

QCR10 / QCR11 - TCR10 / TCR11

INTELLIGENT TOUCHSCREEN CO2 AND TEMPERATURE CONTROLLERS (rH, VOC, PIR)



The TCR/QCR Series Controllers have been designed to be wall mounted universal temperature, air quality, humidity controllers in room spaces. The controllers are suitable for a wide range of applications and have pre-defined application logic that covers most room control heating and cooling systems such as fan coil units, chilled ceilings, zone heating etc.

The xCR10 and xCR11 series controllers are wall surface mounted. The room controllers are typically supplied with a colour touchscreen display with glass front that provides intuitive user interface. An optional PIR sensor is available. The controllers have built-in Modbus RTU or BACnet MS/TP communication that allow interaction to the BMS systems. Optional Bluetooth wireless interface provides Smart Phone App interface (iOS). LoraWan option allows integration wirelessly to the LoraWan systems.



Technical Details Summary

Power:	24Vac/dc, max 80mA with Touchscreen Note: Triacs require 24Vac supply.
Temperature:	Range: 0..50° (32..122°F) Accuracy: ±0.5°C
CO2 (QCR Models):	Range: 0..5,000ppm Accuracy: ±30ppm ±3.0% m.v.
Humidity (Option):	Range: 0..100%rH Accuracy: ±2%rH (within 20 to 80%rH)
VOC (Option):	Volatile Organic Compound Range: Air Quality Index : 0..500 Device to Device Variation: ±10 index points Occupancy Detection, Range: 5m
PIR (Option):	Occupancy Detection, Range: 5m
Inputs:	2 x Universal Inputs, NTC10, 0-10V, Digital
Analogue Outputs:	xCR10: 4 x Analogue 0-10Vdc Outputs, max 2mA xCR11: 1 x Analogue 0-10Vdc Output, max 2mA
Digital Outputs:	xCR11: 4 x 24Vac Rated Triacs, Switching to 0V, Max 1A load xCR10: 1 x Optional 24V Pilot Relay, max 1.0A
Communications:	Modbus RS485 or BACnet MS/TP, with 60V Fault Tolerance, 1/10 Unit Load Address Setup via Bitswitch, Display or Tool
Wireless:	Bluetooth Interface to SmartPhone App or BLE USB Dongle LoraWan® Wireless Interface (EU868, US915, AS923)
Display:	Full Colour 2.4" LCD, 240x320px
Touch:	Capacitive Touchscreen
Terminals:	Rising Cage Screw Terminals, 0.2 to 2.5mm ² / 26 to 12 AWG
Enclosure:	ABS ULV0 Plastics - White or Black, IP30 Hardened Glass ≥6H for Display/Touch
Dimensions:	W86 x H86 x D24mm
Origin:	United Kingdom

Part Number		SKU# Number	
Product Name		Code	Product Options
TCR10	Room Temperature Controller, 2UI, 4AO, 24V Supply	5000	
QCR10	Room Temperature and CO2 Controller, 2UI, 4AO, 24V Supply	5100	
TCR11	Room Temperature Controller, 2UI, 1AO, 4DO, 24Vac Supply	5000	
QCR11	Room Temperature and CO2 Controller, 2UI, 1AO, 4DO, 24Vac Supply	5100	
Communications Options			
MOD	Modbus RS485, Up to 60V Protection	1	
BAC	BACnet MS/TP, Up to 60V Protection	2	
Interface and Wireless Options			
	No Interface (Blank Front)		00
TS	Colour Capacitive Touchscreen		02
BLE	Bluetooth App Interface		03
TS-BLE	Touchscreen and Bluetooth		05
LRA	LoraWan Wireless Interface, EU868Mhz		06
TS-LRA	LoraWan Wireless Interface EU868 with Touchscreen		08
Measurement Options			
	No Extra Measurements		00
RH	Relative Humidity, 2% Acc		01
RH-VOC	Volatile Organic Compound and Humidity		02
OE	Passive Infrared Movement Sensor (PIR)		03
RH-OE	Relative Humidity and Movement (PIR)		04
RH-VOC-OE	VOC, Relative Humidity and PIR		05
Output Options			
	No Output Options		00
RL	24V Relay Output (Only on TCR10/QCR10)		01
Colour Options			
B	Black		01
W	White		02

Order Example: TCR10-BAC-TS-B, SKU# 5000 2 02 00 00 01

