seri ME

Tipe	Referensi	Rating Arus (A)	Harga (Rp)	SS
1 Phasa (1L + N)				
ME12r	17067	63	1,217,000	1
3 Phasa (3P)				
ME32r	17076	63	1,495,000	2
ME4zrt	17072	40 ... 6000 *	2,225,000	1
3 Phasa + Netral (3P + N)				
ME42r	17071	63	1,982,000	1
ME4zrt	17072	40 ... 6000 *	2,225,000	1

Catatan:

- Untuk tipe ME4zrt (referensi 17072) memungkinkan untuk ditambahkan CT untuk pengukuran arus s/d 6000 A (CT dijual terpisah)