

TJERNLUND DRAFT INDUCERS

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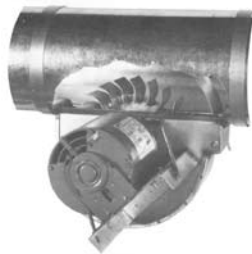
IN-LINE AUTO-DRAFT INDUCERS

IMPROVE HEATING EFFICIENCY

In-Line Draft Inducers assure positive draft when restricted boilers and furnaces, poor chimneys, or negative pressures in buildings prevent proper exhaust of combustion gases. The Venturi action starts air moving up the stack instantly and keeps it moving smoothly. In-Line Inducers are built for long-lasting, trouble-free service and are available in sizes and capacities to meet virtually all heating system requirements. The Vari-Draft control permits adjustment to individual job requirements. Vents/ chimneys utilizing In-Line Draft Inducers must be vertically terminated above the roofline.

Typical Applications:

- Boilers/Furnaces
- Water Heaters
- Modular Boiler Systems
- Multiple Appliances
- Bakery Ovens
- Factory Processes



Solves Venting Problems:

- Undersized Chimneys
- Negative Pressures
- Long Horizontal Vent Connectors
- Down Drafts
- Cold Equipment Starts
- Restrictive Heat Exchangers/Combustion Chambers

NOTE: For use on vertically terminated vent systems only.

STOCK #	MODEL	VOLTS/HZ/RPM/WATTS/AMPS	THERM. PROT.	PRICE
813030	TJ-DJ-3*	Std. 115/60 cyl/1550/35 W/1.43	IMP. PROT.	\$672.00
813032	TJ-D-3*	Std. 115/60 cyl/1550/74 W/1.96	YES	711.00
813034	TJ-I	Std. 115/60 cyl/1725/1/4 H.P./5.4	YES	1,295.00
813036	TJ-IL	Std. 115/60 cyl/1725/1/4 H.P./5.4	YES	1,380.00
813038	TJ-XL	Std. 115/60 cyl/1725/3/4 H.P./10.8	YES	2,773.00
C813000	TJ-HD	Std. 230, 460V/60 cyl/1725/2 H.P./6.4, 3.2	NO	P.O.A.

*C.S.A. Certified



Model TJ-DJ-3



Model TJ-D-3



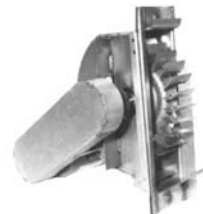
Model TJ- I



Model TJ-IL



Model TJ-XL



Model TJ-HD

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TJERNLUND DRAFT INDUCERS

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POWER VENTERS

MODELS TJ-HSJ, TJ-HS1, TJ-HS2, TJ-HS3, TJ-HS4, TJ-HS5

A full range of models from small residential to large commercial capacities. All models feature the TJ-UC1 interlock control, factory set Fan Proving Switch and adjustable damper to fine tune vent system draft. Can be used on natural gas, LP, and oil-fired furnaces, boilers, and water heaters. We recommend using the SideShot® vent systems for oil-fired applications and do not recommend using the models TJ-HS3, 4, 5 for oil due to the potential volume of soot if the burner goes out of adjustment. Select the appropriately sized TJ-VH1 Series Vent Hood (Please refer to index) to complete your side wall vent system.

STOCK #	MODEL	DESCRIPTION	VENT PIPE DIAMETER ("	PRICE
813073	TJ-HSJ	Power Venter	4	\$973.00
813075	TJ-HS1	Power Venter	4 – 6	1,030.00
813077	TJ-HS2	Power Venter	6 – 8	1,411.00
813078	TJ-HS3	Power Venter	8 – 10	2,590.00
813079	TJ-HS4	Power Venter	8 – 12	3,550.00
C813000	TJ-HS5	Power Venter	10 – 14	P.O.A.



TJ-HSJ, TJ-HS1 and TJ-HS2



TJ-HS3, TJ-HS4, and TJ-HS5

SIDE WALL VENT SYSTEM

SIDESHOT® — MODEL TJ-SS1C

Venting for heating appliances doesn't have to go through the roof, neither does the cost. In more than one million installations, Tjernlund side wall vent systems have proven superior to other venting alternatives in performance and safety. What's more, they substantially reduce heating installation costs.

The SideShot 1 is intended for use with natural draft oil and gas heating equipment. It automatically vents the flue gases from heating equipment to the outdoors. Surrounding combustible surfaces and exhaust gases are kept at safe temperatures by pulling outdoor air into its casing and mixing it with the flue gases during operation. After each burner cycle the SS1 will continue to operate for an adjustable period to purge the heater and vent of residual gases.

The SS1 features a 3-way safety system consisting of the UC1 Interlock Control, Fan Proving Switch, and High Limit. These devices monitor the SS1 performance and will disrupt the burner if a vent system malfunction is detected.

