



# GROUND MONITOR

- PROTECTION FOR AC SYSTEM
- PROTECTION FOR DC SYSTEM
- PROTECTION FOR AC LOW VOLTAGE MOTOR
- PROTECTION FOR AC HIGH VOLTAGE MOTOR

# GROUND MONITOR

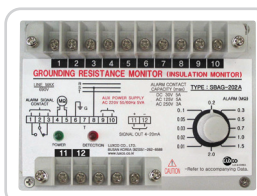
## SERIES INDEX

### PROTECTION FOR AC SYSTEM



#### AC LINE LOW INSULATION MONITORING

MODEL	PAGE
SBAG-102 SBAG-202 SBAG-402	47



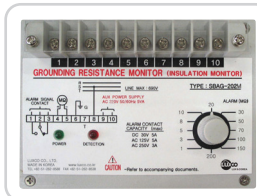
#### AC LINE LOW INSULATION REMOTE MONITORING

MODEL	PAGE
SBAG-102A SBAG-202A SBAG-402A	48



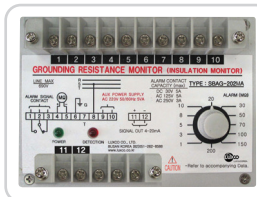
#### AC LINE LOW INSULATION MONITORING

MODEL	PAGE
ISA690A1 ISA690A2 ISA690A4	49



#### AC LINE HIGH INSULATION MONITORING

MODEL	PAGE
SBAG-102M SBAG-202M SBAG-402M	50



#### AC LINE HIGH INSULATION REMOTE MONITORING

MODEL	PAGE
SBAG-102MA SBAG-202MA SBAG-402MA	51

### PROTECTION FOR AC LOW VOLTAGE MOTOR



#### PROTECTION FOR AC LOW VOLTAGE MOTOR

MODEL	PAGE
ISA690M1 ISA690M2 ISA690M4	53



#### PROTECTION FOR AC LOW VOLTAGE MOTOR

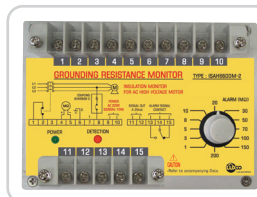
MODEL	PAGE
ISA690MH1 ISA690MH2 ISA690MH4	54



#### PROTECTION FOR AC LOW VOLTAGE MOTOR

MODEL	PAGE
SBMG-102A SBMG-202A SBMG-402A	55

### PROTECTION FOR AC HIGH VOLTAGE MOTOR



#### PROTECTION FOR AC HIGH VOLTAGE MOTOR

MODEL	PAGE
ISAH6600-1 ISAH6600-2 ISAH6600M-1 ISAH6600M-2	58

### PROTECTION FOR DC SYSTEM



#### DC LINE MONITORING

MODEL	PAGE
ISD24L ISD48L	60



#### DC LINE MONITORING

MODEL	PAGE
ISD125L ISD250L	61



## GENERAL SPECIFICATION

1. Operating Temperature : -10°C-55°C
2. Humidity : 80% RH
3. Operating Principle : Moving coil type
4. "0 MΩ" setting VR : Inclusion
5. Moving Method : Pivot & the spring-mounted jewel
6. Dielectric Strength : Between electric circuit and case 2000V, 1min.
7. Insulation Resistance : Between electric circuit 10MΩ

## SPECIFICATIONS OF METER SCALE (The other kind of meter not indicated in below is customer's option)

SCALE	APPLICABLE MODEL	WIDE ANGLE TYPE	DIN TYPE
		METER SIZE ■ 80 X 80 ■ 110 X 110	METER SIZE ■ 72 X 72 ■ 96 X 96
	SBAG-102 <sup>®</sup> / 202 <sup>®</sup> / 402 <sup>®</sup> ∞-10-5-2-1-0.5-0.3-0 MΩ (MAKER : LUXCO)		
	SBAG-102 / 202 / 402 SBAG-102A / 202A / 402A ISA690A1 / ISA690A2 / ISA690M1 / ISA690M2 ∞-5-0.2-0.05-0 MΩ (MAKER : LUXCO)		
	SBAG-102(R2) / 202(R2) / 402(R2) SBAG-102A(R2) / 202A(R2) / 402A(R2) ISA690A1(R2) / ISA690A2(R2) ∞-50-20-0.5-0.1-0 MΩ (MAKER : LUXCO)		
	SBAG -102M / 202M / 402M ISA690MH1 / ISA690MH2 ISAH6600 -1/2, ISAH6600M -1/2 [∞-10-5-1-0.5-0]X100MΩ (MAKER : LUXCO)		
	ISD24L ISD48L ∞-1-0.02-0.005-0 MΩ (MAKER : LUXCO)		
	ISD125L ISD250L ∞-10-5-0.2-0.05-0 MΩ (MAKER : LUXCO)		

## FUNCTION

### INSULATION MEASUREMENT. MONITORING RANGE

Two models available : Low insulation range for 0-5MΩ and High megger range for 0-500MΩ

### INSULATION MEASUREMENT. MONITORING METHOD

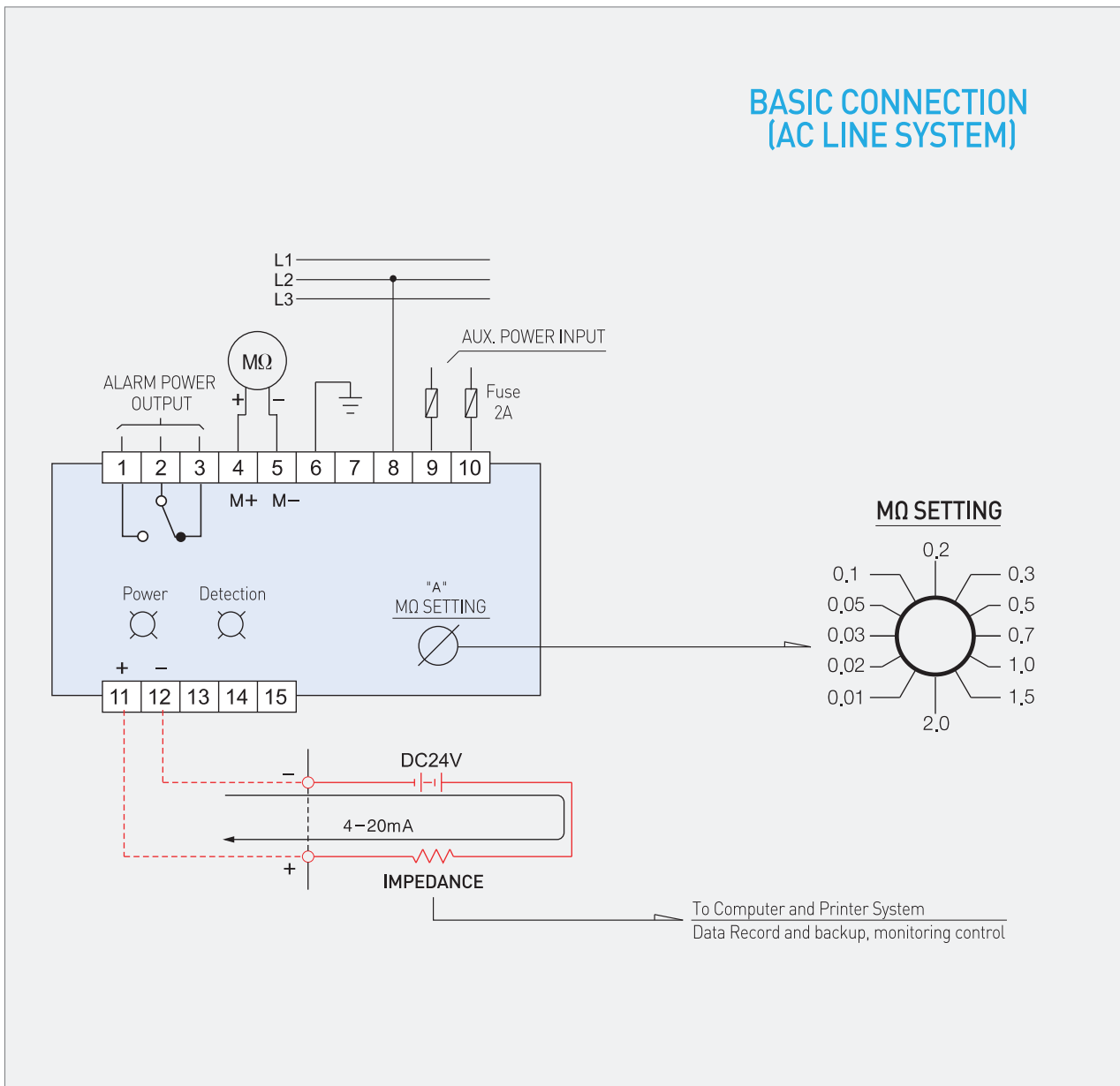
For the measurement, ground monitor is directly connected to the required equipment and is able to read and watch with separate auxiliary electrical source regardless of the equipment line being "on" or "off" power. For watching purpose, connection method can select either single or 3 phase line and when the auxiliary power source is cut off the internal detection line is also cut off.

### ALARM SETTING

The alarm setting knob on the front display can be set in accordance with its environment and system kind freely at operator's option within the regulations and the scope of allowable range. the protection device against the surge or impulse is also included.

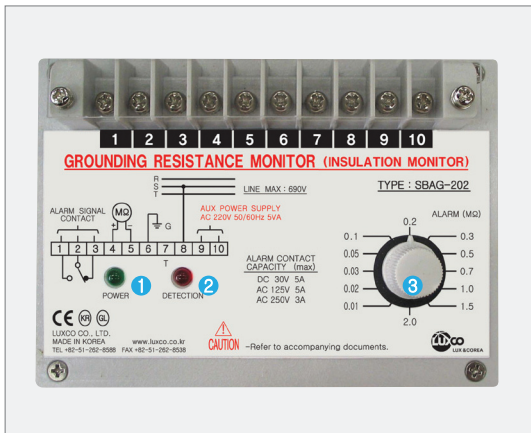
### REMOTE GROUP MONITORING

In case of remote control system uses, 4~20mA output control power by Micom converter is added in this set to enable remote detection group monitoring on the insulation and alarm conditions of widely spread out motors or various equipment at industrial site and when necessary this model can also be made to record and store the insulation date in connection with computer and printer.



