# Acrel ADL3000-E

# 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
	Active kWh (positive and negative)	
Measurement of kWh	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	$2 \sim 31^{\text{ST}}$ voltage and current harmonic	
LCD Display	8 digits	
Button	4 keys	
LED alarm	voltage loss and over voltage	
Switch I/O	Active switch input	
Switchild	Switch output	
	Maximum demanded kWh and time happened	
Data	Frozen data on last 48 months, last 90days	
	Date, time	
Communication	Infrared	
Communication	RS485, MODBUS-RTU	
Temperature measurement	Support 3 outlay NTC temperature	

Note:( : standard; : optional)

## **Technical Parameter**

### Electric performance

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

	Maximum current	6A,80A
Current	Starting current	rrent Direct connect:0.004lb Connect via CT:0.00
	Consumption	<1VA (Single phase rated current)
F	range	±0.2%
Frequency 4	Accuracy of Active kWh	Class 0.5s
Energy	Active energy	Class 2
accuracy	reactive energy	≤0.5s/d
Dulas	Pulse width	80±20ms
Pulse	Pulse constant	400imp/kWh;6400imp/kWh
o : r	Interface	RS485
Communication		Modbus RTU

### Working environment

T	Operating	-25°C~55°C	
Temperature	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.



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# 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



ADL3000-E installing

Note: DIN 35 mm rail installation.

# **Display examples**



V **1231** N **1231** N **1** 1 1 1 1

Voltage on A phase

forward active energy

P.

DI1



Current on A phase

Ua Ub Uc

1234₩

Ia Ib Ic

power