STOCK #	MODEL	DESCRIPTION	PRICE
813080	TJ-SS1C-U	SideShot® Vent System	\$2,658.00



DUCT BOOSTER FANS

- Boosts air flow in hard to heat or cool rooms.
- Model DB-2 features motor outside of air stream.
- Easy installation in both metal and flex duct (EF-Series only).
- Optional speed and Duct Airstat operating controls.
- Quiet, smooth operation.

STOCK #	MODEL	HP/WATTS	AMPS	FREE AIR CFM	PRICE
813110	TJ-DB-2	1/70 HP	.51	200-275	\$315.00



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TJERNLUND DRAFT INDUCERS

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ACCESSORIES

UNIVERSAL CONTROL

The single interlock for all Tjernlund mechanical draft systems. Features include: adjustable pre and post purge, LED status/diagnostic indicators, and prover switch check circuit verifies fan prover switch is open prior to operating. Eliminates appliance control circuit compatibility issues since the UC1 interlocks with dry contact, 24 VAC or 115 VAC appliance control systems. Appliance control circuit voltage can be selected, eliminating false triggering by burner check circuits.



STOCK #	MODEL	PRICE
813196	TJ-UC1	\$395.00

Note: The TJ-UC1 is a standardized control for Tjernlund Inducers/Venters.

MULTIPLE APPLIANCE CONTROL

Used with any TJ-UC1 controlled inducer to interlock additional 24/115 VAC heaters. Powered by and communicates with the TJ-UC1 through a factory wired whip. For one additional 24/115 VAC heater, add the TJ-MAC1E. To interlock up to four more additional 24/115 VAC heaters, add the TJ-MAC4E. TJ-MAC4Es can be daisy chained together for greater than 5 heaters. **Important:** Total combined BTU/hr. input of all heaters and total equivalent pipe lengths must be within inducer's capacity.



STOCK #	MODEL	PRICE
813104	TJ-MAC1E	\$402.00

MILLIVOLT INTERLOCK KIT

For use with TJ-UC1 Universal Control, TJ-MAC1E or TJ-MAC4E auxiliary controls. The TJ-WHKE gas pressure switch actuates the inducer through the A - B Dry contacts. The Linear Limit switch disables the heater in the event of a venting malfunction. Includes TJ-JA1 thermocouple junction adapter. To interlock millivolt water heater(s) only with a TJ-UC1 controlled inducer add a TJ-WHKE for each millivolt heater. To interlock a millivolt water heater, and one 24/115 VAC furnace or boiler with a TJ-UC1 controlled inducer, add a TJ-WHKE and a TJ-MAC1E.



STOCK #	MODEL	PRICE
813106	TJ-WHKE	\$387.00

WATER HEATER INTERLOCK KITS

TJ-WHK-2

The TJ-WHK-2 is used to interlock a millivolt controlled water heater of up to 120,000 BTU/hr with a Power Venter or Draft Inducer. Kit includes: Gas Solenoid Valve and Linear Limit Switch safety interlock to provide 100% safety shut down if a venting malfunction occurs. Gas Pressure Switch, Post Purge Timer/Relay and Control Cables necessary for interlock. Not for use with TJ-UC1.

TJ-WHK-I

Includes Gas Pressure Switch, Spillage Switches and all necessary hardware to interlock a Power Venter or Draft Inducer to an instantaneous water heater or millivolt pool heater. Not for use with TJ-UC1.

STOCK #	MODEL	PRICE
813107	TJ-WHK-I	\$415.00

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ACCESSORIES (cont'd)

FAN PROVING SWITCH

To satisfy national mechanical codes for oil and gas installations, Draft Inducers must be properly interlocked with burner circuits. The TJ-PS1505 Fan Proving Switch monitors pressure within the Inducer housing to verify Inducer operation. Used in conjunction with the TJ-UC1 Universal Control, it assures compliance with codes and simplifies electrical interlock with all 24/115 VAC burner circuits. The TJ-PS1505 is not compatible with millivolt gas valves.

STOCK #	MODEL	PRICE
C813000	TJ-PS1505	P.O.A.



Inline-Draft Inducers with optional VCI Control and TJ-PS1505 Fan Proving Switch.

POSITIVE AIR FLOW PRESSURE SWITCH

The Tjernlund Duct Airstat senses positive pressure in a forced air heating and/or cooling system. The single pole, single throw, snap-acting switch is activated by a diaphragm with a factory installed sampling tube inserted directly into the duct or plenum.

The Duct Airstat can be used to initiate such auxiliary devices as: Duct Boosters, Electronic Air Cleaners, Electrical Duct Heaters, and Humidifiers. The electrical contacts of the switch are closed upon sensing positive air pressure generated by the blower.

STOCK #	MODEL	PRICE
C813000	TJ-PS1503	P.O.A.



