montalvo
Better Web Control®

Range expander

Web break detection

Inertia compensation

Transferable memory card

RS-232 interface to computer

Industrial standard fieldbus connections

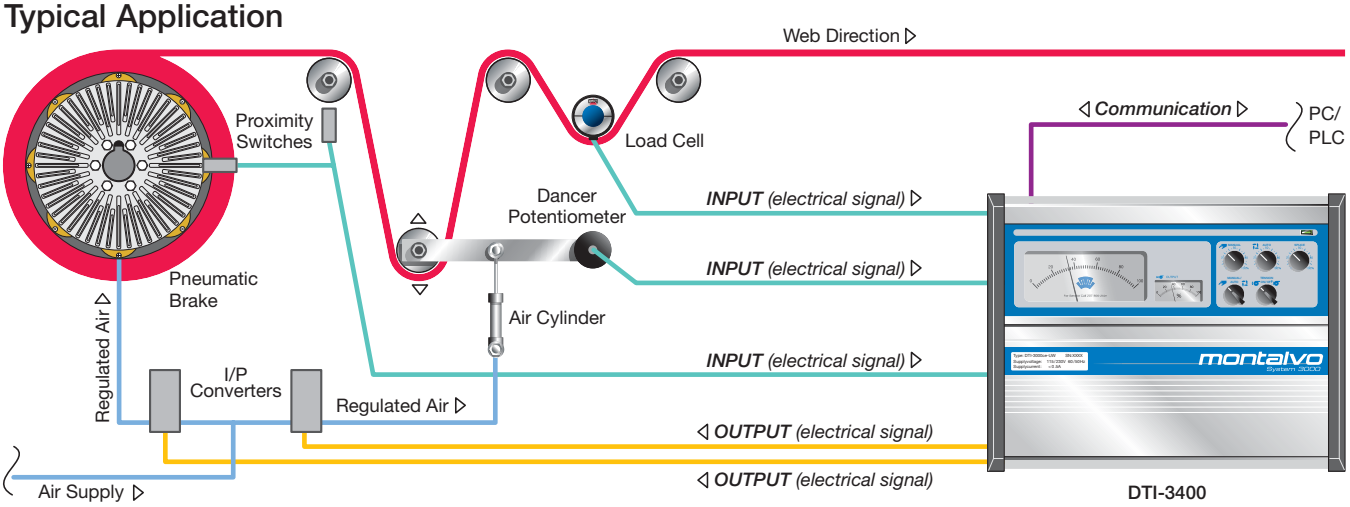
IP54 CE

System 3000™

DTI-3400 Dancer Controller / Tension Indicator

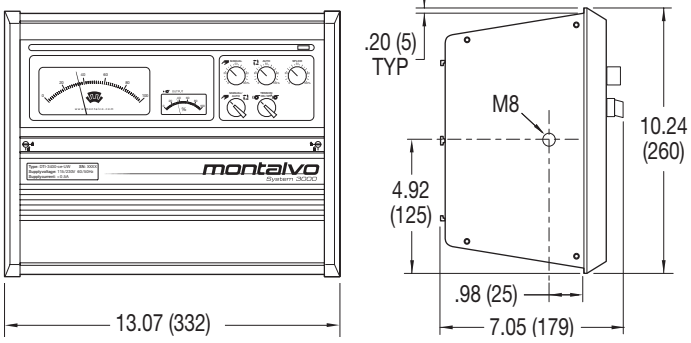
The Montalvo DTI-3400 dancer controller with web tension indication was developed to provide a higher standard of tension control by simultaneously processing the signals from a dancer roller and a pair of load cells. It combines the storage and shock absorption capabilities of a dancer with the accurate, repeatable results of a load cell system. Control is provided by "Progressive PID" circuitry, which regulates the output to the unwind brake and maintains the position of the dancer arm. The signal provided by the load cells is displayed on the analog tension meter. Actual web tension is used by the operator to adjust the load on the dancer arm and thereby maintain the desired tension. Required inputs are taken from the dancer potentiometer, the load cells, and machine stop/start contacts. Other features include: digital diagnostics, a web break output and, when combined with Montalvo's P-3000-RE, a cycling range expander with 2, 3 or 4 valves.

