2 Zone and 3 Zone Panels

Zone Control Panels

iO-ZP2-HC iO-ZP3-HPS iO-ZP3-HCMS

These panels represent the most contractor-friendly solution today. The iO-ZP2 is a single-stage heat/cool panel designed to control 2 zones in residential and light commercial applications. The two iO-ZP3 models are designed to fit three-zone applications for single-stage, multi-stage, heat pump and dual fuel systems in residential and light commercial applications. All panels can accommodate 2 and 3 wire dampers.



Features and Benefits:

- · Auto changeover
- First call priority with time share
- Electronic discharge air sensor sold separately
- · LED status indication
- · Independent fan control by zone
- Short cycle protection
- For use with 2 or 3 wire dampers
- · Purge cycle option
- · Competitively priced

Warranty: 10 years

Construction	Aluminum back plate with mounting holes	
Mounting	Snap track with 2 back plate screws	
Dimensions	8.00" Height x 6.00" Width x 1.50" Depth	
Operating Temperature	re -40° F to 150° F	
Time Delays	3 minutes off between cooling calls 3 minutes off on low limit	
	20 minute time share	

6 Zone Panel Zone Control Panel

The iO-ZP6 is a 6 zone, two-position forced air zone control panel that can be expanded to 12 zones. The panel can be used with single-stage, multi-stage, heat pump and dual fuel equipment with up to 3 stages of heating and 2 stages of cooling. Slide switch configuration makes setup quick and easy. A wide range of control options provide ultimate application flexibility including adjustable high/low limits, adjustable high/low balance point, stage timing, capacity control and priority cooling control.

Features and Benefits:

- 6 zones expandable up to 12
- · Auto changeover
- Cooling priority or majority wins
- Twenty minute time share option
- · LED status indication
- · On-board adjustable high and low limits and balance points
- · Staging by zone thermostat or adjustable stage timer
- · Purge cycle option
- For use with 2 or 3 wire dampers
- · Competitively priced

Warranty: 10 years

3-Zone **Expansion Panel**

iO-ZP6-EP

This 3-zone expansion panel is used with the iO-ZP6 zoning panel to increase the number of zones to 9 or 12.





Construction	Aluminum back plate with mounting holes
Dimensions	13.50" Height x 11.00" Width x 2.00" Depth
Operating Temperature	-40° F to 150° F
Adjustable Limits	High Limit (100° F to 175° F) Low Limit (40° F to 58° F) High Balance Point (55° F to 70° F) Low Balance Point (0° F to 50° F)
Purge Cycle	Off or 1 minute
Fan Mode	All zones or by zone thermostat

ESP 2 Zone and 3 Zone

Zone Control Panels

iO-ZP2-HC-ESP iO-ZP3-HPS-ESP iO-ZP3-HCMS-ESP

Our ESP zone panels integrate our 2 and 3 zone panels with our award-winning ESP, *Electronic Static Pressure*, technology. Each panel comes with a static pressure sensor. As zone dampers open and close, the static pressure sensor continuously monitors the system static pressure. If the static pressure goes above the static pressure setpoint, the panel will send a signal to all non-calling zone dampers to begin opening to a point where the static pressure setpoint is maintained. This eliminates the need for a conventional bypass damper.

The **iO-ZP2-HC-ESP** is a single-stage heat/cool zone panel designed to control 2 zones in residential and light commercial applications. The **iO-ZP3-HPS-ESP** model is designed to fit 3 zone applications for heat pump and dual fuel systems in residential and light commercial applications. The **iO-ZP3-HCMS-ESP** model is designed to fit 3 zone applications for multistage heating and cooling in residential and light commercial applications.



NO BYPASS REQUIRED!

Features and Benefits:

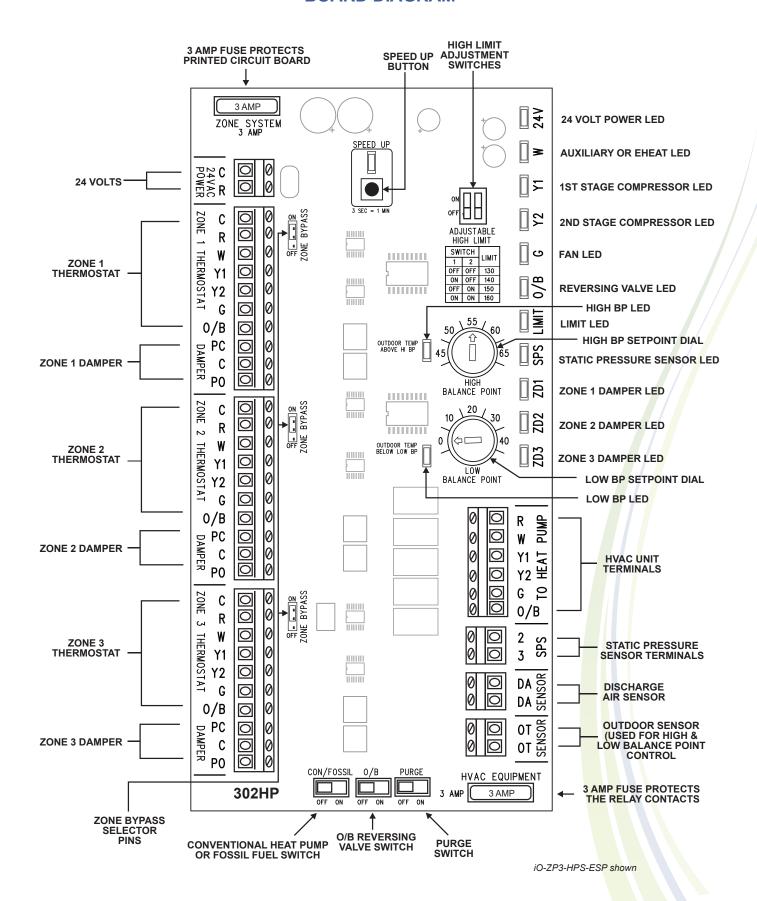
- Built-in static pressure monitoring eliminates the need for a bypass damper
- Auto changeover
- · First call priority with time share
- · Electronic discharge air sensor
- · LED status indication
- · Independent fan control by zone
- · Short cycle protection
- · Competitively priced
- For use with 2 or 3 wire dampers*
- · Adjustable high and low limit
- Adjustable high and low balance point (HPS)

Warranty: 10 years

*For ESP functionality, 3-wire MD dampers and static pressure sensor must be used

Construction	Aluminum back plate with mounting holes	
Mounting	Snap track with 2 back plate screws	
Dimensions	8.00" Height x 6.00" Width x 1.50" Depth	
Operating Temperature	-40° F to 150° F	
Time Delays	3 minutes off between cooling calls 3 minutes off on low limit 20 minute time share	

BOARD DIAGRAM



iO-ZP6-ESP

ESP 6 ZoneZone Control Panel

Our award winning ESP 6 zone panel integrates with our standard 6 zone panel and comes with a static pressure sensor. As zone dampers open and close, the static pressure sensor continuously monitors the system static pressure. If the static pressure goes above the static pressure setpoint, the panel will send a signal to all non-calling zone dampers to begin opening to a point where the static pressure setpoint is maintained. This eliminates the need for a conventional bypass damper.

The iO-ZP6-ESP is a 6 zone, two-position forced air zone control panel that can be expanded to 12 zones. The panel can be used with single-stage, multi-stage, heat pump and dual fuel equipment with up to 4 stages of heating and 2 stages of cooling. Slide switch configuration makes setup quick and easy. A wide range of control options provide ultimate application flexibility including adjustable high/low limits, adjustable high/low balance point, stage timing, capacity control and priority cooling control.



NO BYPASS REQUIRED!

Features and Benefits:

- 6 zones expandable up to 12
- · Auto changeover
- Cooling priority or majority wins
- · Twenty minute time share option
- Optional night thermostat
- · Humidification/Dehumidification pass-throughs
- Staging by zone thermostat or stage timer
- Purge cycle option
- · Compatible with variable speed equipment
- For use with 2 or 3 wire dampers*
- · Adjustable high and low limit
- · Adjustable high and low balance point

Warranty: 10 years

*For ESP functionality, 3-wire MD dampers and static pressure sensor must be used