SPEED CONTROL

- Used to turn Duct Fans on/off and can vary motor RPM.
- Can be used with TJ-PS1503 Duct Airstat.
- Can be used with Models TJ-EA-5, TJ-EF-6, TJ-EF-8, and TJ-EF-10 Duct Booster Fans.

STOCK #	MODEL	PRICE
C813000	TJ-SC-1	P.O.A.

VENT HOODS

Specially designed to terminate Tjernlund Side Wall Vent Systems. They are also an approved method of terminating many horizontally vented appliances. Vent hoods feature heavy duty, corrosive-resistant aluminum construction. Models TJ-VH1-3, 4, and 6 also have built in clearances from combustibles. Building exteriors are kept clean while the structure's exterior aesthetics remain undisturbed. All mounting hardware is included.

STOCK #	MODEL	PRICE
C813000	TJ-VH1-3"	P.O.A.
813092	TJ-VH1-4"	\$335.00
813094	TJ-VH1-6"	395.00
813096	TJ-VH1-8"	910.00
C813000	TJ-VH1-10"	P.O.A.



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IN-LINE DRAFT INDUCER VERTICAL VENT SYSTEMS FOR ALL FUELS

Solves Venting Problems Caused by:

- Undersized Chimneys
- Negative Pressures
- Long Horizontal Vent Connectors
- Down Drafts
- Cold Equipment Starts
- Restrictive Heat Exchangers/Combustion Chambers

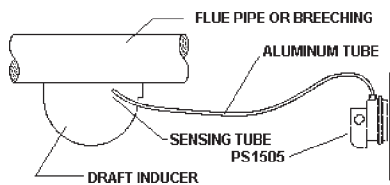
Typical Applications

- Boilers/Furnaces
- Water Heaters
- Modular Boiler Systems
- Multiple Appliances
- Bakery Ovens
- Factory Processes

Tjernlund In-Line Draft Inducers assure positive draft when restricted boilers and furnaces, poor chimneys or negative pressures in buildings prevent proper exhaust of combustion gases. The venturi action starts air moving up the stack instantly and keeps it moving smoothly. These units are quick and easy to install and completely automatic in operation. In-Line Draft Inducers are built for long-lasting, trouble-free service and available in sizes and capacities to meet virtually all heating system requirements. The Vari-Draft control permits adjustment to individual job requirements.

IMPORTANT: Vents/Chimneys utilizing In-Line Draft Inducers must be vertically terminated above the roof line.

Everything needed to conform with national mechanical codes



Fan Prover Safety Interlock – Model PS1505

To satisfy national mechanical codes for oil and gas installations, Draft Inducers must be properly interlocked with burner circuits. The PS1505 Fan Proving Switch monitors pressure within the Inducer housing to verify Inducer operation. Used in conjunction with the UC1 Universal Control, it assures compliance with codes and simplifies electrical interlock with all 24/115 VAC burner circuits. The PS1505 is not compatible with millivolt gas valves.

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IN-LINE DRAFT INDUCER VERTICAL VENT SYSTEMS FOR ALL FUELS (cont'd)

ACCESSORIES

The UC1 is a standardized control for Tjernlund Inducers/Venters. It offers many installation, operational and safety benefits.

Universal Control — Model UC1

The UC1 can be interlocked with virtually any burner control circuit. Features include: adjustable pre and post purge, LED status / diagnostic indicators, 10 second prover switch delay to avoid burner start up and wind induced short cycling. Interlocks with any 24-120 VAC burner control circuit and also includes "dry" contact actuation option. Selectable voltage eliminates false activation by burner control circuits. After each burner cycle the UC1 will continue to operate in post-purge mode to allow the Inducer/Venter to purge the heater and vent of residual flue gases. A factory post-purge time is set at 2 minutes and is adjustable up to 16 minutes.



Multiple Appliance Controls — Model MAC1E

The MAC1E Multiple Appliance Control is used in conjunction with the UC1 Universal Control to easily interlock up to one additional 24 VAC, 115 VAC or millivolt controlled appliance. It activates the Venter through its connections to the UC1 and in turn relies on the UC1 Fan Prover safety circuit (P1 and P2) to allow its interlocked appliances to operate. Any pre/post-purge settings on the UC1 will be defaulted to the MAC1E. The MAC1E puts an end to difficult and costly job site wiring nightmares. Circuit board housed in oversized 18 gauge electrical box with multiple knock-outs for easy wiring connections.



Multiple Appliance Controls — Model MAC4E

The MAC4E Multiple Appliance Control is used in conjunction with the UC1 Universal Control to easily interlock up to 4 additional 24 VAC, 115 VAC or millivolt controlled appliances. It activates the Venter through its connections to the UC1 and in turn relies on the UC1 Fan Prover safety circuit (P1 and P2) to allow its interlocked appliances to operate. Any pre/post-purge settings on the UC1 will be defaulted to the MAC4E. The MAC4E puts an end to difficult and costly job site wiring nightmares. Circuit board housed in oversized 18 gauge electrical box with multiple knock-outs for easy wiring connections.



