


Resistance Transmitter v5 RT124

DESCRIPTION

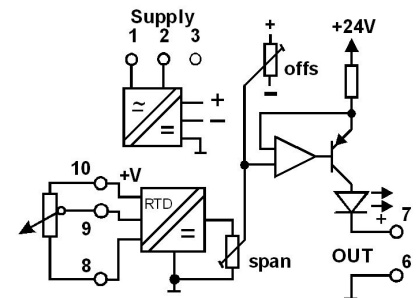
The RT124 is a isolator designed to convert a 3-wire slide-wire or potentiometer input into a standard link selectable process signal signal output . Final calibration is trimmed using the front accessible 'offs' and 'span' 15-turn trim adjustments. The link selectable output signal level is indicated by a green LED on front, giving a clear indication of module function, presence of signal and output loop closed (for current outputs only). Various power supply choices are available varying from 240Vac down to 8Vdc, all provide power isolation. Power transient protection is also standard as with all APCS modules.



General Specifications

Size:	52 W x 70 H x 110 D (mm).
Mounting:	DIN-Rail, gear plate.
Termination:	Screw terminals on front.
Protection class:	IP40
Weight:	0.300 kg.
Housing material:	ABS.
Accuracy:	±0.2% of span.
Front 'OFFS' adjust:	±20% typical.
Front 'SPAN' adjust:	±20% typical.
Temperature effect:	0.025% per °C.
Operating temperature:	-10...+60°C.
Input sensor supply (+V):	1V for 100Ω potentiometer 5V for potentiometers ≥ 500Ω.
Output load effect:	less than 0.2% up to max. load.
Output loop drive:	10mA into 0 - 1.8kΩ. 20mA into 0 - 900Ω.
Input/output isolation:	2kV rms.
Power requirements:	3W.
Power supply isolation:	2kV rms.
Electromagnetic compatibility:	Complies with AS/NZS 4251.1 (EN 50081.1) 

Block Diagram



TYPICAL APPLICATIONS

- Actuator feedback.
- Loading station for manual adjustment of process signal.
- Fixed output current source.
- Signal generator for system check.
- Resistance-change level devices.

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

TYPE NO. DESIGNATION

Power Supply:

- 1 = 90-280Vac 50/60Hz (65-280Vdc).
- *) 3 = 16-48Vac 50/60Hz (10-60Vdc)
- 6 = 8 - 60Vdc.
- *) 9 = Other (Specify).

Input Potentiometer:

- *) 01 = 100Ω.
- 05 = 500Ω to 10kΩ (Any value potentiometer from 500Ω to 10kΩ).
- *) 09 = Other (Specify).

Output:

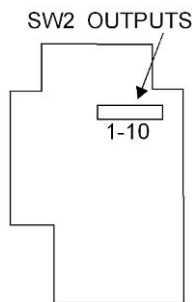
- 4 = Link selectable specify range from table below (4 – 20mA is default setting).
- *) 5 = 0 - 50mA (900Ω max).
- *) 6 = 10 - 50mA (360Ω max).
- *) 9 = Other specify.

Options:

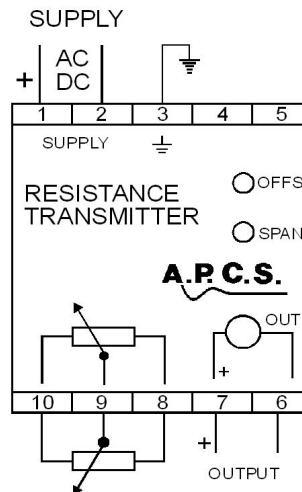
- 0 = None.
 - 3 = Fixed output (span adjust only).
 - *) 5 = Multi-turn dial fitted.
 - *) 7 = Single turn dial with auto/manual relay.
 - *) 9 = Other (Specify).
- *) = Price Extra.

Output Range selection

- 1) Disconnect power to unit.
- 2) Remove terminal covers.
- 3) Un-clip housing lid and withdraw unit from housing.
- 4) Set the coding plugs as required on SW2.
- 5) Reassemble unit and connect power.
- 6) Adjust SPAN and OFFS pots to recalibrate.
- 7) Change the label information to the new input/output values.



Connection



Output Selection – SW2

Factory default us 4-20mA

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			

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