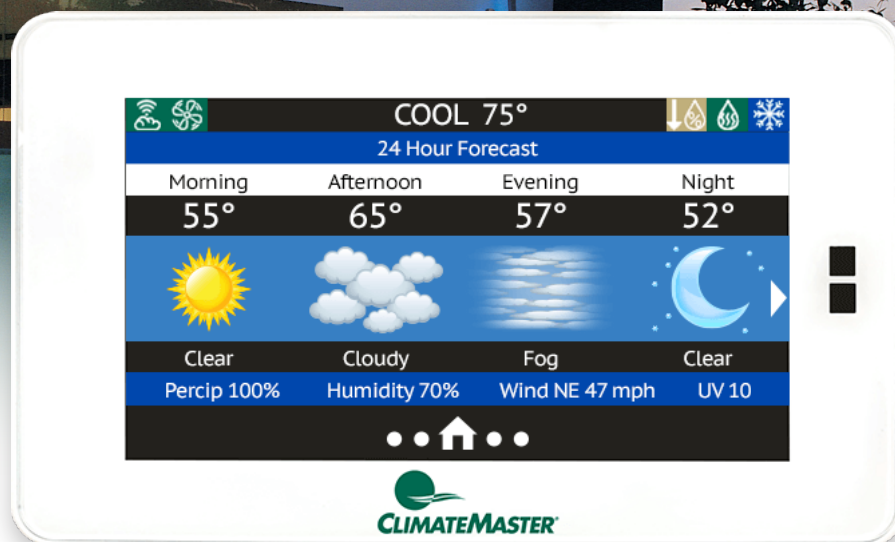


Commerical Thermostat

Submittal Data



Rev.: January 24, 2023



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Table of Contents

T-Stat Series

AWC99U01	3
AVB32V03C/R	4
ATA32V01	5
AVB32V02C/R	6
Wall Plates for CM500, CM300, CM100	7
ATA11U01	8
ATA11U03	9
ATA22U01	10
ATP21W02	11
ATP32U03C	12
ATP32U04C	14
AST008C	16
11B0100N53 Wire Harness (12" Pigtail)	17
ASW 016, 017, 018 Wall Sensors for MPC	18
Revision History	19

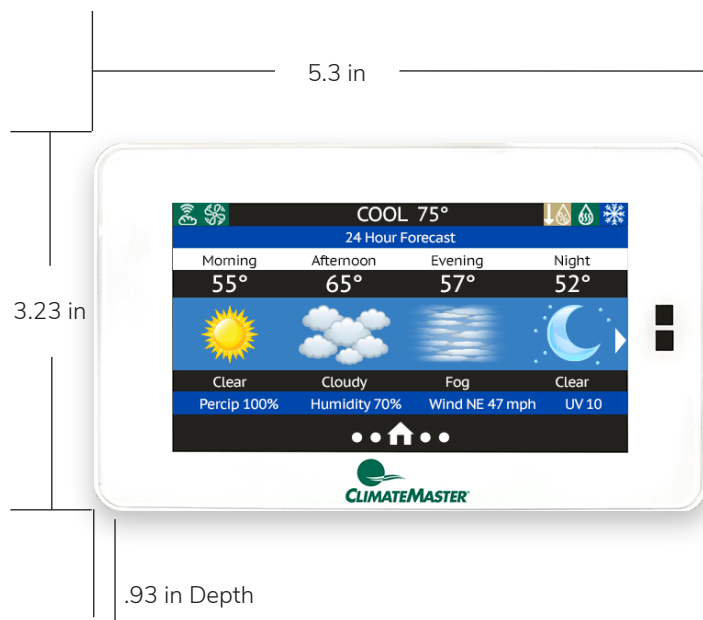


Document page number is shown next to part number (e.g. LC204 - 3 = page 3). Since not all pages are typically used in the submittals process, the page number in the lower right corner can still be used (page ____ of ____).

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AWC99U01: Communicating, Wi-Fi, Color Touch Screen

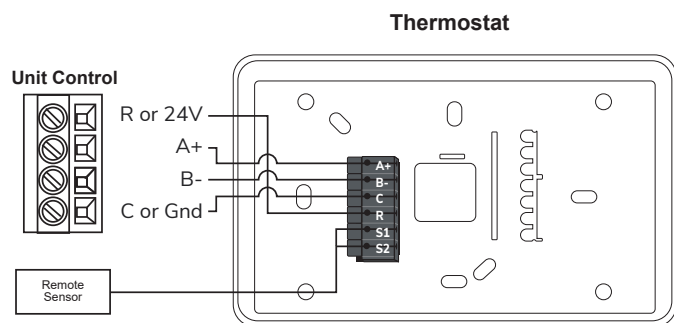
Communicating, 3 Heat/2 Cool, Auto/Manual Changeover, Programmable (7 Day) - w/Humidity Control



Features (cont.):

- Wi-Fi - free mobile app available
- Color touchscreen display
- Seamless integration with ClimateMaster water source heat pumps
- Mobile remote system controls
- Early fault warning notifications
- Remote diagnostics enable contractors to access systems, adjust settings, reset faults, and diagnose issues from any internet connected device
- Real time operations data and system schematics available on the phone app or website
- Integrated control of both temperature and relative humidity
- Integrated control eliminates separate thermostat and dehumidistat/humidistat
- Thermostat can be programmed to use humidification output to control a humidifier
- °F or °C temperature display
- 12 or 24 hour clock
- Individual heat and cool setpoints
- Automatic (program mode) or manual (HOLD) operation
- 7-day programming
- Convenient overrides allow temporary setpoint changes
- Setpoints are permanently held in memory (no batteries used) and retained during power outages
- Room temperature offset adjustment
- Smart Recovery anticipates the time required to bring the space temperature to the next programmed event, and brings on the heat pump accordingly
- Fault indication with with icon displays
- Service contractor information available at the thermostat (when set-up/connected to a myUplink account)
- Simple four wire connection
- Exclusive service communication that display conditions when fault occurred, last 5 faults, and list of possible causes on mobile app and website
- Compatible with optional AST008C sensor for use as remote and/or outdoor sensor, or for indoor wall mounted sensor use ASW06

Mounting:



Application:

The AWC99U01 iGate® 2 Communicating Programmable Thermostat provides 3 stages heating, 2 stages of cooling, with remote access for maximized temperature and humidity control.

Features:

- When combined with DXM2.5 unit controls and Constant Volume (CV) ECM fan motors, CFM can be adjusted from the units minimum to maximum range by increments of 25 CFM.
- From the myUplink app, up to 6 unit installed temperature sensors can be viewed, water coil (LT1), air coil (LT2), compressor discharge, leaving air*, leaving water, entering water
- Dehumidification output is designed to work with ClimaDry II reheat whole house dehumidification or with CV ECM fan dehumidification mode

***Not all units come standard with leaving air temperature sensors. Please consult product line specific submittals for details on sensor availability**

Specifications:

- Input Power: 24 VAC +/- 10% @3 V
- 32°F to 104°F [0°C to 40°C]
- 10% to 95% non-condensing
- Wi-Fi connectivity supports Wi-Fi: 802.11 a/b/g/n standards on 2.4 GHz networks

Temperature Settings:

- Set point range: Heating - 50F to 88F; Cooling - 52F to 90F
- Dehumidification setpoint range: 15% to 95% RH
- Humidification setpoint range: 10% to 45% RH

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AVB32V03C/R: Touch Screen Wi-Fi

ClimateMaster CM500 Thermostat



Features (cont.):

- Optional wall plate available
- HEAT-OFF-COOL-AUTO system selection
- Humidity control for use with ClimaDry® equipped units
- Override for unoccupied periods with adjustable override timer (1-4 hours)
- Customizable display
- Smart fan
- Remote access – View and change setpoints, temperatures, equipment function, view or change schedule, SA, RA, OA (with additional sensor), change setpoint limits
- Web portal provides daily, weekly runtime graphs
- Current weather and forecast screen
- English, Spanish or French

Electrical Rating:

- 0 – 28 VAC 50/60Hz, 5VA max

Output Rating:

- Y1, Y2, G – 0.8 Amp, all others 0.4 Amp, total max on all outputs - 3 Amp.

Setpoint Range

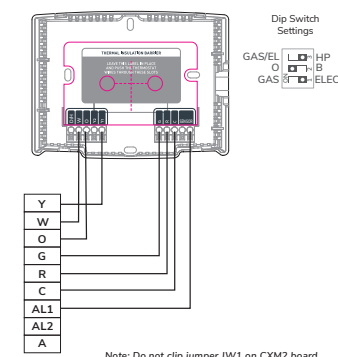
- 35°F to 99°F (2°C to 37°C) **Note: User must maintain temperature settings within proper unit operating temperature range. See specific unit IOM for details.**

Connectivity:

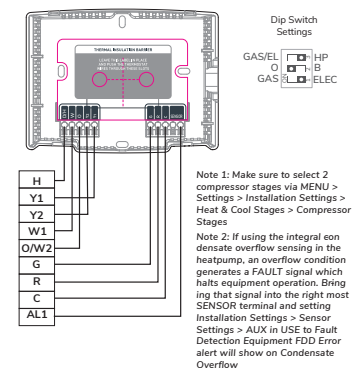
- Integrated 2.4 GHz b/g/n Wi-Fi radio for remote monitor and control.

