

# GROUND MONITOR

– HIGH VOLTAGE MOTOR PROTECTION –  
MODEL : ISAH6600(M)-1/2 & ICHV6600-1/2



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# GROUND MONITOR ( PROTECTION FOR AC HIGH VOLTAGE MOTOR )

## ■ GENERAL INFORMATION

The ground monitor is intended to monitor the insulation resistance to ground of motors or AC voltage lines. If the insulation resistance of your motor or system goes below a predetermined value, the ground monitor will raise an alarm.

The ground monitor is an electronic insulation resistance detecting device with electromechanical relay contact output. And its detect circuit is electrically isolated from alarm circuit, so there's no interference between them.

## ■ MONITORING METHOD

The ground monitor must be connected with the coupling device that is connected with the line or system, and its monitoring operation is not affected by induced voltage that is caused by rotor during motor's operation. Connecting with any of the 3 phase lines or 1 phase line, the monitor can detect the insulation resistance value of your system or motor. When the aux. power is turned off, the internal detection line of the monitor is shut off.

## ■ ALARM SETTING

According to environment and system which the monitor is to be applied to, users can set the detect value freely by adjusting knob within the limit of regular range or option range. And the monitor has the function that protects the monitor from surges and impulses arising from permittivity of lines.

## ■ SPECIFICATIONS FOR ISAH6600

MODEL	ISAH6600-1, ISAH6600M-1	ISAH6600-2, ISAH6600M-2
Aux. Power Rating	AC 110V 50/60Hz	AC 220V 50/60Hz
Aux. Power Variations	AC 85 ~ 135V	AC 170 ~ 270V
Maximum Power Consumption	10 VA	
Insulation Detect Range	$\infty \sim 200 \sim 100 \sim 50 \sim 0 \text{ M}\Omega$	
Detect Line Voltage	AC 3P 0 ~ 7590V ( max. )	
Maximum Leakage Current	10 $\mu$ A ( DETECTOR CIRCUIT )	
Monitoring Method	Connect with Coupling ( ICHV6600 )	
Detect/Alarm Accuracy	$\pm 5\%$ ( 1 ~ 200 $\text{M}\Omega$ )	
	$\pm 10\%$ ( Below 1 $\text{M}\Omega$ , Above 200 $\text{M}\Omega$ )	
Alarm Set Range	1 ~ 200 $\text{M}\Omega$ ( Select by 12 steps selector switch ) ( 1 - 3 - 5 - 8 - 10 - 20 - 30 - 50 - 70 - 100 - 150 - 200 )	
Operation Time Delay	3.0 Sec ( $\pm 0.5$ Sec ) Reset time : 0.5 Sec or less	
Contact Output Rating	<ul style="list-style-type: none"> <li>· 5A ( resistive ) 2A ( inductive ) 30V DC</li> <li>· 5A ( resistive ) 2A ( inductive ) 125V AC</li> <li>· 3A ( resistive ) 1A ( inductive ) 250V AC</li> </ul>	
REMOTE SIGNAL	4~20mA Current loop (Apply only to ISAH6600M-1/2) 0 ~ 500 $\text{M}\Omega$ to 4~20mA	
Operating Temperature Range	- 20 $^{\circ}$ C ~ + 55 $^{\circ}$ C	
Storage Temperature Range	- 40 $^{\circ}$ C ~ + 80 $^{\circ}$ C	
Dielectric Strength	<ul style="list-style-type: none"> <li>· 2.5 KV / 1 min between T.B and enclosure</li> <li>· 1.5 KV / 1 min between T.B(#9,10) and T.B(#6,8)</li> </ul>	

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### ■ SPECIFICATIONS FOR ICHV6600

