

AIM-T300 Industrial Insulation Monitor



Device features

- Insulation monitoring for unearthed AC systems 0-450V, DC 0-480V.
- Two separately adjustable response value 1k-5MΩ.
- Automatic adaptation to the system leakage capacitance.
- Real-time measurement of leakage capacitance, insulation resistance.
- Two separate alarm relays with two potential-free changeover contacts.
- RS-485 interface with modbus-RTU protocol.
- LCD display with backlight.
- Test button to start self-test.
- Connection monitoring of PE and IT systems.
- 20 text of warnings and alarms messages can be written to the history memory.

Typical applications

- Unearthed AC, DC main circuits
- IT systems including high leakage capacitances.
- Battery systems

Standards

The insulation monitoring device AIM-T300 complies with requirements of the device standards:

- GBT18216.8
- IEC 61557-8

Technical parameters

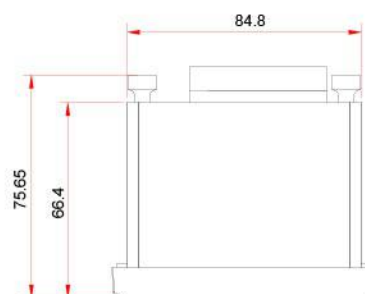
Specifications		Type	AIM-T300
Auxiliary power supply	Voltage		AC85...265V
	Power consumption		<8W
Monitored IT system	Voltage		Up to 450V (AC, DC, AC&DC)
	Frequency		40~60Hz

Specifications		Type	AIM-T300
Insulation Monitoring	Measuring range		1kΩ-5MΩ
	Alarm range		10kΩ-5MΩ
	Relative uncertainty		1...10k: 10k; 10k...5M: ±10%
	System leakage capacitance		<150uF
	Response time		<6s
Communication			RS485, Modbus-RTU
Internal parameters	Measuring current		<170uA
	EMC/EMR		IEC61326-2-4
	Rated impulse voltage /pollution degree		8kV/III
	Internal DC resistance		≥120kΩ
output	Relay output		Early warning, alarm
Environment	Operation temperature		-20—+60°C
	Storage temperature		-20—+70°C
	Relative humidity		5%-95%, No condensation
	Altitude		≤2500m

Dimension Drawings(Unit: mm)



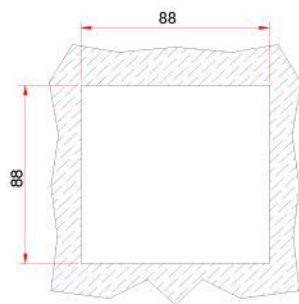
Front view



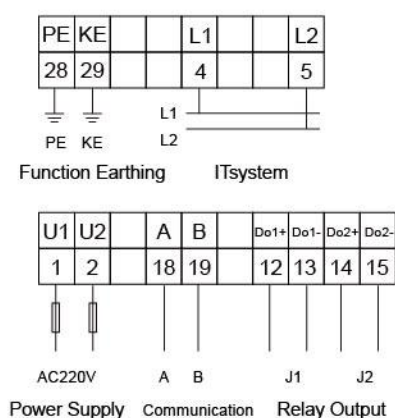
Side view

Installation and terminals

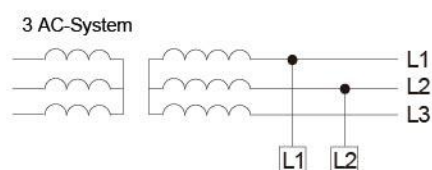
■ Panel cut-out



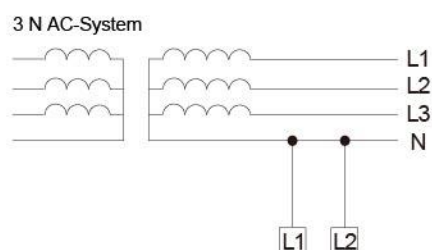
■ Terminals description



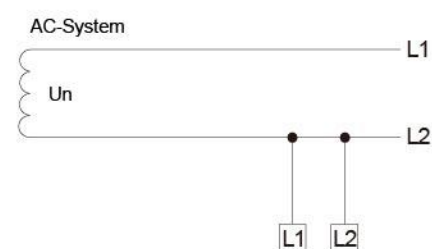
Wiring diagram



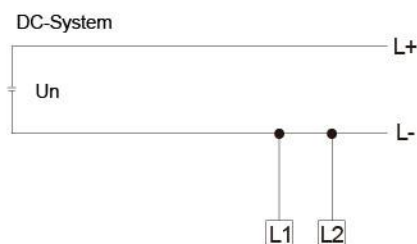
Connection to the 3AC system



Connection to the 3 N AC system



Connection of the AC system



Connection of the DC system

Operation and Display

■ LED indicator instructions

"On"	Flashes once per second during normal operation.
"Comm"	Flashes when communication
"Warning"	Flashes when insulation resistance blow the warning value.
"Alarm"	Flashes when insulation resistance blow the alarm value..

■ Button function descriptions

	In non-programming mode to start the self-test, in other state, used as return function.
	In programming mode, used to increase or decrease the value .
	In non-programming mode, used to enter the programming mode. In programming mode, used as Enter button.

■ Menu description

IT-SYSTEM
Insulat Rv=5.001MΩ
Leak Ce=100uF
2019-08-21 08:44:21

Main page

LCD Set	Time Set
AlarmSet	Comm Set
ClearSOE	Password
SW info.	Language

Setting page

LCD Set
Contrast: 30
Time Hold: 060s
adjust select

LCD setting page

Time Set
Date Set: 2019-08-30
Time Set: 09:56:06
adjust select

Time setting page

Alarm Set	
Pre	: 0060K
Alarm	: 0038K
◀ adjust ↵ select	

Alarm setting page

Comm Set	
Address	: 001
Baud	: 9600
◀ adjust ↵ select	

Communication setting page

■ Data settings

First menu	Second menu	Range and description
LCD set	Contrast	15-60
	Time hold	15~250
Time set	Date set	Year- Month- Day
	Time set	Hour: Minute: Second
Alarm Set	Pre	60~4999
	Alarm	10~4999
Comm Set	Address	1...247
	Baud	4800,9600,19200,38400