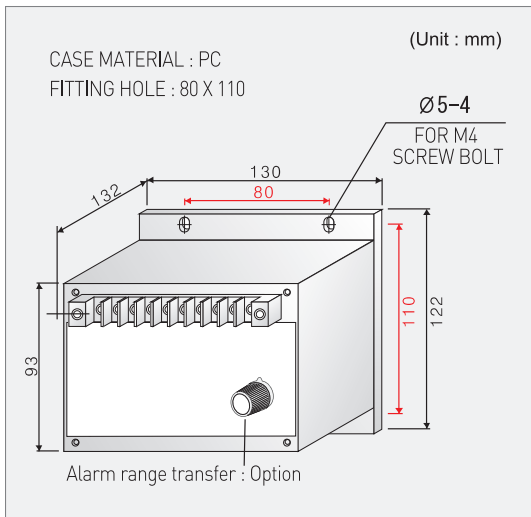


## FRONT VIEW

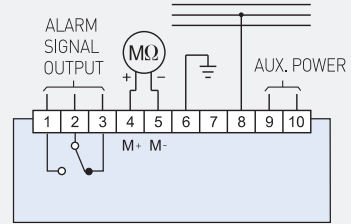


- ① Power indicating lamp (Green)
- ② Alarm indicating lamp (Red)
- ③ Alarm setting (MΩ)

## DIMENSION



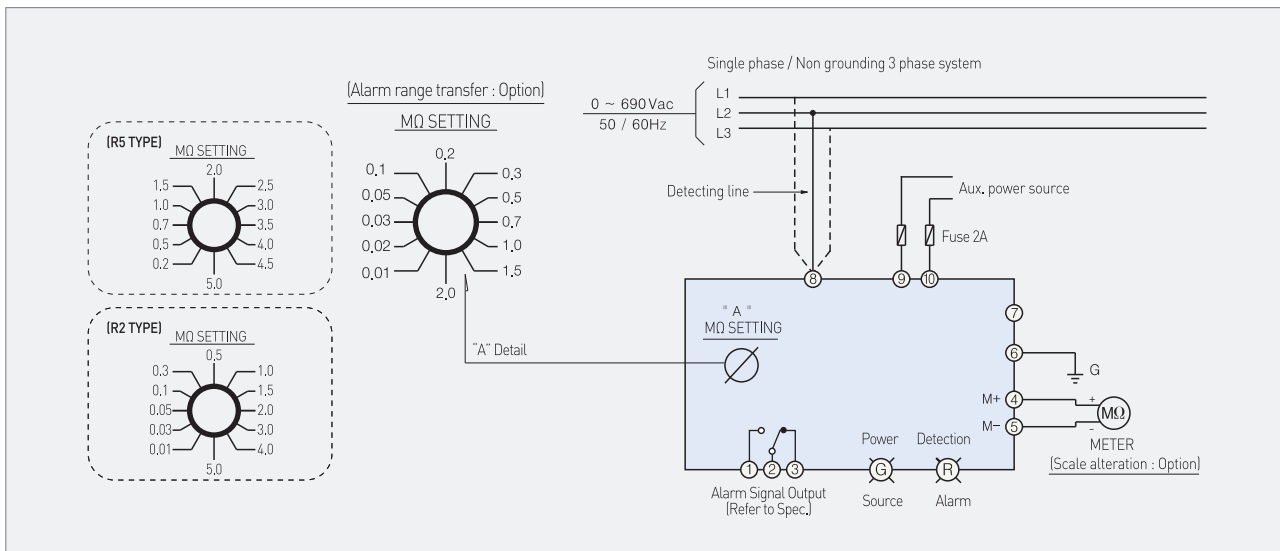
## T.B LAYOUT



## SPECIFICATIONS (LOW INSULATION SPEC')

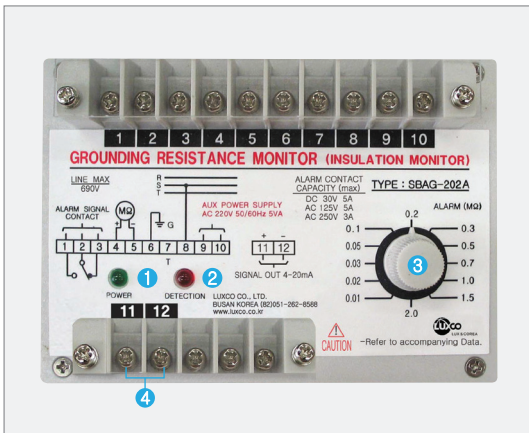
MODEL	SBAG-102	SBAG-202	SBAG-402
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz	AC 440V 50/60Hz
RANGE OF POWER VARIATION	AC 85-135V	AC 170-270V	AC 395-485V
MAX. POWER CONSUMPTION	5VA		
INSULATION MONITORING RANGE	∞ ~ 5 ~ 0.2 ~ 0.05 ~ 0MΩ (R2 : ∞ ~ 50 ~ 0MΩ) (R5 : ∞ ~ 10 ~ 5 ~ 1 ~ 0.5 ~ 0MΩ)		
INSULATION VOLTAGE RANGE	AC 1P / 3 Phase 0 ~ 690V (max.)		
DETECTOR ACCURACY	±5% (0.1 ~ 2MΩ) ±10% (under 0.05MΩ, 2MΩ above)		
ALARM SETTING RANGE	0.01 ~ 2.0MΩ (select by 12 steps selector switch) (R2 : 0.01 ~ 5.0MΩ) (R5 : 0.2 ~ 5.0MΩ)		
ALARM DELAY TIME	3.0sec. (±0.5sec.) Reset time : 0.5sec. or less		
ALARM SIGNAL OUTPUT	5A (resistive), 2A (inductive) 30V DC 5A (resistive), 2A (inductive p.f=0.4) 125V AC 3A (resistive), 1A (inductive p.f=0.4) 250V AC		
AMBIENT TEMP.	-20°C ~ +60°C		
STORAGE TEMP.	-40°C ~ +65°C		
DIELECTRIC STRENGTH	Between terminal to cabinet 2.5KV / 1min Between 9, 10 to 6, 8 terminal 1.5KV / 1min		
METER	Refer to page 45		

## CONNECTION DIAGRAM



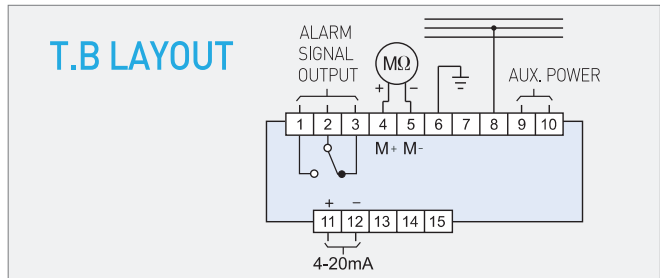
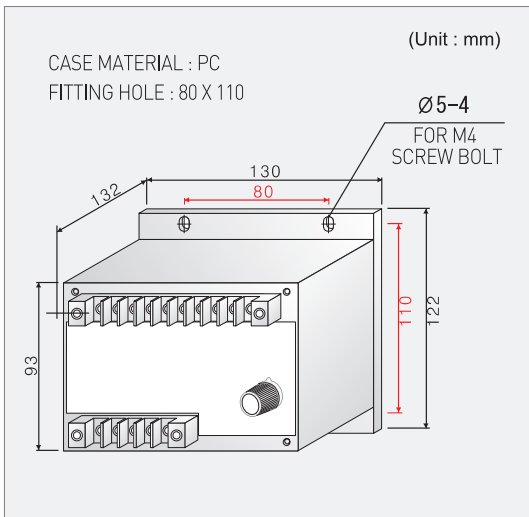


### FRONT VIEW



- ① Power indicating lamp (Green)
- ② Alarm indicating lamp (Red)
- ③ Alarm setting (MΩ)
- ④ 4-20mA power output terminal

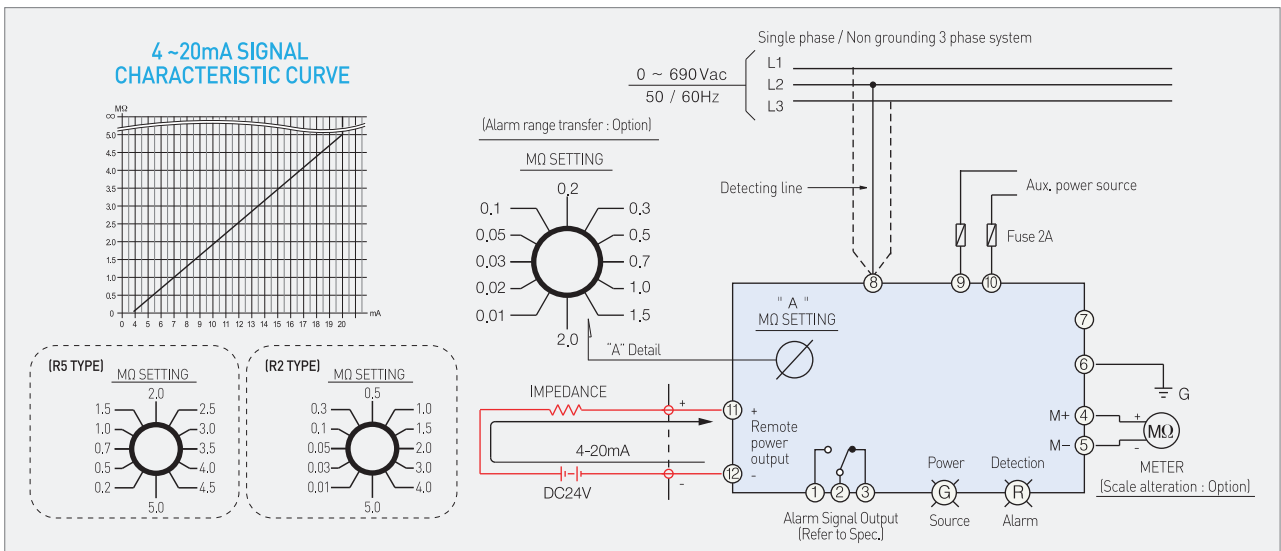
### DIMENSION



### SPECIFICATIONS (LOW INSULATION SPEC')

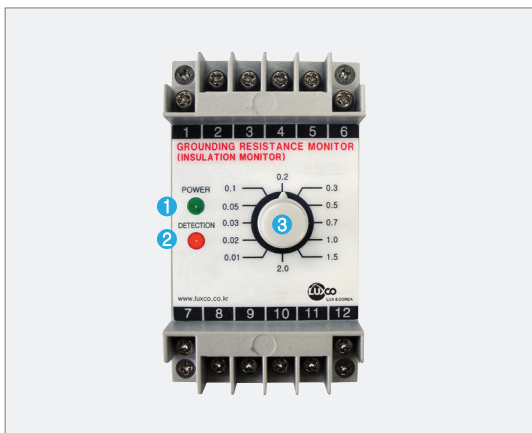
MODEL	SBAG-102A	SBAG-202A	SBAG-402A
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz	AC 440V 50/60Hz
RANGE OF POWER VARIATION	AC 85-135V	AC 170-270V	AC 395-485V
MAX. POWER CONSUMPTION	5VA		
INSULATION MONITORING RANGE	∞ ~5 ~0.2 ~0.05 ~0MΩ (R2 : ∞ ~50 ~0MΩ) (R5 : ∞ ~10 ~5 ~1 ~0.5 ~0MΩ)		
INSULATION VOLTAGE RANGE	AC 1P / 3 Phase 0 ~ 690V (max.)		
DETECTOR ACCURACY	±5% (0.1 ~ 2MΩ) ±10% (under 0.05MΩ, 2MΩ above)		
ALARM SETTING RANGE	0.01 ~ 2.0MΩ (select by 12 steps selector switch) (R2 : 0.01 ~ 5.0MΩ) (R5 : 0.2 ~ 5.0MΩ)		
ALARM DELAY TIME	3.0sec. (±0.5sec.) Reset time : 0.5sec. or less		
ALARM SIGNAL OUTPUT	5A (resistive) 2A (inductive) 30V DC 5A (resistive) 2A (inductive p.f.=0.4) 125V AC 3A (resistive) 1A (inductive p.f.=0.4) 250V AC		
AMBIENT TEMP.	-20°C ~ +65°C		
STORAGE TEMP.	-40°C ~ +65°C		
DIELECTRIC STRENGTH	Between terminal to cabinet 2.5KV / 1min Between 9, 10 to 6, 8 terminal 1.5KV / 1min		
REMOTE SIGNAL (MICOM CONTROL)	4 ~ 20mA current loop 0 ~ 5MΩ to 4 ~ 20mA		
METER	Refer to page 45		

