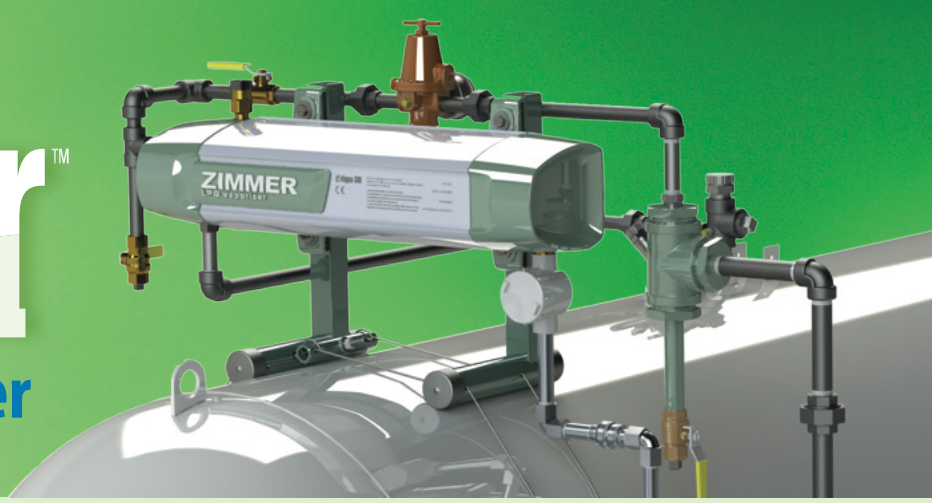
Zimmer™

Dry-Electric LPG Vaporizer



ZIMMER™ is the most hassle-free, easy-to-use vaporizer on the market. It offers a compact, affordable, energy-efficient design and requires virtually no maintenance. When quality, simplicity and reliability are your priorities, just choose ZIMMER.

KEY POINTS:

- **Hands Down the Most Reliable and Trouble-Free Vaporizer Available**
- **98% Thermal Efficiency**
- **Self-Modulating Heaters Use the Minimum Energy Required to Meet the Demand of the Load**
- **Easy Access to All Maintainable Components**
- **Dry-Electric Design — No Water, No Glycol to Maintain**
- **Aluminum Construction — Corrosion Free**
- **Easy to Install — Multiple Mounting Options**
- **Various Voltage Configurations Can be Applied to Factory Installed Explosion Proof Seal-Off**
- **Start-Up In Less Than 60 Seconds — LPG Vapor When You Need It**



The technology behind the dry-electric **ZIMMER** is advanced, yet simple to operate. Algas-SDI innovated every element of the **ZIMMER** design ensuring years of safe, reliable, affordable, and easy-to-use LPG vaporization.

IDEALLY SUITED FOR:

- Hotels & Resorts
- Backup Generators
- Hog & Poultry Barns
- Ski Areas
- Restaurants
- Small-Medium Factories
- LOT Installations
- HVOF Coatings

START-UP: Less than 1 minute depending on ambient temperature

ZIMMER is protected under various granted and pending patents.
*For more information, visit **www.algas-sdi.com/patents** for more details.*

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Origins in 1932

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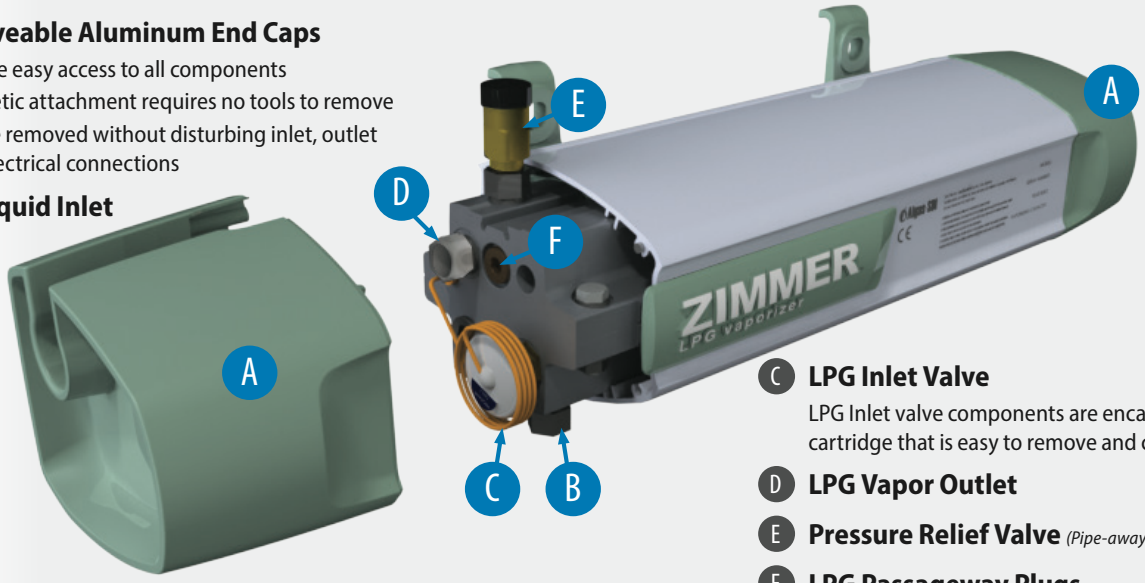


