



CX-TDCE Terminal Controller

SPECIFICATIONS

New Release

Form 450.24-S3 (704)

The CX-TDCE controllers are small, low cost, configurable controllers ideally suited for terminal unit applications. Operation can be as a standalone device or it can communicate with other controllers as part of a Building Automation System (BAS) using BACnet.

The CX-TDCE controllers employ the familiar Feature-Section-Page architecture and programmable building control strategies to create application-specific programs. These programs are stored in Flash memory along with commissioning data, such as setpoints, to provide security of the application during power failures.

The CX-TDCE controllers are available in two versions to accommodate two I/O point configurations. The CX-TDC8E version has 2 universal inputs (link-selectable for thermistor or 0 to 10 VDC or digital signals) and 2 thermistor inputs (accepts thermistor and digital signals). The outputs consist of 3 analog outputs and



CX-TDC8E Controller

1 digital output relay rated to 6 amps at 115 VAC or 3 amps at 230 VAC. The CX-TDC9E version has the same inputs as the CX-TDC8E with 4 triac digital outputs rated at 3 VA each and 1 digital output relay rated at 6 amps at 115 VAC or 3 amps at 230 VAC.

An optional card (TEC-2) provides two additional relays (same rating as the standard relay) to increase the output capability of either point count version. An optional DIN rail mounting kit is available.

The CX-TDCE controllers have virtually all the capabilities of the larger YORK controllers including flexible programming and LAN connectivity but with fewer I/O points and no Real Time Clock.

CX-TDCE controllers connect directly to a BACnet MS/TP network. Programming is done through the network using Ice, YORK's engineering tool.

Features and Benefits

- Communicates using ASHRAE's BACnet MS/TP protocol for interoperability with third-party control systems.
- Multiple I/O configurations to suit virtually any need.
- Onboard digital output relay for direct switching.
- Utilizes nonvolatile Flash Memory for protection against power outages.
- Software updates can be installed via the network without the need to visit each device.
- UL916 Listed. Complies with relevant CE EMC safety directives.

General

Power Source	115 or 230 ±15% VAC (refer to Part Number)
Frequency	45 to 65 Hz
Protection (115/230 VAC)	500 mA Slow-Blow Fuse
Power Consumption	18 VA Nominal
Storage Temperature	-40 to 160° F (-40 to 70° C)
Operating Environment	32 to 120° F (0 to 50° C)
	10 to 95% non-condensing
Size (H x W x D)	4.4 x 6.6 x 1.9 in. (112 X 168 X 47 mm)
Weight	2.2 lb. (1.2 kg)

Processor

Type	NEC V25 Operating at 8 MHz
PROM Memory	256 kbytes
BRAM Memory	128 kbytes
FLASH Memory	256 kbytes w/10 year retention

Inputs

Resolution	10 bits
Input Impedance	10 kohms
Repeatability	±0.5%
Thermistor Resistance	8-70 kohms span
Digital	Dry Volt-Free Contacts
Voltage	0-5/0-10 VDC (Channels 1 & 2 only)
Accuracy	±1.25% full scale (resistive)

Analog Outputs (CX-TDC8E only)

Resolution	8 bits
Accuracy	±2% full scale
Repeatability	±0.5%
Drive Ability	0-10 VDC@10 mA

Digital Outputs (CX-TDC9E only)

Voltage	24 VAC
Rating	3 VA per channel continuous (6 VA peak)
Drive Ability	125 mA @24 VAC per channel
Triac Rating	16 VA per channel with external supply

Digital Relay (CX-TDC8E, CX-TDC9E and TEC2)

Relay Contact Rating	6 amps@115 VAC or 3 amps@230 VAC max
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Interface

LAN	BACnet MS/TP; RS485
LAN Speeds	9.6, 19.2, 38.4 kbaud
LAN Connection	5-pin screw terminals
LAN Cable	Screened Twisted-Pair (Belden 9841 or Equivalent)
LEDs	Controller Status; LAN Communication; Channel Status
Switch Selections	MAC Address (1-99)
Programming	IcE/VT100 Terminal Emulation

Compliance

UL916 Listed	LVD Standard EN60950
FCC Part 15 Class A	CE Directives EN55022

Ordering Information

CX-TDC8E (115 VAC)	371-04470-002	CX-TDC9E (115 VAC) ..	371-04471-002
CX-TDC8E (230 VAC)	371-04470-003	CX-TDC9E (230 VAC) ..	371-04471-003
TEC2	371-04137-001	DIN Rail Kit.....	071-04125-000

