Acrel

ADL3000-E



General

ADL3000-E 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.

Product Functions

Function	Description	Provide
Measurement of kWh	Active kWh (positive and negative)	■
	Reactive kWh (positive and negative)	■
	A, B, C phase positive kWh	■
Measurement of electrical parameters	U、I、P、Q、S、PF、HZ	■
Measurement of harmonic	2~31ST voltage and current harmonic	□
LCD Display	8 digits	■
Button	4 keys	■
LED alarm	voltage loss and over voltage	■
Switch I/O	Active switch input	□
	Switch output	□
Data	Maximum demanded kWh and time happened	□
	Frozen data on last 48 months, last 90days	□
	Date, time	□
Communication	Infrared	■
	RS485, MODBUS-RTU	□
Temperature measurement	Support 3 outlay NTC temperature	□

Note:(■: standard; □: optional)

Technical Parameter

■ Electric performance

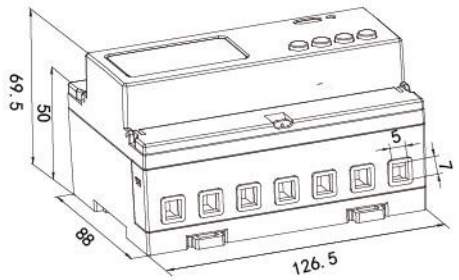
Voltage	Reference voltage	3*57.7/100V 3*220/380V 3*100V 3*380V
	Reference frequency	50Hz
	Consumption	<10VA (Single phase)
	Accuracy	±0.2%

Current	Maximum current	6A,80A
	Starting current	Direct connect:0.004Ib Connect via CT:0.001In
	Consumption	<1VA (Single phase rated current)
Frequency	range	±0.2%
	Accuracy of Active kWh	Class 0.5s
Energy accuracy	Active energy	Class 2
	reactive energy	≤0.5s/d
Pulse	Pulse width	80±20ms
	Pulse constant	400imp/kWh;6400imp/kWh
Communication	Interface	RS485
	Protocol	Modbus RTU

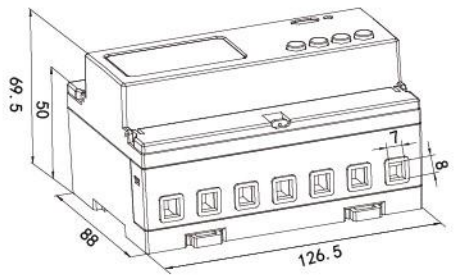
■ Working environment

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

Dimension drawings (Unit: mm)



Connect via CT

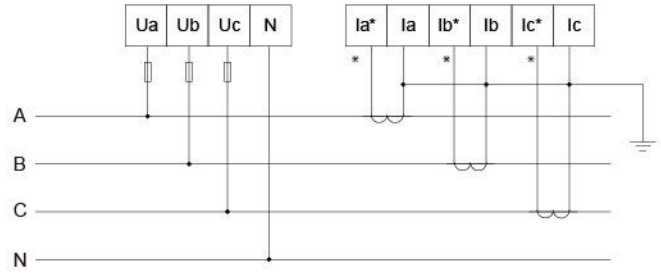


Direct connect

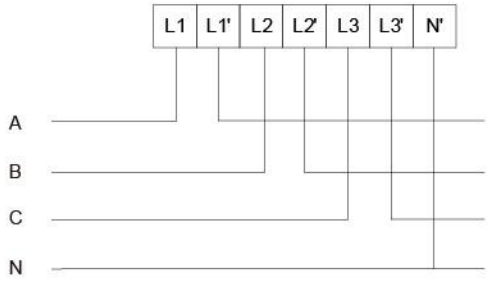
Note: The torque of direct connect should not be greater than 4.0N·m, and the torque of connect via CT should not be greater than 2.0N·m.