### CONNECTION DIAGRAM



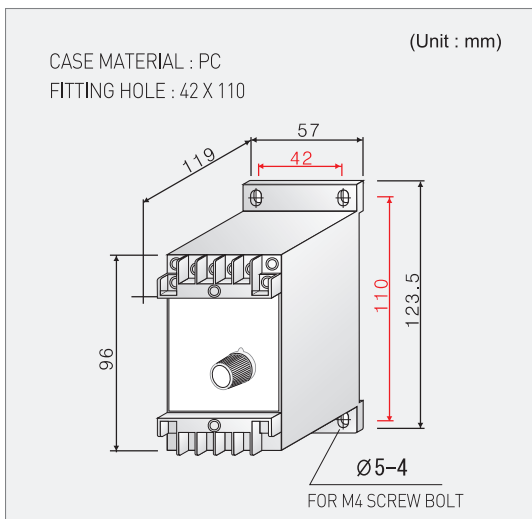


## FRONT VIEW

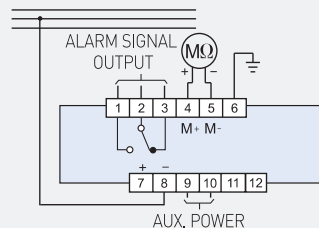


- ① Power indicating lamp (Green)
- ② Alarm indicating lamp (Red)
- ③ Alarm setting (MΩ)

## DIMENSION



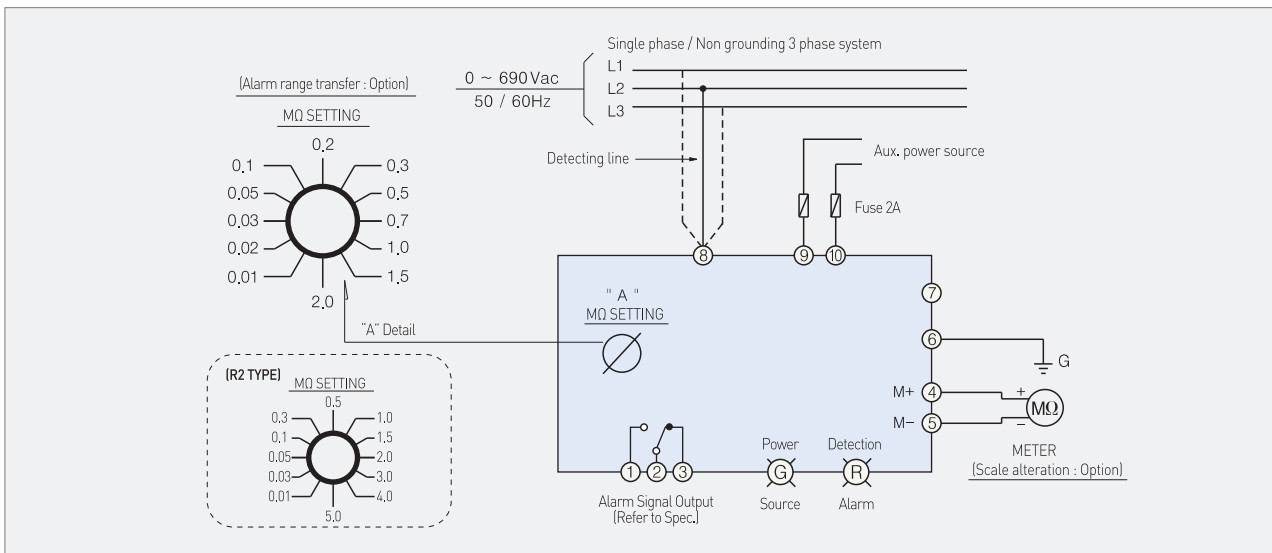
## T.B LAYOUT



## SPECIFICATIONS (LOW INSULATION SPEC')

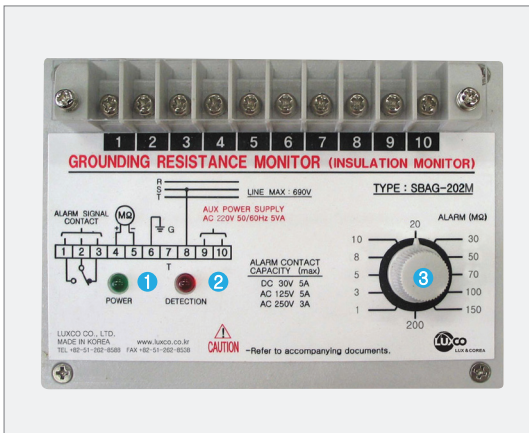
MODEL	ISA690A1	ISA690A2	ISA690A4
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz	AC 440V 50/60Hz
RANGE OF POWER VARIATION	AC 85-135V	AC 170-270V	AC 395-485V
MAX. POWER CONSUMPTION	5VA		
INSULATION MONITORING RANGE	∞ -5 -0.2 -0.05 -0MΩ (R2 : ∞ -50 -0MΩ)		
INSULATION VOLTAGE RANGE	AC 1P / 3 Phase 0 ~ 690V (max.)		
DETECTOR ACCURACY	±5% (0.1 ~ 2MΩ) ±10% (under 0.05MΩ, 2MΩ above)		
ALARM SETTING RANGE	0.01 ~ 2.0MΩ (select by 12 steps selector switch) (R2 : 0.01 ~ 5.0MΩ)		
ALARM DELAY TIME	3.0sec. (±0.5sec.) Reset time : 0.5sec. or less		
ALARM SIGNAL OUTPUT	5A (resistive) 2A (inductive) 30V DC 5A (resistive) 2A (inductive p.f.=0.4) 125V AC 3A (resistive) 1A (inductive p.f.=0.4) 250V AC		
AMBIENT TEMP.	-20°C ~ +60°C		
STORAGE TEMP.	-40°C ~ +65°C		
DIELECTRIC STRENGTH	Between terminal to cabinet 2.5KV / 1min Between 9, 10 to 6, 8 terminal 1.5KV / 1min		
METER	Refer to page 45		

## CONNECTION DIAGRAM



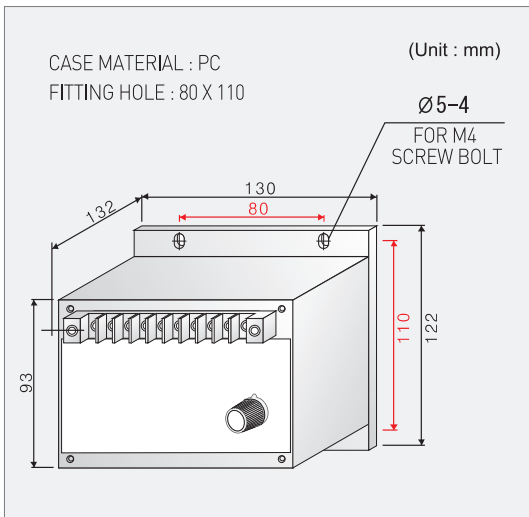


### FRONT VIEW

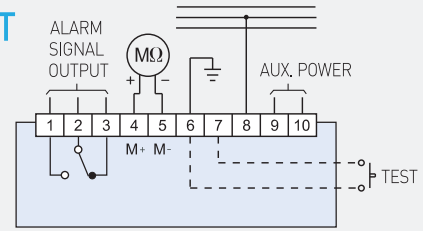


- ① Power indicating lamp (Green)
- ② Alarm indicating lamp (Red)
- ③ Alarm setting [MΩ]

### DIMENSION



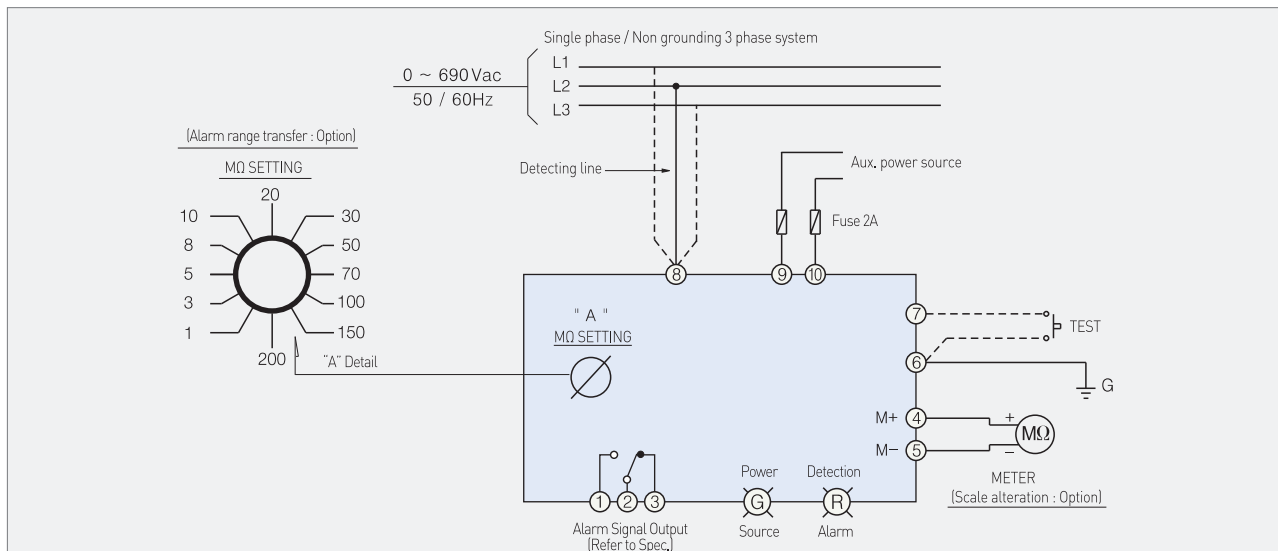
### T.B LAYOUT



### SPECIFICATIONS (HIGH MEGGER SPEC')

MODEL	SBAG-102M	SBAG-202M	SBAG-402M
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz	AC 440V 50/60Hz
RANGE OF POWER VARIATION	AC 85-135V	AC 170-270V	AC 395-485V
MAX. POWER CONSUMPTION	5VA		
INSULATION MONITORING RANGE	∞ ~500 ~100 ~50 ~0MΩ		
INSULATION VOLTAGE RANGE	AC 1P / 3 Phase 0 ~ 690V (max.)		
DETECTOR ACCURACY	±5% (50 ~200MΩ) ±10% (under 50MΩ, 200MΩ above)		
ALARM SETTING RANGE	1 ~ 200MΩ [select by 12 steps selector switch] [1-3-5-8-10-20-30-50-70-100-150-200]		
ALARM DELAY TIME	3.0sec. (±0.5sec.) Reset time : 0.5sec. or less		
ALARM SIGNAL OUTPUT	5A (resistive) 2A (inductive) 30V DC 5A (resistive) 2A (inductive p.f=0.4) 125V AC 3A (resistive) 1A (inductive p.f=0.4) 250V AC		
AMBIENT TEMP.	-20°C ~ +65°C		
STORAGE TEMP.	-40°C ~ +65°C		
DIELECTRIC STRENGTH	Between terminal to cabinet 2.5KV / 1min Between 9, 10 to 6, 8 terminal 1.5KV / 1min		
METER	Refer to page 45		
TEST BUTTON	Meter center (100MΩ) Indication		