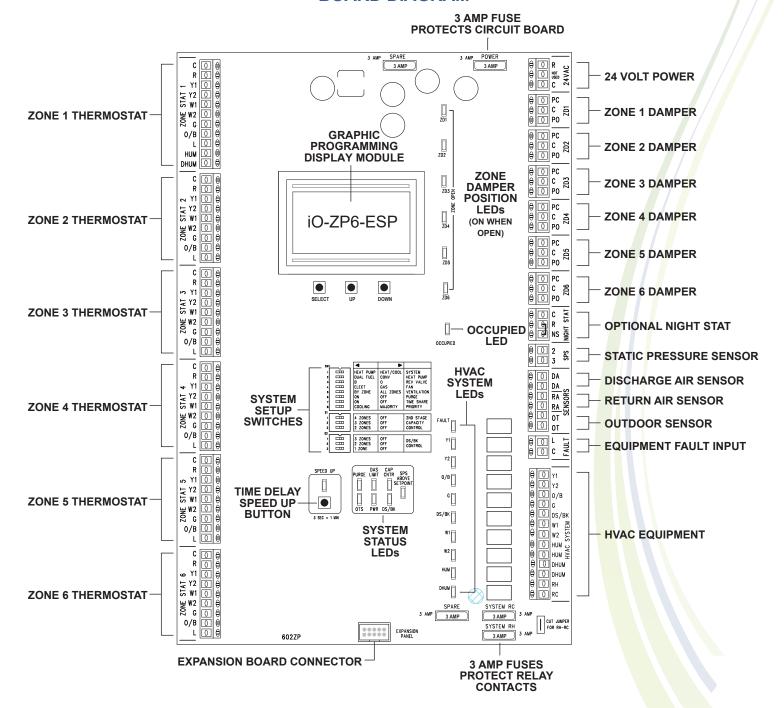
Construction	Aluminum back plate with mounting holes
Dimensions	13.50" Height x 11.00" Width x 2.00" Depth
Operating Temperature	-40° F to 150° F
Adjustable Limits	High Limit (100° F to 175° F) Low Limit (40° F to 58° F) High Balance Point (55° F to 70° F) Low Balance Point (0° F to 50° F)
Purge Cycle	Off or 1 minute
Fan Mode	All zones or by zone thermostat



This 3-zone expansion panel is used with the iO-ZP6-ESP zoning panel to increase the number of zones to 9 or 12.

(2) ZP6 expansion panels shown

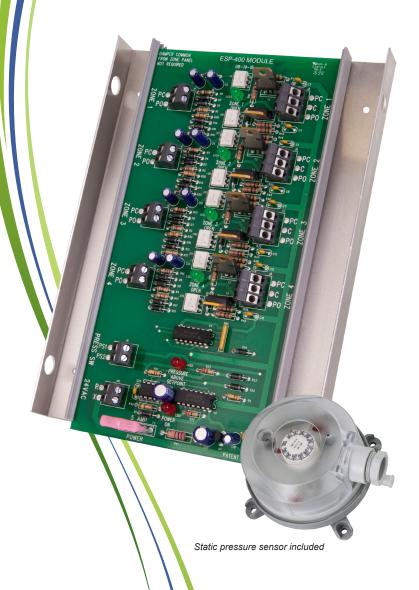
BOARD DIAGRAM



ESP-400

Electronic Static Pressure Control Panel

The ESP-400 is an award winning add-on panel that is used with an existing zone panel. As dampers open and close, the ESP-400 uses the included static pressure sensor to monitor static pressure in a zoning system and makes adjustments to 3-wire zone dampers to relieve static pressure at the zones, eliminating the need for a bypass.



NO BYPASS REQUIRED!

Features and Benefits:

