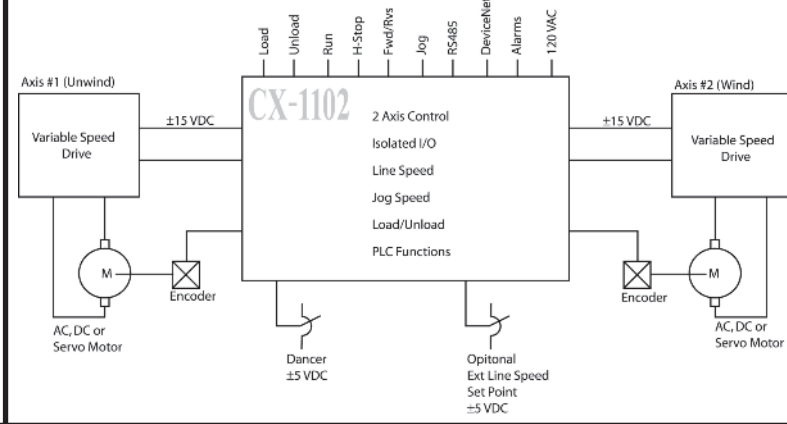


CX-1102



2 Axis Unwind/Dancer/Wind



Specifications

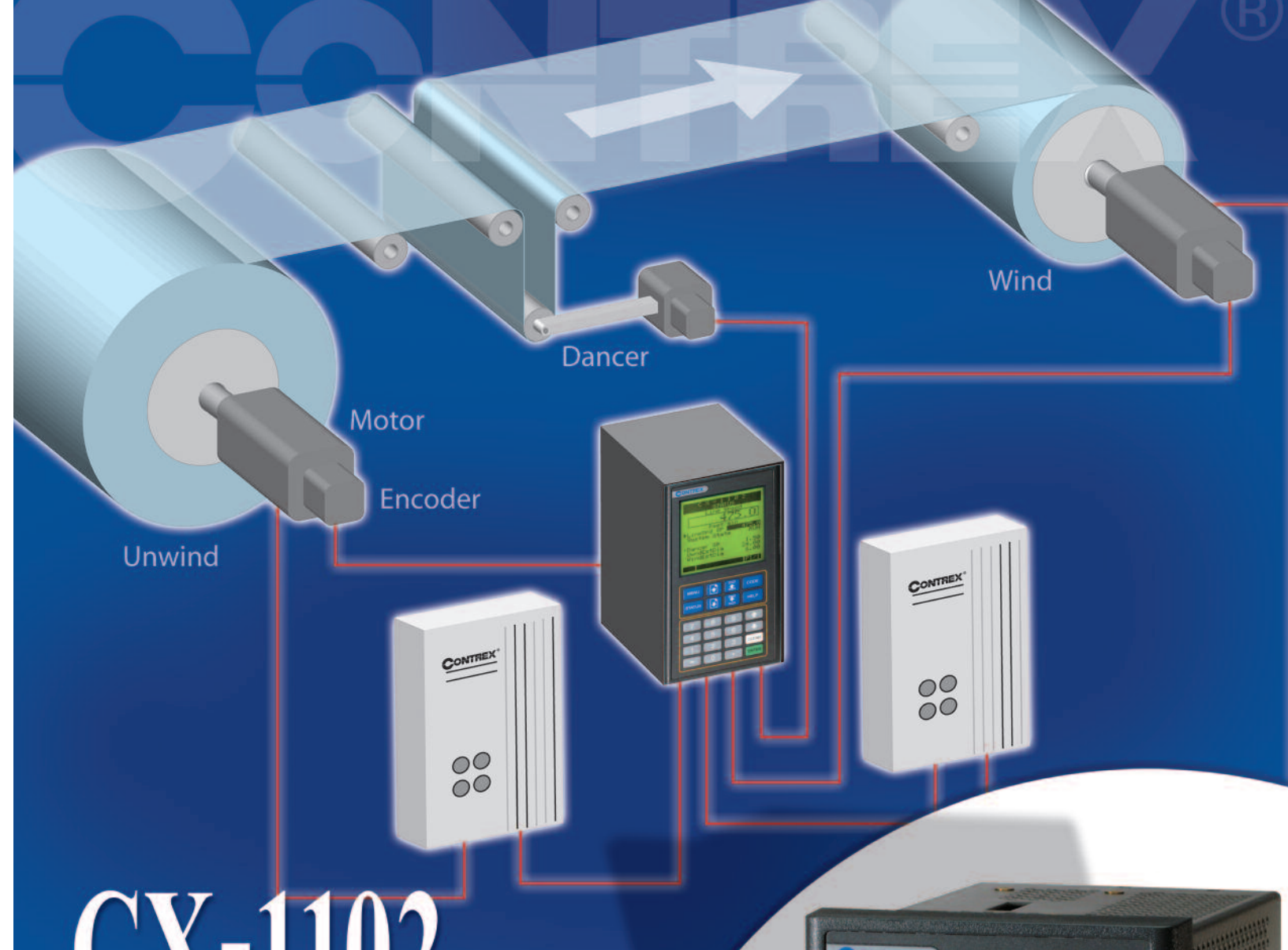
Application Types:	Control both axis, Dancer trims Unwind Control both axis, Dancer trims Wind Control Dancer trimmed Unwind Only Control Dancer trimmed Wind Only
Variable Diameters:	One or both axis can be variable, or fixed (nip roll)
Operating Modes:	Load - slowly tension dancer Run - ramp up to line speed F-Stop - no ramp, zero output H-Stop - ramp to zero speed, hold dancer Unload - slowly release dancer Jog - independent axis or system jog, fwd/rvs
Line Speed Source:	Numerical entry, potentiometer, or serial link (or ref. encoder for 1-axis applications)
Block Parameters:	8 Switch Selectable Parameter Blocks Permissible Setpoint Mode Switching 16 Parameters per Block Full Control Parameter Selection
Help Screens:	Help Screen for all Parameters Displays Min. , Max. , Active, Back-up and Default Summary of Parameter Operation Retrieve Default or Backup Values Decode/Select of Bit Mapped Parameters
On-Board Backup:	Save Custom Configurations, PLC Logic and Setup Parameters to Backup. Factory Defaults Also Available
PLC:	64 Program Instructions Total 8 Digital Inputs / 8 Digital Outputs (Assignable) 4 Timers / 4 Counters / 4 Comparators Program via Keypad, or Off-line
Status LEDs (8):	State, Alarms, and Signal Monitoring Helpful on Chassis Only Models
Frequency Inputs(2):	Quadrature Optically Isolated (Dig_Com) Differential Mode (26LS32): 5 to 15 VDC Operating Voltage 200 mV Differential Input Voltage 100 mV Hysteresis Typical 2.0 kOhm, 1/8 W to 5 V Internal Pullup 0 to 180 kHz Operating Frequency Single-Ended Mode: Current Sinking, Open Collector 2.5 V Switching Threshold 100 mV Hysteresis Typical
Digital Inputs(16):	Single-Ended (74HC14) Current Sinking 5 to 24 VDC Operating Voltage 3.15 V Rising Edge Threshold Maximum 0.90 V Falling Edge Threshold Minimum 1.0 V Hysteresis Typical 10.0 kOhm, 1/8 W to 5 V Internal Pullup 2 mSec Response Time Optically Isolated (Dig_Com)

