DFPM951X Series Relay Control Energy Meter

Description

DFPM951X Series is a DIN Rail Relay Control Energy Meter can accurately and directly measure energy consumption and billing. The meters has Relay function, support to control the switch on/off remotely. It can Max. support 80A direct input. With Modbus-RTU protocol and RS485 port, the meter also support connect into 3rd party system.

DFPM9511
Single Phase

Feature

- Suit for 120V, 220V, 230V, 240V AC Power System
- 7+1 digits LCD display (9999999.9kWh)
- High accuracy: Class 0.5s for 5A via CT, Class 1.0 for 80A direct input
- 3 keys for programming, 35mm DIN Rail installation, standard DIN ED5002
- 1 LED indicates pules output, standard DIN 43864
- Support reading and inquiry data when power off
- Standard: IEC62053-21/22

DFPM9513
Three Phase

Function

- **Measure** -- U, I, P, Q, S, PF, F, kWh, kvarh, multi-tariff energy (kWh, kvarh)
- **Relay Control** -- for remote control circuit switch on/off
- **TOU (Multi-tariff)** -- 4 tariffs and 8 time periods in 24 hours
- **Historical Record** -- kWh, kvarh, Max. P for last 31 days (Per 15min.) and last 12 months data; last 200 alarms and last 20 times power off
- **Alarm** -- anti-temper alarm, over-load alarm, swich on/off alarm, over-voltage alarm, under-voltage alarm, reversed connection alarm etc.
- **Communication** -- one RS485 port, MODBUS-RTU Protocol

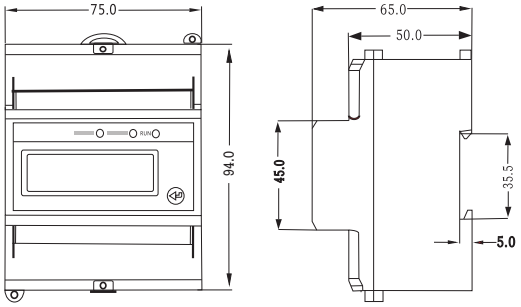
Technical Specification

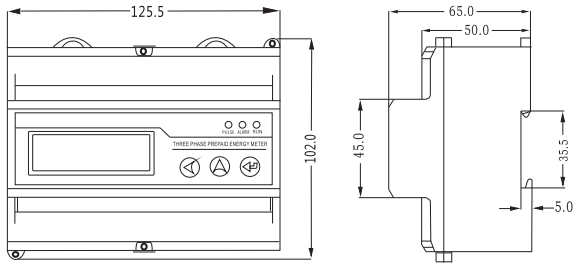
Accuracy	Class 0.5s: 5 (6) A Class 1.0: 10 (80)A
Current	DFPM9511: Direct: 10（80）A
	DFPM9513: Direct: 10(80)A, 5(6)A via CT
Rated Voltage	DFPM9511: 220V, 120V, 240V (Optional)
	DFPM9513: 220/380V, 120/208V, 240V/415V (Optional)
Power Supply	Self Supply (Note: for DFPM9513, RS485 won't work if only connect 1 phase voltage) Overload: 1.2 times
Relay Control	Support control circuit switch on/off **build-in relay module** for DFPM9511/DFPM9513 direct module 10(80)A **need to add DFPM9513-R relay module** for DFPM9513 5(6)A via CT
Pulse Output	1 Channel (Settable for kWh or kvarh) constant: 1600imp/kWh/kvarh
Frequency	50/60Hz
Power Consumption	<2W/10VA each phase
Wire Diameters	7mm*7mm (16mm2)

