Algas-SDI™

ISO 9001 Certified

...Innovative liquid vaporizing and gas mixing solutions

Aquavaire

Vertical Waterbath Vaporizer Models: Q320V through Q1650V

Easiest and most reliable vaporizer you will ever use!

- *Simple push button start - no hassle operation.*
- *Push to prime feature added for cold-start days.*
- *Heavy duty Eclipse industrial fixed-air burner requires no adjustments, even at high elevations.*
- *Designed for extreme weather conditions. Proven reliability to -40°F.*
- *Built-in heavy ends separation chamber - prevents clogging of regulators and other downstream devices.*
- *Best in class, double protected cabinet - powder coating over heavy duty galvanized sheet steel.*
- *Eight point annunciator display panel provides up to the minute visual status.*

Revised 08.01.00

Factory Mutual System Approved

ECLIPSE Innovative Thermal Solutions

Specifications

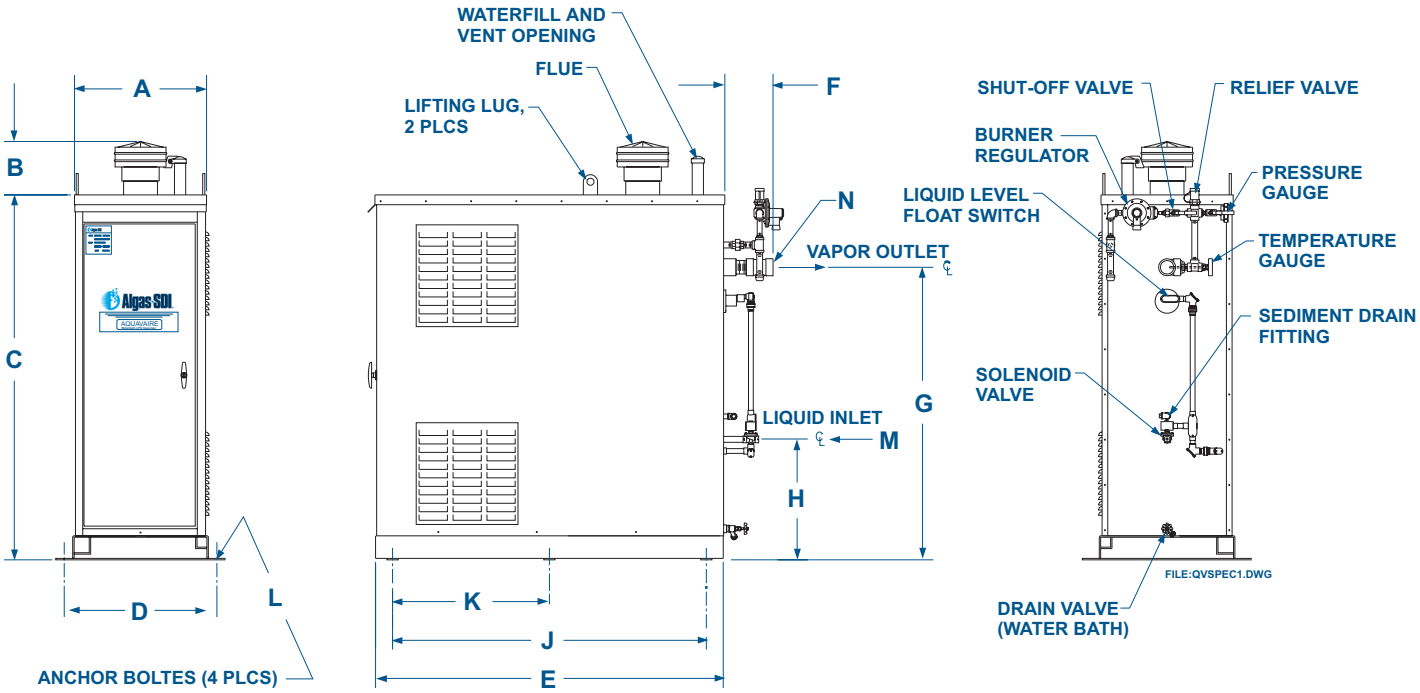
	MODEL	Q320V	Q480V	Q640V	Q800V	Q960V	Q1120V	Q1375V	Q1650V
Rated Capacity	Kg/hr	614	921	1,230	1,535	1,840	2,150	2,640	3,332
	Million BTU/hr	29.1	43.7	58.2	72.8	87.4	102.0	125.1	150.2
	Million kcal/hr	7.3	11.0	14.7	18.4	22.0	25.7	31.5	37.8
Nominal Capacity	US Gallons/hr	320	480	640	800	960	1,120	1,375	1,650
Heat Exchanger Surface Area	ft^2	30.5	40.6	58.6	90.5	90.5	99	99	140.7
	m^2	2.83	3.77	5.45	8.41	8.41	13.07	13.07	13.07
Heat Exchanger Design Pressure	psig	250	250	250	250	250	250	250	250
	kg/cm^2	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6
Heat Exchanger Test Pressure	psig	375	375	375	375	375	375	375	375
	kg/cm^2	26.3	26.3	26.3	26.3	26.3	26.3	26.3	26.3
Watebath Water Volume	US Gallons	107	128	221	279	279	475	475	475
	liters	405	485	836	1,056	1,056	1,798	1,798	1,798
Waterbath Operating Temperature (Adjustable)	°F	160	160	160	160	160	160	160	160
	°C	71	71	71	71	71	71	71	71
Firetube Surface Area	ft^2	37.4	51.3	66.7	89.2	89.2	115	115	150.8
	m^2	3.47	4.76	6.19	8.32	8.32	14	14	14
Burner Fuel Input (Min)	BTU/hr	370,000	550,000	710,000	880,000	999,000	1,240,000	1,520,000	1,825,000
	kcal/hr	93,240	138,600	178,920	221,760	251,748	312,480	383,040	459,890
Burner Fan Motor	Horsepower	1/3	1/3	3/4	3/4	3/4	3/4	3/4	1
Shipping Weight	lbs	1,770	2,025	2,690	2,900	2,900	3,200	3,200	3,400
	kg	803	919	1,220	1,315	1,315	1,452	1,452	1,542
Operating Weight *with 50/50 Glycol/Water*	lbs	2,740	3,200	4,700	5,430	5,430	7,500	7,500	7,700
	kg	1,250	1,450	2,130	2,460	2,460	3,400	3,400	3,493
Electrical *Specify 50 Hz or optional voltage if required*	Voltage	120	120	120	120	120	120	120	120
	Hz	60	60	60	60	60	60	60	60
	Phase	1	1	1	1	1	1	1	1
	Amperage	10.9	10.9	13.4	15.5	15.5	16.9	16.9	26.5

