

INPUT & OUTPUT

■ **INPUT:** potentiometer; 100Ω – 10kΩ (set to 1000Ω if not otherwise specified when ordering.)

Minimum span:

0 – 100Ω	: 2.5Ω
0 – 300Ω	: 3.0Ω
0 – 1000Ω	: 10Ω
0 – 10kΩ	: 10Ω

Excitation: ≤0.5V DC at 1kΩ

■ OUTPUT

• **DC Current:** 0 – 20mA DC

Operational range: 0 – 24mA DC

Minimum span: 1mA

Zero suppression: available

Load resistance: output drive 15V maximum
(e.g. 4 – 20mA: 750Ω [15V/20mA])

• **DC Voltage:** -2.5 – +2.5V DC for V1;
-10 – +10V DC for V2

Operational range: -3 – +3V DC for V1;
-11.5 – +11.5V DC for V2

Minimum span: 250mV for V1; 1V for V2

Zero suppression/elevation: available

Load resistance: output drive 1mA maximum
(e.g. 1 – 5V: 5000Ω [5V/1mA])

INSTALLATION**Power input**

AC: operational voltage range 85 – 264V
(90 – 264V for UL); 47 – 66 Hz,
approx. 3VA at 100V
approx. 4VA at 200V
approx. 5VA at 264V

DC: operational voltage range for R: 24V ±10%
or P: 85 – 150V (110V ±10% for UL);
approx. 2W (ripple 10% p-p max.)

Operating temperature: -30 to +60°C (-22 to +140°F)

Operating humidity: 30 to 90% RH (non-condensing)

Mounting: surface or DIN rail

Dimensions: W23×H76×D124 mm (0.91"×2.99"×4.88")
See General Spec. Sheet Figure A-2.

Weight: 120 g (0.26 lbs)

Terminal assignment: See General Spec. Sheet Figure B-1.

PERFORMANCE

Accuracy: input accuracy + output accuracy

Input accuracy*: (% of input range)

0 – 100Ω	: ≤ ±0.02 (%)
0 – 300Ω	: ≤ ±0.01
0 – 1000Ω	: ≤ ±0.01
0 – 10kΩ	: ≤ ±0.01

(e.g. 250 – 750Ω for 0 – 1000Ω range:
0.02% [usable span 1000Ω/500Ω×0.01])

Output accuracy*: ≤ ±0.01% of output range

*Inversely proportional to the span

Temp. coefficient: ±0.015%/°C (±0.008%/°F) at -5 to
+55°C (23 to 131°F) of I/O range
(input ±0.002%/°C, output ±0.013%/°C)

Response time: ≤0.9 seconds (0 – 90%)

Burnout response: ≤30 seconds

Line voltage effect: ±0.1% over voltage range

Insulation resistance: ≥100MΩ with 500V DC

Dielectric strength: 2000V AC @1 minute
(input to output to power to ground)

STANDARDS & APPROVALS

CE conformity: EMC Directive (89/336/EEC)

EMI EN 61000-6-4

EMS EN 61000-6-2

Low Voltage Directive (73/23/EEC)

EN 61010-1

Installation category II

Pollution degree 2

Max. operating voltage 300V

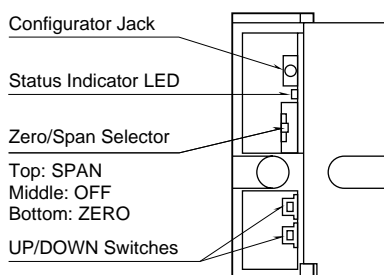
Input or output to power – Reinforced insulation

Input to output – Basic insulation

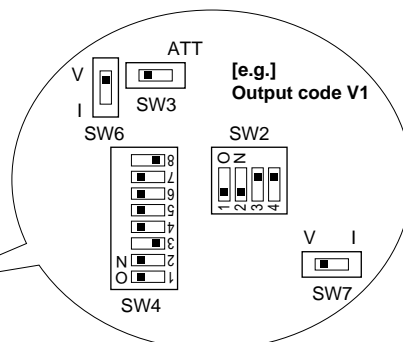
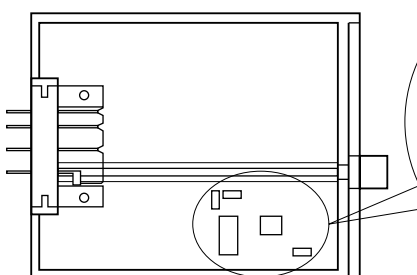
Approval: UL/C-UL nonincendive Class I, Division
2, Groups A, B, C, and D hazardous loca-
tions (UL 1604, CAN/CSA-C22.2 No.213);
UL/C-UL general safety requirements
(UL 3111-1, CAN/CSA-C22.2 No.1010-1)

FRONT & SIDE VIEW2

FRONT VIEW (with cover open)



LEFT SIDE VIEW (with cover removed)



Output Range Selectors

The front cover cannot be turned open by 180 deg. when there is no extra space between units.

Manual zero/span adjustments: $\pm 5\%$ (set to 0% and 100% respectively at factory)

Zero/span selector: Switching parameters to be adjusted. Used also to capture potentiometer zero/span positions when it is switched while the DOWN switch is pressed down.

ZERO: UP/DOWN switches usable for zero adjustment.

OFF: UP/DOWN switches unavailable.

SPAN: UP/DOWN switches usable for span adjustment.

UP/DOWN switches

UP: Pressing UP increases adjusted values.

DOWN: Pressing DOWN decreases adjusted values.

(Press both switches at once for resetting zero/span adjustments.)

Output range selectors

	SW2				SW3
	1	2	3	4	
V1	OFF	OFF	ON	ON	Not ATT
V2	OFF	OFF	ON	ON	Not ATT
Z1	ON	ON	OFF	OFF	Not ATT

	SW4							
	1	2	3	4	5	6	7	8
V1	ON	ON	OFF	ON	ON	*	ON	OFF
V2	ON	OFF	ON	OFF	ON	*	ON	OFF
Z1	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF

	SW6		SW7	
	V	I	V	I
V1	ON	OFF	ON	OFF
V2	ON	OFF	ON	OFF
Z1	OFF	ON	OFF	ON

*Don't care.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