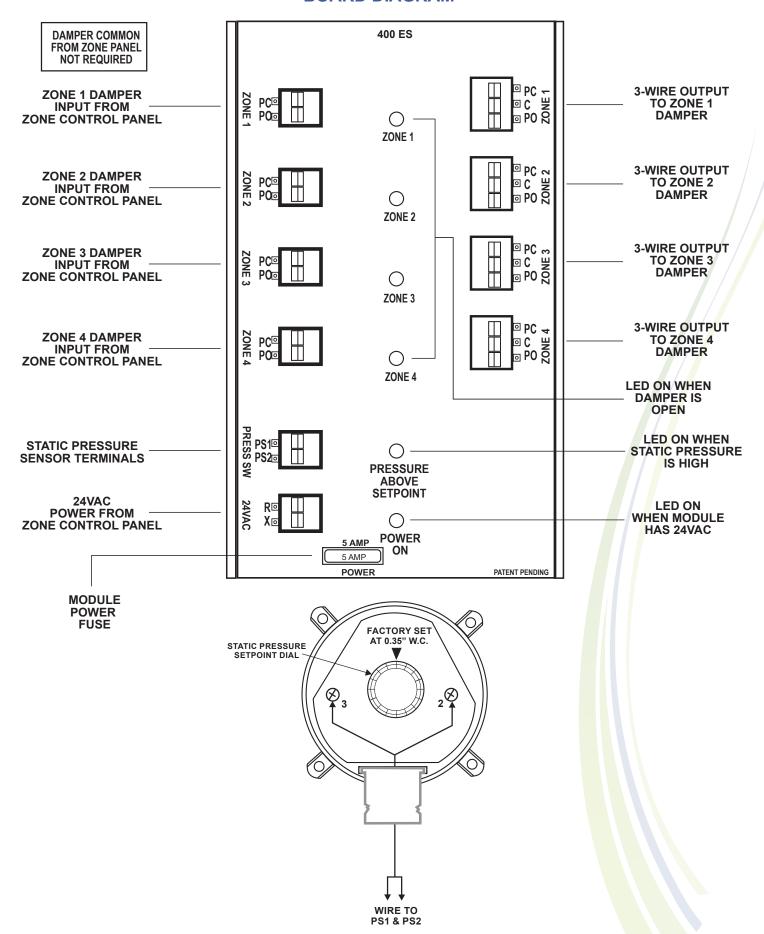
- Easy to install
- · Lowers labor cost
- Lowers overall system cost
- · Eliminates tight space issues
- Increases system efficiency
- Uses standard 3-wire zone dampers*
- Factory set (Easy to adjust)
- · Prevents coil freeze-up
- · Eliminates air noise
- · Includes static pressure sensor
- · Works with most zone panels

Warranty: 10 years

*For ESP functionality, 3-wire MD dampers and static pressure sensor must be used

Construction Aluminum backplate with mounting holes	
Mounting	Snap track with 2 backplate screws
Dimensions	8.00" Height x 6.00" Width x 1.50" Depth
Operating Temperature	-40° F to 150° F

BOARD DIAGRAM



D and HD Series

D-XX HD-XXXX

2-Wire Round/Rectangular Zone Dampers

The D Series dampers are galvanized steel, single-blade dampers with a 24 volt spring return actuator. These dampers are shipped complete and ready for installation. They are rated for duct systems with less than 1.0" WC. The D Series damper has a simple adjustment for setting the minimum position.



Features and Benefits:

- · Compatible with most zone control panels
- 24-gauge steel shell
- 24 volt synchronous motor
- Quiet operation
- Simple adjustment for setting the minimum position

Warranty: 5 years

Can be configured as PC/SO or PO/SC

Specifications:

Construction	24-gauge steel shell
Sizes	5", 6", 7", 8", 9", 10", 12", 14", 16", 18"
Damper Actuator Type	24VAC, 10VA, two-wire power close/spring open

The HD Series dampers are extruded aluminum parallel blade dampers with a 24 volt spring return actuator. These dampers are shipped complete and ready for installation. The HD Series dampers can be installed in any position. They are rated for duct systems with less than 1.0" WC. The damper has a simple adjustment for setting the minimum position.



Features and Benefits:

- Compatible with most zone control panels
- · Extruded aluminum
- 24 volt synchronous motor
- Quiet operation
- Simple adjustment for setting the minimum position

Warranty: 5 years

Can be configured as PC/SO or PO/SC

Construction	Extruded aluminum
Sizes	6" x 6" to 36" x 24" side-mount or bottom-mount motor
Damper Actuator Type	24VAC, 10VA, two-wire power close/spring open

MD Series

Two-Position, 3-Wire Dampers

The MD Series dampers are perfect for use with most zoning systems and recommended for use with our iO-ESP-400 and ESP zone panels. These dampers are shipped complete and ready for installation. The MD Series dampers can be installed in any position. They are rated for duct systems less than 1.0" WC. The MD Series damper has a simple adjustment for setting the minimum position.

