

THERMACAST™ ELECTRIC COMBO VAPORIZER

Direct-To-Process and Pressure Building in a Single Unit!



Thermax Thermacast™ Electric Combo Vaporizers combine a direct-to-process vaporizer and a pressure building vaporizer into a single, efficient, compact, reliable and economic package. The main direct-to-process circuit vaporizes and superheats the process fluid to the desired outlet temperature. The gas outlet temperature set point is user adjustable. The pressure building coil vaporizes a proportionally smaller flow rate of fluid and returns the gas back to the tank. Tank pressure is thereby maintained while liquid is withdrawn to feed the main direct-to-process circuit.

Standard Features

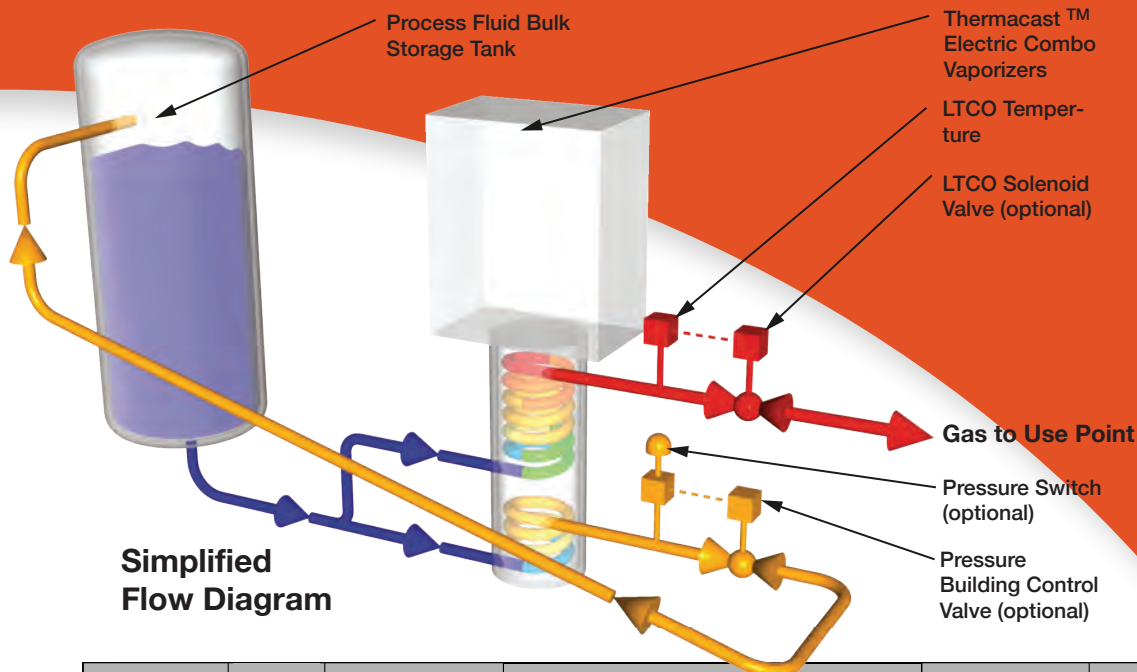
- ☒ Pressure Building and direct to process circuits in a single unit
- ☒ Replaceable S.S. cartridge heaters
- ☒ Adjustable gas temperature
- ☒ Fully automatic operation
- ☒ Compact design
- ☒ Casting high temperature limit for safety
- ☒ Stainless steel casting jacket and legs for appearance and low maintenance
- ☒ Unit comes fully factory wired, tested and ready to install
- ☒ Quick delivery of standard units
- ☒ 98% or better thermal efficiency
- ☒ Built In conformance with ASME



Options

- ☒ Pressure switch and solenoid valve for regulation of pressure building. You set the pressure switch at your desired tank pressure and the valve will open to allow flow to the P.B. circuit automatically maintaining tank pressure.
- ☒ Safety low temperature cut-off valve and controller (LTCO). You set the temperature controller at the low temperature cut off value the valve will remain open only while the gas outlet temperature remains above the LTCO set point. This option is used to protect downstream piping, processes and instruments from low temperature conditions.

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Simplified Flow Diagram

Model #	Power Rating kW	MAWP		Ratings				Dimensions L x W x H inches	Weight		Inlet/Outlet FNTF
				N ₂ , O ₂ , Ar		CO ₂ , N ₂ O			Lbs	Kg	
		PSIG	BARG	SCFH	Nm ³ /Hr	l/b hr	Kg/Hr				
H3A-CMB	9	500	34	2,250	60	225	100	24"x14"x54	250	115	1/2" / 3/4"
H3-CMB	12	500	34	3000	80	310	140	24"x14"x54	250	115	1/2" / 3/4"
H3L-CMB	15	500	34	3,750	100	375	170	24"x14"x54	250	115	1/2" / 3/4"
H6A-CMB	20	500	34	5,000	130	500	230	24"x14"x55	350	160	1/2" / 3/4"
H6-CMB	25	500	34	6,250	160	625	280	24"x14"x55	350	160	1/2" / 3/4"
H6L-CMB	30	500	34	7,500	200	750	340	24"x14"x55	350	160	1/2" / 3/4"
H9A-CMB	40	500	34	10,000	260	1,000	460	24"x14"x57	600	270	3/4" / 1"
H9L-CMB	50	500	34	12,500	320	1,250	560	24"x14"x57	600	270	3/4" / 1"
H12-CMB	60	500	34	15,000	400	1,500	680	24"x14"x57	600	270	3/4" / 1"
H15-CMB	75	500	34	18,750	480	1,900	840	36"x18"x88	700	315	1" / 1"
H18-CMB	100	500	34	25,000	640	2,500	1,120	36"x18"x88	700	315	1" / 1"
H21-CMB	120	500	34	30,000	780	3,000	1,360	36"x18"x88	700	315	1" / 1"

How to Order a Thermacast™ Combo Vaporizer

Model # Below	Combo Style Unit	Voltage	Available options:	LTCO = low temperature cut off valve & controller PBVS = pressure build valve & pressure switch SCR = solid state SCR power control
XXX	-CNB	-XXX	-XXXX	
From above table		240 380 400 480 600	LTCO PBVS SCR	
Also specify:		Process fluid (N ₂ O ₂ Ar CO ₂ N ₂ O) Desired outlet temperature (40°F to 120°F) Tank operating pressure		

All tables shown on this Datasheet are intended as a guide that reflect our experience on these models. Please call Thermax Inc. for guidance on specific applications. Actual performance may vary. This product and/or data was designed and/or developed by Thermax Inc. and shall not be used in any way injurious to the interests of Thermax Inc. Thermacast™ is a Thermax Inc. trademark.