If low cost of ownership of a vaporizer is important, Algas-SDI, the pioneer in dry-electric vaporizers, has the solution for you. Dry-electric means more reliable operation and less maintenance when compared to other vaporizer types. **ZIMMER** is designed to be easy to install, operate and maintain with only a few components that require maintenance and are easy to access without removing the unit from the field. End users will benefit from the simplicity and efficiency of the **ZIMMER**.

A Removeable Aluminum End Caps

- Provide easy access to all components
- Magnetic attachment requires no tools to remove
- Can be removed without disturbing inlet, outlet and electrical connections

B LPG Liquid Inlet



C LPG Inlet Valve

LPG Inlet valve components are encapsulated in a cartridge that is easy to remove and clean or replace.

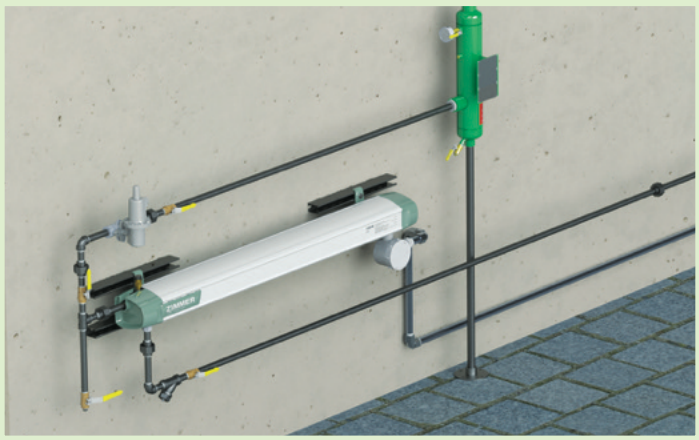
D LPG Vapor Outlet

E Pressure Relief Valve *(Pipe-away adapter available)*

F LPG Passageway Plugs

- Provided on each end of the straight LPG passageways
- Easy to access and remove to clean or drain the vaporizer
- Allow the user to clean or drain the vaporizer without removing the unit from the field

ZIMMER is designed and rated for installations in hazardous area locations. The explosion proof design allows the unit to be installed with little to no distance set backs from the LPG storage tank, cylinders, buildings or other components in the installation. **ZIMMER** can be installed either in the horizontal or vertical position. This coupled with multiple installation options — wall mount, tank mount or stand mount — make it a perfect fit for a space constrained installation and the most versatile option for all applications.



Wall mount option shown

Zimmer™ is a Trademark of Algas-SDI, LLC.

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ZIMMER Technical Specifications

Vaporizer Type/Model	Indirect | Dry-Electric | Feed Out					
	Model	Z25	Z40	Z50	Z100	Z150
Hazardous Area Classification		Class I, Division 1, Group D, T3; Ex db IIA T3 Gb (Zone 1)				
Approvals		UL/ULc, CE (ATEX & IECEx), PED (SEP)			UL/ULc, CE (ATEX & IECEx), PED (Category I)	
Vaporization Capacity*	Kg/hr	25	40	50	100	150
	US Gal/hr	12.5	20	25	50	75
	MMBTU/hr	1.1	1.8	2.2	4.5	6.8
Liquid Inlet Connection		1/2" FNPT			3/4" FNPT	
Vapor Outlet Connection		1/2" FNPT			3/4" FNPT	
Design Pressure (MAWP)		250 psig - 17.2 barg				
Relief Valve Set Point		250 psig - 17.2 barg				
Hydrostatic Test Pressure		375 psig - 25.9 barg				
Unit Dimensions		26.9" L x 9.5" H x 8.3" W			67.4" L x 9.5" H x 8.3" W	
		684 mm L x 241 mm H x 210 mm W			1712 mm L x 241 mm H x 210 mm W	
Shipping Dimensions		34" L x 11" H x 14" W			75" L x 11" H x 14" W	
		864 mm L x 280 mm H x 356 mm W			1905 mm L x 280 mm H x 356 mm W	
Shipping Weight		65 lb / 30 Kg	70 lb / 32 Kg	70 lb / 32 Kg	165 lb / 75 Kg	175 lb / 80 Kg
Optional Accessories		Tank Mount Kit; Tank Mount Piping Kit; Wall Mount Kit; Strainer and Piping Kit for Wall Mount; Regulator/Gauge for Wall Mount; Drain Valve Kit			Floor Mount Kit; Wall Mount Kit; Strainer and Piping Kit; Regulator/Gauge Kit; Drain Valve Kit	