Millivolt Safety Interlock Kit — Model WHKE

For use with the UC1 Universal Control, MAC1E or MAC4E auxiliary controls. The WHKE gas pressure switch actuates the Inducer through the A-B dry contacts. The Linear Limit switch disables the heater in the event of a venting malfunction. Includes JA1 thermocouple junction adapter. To interlock millivolt water heater(s) only with a UC1 controlled Inducer add a WHKE for each millivolt heater. To interlock a millivolt water heater and one 24/115 VAC furnace or boiler with a UC1 controlled Inducer, add a WHKE and a MAC1E.



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TJERNLUND DRAFT INDUCERS

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IN-LINE DRAFT INDUCER VERTICAL VENT SYSTEMS FOR ALL FUELS (cont'd)

MODEL SELECTION TABLE AND ELECTRICAL DATA

MODEL NO.	PIPE SIZE (")	GAS FIRING WITH DRAFT HOOD			GAS FIRING WITH BAR. DRAFT CONTROL			OIL FIRING WITH BAR. DRAFT CONTROL			ELECTRICAL DATA					
		HEATER BTU INPUT	270° F FLUE GAS		HEATER BTU INPUT	390° F FLUE GAS		HEATER BTU INPUT	530° F FLUE GAS		VOLT	HZ	RPM	WATTS	AMP.	THER PROT.
			S.P.	CFM		S.P.	CFM		S.P.	CFM						
DJ-3	3	69,000	.034	48	72,000	.047	36	58,000	.048	33	115	60	1550	35	.43	IMP. PROT.
	4	105,000	.042	72	109,000	.053	55	92,000	.057	48						
	5	111,000	.043	72	104,000	.052	52	74,000	.052	39						
	6	100,000	.041	68	34,000	.042	17	25,000	.035	13						
D-3	5	270,000	.063	190	330,000	.085	166	295,000	.092	163	115	60	1550	74	.96	Yes
	6	356,000	.073	246	377,000	.090	190	300,000	.093	169						
	7	360,000	.075	259	330,000	.085	166	230,000	.080	118						
	8	320,000	.068	217	222,000	.075	110	123,000	.065	65						
I	8	900,000	.125	590	1,200,000	.143	603	1,100,000	.147	566	115	60	1725	1/4 HP	5.4	Yes
	9	1,110,000	.135	765	1,330,000	.150	653	1,100,000	.148	566						
	10	1,250,000	.140	850	1,260,000	.145	615	840,000	.136	440						
	12	1,030,000	.128	710	710,000	.115	357	400,000	.100	211						
IL	9	1,460,000	.145	1010	1,970,000	.175	989	1,700,000	.180	900	115	60	1725	1/4 HP	5.4	Yes
	10	2,080,000	.170	1370	2,460,000	.185	1240	1,900,000	.180	1010						
	12	1,920,000	.160	1325	2,230,000	.182	1120	1,500,000	.170	789						
	14	1,840,000	.159	1270	1,470,000	.158	740	825,000	.135	453	115	60	1725	1/3 HP	6.0	Yes
	16	900,000	.120	620	650,000	.113	340	350,000	.095	184						
	18	650,000	.099	450	440,000	.095	220	200,000	.075	106						
XL	16	4,000,000	.250	2670	4,000,000	.260	2010	3,300,000	.230	1763	115 208 230	60	1725	1 HP	12.6 6.2 6.3	Yes
	18	3,900,000	.240	2650	3,250,000	.240	1660	2,100,000	.190	1103						
	20	2,800,000	.195	1935	2,100,000	.175	1079	1,200,000	.150	626						
	24	1,500,000	.150	1035	1,100,000	.125	527	503,000	.110	266						
HD	20	5,300,000	.290	3690	5,200,000	.270	2440	3,600,000	.240	1870	208 230 460	60	1725	2 HP	6.3 6.4 3.2	No
	24	3,500,000	.220	2415	3,750,000	.220	1660	2,900,000	.218	1550						

IMPORTANT: Vents/Chimneys utilizing In-Line Draft Inducers must be vertically terminated above the roof line. Do not use for side wall venting. Consult your local ECCO Supply sales representative for proper Gas or Oil Side Wall Vent options. Tjernlund's Fixed and Variable Speed Specified Systems are also available with virtually unlimited capacities.

NOTE: Inputs shown above are believed to be maximum capacities for inducers, when mounted on pipe sizes shown for ordinary jobs where a moderate amount of mechanical induced draft is required.

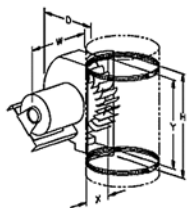
Consideration is given to typically higher static pressure requirements for larger installations, for the type of fuel burned, and for the type of draft control installed.

