


REV. DATE	DESCRIPTION	MESSRS		
		<p style="text-align: center;">DC GROUND MONITOR (MODEL : SBG-241D)</p> <ul style="list-style-type: none"> ■ GENERAL SPECIFICATION ■ OUTLINE DIMENSION ■ NAME PLATE ■ INSTRUTION MANUAL <p style="text-align: right;">6 SHEETS WITH COVER</p>		
		<p style="text-align: center;"> LUXCO CO., LTD. 980-17, Jangrim-dong, Saha-gu, Busan, 604-040, Korea TEL : +82-51-262-8588 FAX : +82-51-262-8538 http://www.luxco.co.kr</p>		
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■ SPECIFICATIONS

● GENERAL TABLE

MODEL	Auxiliary control voltage		Insulation resistance setting 12 step value is selectable	Maximum detecting line voltage
	Norminal	Variations		
SBG-241D	DC24V	DC 19~30V	0.001 – 0.002 – 0.003 – 0.004 – 0.005 – 0.007 – 0.01 – 0.02 – 0.03 – 0.05 – 0.1 – 0.2MΩ	DC 35V

● DETECTION ACCURACY

AMBIENT TEMP	DETECTION ACCURACY (percent value in reference to set value)		Range of aux' voltage variations	
			Norminal	Variations
+ 3°C ~ 45°C	0.005 ~ 0.2MΩ	± 5%	DC24V	DC 19V ~ 30V
	~ 0.005MΩ, 0.2MΩ ~	±10%		
-10°C ~ +3°C +45°C ~ 60°C	0.005 ~ 0.2MΩ	±10%		
	~ 0.005MΩ, 0.2MΩ ~	±20%		

● DEAD BAND : 5% of less the set value.

● NOTE

The dead band refers to the difference in % of the set value between the pickup value and the drop out value. The pickup value is a value at which the monitor turns to an operate state and drop value is a value at which the monitor is reset to a non-operate state. In other words, the dead band is reset hysteresis. The detection accuracy is the maximum deviation if the actual pickup value from the nomical set value.

● SELECTION FO SETTING : By 12-position selector switch.

● MAXIMUM OUTPUT CONTACT RATING : 5A (resistive) or 2A (inductive) at 30V DC.

5A (resistive) or 2A(inductive $\cos \varnothing = 0.6$) at 125V AC.

3A (resistive) or 1A(inductive $\cos \varnothing = 0.6$) at 250V AC.

● OUTPUT CONTACT FROM : 1C (single-pole double-throw).

● DIELECTRIC STRENGTH : 1.5KV between electric circuit (T.B #9) and enclosure for 1min.

● POWER CONSUMPTION : 2W

● MAXIMUM LEAKAGE CURRENT : 250 μ A (Detector circuit)

● MONITOR OPERATION CHECK : A test circuit that applies a short or a dummy resistance less than the set value across each test terminals and ground terminals is to be provided by the user for monitor operation check.

● OPERATION TIME DELAY : 3.0 sec (± 0.5 sec) definite time delay, reset time delay is 0.5 sec or less.

Title

GENERAL SPECIFICATION (SBG-241D)



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- OPERATION TEMPERATURE RANGE : $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- STORAGE TEMPERATURE RANGE : $-40^{\circ}\text{C} \sim +65^{\circ}\text{C}$
- VIBRATION : The monitor is so constructed that it will withstand applications of the following vibration for 2 hours in each X, Y and Z directions : – for vibration frequency from 2 to 13.2Hz, 2mm double amplitude, for vibration frequencies 13.2 to 100Hz.
- SPECIFICATION OF INSULATION RESISTANCE METER (Option)

Three meter types available

METER TYPE	REMARKS	SIZE m/m
W11 – AD	option (wide angle METER)	110 × 110
DCF – 12Na	standard (Japan TOTO)	120 × 100
KS – 6e	option	72 × 72

● METER INDICATION ACCURACY

SCALE RANGE	SCALE RANGE (% of indicated value)	REMARKS
0.05M Ω ~ 1M Ω	$\pm 5\%$	Operating temprature range $- 20^{\circ}\text{C} \sim + 60^{\circ}\text{C}$
outside of above : less than 0.05M Ω and more than 1M Ω :	$\pm 10\%$	

Title

GENERAL SPECIFICATION (SBG-241D)



