AIM-T300 Industrial Insulation Monitor

Device features

- Insulation monitoring for unearthed AC sytems 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 backlit.
- Test button to start self-test.
- Connection mornitoring of PE and IT sytems.
- 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

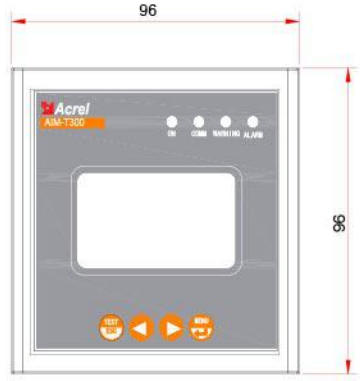
The insulation monitoring device AIM-T300 complies with requirements of the device standards:

- GBT18216.8
- IEC 61557-8

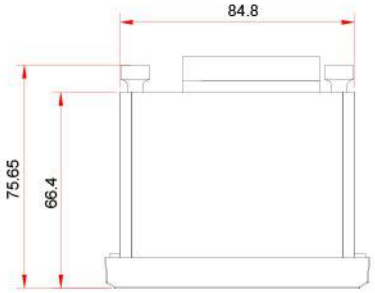
Technical parameters

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
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℃
	Storage temperature	-20—+70℃
	Relative humidity	5%-95%，No condensation
	Altitude	≤2500m

Dimension Drawings(Unit: mm)



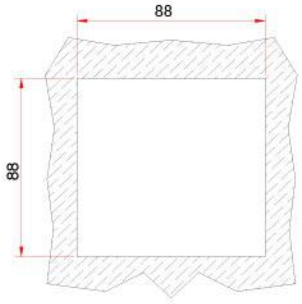
Front view



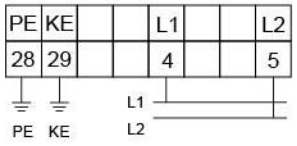
Side view

Installation and termicals

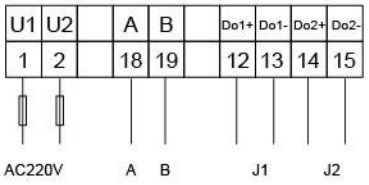
■ Panel cut-out



■ Terminals description

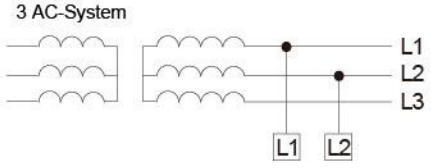


Function Earthing ITsystem

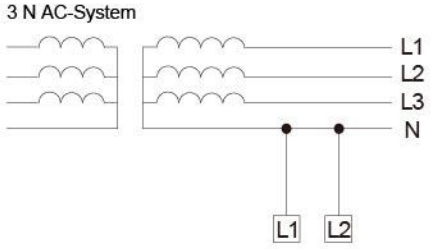


Power Supply Communication Relay Output

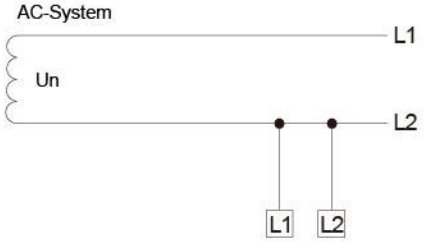
Wiring diagram



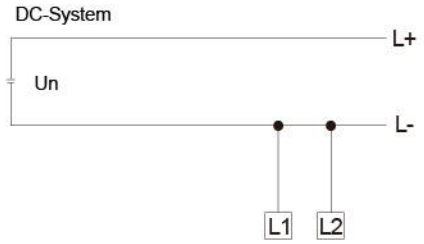
Connection to the 3AC system



Connection to the 3 N AC system



Connection of the AC system



Connection of the DC system

Operation and Display

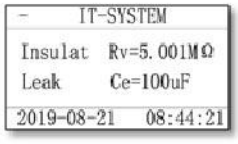
■ LED indicator instructions

"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..

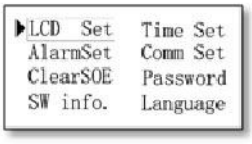
■ Button function descriptions

	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.

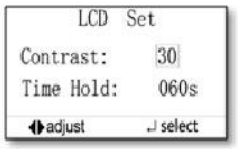
■ Menu description



Main page



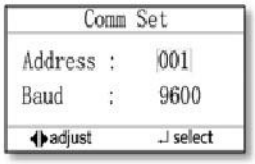
Setting page



LCD setting page

Time setting page

Alarm setting page



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