

AGUAdens T

Tankless potable water heaters from 199,000 to 1,000,000 Btu/hr

AGUAdens T is a range of tankless, modular, condensing water heaters, patented and built by Cosmogas.

Where domestic hot water is needed, AGUAdens T is perfect for any type of installation such as: hotels, camp grounds, restaurants, schools, sport centers, wellness centers, hospitals, car washers, malls, factories, and more.

REDUNDANCY and EFFICIENCY

Each water heater 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 domestic hot water 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 and the various compositions of city water.

Thanks to low inlet water temperatures, the heat exchanger boosts the condensing effect and supplies domestic hot water even at high temperatures, while maximizing efficiency and reducing the thermal inertia to a minimum.

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.



AGUAdens T
750 - 1000

AGUAdens T
199 - 250
399 - 500

LOW NO_x and LOW CO PREMIX BURNER

The Cosmogas range of water heaters is equipped with low No_x 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.

INNOVATIVE DESIGN, COMPACT, POWERFUL, LIGHTWEIGHT

AGUAdens 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. The AGUAdens 1000T continuously supplies water up to 25.4 GPM rise at 75°F.

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.

TANKLESS INSTALLATION

Using a large recycling loop, which can produce a high volume of water, the need of a storage tank can be omitted while still ensuring performance above the required comfort standards.

The water circulation contained in the recycling loop plus the instantaneous output of AGUAdens T are perfect for effectively meeting the demand for domestic hot water.

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 and temperature relief valve rated at 125 PSI, 210°F.
- 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.
- AGUAdens 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.



AGUAdens 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)	ft ³ /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
Recovery Rating (70°F rise)	Gal/hr	335	420	670	840	1260	1678
Recovery Rating (100°F rise)	Gal/hr	235	294	469	588	882	1175
Recovery Rating (140°F rise)	Gal/hr	168	210	335	420	630	839
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