Digital Outputs(8):	NPN Darlington (ULN2003) Current Sinking 50 VDC Maximum Operating Voltage 1.0 V Saturation at 200 mA Typical 0.6 V Saturation at 1 mA Typical 200 mA Continuous/Channel 500 mA Peak/Channel (50% Duty Cycle) 750 mA Continuous Total All Channels Internal Freewheeling Diodes 2 mSec Update Rate Optically Isolated (Dig_Com)
Analog In (2):	Dancer and External Speed Pot. Input Channels ±5 VDC Unipolar / Bipolar 14 Bits Resolution (13+Sign) Optically Isolated (Dig_Com)
Control Output (2):	±5 V to ±15 V Unipolar/Bipolar/Brake Zero/Span Software Calibration 16 Bits Bipolar Resolution (15+Sign) 18 mA Maximum Drive Current Optically Isolated (ComU / ComW)
Aux. Power Output:	+5 VDC ±5% 150 mA Maximum Optically Isolated (Dig_Com)
Serial Communications:	RS485 Compatible 300 to 19200 Baud Rate Optically Isolated (Dig_Com)
DeviceNet Option:	Explicit Messages (Any Parameter) Polling Mode (4 Read, 4 Write) 125/250/500 k Baud
AC Power Input:	115/230 VAC +15% -10% 48 to 62 Hertz 0.250 Amps Maximum 30 Watts Maximum
Panel Dimensions:	NEMA4, 4X, 12, 13 IP65 Compatible Frontpanel 18.41 cm (7.25 in) Panel Height Cutout 9.27 cm (3.65 in) Panel Width Cutout 16.30 cm (6.30 in) Panel Inside Depth
Weight:	2.3 kilograms (5.1 Pounds)
Operating Temperature:	0° to 55° C (32° to 131° F) Int. Enclosure 0° to 40° C (32° to 104° F) Ext. Enclosure
Storage Temperature:	-25° to 70° C (-13° to 158° F)
Relative Humidity:	0 to 95% Non-condensing



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DS522-C



CX-1102

2 Axis Unwind / Dancer / Wind Controller

Preprogrammed Application Software

Calculates Diameters

No Surface Encoders Needed

Automatic Dancer Load/Unload Sequences

Built-In PLC

Optical Isolation

2 Frequency (Encoder) plus 2 Analog Inputs



CX-1102

2 Axis Unwind / Dancer / Wind Controller



2 - Axis Control

Operate both unwind and wind axis, with dancer trim.

Calculates Diameters

No surface encoders needed - Maintain constant line speed using only axle and dancer signals.

Easy Setup

Select application type. Then exercise an automated "learn" cycle to finish the configuration.

Built-In PLC

Programmable Logic Controller (PLC) capability includes timer/counter/comparator and batching function. PLC permits customizing at installation. I/O port functions are reassignable.

Integrated Operator Interface

Integrated menu driven, multiline display and keypad allows control over display information and also to enter numeric data. Configurable screens help to simplify operator data. Display is LCD with 14 lines of 21 characters. Key functions are clearly labeled. Operator friendly, English labels. It provides access to all control and monitor variables (Open chassis version also available).

Factory Automation

The 32 bit microprocessor can be easily integrated into any factory automation scheme. Addressable two-way communications make the CX-1102 ideal for distributed control, providing interrogate, download and command functions, with direct access to control parameters for simple setup and monitoring. Access to all control and monitor variables is through either the RS485 serial communications port, operator interface or the optional DeviceNet Card. OPC Servers are available for linking Windows NT®, Windows 2000® and Windows XP®.

Fully Optically Isolated

It has a fully isolated input/output to minimize vulnerability to noise in harsh industrial environments. Motor Drive signals can operate isolated or non-isolated Drive types.

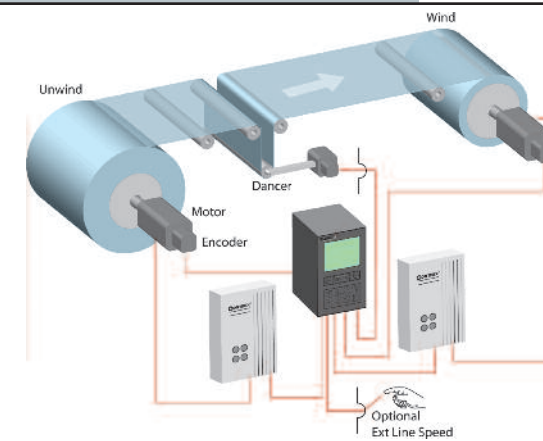
Encoder plus Analog Inputs

Receives a quadrature encoder signal from each axis. Dancer signal and optional remote Potentiometer Line Speed signal are in 0±5 Vdc analog format.

