

# EMDX<sup>3</sup> electrical energy meters

└ rail mounting

## Technical characteristics

Conform to IEC 61557-12

Active energy accuracy: Class 1 (EN 62053-21)  
Class B (EN 50470-1,3) - for MID version

Reactive energy accuracy: Class 2 (EN 62053-23)

### Single-phase meters:

Reference voltage  $U_n$ : 230 V-240 V  
Reference frequency: 50-60 Hz

#### Cat.Nos 0 046 70, 4 120 68/69

LCD display: 7 digits  
Resolution: 0.1 kWh  
Maximum indication: 99999.9 kWh

#### Cat.Nos 4 120 80/81/82/83

LCD graphic display: 9 digits  
Resolution: 0.01 kWh  
Maximum indication: 999999.99 kWh

### Three-phase meters:

Reference voltage  $U_n$ : single phase 230 V-240 V  
three-phase 230 (400) - 240 (415) V

Reference frequency: 50-60 Hz

#### Cat.Nos 4 120 40/41/42/43/91/92/93

LCD graphic display: 9 digits  
Resolution: 0.01 kWh  
Maximum indication: 999999.99 kWh

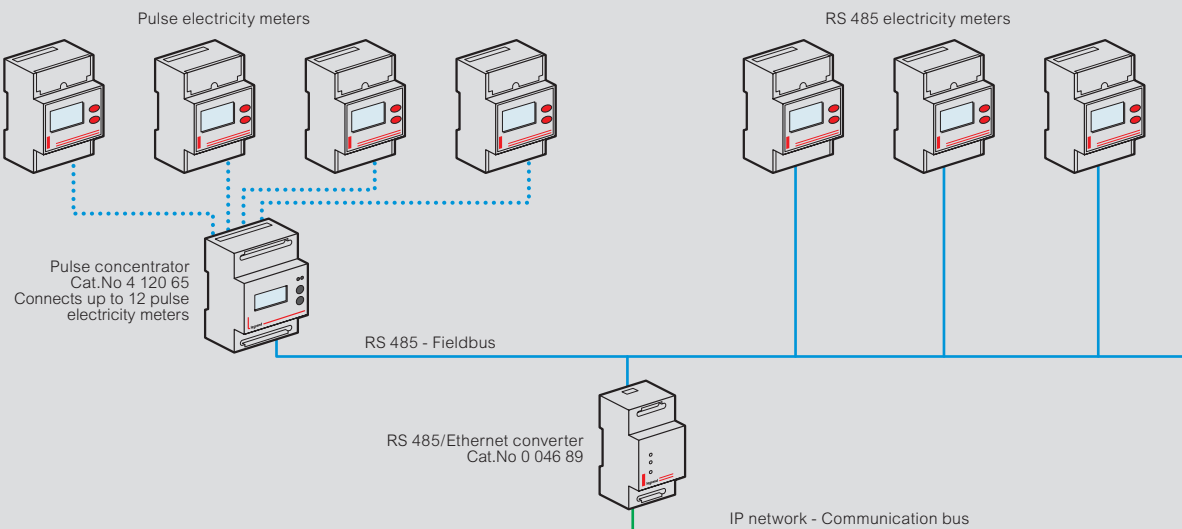
#### Cat.Nos 4 120 74/75

LCD display: 8 digits  
Resolution: 0.01 kWh  
Maximum indication: 999999.99 kWh

Cat.Nos		0 046 70	4 120 68	4 120 69	4 120 80	4 120 81	4 120 82	4 120 83	4 120 90	4 120 91	4 120 92	4 120 93	4 120 74	4 120 75	4 120 40	4 120 41	4 120 42	4 120 43			
Type		Single phase								Three-phase											
Connection		Direct connection																Connection via CT			
Number of modules		1	1	1	2	2	2	2	4	4	4	4	6	6	4	4	4	4			
Max. current (A)		32	45	45	63	63	63	63	63	63	63	63	125	125	5 (CT)	5 (CT)	5 (CT)	5 (CT)			
Metering and measurement	Energy	Total active energy	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
		Total reactive energy		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Partial active energy (reset)				●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Partial reactive energy (reset)				●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Energy bidirectional measure	Ea + and Ea-by tariff				●	●	●	●	●	●	●	●			●	●	●	●		
		Active power		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Power	Reactive power		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Apparent power		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Average active power		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Max. average active power value				●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Electrical values	Current		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Voltage		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Frequency				●	●	●	●	●	●	●	●	●	●	●	●	●	●		
		Power factor		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		
	Dual tariff					●	●	●	●	●	●	●	●	●	●			●	●		
	Pulse input					●	○	●	○	●	○	●	○			●	○	●	○		
Connection diagnostic															●	●	●	●			
Time of uses	Total				●	●	●	●	●	●	●	●	●	●	●	●	●	●			
	By tariff					●			●			●				●					
Communication	Pulse output	●		●	●		●		●		●		●		●		●				
	Modbus RS 485		●			●		●		●		●		●		●		●			
MID certification				●		●		●		●		●		●		●		●			

● Built-in function  
○ Dual tariff or pulse input

## Interfacing with IP communication network



For direct connection meters, if connected via transformers, the resolution and maximum indication depend on the transformation ratios of these transformers