AC Three-phase Ammeter
User Manual

This manual is applied to the following models：
LNF36

JIANGSU SFERE ELECTRIC CO., LTD.

1. Product description

1.1 Overview

LNF series digital AC ammeter is applied for measuring three-phase AC current in low voltage power distribution system. The transformation ratio can be programmed. It also can be equipped with communication supporting Modbus-RTU protocol.

1.2 Model selection

Function		LNF36
Appearance	Display mode	LCD
	Installation size（mm）	96×96
Real-time measurement	Current, frequency	■

Note: "■" indicates that this function is available.

2. Technical parameters

2.1 Technical specification

Working environment conditions	
Wokring temperature	-10°C -- 55°C
Storage temperature	-25°C -- 70°C
Relative humidity	≤95%RH， no condensation
Working altitude	≤2500m
Anti-pollution level	Non-corrosive gas
Protection degree	Front case IP54, rear case IP20
Insulation	Between signal, power supply, output terminal to case resistance >100MΩ
Withstand voltage	Input and power supply ≥ 2kV, input and output ≥ 2kV, power supply and output ≥ 2kV
Display	
Display method	LCD

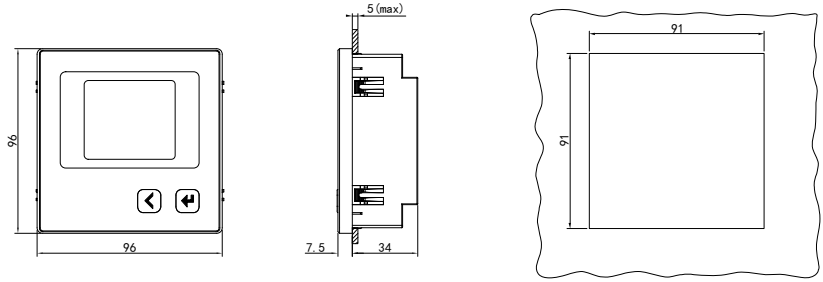
Working power supply	
Rated range	AC/DC（80～270）V
Power consumption	≤3VA
Withstand voltage	≥2kV
Current input	
Range	3×5A/1A
Resolution	1 mA
Impedance	≤20mΩ/ per phase
Power consumption	≤0.2 VA/ per phase
Overload	Continuous:1.2Vn Instantaneous：10In/5s
Frequency	45 Hz-65 Hz
Communication interface	
Physical interface	RS-485
Communication speed	Up to 9.6 kbps
Communication protocol	Modbus-RTU
Isolation voltage	2000 VAC (1 min)
Electromagnetic compatibility	
Electrostatic discharge immunity	IEC 61000-4-2-III
Radiated, radio-frequency, electromagnetic field immunity	IEC 61000-4-3-III
Electrical fast transient/burst immunity	IEC 61000-4-4-IV
Impact (surge) immunity	IEC 61000-4-5-IV
Immunity to conducted disturbances, induced by radio-frequency fields	IEC 61000-4-6-III
Power frequency magnetic field immunity	IEC 61000-4-8-III
Voltage dips, short interruptions and voltage variations immunity	IEC 61000-4-11-III

2.2 Measurement parameter

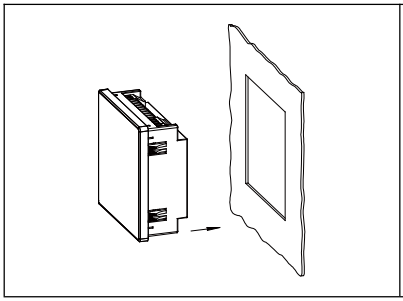
Measurement variable	Accuracy	Instant	Demand	Sum	Unit
I1/I2/I3	0.2	●	●	—	[A,kA]
F	±0.01Hz	●	—	—	[Hz]

3. Installation

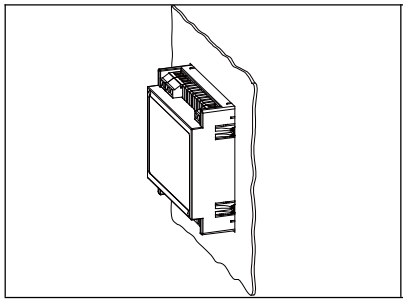
3.1 Dimension



3.2 Installation



Install the meter from the outside of the panel into the mounting hole.



Install it to the end and fix the meter with a snap spring.

3.3 Wiring