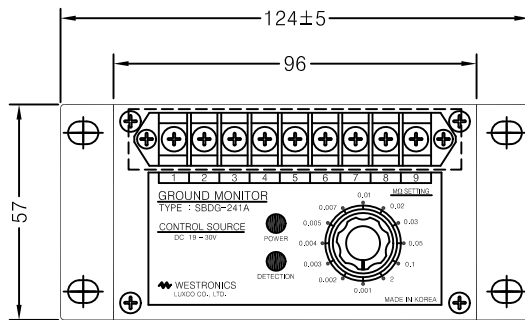
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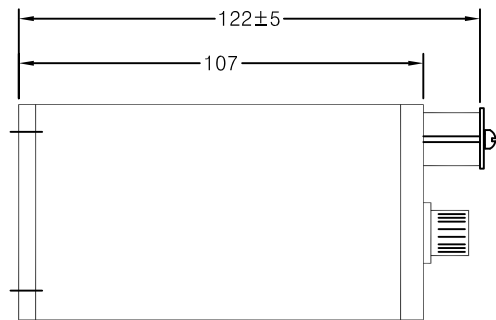
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FRONT VIEW

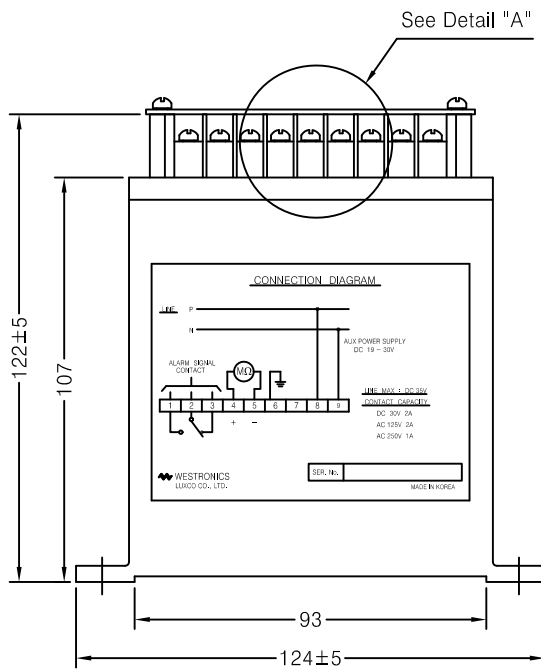


SIDE VIEW

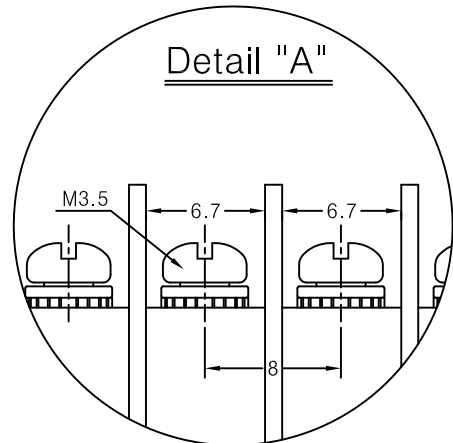


BOTTOM VIEW

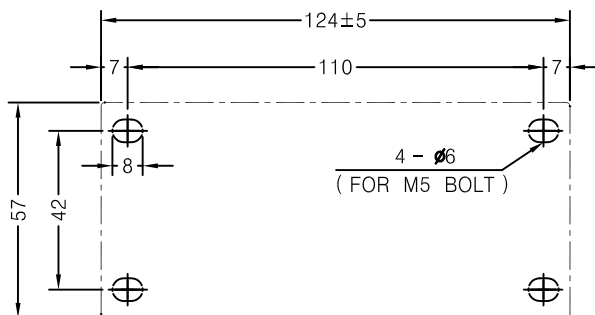
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Detail "A"



MOUNTING



NOTE

1. T. B COVER : PC (R3000) CLEAR
2. T. B : PC (R3000) BLACK
3. CASE : PC (R3000) BLACK

Title OUTLINE DIMENSION FOR DC GROUND MONITOR (SBG-241D)

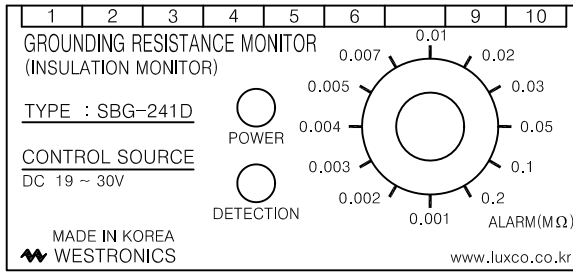
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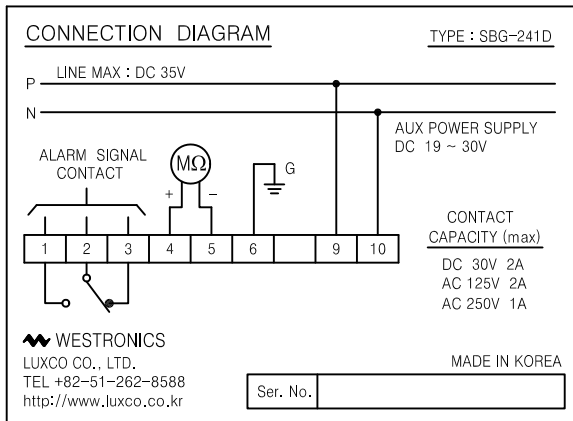
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Sheet 3

