AIM-M200 Insulation Monitor Device



General

The AIM-M200 monitors the insulation resistance of medical IT system, At the same time, the load current and temperature of the IT system transformer is monitored. In combination with ASG100, AIL100 series insulation fault locators and the appropriate measuring current transformers, the AIM-M200 is designed to support insulation fault location.

Function Description

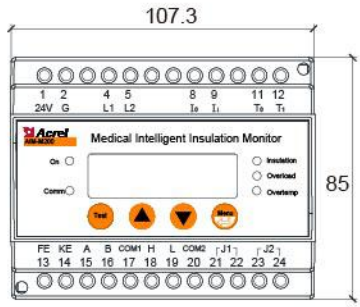
- Insulation, load and transformer temperature monitoring for IT system;
- Real-time monitoring disconnection fault of L1/L2, temperature sensor and FK, and alarming when these faults occurs;
- Relay alarm output and LED alarm output;
- Real-time monitoring the status of operating by data exchange with AID series or centralized monitoring software via field bus;
- With SOE function;
- AIM-M200 is with insulation fault locating function.

Technical Parameters

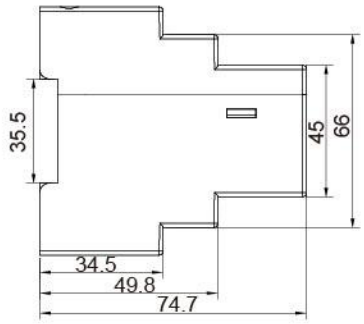
Parameters / Model		AIM-M200
Auxiliary power supply	Voltage	DC24V(±25%)
	Frequency	—
	Maximum power consumption	<3VA
Insulation monitoring	Insulation resistance	10～999kΩ
	Relative uncertainty	0～±10%
	Alarm value	50～999kΩ
	Response time	<2s
	Measuring voltage	<12V
	Measuring current	<50uA
Current monitoring	Measuring range	2.1～50A
	Alarm value	5～50A
	Accuracy	5%
	Display method	Value and percentage display
Temperature monitoring	Thermistor	PT100
	Measuring range	-50～+200℃
	Alarm value	0～+200℃
Alarm output	Output	2 relay(not programmable)
	Contact capacity	AC 250V/3A DC 30V/3A
Communications		1 RS485（Modbus-RTU）
		1 CAN
Environment	Operating temperature	-10～+50℃
	Storage temperature	-20～+70℃
	Relative humidity	5%-95%,No condensation
	Altitude	≤2500m
EMC & EMR		IEC61326-2-4

Dimension Drawings

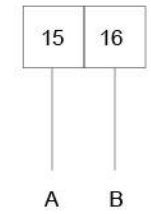
Dimensions in mm



Front view

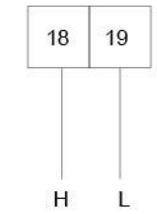


Side view



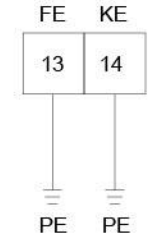
Communication 1

RS485



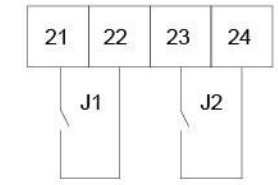
Communication 2

CAN



Functional

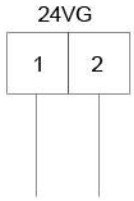
grounding wires



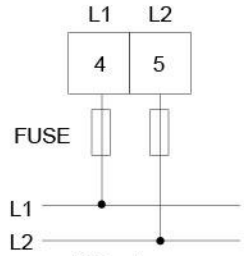
Relay output

Wiring

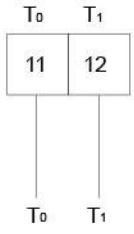
Terminal description



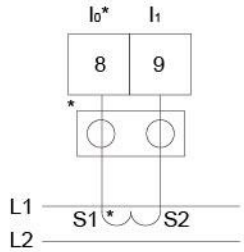
Power supply



IT System



Temperature input



Current input

Operation and Display

■ LED indicator instructions

"On"	Flashes once per second during normal operation.
"Comm"	Flashes when communication
"Insulation"	Flashes when insulation fault.
"Overload"	Flashes when overload fault.
"Overtemp"	Flashes when overtemperature fault.

■ Button function descriptions

Test	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 .
Menu ↵	In non-programming mode, used to enter the programming mode. In programming mode, used as Enter button.

■ Data settings

First menu	Second menu	Range and description
SET Comm	485 Ad	1…247
	Baud	4800,9600,19200
	Can Ad	1…110
	LOCAT	YES,NO
Set Alarm	Res	50…999
	Irms	14,18,22,28,35,45
	Temp	0…200
Set Time	Date	Year-month-day
	Time	Hour-minute-second
Set Others	Pass	0000…9999
	Contra	0…63
	BL	1…99
	ClrSOE	Clear the fault record

Malfunctions

List of possible errors and proposals for the correction of the faults. This error list does not claim to be exhaustive.

Error	Possible cause/Actions
AIM-M200 diplay blank	Check DC 24V power supply
LCD: Insulation fault	The resistance between IT system and PE below the response value.
LCD: LL open	Connection fault to IT system
LCD: FK open	Connection fault to PE
LCD: TC open	Connection fault to temperature sensor.
LCD: Overload	Load current above the response value
LCD: Overtemp	Temperature above the response value
Communication fails	First check the cable and make sure the connection is right. Then check the bus address and baudrate.
LEDs do not light	Replace AIM-M200
Display is lit but the screen is empty	Replace AIM-M200

Typical connection diagram