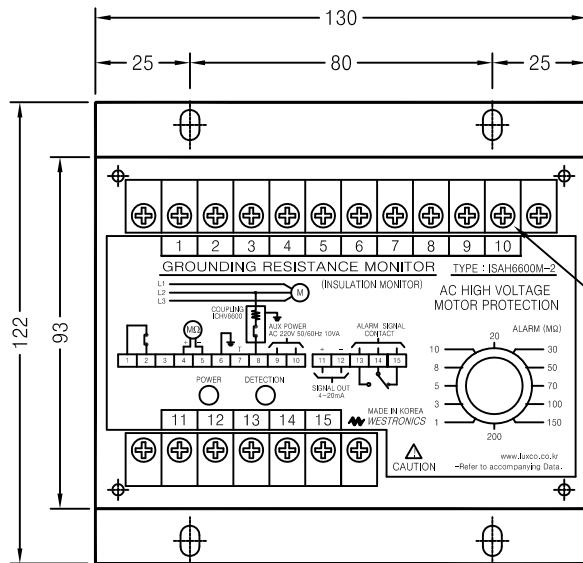
MODEL	ICHV6600-1	ICHV6600-2
Aux. Power Rating	AC 110V 50/60Hz	AC 220V 50/60Hz
Aux. Power Variations	AC 85 ~ 135V	AC 170 ~ 270V
Rated of Insulation Voltage	AC 6.6KV / 50~60Hz	
Range of Insulation Voltage	AC 0~7590V	
Impluse	12KV	
Dielectric Strength	· 2.5 KV / 1 min between T.B and enclosure	
Range of Measurement	0 ~ 500 MΩ	
Measurement Circuit	AC 1P / 3P Non grounded line	
Rating	Continuity	
Operating Temperature Range	- 20℃ ~ + 55℃	
Storage Temperature Range	- 40℃ ~ + 80℃	
Storage Temperature Range	PC ( Frame retardant )	

# GROUND MONITOR ( PROTECTION FOR AC HIGH VOLTAGE MOTOR )

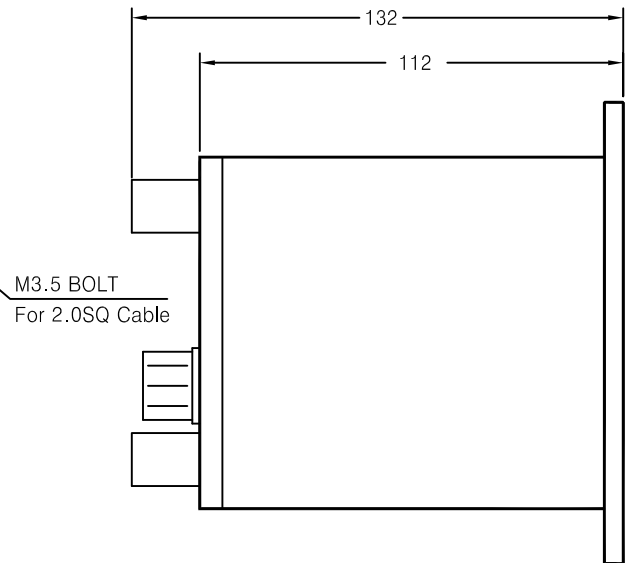
## ■ OUTLINE DIMENSION AND PANEL CUTTING (Unit in m/m)