*Vaporization capacity ratings at 100 psig (7.0 kg/cm^2) and at 0°F (-17.8°C) liquid propane.
*Consult factory for elevations greater that 6,8000ft.

Features

- *Meets the design requirements of NFPA Pamphlet 58 for gas fired waterbath vaporizers.*
- *The LPG heat exchanger is designed and constructed to conform with ASME Pressure Vessel Code, Section VIII, Division 1.*
- *All wiring, controls, electrical components, and their installation comply with recognized standards defined in NFPA 58 and 70.*
- *Industrial duty fixed air forced draft power burner provides optimum exhaust stack temperatures and fast response to load changes.*
- *Float activated high LPG liquid level shutdown switch.*
- *LPG heat exchanger design pressure rating: 250 psig at 650°F (17.6 kg/cm^2 at 343°C).*
- *Minimum 15°F [8.4°C] superheat @ 100% capacity.*
- *Water level sight gauge.*
- *Powder coated enclosure for durability with fully insulated waterbath for greater efficiency.*
- *Lifting lugs provided for ease of field installation.*
- *Water circulation pump standard on all models to eliminate thermal stratification and increase vaporizer efficiency.*
- *Electronic flame safeguard assures positive and safe ignition.*
- *Two electronically operated main fuel safety shutoff valves in gas train.*