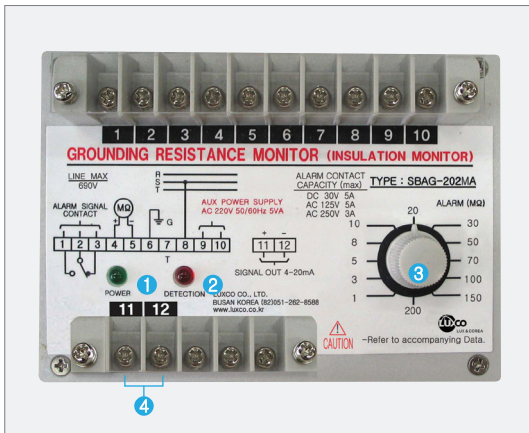
### CONNECTION DIAGRAM





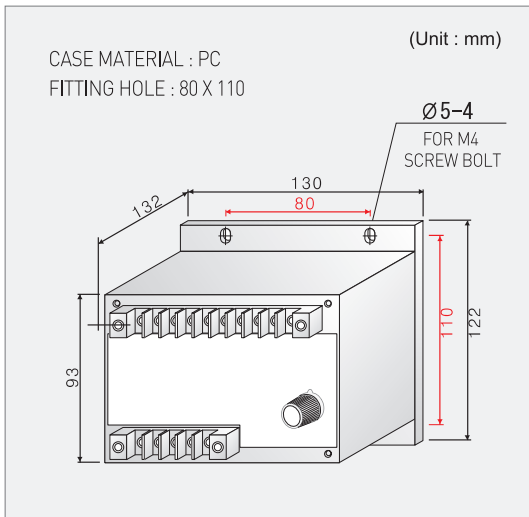


## FRONT VIEW

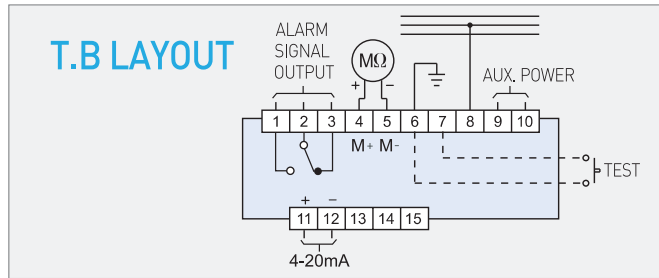


- ① Power indicating lamp (Green)
- ② Alarm indicating lamp (Red)
- ③ Alarm setting (MΩ)
- ④ 4~20mA power output terminal

## DIMENSION



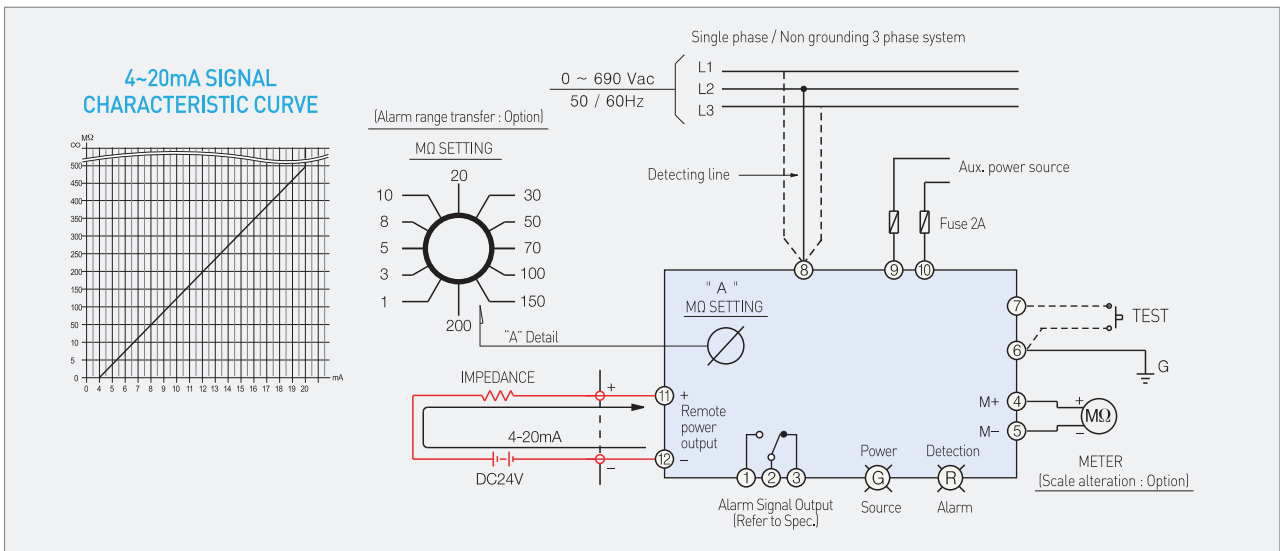
## T.B LAYOUT



## SPECIFICATIONS (HIGH MEGGER SPEC')

MODEL	SBAG-102MA	SBAG-202MA	SBAG-402MA
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz	AC 440V 50/60Hz
RANGE OF POWER VARIATION	AC 85~135V	AC 170~270V	AC 395~485V
MAX. POWER CONSUMPTION	5VA		
INSULATION MONITORING RANGE	∞ ~500 ~100 ~50 ~0MΩ		
INSULATION VOLTAGE RANGE	AC 1P / 3 Phase 0 ~ 690V [max.]		
DETECTOR ACCURACY	±5% [50 ~200MΩ] ±10% [under 50MΩ, 200MΩ above]		
ALARM SETTING RANGE	1 ~ 200MΩ [select by 12 steps selector switch] [1-3-5-8-10-20-30-50-70-100-150-200]		
ALARM DELAY TIME	3.0sec. (±0.5sec.) Reset time : 0.5sec. or less		
ALARM SIGNAL OUTPUT	5A [resistive] 2A [inductive] 30V DC 5A [resistive] 2A [inductive p.f=0.4] 125V AC 3A [resistive] 1A [inductive p.f=0.4] 250V AC		
AMBIENT TEMP.	-20°C ~ +60°C		
STORAGE TEMP.	-40°C ~ +65°C		
DIELECTRIC STRENGTH	Between terminal to cabinet 2.5KV / 1min Between 9, 10 to 6, 8 terminal 1.5KV / 1min		
REMOTE SIGNAL (MICOM CONTROL)	4 ~20mA Current loop 0 ~500MΩ to 4 ~20mA		
METER	Refer to page 45		
TEST BUTTON	Meter center [100MΩ] Indication		

## CONNECTION DIAGRAM



## FUNCTION

### INSULATION MEASUREMENT. MONITORING RANGE

Two models available :  
0~5MΩ Low insulation range and 0~500MΩ High megger range.

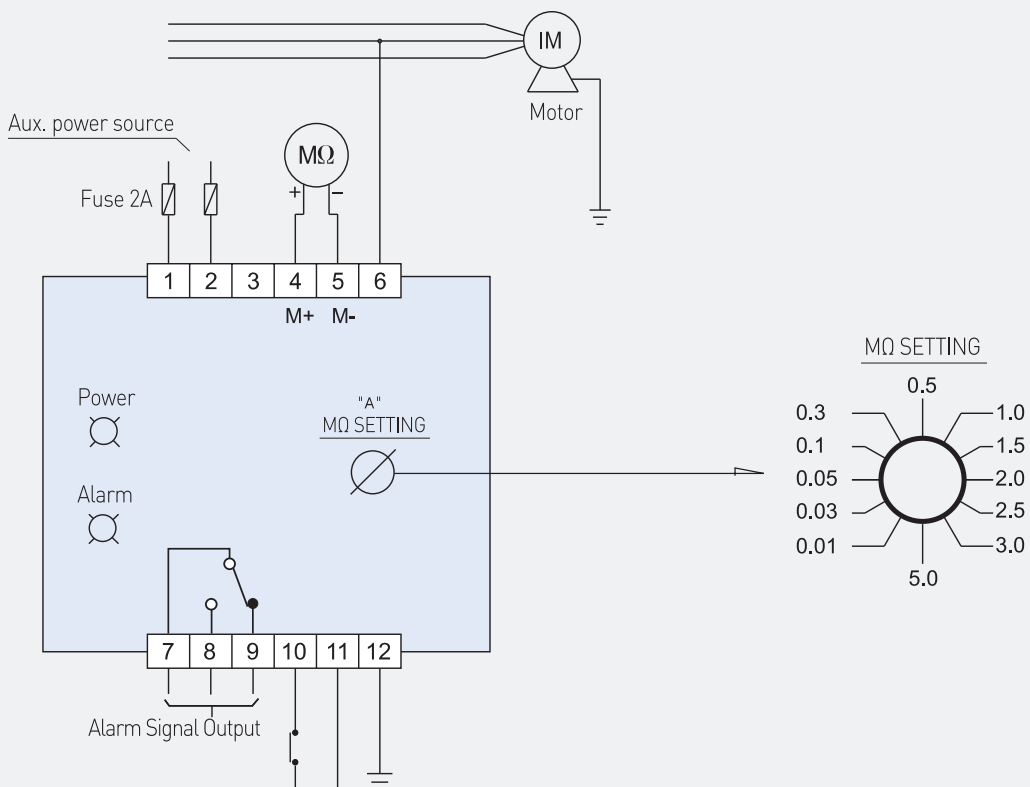
### MONITORING METHOD

Checking and measuring are possible by directly contacting sensor to the line, or the equipment and not influenced by the induced voltage of armature during motor operation, and also continuous measuring and checking is possible even in the motor circuit installed with exclusive transformer. Only one line connection either single or three phase is needed and the measuring power goes off when the auxiliary power line is cut off.

### ALARM SETTING

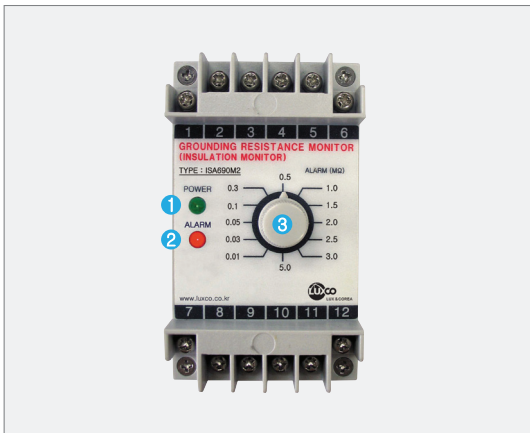
The alarm setting knob on the front display can be set in accordance with its environment and system kind freely at operator's option within the regulations and the scope of allowable range. The protection device against the surge or impulse is also included.

