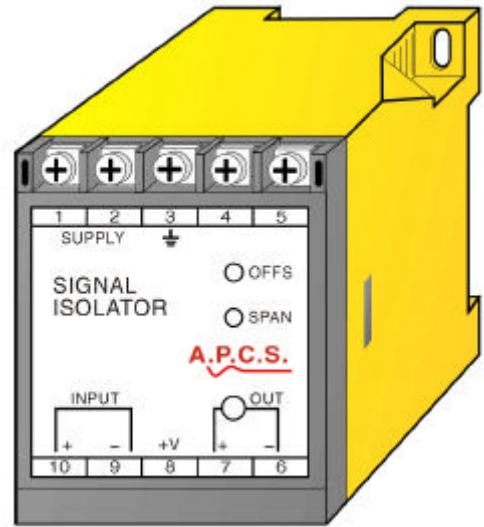



CONFIGURABLE SIGNAL ISOLATOR (v4) SI132

DESCRIPTION

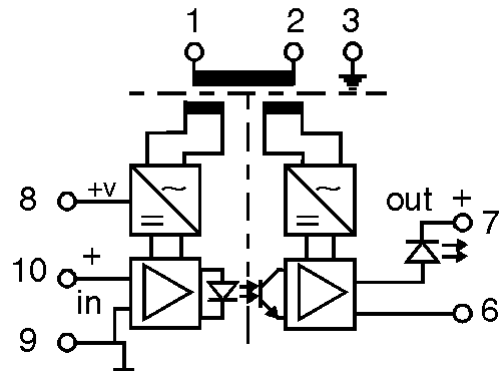
The CONFIGURABLE SIGNAL ISOLATOR SI132 is a universal field configurable isolating signal converter providing true 3-way galvanic isolation up to 2000V r.m.s. for standard process signals. Inputs, outputs and response time are programmable via internal coding plugs. The coding plugs enable a large combination of standard process signals to be isolated and/or converted. Programming is simply a matter of referring to the table (for programming table see back page or sticker attached to module), unclipping the case and setting the appropriate coding plug. Final calibration is trimmed using the front accessible 'offs' and 'span' 15-turn trim adjustments. The output signal level is indicated by a green L.E.D. on the front of the module, giving a clear indication of module function, signal presence and loop condition for current outputs. Various power supply choices are available ranging from 240Vac down to 8dc all provide power isolation and surge protection.



General Specifications

Size:	52 W x 70 H x 110 D (mm).
Housing material:	Polycarbonate.
Mounting:	DIN-Rail, gear plate.
Termination:	Screw terminals on front Terminal covers standard.
Protection class:	IP40 (IP65 Enclosure opt.).
Weight:	0.370 kg.
Accuracy:	0.15% of span.
Front 'OFFS' adjust:	±20% typical
Front 'SPAN' adjust:	±20% typical
Linearity:	0.15% of span above 0.2mA.
Repeatability:	0.1% of span.
Response time:	0.5 sec for T ₉₀ standard 0.05 seconds selectable 5 milliseconds selectable.
Input Impedance:	51Ω (20mA/10mA range). 1kΩ (1mA range). 2M7Ω (10V/5V range). 560kΩ (2V/1V range).
Temperature effect:	0.025% per °C.
Operating temp. range:	-10...-60°C.
Storage temp. range:	-20...+70°C.
Output loop drive:	10mA into 0 - 1.8k Ω, 20mA into 0 - 900 Ω Higher output drive on request.
Output load change effect:	less than 0.2% up to maximum load stated.
Auxiliary output:	20Vdc with 22mA current limit (suitable for 2 wire transmitter supply).
Input/output isolation:	>2kV r.m.s.
Power requirements:	ac supply 4W, dc supply 3W.
Electromagnetic compatibility:	Complies with AS/NZS 4251.1 (EN 50081.1) 

Block Diagram



For input / output combinations refer to TYPE NO. DESIGNATION overleaf.

Power Supply:

- 1 = 240V, 50/60Hz ±10%.
- 2 = 120V, 50/60Hz ±10%.
- 3 = 24V, 50/60Hz ±10%.
- *) 5 = 12Vdc (use '6').
- *) 6 = 8 - 60Vdc Isolated.
- *) 7 = 48Vdc (use '6').
- *) 8 = 60 - 240Vdc Isolated.
- *) 9 = Other (Specify).

Input:

As per programming table 1, (Specify required input).

Output:

As per programming table 2, (Specify required output).

Response Time:

As per table 3, (Specify required response time).

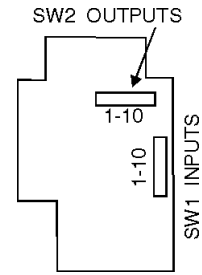


Table 1 Input Selection SW1

Input	1	2	3	4	5	6	7	8
4-20mA		X	X	X				X
0-1mA	X		X	X			X	
0-10mA		X	X	X	X		X	
0-20mA		X	X	X			X	
0-1V			X	X			X	
0-2V			X				X	
0-5V				X			X	
1-5V				X				X
0-10V							X	

Table 2 Output Selection SW2

Output	1	2	3	4	5	6	7	8	9	10
4-20mA	X	X								
0-20mA					X					
0-10mA			X							
0-1mA				X						
0-1V					X				X	
0-2V					X					X
0-5V					X			X		
1-5V	X	X						X		
0-10V					X		X			

Table 3 Response Time SW1

Response time	9	10
5msec		
50msec	X	
500msec		X

To change ranges:

- 1) Disconnect power to unit.
- 2) Unclip housing lid and withdraw unit from housing.
- 3) Set the coding plugs as required.
- 4) Reassemble unit and connect power.
- 5) Adjust "span" and "offs" pots to recalibrate.
- 6) Change the label information to the new input/output values.

Factory default range: 4-20mA input 4-20mA output, 0.5 sec Response.

For non standard input or output values use the SI139

*) Price Extra.

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Connection Diagrams

