

## HT961xD Series

### Driver of Communicating Fan Coil Thermostat 2-pipe/4-pipe fan coil control

#### PRODUCT DATA



## APPLICATION

HT961 communicating thermostats are designed for application of 3-speed fan and valves in fan coil system and available in BACnet MS/TP protocol. HT961 Series thermostats can be easily integrated into a building automation system based on the BACnet MS/TP platform.

HT961 communicating thermostat adopts two-piece solution consisting of two devices: driver and room unit. Driver provides inputs/outputs and communication interface for thermostats. This document contains specification of the driver. For room unit, please refer to the data sheet of "HT9610P Series Room Unit of Communicating Fan Coil Thermostat".

## FEATURES

- Available in BACnet MS/TP protocols
- Two-wire polarity-free communicating with room unit
- 1 analogy input for remote temperature sensor
- 3-speed fan control output
- 2/4-pipe valves control output
- SPDT output that can be used for both spring return and non-spring return valves
- 32-bit ARM architecture CPU
- Power and communicating status indication with LEDs
- Easy install with both DIN rail and wall mounting
- Easy wiring with removable terminal block
- Safety, all terminals protected with cover

## TECHNICAL SPECIFICATIONS

Network	BACnet MS/TP
Rated voltage	220 ± 10%Vac, 50/60Hz
Power consumption	4.5VA maximum (connected with room unit)
Remote sensor	NTC20K (Prefer Honeywell 50046805-001)
Fan relay output	4(3) A @ 220 Vac
Valve relay output	2(1) A @ 220 Vac
Circuit protection fuse	250V 6.3A
Working ambient temperature	0 ~ 49 °C (32 to 120 °F)
Shipping ambient temperature	-29 ~ 55 °C (-20 to 130 °F)
Relative humidity	5 % to 95 % non-condensing
IP level	IP20
Certificate	BTL, CQC (China Quality Certification)

## BACnet Interface

Honeywell uses BACnet MS-TP as the physical layer between driver and supervisory controllers.

### Specifications for a Honeywell BACnet MS-TP Network

- Cable type: Twisted pair 20AWG - 24AWG, Shield
- Characteristics impedance: 100 ~ 130 ohms
- Distributed capacitor: less than 100 pF/m
- Maximum length per segment: 1000 m

- Multi-drop: Daisy-chain
- Maximum numbers of nodes per segment: 64
- Baud rate(bps): 9600, 19200, 38400, 76800(auto detect)
- Termination: 120 ohms(should be installed at each end)

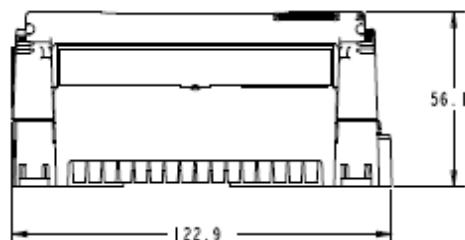
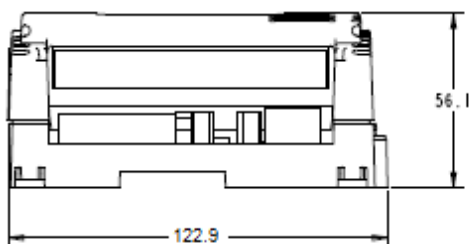
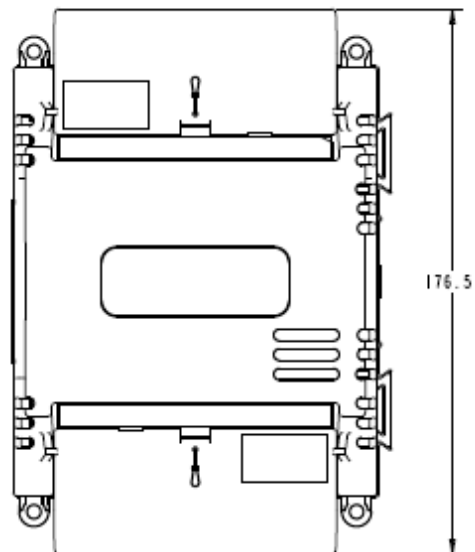
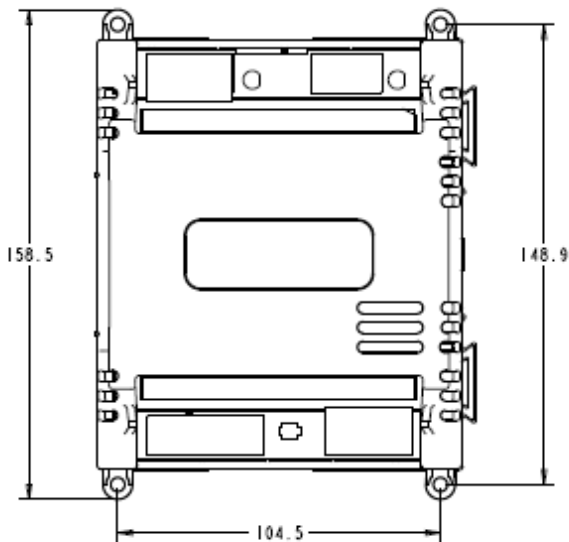
### IMPORTANT:

If you have more than 64 devices, BACnet MS-TP repeaters are required to extend the network. The best configuration is to daisy chain the repeaters to the controller. From each of these repeaters, a separate daisy chain will branch off.

