

# TC300 THERMOSTATS

## CONNECTED DEVICE FOR COMMERCIAL BUILDINGS

TC300 thermostat models are advanced, highly configurable devices providing building automation connectivity well suited for commercial building applications. Supported equipment types include 2/4-Pipe FCU, 1H/1C conventional, and 2H/1C heat pump plus water source heat pump.

The TC300 models support BACnet MS/TP and Modbus communications, while the TC320 models also support BACnet IP via Wi-Fi.



All models have intelligent control algorithms, scheduling, and an intuitive touchscreen interface. The B models support low voltage power input, while the C models support line voltage power input. The TC320 variant also has Wi-Fi and Bluetooth connectivity.

### FEATURES AND HIGHLIGHTS

#### CONVENIENT FOR USERS

- Color, capacitive-touch screen display for intuitive, fast commissioning and exceptional user experience.
- Embedded system monitoring screen for equipment and I/O status.
- Customizable inactive display modes, Auto dim display, always on, or dark mode.
- An LED ring indicator to show the operational status.
- Real-Time Clock time-keeping accuracy with 72-hour retention during power loss.

#### EASY FOR CONTRACTORS

- Thermostat can be configured via its own touch-screen interface or a BACnet/Modbus client.
- Fan coil, 2H/1C Heat Pump-Air Source Heat Pump, Water Source Heat Pump (with water valve enable/lock-out) 1H/1C Conventional, On/Off Valve, Floating Valve, Modulating Valve, and 6-Way Modulating Valve.
- 1-3 or variable speed fan
- Dehumidification with and without reheat.
- Enhanced 2-pipe fan coil functionality during seasonal or system changeover delivering improved occupant comfort.

- Service mode for manually enabling outputs for quicker diagnostics and equipment testing.
- Auxiliary heating options supporting peripheral or supplemental types.
- Auto mode to switch between heating and cooling according to the current space temperature.
- Staging control, PID Tuning, DAT Lockout, Modulating control, Compressor time delay.
- System Switch and Ventilation options.
- Integration with various external wired sensor types including Discharge air temperature, Drain pan, Occupancy, Proof of airflow, Proof of water flow, Space temperature, Outdoor air temperature, Humidity, Shutdown sensor, and 3 custom sensors.
- Complies with ASHRAE guideline 36-2021, Section 5.22 sequence of operations for high-performance operation when using floating/modulating valves and multi-speed/variable speed fan.
- Advanced commercial control algorithms such as auto changeover.

#### CONNECTED FOR FACILITY MANAGERS

- Multiple, configurable user types with customizable privileges to prevent unauthorized usage.
- Customizable daily schedules include options for setting up to 10 recurring holidays (with support for floating holidays) and up to 10 specific special events.
- Up to 4 schedule events per day.

**Honeywell**

## TECHNICAL SPECIFICATIONS

### ELECTRICAL CHARACTERISTICS

| PARAMETER                                                              | TC300B-G/TC320B-G                                                                                                                      | TC300C-G/TC320C-G                                      |
|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Power Supply                                                           | Rated voltage : 24 VAC 50/60 Hz<br>Working Voltage range: 20-30 VAC<br>UL listed class - 2 transformer or IEC 61558 listed transformer | Rated voltage : 100-277 VAC 50/60 Hz                   |
| Standby Power Consumption (Display On, All DOs off, All UIOs As Input) | 1.5 VA@24 VAC                                                                                                                          | 3.3 VA@Rated voltage                                   |
| Max. Load                                                              | 96 VA<br>(all DOs ON)                                                                                                                  | 1200 VA@120 VAC<br>1500 VA@240/277 VAC<br>(all DOs ON) |
| Rated Impulse Voltage                                                  | 500 V                                                                                                                                  | 2.5 KV (Overvoltage Category II)                       |
| Pollution Degree                                                       | 2                                                                                                                                      |                                                        |
| Operation Method                                                       | Type 1.B Action                                                                                                                        |                                                        |
| DO/DIO Combined Max. Current Limit                                     | Total current cannot exceed 4 A                                                                                                        | Total current cannot exceed 10 A                       |

### USER INTERFACE

| PARAMETER      | SPECIFICATIONS                                      |
|----------------|-----------------------------------------------------|
| Display Type   | Capacitive touch TFT, 320x240 pixels, 2.4 in. diag. |
| Backlight      | LCD (Dimmable)                                      |
| LED Color Ring | Blue (cooling), Orange (heating)                    |

### OPERATING ENVIRONMENT

| PARAMETER                     | SPECIFICATIONS                                |
|-------------------------------|-----------------------------------------------|
| Ambient Operating Temperature | Range: 32 to 122 °F (0 to 50 °C)              |
| Ambient Operating Humidity    | 10 to 90 % relative humidity (non-condensing) |
| Storage Temperature           | -40 to 150 °F(-40 to 65.5 °C)                 |
| Protection Class              | IP20                                          |