## BASIC CONNECTION (AC LINE SYSTEM)



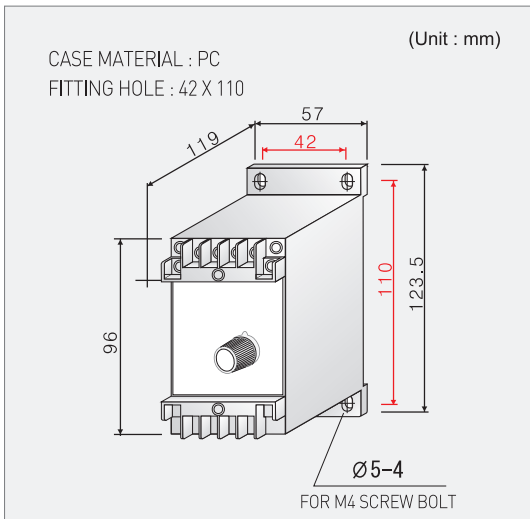


## FRONT VIEW

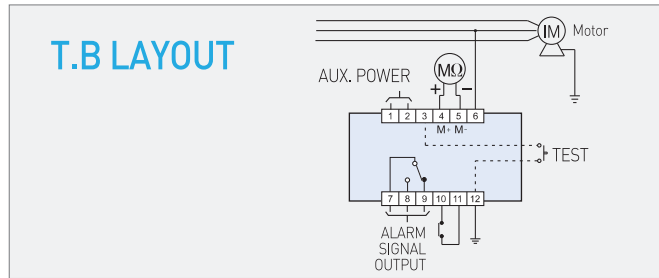


- ① Power indicating lamp (Green)
- ② Alarm indicating lamp (Red)
- ③ Alarm setting (MΩ)

## DIMENSION



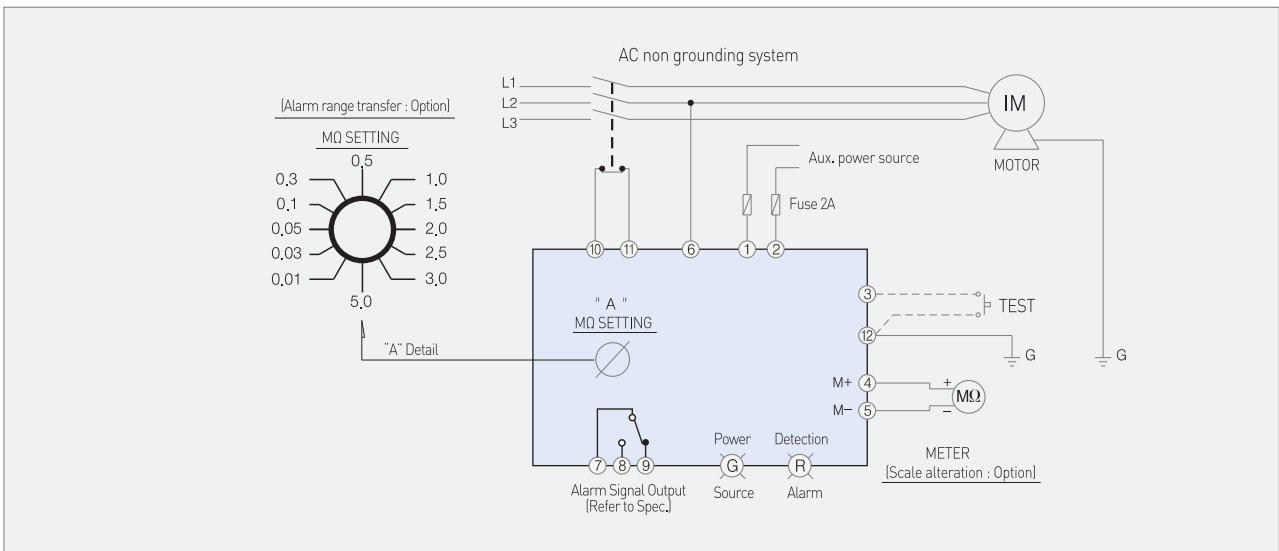
## T.B LAYOUT



## SPECIFICATIONS (LOW INSULATION SPEC')

MODEL	ISA690M1	ISA690M2	ISA690M4
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz	AC 440V 50/60Hz
RANGE OF POWER VARIATION	AC 85-135V	AC 170-270V	AC 395-485V
MAX. POWER CONSUMPTION	5VA		
INSULATION MONITORING RANGE	∞ -5 -0.2 -0.05 -0MΩ		
INSULATION VOLTAGE RANGE	AC 1P / 3 Phase 0 ~ 690V (max.)		
DETECTOR ACCURACY	±5% (0.1 ~5MΩ) ±10% (under 0.1MΩ, 5MΩ above)		
ALARM SETTING RANGE	0.2 ~ 5MΩ [select by 12 steps selector switch] (0.01-0.03-0.05-0.1-0.3-0.5-1.0-1.5-2.0-2.5-3.0-5.0)		
ALARM DELAY TIME	3.0sec. (±0.5sec.) Reset time : 0.5sec. or less		
ALARM SIGNAL OUTPUT	5A (resistive) 2A (inductive) 30V DC 5A (resistive) 2A (inductive p.f=0.4) 125V AC 3A (resistive) 1A (inductive p.f=0.4) 250V AC		
AMBIENT TEMP.	-20°C ~ +60°C		
STORAGE TEMP.	-40°C ~ +65°C		
DIELECTRIC STRENGTH	Between terminal to cabinet 1.5KV / 1min Between 1, 2 to 6 terminal 1.5KV / 1min		
METER	Refer to page 45		
TEST BUTTON	Meter center (0.2MΩ) Indication		

## CONNECTION DIAGRAM



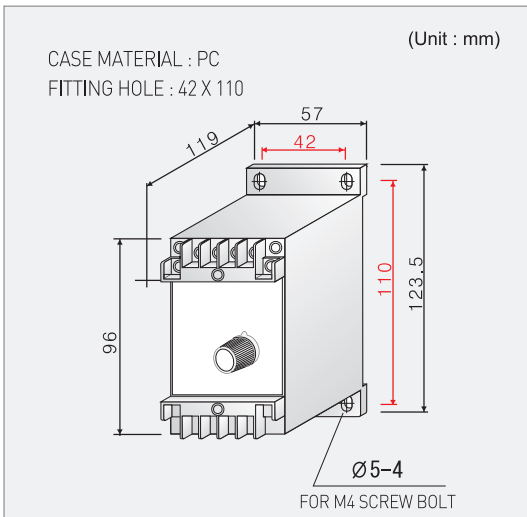


## FRONT VIEW

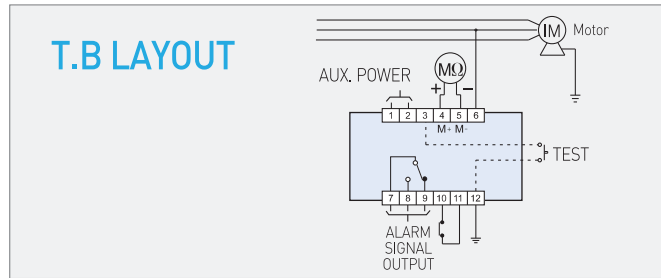


- ① Power indicating lamp (Green)
- ② Alarm indicating lamp (Red)
- ③ Alarm setting (MQ)

## DIMENSION



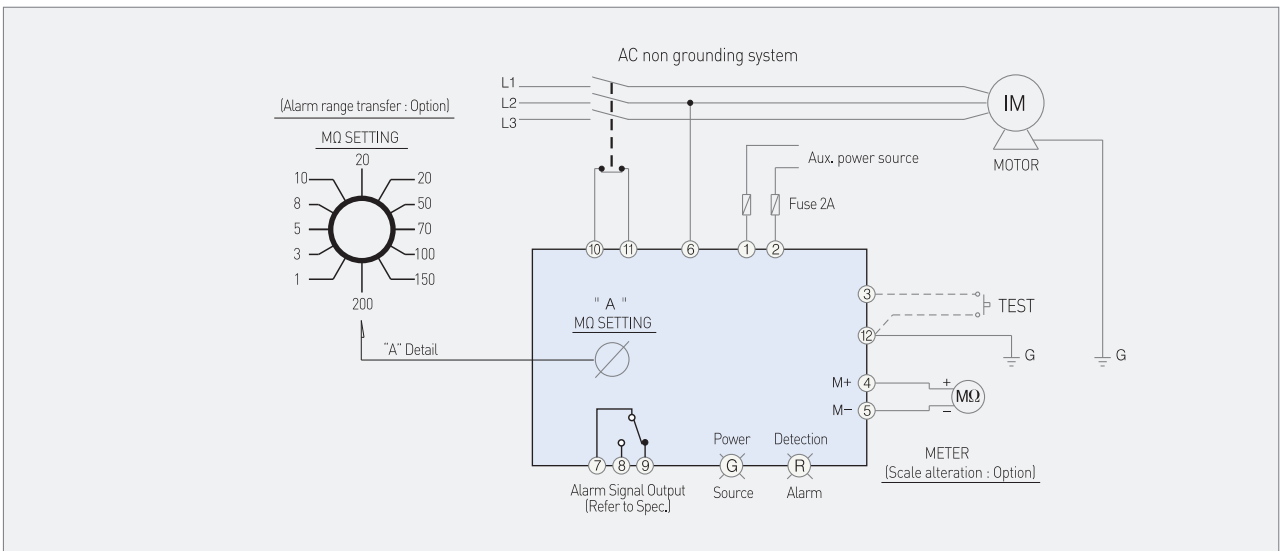
## T.B LAYOUT



## SPECIFICATIONS (HIGH MEGGER SPEC)

MODEL	ISA690MH1	ISA690MH2	ISA690MH4
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz	AC 440V 50/60Hz
RANGE OF POWER VARIATION	AC 85-135V	AC 170-270V	AC 395-485V
MAX. POWER CONSUMPTION	5VA		
INSULATION MONITORING RANGE	$\infty \sim 500 \sim 100 \sim 50 \sim 0\Omega$		
INSULATION VOLTAGE RANGE	AC 1P / 3 Phase 0 ~ 690V (max.)		
DETECTOR ACCURACY	$\pm 5\%$ (0.1 ~ 200MQ) $\pm 10\%$ (under $\pm 5\%$ (1 ~ 200MQ) above)		
ALARM SETTING RANGE	1 ~ 200MQ [Select by 12 steps selector switch] (1-3-5-8-10-20-30-50-70-100-150-200)		
ALARM DELAY TIME	3.0sec. ( $\pm 0.5$ sec.) Reset time : 0.5sec. or less		
ALARM SIGNAL OUTPUT	5A (resistive) 2A (inductive) 30V DC 5A (resistive) 2A (inductive p.f=0.4) 125V AC 3A (resistive) 1A (inductive p.f=0.4) 250V AC		
AMBIENT TEMP.	$-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$		
STORAGE TEMP.	$-40^{\circ}\text{C} \sim +65^{\circ}\text{C}$		
DIELECTRIC STRENGTH	Between terminal to cabinet 2.5KV / 1min Between 1, 2 to 6 terminal 1.5KV / 1min		
METER	Refer to page 45		
TEST BUTTON	Meter center (100MQ) Indication		

## CONNECTION DIAGRAM



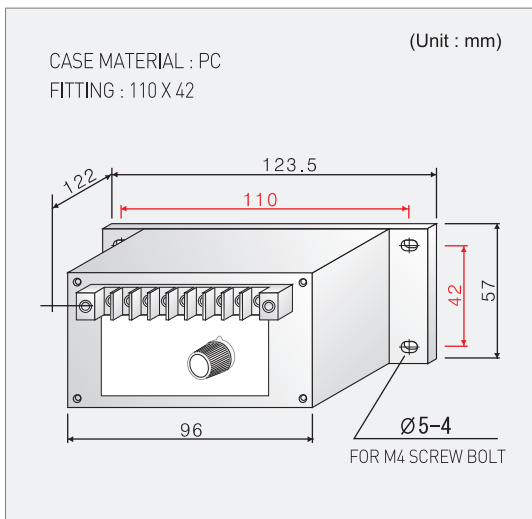


## FRONT VIEW

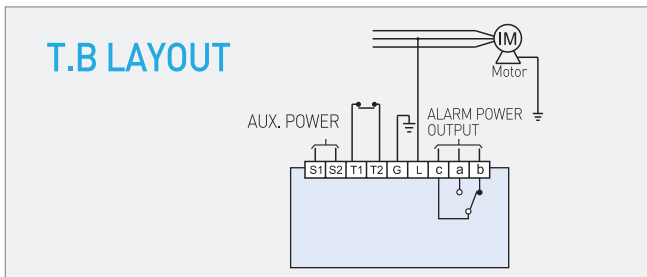


- ① Power indicating lamp (Green)
- ② Alarm indicating lamp (Red)
- ③ Alarm setting (MΩ)

