

I/O Points for the FloBoss™ 103 and 104

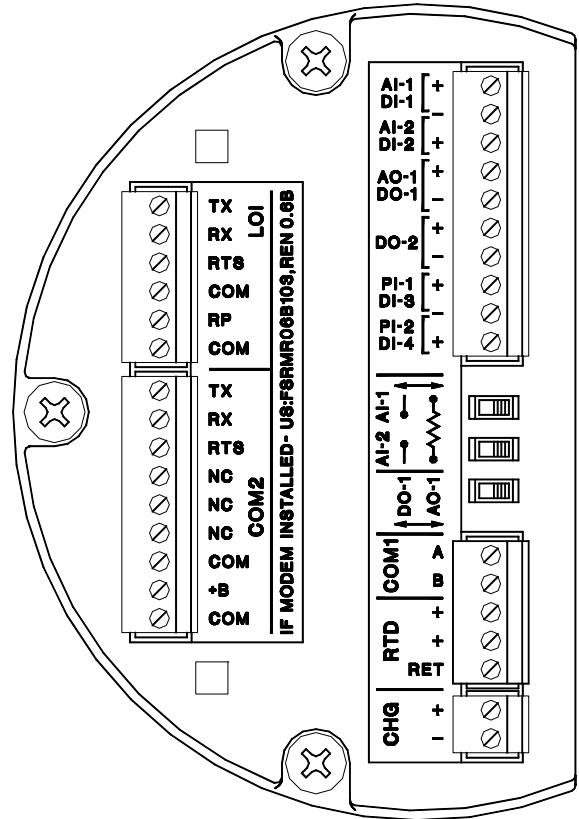
The standard termination board in a FloBoss 103 or 104 Flow Manager provides terminals for the Resistive Temperature Device (RTD) input, the Local Operator Interface (LOI) communications port, the COM1 communications port, the COM2 communications card, and the charge input. The termination board may also be ordered with I/O terminations.

The termination board optionally provides terminations for six points of expansion I/O (FloBoss 100-Series units, version 1.30 or greater). The six points of I/O consists of one discrete output (non-selectable), two analog inputs/discrete inputs, one analog output/discrete output, and two pulse inputs/discrete inputs.

Five of the six points of I/O are selectable. Using the I/O Setup screen in ROCLINK™ 800 Configuration Software and the AO/DO switch, you can switch the analog output to a discrete output, analog inputs to discrete inputs, and pulse inputs to discrete inputs.

When the analog input/discrete input channels are selected as analog inputs, a switch is provided on the termination board for a 250 ohm resistor.

(Specifications listed on next page)



D0C0503A

Termination Board with I/O Terminations

D301202X012

I/O Termination Points Specifications

ANALOG INPUT (OPTIONAL)

Type: Single-ended, voltage-sense analog inputs (current loop if resistor is switched ON).
Signal: 0 to 5 V dc, software configurable. 4 to 20 mA, with 250Ω resistor switched to ON.
Reference Accuracy¹ (after calibration) at 20°C (68°F): ±0.1%.
Accuracy¹ Over Operating Temperature Range [-40 to 65°C (-40 to 149°F)]: ±0.3%.
Isolation: None.
Input Impedance: 1 MΩ.
Filter: Single pole.
Resolution: 12 bits.
Sample Period: 1 second minimum.

ANALOG OUTPUT (OPTIONAL)

Type: 4-20 mA high side source current.
Resolution: 12 bits.
Accuracy: 0.1% of full-scale output.
Reset Action: Output switches to last value or low scale (software configurable) on power-up, warm start, or on watchdog time-out.

DISCRETE INPUT (OPTIONAL)

Type: Contact-sense discrete input.
Current Rating: 35 microamperes in the active (ON) state, 0 microamperes in the inactive (OFF) state.
Isolation: None.
Frequency: 0.5 Hz maximum.
Sample Period: 1 second minimum.

DISCRETE OUTPUT (OPTIONAL)

Type: Solid-state switch.
Switch Rating: 50 V dc, 0.2 A maximum.

DISCRETE OUTPUT (OPTIONAL) (continued)

Isolation: 3000 V from processor.
Reset Action: Output switches to last value or off (software configurable) on power-up, warm start, or on watchdog time-out.

PULSE INPUT (OPTIONAL)

Type: High-speed pulse counter inputs, dry contact.
Frequency: 10 KHz maximum.
Signal Current: 65 microamperes in the active (ON) state, 0 microamperes in the inactive (OFF) state.
Filter: Slow pulse input debounce filter. Software selectable. Filter times from 0.025 to 5 seconds.

RTD INPUT (STANDARD)

Quantity/Type: Single input for a 2 or 3-wire, 100 Ω, platinum type RTD element with alpha of 0.00385.
Terminals: "RTD+" current source, "RTD+" signal positive input, and "RTD RET" signal negative input.
Sensing Range: -40 to 240°C (-40 to 464°F).
Accuracy: ±0.2°C (0.64°F) over sensing range (includes linearity, hysteresis, repeatability).
Ambient Temperature Effects per 28°C (50°F): ±0.50°C (0.90°F) for process temperatures from -40 to 240°C (-40 to 464°F).
Filter: Band-pass hardware filter.
Resolution: 16 bits.
Sample Period: 1 second minimum.

CLASSIFICATION

FCC Class A and CISPR 22 computing device.

ENVIRONMENTAL

Same as the FloBoss unit in which it is installed. Refer to Specification Sheet 5:FB103, 5:FB103CE, or 5:FB104.

APPROVALS

Same as the FloBoss unit in which it is installed. Refer to Specification Sheet 5:FB103, 5:FB103CE, or 5:FB104.

1. Includes: Linearity, Hysteresis, Repeatability, and Stability.

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