ADL400

General

ADL400 three phase electric meter is designed for three phase energy measurement on low voltage system.The meter meet the related technical requirements of electronic meter in the IEC62053-21、IEC62053-22 standards.

Functions

Function	Description	Provide
Measurement of kWh	kWh (positive and negative)	■
	kvarh (positive and negative)	■
	A, B, C phase positive kWh	■
Measurement of electrical parameters	U、IP、Q、S、PF、Hz	■
Measurement of harmonics	2~31ST harmonic	■
LCD Display	12 digits	■
Key programming	3 keys	■
Pulse output	kWh	■
Data	Maximum demanded	□
	Frozen data on last 48 months, last 90days	□
	Date, time	□
Communication	Infrared RS485, MODBUS-RTU	■

Note:(■: means standard, □:means optional)

Parameters

■ Electric performance

Voltage	Nominal voltage	3×100V、3×380V、 3×57.7/100V、3×220/380V
	Consumption	<10VA(Single phase)
	Impedance	>2MΩ
	Accuracy	±0.2%
Current	Maximum current	80A，6A
	Consumption	<1VA
	Accuracy	±0.2%
Frequency	range	45～65Hz
	accuracy	±0.2%
Energy accuracy	Active energy	Class 0.5s
	reactive energy	Class 2
Clock	accuracy	≤0.5s/d
Active Pulse	Width	80±20ms
	constant	1000imp/kWh,10000imp/kWh
Communication	Interface	RS485
	Protocol	Modbus RTU

■ Working environment

Temperature	Working	-25℃~55℃
	Storing	-40℃~70℃
Humidity	≤95%(No condensation)	
Altitude	<2000m	

Dimension drawings (Unit: mm)

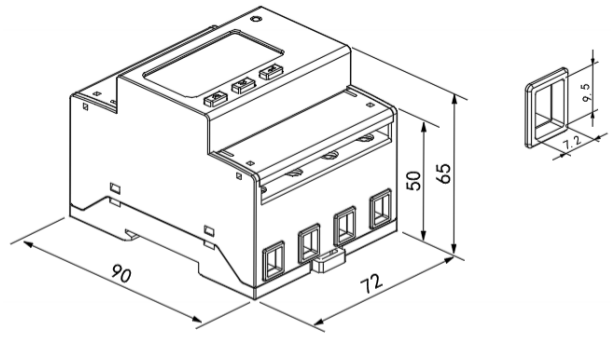


Figure 1 direct connect

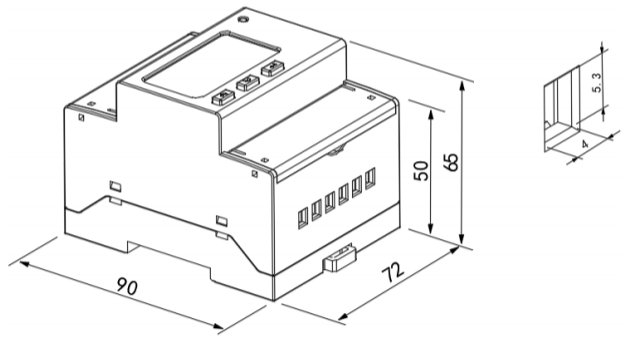


Figure 2 connect via CT

Note: The torque of direct connect should not be greater than 4.0N·m, and the torque of connect via CT should not be greater than 2.0N·m。

Wiring and installing

■ Wiring

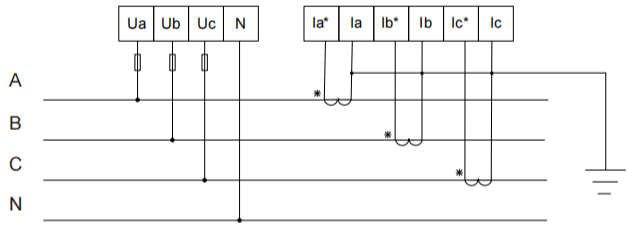


Fig 3 Three phase four lines connect via CT

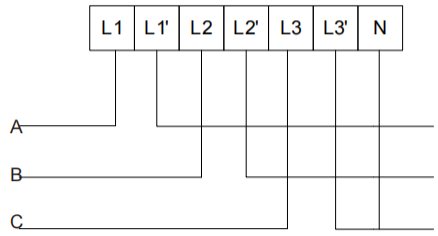


Fig 4 Three phase four lines direct connect

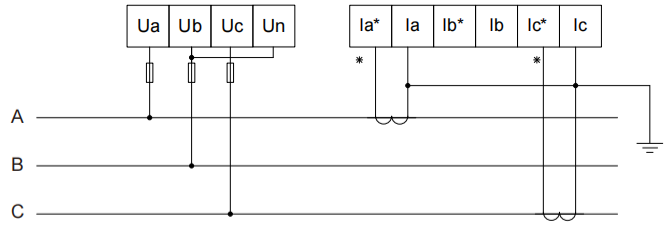


Fig 5 Three phase three lines connect via CT

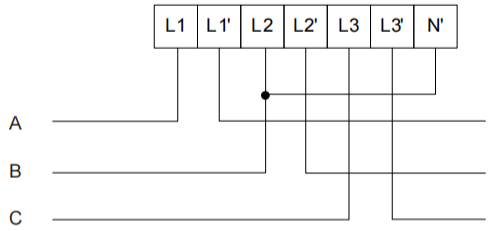
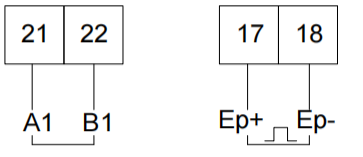


Fig6 Three phase three lines direct connect



RS485 Active energy pulse

Fig 7 Communication, pulse connection

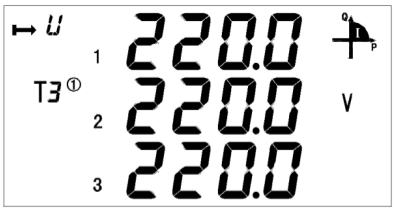
■ Installing

ADL400 installing

Note: DIN 35 mm rail installation.

Display examples

Total active energy



Voltage of three phase

Current of three phase

power