### ONBOARD SENSORS

| PARAMETER                     | SPECIFICATIONS                                                                                                                                                                                                                                                                                       |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature Accuracy          | TC300B-G:<br>±1.5 °F (0.8 °C) from 32 to 122 °F (0 to 50 °C)<br>±0.8 °F (0.45 °C) with 95 % confidence from 60 to 85 °F (15 to 30 °C)<br><br>TC320B-G, TC300C-G, TC320C-G<br>±1.5 °F (0.8 °C) from 32 to 122 °F (0 to 50 °C)<br>±0.9 °F (0.5 °C) with 95 % confidence from 60 to 85 °F (15 to 30 °C) |
| Temperature Control Accuracy  | ±1.5 °F (0.8 °C) from 60 to 85 °F (15 to 30 °C), all models.                                                                                                                                                                                                                                         |
| Temperature Display Precision | 1 °F (0.5 °C), all models.                                                                                                                                                                                                                                                                           |
| Humidity Accuracy             | TC300B-G<br>±3 % RH from 20 to 80 % RH @ 25 °C<br><br>TC320B-G, TC300C-G, TC320C-G<br>±5 % RH from 20 to 80 %RH @ 25 °C                                                                                                                                                                              |
| Humidity Display Precision    | 1 % RH, all models.                                                                                                                                                                                                                                                                                  |

| COMPLIANCES  |                                                                                                  |                                                                                                                                                                                                               |                                                                      |                                                                                                                                                                                   |
|--------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SKU          | TC300B-G                                                                                         |                                                                                                                                                                                                               | TC320B-G                                                             | TC300C-G                                                                                                                                                                          |
| Certificates | CE, FCC, ICES, UL/cUL, RoHS, REACH, Prop65                                                       |                                                                                                                                                                                                               |                                                                      | CE, FCC, ICES, RoHS, REACH, Prop65                                                                                                                                                |
| Standards    | EN 60730-1<br>EN 60730-2-9<br>UL60730-1<br>UL60730-2-9<br>Title 47 part 15 subpart B<br>ICES-003 | EN 60730-1<br>EN 60730-2-9<br>UL60730-1<br>UL60730-2-9<br>Title 47 part 15 subpart B<br>Title47 part15 subpart C<br>ICES-003<br>RSS247<br>EN 300 328<br>EN 301 489-1<br>EN 301 489-17<br>EN 62479<br>EN 62311 | EN 60730-1<br>EN 60730-2-9<br>Title 47 part 15 subpart B<br>ICES-003 | EN 60730-1<br>EN 60730-2-9<br>Title 47 part 15 subpart B<br>Title47 part15 subpart C<br>ICES-003<br>RSS247<br>EN 300 328<br>EN 301 489-1<br>EN 301 489-17<br>EN 62479<br>EN 62311 |

| WIRED AND WIRELESS TECHNOLOGIES |                                                                                              |
|---------------------------------|----------------------------------------------------------------------------------------------|
| PARAMETER                       | SPECIFICATIONS                                                                               |
| Sylk™                           | Honeywell Sylk™, 2-wire Bus                                                                  |
| BACnet MS/TP                    | RS485 (9.6, 19.2, 38.4, 76.8, 115.2 Kbps)                                                    |
| Modbus RTU                      | RS485 (1.2 to 115.2 Kbps)                                                                    |
| BACnet IP (TC320B/TC320C)       | Over Wi-Fi                                                                                   |
| Wi-Fi 2.4 GHz (TC320B/TC320C)   | IEEE802.11 b/g/n<br>NONE<br>WPA_PSK<br>WPA_WPA2_PSK<br>WPA2_PSK<br>WPA2_WAP3_PSK<br>WPA3_PSK |
| Bluetooth (TC320B/TC320C)       | BLE 5.3 Class 2<br>IEEE802.15.4 Open Thread                                                  |

| EIRP INFORMATION     |          |
|----------------------|----------|
| STANDARD             | MAX EIRP |
| Wi-Fi 2.4 GHz for CE | 20 dBm   |
| BLE for CE           | 10 dBm   |

