

General

Model GEM021DF three phase four wire electronic DIN rail active energy meter is a kind of new style three phase four wire active energy meter, it adopt micro-electronics technique, and imported large scale integrate circuit, use advanced technique of digital and SMT techniques, etc. The meter completely accord with relevant technical requirements of class 1 three phase active energy meter stipulated in international standard IEC 62053-21.

It can accurate and directly measure 50Hz or 60Hz active energy consumption from three phase four wire AC electricity net. It can display total energy consumption by step motor type impulse register. It has following features: good reliability, small volume, light weight, specious nice appearance, convenient installation, etc.



31

Functions and features

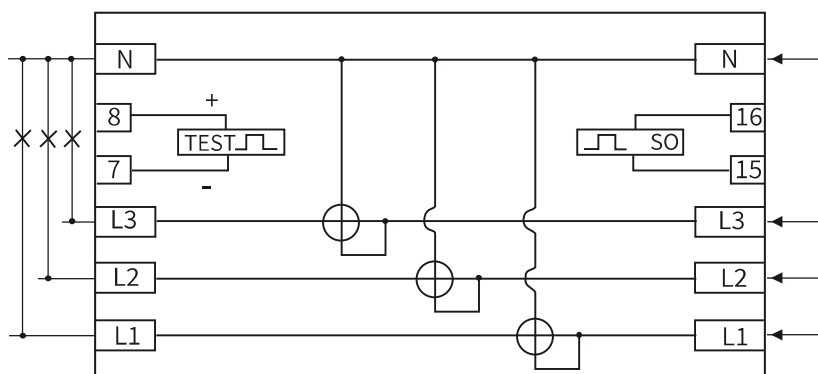
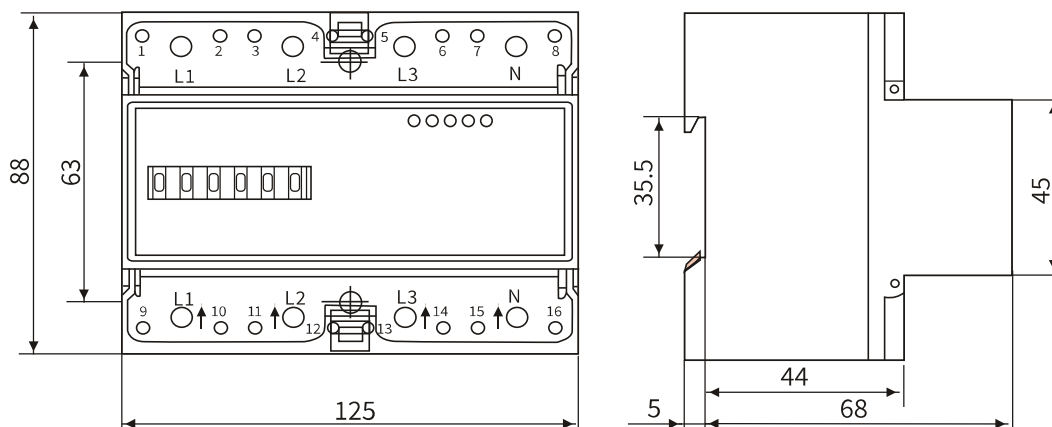
- 35mm standard DIN rail installation, complying with standard DIN EN50022. Or front board installed (mounting holes center distance 63 mm), users can choose any one by themselves.
- Ten pole width (Modulus 12.5mm), complying with standard JB/T7121-1993.
- Standard configuration 6 digits display (999999kWh) by step motor type impulse register. May select 7 digits display by impulse register (Product Configuration code is BJ).
- There are a polarity port of pulse output passive closed and a nonpolarity port of pulse output passive distant, the output rate is 10 or 100 imp/kWh (can select). And contact with all kind of AMR system conveniently, Complying with standard IEC 62053-31 and DIN 43864.
- Five LED instructions respectively every power supply state and signal of closed energy impulse and distant energy impulse.
- Automatic detection the direction of the flow of load current. And instructions (signal of closed energy impulse is green when working, that is meaning the direction of the flow of load current reverse).
- Single direction three components measure three phase four wire active energy consumption. It is nothing with direction of the flow of load current. Complying with standard IEC 6205-21.
- May select two components measure three phase three wire active energy (Product Configuration code is DE) or two phase three wire active energy (Product Configuration code is DD).
- Standard configuration type S wiring (Inlet from bottom, outlet from top) for direct connect operation, we can also choose another type of wiring, and use 5 + 1 digits display by impulse register. CT (Product Configuration code is CF) and PT & CT (Product Configuration code is BF) for operation.
- Standard configuration short terminals cover, may select extension terminals cover, in order to protect to use safety. (Product Configuration code is DI).

Technical parameters

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
GEM021DF	Class 1	3x127/220	5(30)	0.02	AC voltage 4kv for 1 minute, 1.2/50us waveform impulse voltage 6kv
		3x230/400	10(60)	0.04	
			20(100)	0.08	

Dimension and Wiring

32



Terminal	Note
L1	L1 phase line
L2	L2 phase line
L3	L3 phase line
N	Neutral line
7 and 8	Port of pulse output passive closed
15 and 16	Port of pulse output passive distant