Dimensions



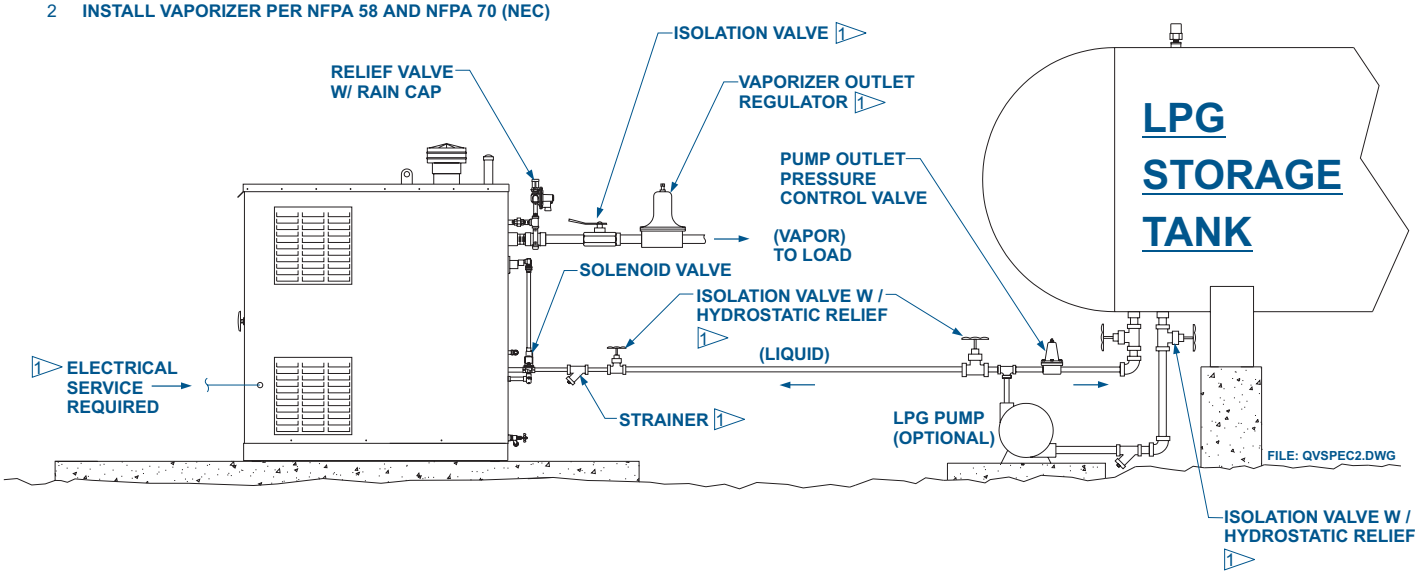
MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N
Q320V	2'-0" 24" 610mm	0'-10" 10" 254mm	5'-4 1/2" 64 1/2" 1632mm	2'-3" 27" 686mm	5'-1 1/2" 61 1/2" 1562mm	0'-7" 7" 178mm	4'-3 3/4" 51 3/4" 1315mm	1'-9 3/8" 21 3/8" 543mm	4'-7 1/2" 55 1/2" 1410mm	N/A	5/8"	3/4" FNPT	2" FNPT
Q480V	2'-0" 24" 610mm	1'-4 1/4" 16 1/4" 412mm	6'-1 3/4" 73 3/4" 1873mm	2'-3" 27" 686mm	5'-1 1/2" 61 1/2" 1562mm	0'-7" 7" 178mm	5'-1 3/8" 61 3/8" 1559mm	1'-9 1/2" 21 1/2" 546mm	4'-7 1/2" 55 1/2" 1410mm	N/A	5/8"	3/4" FNPT	2" FNPT
Q640V	3'-0" 36" 914mm	1'-5 3/4" 17 3/4" 450mm	5'-5 1/4" 65 1/4" 1657mm	3'-3" 39" 991mm	6'-6 1/4" 78 1/4" 1988mm	0'-7" 7" 178mm	4'-7 3/4" 55 3/4" 1416mm	1'-11 1/8" 23 1/8" 587mm	6'-1/4" 72 1/4" 1835mm	N/A	5/8"	3/4" FNPT	2" FNPT
Q800V	3'-0" 36" 914mm	1'-6" 18" 457mm	6'-6 1/4" 78 1/4" 1988mm	3'-3" 39" 991mm	6'-6 1/4" 78 1/4" 1988mm	0'-7" 7" 178mm	5'-9" 69" 1753mm	1'-11 13/16" 23 13/16" 605mm	6'-1/4" 72 1/4" 1835mm	N/A	5/8"	1" FNPT	2" FNPT
Q960V	3'-0" 36" 914mm	1'-6" 18" 457mm	6'-6 1/4" 78 1/4" 1988mm	3'-3" 39" 991mm	6'-6 1/4" 78 1/4" 1988mm	0'-7" 7" 178mm	5'-9" 69" 1753mm	1'-11 13/16" 23 13/16" 605mm	6'-1/4" 72 1/4" 1835mm	N/A	5/8"	1" FNPT	2" FNPT
Q1120V	4'-3 5/8" 51 5/8" 1311mm	1'-7" 19" 482mm	6'-61/2" 73 1/2" 1867mm	4'-6 1/2" 54 1/2" 1384mm	7'-2 5/8" 86 5/8" 2200mm	0'-7" 7" 178mm	4'-11" 59" 1499mm	2'-8 7/8" 32 7/8" 835mm	6'-8 5/8" 80 5/8" 2048mm	3'-4 5/16" 40 5/16" 1024mm	5/8"	1" FNPT	2" FNPT
Q1375V	4'-3 5/8" 51 5/8" 1311mm	1'-7" 19" 482mm	6'-61/2" 73 1/2" 1867mm	4'-6 1/2" 54 1/2" 1384mm	7'-2 5/8" 86 5/8" 2200mm	0'-7" 7" 178mm	4'-11" 59" 1499mm	2'-8 7/8" 32 7/8" 835mm	6'-8 5/8" 80 5/8" 2048mm	3'-4 5/16" 40 5/16" 1024mm	5/8"	1" FNPT	2" FNPT
Q1650V	4'-3 5/8" 51 5/8" 1311mm	1'-7" 19" 482mm	6'-61/2" 73 1/2" 1867mm	4'-6 1/2" 54 1/2" 1384mm	7'-2 5/8" 86 5/8" 2200mm	0'-7" 7" 178mm	4'-11" 59" 1499mm	2'-8 7/8" 32 7/8" 835mm	6'-8 5/8" 80 5/8" 2048mm	3'-4 5/16" 40 5/16" 1024mm	5/8"	1" FNPT	2" FNPT

Product improvement is a continuing goal at Algas-SDI. Designs and specifications are subject to change without notice or obligation.

NOTES

1 BY OTHERS

2 INSTALL VAPORIZER PER NFPA 58 AND NFPA 70 (NEC)



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Algas·SDI™ ISO 9001 Certified

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