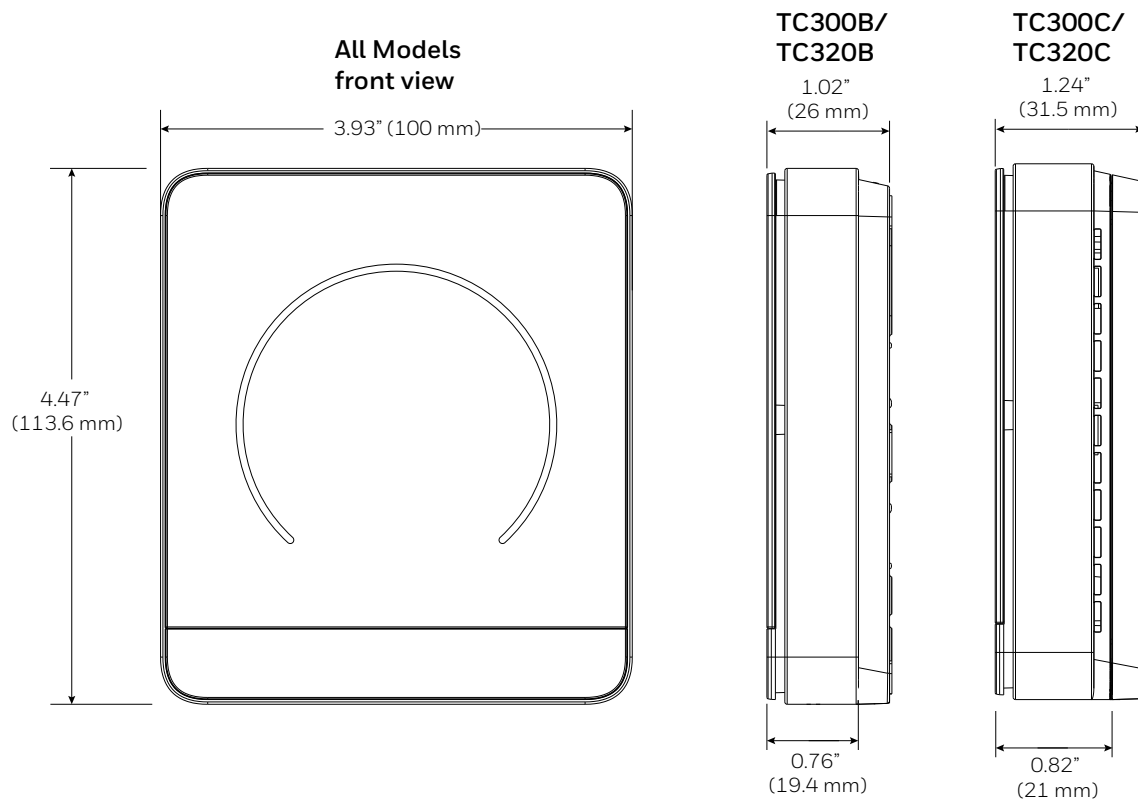
| TC300 MODELS |             |                               |                                  |                                                                                     |                                       |
|--------------|-------------|-------------------------------|----------------------------------|-------------------------------------------------------------------------------------|---------------------------------------|
| SKU          | INPUT POWER | WIRELESS                      | WIRED COMMUNICATIONS             | EQUIPMENT TYPES                                                                     | OUTPUTS                               |
| TC300B-G     | 24 VAC      | No                            | RS485 BACnet MS/TP<br>Modbus RTU | FCU - 4 Pipe/2 Pipe<br>2H/1C Heat Pump (air/<br>water source)<br>1H/1C Conventional | 3 x DO (24 VAC)<br>2 x DIO<br>3 x UIO |
| TC320B-G     |             | Wi-Fi/BACnet IP,<br>Bluetooth |                                  |                                                                                     |                                       |
| TC300C-G     | 100-277 VAC | No                            |                                  | FCU - 4 Pipe/2 Pipe                                                                 | 5 x DO (100-277 VAC)<br>3 x UIO       |
| TC320C-G     |             | Wi-Fi/BACnet IP,<br>Bluetooth |                                  |                                                                                     |                                       |

| ACCESSORY        |                                         |
|------------------|-----------------------------------------|
| PART NUMBER      | DESCRIPTION                             |
| TRTC-DECOPLATE-1 | Decorative wall plate, TR and TC Series |

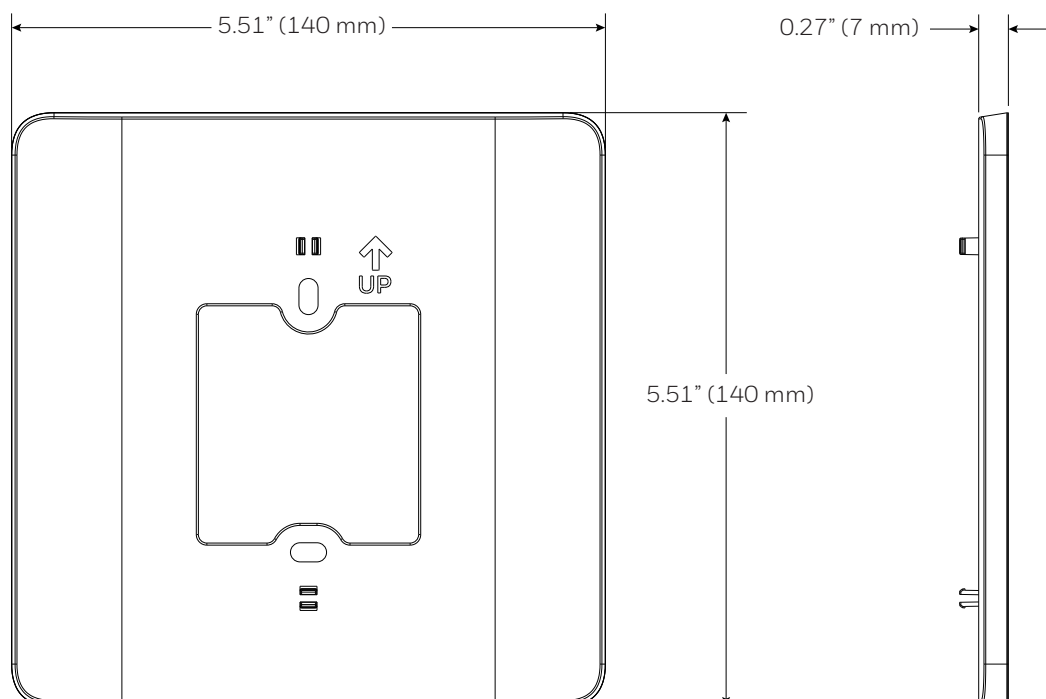
Note: The accessory is available in separate order.

