

MYdens T

Boilers from 199,000 to 1,000,000 Btu/hr

MYdens T is a range of modular, condensing boilers, patented and built by Cosmogas. The performance and dimension of MYdens T, with a wide range of output levels, make it one of the best gas condensing boilers to use in any heating system requirement. It can be used with radiators, radiant panels, fan-coils and can be installed in any mechanical rooms such as: new and renovated buildings, houses, hotels, schools, factories, and more.

INNOVATIVE DESIGN, COMPACT, POWERFUL, LIGHTWEIGHT

MYdens T are designed to be "space-saving" and they can fit through a 26" wide door. Thanks to their compact footprint, light weight and design these units allow space saving in both new and retrofitted mechanical rooms.

REDUNDANCY and EFFICIENCY

Each boiler is composed of 1 - 4 PATENTED heat exchangers with 250,000 Btu/hr capacity. The units are composed of a "monobloc" system that optimizes the supplied output according to real thermal needs. This ensures maximum efficiency and redundancy.

Each heat exchanger is made of three AISI 316 Ti (Titanium) round stainless steel tubes, efficiently manufactured without weld joints. This patented process keeps the stainless steel characteristics unaltered to maintain a working pressure of up to 160 PSI and to promote the highest resistance against corrosion.



**MYdens T
750 - 1000**



**MYdens T
199 - 250
399 - 500**

EXTENSIVE TURNDOWN RATIO UP TO 20:1

The perfect synchronization of heat exchangers that cascade and cycle between each other are combined with the patented COSMOMIX air/gas mixer that allow a wide turndown ratio of 20:1.

Once the system reaches full power, or when thermal load varies, the burners reduce power until they turn off, one after another, then they eventually increase together to reach maximum output.

In this way it is possible to obtain maximum efficiency from each heat exchanger, even when at low thermal loads, to get seasonal high efficiency with great gas savings.

LOW NOx and LOW CO PREMIX BURNER

The Cosmogas range of boiler is equipped with low Nox and low CO (Carbon Monoxide) premix burners made of Fecralloy metal fiber. The Fecralloy metal fiber burners maintain a constant air/gas ratio at each point of the turndown range, decreasing emissions and optimizing efficiency. The product is Natural gas and LPG ready.

PVC/CPVC POLYPROPYLENE and STAINLESS STEEL VENT APPROVED

Cosmogas products leave the factory able to connect directly to PVC/ PVC pipes. Adaptors for polypropylene and stainless-steel venting materials are available.

STANDARD DETAILS THAT MAKE THE DIFFERENCE

- Built-in condensate neutralizer with 22 lb of limestone, is always properly sized to restore pH to required levels.
- Condensate blocked drain switch, if the condensate drain pipe is blocked a switch will shut-down the unit.
- Vortex water flow meter, for more accurate product management and more efficient operation.
- Advanced Air filter, used to protect burner, combustion and the heat exchanger. This ensures better efficiency of the combustion circuit.
- Built-in back-flow preventer flap with safety sensor, used to prevent flue gas recirculation between the different burners.
- ASME pressure relief valve rated at 50 PSI and ASME pressure and temperature gauge.
- Four adjustable feet located in the bottom of the unit for easy levelling.
- Easy 0-10V input electrical connections with a pre-wired terminal box at. Modbus connection and an alarm contact.
- Front access to all inner components for easy and quick maintenance.
- MYdens T comes standard with a single flue gas manifold, air inlet manifold, cold water inlet and hot water outlet manifolds. All pre-assembled and tested at Cosmogas.
- Cosmogas products share spare parts for the complete range of Cosmogas products.



MYdens T MODEL		199T	250T	399T	500T	750T	1000T
Category of flue venting		IV	IV	IV	IV	IV	IV
Min / Max heat input	MBtu/hr	50 / 199,5	50 / 250	50 / 399	50 / 500	50 / 750	50 / 999
Turndown ratio		4:1	5:1	8:1	10:1	15:1	20:1
Number of modules		1	1	2	2	3	4
Gas flow rate (Nat gas / LP gas)	ft3/hr	199.5 / 50	250 / 100	399 / 160	500 / 200	750 / 300	999 / 400
Min / Max gas pressure (Nat. and LP)	In.W.C.	3 / 13	3 / 13	3 / 13	3 / 13	3 / 13	3 / 13
Min / Max water temperature	°F	68 / 180	68 / 180	68 / 180	68 / 180	68 / 180	68 / 180
Min / Max water pressure	PSI	8 / 160	8 / 160	8 / 160	8 / 160	8 / 160	8 / 160
Content of water	gal	1.7	2	3.4	4	7	9
Supply voltage / Frequency	Vac / Hz	120 / 60	120 / 60	120 / 60	120 / 60	120 / 60	120 / 60
Absorbed electric power (FLI) / Current (FLA)	W / A	110 / 1	150 / 1,3	220 / 1,8	300 / 2,5	430 / 3,6	591 / 5
Max. length venting system	ft	120	120	120	120	120	120
Appliance weight (empty of water)	lb	211	216	312	323	464	548
Dimensions (H x W x D)	Inch	45.7 x 23.6 x 34.8	45.7 x 23.6 x 34.8	45.7 x 23.6 x 34.8	45.7 x 23.6 x 34.8	71.4 x 23.6 x 35.3	71.4 x 23.6 x 35.3
Packaging dimensions (H x W x D)	Inch	52 x 28 x 38	52 x 28 x 38	52 x 28 x 38	52 x 28 x 38	78 x 28 x 38	78 x 28 x 38
AHRI Thermal Efficiency	%	95	95	95	95	95	95