Wiring and Installing

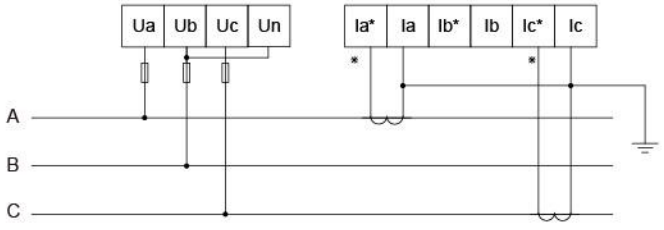
■ Wiring



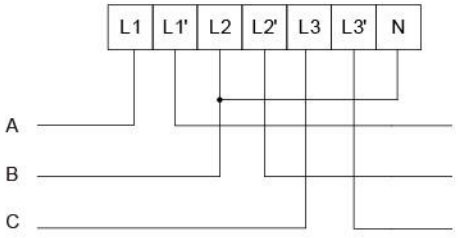
Three phase four lines connect via CT



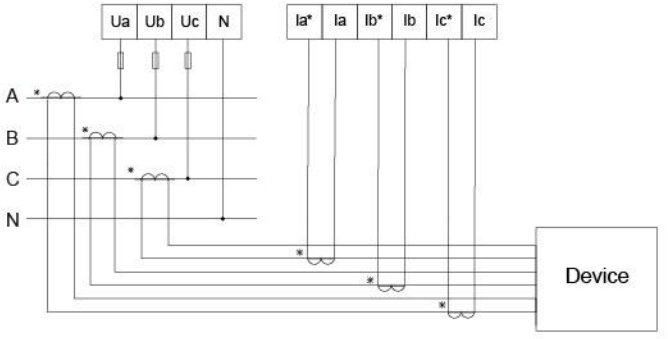
Three phase four lines direct connect



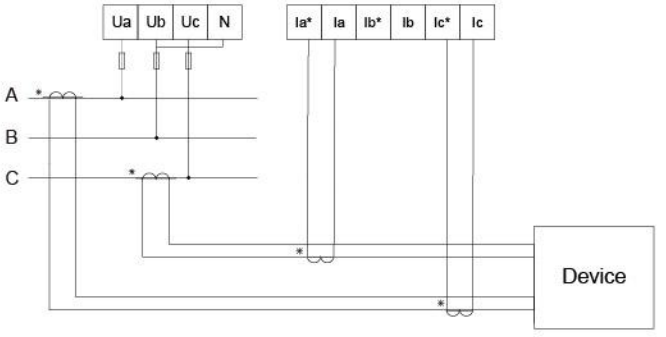
Three phase three lines connect via CT



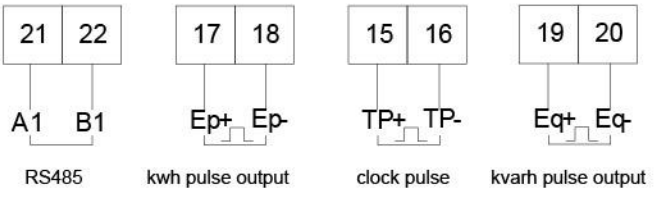
Three phase three lines direct connect



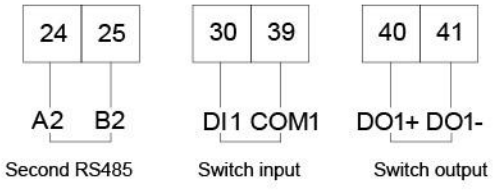
Three phase four lines, 3CT



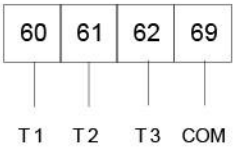
Three phase three lines, 2CT



Communication, pulse connection

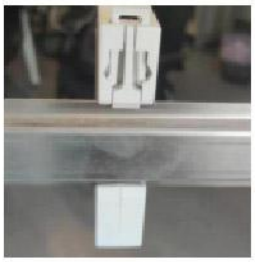


Communication, pulse connection



Outlay NTC temperature measurement

Installing



ADL3000-E installing

Note：DIN 35 mm rail installation.

Display examples



forward active energy



Voltage on A phase



Current on A phase



power