## DIMENSIONS

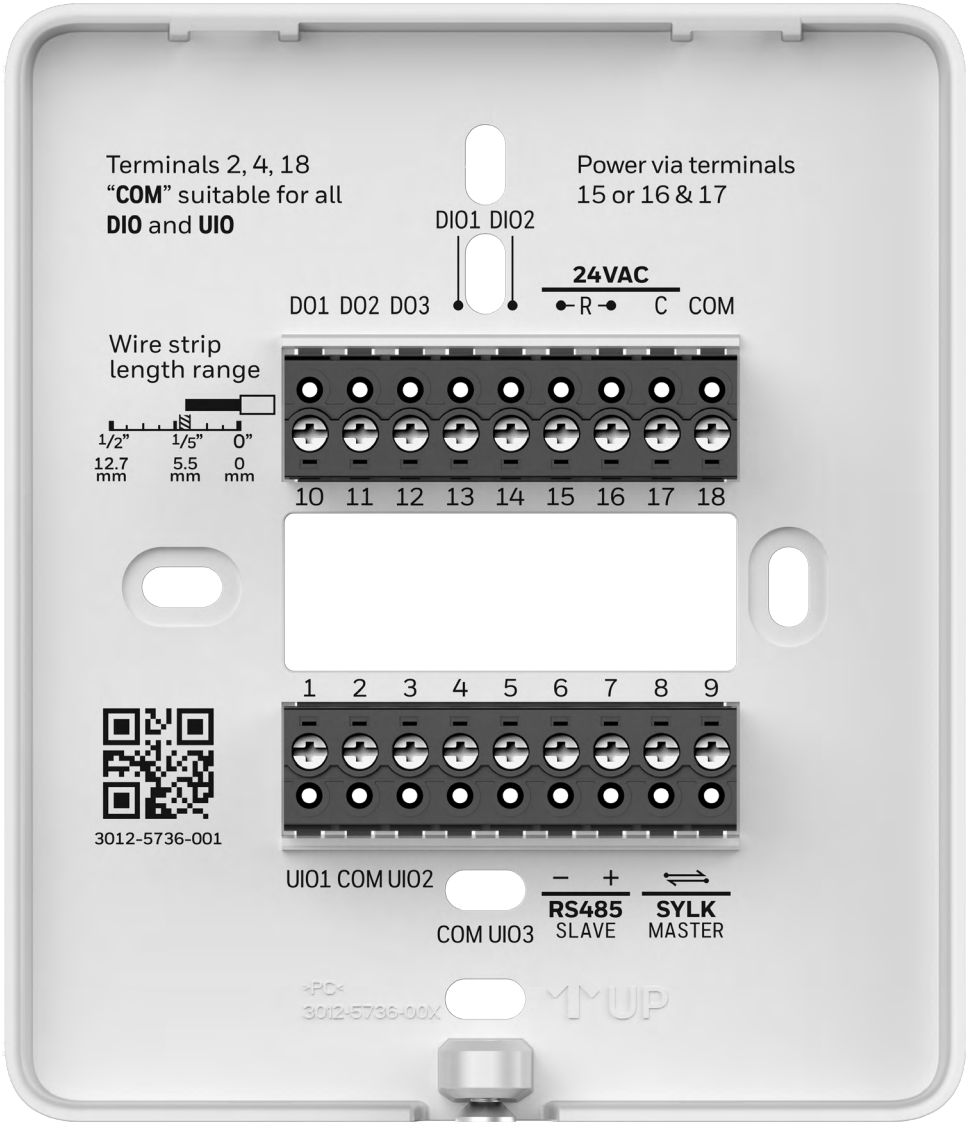
### ALL MODELS THERMOSTATS



### TRTC-DECOPLATE-1



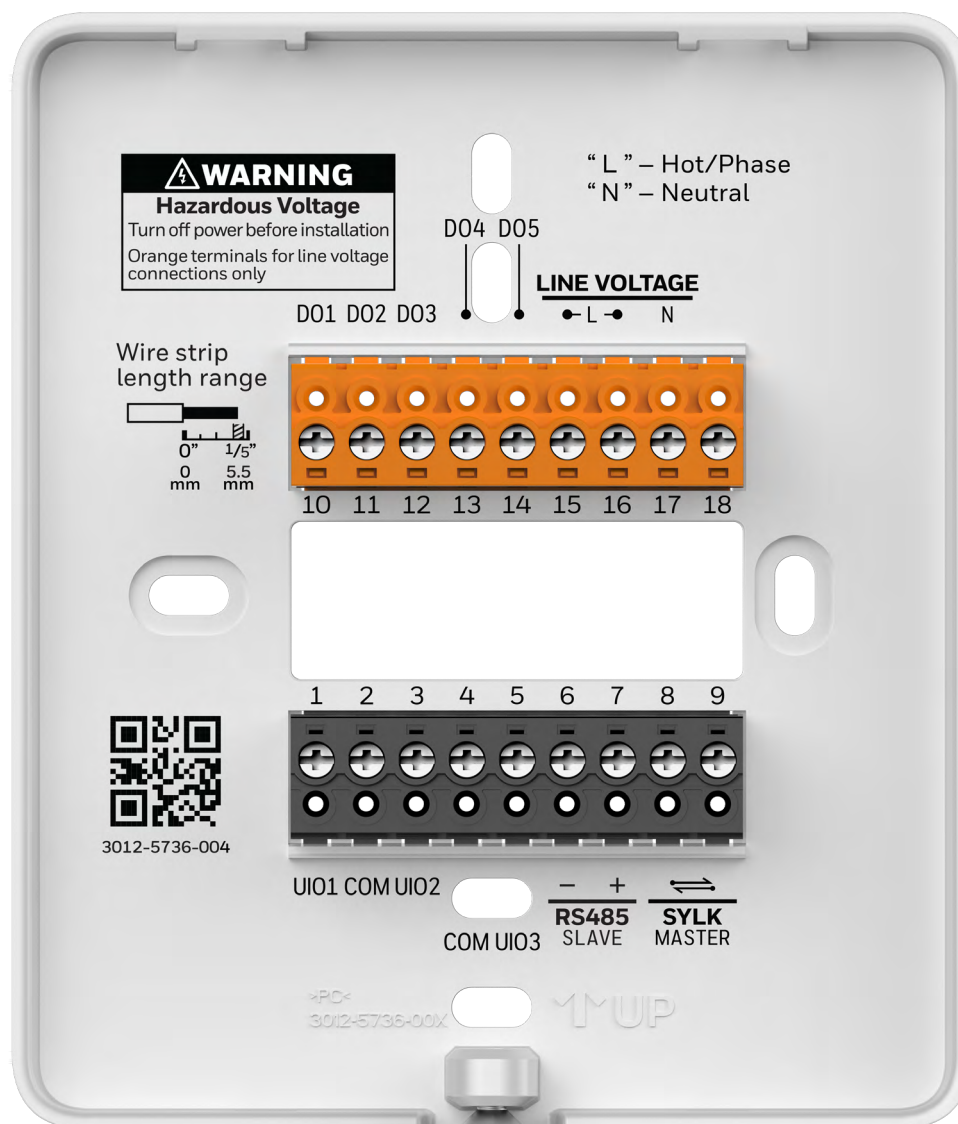
**TERMINAL LAYOUT TC300B-G/TC320B-G (24 VAC)**



**TERMINAL IDENTIFICATION - TC300B-G/TC320B-G**

| TERMINAL NAME | TERMINAL NUMBER | TERMINAL LABEL | DESCRIPTION                                               |
|---------------|-----------------|----------------|-----------------------------------------------------------|
| UIO1          | 1               | UIO1           | Universal input/output                                    |
| COM           | 2               | COM            | Common                                                    |
| UIO2          | 3               | UIO2           | Universal input/output                                    |
| COM           | 4               | COM            | Common                                                    |
| UIO3          | 5               | UIO3           | Universal input/output                                    |
| RS485 SLAVE   | 6               | -              | BACnet/Modbus Communications                              |
| RS485 SLAVE   | 7               | +              | BACnet/Modbus Communications                              |
| SYLK MASTER   | 8               | ↔              | Sylk bus                                                  |
| SYLK MASTER   | 9               | ↔              | Sylk bus                                                  |
| DO1           | 10              | DO1            | Relay output                                              |
| DO2           | 11              | DO2            | Relay output                                              |
| DO3           | 12              | DO3            | Relay output                                              |
| DIO1          | 13              | DIO1           | Relay output<br>Analog input<br>Dry contact digital input |
| DIO2          | 14              | DIO2           | Relay output<br>Analog input<br>Dry contact digital input |
| 24 VAC POWER  | 15/16           | R              | 24 VAC power from Class2 transformer                      |
| 24 VAC POWER  | 17              | C              | 24 VAC common (Neutral) from Class2 transformer           |
| COM           | 18              | COM            | Common                                                    |

