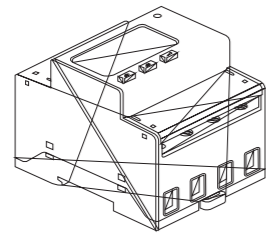


85mm

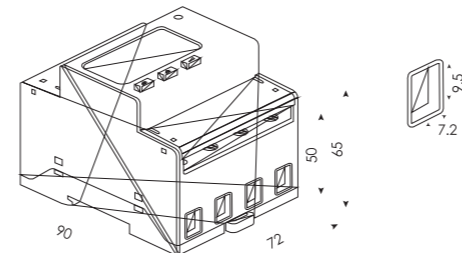
Installation and operation instruction



70mm

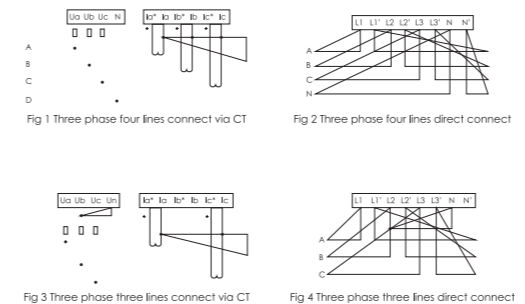
project	performance parameter
Specification	3 phase 3 wires 3 phase 4 wires
Reference voltage	3×100V - 3×380V 3×57.7/100V - 3×220/380V
Voltage range	3×100V - 3×450V 3×57.7/100V - 3×260/450V
Consumption	<10VA(Single phase)
Impedance	>2MΩ
Accuracy class	Error±0.2%
Input current	3×1(6)A, 3×10(80)A
Current Consumption	<1VA Single phase rated current
Accuracy class	Error±0.2%
Power	Active, reactive, apparent power, error±0.5%
Frequency	45~65Hz, Error±0.2%
Energy	Active energy(Accuracy class:0.5); reactive energy(Accuracy class:2)
Clock	≤0.5s/d
Energy pulse output	1 active photocoupler output
Width of pulse	80±20ms
Pulse constant	400imp/kWh,10000imp/kWh(Correspond with the basic current)
Interface, and communication protocol	RS485: Modbus RTU
Range of communication address	Modbus RTU:1~254
Baud rate	1200bps~38400bps
working temperature	-25℃~+55℃
Relative humidity	≤95%(No condensation)

1 Dimension drawings



2 Wiring and installing

2.1 Wiring sample of voltage and current



2.2 Wiring diagram of communication and pulse terminals



3 Function description

3.1 Measurement
It can measure the electrical parameter, include U, I, P, Q, S, PF, F, 1~31th harmonic.
If: U = 220.1V, f = 49.98Hz, I = 1.99A, P = 0.439kW
Such as: U = 220.1V, f = 49.98Hz, I = 1.99A, P = 0.439kW

3.2 Calculating
Can measure the active energy, forward active energy, reversing active energy, forward reactive energy, reversing reactive energy.

3.3 Timing
Two timing table, four time zone, one table have fourteen timing, four rate.

3.4 Demand

The description about demand:

Demand	The average power in the demand cycle.
DemMaximum demand	The maximum value of demand in a period of time.
Slip time	A recurrence method to measure the demand from any time point during a period shorter than the demand period. The demand measured by this means is called sliding demand. The recurrence time is sliding window time.
Demand cycle	The time period between two same average value of demand.

The default demand cycle is 15 minutes, slip time is 1 minute. The meter can measure 4 kinds of maximum demand: forward active, reversing active, inductive reactive, capacitive reactive maximum demand and the occur time.

3.5 History data statistics
The meter can record last 48 months or last 90 days history energy in each tariff.

4 Operation and display

4.1 Key function description

Table 3 Key's function description

icon	Name	Function
	Voltage and current, up	Check the voltage and current Leftward and change flash in programming menu
	Power, down	Check the power Rightward and change the value on flash
	Energy, enter	Check the energy h/out programming menu Save changes

4.2 Display menu

The meter will show the forward active energy after powering. The customers can change the information showing by pressing the keys. The menu description is listed as below:

Table 4 display descriptions

Note:
1 All the display menus above are in the model of ADL400 three phases four lines with multi-tariff rate function and can be changed by the keys.
2 There will not be power or power factor on each phase and will only show total power and power factor (Active, reactive, apparent) under the three phase three lines.
3 There will not be date, time, maximum demand and energy by time without the function of multi-tariff rate.