Wiring:

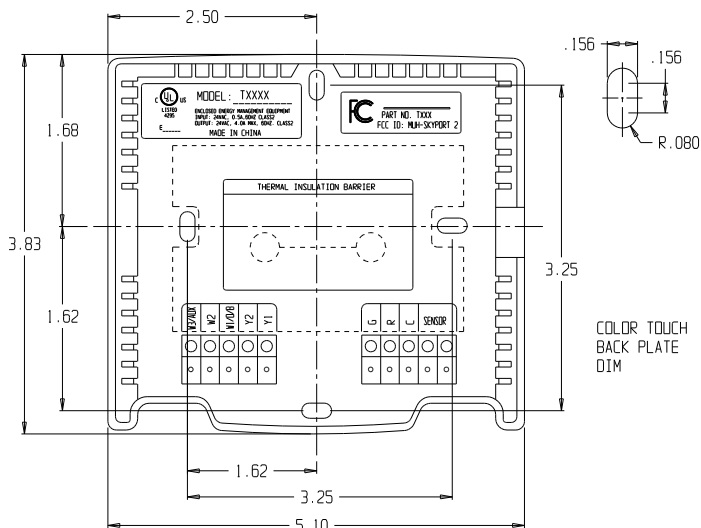
Single Stage Heat Pump with AUX Heat



Dual Stage Heat Pump with AUX Heat and ClimaDry



Mounting:



Features:

- LCD Hi resolution touch screen display
- Heat pump or DX with gas or electric heat
- Up to 4 heat and 2 cool stages
- Humidity sensor included
- Internet enabled
- 7-day programmable
- Wi-Fi – free mobile apps available
- Lockout feature
- Programming and setpoints stored in non-volatile memory (time clock does not advance)

ATA32V01: Auto Changeover 3H 2C

ClimateMaster CM100 Thermostat



Features (cont.):

- Setpoints and programming held in memory during power outages (time clock does not advance)
- Backlight feature selectable
- Large number display easy to read
- Optional wall plate available for replacement applications
- Dual setpoints with adjustable dead band

Electrical Rating:

- 20 – 28 VAC 50/60Hz, 5VA max

Output Rating:

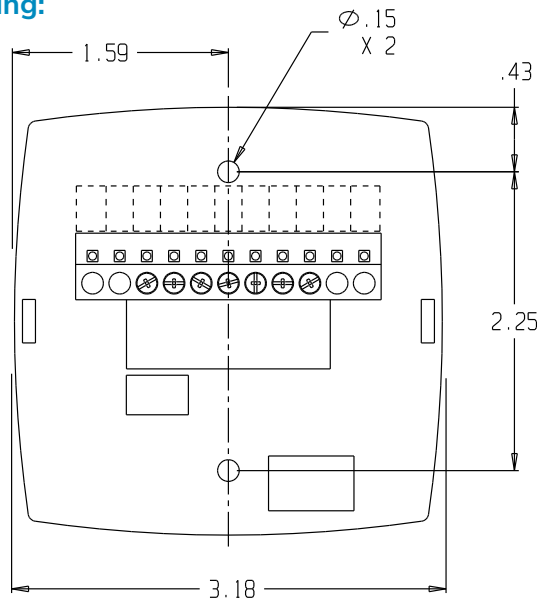
- Y1, Y2, G – 0.8 Amp, all others 0.4 Amp, total max on all outputs - 3 Amp.

Setpoint Range

- 35°F to 99°F (2°C to 37°C) **Note: User must maintain temperature settings within proper unit operating temperature range. See specific unit IOM for details.**

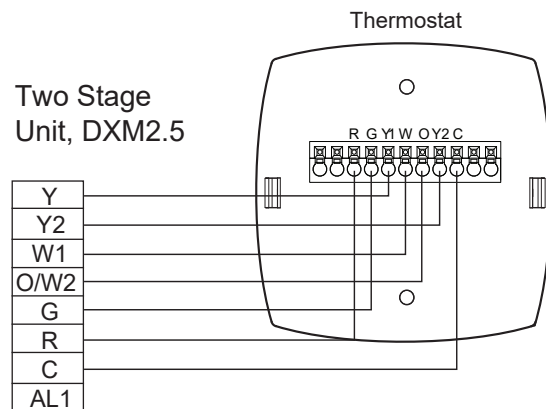
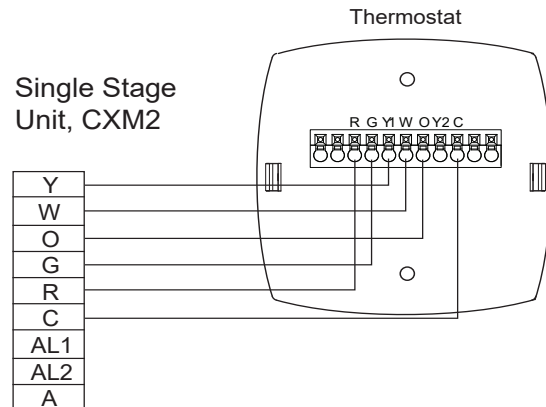
Wiring:

Mounting:

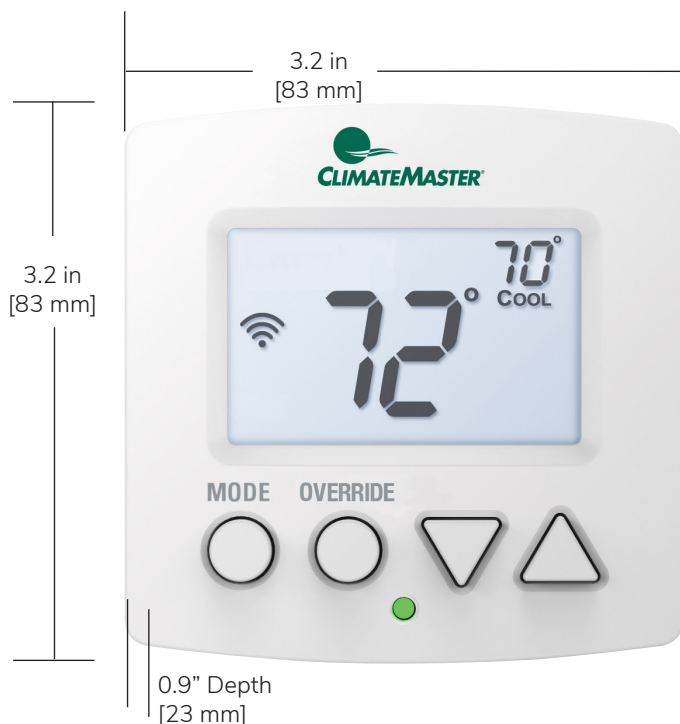


Features:

- 24 volt thermostat for use with water source heat pump
- HEAT-OFF-COOL-AUTO system selection
- FAN-ON-AUTO selection
- °F or °C temperature display
- Keypad lockout feature selectable
- Bi-color LED indicates heating or cooling demand
- Time clock with day of the week
- Space temperature and setpoint display
- Quick Start and advanced setup menus



AVB32V02C/R: 3H 2C 7-Day Programmable Wi-Fi ClimateMaster CM300 Thermostat



Features (cont.):

- Optional remote wireless temperature sensors
- HEAT-OFF-COOL-AUTO system selection
- Time clock with day of week
- Humidity control for use with ClimaDry® equipped units
- Override button for unoccupied periods with adjustable override timer (1-4 hours)
- Backlight/Nightlight feature

Electrical Rating:

- 20 – 28 VAC 50/60Hz, 5VA max

Output Rating:

- Y1, Y2, G – 0.8 Amp, all others 0.4 Amp, total max on all outputs - 3 Amp.

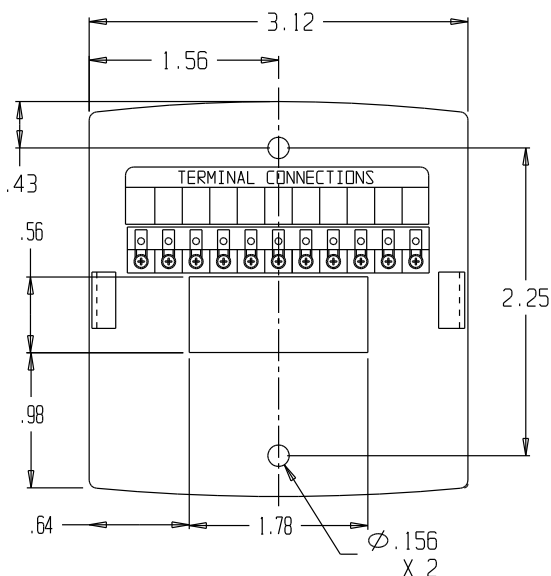
Setpoint Range:

- 35°F to 99°F (2°C to 37°C) **Note: User must maintain temperature settings within proper unit operating temperature range. See specific unit IOM for details.**

Connectivity:

- Integrated 2.4 GHz b/g/n Wi-Fi radio for remote monitor and control.