## TERMINAL LAYOUT TC300C-G/TC320C-G



### TERMINAL IDENTIFICATION - TC300C-G/TC320C-G

| TERMINAL NAME          | TERMINAL NUMBER | TERMINAL LABEL | DESCRIPTION                                                       |
|------------------------|-----------------|----------------|-------------------------------------------------------------------|
| UIO1                   | 1               | UIO1           | Universal input/output                                            |
| COM                    | 2               | COM            | Common                                                            |
| UIO2                   | 3               | UIO2           | Universal input/output                                            |
| COM                    | 4               | COM            | Common                                                            |
| UIO3                   | 5               | UIO3           | Universal input/output                                            |
| RS485 SLAVE            | 6               | -              | BACnet/Modbus Communications                                      |
| RS485 SLAVE            | 7               | +              | BACnet/Modbus Communications                                      |
| SYLK MASTER            | 8               | ↔              | Sylk bus                                                          |
| SYLK MASTER            | 9               | ↔              | Sylk bus                                                          |
| DO1                    | 10              | DO1            | Relay output                                                      |
| DO2                    | 11              | DO2            | Relay output                                                      |
| DO3                    | 12              | DO3            | Relay output                                                      |
| DO4                    | 13              | DO4            | Relay output                                                      |
| DO5                    | 14              | DO5            | Relay output                                                      |
| Line Voltage Hot/Phase | 15/16           | L              | Line - Line voltage power input<br>TC300C-G/TC320C-G: 100-277 VAC |
| Line Voltage Neutral   | 17              | N              | Neutral - Line voltage power input                                |
| Not applicable         | 18              | NC             | Not connected                                                     |

# TERMINAL ASSIGNMENT

| TERMINAL ASSIGNMENT 24 VAC (TC300B/TC320B) |          |       |             |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------|----------|-------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE                                       | TERMINAL | LABEL | DEFAULT     | INPUTS                                                                                                                                                                                                                     | OUTPUTS                                                                                                                                                                                                                                                                                                                                          |
| Digital Output                             | D01      | DO1   | On/Off Heat | NA                                                                                                                                                                                                                         | Heating On/Off, Heating Floating Open, Cooling Floating Open, Valve On/Off, Valve Floating Open, Changeover Valve, Fan Command, High Speed Fan, Medium Speed Fan, Low Speed Fan, Auxiliary Heat, Heat Stage1(Heat/Cool Stage1 for heat pump), Valve Stage1<br><b>Note:</b> FCU changeover valve used to switch between heating and cooling modes |
|                                            | D02      | DO2   | On/Off Cool | NA                                                                                                                                                                                                                         | Heating Floating Close, Cooling Floating Close, Cooling On/Off, Valve Floating Close, Changeover Valve, Fan Command, High Speed Fan, Medium Speed Fan, Low Speed Fan, Auxiliary Heat, Cool Stage1, Reversing Valve, Dehumidifier, Humidifier                                                                                                     |
|                                            | D03      | DO3   | NA          | NA                                                                                                                                                                                                                         | Cooling Floating Open, Changeover Valve, Fan Command, High Speed Fan, Medium Speed Fan, Low Speed Fan, Auxiliary Heat, Heat Stage1, Cool Stage1, Water Flow Valve, Dehumidifier, Humidifier                                                                                                                                                      |
|                                            | DIO1     | DIO1  | NA          | Discharge Air Sensor, Drain Pan Sensor, Occupancy Sensor, Proof of Airflow, Pipe Sensor, Space Temp Sensor, Changeover Switch, Proof of Waterflow, Outdoor Air Sensor, Shutdown Sensor, Custom1, Custom2, Custom3 sensors  | Cooling Floating Close, Changeover Valve, Fan Command, High Speed Fan, Medium Speed Fan, Low Speed Fan, Auxiliary Heat, Dehumidifier, Humidifier                                                                                                                                                                                                 |
|                                            | DIO2     | DIO2  | Fan command | Discharge Air Sensor, Drain Pan Sensor, Occupancy Sensor, Proof of Airflow, Pipe Sensor, Space Temp Sensor, Changeover Switch, Proof of Waterflow, Outdoor Air Sensor, Shutdown Sensor, Custom1, Custom2, Custom3 sensors. | Changeover Valve, Fan Command, High Speed Fan, Medium Speed Fan, Low Speed Fan, Auxiliary Heat, Dehumidifier, Humidifier                                                                                                                                                                                                                         |
| Universal Input/ Output                    | UIO1     | UIO1  | NA          | Discharge Air Sensor, Drain Pan Sensor, Occupancy Sensor, Proof of Airflow, Pipe Sensor, Space Temp Sensor, Changeover Switch, Proof of Waterflow, Outdoor Air Sensor, Shutdown Sensor, Custom1, Custom2, Custom3 sensors  | 6-Way Valve, Modulating Cool , Modulating Heat, Modulating Valve, Variable Speed Fan                                                                                                                                                                                                                                                             |
|                                            | UIO2     | UIO2  | NA          |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                  |
|                                            | UIO3     | UIO3  | NA          |                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                  |

