TUUB

Networkable Universal Wall-Mount Controller

The TUUB is a universal wall-mount controller, with a built-in temperature sensor and scheduler. It is specifically designed for straightforward and accurate control of a heat pump, rooftop unit, fan coil or other heating/cooling equipment. Its field-configurable algorithms allow for versatility when implementing required control sequences.

Featuring an external humidity sensor input for accurate humidity control, this comprehensive unit also provides a dehumidification sequence compensated by auto activation of reheat output.

The controller is available with additional sensors such as the CO_2, VOC and humidity sensor, providing more functionality for the terminal device.

By employing this versatile controller, the integrator has a host of inputs and outputs to incorporate other monitoring points for their equipment.

APPLICATIONS

The TUUB is the ideal solution in a variety of applications that require accurate control, such as:

- Fan coil units (2 or 4 pipes)
- Rooftop units
- Heat pumps
- Humidity control
- Packaged or split unitary systems
- Other heating/cooling equipment

neptronic

MODELS

Models	Temp.	RH	CO_2	VOC
○ TUUB00-100 ● TUUB30-100 ○ TUUB60-100	•			
○ TUUB00-101 ● TUUB30-101 ○ TUUB60-101	•	•		
○ TUUB00-102 ● TUUB30-102 ○ TUUB60-102	•	•	•	
○ TUUB00-106 ● TUUB30-106 ○ TUUB60-106	•	•	•	•

STANDARD FEATURES

- Heat pump, humidity control or general unit controller
- Fan control: 1, 2, or 3-speed (auto/on), or analog (ECM)
- Optional internal/external humidity sensor input for simple and accurate humidity control
- Dehumidification sequence compensated by auto activation of reheat output
- Real time clock (RTC) with 24-hour backup
- 7-day programmable schedule
- Precise temperature control with configurable PI (Proportional-Integral) function
- Selectable internal or external temperature sensor
- Low limit set protection (10°C / 50°F)
- Occupancy and night set back (NSB) mode
- Selectable direction on outputs
- Option of pulse/floating/on-off output on binary outputs
- External occupancy input
- Compressor anti-cycling delay (configurable)
- ΔT control (on request)
- Standard dimensions: 124mm x 83mm x 20mm (4.88” x 3.25” x 0.78”)
- Dimensions for models with CO_2: 124mm x 83mm x 24mm (4.88” x 3.25” x 0.95”)
- Made in Canada

OPTIONAL FEATURES

- Humidity sensor for RH control
  - Sensor Range: 5 to 95% RH
  - Control Accuracy: ±3.5% RH
- Internal and external CO_2 sensor input with alarm output for IAQ functions
- VOC readings for IAQ monitoring

INPUTS/OUTPUTS

- 4 Configurable Universal Inputs (0-10Vdc, 10KΩ sensor, dry contact)
- 6 Configurable Binary Outputs (OptoFET, 250mA max)
- 4 Configurable Analog Outputs (0-10Vdc, adjustable)

NETWORK COMMUNICATION

- BACnet® MS/TP or Modbus communication port (selectable via menu)
- Select MAC address via menu or via network
- Automatic baud rate detection

BACnet MS/TP®

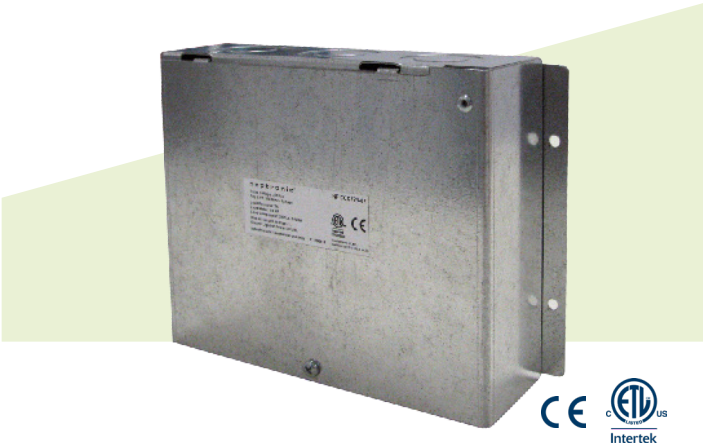
- Automatic device instance configuration
- Copy & broadcast configuration via menu or via BACnet to other controllers
- BACnet scheduler (up to 6 events per day)
- Firmware upgradeable via BACnet
- Supports COV (change of value)

Modbus

- Modbus @ 9600, 19200, 38400, or 57600 bps
- RTU Slave, 8 bits (configurable parity and stop bits)
- Connects to any Modbus master

RELAY INTERFACE BOARD *(OPTIONAL PERIPHERAL)*

- 240/120 Vac
- 3, 4 or 5 contacts
- Metal box with secure 4-point mounting (models without enclosure also available)
- Equipped with built-in transformer (12VA max)



Model	Voltage	Contact Ratings		Number of Outputs
		Resistive	Motor	
CCC713-07	120 Vac	7 A	1/4 HP	3
CCC714-07				4
CCC715-07				5
CCC723-07	240 Vac			3
CCC724-07				4
CCC725-07				5