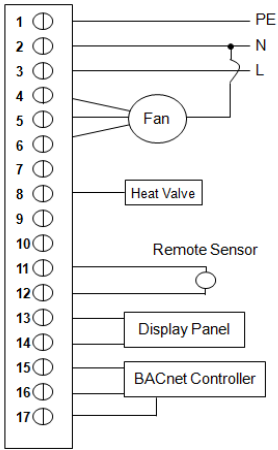
## MODEL SUMMARY

Model	Power Supply (Vac)	Application	Communication	Analog Input
HT9611D3100	220	FCU on/off 2-pipe	BACnet	1
HT9612D3100	220	FCU on/off 2/4-pipe	BACnet	1

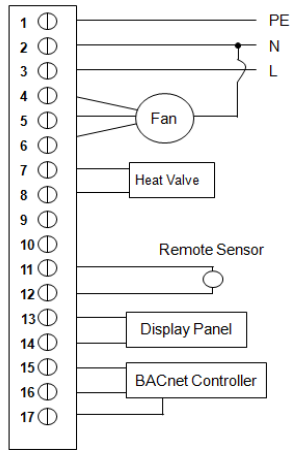
## DIMENSIONS (mm)



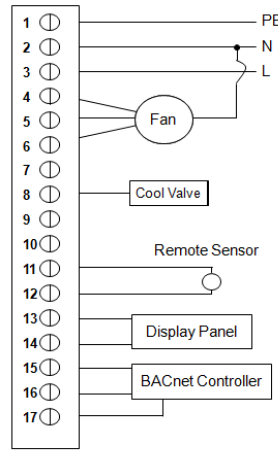
# WIRING DIAGRAM



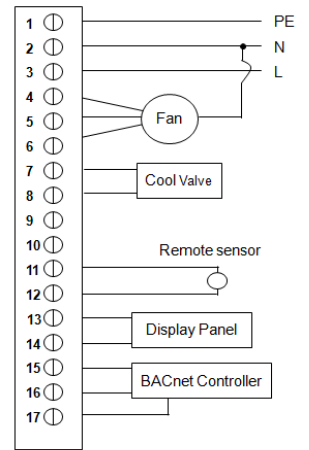
Wiring for VC4013 Valve



Wiring for VC6013 Valve



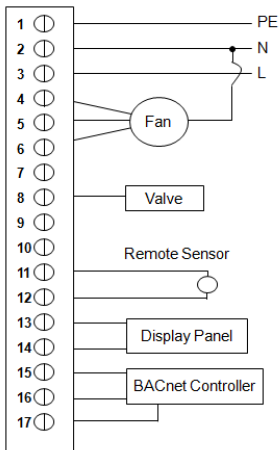
Wiring for VC4013 Valve



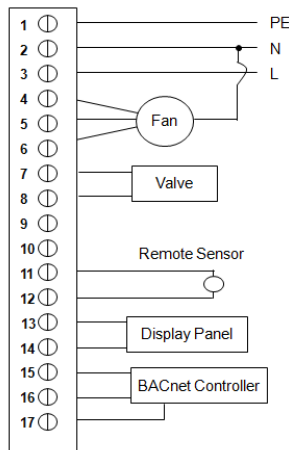
Wiring for VC6013 Valve

**Fig. 4. 2-pipe heat only**

**Fig. 5. 2-pipe cool only**

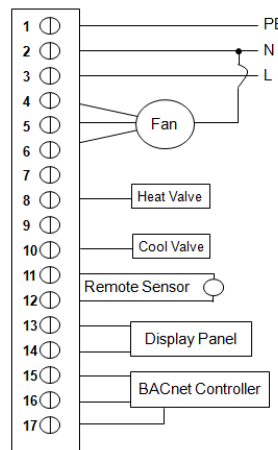


Wiring for VC4013 Valve

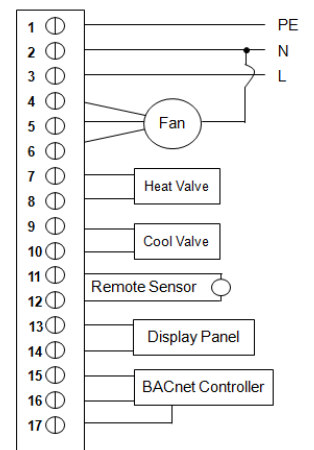


Wiring for VC6013 Valve

**Fig. 6. 2-pipe 1-stage heat or 1-stage cool MCO**



Wiring for VC4013 Valve



Wiring for VC6013 Valve

**Fig. 7. 4-pipe 1-stage heat and 1-stage cool MCO/ACO**

## Automation and Control Solutions



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Subject to change without notice.