| TERMINAL ASSIGNMENT LINE VOLTAGE (TC300C/TC320C) |          |       |                            |                                                                                                                                                                    |                                                                                           |
|--------------------------------------------------|----------|-------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| TYPE                                             | TERMINAL | LABEL | DEFAULT                    | INPUTS                                                                                                                                                             | OUTPUTS                                                                                   |
| Digital Output                                   | D01      | DO1   | On/Off Heat                | NA                                                                                                                                                                 | Heating On/Off, Valve On/Off, Changeover Valve, Auxiliary Heat, Heat Stage1, Valve Stage1 |
|                                                  | D02      | DO2   | On/Off Cool                | NA                                                                                                                                                                 | Cooling On/Off, Changeover Valve, Auxiliary Heat, Cool Stage1                             |
|                                                  | D03      | DO3   | Low Speed Fan              | NA                                                                                                                                                                 | Changeover Valve, Low Speed Fan, Auxiliary Heat, Heat Stage1, Cool Stage1                 |
|                                                  | D04      | DO4   | Medium Speed Fan           | NA                                                                                                                                                                 | Changeover Valve, Medium Speed Fan Auxiliary Heat                                         |
|                                                  | D05      | DO5   | High Speed Fan/Fan Command | NA                                                                                                                                                                 | Changeover Valve, Fan Command, High Speed Fan, Auxiliary Heat                             |
| Universal Input/ Output                          | UIO1     | UIO1  | NA                         | Discharge Air Sensor, Drain Pan Sensor, Occupancy Sensor, Proof of Airflow, Pipe Sensor, Space Temp Sensor, Changeover Switch, Outdoor Air Sensor, Shutdown Sensor | 6-Way Valve, Modulating Cool , Modulating Heat, Modulating Valve, Variable Speed Fan      |
|                                                  | UIO2     | UIO2  | NA                         |                                                                                                                                                                    |                                                                                           |
|                                                  | UIO3     | UIO3  | NA                         |                                                                                                                                                                    |                                                                                           |

| WIRING            |          |            |             |           |
|-------------------|----------|------------|-------------|-----------|
| SKU               | TERMINAL | WIRE GAUGE | NORMAL LOAD | WIRE TYPE |
| TC300B-G/TC320B-G | R, C     | 14-18 AWG  | 0-4 A       | Copper    |
|                   | DO       | 14-26 AWG  | 0-1 A       |           |
|                   | Others   | 14-26 AWG  | N/A         |           |
| TC300C-G/TC320C-G | L, N     | 14-18 AWG  | 0-10 A      |           |
|                   | DO3-DO5  | 14-20 AWG  | 0-3 A       |           |
|                   | DO1, DO2 | 14-26 AWG  | 0-1 A       |           |
|                   | Others   | 14-26 AWG  | N/A         |           |

Note: The recommended wire gauge 14-26 AWG (0.2-1.5 mm<sup>2</sup> for solid or stranded, max 2.5 mm<sup>2</sup> for solid).

| IO CHARACTERISTICS |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PARAMETER          | SPECIFICATIONS    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| All models         | UIO x 3           | <ul style="list-style-type: none"> <li>Resistive Temperature Sensor Input               <ul style="list-style-type: none"> <li>NTC10K Type II, C7021 series</li> <li>NTC10K Type III, C7023 series</li> <li>NTC20K, TR21, and C7041 series</li> </ul> </li> <li>Digital Input               <ul style="list-style-type: none"> <li>Dry contact closure</li> <li>Open circuit (<math>\geq 100</math> Kohms)</li> <li>Closed circuit (<math>\leq 100</math> ohms)</li> </ul> </li> <li>Voltage Output               <ul style="list-style-type: none"> <li>0-10 V, <math>\pm 1.5\%</math> of full scale @2 Kohms</li> </ul> </li> </ul> |
| TC300B/TC320B      | DIO x 2           | <ul style="list-style-type: none"> <li>Resistive Temperature Sensor Input               <ul style="list-style-type: none"> <li>NTC10K Type II, C7021 series</li> <li>NTC10K Type III, C7023 series</li> <li>NTC20K, TR21, and C7041 series</li> </ul> </li> <li>Digital Input               <ul style="list-style-type: none"> <li>Dry contact closure</li> <li>Open circuit (<math>\geq 100</math> Kohms)</li> <li>Closed circuit (<math>\leq 100</math> ohms)</li> </ul> </li> </ul>                                                                                                                                                |
|                    | DO x 3<br>DIO x 2 | <ul style="list-style-type: none"> <li>Relay Output</li> <li>Rated Average Current               <ul style="list-style-type: none"> <li>1 A Resistive at 24 VAC</li> </ul> </li> <li>Rated Pulse Current               <ul style="list-style-type: none"> <li>3.5 A Resistive at 24 VAC</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                        |
| TC300C-G/TC320C-G  | DO1<br>DO2        | <ul style="list-style-type: none"> <li>Relay Output</li> <li>Rated Average Current               <ul style="list-style-type: none"> <li>1 A Inductive at 100-277 VAC</li> </ul> </li> <li>Power Factor <math>&gt; 0.85</math></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                              |
|                    | DO3<br>DO4<br>DO5 | <ul style="list-style-type: none"> <li>Relay Output</li> <li>Rated Average Current               <ul style="list-style-type: none"> <li>3 A Inductive at 100-277 VAC</li> </ul> </li> <li>Power Factor <math>&gt; 0.85</math></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                              |