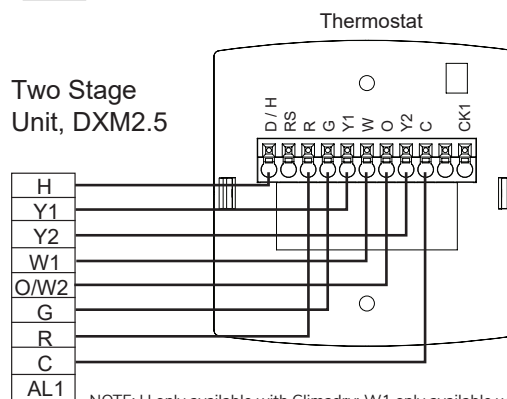
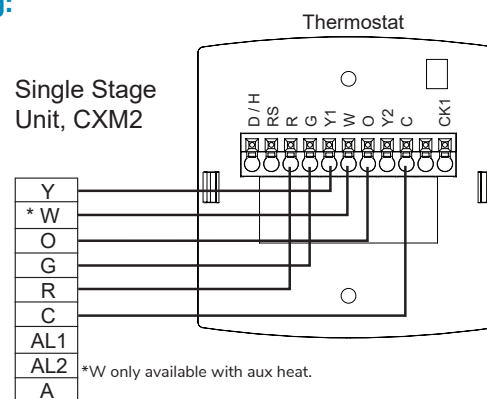
Mounting:



Features:

- Heat pump or DX with gas or electric heat
- 3 heat, 2 cool multi-stage
- 7-day programmable
- Wi-Fi - free mobile apps available
- Bi-color LED indicates heating or cooling demand
- Keypad lockout feature
- Programming and setpoints stored in non-volatile memory (time clock does not advance)
- Optional wall plate available

Wiring:

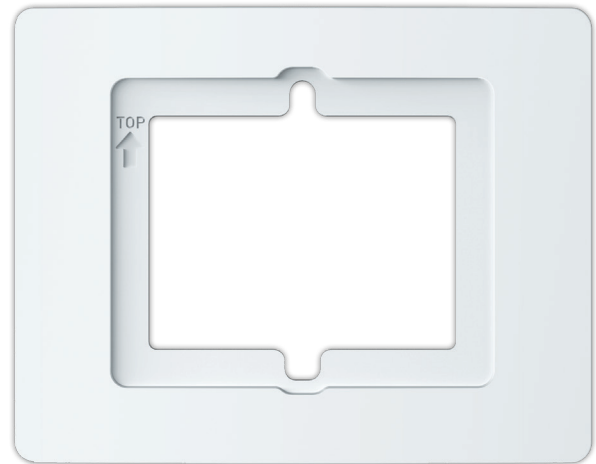


NOTE: H only available with Climadry; W1 only available with aux heat and Y2 only available with 2 stage heating/cooling. For one or two compressor units, refer to that unit's installation manual.

Wall Plates for CM500, CM300, CM100

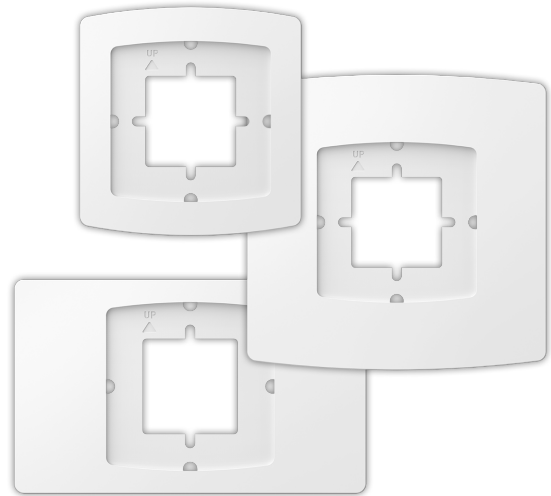
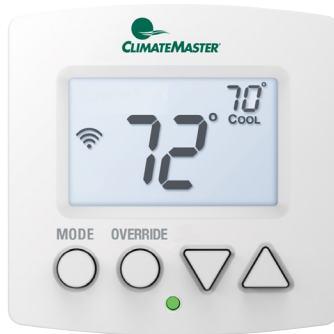
CM500 / AVB32V03C/R:

ACC-WPLWH – Wall Plate for CM500 (7.0"w x 5.5"h)



CM300 / AVB32V02C/R:

ACC-EMIN-S – Wall Plate - Small (4.62"w x 4.81"h)
ACC-EMIN-M – Wall Plate - Medium (7.0"w x 4.25"h)
ACC-EMIN-L – Wall Plate - Large (6.25"w x 6.17"h)



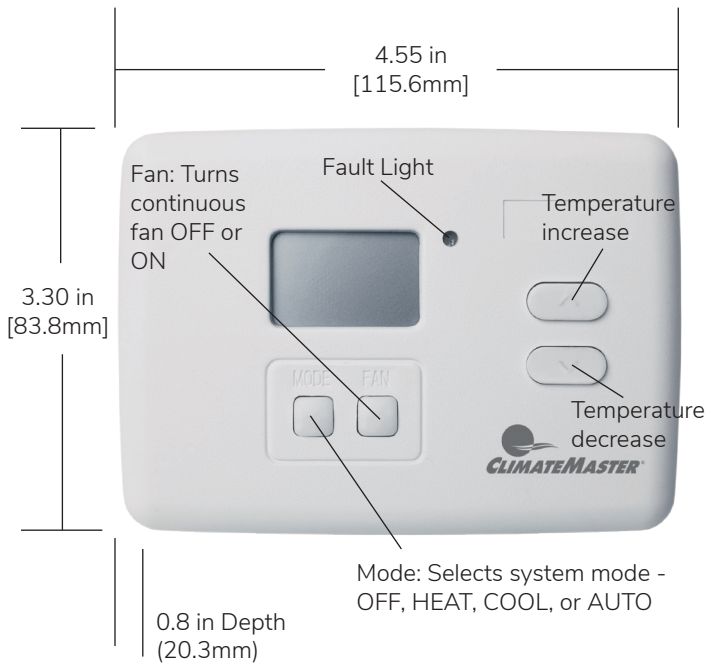
CM100 / ATA32V01:

ACC-0421S – Wall Plate - Small (4.62"w x 4.62"h)
ACC-0421M – Wall Plate - Medium (7.0"w x 4.25"h)
ACC-0421L – Wall Plate - Large (6.3"w x 5.8"h)

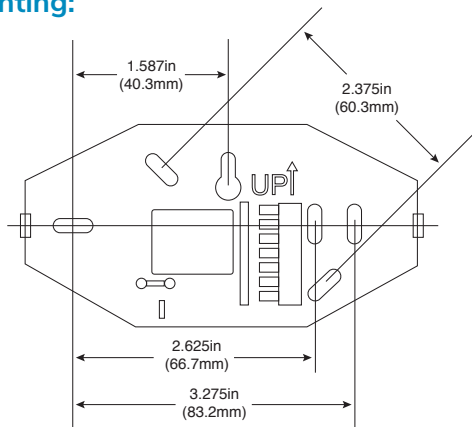


ATA11U01: Auto Changeover

One Heat/One Cool, Auto/Manual Changeover, Non-Programmable



Mounting:



Application:

The ATA11U01 electronic thermostat provides single-stage, non-programmable temperature control for 24V water-source heat pump systems.

Features:

- Heat-Off-Cool-Auto System selections
- Fan-On-Auto selections
- °F or °C temperature display
- Configurable automatic or manual changeover operation
- Light emitting diode (LED) for alarm status.
- Installer setup options allow for customized applications
- Zero temperature droop performance
- Temperature display adjustment feature provides display offset for custom applications

Features (cont.):

- Setpoints are permanently held in memory (no batteries used) and retained during power outages
- Extended fan operation feature can be used to operate fan for 90 seconds after “Y” turns off
- Setup feature allows either “current room temp” or the “current setpoint” to be displayed
- Optional safety setpoints ensure that heating and cooling will occur even if thermostat is in “Off” mode
- Backplate wiring for easy installation

Electrical Rating:

- Input Power: 18 to 30 Vac, 50/60 Hz.

Temperature Settings:

- Setpoint Range: 50°F to 90°F [10°C to 32°C]
Note: User must maintain thermostat setting within proper unit operating temperature range (See specific unit(s) IOM for details)
- The default setpoint for heating is 70°F [21°C] and for cooling is 74°F [23°C]. Press the ▲ or ▼ keys to change the setting. To change between heat and cool settings, press the mode key until the setting to be changed appears

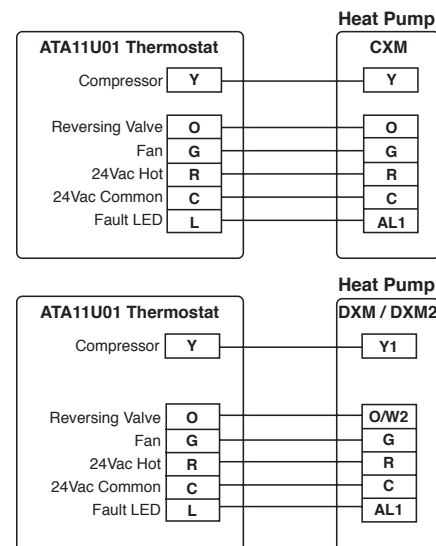
Display Range:

- Display Updates: Updated every 12 seconds
- Differential (auto changeover model): 3°F [1.5°C] minimum

Output Ratings:

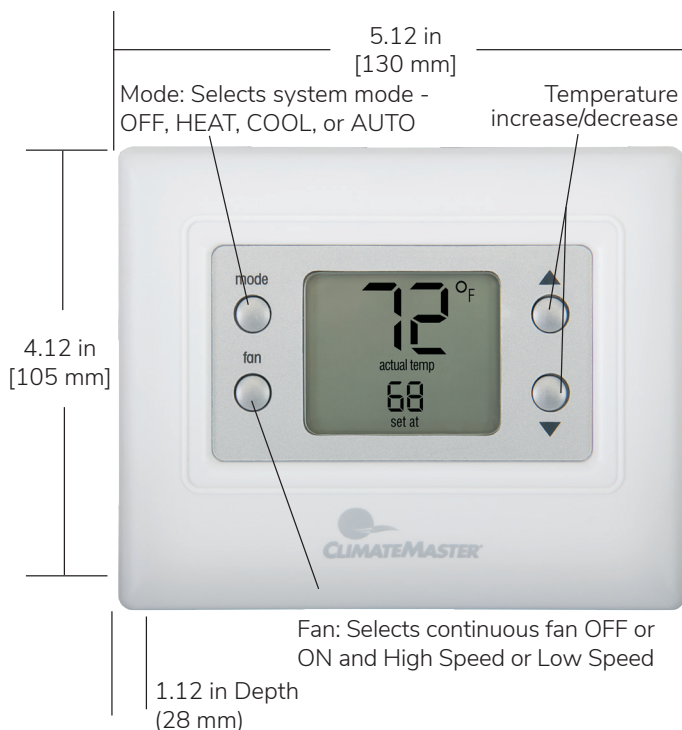
- Maximum current for each output is 1 Amp

Wiring:



ATA11U03

One Heat/One Cool, Auto/Manual Changeover w/Fan Speed Switch, Non-Programmable



Features (cont.):

- °F or °C temperature display
- Backlight user select
- Installer setup options allow for customized applications, including dead band adjustment, temperature display offset, manual heat-cool only, keypad lockout, sensing on board or remote, maximum cycles per hour, fan speeds (2 or 1), setting minimum cooling temperature, and setting maximum heating temperature
- Zero temperature droop performance
- Setpoints are permanently held in memory (no batteries used) and retained during power outages
- Backplate wiring for easy installation

Electrical Rating:

- Input Power: 18 to 30 Vac, 50/60 Hz

Temperature Settings:

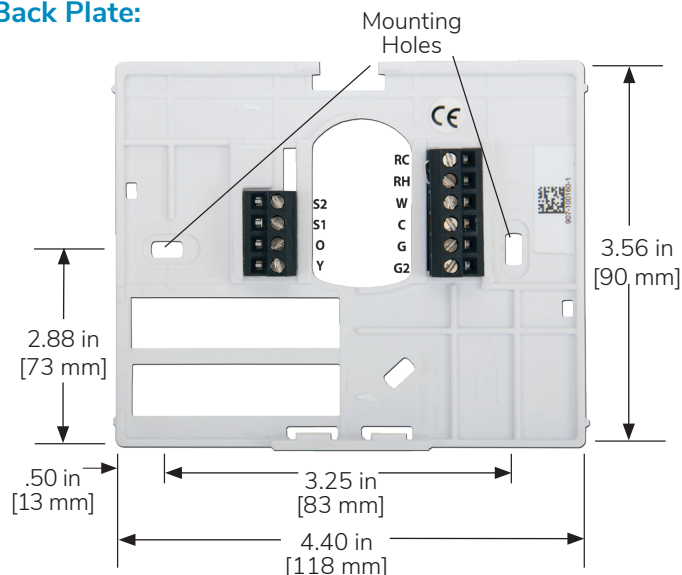
- Setpoint Range: 50°F to 90°F [10°C to 32°C]
Note: User must maintain thermostat setting within proper unit operating temperature range (See specific unit(s) IOM for details)
- The default setpoint for heating is 68°F [20°C] and for cooling is 78°F [25.5°C]. Press the ▲ or ▼ keys to change the setting. To change between heat, cool, and auto settings, press the mode key until the desired setting appears

Output Ratings:

- Maximum current for each output is 1 Amp, 3 Amp total

Wiring:

Back Plate:

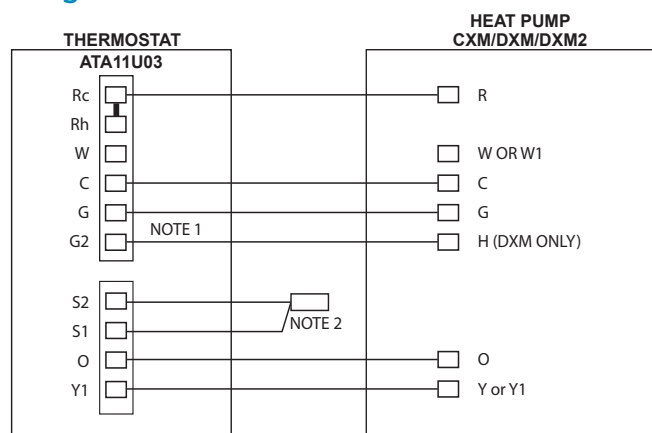


Application:

The ATA11U03 electronic thermostat provides single-stage, 2 fan speed selections, non-programmable temperature control for 24 Vac water-source heat pump systems.

Features:

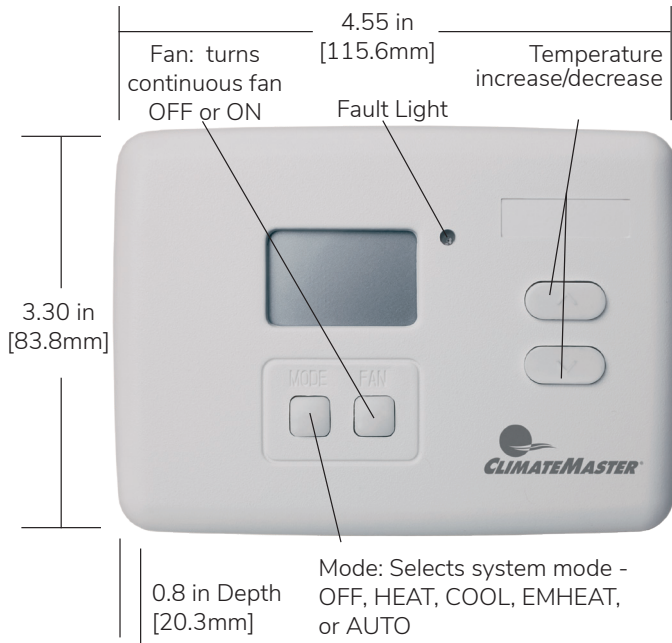
- Heat-Off-Cool-Auto System selections
- Fan Low or High selections
- Fan-On-Auto selections



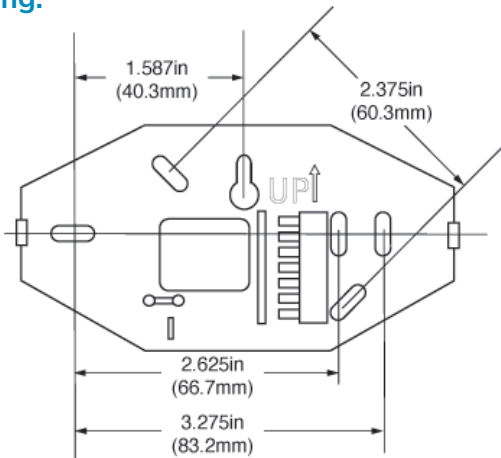
1. For units using only 1 speed (see unit wire diagram.) Must add jumper on thermostat between G and G2, or configure thermostat for 1 speed (G only)
2. For optional remote sensor, configure thermostat remote sensing, use ASW06 (wall sensor) or 17B0008N05 (duct sensor)

ATA22U01: Auto Changeover

Two Heat/Two Cool, Auto/Manual Changeover, Non-Programmable



Mounting:



Application:

The ATA22U01 electronic thermostat provides two-stage, non-programmable temperature control for 24V water-source heat pump systems.

Features:

- Heat-Off-Cool-Em Heat-Auto System selections
- Fan-On-Auto selections
- °F or °C temperature display
- Configurable automatic or manual changeover operation
- Light emitting diode (LED) for alarm status
- Installer setup options allow for customized applications
- Zero temperature droop performance
- Temperature display adjustment feature provides display offset for custom applications
- Setpoints are permanently held in memory (no batteries used) and retained during power outages

Features (cont.):

- Extended fan operation feature can be used to operate fan for 90 seconds after "Y" turns off
- Setup feature allows either "current room temp" or the "current setpoint" to be displayed
- Optional safety setpoints ensure that heating and cooling will occur even if thermostat is in "Off" mode
- Backplate wiring for easy installation
- Automatic fan staging (when used with DXM board and direct drive motor)

Electrical Rating:

- Input Power: 18 to 30 Vac, 50/60 Hz

Temperature Settings:

- Setpoint Range: 50°F to 90°F [10°C to 32°C]
Note: User must maintain thermostat setting within proper unit operating temperature range (See specific unit(s) IOM for details)
- The default setpoint for heating is 70°F [21°C] and for cooling is 74°F [23°C]. Press the ▲ or ▼ keys to change the setting. To change between heat and cool settings, press the mode key until the setting to be changed appears