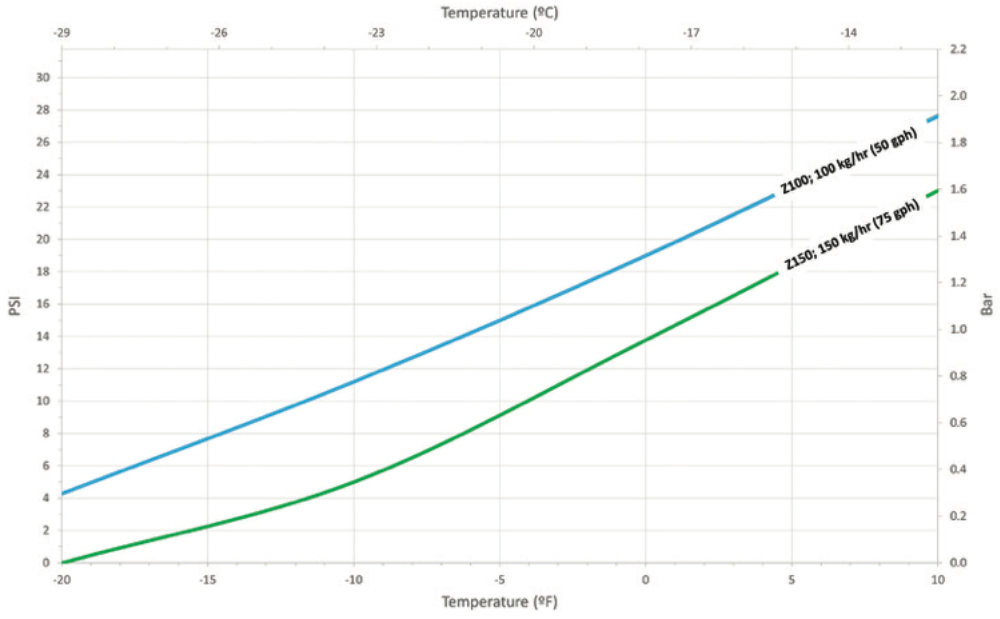
**Capacity rating may vary with ambient conditions*

Under low ambient temperature conditions the pressure drop through the heat exchangers of models Z100 and Z150 limits the pressure at the outlet of the vaporizer necessary to achieve full capacity through the high pressure regulator. Use the Vaporizer Outlet Pressure chart (100% propane shown) to determine the Z100 and Z150 outlet pressure at various liquid propane inlet temperatures. If the outlet pressure is not sufficient to achieve the required flow rate, a liquid pump needs to be installed in the system. For additional information on the Z100 and Z150 outlet pressure when vaporizing LPG mixtures, refer to detailed charts located on our website or contact the factory for application assistance.

Note: Vaporizer outlet pressure chart is for use with above ground tanks only, does not apply to buried or mounded tanks, and assumes LPG composition is 100% propane, no liquid pump in the system, no vapor withdrawal from the tank, and liquid propane in the tank is at ambient temperature.

Vaporizer Outlet Pressure at Full Capacity

(Models Z100 and Z150)