Features and Benefits:

- Two-position 24V motor; power close/power open, 3-wire
- Compatible with iO-ESP-400 and iO Zone ESP
- Quiet operation
- Simple adjustment for setting the minimum position

Warranty: 5 years





Construction	Round: 24-gauge steel shell Rectangular: extruded aluminum
Sizes	Round: 4" to 20" Rectangular: 6" x 6" to 30" x 20" side-mount and bottom-mount
Damper Actuator Type	24VAC, 2.5VA, three-wire power open/power close
Timing	60 seconds

CD Series

Carrier[®] Infinity[®] and Bryant[®] Evolution[®] Compatible Dampers

CD-XX CD-XXXX CRD-XX

iO HVAC Controls offers a wide selection of in-stock round and rectangular dampers that are compatible with the Carrier[®] Infinity[®] and Bryant Evolution[®] zone control systems. We offer more sizes, better pricing and same-day shipping.



Features and Benefits:

- Compatible with the Carrier[®] Infinity[®] and Bryant[®] Evolution[®] systems
- Two-position 24V motor; power close/power open, 3-wire
- Large selection available in stock ship the same day
- Retrofit, round and rectangular offers installation flexibility
- Rectangular offers side-mount and bottom-mount motor
- Simple adjustment for setting the minimum position

Warranty: 10 years





Specifications:

Construction	Round: 24-gauge steel shell Rectangular: extruded aluminum
Sizes	Round: 5" to 20" Rectangular: 6" x 6" to 36" x 24" side-mount or bottom-mount motor Retro: 5" to 10"
Damper Actuator Type	24VAC, 2.1VA, three-wire power open/power close
Timing	15 seconds

ACTUATORS

TD-XXX TD-XXXX TRD-XX

TD Series

Trane® and American Standard® Compatible Dampers

iO HVAC Controls offers a wide selection of in-stock round and rectangular dampers that are compatible with the Trane[®] ComfortLink™ II and the American Standard[®] AccuLink™ zone control systems. We offer more sizes, better pricing and same-day shipping.

Features and Benefits:

- Compatible with the Trane® ComfortLink™ II and the American Standard® AccuLink™ systems
- Two-position 24V motor; power close/power open, 3-wire
- Large selection available in stock ship the same day
- Retrofit, round and rectangular offers installation flexibility
- Rectangular offers side-mount and bottom-mount motor
- Simple adjustment for setting the minimum position

Warranty: 10 years







Construction	Round: 24-gauge steel shell Rectangular: extruded aluminum
Sizes	Round: 5" to 20" Rectangular: 6" x 6" to 36" x 24" side-mount and bottom-mount Retro: 5" to 10"
Damper Actuator Type	24VAC, 2.5VA, three-wire power open/power close
Timing	60 seconds

RD-XX

Retro Series

Retrofit Zone Control Dampers

These low-cost dampers make it easy to quickly add zoning to an existing duct system. The Retro Damper is the perfect alternative to expensive pneumatic systems that require special plastic tubing and pumps. This damper uses standard thermostat wire and will work with most zone control panels.





Features and Benefits:

- · Compatible with most zone control panels
- 18-gauge steel
- · Installation flexibility
- · Saves time and labor expense
- · Resolves tight space issues

Warranty: 5 years

Construction	18-gauge steel
Sizes	5", 6", 7", 8", 9", 10"
Damper Actuator Type	24VAC, 1.5VA, three-wire power open/power close
Timing	60 seconds

BH and BV Series

Barometric Bypass Dampers

BH and BV Series barometric bypass dampers are used to automatically bypass excess air when increases in duct pressure occur due to closing of zone dampers. Various relief air control settings are accomplished by simple adjustment of the weight on the arm. Barometric bypass dampers are recommended for systems up to 0.75" WC of static pressure. These come as horizontal (BH) or vertical (BV) configuration in both round and rectangular.

Features and Benefits:

- · Easy adjustment
- · Many sizes available
- Installation flexibility
- · Reduces system noise
- · Round and rectangular

Warranty: 5 years



Construction	Round: 24-gauge steel shell, aluminum shaft, nylon bushings, blade seals, adjustable weights Rectangular: 22-gauge zinc plated steel frame, single-blade design, adjustable weights
Sizes	Round: 6" to 16" Rectangular: 12" x 8" to 20" x 12"
Application	Systems with static pressure up to 0.75" WC

EB Series

EB-XXX EB-XXXX

Electronic Bypass Dampers

EB Series electronic bypass dampers are used to automatically bypass excess air when increases in duct pressure occur due to closing of zone dampers. The EB Series dampers utilize a floating-point actuator along with the iO-SPC static pressure control. The iO-SPC has a fully calibrated setpoint dial for easy setup and adjustment. The iO-SPC maintains the system static pressure by modulating the bypass damper. EB Series electronic bypass dampers are recommended for systems from 0.08" WC up to 1.20" WC of static pressure.