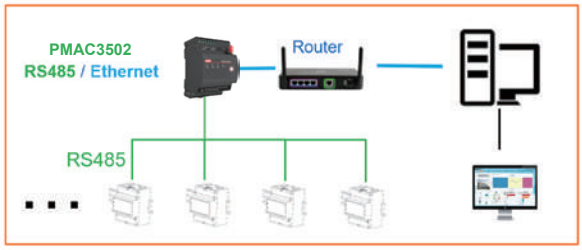
Starting Current	0.4% Ib
Communication	RS485 port, MODBUS-RTU Baud rate: 2400、4800、9600 Address: 1~247
Insulation	Withstand voltage: 2kV, Impulse voltage:6kV
Historical Record	- kWh, kvarh, Max. P for last 31 days (Per 15min.) and last 12 months data - Last 200 alarms records - Last 20 times power off
EMC Standard	Electrostatic discharge immunity test — IEC 61000-4-2,Level 4 Radiated immunity test — IEC 61000-4-3,Level 3 Electrical fast transient/burst immunity test — IEC 61000-4-4,Level 4 Surge immunity test (1, 2/50μs～8/20μs) — IEC 61000-4-5,Level 4 Conducted emission — EN55022, Class B Radiated emission — EN55022, Class B
Environment	Operating temperature: -20℃～+55 ℃ Storage temperature: -40℃～+70 ℃ Humidity: 5%~95% non-condensing

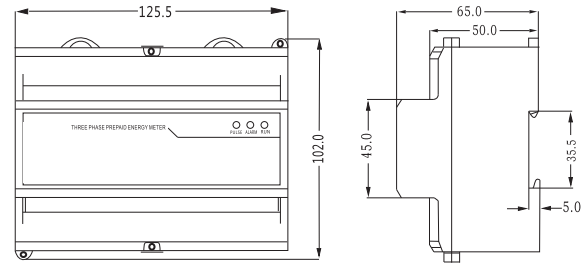
Dimension & Installation

Unit: mm

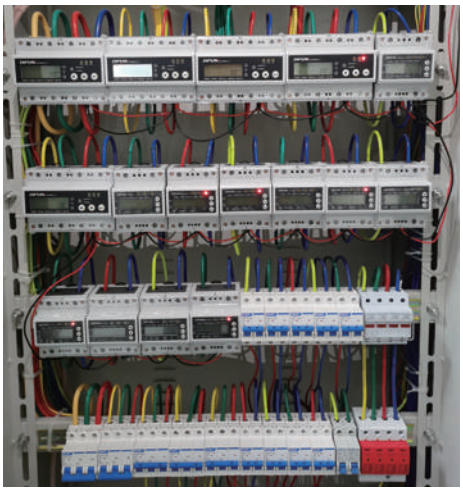


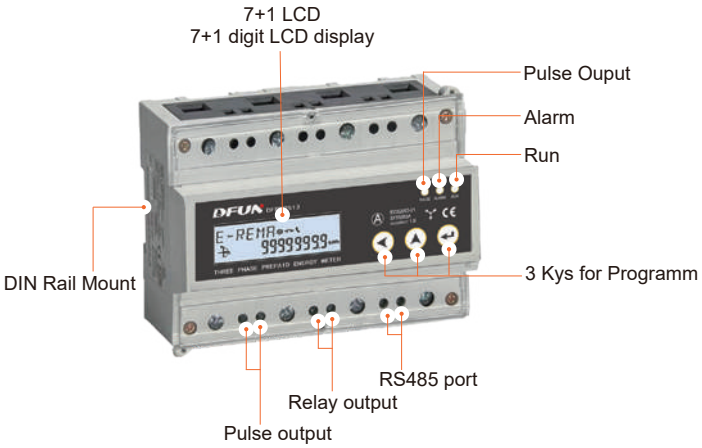






Relay Control for DFPM9513 5(6)A via CT





Order Information

DFPM9511 (Single Phase)

①--②--③

80	10(80)A direct
V1	220V， Suit for 220, 230Vac ph-N
V2	120V， Suit for 110, 120Vac ph-N
V3	240V
50	50Hz
60	60Hz

DFPM9513 (Three Phase)

①--②--③

A-80	10(80)A direct
D-5	5(6) for external CT
V1	220/ 380V, Suit for 220, 230Vac ph-N
V2	120/ 208V, Suit for 110, 120Vac ph-N
V3	240/415V
50	50Hz
60	60Hz

DFPM9513 --R (Relay Control module) for DFPM9513-D

Note:
1. DFPM9511 has build-in relay module
2. DFPM9513-A 80A direct input model need to add DFPM9513-R relay module to realize remote control switch
3. DFPM9513-D 5A via CT module need to add AC contactor and relay switch to realize remote control switch