- The size of all models are the same

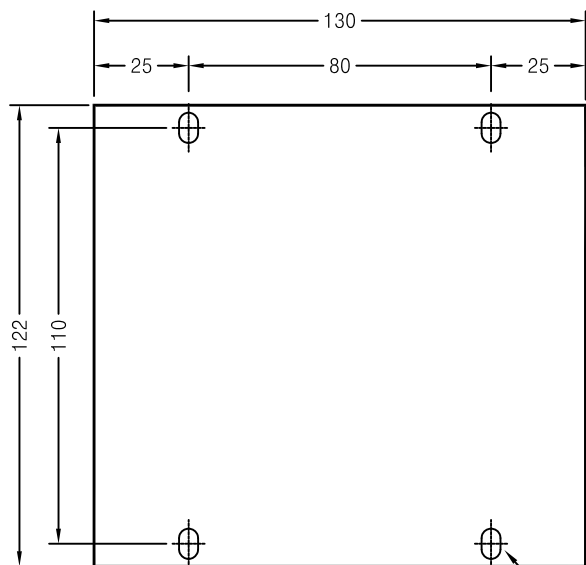
FRONT VIEW



SIDE VIEW



MOUNTING



NOTE

1. Material : PC ( Flame retardant )

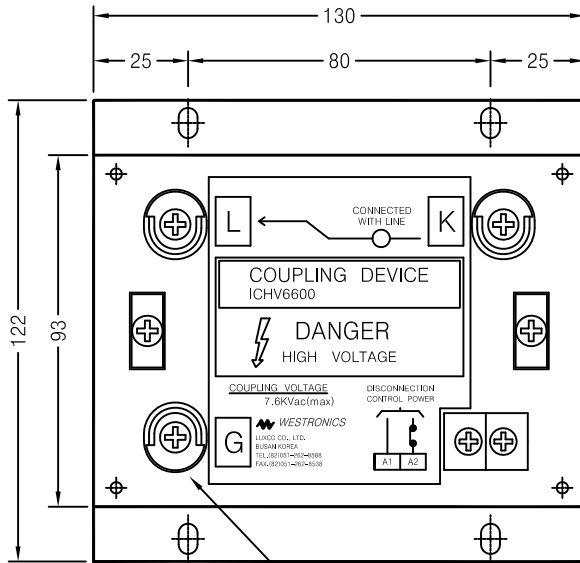
4 -  $\phi 5$   
( FOR M4 SCREW BOLT )

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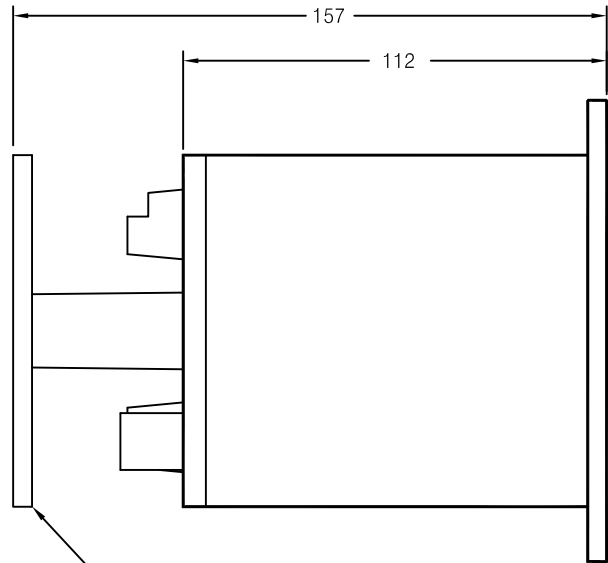
- The size of all models are the same

FRONT VIEW



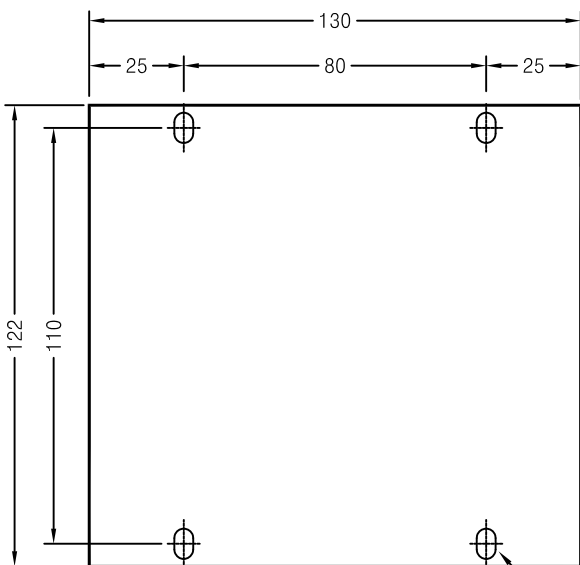
M4 SCREW BOLT  
( For High Voltage Drop Wire )

