

SHICO. SQUARE ROOT ISOLATION CONVERTER

MODEL : SQC Series

The square root isolation converter model SQC accepts DC inputs typically from differential pressure flow-meters and provides a square root output which is linear to the actual flow.

■ SPECIFICATION

ITEM	SPECIFICATIONS	
Input	DC voltage signal DC current signal	(√)
Output	DC Voltage or DC Current signal	
Accuracy	±0.2% of F.S	
Linearity	±0.1% of F.S	
Repeatability	±0.1% of F.S	
Response Time	Less than 0.5sec(0~90%)	
Insulation Resistance	Greater than 100MΩ (DC500V)	
Dielectric Strength	Input-Power AC1000V Input-Output AC1000V (1 min) Input-GND AC1000V	
Ambient Temperature	-5~+60℃	
Humidity	Less than 90% RH	

■ GENERAL SPECIFICATIONS

- Construction : Plug-In
- Housing Material : ABS plastic(Black)
- Adjustments : Zero and Span ±5%

■ INSTALLATION

- DC : 24V ±10%, 100mA(Ripple 10% p-p max)
- AC : Rating (100~240V) ±10%, 50/60Hz 4VA
- Mounting : Wall or DIN rail

■ INPUT SIGNAL SPECIFICATIONS

- Input voltage signal : -300~300V DC
- Input voltage impedance : 1Ω or more
- Input current signal : 50mA DC max

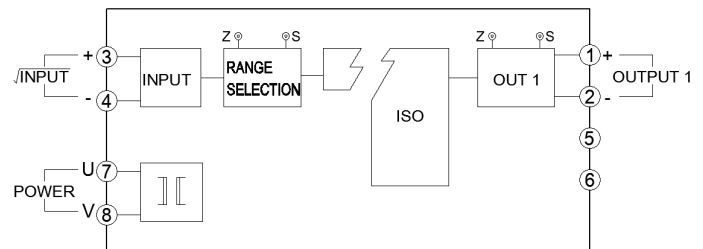
■ OUTPUT SIGNAL SPECIFICATIONS

- Output voltage : 12V DC max
- Output Current : 30mA DC max

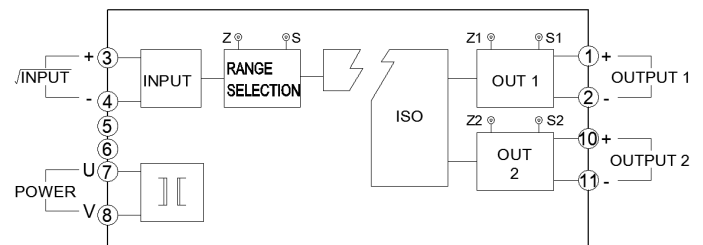


■ BLOCK DIAGRAM & CONNECTIONS

• Single Loop



• Double Loop



■ DC Voltage

Output	Load Resistance	Impedance
0-10mV	10kΩ or more	10Ω or less
0-100mV	100kΩ or more	100Ω or less
0-1V	1kΩ or more	1Ω or less
0-10V	10kΩ or more	
0-5V	5kΩ or more	
1-5V		

■ DC Current

Output	Load Resistance	Impedance
4-20mA	0-600Ω	5MΩ or more
2-10mA	0-1200Ω	
1-5mA	0-2400Ω	
0-20mA	0-600Ω	
0-10mA	0-1200Ω	
0-1mA	0-12kΩ	



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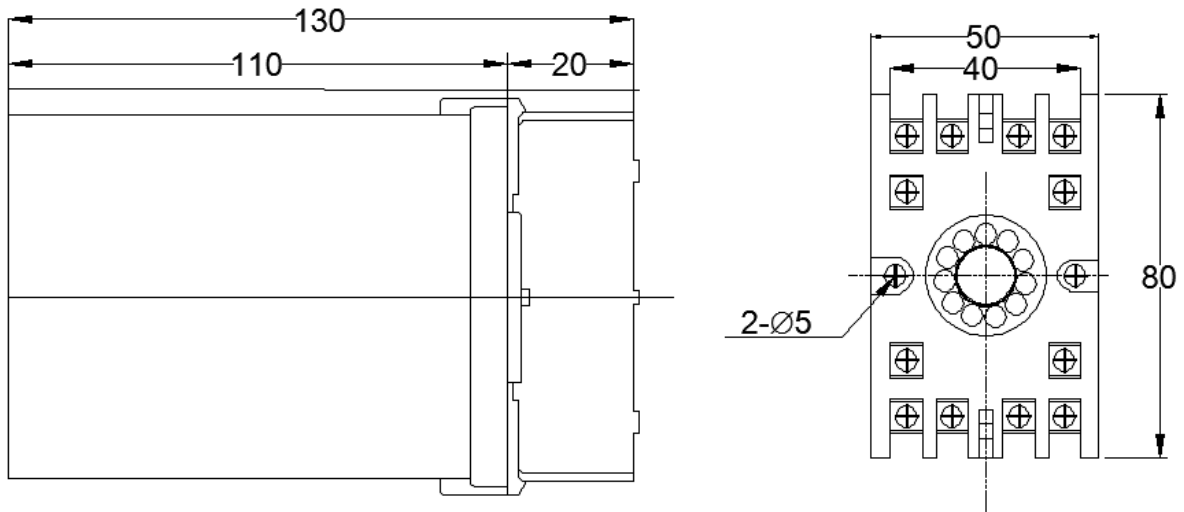
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■ DIMENSION



■ ORDERING INFORMATION

CODE	INPUT SIGNAL
1	0~100mV
2	0~100mV
3	0~1V
4	0~5V
5	0~10V
6	1~5V
A	4~20mA
B	2~10mA
C	1~5mA
D	0~20mA
E	0~10mA
F	0~1mA
O	Other

CODE	OUTPUT SIGNAL
1	DC 0~10mV
2	DC 0~100mV
3	DC 0~1V
4	DC 0~5V
5	DC 0~10V
6	DC 1~5V
A	DC 4~20mA
B	DC 2~10mA
C	DC 1~5mA
D	DC 0~20mA
E	DC 0~10mA
F	DC 0~1mA
O	Other

CODE	POWER SUPPLY
1	AC 110V
2	AC 220V
3	DC 24V(Option)

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