SFERE

DIN-rail Mounted Energy Meter

User Manual

Applied to：

DDSF1946-1P

JIANGSU SFERE ELECTRIC CO., LTD.

1. Overview

DIN-rail mounted energy meters are designed and produced according to user's real electricity consumption situation by adopting advanced energy measurement IC and using digital sampling processing and SMT technologies. This series of energy meters adopt modularity structure with the features such as small volume, convenient installation and reliable working.

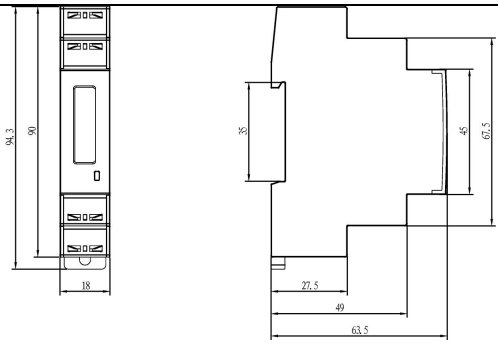
2. Technical parameters

Electrical feature		
Model / Function		DDSF1946-1P
Accuracy		Voltage, current: Class 1 Power, active energy: Class 1
Rated voltage		220V
Input current	Direct input	5(40)A
Frequency		50/60 Hz
Wiring mode		Single phase
Voltage range		0.8Un ～ 1.2Un
Consumption	voltage circuit	< 3VA
	current circuit	< 2VA
Start current	direct input	0.004Ib
Energy pulse		One optoelectronic isolation output, pulse width（80±20%）ms
Communication feature		
RS485 communication interface		Modbus-RTU protocol(optional)，baud rate up to 9600bps DL/T 645 protocol(optional)，baud rate up to 9600bps
Mechanical feature		

Dimension	18×90×63.5
IP protection	IP54（front case）/IP20（rear case）
Environment feature	
Work temperature	(-10～55)℃
Storage temperature	(-25～70)℃
Relative humidity	(5～95)%（no condensation）
EMC	
Electrostatic discharge immunity	IEC 61000-4-2-III
Radiated, radio-frequency, electromagnetic field immunity	IEC 61000-4-3-III
Electrical fast transient/burst immunity test	IEC 61000-4-4-Ⅳ
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

3. Installation and wiring

3.1 Outline dimension (Unit: mm)



3.2 Installation method