

# **Honeywell** Home



# INSTALLATION GUIDE GUIDE D'INSTALLATION GUÍA DE INSTALACIÓN

# CT230-GA / CT230-GB

LINKED UNIT UNITÉ ESCLAVE UNIDAD FNI AZADA





# Need Help? We are here to help. Call 1-800-468-1502.

Besoin d'aide? Nous sommes là. Composez le 1 800 468-1502.

¿Asistencia?

Estamos aquí para ayudarlo. Llame al 1 800 468-1502.

## Before you start

Read the entire document

#### CAUTION:

- Installation must be carried out by a certified electrician and must comply with national and local electrical codes.
- Use the CT230 linked unit for resistive load only.
- Do NOT install the CT230 linked unit in an area where it can be exposed to water or rain.
- To prevent severe shock or electrocution, always turn the power OFF at the service panel before working with wiring.
- Install the CT230 linked unit onto an electrical box.
- Connect the wires using solderless connectors for copper wires. Use special CO/ALR solderless connectors for connection to aluminum wires.
- Keep the top and bottom air vents (openings) of the CT230 clean and unobstructed at all times.

### About the CT230 linked unit

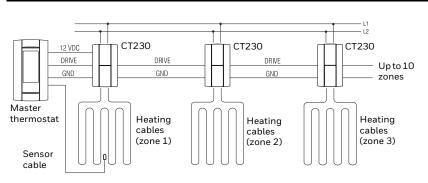
The CT230 linked unit is designed to be used in a system for large floor heating applications whose load is too high for a single conventional thermostat. The system consists of a master thermostat and multiple CT230 linked units (see diagram on the following page). The heating area is divided into zones of 15 A or less, each zone connected to a CT230 linked unit. The user sets the temperature and programs the heating schedule on the master thermostat.

- Each CT230 linked unit is powered by line voltage (120 VAC, 208 VAC or 240 VAC) and has its
  own ground fault protection mechanism. Up to 10 CT230 linked units can be used in a given
  setup.
- The master thermostat (not included) can be a TH114 or TH115 thermostat operating on 12 VDC. The master thermostat is powered by one of the CT230 linked units.

#### **Supplied Parts**

- One (1) CT230 linked unit
- Two (2) mounting screws
- Four (4) solderless connectors for copper wires

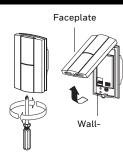
# System diagram



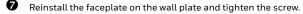
# Installing the CT230 linked units

Install each CT230 linked unit as follows:

- Turn the heating system off at the main electrical panel.
- Loosen the bottom screw and remove the CT230 faceplate from the wallplate. (The screw cannot be completely removed.)
- Connect the wallplate to the load (heating cables) and to the power supply (see wiring diagram on page 6).
  NOTE: The CT230 linked units can operate on different voltages in the same setup (e.g., 5 units @ 120 V and 5 @ 240 V).
- Install the wallplate to the electrical box using the provided screws.

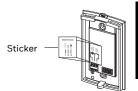


- If not already done, affix the provided terminal sticker to the wallplate.
- 6 Insert the wires (not included) through one of the two openings on the wallplate and connect the CT230 linked units together in a daisy-chain configuration (see connection diagram on page 7).



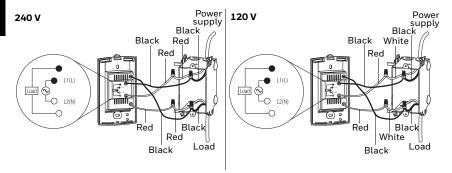
Access the ON/OFF switch by sliding the CT230 door upwards and place the CT230 linked unit on OFF.



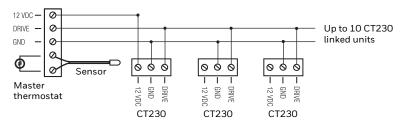


# Wiring diagram

**NOTE:** Connect the wires using the provided solderless connectors for copper wires:



# Connection diagram



#### NOTE:

- The wire distance between the master thermostat and each CT230 unit must not exceed 500 ft. (150 m). 20-AWG wires are recommended.
- The floor sensor cable must not exceed 200 ft. (60 m).

# Installing the master thermostat

WARNING: Make sure all CT230 linked units are Off.

Connect the master thermostat to the nearest CT230 linked unit (see connection diagram on page 7).

WARNING: Only one CT230 linked unit must be used to power the master thermostat.

- 0 Connect the floor sensor (included with the TH114-AF-12VDC & TH115-AF-12VDC thermostat) to the master thermostat (no polarity, see connection diagram on page 7).
  - Position the sensor cable such that it does not come in contact with the floor heating wires. The sensor must be centered between two floor heating wires for best temperature control.
  - Do NOT staple the sensor head (the plastic end) to the floor. Doing so might damage the sensor. Any damage might not be noticeable during testing but can become apparent several days later.
- Ø Loosen the bottom screw and remove the faceplate from the wallplate. (The screw cannot be completely removed.)
  - Install the wallplate on the wall using the provided screws and wall anchors.
- **4 6 6** Reinstall the faceplate on the wallplate.
- Apply power to heating system and switch each CT230 linked unit and the master thermostat to On.
- Ø Test the ground fault protection on each CT230 linked unit.