

ENERVEX®

VHX 800–5400 DOUBLE ROW MODELS

3902027 03.16

Product Information

Use

The VHX, Vortex Heat Recovery Center, is a highly versatile and efficient economizer system with integrated bypass.

The VHX can be used with CASV and CASI Chimney Automation Systems. Other applications include:

- Single or multiple boilers
- Forced draft or atmospheric boilers
- Condensing or non-condensing boilers
- Baking Ovens
- Process Applications
- Chillers
- Thermal oxidizers
- Engine, turbine and high temperature exhaust systems

Description

The VHX is a fully packaged, lightweight, round configuration for easy installation. The stainless steel construction makes it suitable for both condensing and non-condensing applications without any kind of modification.

With the modular design, the economizer can be used for multiple applications simultaneously: one module can be used for preheating of feed-water, one module for domestic hot water, and one module for direct pool heating, etc.

The economizer is fully designed and packaged to combine with an automated mechanical draft system capable of optimizing the exhaust rate of the appliance to completely stabilize the appliance efficiency as well as to assure a proper and constant draft for the appliance. This allows a single economizer to serve multiple boilers no matter whether they are of atmospheric, fan-assisted or forced draft design.

The compact design utilizes a modular design with one or more stainless steel plate heat modules each with supply and return connections representing individual liquid circuits. Individual circuits can be connected to one or more common headers in accordance with the specific application. The connections are straight with proprietary bolt flanges. A TDF Exhaust fan can be attached to the mating bolt flange. Factory built tapered transitions are available.

The heat modules are designed to handle asymmetric volume flows with exceptionally high performance and are mounted in a tray system that allows it to slide out for service or cleaning.

A modulating, multi-blade damper design provides bypass capabilities for use with dual fuel applications, and also prevents over-heating of the heat modules, while eliminating nuisance shutdowns.



The VHX is available for steam boiler systems up to 1300 HP (54,000 MBH) or for other applications with flow rates up to 10,250 SCFM.

Material

Housing and heat exchanger plates are made in 316L (1.4404) stainless steel.

Warranty

2-Year Factory Warranty. Complete warranty conditions are available from ENERVEX Inc.

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Specifications

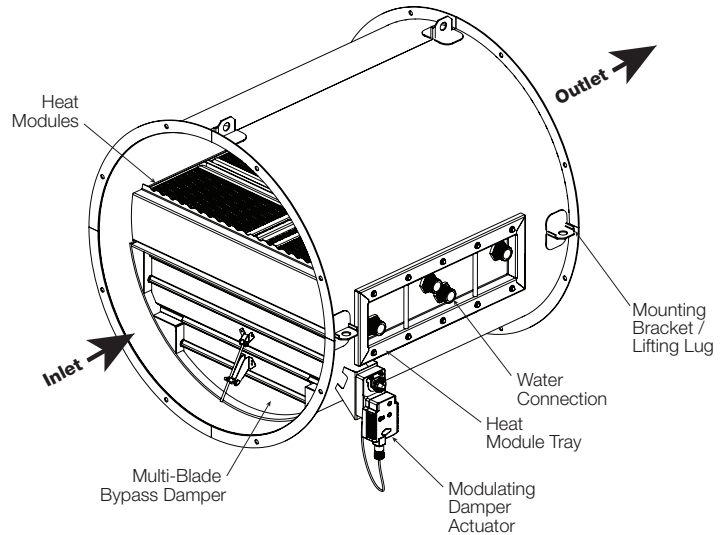
Double Row Models	VHX 800-11	VHX 1200-21	VHX 1600-22	VHX 2400-32	VHX 3200-33	VHX 4200-44	VHX 5400-55	
Boiler Input, Max. ¹⁾ MBH	8000	12000	16000	24000	32000	42000	54000	
Air Flow, Max. ²⁾ SCFM	2050	3075	4100	5125	6150	8200	10250	
Housing Material	ASTM 316L							
Heat Exchanger Material	ASTM 316L / 1.4404							
No. Heat Modules	2	3	4	5	6	8	10	
Heat Module Type	Cross 30-140	Cross 30-140	Cross 30-140	Cross 30 - 140	Cross 30 - 140	Cross 30 - 140	Cross 30 - 140	
Heat Exchanger Plate Surface Ft ²	208	312	416	520	624	832	1040	
Operating Pressure Max PSI	230							
Water Connection BSPP ³⁾	G1.25							
Weight (Dry) lbs/kg	192 / 87	273 / 124	350 / 159	431 / 195	512 / 232	588 / 267	667 / 303	
Weight (Wet) lbs/kg	214 / 97	306 / 139	394 / 179	486 / 220	578 / 262	665 / 302	755 / 342	
Dimensions	Length in/mm	28.0 / 711	39.0 / 991	39.0 / 991	50.0 / 1270	50.0 / 1270	65.0 / 1651	78.0 / 1981
	ID in/mm	36.0 / 914	36.0 / 914	36.0 / 914	36.0 / 914	36.0 / 914	42.0 / 1067	46.0 / 1168
	incl. flange OD in/mm	39.0 / 965	39.0 / 965	39.0 / 965	39.0 / 965	39.0 / 965	45.0 / 1143	49.0 / 1245
No. of Flange Bolt Holes	8							

¹⁾ Based on 80% efficient boiler. Actual maximum may be higher.

²⁾ Based on 2.0 inch WC pressure drop. Actual maximum may be higher if a mechanical draft fan is used.

³⁾ BSPP/NPT adaptors available from ENERVEX, Inc.

Larger sizes available upon request; contact ENERVEX, Inc. with specifications.



Specifications are subject to change without notice.

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