## SUPPORTED SENSORS AND FUNCTIONS

| SENSORS                           | OPTIONS                                                                                                                         | PART NUMBERS                                                                                                             |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Occupancy Sensor                  | Direct (Normally Open)<br>Reverse (Normally Closed)                                                                             | Dry contact occupancy sensor                                                                                             |
| Proof Of Air Flow Sensor          | Direct (Normally Open)<br>Reverse (Normally Closed)                                                                             | DPS200<br>DPS400<br>DPS1000<br>MCS, CS, CSP current switches<br>(Dry contact switches)                                   |
| Discharge Air Temperature Sensor  | NTC 20K<br>NTC 10K Type II<br>NTC 10K Type III<br>Sylk                                                                          | C7250A<br>C7041<br>C7021<br>C7023<br>C7400S                                                                              |
| Space Temperature Sensors         | NTC 20K<br>NTC 10K Type II<br>NTC 10K Type III<br>Sylk                                                                          | TR21<br>C7041, C7772A, C7021, C7772F, C7023, C7772G,<br>TR40,<br>TR40-H,<br>TR40-CO2,<br>TR40-H-CO2,<br>TR50-3N, TR50-3D |
| Pipe Sensor                       | NTC 20K<br>NTC 10K Type II<br>NTC 10K Type III                                                                                  | C7250A<br>C7041<br>C7021<br>C7023                                                                                        |
| Changeover Switch                 | Closed with heat<br>Closed with cool                                                                                            | Digital input                                                                                                            |
| Drain Pan / Leak Detector         | Direct (Normally Open)<br>Reverse (Normally Closed)                                                                             | Dry contact float switch or water sensor                                                                                 |
| Proof of Water Flow Sensor        | Direct (Normally Open)<br>Reverse (Normally Closed)                                                                             | Dry contact pressure switch                                                                                              |
| Shutdown sensor                   | Direct (Normally Open)<br>Reverse (Normally Closed)                                                                             | Digital input                                                                                                            |
| Custom sensor (remote monitoring) | Digital Input - NO or NC<br>Analog Input - 0-10VDC - 0-100% scaled<br>Temperature Input - NTC 20K, NTC 10K Type II and Type III | Digital input<br>Analog input                                                                                            |

## GENERAL SAFETY INFORMATION

- When performing any work (installation, mounting, start-up), all manufacturer instructions and in particular the Mounting and Installation Instructions guide (31-00642) and the user guide (31-00644) are to be observed.
- The thermostats be installed and mounted only by authorized and trained personnel.
- Rules regarding electrostatic discharge should be followed.
- If the thermostats are modified in any way, except by the manufacturer, all warranties concerning operation and safety are invalidated.
- Make sure that the local standards and regulations are always observed.
- Use only accessory equipment that comes from or has been approved by Honeywell.
- It is recommended that out-of-the-box devices be kept at room temperature for at least 24 hours before applying power. This is to allow any condensation resulting from low shipping/storage temperatures to evaporate.
- Investigated according to United States Standard UL60730-1, UL60730-2-9, EN 60730-1 and EN 60730-2-9.
- Do not open the thermostats, as they contain no user-serviceable parts inside!
- For TC300B/TC320B models, CE declarations according to EMC Directive 2014/30/EU.
- For TC320C-G models, CE declarations according to RED Directive 2014/53/EU.
- For TC300C-G models, CE declarations according to Low Voltage Directive 2014/35/EU..
- The thermostats are Class B digital apparatus and comply with Canadian ICES-003.
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- Caution: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- Prudence: Les changements ou modifications apportés à cet appareil non expressément approuvés par la partie responsable de la conformité pourraient annuler le droit de l'utilisateur à utiliser l'équipement.
- This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:
  - This device may not cause interference.
  - This device must accept any interference, including interference that may cause undesired operation of the device.

- L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
  - L'appareil ne doit pas produire de brouillage;
  - L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.
- Limited by local law regulations, version for North America does not have region selection option.
- To satisfy FCC&IC&CE RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended.
- Les antennes installées doivent être situées de façon à ce que la population ne puisse y être exposée à une distance de moins de 20 cm. Installer les antennes de façon à ce que le personnel ne puisse approcher à 20 cm ou moins de la position centrale de l'antenne. Region Selection (for Wi-Fi 2.4G device).

## SAFETY INFORMATION

The thermostats are intended for commercial environments.

The thermostats are independently mounted electronic control systems with fixed wiring.

The thermostats are used for the purpose of building HVAC control and are suitable for use only in non-safety controls for installation on or in appliances.

**Note:** All images used in this document are for illustrative purposes only and may not match the actual product.



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