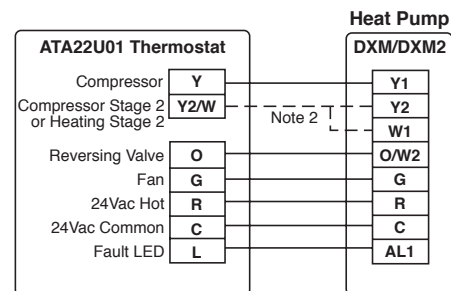
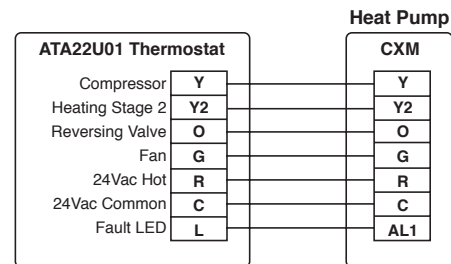
Display Range:

- Display Updates: Updated every 12 seconds
- Differential (auto changeover model): 3°F [1.5°C] minimum

Output Ratings:

- Maximum current for each output is 1 Amp

Wiring:

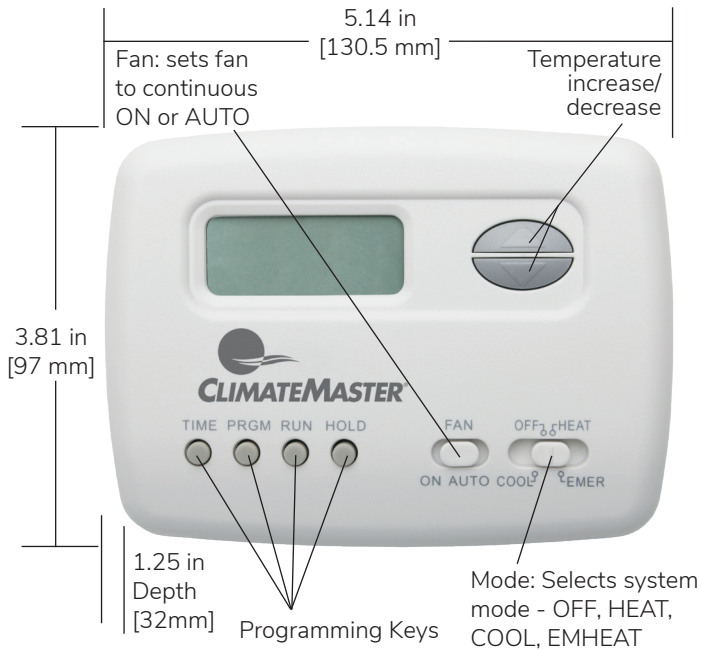


Note 2: Connect "W/Y2" thermostat output to "Y2" on the DXM if thermostat "Y2" option is configured as "Y2 - On" and the desired operation is for 2 stages of compressor with no electric heat. Connect "W/Y2" thermostat output to "W1" on the DXM if thermostat "Y2" option is configured as "Y2 - Off" and the desired operation is for 1 stage of compressor with electric heat for Heating Stage 2.

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ATP21W02: Programmable 2H 1C

Two Heat/One Cool, Manual Changeover, Programmable



Features (cont.):

- Zero temperature droop performance
- Manual changeover
- Convenient overrides allow temporary setpoint changes
- Setpoints are permanently held in memory (if batteries are used)
- Room temperature offset adjustment
- Back section has wiring connections for easy installation

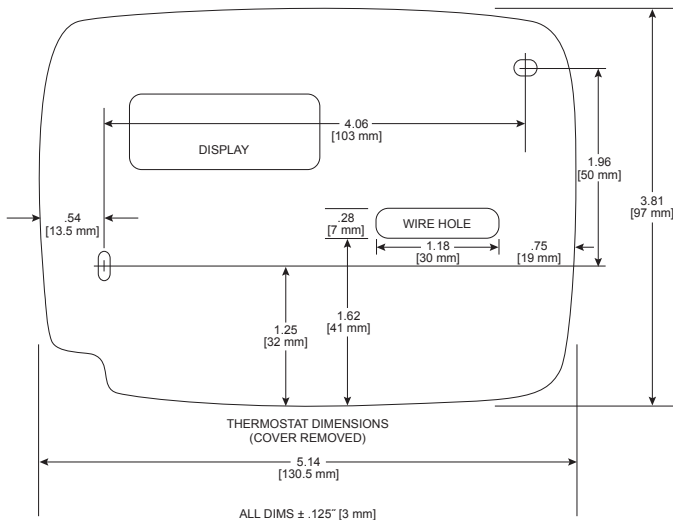
Electrical Rating:

- Input Power: 18 to 30 VAC, 50/60 Hz.

Temperature Settings:

- Setpoint range: 50°F to 90°F [10°C to 32°C]
Note: User must maintain thermostat setting within proper unit operating temperature range (See specific unit(s) IOM for details)
- Press the ▲ or ▼ keys to change the temperature setting. The MODE, PROGRAM and HOLD keys allow changes to the program and schedule

Mounting:



Application:

The ATP21W02 Thermostat provides 2 stages heating, 1 stage cooling, and programmable temperature control of 24V water-source heat pump equipment. Programming schedule includes one schedule for the five week days, one schedule for the two weekend days and four periods per day (5/2/4).

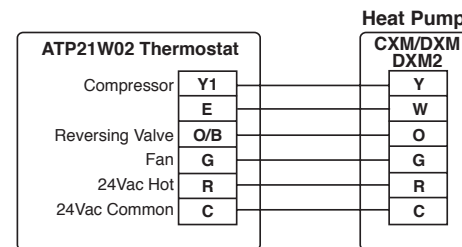
Features:

- 5-day/2-day programming
- Four periods per day
- °F or °C temperature display
- Individual heat and cool setpoints

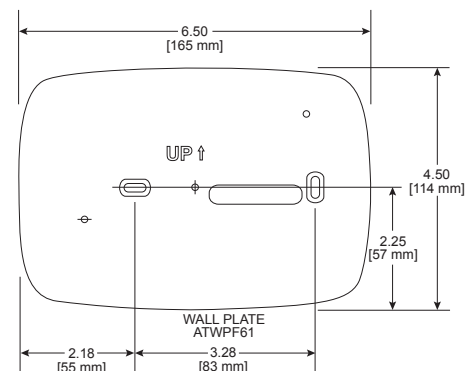
Output Ratings:

- Maximum current for each output is 1 Amp

Wiring:



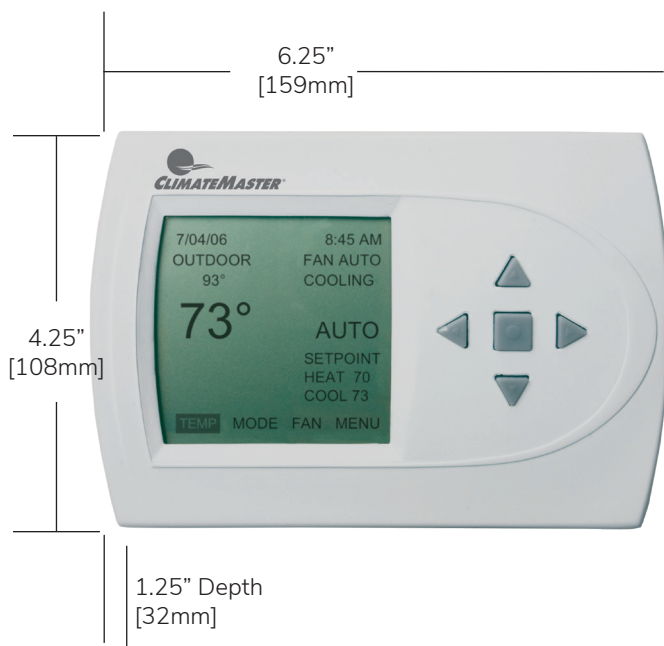
Wall Plate:



Note: Order Wall Plate ATWPF61 to mount thermostat to standard 2 x 4 electrical box (Includes metal plate for vertical box)

ATP32U03C: Programmable 3H 2C

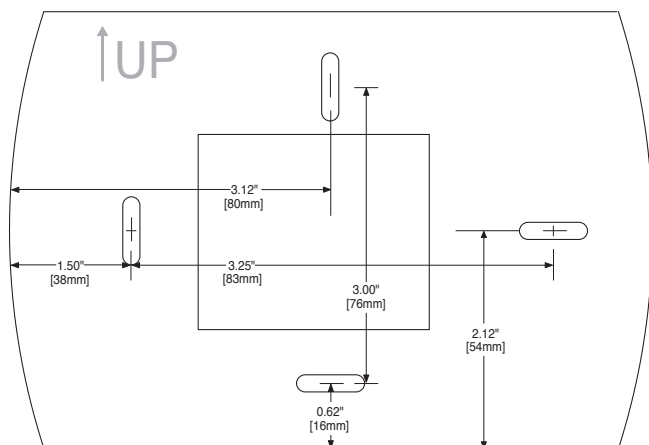
Three Heat/Two Cool, Auto/Manual Changeover, Programmable (7 Day)



Features (cont.):

- Convenient overrides allow temporary setpoint changes
- Setpoints are permanently held in memory (no batteries used) and retained during power outages
- Room temperature offset adjustment
- Progressive Recovery anticipates the time required to bring the space temperature to the next programmed event, and brings on the heat pump accordingly
- Large backlit dot matrix display is activated whenever a key is pressed and remains on for 25 seconds
- Menu-driven programming with five navigation buttons (UP/DOWN/LEFT/RIGHT/SELECT) for ease of use
- Fault indication with red backlight display
- Configurable service interval messages and servicing contractor contact information
- Keypad lockout
- Back-plate wiring connections for easy installation
- Exclusive fault identification (When used with CXM, DXM or DXM2) displays fault from board (e.g. condensate overflow) and suggests possible causes
- Compatible with optional AST008C sensor for use as remote and/or outdoor sensor, for indoor wall-mounted remote sensor use ASW06
- Automatic fan staging (when used with DXM/DXM2 board and direct drive motor)

Mounting:



Application:

The ATP32U03 Thermostat provides 3 stages heating, 2 stages of cooling, and programmable temperature control of 24V water-source heat pump equipment.