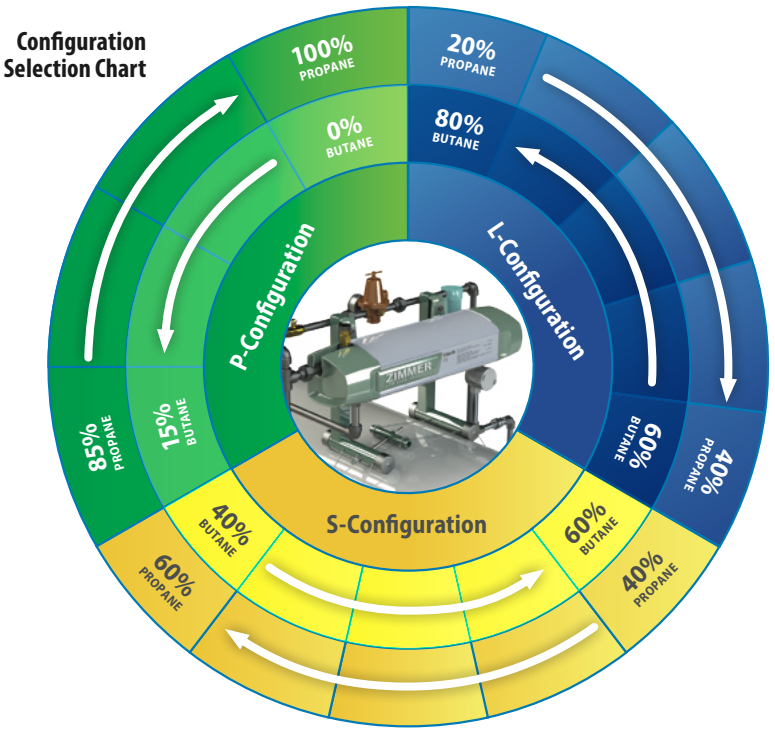


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Configuration Options

Each model of ZIMMER is available in three configurations; one for Propane and two for LPG mixtures. Each configuration is specific to the composition of the LPG because the inlet valve operates relative to the thermodynamic properties of the LPG composition. The specific configuration is identified by one of three letters following the model number: P, L and S. Use the Configuration Selection Chart to determine the proper vaporizer configuration.

Electrical Specifications

ZIMMER's design allows multiple power supply options, 50Hz or 60Hz, to be supplied to the vaporizer without the need to change wiring inside the vaporizer. Power supply options for the Z25-Z50 range from 100-277VAC single phase. Power supply options for the Z100 and Z150 range from 100-277VAC single phase or up to 480VAC 3 phase, 4-wire Wye configuration.

A properly sized D or J type circuit breaker (UL489 or CE equivalent) is required for use with the ZIMMER to allow a high level of inrush current on start-up. For 3 phase 4 wire Wye wiring, a 4 pole circuit breaker is required for the electrical installation.

SINGLE PHASE WIRING

Voltage L1 to Neutral [VAC]		**100***	**120***	**208**	**220**	**240**	**277**
Z25	Power [kW]***	2.2	2.2	3.0	3.0	3.0	3.0
	Current at rated Capacity [A]***	22.3	18.6	14.3	13.5	12.4	10.7
	Circuit Breaker D/J Type [A] (125%)	30	25	20	20	15	15
Voltage L1 to Neutral [VAC]		**100***	**120***	**208**	**220**	**240**	**277**
Z40	Power [kW]***	3.6	3.6	4.8	4.8	4.8	4.8
	Current at rated Capacity [A]***	35.7	29.8	22.9	21.6	19.8	17.2
	Circuit Breaker D/J Type [A] (125%)	45	40	30	30	25	25
Voltage L1 to Neutral [VAC]		**100***	**120***	**208**	**220**	**240**	**277**
Z50	Power [kW]***	4.5	4.5	6.0	6.0	6.0	6.0
	Current at rated Capacity [A]***	44.6	37.2	28.6	27.0	24.8	21.5
	Circuit Breaker D/J Type [A] (125%)	60	50	40	35	35	30
Voltage L1, L2 or L3 to Neutral [VAC]		**100***	**120***	**208**	**220**	**240**	**277**
Z100 **	Power [kW]***	8.9	8.9	11.9	11.9	11.9	11.9
	Current at rated Capacity [A]***	29.8	24.8	22.9	21.6	19.8	17.2
	Circuit Breaker D/J Type [A] (125%)	40	35	30	30	25	25
Voltage L1, L2 or L3 to Neutral [VAC]		**100***	**120***	**208**	**220**	**240**	**277**
Z150 **	Power [kW]***	13.4	13.4	17.9	17.9	17.9	17.9
	Current at rated Capacity [A]***	44.6	37.2	28.6	27.0	24.8	21.5
	Circuit Breaker D/J Type [A] (125%)	60	50	40	35	35	30

THREE PHASE WIRING (4 Wire Wye)

Line to Line Voltage [VAC]		**173***	**208***	**360**	**380**	**415**	**480**
Voltage L1, L2 or L3 to Neutral [VAC]		**100***	**120***	**208**	**220**	**240**	**277**
Z100	Power [kW]***	8.9	8.9	11.9	11.9	11.9	11.9
	Current at rated Capacity [A]***	29.8	24.8	22.9	21.6	19.8	17.2
	Circuit Breaker D/J Type [A] (125%)	40	35	30	30	25	25
Line to Line Voltage [VAC]		**173***	**208***	**360**	**380**	**415**	**480**
Voltage L1, L2 or L3 to Neutral [VAC]		**100***	**120***	**208**	**220**	**240**	**277**
Z150	Power [kW]***	13.4	13.4	17.9	17.9	17.9	17.9
	Current at rated Capacity [A]***	44.6	37.2	28.6	27.0	24.8	21.5
	Circuit Breaker D/J Type [A] (125%)	60	50	40	35	35	30

*25% capacity derate with 100-120V line to neutral voltage
**Requires three (3) single phase breakers, one for each leg (L1, L2, L3)
***Operating conditions affect power and current

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