FRONT PLATE



SIDE PLATE



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■ INSTRUCTION MANUAL (FOR SBG-241D)

● GENERAL

This insulation resistance monitor consists of a meter and a power box monitor the insulation level of a non-grounded DC electrical system.

● MONITOR

The monitor converts DC main power into regulated DC power. The DC output voltage is constant over an DC input voltage of 80% to 120% of the rating (DC24V).

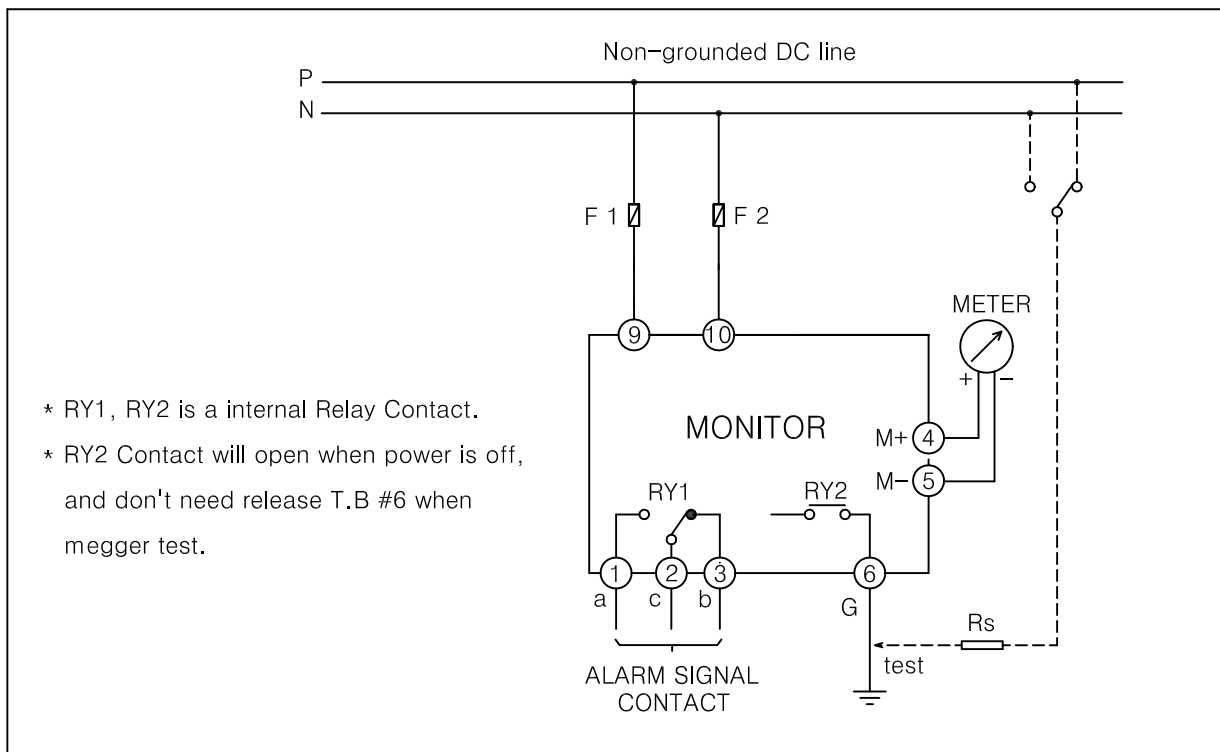
There is no detection line on monitor, detection line is inside connected DC lines.

● FEATURES


This insulation resistance monitor features :

- continuous monitoring of insulation level.
- provision for low insulation level alarm, output contact can be used as either alarm "make" or alarm "break" signal.
- error - free stable operation, use of voltage regulator circuits in both meter and relay sections.
- detection function in both line (P) or (N).

● CONNECTION



* The terminal (#9, 10) must be connected to power 'P' and 'N'.

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