Some ratings may only be valid for extremely short vent lengths due to excessive pressure loss; i.e. the Model IL gas firing with draft hood in 10" pipe at 2,080,000 BTU/hr.

Where pressure requirements are unknown, or believed to be unusually severe, ask for complete performance curves or consult your local ECCO Supply sales representative.

Draft Inducers should be installed in single wall vent pipe to assure proper performance.

MODEL DIMENSIONS



"H" – Overall Height
"D" – Overall Depth
"W" – Overall Width
"X" – Pipe Slot Width
"Y" – Pipe Slot Height

MODEL	UNIT DIMENSIONS (")			SLOT		SHIP WEIGHT (LBS)
	H	W	D	X	Y	
DJ-3	7-1/2	8-1/2	5-7/8	2-5/8	7-5/8	8
D-3	9-1/8	9-1/2	7	3-1/8	8-5/8	10
I	14-1/2	13-1/2	8-3/4	4	12-3/4	31
IL	17	14-3/4	10	4-1/8	15	34
XL	18-7/8	18-1/2	10-1/2	5-1/8	16-3/4	53
HD	27-1/2	16-3/4	25	6	24-1/2	176

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GAS SIDE WALL POWER VENTERS

GPAK/HS-SERIES

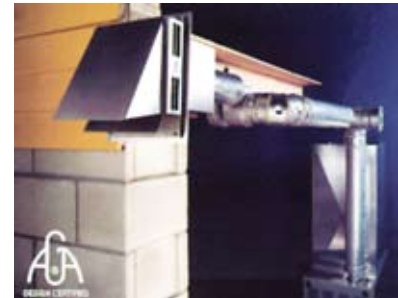
Side Wall Vent Systems save time and money and are excellent for electric to gas/oil, renovations, new construction or for replacing deteriorated chimneys. Side wall venting saves costly materials and labour on two, three or more story runs. It also increases living space by cutting out interior chases. Proven safety interlocks assure proper exhaust, a feature conventional chimneys do not offer in today's homes and buildings.

GPAK* Series Models: GPAK-JT*, GPAK-1T*, GPAK-1TR*

GPAK* gas vent packages combine the Power Venter, VH1-4 Vent Hood and 4" Barometric Draft Control to make it easier for the wholesaler to inventory and the contractor to order. GPAK* Series Power Venters include a factory prewired Fan Proving Switch and non-adjustable 45 second, post-purge Relay/Timer to purge the vent system of residual flue gases after burner cycle has completed. AGA Certification and package concept make the GPAK a popular Side Wall Venting solution.

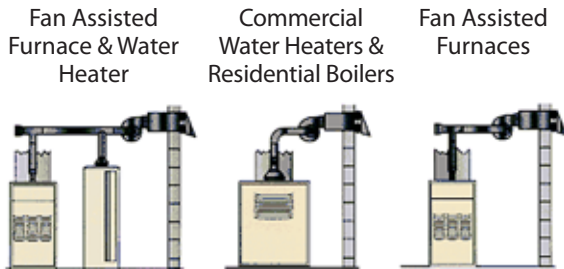
Safety and performance features time-tested in over a million installations:

- All operating components located indoors for weather protection and easy servicing.
- Capacities up to 250,000 BTU/hr.
- Accommodates vent pipe runs up to 100 equivalent feet.
- Regulated, consistent draft throughout burner cycle.
- Built-in Fan Proving Switch interlocks with gas valve.
- Standard 45 Second Post-Purge Relay/Timer.
- Kit includes everything needed for installation, except vent pipe. (HS-Series does not come with the vent hood or Draft Control)
- Durable, heavy-duty 5052 aluminum Vent hood. (GPAK* Series only)
- AGA design certified for gas furnaces, boilers, pool heaters, unit heaters and commercial water heaters. (HS-Series is UL approved)



Ideal For Replacing Plastic pipe on 80+ gas furnaces

Typical Applications



GPAK Series Model Selection Table

MODELS	VENT PIPE DIAMETER (")	BTU/HR INPUT	MAXIMUM TOTAL VENT PIPE LENGTH (')		
			ATMOSPHERIC A (ft)	FAN ASSISTED B (ft)	*40,000 ATM + COLUMN B C (ft)
GPAK-JT*	4	45,000	100	60	60
		75,000	100	60	60
		100,000	100	60	N/A
		120,000	45	60	N/A
GPAK-1T*	4	100,000	100	60	60
		120,000	100	60	60
		150,000	100	60	60
		200,000	87	N/A	N/A
		250,000	40	N/A	N/A

NOTES:

1. If the appliance flue outlet is greater than 4", install a tapered reducer after the draft hood, draft diverter or barometric draft control, reducing vent pipe diameter to 4". All vent pipe from the appliance to the Power Venter may be 4".
2. Table is based on equivalent length of straight vent pipe. 90° elbows are equivalent to 6 feet of straight vent pipe. 45° elbows are equivalent to 3 feet of straight vent pipe.
3. Determine maximum pipe length from type of equipment being vented and GPAK Model. Column A pipe runs over 30' linear feet should use Type "B" vent. Column B & C pipe runs over 15 linear feet should use type "B" vent.
4. Column C allows for up to a 40,000 BTU/hr input atmospheric water heater common vented with a fan assisted appliance from Column B.
5. All reducers and vent pipe are to be supplied by the installer and are available from your local heating wholesaler.
6. Models include a 4" Vent Hood and Draft Control and are authorized for use on furnaces eligible for the HTPV Corrective Action Program. Installations for the HTPV Program must use Type "B" vent.
7. Also available, GPAK-1TR* for use with Rheem, Ruud, Weatherking and Heat Controller Brands.

* Oil applications must use the SideShot® Vent Systems or HSJ, HS1, HS2 models including UC1 Universal Control with integral Pre and Post-Purge settings.

GPAK MOTOR SPECIFICATIONS (ELECTRICAL DATA)		INCLUDED GPAK-SERIES COMPONENTS
Volts	115	GPAK-JT*, GPAK-1T*, GPAK-1TR* Relay/Timer – 24V – 45 second post-purge time delay fan proving switch – 3FLA, 18 LRA@120 VAC VH1-4 – 4" Heavy-Duty 5052 Aluminum DC-4 Barometric Draft Control
Hertz	60	
RPM	3000	
Watts	95	
Amps	1.26	
Therm. Prot.	Yes	

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GAS SIDE WALL POWER VENTERS (cont'd)

HS SERIES MODELS: HSJ, HS1, HS2

Used for Side wall venting residential/light commercial natural gas, LP or oil fired equipment including: Furnaces, boilers, water heaters and unit heaters. All models feature the new UC1 Universal Control and a diaphragm Fan Proving Switch safety interlock which will shut down the heating equipment if a venting malfunction occurs. Built-in adjustable damper also allows regulation for maximum combustion efficiency. UC1 Universal Control features include; adjustable pre and post-purge settings, LED Status/diagnostic indicators, Fan Prover switch monitoring. Interlocks with any 24-120 VAC burner control circuit and also includes "dry" contact actuation option. Easily interlock multiple appliances with Tjernlund's MAC-Series multiple appliance controls.

HSUL Series (Discontinued 8/05) Replace with HSJ, HS1 or HS2 Models

Designed for atmospheric 24V controlled gas equipment. Includes a 24/115V switching relay and a factory set diaphragm Fan Proving Switch. Built-in adjustable damper also allows regulation for maximum combustion efficiency.

HST Series (Discontinued 7/02) Replace with HSJ, HS1 or HS2 Models

Designed for 24V or 115V controlled oil or gas equipment. Includes a dual input 24V or 115V, 1-10 minute post purge Timer/Relay and factory set diaphragm Fan Proving Switch. Built-in adjustable damper also allows regulation for maximum combustion efficiency.

HS115 Series (Discontinued 7/02) Replace with HSJ, HS1 or HS2 Models

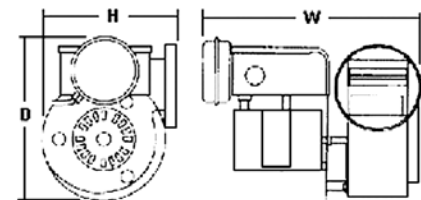
Designed for 115V controlled gas equipment. Includes a factory set diaphragm Fan Proving Switch. Built-in adjustable damper also allows regulation for maximum combustion efficiency.

Model Selection Table

MODEL NUMBER	VENT PIPE DIAMETER (")	BTU/HR INPUT	MAX PIPE LENGTH (ft) AT STACK TEMP. GAS FIRED 300°F	MAX PIPE LENGTH (ft) AT STACK TEMP. GAS FIRED 400°F	MAX PIPE LENGTH (ft) AT STACK TEMP. OIL FIRED 500°F	CFM AT 70°F (STATIC PRESSURE)				
						0"	.50"	.75"	1.0"	1.4"
*HSJ	4	50,000 75,000 100,000 125,000	100 100 100 35	100 100 100 23	100 100 -	110	85	67	10	-
*HS1	4	150,000 200,000 250,000 300,000	100 87 40 4	60 57 12 -	35 27 -	158	115	95	12	-
	6	150,000 200,000 250,000 300,000	100 100 100 30	100 100 92 -	100 100 -					
*HS2	6	350,000 400,000 450,000 500,000 550,000 600,000	100 100 100 100 94 15	100 100 100 72 -	100 100 67 -	286	235	215	196	158
	8	350,000 400,000 450,000 500,000 550,000 600,000	100 100 100 100 100 67	100 100 100 100 -	100 100 100 -					

GPAK/HS-Series Power Venter Dimensions

MODEL	(H) HEIGHT (")	(W) WIDTH (")	(D) DEPTH (")	INLET/OUTLET (")
HSJ				
GPAK-JT*	7-7/8	10-1/4	7	4
HS1				
GPAK-1T*	7-7/8	11	7	4
HS2	9-1/4	11-1/2	8-1/2	6



* Oil applications must use the SideShot® Vent Systems or HSJ, HS1, HS2 models including UC1 Universal Control with integral Pre and Post-Purge settings.

