



The TCX2 is a programmable universal controller with high level communication capabilities. Each of the 4 control loops may use a PID sequence, 6 binary stages, 8 universal inputs, and 3 analogue outputs.

The TCX2 comes with a built in RS485 communication interface that allows peer to peer communication with a built in LCD interface.

Optional Communication plug-ins allow for integration of the controller into existing BACnet or Modbus networks.

Flexible application configuration, programmable time clock schedules, with options including change of setpoints and direct position of manual outputs.

Insight Control will pre configure the TCX2 controller to meet your project requirements, with an extensive range of standard programs available the TCX2 will eliminate the need for costly engineering on your project.

Supported Communication Protocols:

## FEATURES

- Onboard interface with backlit LCD display
- Optional remote wall mounted LCD Touchpad
- BACnet and Modbus plug-in communication options
- Programmable time clock schedules, with options including change of setpoints and direct position of manual outputs.
- Economy mode based on enthalpy or temperature.
- CO<sub>2</sub> control with economy damper override function
- CO control for car park applications
- Humidity control with set point shift function
- Pre-configured applications eliminating engineering costs
- Easy program duplication with plug-in memory module



Product Code			ICV-TCX2
Environmental	Operation	Temperature Range	0 to +50 °C
		Humidity	< 95% r.H. non-condensing
Electrical	Power Supply	Supply Voltage	24V AC/DC ± 10%
		Power	Max. 10 VA
		Connection Type	Plug-in terminal block
		Clock Backup	Min. 48 hours
Signal Inputs	Universal Input		Voltage or Current
	Input Signal		0 to 10V DC, 0 to 20mA
	Resolution		10-bit (9.76mV resp. 0.019mA)
	Impedance		Voltage: 98kΩ, Current: 240Ω
	Passive Input		Temperature (RT) or digital input (DI)
	Type and Range		NTC: -40 to 140°C [-40 to 284°F]
Signal Outputs	Analogue Outputs	Output Signal	0 to 10V AC, 0 to 20mA (5000 max.)
		Resolution	10-bit (9.76mV resp. 0.019mA)
		Maximum Load	Voltage: ≥ 1kΩ, Current: ≤ 500Ω
	Relay Outputs	AC Voltage	0 to 250V AC, full-load current 3A, locked-rotor 18A
		DC Voltage	0 to 30V DC, full-load current 3A, locked-rotor 18A
	Insulation Strength	Between relay contacts and system electronics	3750V AC
		Between neighbouring contacts	1250V AC
	Communications	RS-485 (Optional plug-in module)	
Physical Characteristics	Enclosure Material		PC + ABS plastic
	Degree of protection		IP20
	Mounting		DIN-rail or screw holes
	Dimensions		57 x 147 x 115 mm

## APPLICATIONS

- Package units
- Fan coil units
- VAV with reheat/recool
- Air handlers
- Fan, Pump control
- Car park ventilation
- Humidifiers
- Dehumidifiers
- Ventilation
- Pressurisation / Pressure control
- Radiant heating/cooling
- Heat exchangers