Features:

- 7-day programming
- Four periods per day
- °F or °C temperature display
- 12 or 24 hour clock
- Individual heat and cool setpoints
- Zero temperature droop performance
- Automatic (program mode) or manual (HOLD) operation
- Digital Night Setback mode initiated by an external signal (when using a DXM/DXM2 controller)

Electrical Rating:

- Input Power: 18 to 30 VAC, 50/60 Hz.

Operating Conditions:

- 32°F to 104°F [0°C to 40°C]
- 10% to 95% non-condensing

Temperature Settings:

- Setpoint range: 55°F to 95°F [12°C to 35°C], +/- 2°F [1°C] **Note: User must maintain thermostat setting within proper unit operating temperature range (See specific unit(s) IOM for details)**

Output Ratings:

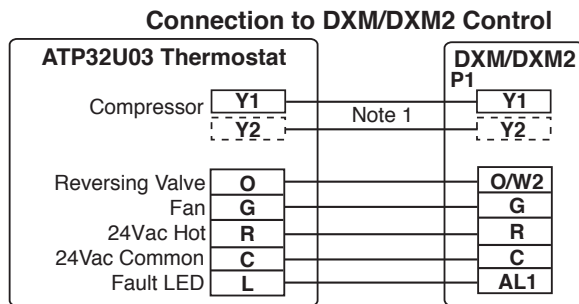
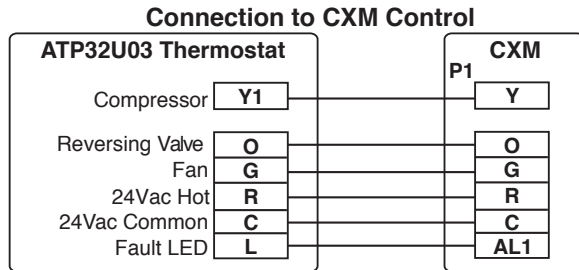
- Maximum current for each output is 1.0 Amp (2.0 max. output total)

ATP32U03C: Programmable 3H 2C

Three Heat/Two Cool, Auto/Manual Changeover, Programmable (7 Day)

Wiring:

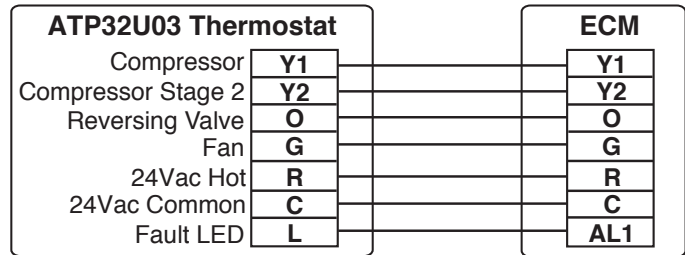
Single Stage Units



Single stage unit with PSC or belt drive fan motor
Note 1: Y2 may be used for High Speed fan for units with direct drive motor

Units With ECM Board (TS, TR, and TC)

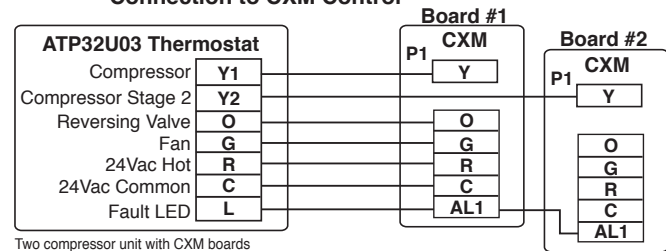
Connection to ECM Control



Units with CXM or DXM board and ECM fan motor

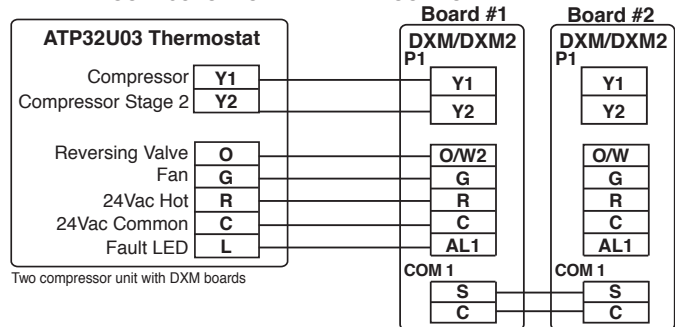
Two Stage Units

Connection to CXM Control



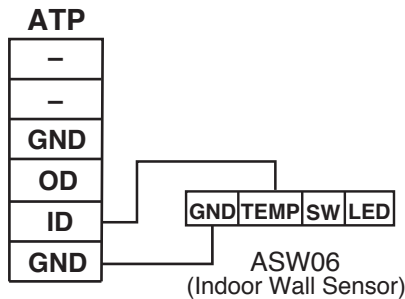
Two compressor unit with CXM boards

Connection to DXM/DXM2 Control

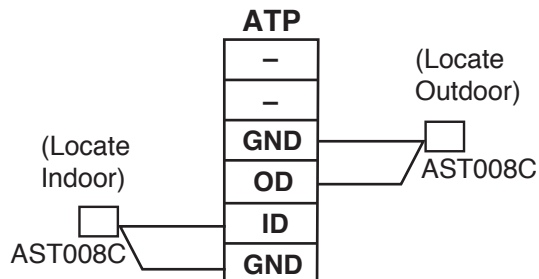


Two compressor unit with DXM boards

Optional Wiring for ASW06

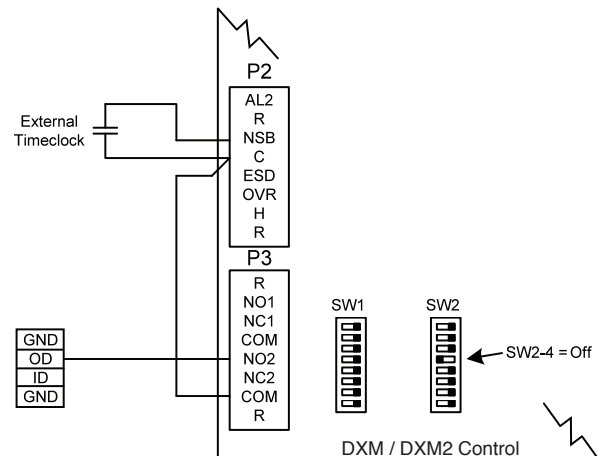


Optional Wiring for AST008C



Note: AST or ASW can be mounted up to 200 feet from thermostat - use minimum two-conductor 22AWG thermostat wire. Follow all NEC and local electrical codes. Outdoor sensor cannot be used if thermostat is configured for digital night setback.

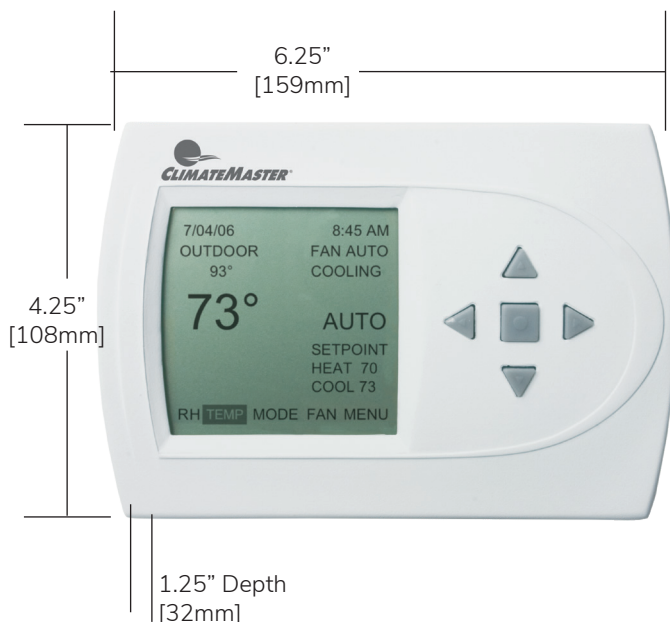
Digital Night Setback Wiring:



See equipment wiring diagrams for more details.