## DIMENSION



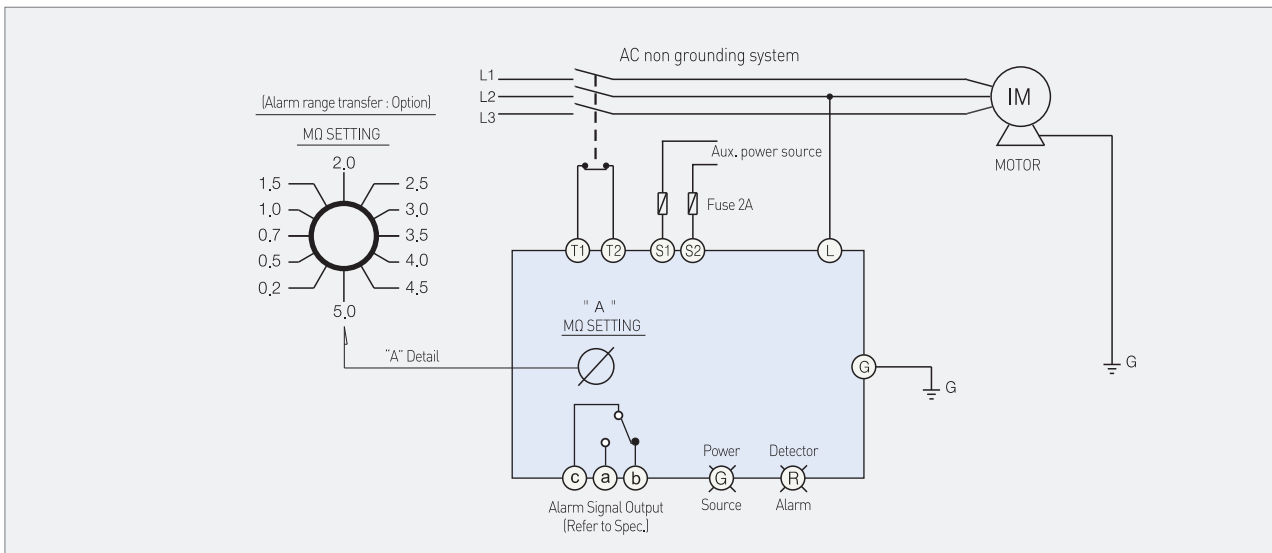
## T.B LAYOUT



## SPECIFICATIONS (LOW INSULATION SPEC')

MODEL	SBMG-102A	SBMG-202A	SBMG-402A
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz	AC 440V 50/60Hz
RANGE OF POWER VARIATION	AC 85-135V	AC 170-270V	AC 395-485V
MAX. POWER CONSUMPTION	5VA		
INSULATION MONITORING RANGE	$\infty \sim 10 \sim 5 \sim 0.2 \sim 0.05 \sim 0M\Omega$		
INSULATION VOLTAGE RANGE	AC 1P / 3 Phase 0 ~ 690V (max.)		
DETECTOR ACCURACY	$\pm 5\%$ (0.2 ~ 5MΩ) $\pm 10\%$ (under 0.2MΩ, 5MΩ above)		
ALARM SETTING RANGE	0.2 ~ 5MΩ (select by 12 steps selector switch) (0.2-0.5-0.7-1.0-1.5-2.0-2.5-3.0-3.5-4.0-4.5-5.0)		
ALARM DELAY TIME	3.0sec. ( $\pm 0.5$ sec.) Reset time : 0.5sec. or less		
ALARM SIGNAL OUTPUT	5A (resistive) 2A (inductive) 30V DC 5A (resistive) 2A (inductive p.f=0.4) 125V AC 3A (resistive) 1A (inductive p.f=0.4) 250V AC		
AMBIENT TEMP.	-20°C ~ +60°C		
STORAGE TEMP.	-40°C ~ +65°C		
DIELECTRIC STRENGTH	Between terminal to cabinet 2.5KV / 1min		

## CONNECTION DIAGRAM



## FUNCTION

### INSULATION MEASUREMENT. MONITORING RANGE

High Megger Range : 0 ~ 500MΩ

### MONITORING METHOD

Checking and measuring are possible by directly contacting sensor to the line, or the equipment and not influenced by the induced voltage of armature during motor operation, and also continuous measuring and checking is possible even in the motor circuit installed with exclusive transformer. Only one line connection either to single or three phase is needed and the measuring power goes off when the auxiliary power line is cut off.

### ALARM SETTING

The alarm setting knob on the front display can be set in accordance with its environment and system kind freely at operator's option within the regulations and the scope of allowable range. The protection device against the surge or impulse is also included.

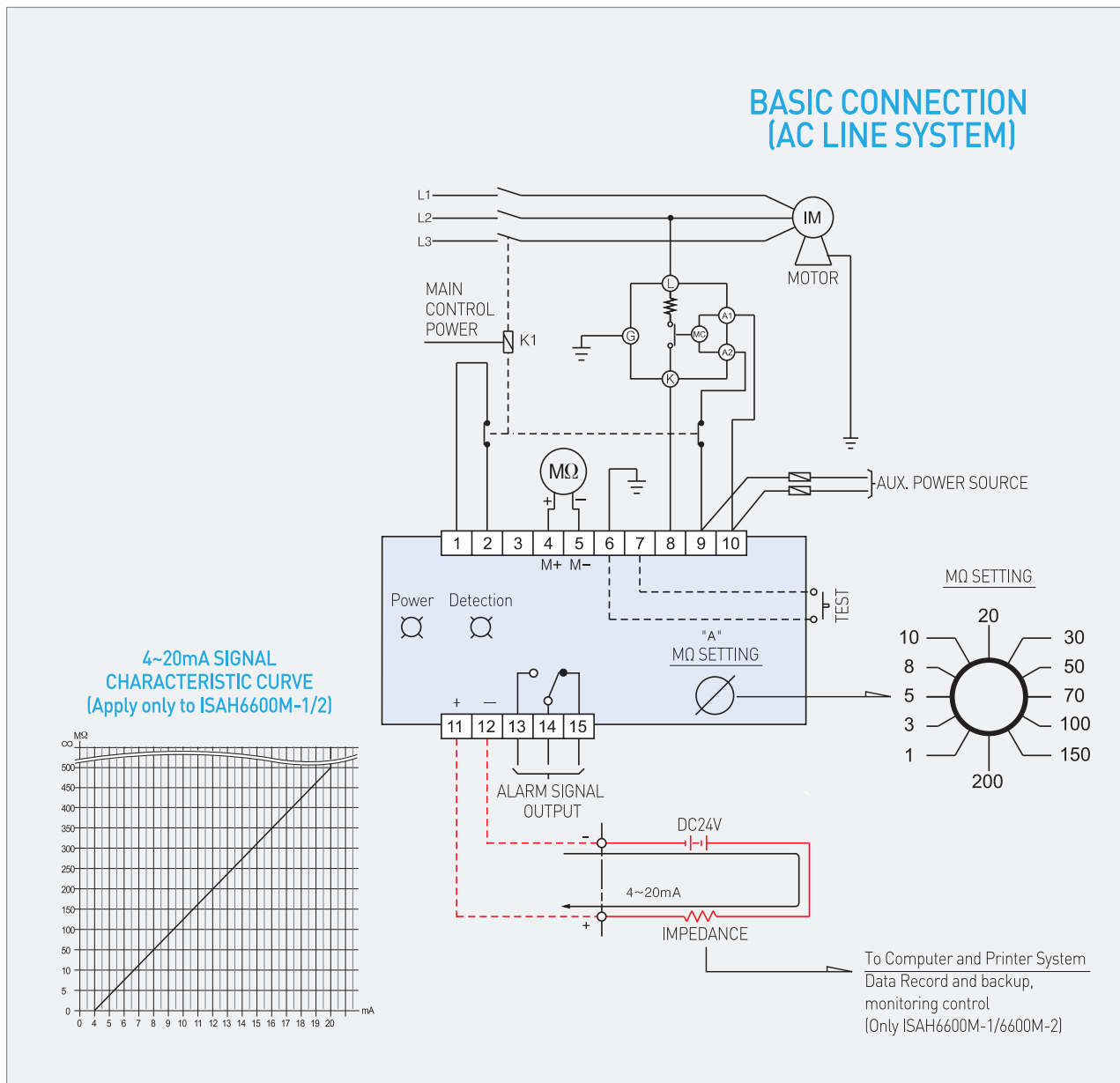
### TEST BUTTON

When the test button is pressed, then the detection circuit of sensor is cut off and indication needle of meter will return to the center position, and also the alarm can go off at the set value.

Note.) It is reduced according to the insulation status of line.

### REMOTE GROUP MONITORING

Micom converter for remote monitoring(4~20mA) is added and respective sensors(ISAH6600M) are enable to make signal for the apart control center group monitoring. This model is also able to record and keep the insulation data when connected with computer and printer.

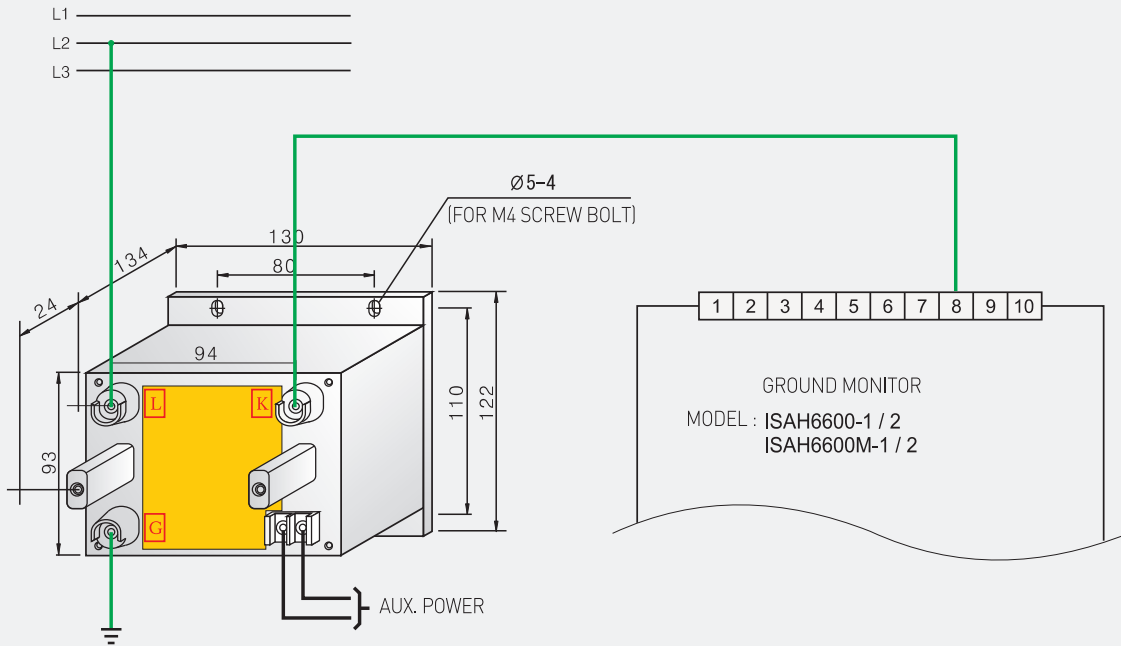




## CONNECTION DIAGRAM

(Unit : mm)