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GAS SIDE WALL POWER VENTERS (cont'd)

MILLIVOLT WATER HEATER VENTING PACKAGES — MODELS VP-2F, VP-3F

CSA Design Certified, used for Side Wall venting any brand or type of millivolt residential or light commercial gas water heater. Vents up to 75 equivalent feet and includes: Post-Purge Relay/Timer, Gas Pressure Switch, Thermocouple Junction Adapter, Linear Limit Spillage Switch, and Vent Hood. Factory pre-wired electrical box and Control Cables eliminate the need for an electrician. VP-2F will vent up to 60,000 BTU/hr; VP-3F 60,000 up to 120,000 BTU/hr.



COMMERCIAL POWER VENTERS — MODELS HS3, HS4, HS5

Used for Side wall venting commercial natural gas or LP fired equipment including: boilers, water heaters and unit heaters. All models feature the new UC1 Universal Control and a diaphragm Fan Proving Switch safety interlock which will shut down heating equipment if a venting malfunction occurs. UC1 Universal Control features include; adjustable pre and post-purge settings, LED Status/diagnostic indicators, Fan Prover switch monitoring. Interlocks with any 24-120 VAC burner control circuit and also includes "dry" contact actuation option. Easily interlock multiple appliances with our MAC-Series multiple appliance controls. Allows for a significant reduction in vent pipe diameter to save on costly materials and labour. Built-in adjustable damper also allows regulation for maximum combustion efficiency.

Model Selection Table

MODEL NUMBER	VENT PIPE DIAMETER (")	BTU/HR INPUT	MAXIMUM PIPE LENGTH (ft) AT STACK TEMP	
			100% DILUTION 300°F GAS FIRED ATMOSPHERIC WITH DRAFT HOOD OR DRAFT DIVERTER	25% DILUTION 400°F GAS FIRED POWER BURNER WITH BAROMETRIC DRAFT CONTROL
HS3 115 VAC 1/4 HP 2.7 Amps	8	450,000	100	100
		500,000	100	100
		600,000	100	100
	10	700,000	7	100
		450,000	100	100
		500,000	100	100
HS4 115 VAC 1/4 HP 5.8 Amps	8	600,000	100	100
		700,000	100	100
		800,000	100	100
		900,000	100	100
		1,000,000	70	100
		1,100,000	32	100
	10	1,200,000	5	100
		700,000	100	100
		800,000	100	100
		900,000	100	100
		1,000,000	100	100
		1,100,000	97	100
	12	1,200,000	14	100
		700,000	100	100
		800,000	100	100
		900,000	100	100
		1,000,000	100	100
		1,100,000	100	100
HS5 115/208/230 VAC, 1 HP 6.2 Amps @ 208V* 6.3 Amps @ 230V* 12.6 Amps @ 115V*	10	1,200,000	100	100
		1,400,000	100	100
		1,600,000	100	100
		1,825,000	29	100
	12	1,200,000	100	100
		1,400,000	100	100
		1,600,000	100	100
		1,825,000	72	100
	14	1,200,000	100	100
		1,400,000	100	100
		1,600,000	100	100
		1,825,000	100	100

Commercial Power Venter Dimensions

MODEL	A	B	C
HS3	8	12-1/2	13-1/4
HS4	8	14-3/4	15-1/4
HS5	10	18	16-1/2

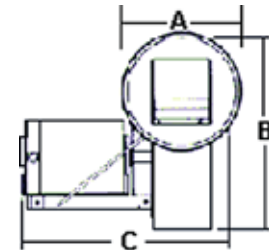


Table is based on straight vent pipe. 90° elbows are equivalent to 10 feet of straight vent pipe, 45° elbows are equivalent to 5 feet of straight vent pipe. Tjernlund Commercial Power Vent Systems include all necessary actuation, operation and safety controls. Tjernlund's Fixed and Variable Speed Specified Systems are also available with virtually unlimited capacities. *A SPDT motor relay must be added for use with the UC1 Universal Control.

TJERNLUND DRAFT INDUCERS

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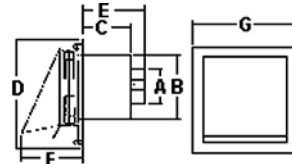
GAS SIDE WALL POWER VENTERS (cont'd)

VENT HOODS — MODELS VH1-3, VH1-4, VH1-6, VH1-8, VH1-10

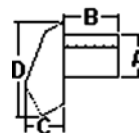
Specially designed to terminate Tjernlund Side Wall Vent Systems. They are also an approved method of terminating many horizontally vented appliances. Vent hoods feature heavy duty, corrosion resistant aluminum construction. Models VH1-3, 4 and 6 also have an additional heat shield for built in clearances from combustibles. Building exteriors are kept clean while the aesthetics of the structure remain undisturbed. All mounting hardware is included.

