

ELECTRO - CHEMICAL DEVICES, INC.

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SPECIFICATION SUMMARY SHEET T23 CONDUCTIVITY TRANSMITTER

MEASUREMENT RANGE

3 ranges:

- 1) Low range (model CDL): \leq or = to 50 μ S.
- 2) High range (model CDH): $>$ 50 μ S & \leq 20mS.
- 3) Toroidal (model CDT): 50mS minimum to 1 S.

OUTPUT

4-20 mA or 20-4 mA, linear for Conductivity units; optional specific concentration.

POWER REQUIREMENTS (with zero loop impedance)

Recommended	24 vdc
Maximum	50 vdc
Minimum	13.5 vdc

MAXIMUM LOOP IMPEDANCE (@ 24 vdc)

525 ohms for 4-20 mA compliance on primary (channel 1) output (600 ohms @ 25.5 vdc); approximately 800 ohms on secondary outputs.

RELAY MODULE

2 each Form C, SPDT, dry contacts, 50/60 hz.

5 amps @ 24vdc

3 amp @ 24vdc inductive

Single channel T23: Both relays assigned to channel.

Dual Channel T23: One relay assigned to the primary channel, one relay assigned to the secondary channel

Relays can be field configurable as high or low relays. The deadband is fully adjustable.

DISPLAY

Menu driven, 32 character alphanumeric, Supertwist LCD. The main menu simultaneously displays (1) process identity (2) process value (and engineering units), (3) percent output, (4) temperature in $^{\circ}$ C.

ENCLOSURE

NEMA 4X, weatherproof.

SHIPPING WEIGHT

Standard T23: 2 lbs (0.91 kgs)

ACCURACY

+/- 0.10% of full scale

SENSITIVITY

+/- 0.01 engineering units, or
+/- 0.1% of full scale

LINEARITY

+/- 0.05% of full scale

STABILITY

+/- 0.2% per year @ 0 $^{\circ}$ C to 100 $^{\circ}$ C

RESPONSE TIME

1 second to reach 90% of the change.

REPEATABILITY

+/- 0.01 engineering units, or
+/- 0.1% of full scale

OPERATING TEMPERATURE

-4 $^{\circ}$ F to +158 $^{\circ}$ F (-20 $^{\circ}$ C to +70 $^{\circ}$ C)

TEMPERATURE COMPENSATION

Automatic, -30 $^{\circ}$ C to +140 $^{\circ}$ C, RTD. Adjustable slope. Accuracy within +/-0.1 $^{\circ}$ C over a 0 $^{\circ}$ C-100 $^{\circ}$ C span.

50/60 Hz NOISE REJECTION

Greater than 70 db

INPUT/OUTPUT ISOLATION

Maximum 300 volts between process input and any 4-20 mA output (single and multiple channel outputs). No isolation between inputs on multiple channel units.

CALIBRATION

Auto Buffer Calibration

Allows the definition of one buffer point, saved in memory during initial start-up. This allows subsequent span buffer calibrations with only 2 keystrokes.

Temperature Trim

Allows for compensation for any differences in RTDs by programming the offset into the transmitter.

Temperature Slope

Allows for the adjustment of the slope from 0 to 10% to compensate for different solutions or conductivity ranges.

Temperature Display

Temperature is displayed in $^{\circ}$ C.

Display Contrast

Fully adjustable for ambient lighting conditions.