BACnet
Modbus

TSUB

Networkable Wall-Mount Controller

The TSUB is a wall-mount controller, with a built-in temperature sensor and scheduler. It is specifically designed for straightforward and accurate control of fan coil units. 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 PIR 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

- Fan coil units (2 or 4 pipes)

neptronic

MODELS

Models	Temp.	RH	PIR
○ TSUB00-100 ● TSUB30-100 ○ TSUB60-100	•		
○ TSUB00-101 ● TSUB30-101 ○ TSUB60-101	•	•	
○ TSUB00-104 ● TSUB30-104 ○ TSUB60-104	•		•
○ TSUB00-105 ● TSUB30-105 ○ TSUB60-105	•	•	•

STANDARD FEATURES

- 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”)
- Made in Canada

OPTIONAL FEATURES

- Humidity sensor for RH control
  - Sensor Range: 5 to 95% RH
  - Control Accuracy: ±3.5% RH

INPUTS/OUTPUTS

- 2 Configurable Universal Inputs
  (0-10Vdc, 10KΩ sensor, dry contact)
- 5 Configurable Binary Outputs
  (OptoFET, 250mA max)
- 2 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