ATP32U04C: Programmable 3H 2C w/Humidity

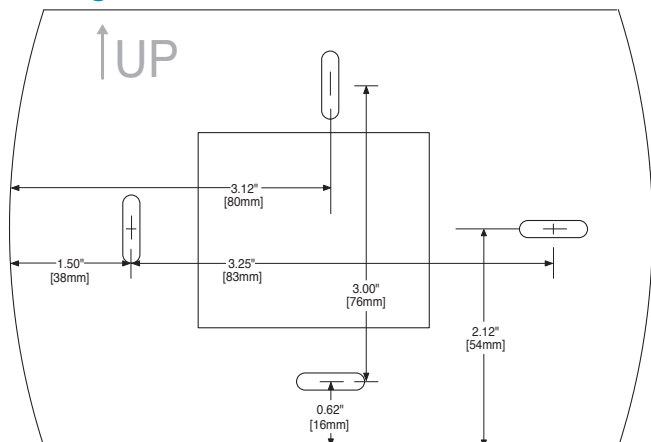
Three Heat/Two Cool, Auto/Manual Changeover, Programmable (7 Day) - w/Humidity Control



Features (cont.):

- Four periods per day
- °F or °C temperature display
- 12 or 24 hour clock
- Individual heat and cool setpoints
- Zero temperature droop performance
- Automatic (program mode) or manual (HOLD) operation
- 7-day programming
- Convenient overrides allow temporary setpoint changes
- Setpoints are permanently held in memory (no batteries used) and retained during power outages
- Room temperature offset adjustment
- Progressive Recovery anticipates the time required to bring the space temperature to the next programmed event, and brings on the heat pump accordingly
- Large backlit dot matrix display is activated whenever a key is pressed and remains on for 25 seconds
- Menu-driven programming with five navigation buttons (UP/DOWN/LEFT/RIGHT/SELECT) for ease of use
- Fault indication with red backlight display
- Configurable service interval messages and servicing contractor contact information
- Keypad lockout
- Back-plate wiring connections for easy installation
- Exclusive fault identification (When used with CXM, DXM, or DXM2) displays fault from board (e.g. condensate overflow) and suggests possible causes
- Compatible with optional AST008C sensor for use as remote and/or outdoor sensor, or for indoor wall mounted sensor use ASW06

Mounting:



Application:

The ATP32U04 Thermostat provides 3 stages heating, 2 stages of cooling, and programmable temperature/humidity control of 24V water-source heat pump equipment.

Features:

- Dehumidification output is designed to work with Whole House Dehumidification Modulating Reheat option or with ECM fan motor dehumidification mode
- Integrated control of both temperature and relative humidity
- Integrated control eliminates separate thermostat and dehumidistat/humidistat
- Thermostat can be programmed to use humidification output to control a humidifier
- Digital Night Setback mode initiated by an external signal (when using a DXM/DXM2 controller)

Electrical Rating:

- Input Power: 18 to 30 VAC, 50/60 Hz.

Operating Conditions:

- 32°F to 104°F [0°C to 40°C]
- 10% to 95% non-condensing

Temperature Settings:

- Setpoint range: 55°F to 95°F [12°C to 35°C], +/- 2°F [1°C] **Note: User must maintain thermostat setting within proper unit operating temperature range (See specific unit(s) IOM for details)**
- Dehumidification setpoint range: 15% to 95% RH
- Humidification setpoint range: 10% to 45% RH

Output Ratings:

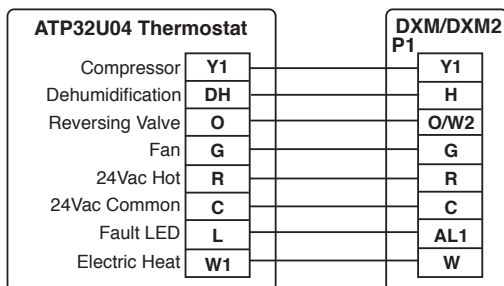
- Maximum current for each output is 1.0 Amp (2.0 max. output total)

ATP32U04C: Programmable 3H 2C w/Humidity

Three Heat/Two Cool, Auto/Manual Changeover, Programmable (7 Day) - w/Humidity Control

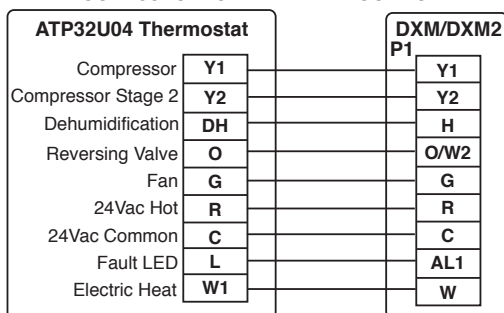
Wiring:

Units with ClimaDry® Reheat



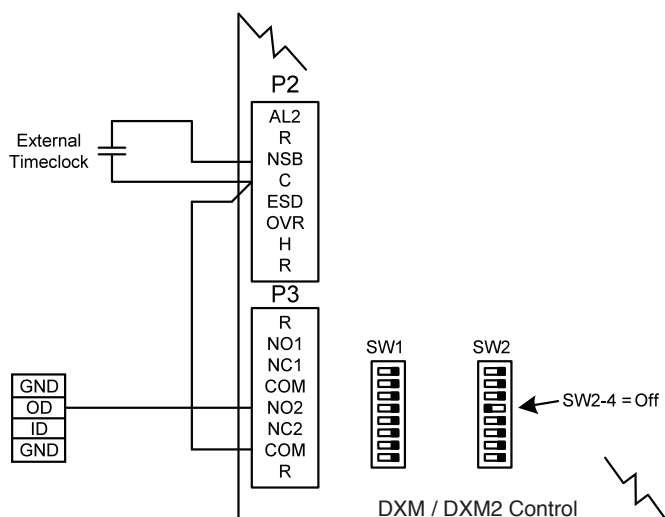
Single stage unit with ClimaDry Modulating Reheat Option and PSC fan

Connection to DXM/DXM2 Control



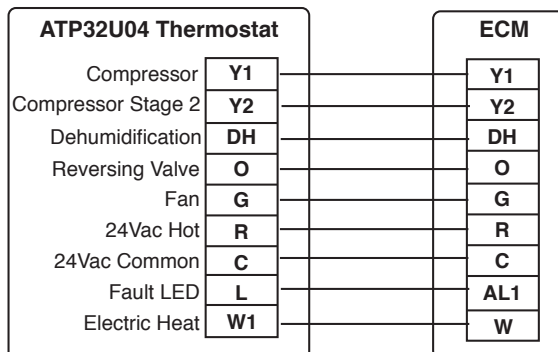
Two-stage unit with ClimaDry Modulating Reheat Option and DXM/DXM2 board

Digital Night Setback Wiring:



Units with ECM Board (TS, TR, and TC)

Connection to ECM Control

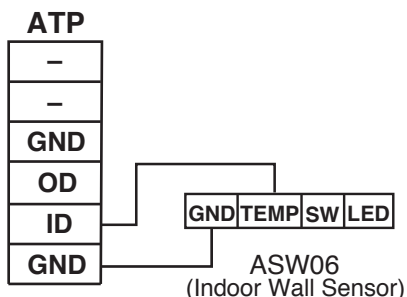


Units with CXM or DXM board and ECM fan motor, utilizing ECM dehumidification mode (w/o ClimaDry option)

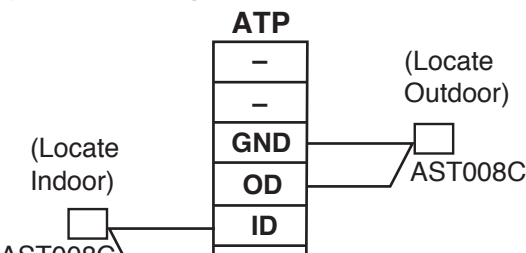
Notes:

- 1) ECM dehumidification mode slows down fan speed in the cooling mode when dehumidification output from thermostat is active. Normal heating and cooling fan speeds are not affected.
- 2) ECM board DIP switch SW9 must be in dehumid. mode.

Optional Wiring for ASW06



Optional Wiring for AST008C



Note: AST or ASW can be mounted up to 200 feet from thermostat - use minimum two-conductor 22AWG thermostat wire. Follow all NEC and local electrical codes. Outdoor sensor cannot be used if thermostat is configured for digital night setback.

See equipment wiring diagram for more details

AST008C: Sensor

Remote/Outdoor Temperature Sensor



Application:

The AST008C sensor is a thermistor, used as an accessory for thermostat models ATP32U03C and ATP32U04C. This sensor provides outdoor air temperature information for the control system, as well as an indication of outdoor temperature on the display screen. The AST008C sensor can also be used as a remote indoor sensor. Two sensors may be used – one for remote indoor temperature sensing, and one for outdoor temperature sensing. When the sensor is used as a remote indoor temperature sensor, the internal sensor of the thermostat becomes inactive. (No thermostat reconfiguration required).

