

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	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)

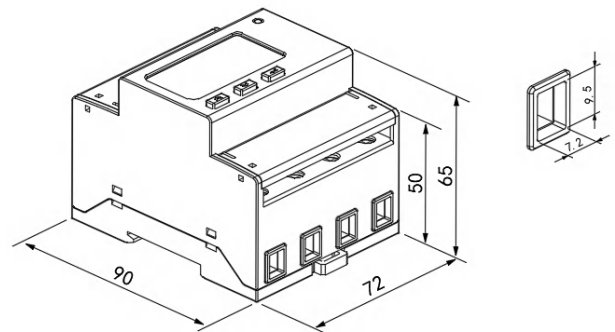


Figure 1 direct connect

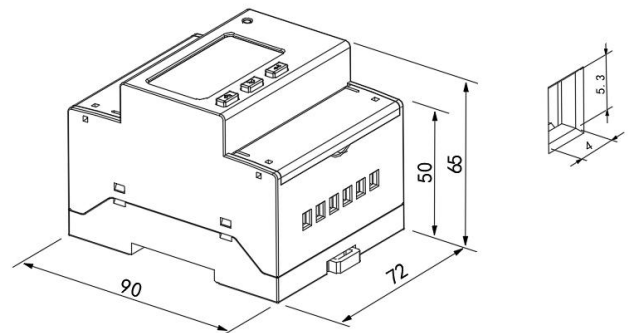


Figure 2 connect via CT

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

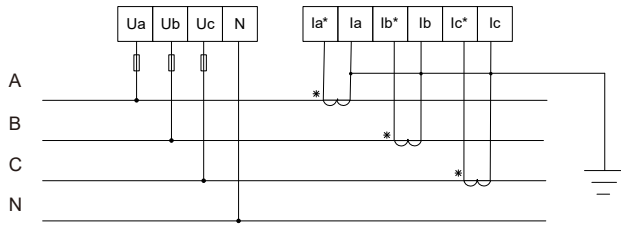


Fig 3 Three phase four lines connect via CT

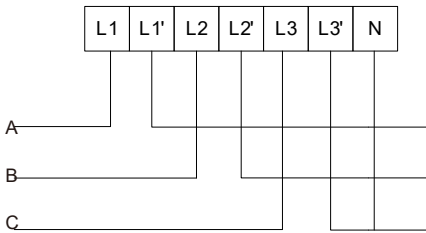


Fig 4 Three phase four lines direct connect

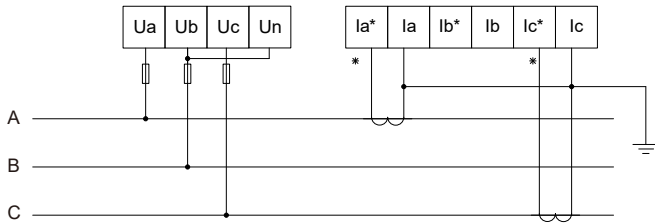


Fig 5 Three phase three lines connect via CT

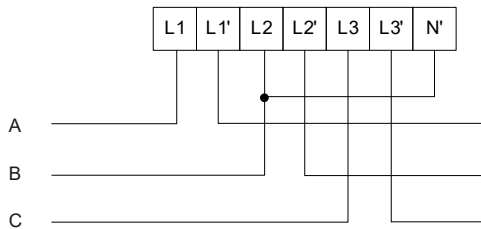


Fig6 Three phase three lines direct connect

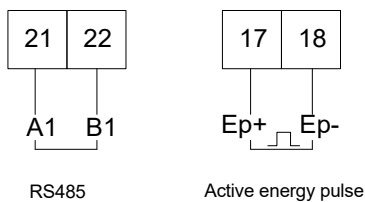


Fig 7 Communication, pulse connection

Installing



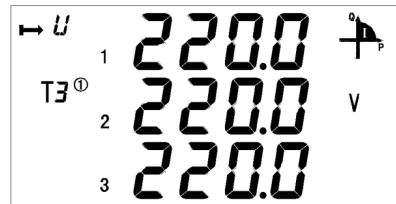
ADL400 installing

Note: DIN 35 mm rail installation.

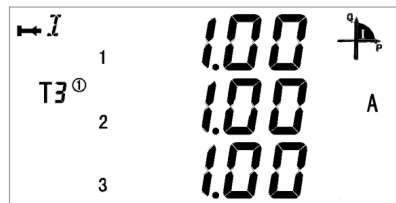
Display examples



Total active energy



Voltage of three phase



Current of three phase



power