

PowerLogic power-monitoring units

iEM2000/2000T

Technical data sheet





iEM2000T



iEM2000



iEM2010



iME1zr.

Function

Digital kilowatt-hour meters designed for sub-metering of active energy (rms) consumed by a single-phase or three-phase electric circuit with or without distributed neutral.

iEM2000T

40 A single-phase kilowatt-hour meter without display, with remote transfer of metering impulses (static output).

iEM2000

40 A single-phase kilowatt-hour meter.

iEM2010

40 A single-phase kilowatt-hour meter with remote transfer of metering impulses (static output).

iME1

Single-phase kilowatt-hour meter.

iME1z

Single-phase kilowatt-hour meter with partial meter.

iME1zr

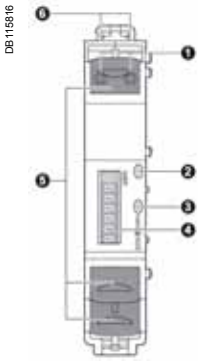
Single-phase kilowatt-hour meter with partial meter and remote transfer of metering impulses (relay output).

Catalogue numbers

Type	Rating (A)	Voltage (V AC)	Tolerance (V AC)	Width in mod. of 9 mm	Cat. no.
Single-phase circuit (1L + N)					
iEM2000	40	230	±20	2	A9MEM2000
iEM2010	40	230	±20	2	A9MEM2010
iEM2000T	40	230	±20	2	A9MEM2000T
iME1	63	230	±20	4	A9M17065
iME1z	63	230	±20	4	A9M17066
iME1zr	63	230	±20	4	A9M17067

Main technical data

	iEM2000T	iEM2000/iEM2010	iME
Accuracy class	1	1	1
Frequency	48/62 Hz	48/62 Hz	48/62 Hz
Consumption	<10VA	<10VA	2.5 VA
Operating temp	-10°C to +55°C	-10°C to +55°C	-25°C to +55°C
Connection by tunnel terminals	Top terminals: 4 mm ²	Top terminals: 4 mm ²	Top terminals: 6 mm ²
	Bottom terminals: 10 mm ²	Bottom terminals: 10 mm ²	Bottom terminals: 16 mm ²
Compliance with standard	IEC 61557-12 : - PMD/DD/K55/1	IEC 61557-12 : - PMD/DD/K55/1	IEC 61557-12 : - PMD/DD/K55/1
	IEC 62053-21 (accuracy)	IEC 62053-21 (accuracy)	IEC 62053-21 (accuracy)
Sealable screw shield	Yes	Yes	Yes
MID Compliance	No	Yes	No

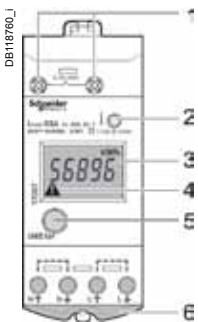


Description

iEM2000, iEM2010, iEM2000T

- 1 Remote transfer pulse output (iEM2000T, iEM2010).
- 2 Green power-on indicator light.
- 3 Yellow metering indicator light (flashing).
- 4 Display unit (iEM2000, iEM2010).
- 5 Seal.
- 6 Allow the comb busbar to pass.

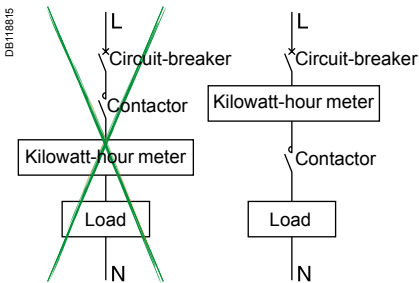
iEM2010



iME1, iME1z, iME1zr

- 1 Pulse output for remote transfer (iME1zr).
- 2 Flashing meter indicator.
- 3 Total or partial meter display (iME1z, iME1zr).
- 4 Wiring error indicator.
- 5 Push-button: total or partial meter display, reset partial meter (ME1z, ME1zr).
- 6 Sealing connection.

iME1zr.



Installation

- The front panel of the product is IP40 and its housing is IP20.
- Its installation must be appropriate to the operating conditions.
- The protection must not be less than IP65 for outdoor use.

Use with a contactor

A measurement instrument is normally continually supplied.

For a non-continuous supply (load switching), we recommend that you place the breaking device downstream from the measurement instrument to limit disturbances on the module inputs.

These disturbances, particularly on inductive loads, may result in early ageing of the device.

You must also place the measurement instrument at a distance from the breaking device to limit the risk of disturbance.

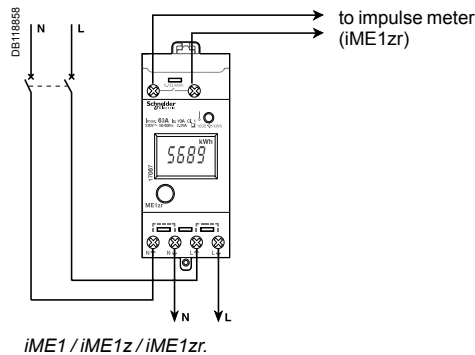
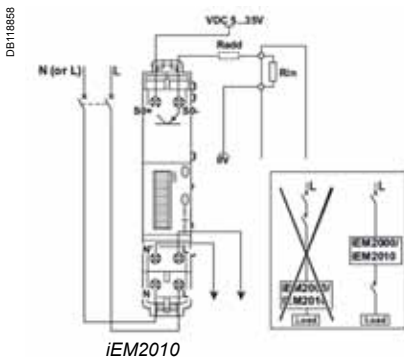
Example: meter on a load switching

Specific technical data

iEM2000, iEM2010, iEM2000T, iME1, iME1z and iME1zr specific technical data						
	iEM2000	iEM2010	iEM2000T	iME1	iME1z	iME1zr
Direct measurement	Up to 40 A			Up to 63 A		
Metering and activity indicator light (yellow)	3,200 flashes per kWh			1,000 flashes per kWh		
Wiring error indicator	Yes					
Total meter (max. capacity) on one phase	999 999.9 kWh			999.99 MWh		
Total meter display	In kWh with 7 significant digits (not for iEM2000T)			In kWh or MWh with 5 significant digits. No decimal point in kWh; 2 digits after the decimal point in MWh		
Partial meter (max. capacity) on one phase with RESET	-			99.99 MWh		
Partial meter display	-			In kWh or MWh with 4 significant digits. No decimal point in kWh; 2 digits after the decimal point in MWh		
Remote transfer	-	By static output: - ELV insulation voltage: 4 kV, 50 Hz - 20 mA/35 V DC max. - 100 impulses of 120 ms per kWh		-	-	By NO impulse contact: - 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

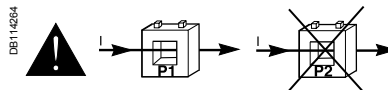
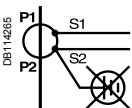
Connection

Single-phase circuit



Caution

- Do not earth the CT secondary (S2).
- You must comply with the routing direction of power cables in the current transformer primary. Cables enter in "P1" and leave in "P2" to the loads.



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