Features and Benefits:

- Easy Adjustment
- · Many sizes available
- Installation flexibility
- · Reduces system noise
- · Round and rectangular

Warranty: 5 years



Construction	Round: 24-gauge steel shell, aluminum shaft, nylon bushings, blade seals Rectangular: aluminum frame and blades, nylon bushings
Sizes	Round: 6" to 20" Rectangular: 6" x 6" to 36" x 24"
Application	Systems with static pressure .08" to 1.20" WC
Damper Actuator Type	24VAC, 2VA, floating-point
Timing	90 seconds
Damper Position Indicator	Green LED indicates when the damper is opening.

MZR TM Motorized Zone Registers

The Motorized Zone Register is a low-cost, rugged motorized register designed to work with most forced air zone control systems. It can also be used as a stand-alone register with a wall mounted thermostat to eliminate over-heating or over-cooling in bonus rooms, sun rooms, guest rooms and basements. The MZR is the perfect solution when you are unable to install zone dampers.

Features and Benefits:

- · Low cost
- Easy to install
- Works with most forced air zone control systems
- Allows zoning to be installed in almost any application
- Can be used in floor and ceiling applications (polymer register available for wall applications)
- · Designed to fit most register boots

Warranty: 5 years



Operating Voltage	24VAC
Amperage	0.26A
VA Rating	6.5VA
Configuration	PC/SO or PO/SC

Dimensions	Color	
4" x 10"	Tan and White	
4" x 12"	Tan and White	
4" x 14"	Tan and White	
6" x 10"	White	
6" x 12"	White	
May require plenum-rated wire		

Zone OneTM

Two-Position, Stand-Alone Dampers

D-Z1-XX D-Z1-XXXX

The Zone One two-position, stand-alone damper is a control damper assembly designed to solve over-heating and over-cooling problems. It can be used to control a single room, or by using multiple dampers, zone multiple rooms. The damper is wired to a thermostat in the room or area that is too hot or too cold. Using a duct temperature sensor mounted on the damper, the damper will open or close to help maintain setpoint based on the air temperature in the duct system.



Features and Benefits:

- Stand-alone control of single room or multiple rooms
- Two-position
- Auto changeover
- · Minimum position adjustment
- · LED status indicator
- · Controls pre-wired
- No control panel required
- Installation flexibility
- Round and rectangular dampers

Warranty: 5 years



iO-UT32 thermostat sold separately

Damper Construction	Round: 24-gauge steel spiral shell, aluminum shaft, nylon bushings, blade seals Rectangular: aluminum frame and blades, nylon bushings
Damper Sizes	Round: 6" to 18" Rectangular: 6" x 6" to 36" x 24" side-mount or bottom-mount motor
Damper Actuator Type	24VAC, 10VA, 2-wire power open/spring close

Titan Thermostat 3H/2C Touchscreen Thermostat

The Titan thermostat is a low-cost, universal touchscreen thermostat available from iO HVAC Controls. The iO-UT32 can be battery powered or hardwired which makes it ideally suited for use in residential and light commercial applications.

Features and Benefits:

- · Battery powered or hardwired
- · Manual or auto changeover
- Programmable or non-programmable
- Up to 3H/2C, gas/electric, heat pump or dual fuel
- · Keypad lockout
- Adaptive recovery
- Assignable auxiliary relay
- · Adjustable heating and cooling setpoint limits
- Outdoor temperature display (with optional outdoor sensor, iO-UT32-OTS)
- Temperature averaging (with optional indoor sensors, iO-UT32-S1, iO-UT32-S2)
- Short cycle protection
- High operating temperature makes it ideal for hot yoga rooms

Warranty: 5 years





Specification 5.	
Dimensions	3.75" Height x 5.5" Width x 1.312" Depth
Display Size	2.375" Height x 4.125" Width
Input Voltage	24VAC, 50/60 Hz or 2 AA alkaline batteries
Relay Rating	24VAC @ 1Amp maximum per relay
Operating Temperature	32° F to 150° F
Operating RH	0% – 90% (non-condensing)
Temperature Sensors	10K NTC type 2
Short Cycle Protection	4 minutes
Setpoint Range	41° F to 122° F