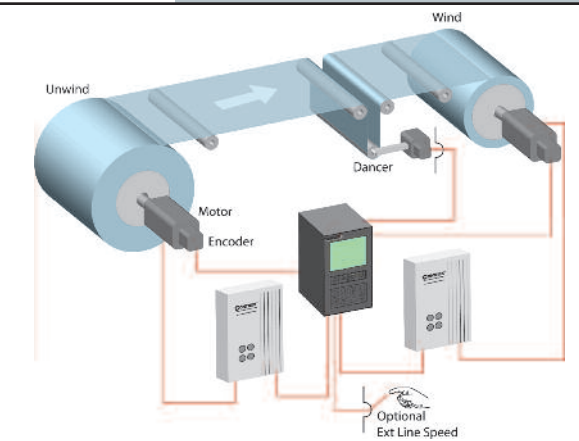
Control Many Machine Configurations

The CX-1102 accommodates a wide range of configurations. The Universal motor speed control provides digital control to virtually any drive. It accepts quadrature encoders, plus dancer and line speed analog inputs.

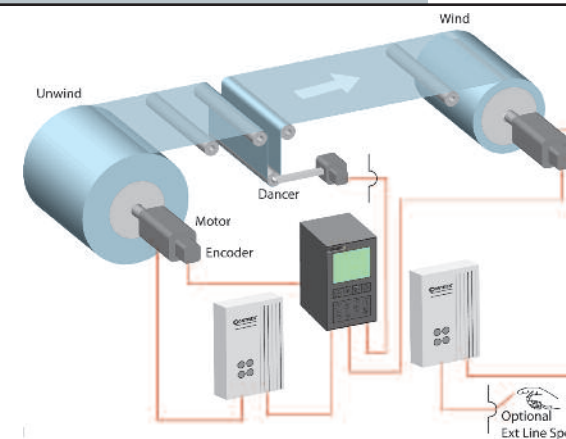
Control both axis, Dancer trims Unwind With Variable Diameters



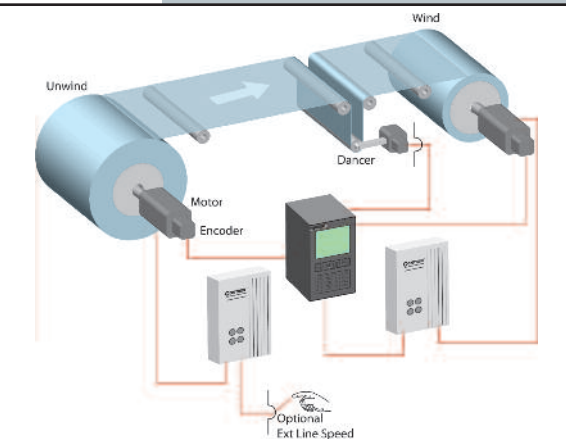
Control both axis, Dancer trims Wind With Variable Diameters



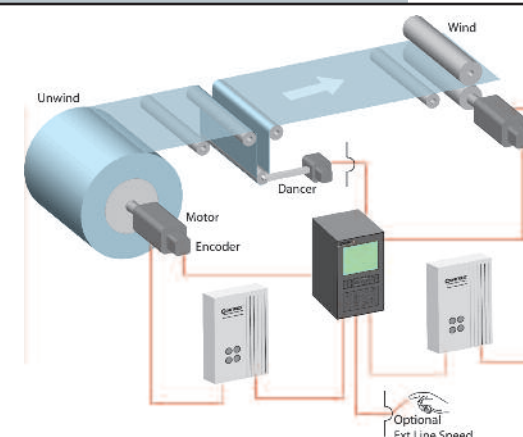
Control Dancer trimmed Unwind Only With Variable Diameters



Control Dancer trimmed Wind Only With Variable Diameters



Control both axis, Dancer trims Unwind With Fixed Wind Diameter Nip Rolls



Control both axis, Dancer trims Wind With Fixed Unwind Diameter Nip Rolls