SIDE VIEW



SAFETY COVER  
Acryl Plate 5.0t

MOUNTING



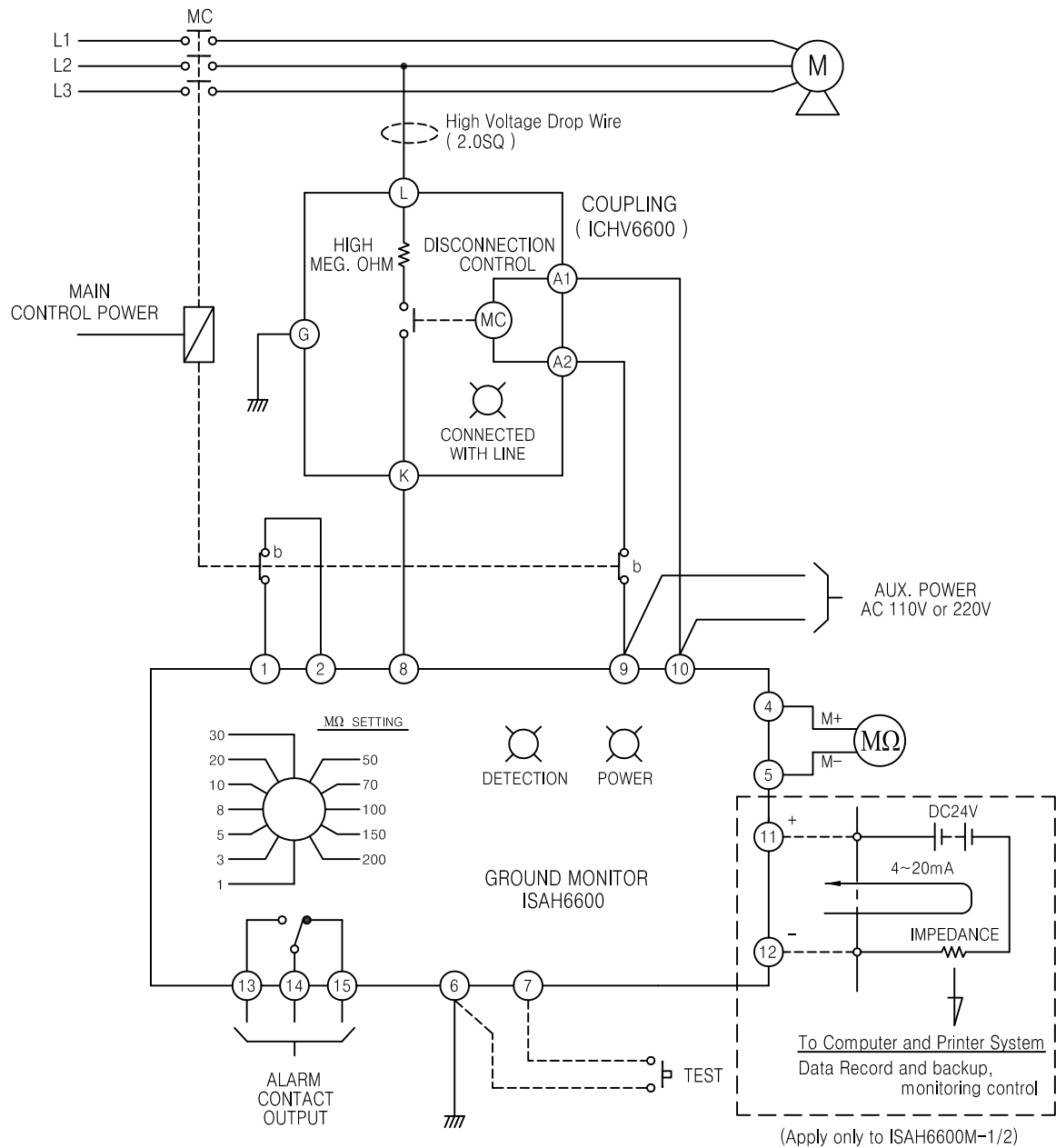
4 -  $\phi 5$   
( FOR M4 SCREW BOLT )

NOTE

1. Material : PC ( Flame retardant )

# GROUND MONITOR ( PROTECTION FOR AC HIGH VOLTAGE MOTOR )

## ■ CONNECTION DIAGRAM



- 1) The terminal (L) of the Coupling device may be connected to any of the lines 'R', 'S' or 'T'
- 2) Maximum output contact rating
  - 5A ( resistive ) 2A ( inductive ) 30V DC
  - 5A ( resistive ) 2A ( inductive ) 125V AC
  - 3A ( resistive ) 1A ( inductive ) 250V AC
- 3) Meter center ( 100MΩ ) is indicated on test

# GROUND MONITOR ( PROTECTION FOR AC HIGH VOLTAGE MOTOR )

■ 4~20mA SIGNAL CHARACTERISTIC CURVE (Apply only to ISAH6600M-1/2)