### COUPLINE DEVICE



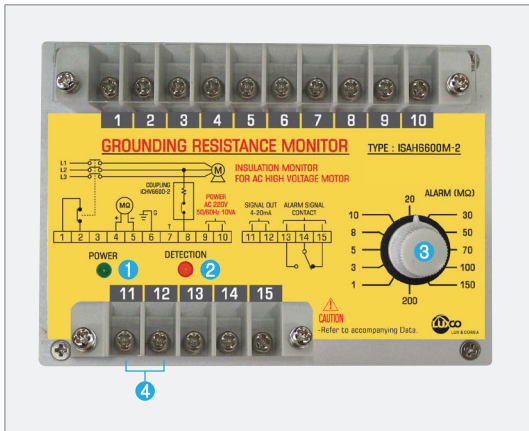
CASE MATERIAL : PC(R3000 + GW) Thermostable and high insulation  
 FITTING HOLE : 80 X 110

## SPECIFICATIONS

MODEL	ICHV6600-1	ICHV6600-2
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz
RANGE OF POWER VARIATION	AC 85-135V	AC 170-270V
RATED INSULATION VOLTAGE	AC 6.6KV 50/60Hz	
RANGE OF INSULATION VOLTAGE	AC 0 ~ 7590V	
IMPULSE	12KV	
DIELECTRIC STRENGTH	Between terminal to cabinet 2.5KV / 1min	
RANGE OF INSULATION MEASUREMENT	0 ~ 500MΩ	
MEASUREMENT CIRCUIT	1P / 3Phase non grounded AC line	
RATING	Continuity	
AMBIENT TEMPERATURE	-20°C ~ +55°C	
RANGE OF STORAGE TEMPERATURE	-40°C ~ +80°C	
MATERIAL OF CABINET	PC(Flame retardant) UL94 V-O / TRIREX3025G10 / G / F(Reinforced)	

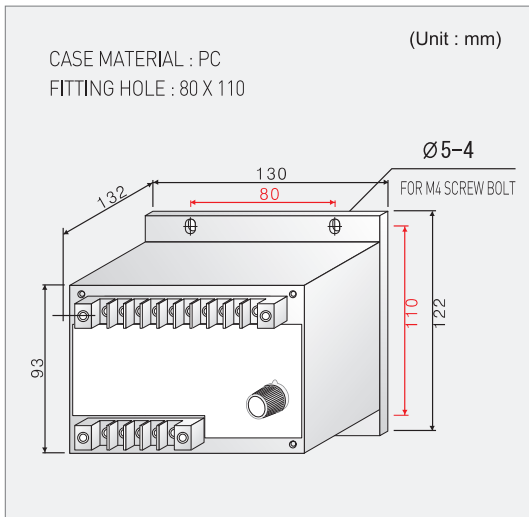


### FRONT VIEW



- ① Power indicating lamp (Green)
- ② Alarm indicating lamp (Red)
- ③ Alarm setting (MΩ)
- ④ 4~20mA power output terminal (Apply only to ISAH6600M-1/2)

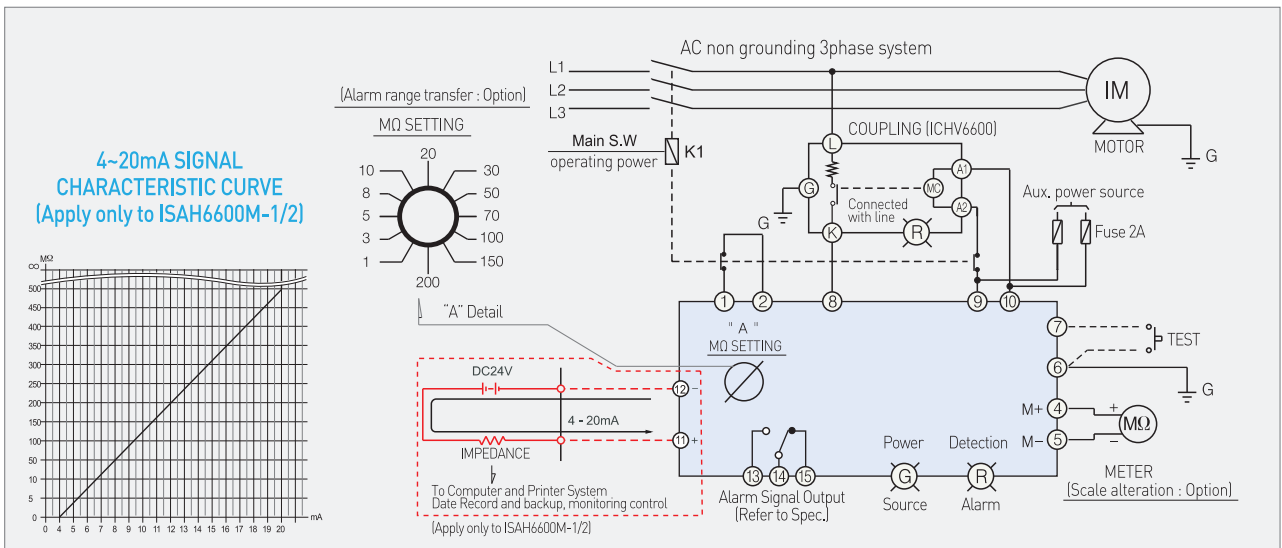
### DIMENSION



### SPECIFICATIONS

MODEL	ISAH-6600-1	ISAH-6600-2
	ISAH-6600M-1	ISAH-6600M-2
AUX. POWER RATING	AC 110V 50/60Hz	AC 220V 50/60Hz
RANGE OF POWER VARIATION	AC 85-135V	AC 170-270V
MAX. POWER CONSUMPTION	10VA	
INSULATION MONITORING RANGE	$\infty \sim 500 \sim 100 \sim 50 \sim 0M\Omega$	
INSULATION VOLTAGE RANGE	AC 3P 0~7590V [max.]	
DETECTING METHOD OF INSULATION	Connect With Coupling (ICHV6600)	
DETECTOR ACCURACY	$\pm 5\%$ (1~200MΩ) $\pm 10\%$ (under 1MΩ, 200MΩ above)	
ALARM SETTING RANGE	1 ~ 200MΩ [select by 12 steps selector switch] (1-3-5-8-10-20-30-50-70-100-150-200)	
ALARM DELAY TIME	3.0sec. ( $\pm 0.5$ sec.) Reset time : 0.5sec. or less	
ALARM SIGNAL OUTPUT	5A [resistive] 2A [inductive] 30V DC 5A [resistive] 2A [inductive p.f=0.4] 125V AC 3A [resistive] 1A [inductive p.f=0.4] 250V AC	
AMBIENT TEMP.	-20°C ~ +60°C	
STORAGE TEMP.	-40°C ~ +65°C	
DIELECTRIC STRENGTH	Between terminal to cabinet 2.5KV / 1min Between 9, 10 to 6, 8 terminal 1.5KV / 1min	
REMOTE SIGNAL (MICOM CONTROL)	4 ~ 20mA Current loop 0 ~ 500MΩ to 4 ~ 20mA [Apply only ISAH6600M-1/2]	
METER	Refer to page 45	
TEST BUTTON	Meter center (100MΩ) Indication	

### CONNECTION DIAGRAM





## FUNCTION

### INSULATION MEASUREMENT. MONITORING RANGE

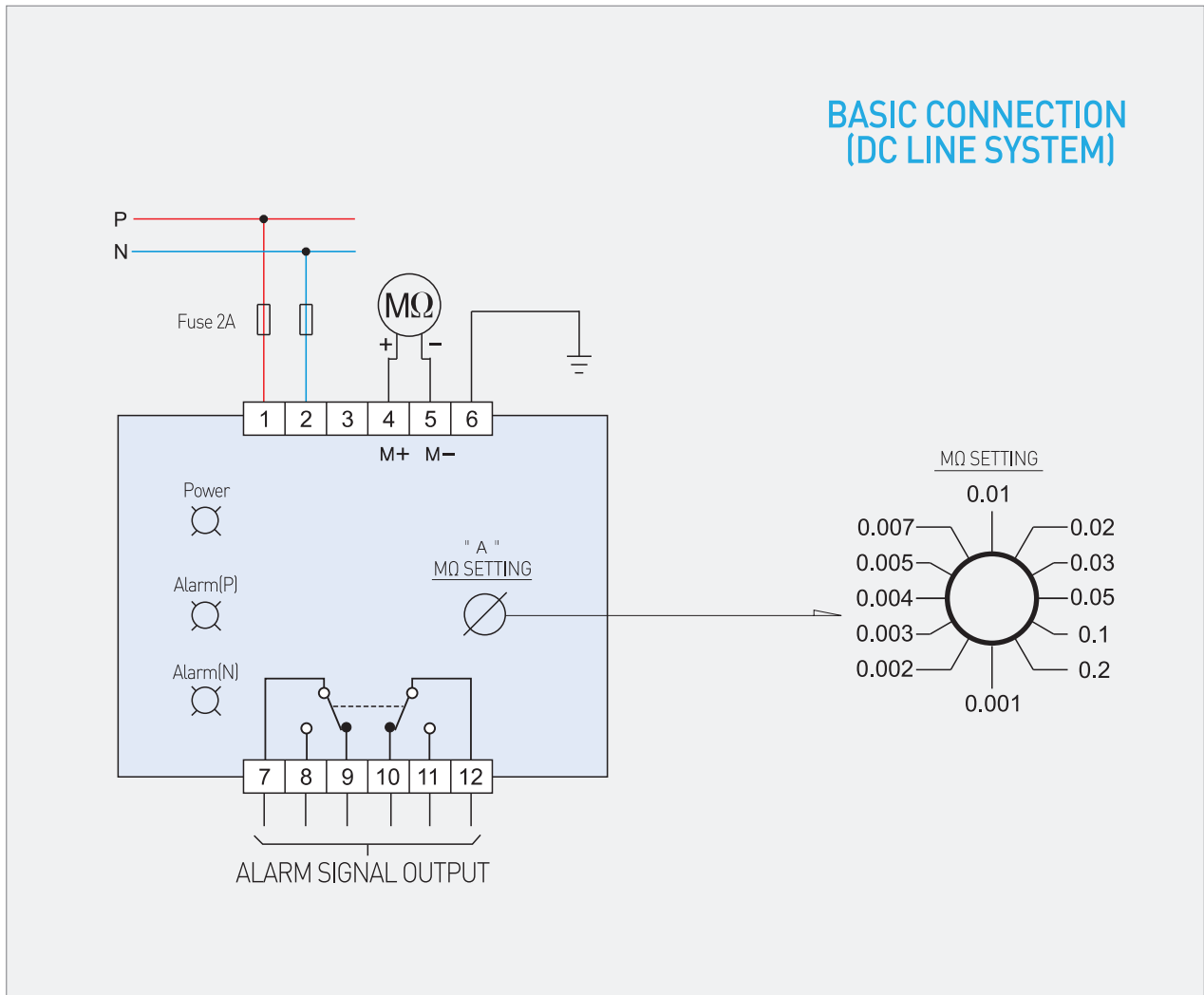
Two models available :  
 0 ~ 1MΩ insulation range and 0 ~ 5MΩ insulation range

### MONITORING METHOD

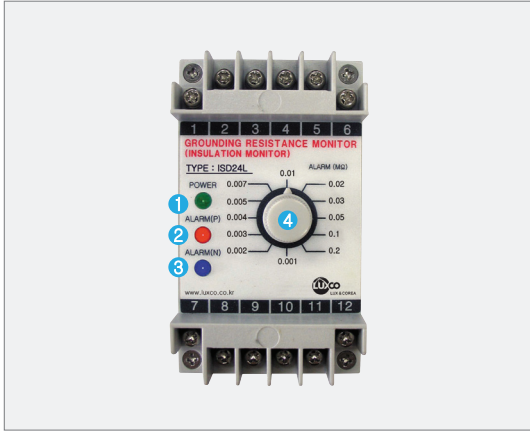
There is no concern about the measuring equipment capacity and the internal detection goes off when the main power fails.