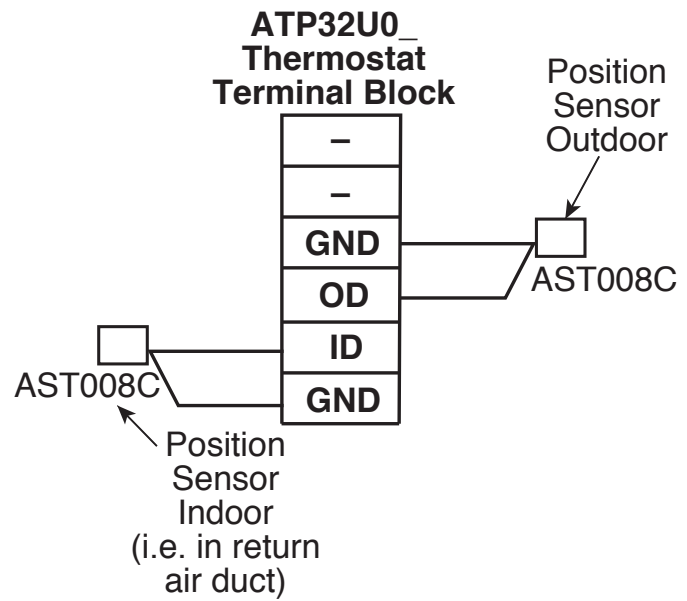
Features:

- Designed for indoor or outdoor installation
- May be used as indoor remote temperature sensor or as outdoor temperature sensor

Specifications:

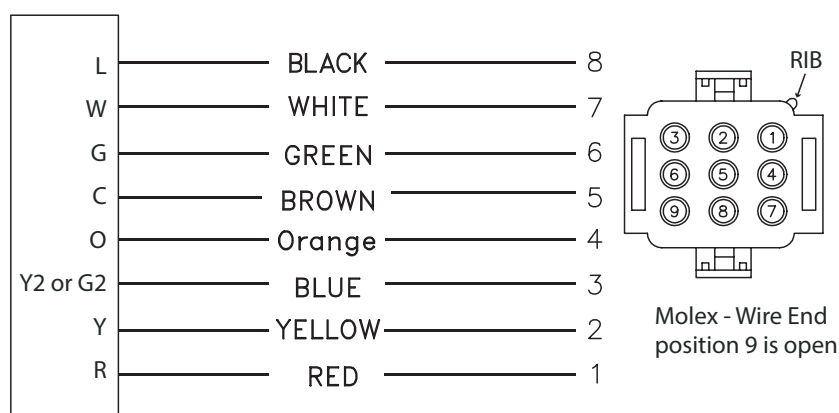
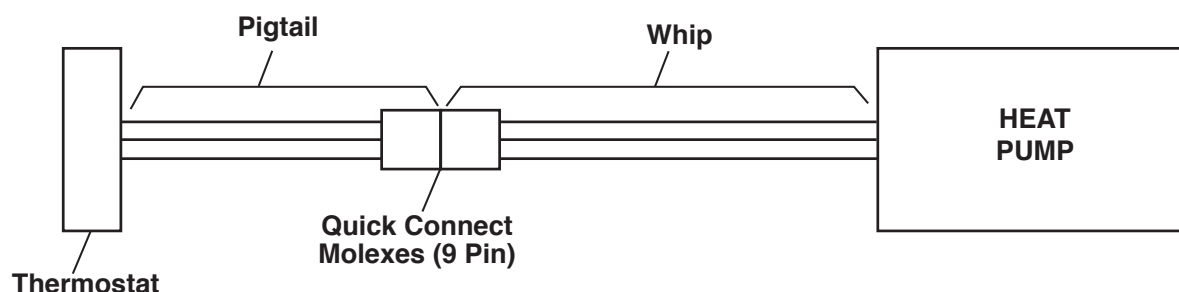
- Two-wire connection to thermostat, extendable with two-conductor 22 AWG thermostat wire up to 200 feet
- Mounting clip with adhesive strip included

Wiring:



11B0100N53 Wire Harness (12" Pigtail)

Wire harness can be connected to any thermostat for quick connection to heat pump units with whip.



Thermostat

(Not all wires required for all thermostats - Cap unused wires)

Pigtail

Note: Thermostats can be ordered with Pigtail factory attached

A9155801 - ATA11U01

A9155802 - ATA11U03

A9155804 - ATA22U01

A9155805 - ATP32U03C

A9155806 - ATC32U03C

A9155811 - ATP21W02 with plastic back plate (attach to 2x4 horizontal or vertical box)

A9155813 - ATA32V01 (requires optional wall plate when installing on 2x4 outlet box)

A9155814 - AVB32V02C (requires optional wall plate when installing on 2x4 outlet box)

A9155816 - AVB32V03C (requires optional wall plate when installing on a vertically mounted 2x4 outlet box)

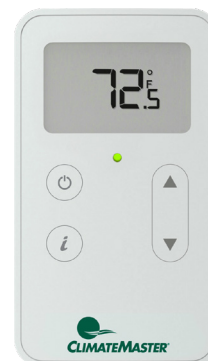
ASW 016, 017, 018 Wall Sensors for MPC



ASW016



ASW017



ASW018

Application:

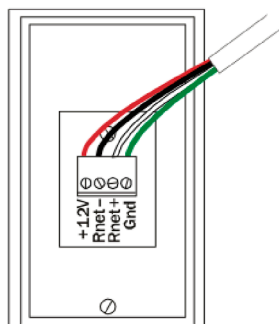
ASW sensors are wall-mounted temperature sensors for use with the MPC controller on Water-to-Air units. The ASW is available in 3 different models to allow for application flexibility. Features such as room temperature sensing, digital LCD readout, set point adjustment, override push button, heat pump reset, lockout recognition, fault type, LED indicator, cosmetics and occupancy status can be supplied by the different types of ASW wall sensors. The ASW wall mounted sensors are low profile, which provides a distinguished look for building architects and engineers.

Wiring:

PREREQUISITE: The RNet cable is wired to the controller. The shield wire and the ground wire should be inserted into the controller's GND terminal.

Insert the other 4 wires into the RNet Sensor's screw terminal connector. If wiring 2 cables, insert like colored wires into each terminal. It is recommended that you use the following RNet wiring scheme:

Connect this wire...	To this terminal...
Red	+12V
Black	RNet-
White	RNet+
Green	Gnd



Specifications:

Sensing Element Range Accuracy

- Temperature with any Option (excluding Humidity) -4° to 122° F (-20° C to 50° C) $\pm 0.35^\circ$ F (0.2° C)
- Temperature with Humidity and any Option 50° F to 104° F (10° C to 40° C) $\pm 0.5^\circ$ F (0.3° C)
- Humidity 20% to 80% $\pm 2\%$ typical
- CO2 400 to 1250 PPM ± 30 PPM or $\pm 3\%$ (greater of two) 1250 to 2000 PPM $\pm 5\%$ of reading plus 30 PPM
- VOC 0 to 2,000 PPM ± 100 PPM

Power Requirements Sensor Type Power Required

- Temperature Only All Models 12 Vdc @ 8 mA
- Temperature with Humidity
- Temp with VOC, or Temp/VOC/Humidity All Models 12 Vdc @ 60 mA
- Temp with CO2 , or Temp/ CO2 /Humidity All Models 12 Vdc @ 15 mA (idle) to 190 mA (CO2 measurement cycle)

Power Supply: controller supplies the Rnet sensor network with 12 Vdc @ 210 mA

- Additional power may be required. See sensor power requirements above.

Communication

- 115 kbps Rnet connection between sensor(s) and controller 15 sensors max per Rnet network; 5 sensors max per control program

Local Access Port

- For connecting a laptop computer to the local equipment or WebCTRL® network for maintenance and commissioning

Environmental Operating Range

- 32° to 122° F (0° - 50° C), 10% to 90% relative humidity, non-condensing

Mounting Dimensions

- Standard 4"x 2" electrical box using provided 6/32" x 1/2" mounting screws

Overall Dimensions

- Width: 2.75" (6.99 cm) Height: 4.75" (12.07 cm) Depth: 13/16" (2.01 cm)

Revision History

Date:	Item:	Action:
1/24/23	AWC99U01, ATC32U03	Introduced AWC thermostat and discontinued ATC thermostat
08/31/21	Page 3, 5	AVB32V03C/R, AVB32V02C/R Updated features
08/26/21	Page 18, page 6	Added ASW Sensor Page, added T-stat Wall Plate page
1/12/21	Page 5, All	Added Dimensions to Mounting Figure, Updated Fonts
5/20/20	AVB32V03C/R	Added New Section - pg. 3
4/28/20	Page 16	Added A9155816 and wire color updates
2/20/20	Format - All Pages and Info	Updated
01/09/20	AVB32V02C	Added New Sections - pg. 4
	ATA32V01C	Added New Sections - pg. 3
09/25/19	AVB32V02C	Added Thermostat - pg. 4
	ATA32V01C	Added Thermostat - pg. 3
11/15/16	Document Design Update	Updated
04/22/15	Text Edit - All Pages; 11B0200N28	Updated & Added
12/03/14	ATP21W02; Misc Text - All Pages	Added
03/26/14	ATC32U02C	Added
12/11/13	ATA11U01	Updated
02/28/13	AST008C	Updated
02/25/13	ATA11U03	Added
11/26/12	ATA11C04 and AST009	Removed
02/16/12	ATA11C06	Removed
01/26/12	ATP32, ATP21, AST008C, AST009	Updated
04/26/11	ATP32U03 & ATP32U04 Featuresp	Updated
01/03/11	Format - All Pages	Updated
09/01/10	ATP32U03 & ATP32U04	Temperature Settings Updated
06/11/10	Format - All Pages	Updated
07/06/09	ATP11N01	Removed
05/21/09	ATM11C04	Removed
05/11/09	ATP32U04	Information and Pictorials Added to Page 12
05/11/09	ATR11C01, ATT11C01 Page	Removed
05/11/09	ATP31U02	Changed to ATP31U04
05/11/09	ATP31U01	Changed to ATP31U03
10/31/08	ATM11C04	Added
09/16/08	ATP32U02	Updated Wiring Controls
07/31/08	ATR11C01, ATT11C01	Information Added
07/23/08	ATA11C03, ATA11C04	Note 3 Added



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