PROGRAMMABLE TEMPERATURE TRANSMITTERS - SERIES 441

Output

Output (Analog)

Output signal	4 to 20 mA or 20 to 4 mA
Transmission as	Temperature linear, resistance linear, voltage linear
Maximum load	$(V_{power\ supply}$ - 8 V) /0.025 A (current output)
Digital filter 1st degree	0 to 8 s
Induced currrent required	≤3.5 mA
Current limit	≤25 mA
Switch on delay	4 s (during power up I_a = 3.8mA)
Electronic responce time	1 s

Failure Mode

Undershooting measurement range	4 to 20 mA or 20 to 4 mA
Exceeding measurement range	Temperature linear, resistance linear, voltage linear
Sensor breakage/short circuit (1)	≤3.5 mA or ≥21.0 mA

Failure Mode

Power Supply	U_B = (8 to 30) V dc, polarity pretected
Galvanic Isolation (in/out)	$\hat{U}$ = 3.75 kV ac
Allowable ripple	U_{pp} ≤5 V at U_B ≥13 V, f = 1 kHz

Accuracy

Output (Analog)

Reference conditions	Calibration temperature: 23 ± 5° C (73 ± 9° F)

Resistance Thermometer (RTD)

TYPE	MEASUREMENT ACCURACY
Pt100, Ni100	0.2° C or 0.08% ■
Pt500, Ni500	0.5° C or 0.20% ■
Pt1000, Ni1000	0.3° C or 0.12% ■

Resitance (Ω)

TYPE	MEASUREMENT RANGE	MINIMUM RANGE
Resistance	0.1 Ω or 0.08% (2)	10 to 400 Ω
	1.5 Ω or 0.12% (2)	10 to 2000 Ω

(1) not for thermocouple

(2) % is related to the adjusted measurement range (the value to be applied is the greater)

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