### ALARM SETTING

The alarm setting knob on the front display can be set in accordance with its environment and system kind freely at operator's option within the regulations and the scope of allowable range. The protection device against the surge or impulse is also included.

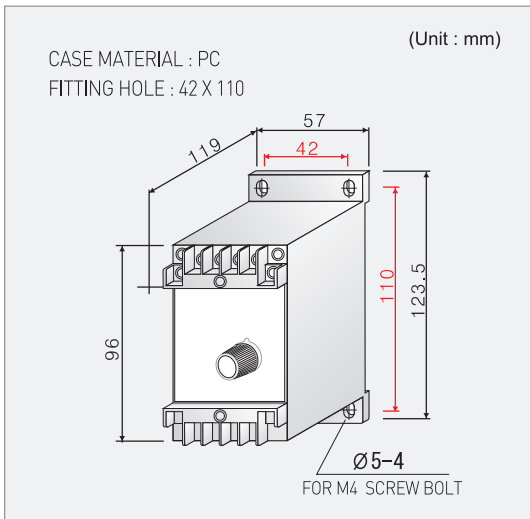


## FRONT VIEW

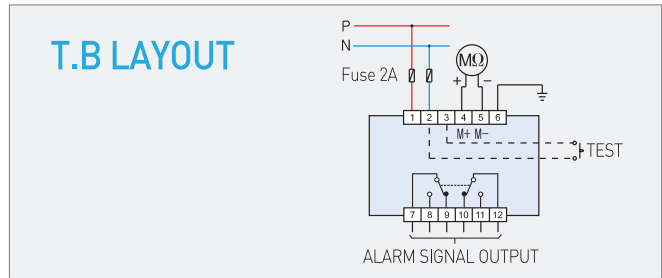


- ① Power indicating lamp (Green)
- ② Alarm (+Line) (Red)
- ③ Alarm (-Line) (Blue)
- ④ Alarm setting (MQ)

## DIMENSION



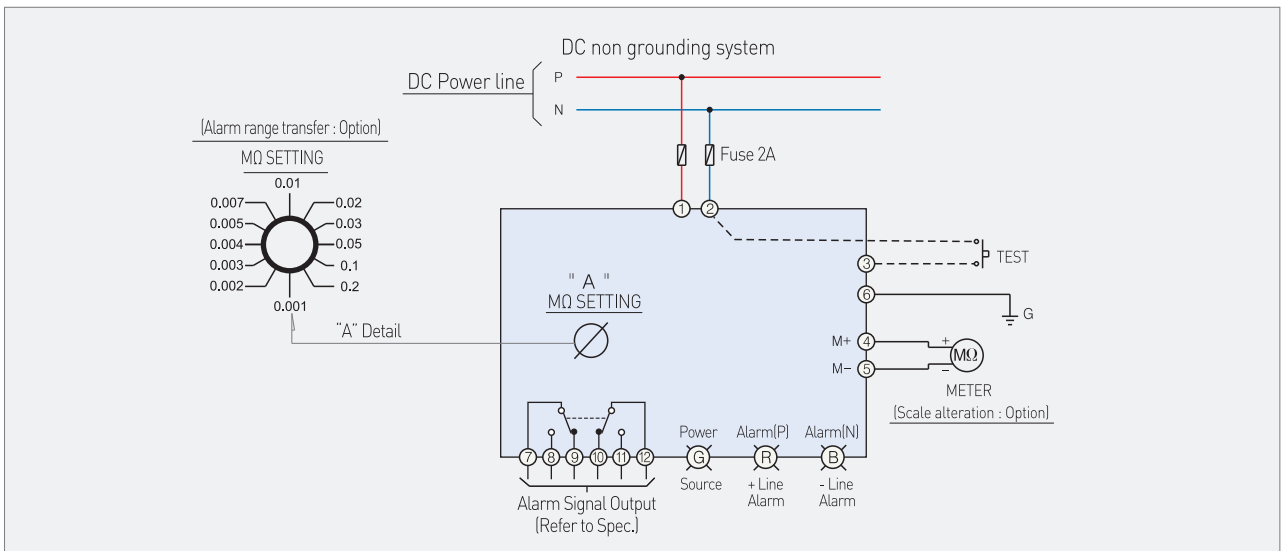
## T.B LAYOUT



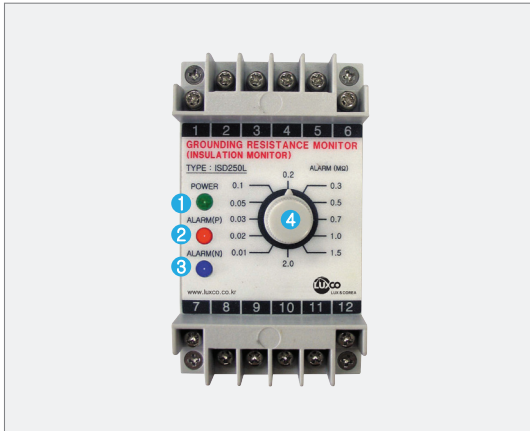
## SPECIFICATIONS

MODEL	ISD24L	ISD48L
AUX. POWER RATING	DC 24V	DC 48V
RANGE OF POWER VARIATION	DC 19 ~ 30V	DC 38V ~ 60V
MAX. POWER CONSUMPTION	2W	
INSULATION MONITORING RANGE	$\infty \sim 1 \sim 0.02 \sim 0.001 \sim 0\text{M}\Omega$	
INSULATION VOLTAGE RANGE	DC 35V (max.)	DC 70V (max.)
DETECTOR ACCURACY	$\pm 5\%$ (0.005 ~ 0.2M $\Omega$ ) $\pm 10\%$ (under 0.005M $\Omega$ , 0.2M $\Omega$ above)	
ALARM SETTING RANGE	0.001 ~ 0.2M $\Omega$ (select by 12 steps selector switch) (.001-.002-.003-.004-.005-.007-.01-.02-.03-.05-.1-.2)	
ALARM DELAY TIME	3.0sec. ( $\pm 0.5$ sec.) Reset time : 0.5sec. or less	
ALARM SIGNAL OUTPUT	5A (resistive) 2A (inductive) 30V DC 5A (resistive) 2A (inductive p.f=0.4) 125V AC 3A (resistive) 1A (inductive p.f=0.4) 250V AC	
AMBIENT TEMP.	-20°C ~ +60°C	
STORAGE TEMP.	-40°C ~ +65°C	
DIELECTRIC STRENGTH	Between terminal to cabinet 1.5KV / 1min	
METER	Refer to page 45	
TEST BUTTON	Meter center (0.02M $\Omega$ ) Indication	

## CONNECTION DIAGRAM

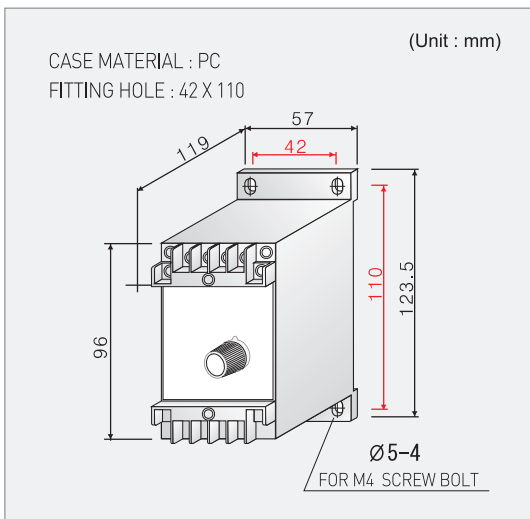


## FRONT VIEW

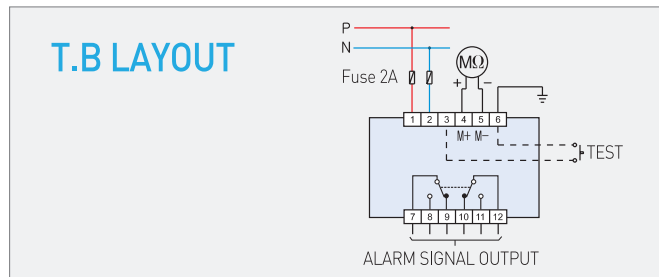


- ① Power indicating lamp (Green)
- ② Alarm (+Line) (Red)
- ③ Alarm (-Line) (Blue)
- ④ Alarm setting (MQ)

## DIMENSION



## T.B LAYOUT



## SPECIFICATIONS

MODEL	ISD125L	ISD250L
AUX. POWER RATING	DC 125V	DC 250V
RANGE OF POWER VARIATION	DC 100 ~ 150V	DC 200 ~ 300V
MAX. POWER CONSUMPTION	4W	
INSULATION MONITORING RANGE	$\infty \sim 5 \sim 0.2 \sim 0.05 \sim 0M\Omega$	
INSULATION VOLTAGE RANGE	DC 162V (max.)	DC 325V (max.)
DETECTOR ACCURACY	$\pm 5\%$ (0.1 ~ 2M $\Omega$ ) $\pm 10\%$ (under 0.1M $\Omega$ , 2M $\Omega$ above)	
ALARM SETTING RANGE	0.01 ~ 2M $\Omega$ [select by 12 steps selector switch] (0.01-0.02-0.03-0.05-0.1-0.2-0.3-0.5-0.7-1.0-1.5-2.0)	
ALARM DELAY TIME	3.0sec. ( $\pm 0.5$ sec.) Reset time : 0.5sec. or less	
ALARM SIGNAL OUTPUT	5A (resistive) 2A (inductive) 30V DC 5A (resistive) 2A (inductive p,f=0.4) 125V AC 3A (resistive) 1A (inductive p,f=0.4) 250V AC	
AMBIENT TEMP.	-20°C ~ +60°C	
STORAGE TEMP.	-40°C ~ +65°C	
DIELECTRIC STRENGTH	Between terminal to cabinet 1.5KV / 1min	
METER	Refer to page 45	
TEST BUTTON	Meter center (0.2M $\Omega$ ) Indication	

## CONNECTION DIAGRAM

