

# Adapt<sup>™</sup> Premium Condensing **Gas Tankless Water Heater**

## What's in the box?

- ATHR-160M / ATHR-160X3 / ATHR-180M / ATHR-180X3 / ATHR-199M / ATHR-199X3
- Installation manual .
- . Use and case guide
- X3<sup>™</sup> Cartridge (X3<sup>™</sup> models only) .
- Pressure relief valve (X3<sup>™</sup> models only)
- . Wall mounting bracket with four 1/4" x 3" lag bolts
- . Screws for vent ports
- X3<sup>™</sup> cartridge screws (X3<sup>™</sup> models only) .
- Cascading cable .
- Fuel conversion kit (NG to LP) .
- Two 2" vent screens .

## **Available Accessories**

| Part number | Description  |  |
|-------------|--|--|
| 100368986   | X3™ cartridge  |  |
| 100371922   | Wi-Fi module kit   |  |
| 100371898   | Remote temperature controller comes with 10 ft. cable        |  |
| 100371899   | Communication cable for remote temperature controller 10 ft. |  |
| 100371900   | Communication cable for remote temperature controller 32 ft. |  |
| 100371920   | Remote recirculation kit (one receiver, two buttons)         |  |
| 100371921   | Remote recirculation kit (one receiver, three buttons)       |  |
| 100371913   | Individual spare buttons                                     |  |
| 100325654   | Cartridge freeze protection for X3 <sup>™</sup> models       |  |
| 100371918   | Cartridge freeze protection for bypass models                |  |
| 100374697   | Pipe cover   |  |
| 100112159   | Neutralizer kit  |  |
| 100327167   | Crossover valve kit  |  |
| 100112156   | Isolation valve kit for bypass model                         |  |

# **Venting Considerations**

PVC, CPVC or Polypropylene ULC S636 systems only

| No. of 90-degree | Maximum Vertical or Horizontal (Total) Vent Length |                  |  |
|------------------|--|------------------|--|
| Elbows*          | 2" venting   | 3" venting       |  |
| 0                | 75 ft. (22.9 m)                                    | 150 ft. (45.7 m) |  |
| 1                | 70 ft. (21.3 m)                                    | 145 ft. (44.2 m) |  |
| 2                | 65 ft. (19.8 m)                                    | 140 ft. (42.7 m) |  |
| 3                | 60 ft. (18.3 m)                                    | 135 ft. (41.1 m) |  |
| 4                | 55 ft. (16.8 m)                                    | 130 ft. (39.6 m) |  |
| 5                | 50 ft. (15.2 m)                                    | 125 ft. (38.1 m) |  |

\*For each 90-degree elbow added, deduct 5 ft. 45-degree elbows count as 2.5 ft. Excludes vent terminators, termination elbow or rain caps. Can be installed as PV or PDV.





## **Installation Clearance**

| Тор | Side | Front | Bottom | Back |
|-----|------|-------|--------|------|
| 12" | 3"   | 4"    | 18"    | 1/2" |

### **Gas Considerations**

- Minimum 1/2" gas line
- Minimum 3 ft. from regulator
- Field convertible from NG to LP

### Water Connection

- 3/4" NPT
- No isolation valve kit required on the X3<sup>™</sup>
- Ball valves may be required by code:
  - X3™ models: we recommend installing a ball valve with shutoff to easily isolate the heater for troubleshooting and service in the future.
  - M models: we recommend installing an isolation valve kit with hose bibs, for ease of annual descaling and routine maintenance.
- Manual cold water shut off recommended

## **Condensate Draining**

The condensate drain port on the bottom of the heater is a nylon ½" NPT male fitting. Note: it's best practice to add an overflow to external condensate management systems.

| Maximum Pipe Length - Hot Water Supply Line and Dedicated Return line |                 |  |  |  |
|---|-----------------|--|--|--|
| Pipe Diameter   | Pipe Length     |  |  |  |
| 3/4"  | 500 ft. (152 m) |  |  |  |
| 1/2"  | 200 ft. (61 m)  |  |  |  |

## **Recirculation Pump Operation Modes**

#### Recirculation with a dedicated line

Two pump timer ON/OFF periods set by the user manually.

#### Crossover valve mode

Valve settings differ by manufacturer (typical is 95°F to 105°F).

#### On-demand mode

Used with remote circulation kit.

#### **Combination Heating Compatible**

Can be used for space heating when combined with water heating.

#### **Cascade System**

Cascade up to 12 units in a parent/child configuration. Patch cord included.

## **Freeze Protection System**

- Always ON when the unit is powered
- Multiple heating blocks protect internal piping
- The unit will briefly fire to protect against freezing
- In the event of a prolonged power failure, the unit must be drained

## **Routine Maintenance**

- Clean the inlet water filter
- Descaling (M models only)
- Check venting system annually
- Exercise the relief valve annually
- Inspect the condensate drain system regularly
- Inspect the rain protection tray screen annually

For internal use only.

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