

Cyclone® Mxi

Commercial Gas Water Heaters





Think Tank

For years, A. O. Smith has set the industry standard for performance and quality in heavy-duty commercial applications. The latest enhancement to the groundbreaking Cyclone family, Cyclone Mxi™ has taken water heater functionality, performance and design to a whole new level. Now with a broader line to choose

from, high thermal efficiency, superior tank protection and the **new modulating combustion system**, the Cyclone Mxi is not only the benchmark in the high efficiency commercial water heating category—it's simply the smartest water heater ever made. Innovation has a name... A. O. Smith.

AT A GLANCE

Fully Modulating Combustion Control

- Modulates the firing rate as the demand changes
- Modulating the burner results in higher overall operating efficiencies and longer service life
- Intelligent Control System with LCD display
- iCOMM™ compatible and can be monitored from remote locations. Call 1.888.WATER02 for more information. iCOMM system available for BTX-100, BTXL-100 and BTH-120 - BTH-500 models
- Models ranging from 50-gallon/76,000 BTU to 119-gallon/500,000 BTU with up to 98% thermal efficiency and all models are ENERGY STAR® Qualified except the BTX-80
- Venting flexibility for versatility and easy serviceability
- Industry-first powered anodes for superior tank protection
- Exclusive PermaGlas® Ultra Coat™ glass lining



TC Total Control Cyclone Mxi LCD

The intelligent control system, with easy to navigate menu, provides precise temperature control and unit operating information.

- Detailed heater status information: blower, igniter, gas valve, flame detection, air inlet restrictions, exhaust vent restrictions, acceptable gas supply pressure
- Precise temperature setting with actual tank temperature at upper and lower probes
- Alerts the user to any potential corrosion-related leak
- Maintains constant log of the number of cycles and burner operating time
- Communicates fault details and gives diagnostic information
- Maintains a log of any fault occurrence and the time a fault occurred



Powered Anodes* PA

The A. O. Smith powered anode system provides the most modern and innovative technology available to provide long-lasting tank protection.

- Non-sacrificial anode does not require maintenance or inspection
- Provides superior tank protection to traditional aluminum or magnesium anodes
- Power level adjusts to changes in water conditions for optimum protection
- Offers superior protection in various water conditions
 - Better protection in water with low conductivity
 - Eliminates the occurrence of hydrogen sulfide gas production (rotten egg odor)

*Not on 76,000 and 100,000 BTU models

COMMERCIAL WATER HEATERS

The Breadth Of Innovation

UNRIVALED VENTING VERSATILITY

The Cyclone® Mxi features power vent and power direct vent design, allowing clean uncontaminated air to be drawn directly into the unit with the flue gas products vented through the ceiling or directly through the wall to the outside.

Direct Vent Vertical



Direct Vent Sidewall



Power Vent Vertical



Power Vent Sidewall



Diagram applies to BTH-120 through BTH-250 models only

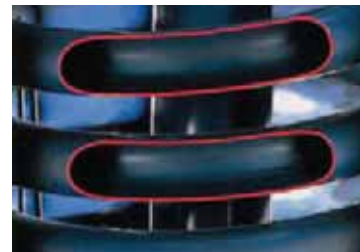
BTH-300 through BTH-500 vents up to 70 equivalent feet using 4" PVC or 120 equivalent feet using 6" PVC

EASIER TO INSTALL

Because installation space today is almost always at a premium, we've designed the Cyclone to install in an absolute minimum of space. The exhaust outlet and fresh air intakes are positioned so the water heater can be placed either in a corner or against a wall.

ADVANCED GLASS LINING TECHNOLOGY

Exclusive PermaGlas® Ultra Coat™ glass lining protects all Cyclone water heaters. PermaGlas Ultra Coat provides superior protection for all inner tank surfaces, as well as for the inside of the heat exchanger, which would otherwise be vulnerable to corrosion from flue gas condensate. The innovative helical coil minimizes weld points to extend tank life.



STRENGTH IN NUMBERS

Cyclone Mxi water heaters can be installed in manifolded multiples to serve the highest demand applications in place of boiler systems. For example, four BTH-500s can be manifolded to provide total storage of 476 gallons with an input of 2,000,000 BTU.

The Innovation That Started It All

REVOLUTIONARY HEAT EXCHANGER AND BURNER SYSTEMS

The helical internal heat exchanger in all Cyclone models swirls the hot gases, like a cyclone, against the heat exchanger walls. This cyclonic action produces an increased rate of heat transfer, resulting in extra-high thermal efficiency. All Cyclone Mxi models employ an ingenious top-mounted down-fire pre-mix burner, resulting in even higher efficiencies.

This exclusive design delivers rated thermal efficiencies of up to 98% with actual efficiencies up to 99.9% when in modulating firing mode.



CYCLONE Mxi MODELS USE THE LATEST IN BURNER TECHNOLOGY

- A. The pre-mixed burner design delivers maximum efficiency.
- B. Once the premixed fuel is ignited, the flame travels into the submerged central Combustion Chamber.
- C. The resulting hot flue gases are then forced at high velocity through a helical heat exchanger coil.
- D. The spiral shape of the coil keeps the hot gases swirling against the heat exchanger walls, resulting in extra-high thermal efficiency.

Cyclone HE®

For medium duty applications choose one of the Cyclone BTX or BTXL models. These models deliver high efficiency and performance in a compact footprint. Like the Mxi these models feature the helical coil heat exchanger design that maximizes heat transfer. The BTX-80 is configured for single pipe power venting. The larger capacity BTX-100 and BTXL-100 models deliver more hot water and have the flexibility for either power vent or power direct vent installation.



Model	ENERGY STAR® Qualified	Gallon Capacity	BTU/Hr. Input		First Hour Delivery		Recovery		Height (Inches)	Diameter (Inches)
			Natural	LP	Gallons	Liters	GPH @ 100°F	Liters @ 56°C		
BTX-80+*	NO	50	76,000	NA	118	447	83	314	70 5/8	22
BTX-100+	YES	50	100,000	100,000	151	571	116	439	68 3/4	22
BTXL-100+	YES	75	100,000	100,000	169	640	116	439	68 1/2	22
BTH-120(A)	YES	60	120,000	120,000	180	681	138	523	55 1/2	27 3/4
BTH-150(A)	YES	100	150,000	150,000	248	939	178	674	76	27 3/4
BTH-199(A)	YES	100	199,900	199,900	305	1154	235	890	76	27 3/4
BTH-250(A)	YES	100	250,000	250,000	361	1366	291	1101	76	27 3/4
BTH-300(A)	YES	119	300,000	300,000	432	1635	349	1321	75 3/4	33 1/8
BTH-400(A)	YES	119	399,900	399,900	544	2059	460	1743	75 3/4	33 1/8
BTH-500(A)	YES	119	499,900	499,900	659	2494	576	2179	75 3/4	33 1/8

+ Non-modulating units.

* Power vent only—see spec sheet for details.

Add "A" to model number for ASME construction on BTH-120-BTH-500 models (Example): BTH-120A when ordering.



High Efficiency Gas Water Heaters

INNOVATIVE SOLUTIONS FOR ALL YOUR COMMERCIAL APPLICATIONS

The expanded Cyclone® product line gives you a high efficiency water heater option for nearly any commercial application.

For complete specifications on Cyclone HE and Cyclone Mxi, consult Specification Sheets at www.hotwater.com.



A. O. Smith

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