Typical Application

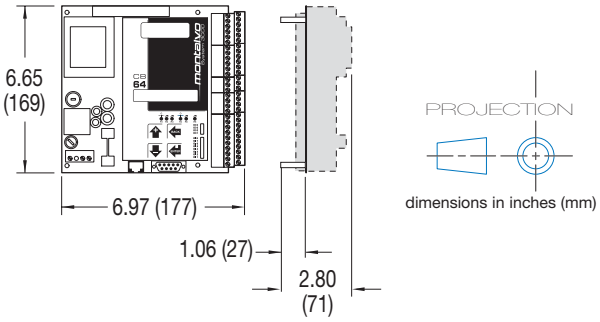


Specifications

Cabinet



Panel



Electrical

AC Input	115 or 230 VAC ±10% (IEC-60204-1) 48 to 62 Hz
Fuse Size (115 V)	160 mA T (slow-blowing type)
Fuse Size (230 V)	80 mA T (slow-blowing type)
Overvoltage Category	II (IEC 664)
Test Voltage	3.75 kV for 1 minute primary to secondary
Max Power Consumption	12 VA
Max External Input Fuse	10 A
Noise Immunity	EN 50082-2 industrial
Noise Emission	EN 50081-1
Load Cell Supply	±2.5 VDC ±5%
Load Cell Input	0 to ±250 mVDC
Load Cell Input (optional)	0 to 10 VDC
Zero Range (tare)	50% of load cell rating
Zero Range (tare) (Dancer)	50% of potentiometer rating
Calibration Range	11 to 480
Calibration Range (Dancer Gain)	1.5 to 42
Regulator Outputs	0 to 10 VDC, Max. load 5 mA
	4 to 20 mA / 0 to 20 mA, RL = 0 to 1000 Ω
Meter Outputs	0 to 100 µA
	RO = 100k Ω
	0 to 10 VDC, Max. load 5 mA
Analog Input Voltage	0 to 10 VDC, RI = 100k Ω
Digital Input Voltage	15 to 30 VDC, RI = 10k Ω
Digital Output Voltage	24 VDC ± 15%, Max. load 100 mA
	Total load 4 outputs 350 mA
Standards	Designed to meet UL 508 and EN 60204

Environmental

Temperature Range Operating	32 to 122˚F (0 to 50˚C)
Storage	14 to 176˚F (-10 to 80˚C)
Degree of Protection Cabinet Model	IP54
Panel Model	IP10

Physical

Weight (approx.) Cabinet Model	~8.8 lb (4.0 kg)
Panel Model	~2.2 lb (1.0 kg)
Size (WxDxH) Cabinet Model	13.07 x 7.05 x 10.24 (332 x 179 x 260)
Panel Model	6.97 x 2.80 x 6.65 (177 x 71 x 169)
Cut-Out (WxH) Cabinet Model	12.83 x 9.96 (326 x 253)
Cut-Out Tolerance	+.04/-0 (+1/-0)
Dimensions	inches (mm)

*Standard Functions (cabinet)**

Manual Setpoint	Yes
Auto Setpoint	Yes
Manual / Auto	Yes
Tension On / Off	Yes

Other Functions (optional)

Splice	Yes
Range Expansion (requires P-3000-RE)	Unwind

Communication (optional)

RS-232** (includes software & cable)	Yes
DeviceNet	Yes
Profibus DP	Yes
CANopen	Yes
Modbus	Yes
RWD™ (remote wireless diagnostics)***	Yes

* All functions available in panel model
** Controller setup through RS-232
*** Requires customer supplied modem and connection

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