Dimensions

MODEL	(A) DIA. (")	B (")	C (")	D (")	E (")	F (")	G (")	ROUGH-IN DIMENSIONS
VH1-3	3	6-1/4 sq	8-1/2	10	10	5-1/4	7-3/4	6-3/4 sq
VH1-4	4	7-1/2 sq	7-1/8	13	8-5/8	7-3/8	11	8 sq
VH1-6	6	8-1/2 dia.	7-7/8	12	9-1/2	10-1/2	10	9 dia.



MODEL	(A) DIA. (")	B (")	C (")	D (")	E (")	ROUGH-IN DIMENSIONS
VH1-8	8	16	7-3/4	18-3/8	20	8-1/2 dia.
VH1-10	10	16	7-3/4	18-3/8	20	10-1/2 dia.



DRYER DUCT BOOSTER

Featuring the Lint Blitzer™ Blower Wheel for maximum performance, zero maintenance.

The Problem

Exhaust duct lengths beyond 25 equivalent feet* reduce air velocity, often causing:

- Increased drying time
- Increased energy use
- Increased lint build-up in ductwork

*Equivalent feet equals linear feet plus 5 additional feet for each 90° elbow and 2.5 feet for each 45° elbow.

The Solution

The Dryer Duct Booster® maintains proper exhaust velocity in duct runs up to 100 equivalent feet, optimizing dryer performance.

The Dryer Duct Booster® surpasses all existing dryer duct fans with features including:

- The Lint Blitzer™ blower wheel. Unlike in-line tubeaxial fans which can clog with lint, the Lint Blitzer wheel is specially designed to repel lint while providing optimum air velocity.
- 5-year no-clog, no-maintenance guarantee.
- Saves energy by operating only when dryer is in use.
- Permanently lubricated motor positioned out of the air stream for maximum motor life.
- Simple installation in both vertical and horizontal ducts.

Unlike in-line tubeaxial fans, which can clog with lint and require periodic cleanings, the Dryer Duct Booster's externally located motor and Lint Blitzer blower wheel mean maximum performance with zero maintenance, backed by a 5 year guarantee.

If the Dryer Duct Booster becomes inoperable due to a lint clogged blower wheel Tjernlund Products will issue a free replacement booster fan.

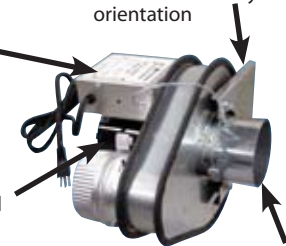


Automatic actuation control features self-cleaning dryer duct pressure sensing tube.



Rubber isolated mounting bracket eliminates vibration transfer. Rotates 360° to accommodate any mounting orientation

PSC, permanently lubricated ball bearing motor is not exposed to heat, lint or moisture. Uses less power than a 50 watt light bulb.



4" long dryer duct connections for easy duct attachment.

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DRYER DUCT BOOSTER (cont'd)



The Lint Blitzer™ blower wheel has a 5-year no-clog guarantee and outperforms typical in-line fans in a lint build-up test.

Go to www.dryerboosters.com to see for yourself.

Specifications

STOCK #	MODEL	VOLTAGE	WATTS	AMPS	PRICE
C813000	LB1	120 VAC	50	0.5	P.O.A.

Dryer Duct Booster® fans can be installed in any mounting orientation

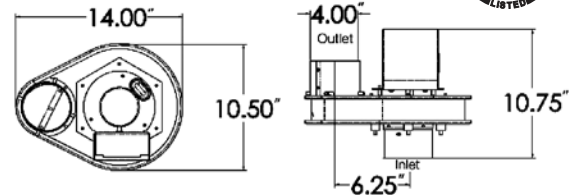


Horizontally Mounted



Vertically Mounted

Dimensions



ROOFTOP INDUCERS

The alternative to in-line inducers

- The solution for inaccessible and short length vent connectors and chimneys
- Great for noise sensitive installations
- Connects easily to single wall, insulated and tile lined flues
- Rooftop mounting maintains negative pressure throughout entire vent system.

Features

- Speed control compatible
- PSC ball bearing motors with -40°F low temp lubricant
- Motor cooling system (US Patent 6450874) automatically activates, extending motor life
- Clam-shell design for easy installation, inspection and service
- Hi-performance backward inclined impeller repels soot
- Hi-temp powder coat finish



Clamshell design means faster, easier installation and maximum accessibility to chimney or vent pipe during inspection and servicing.

RT750 AND RT1500

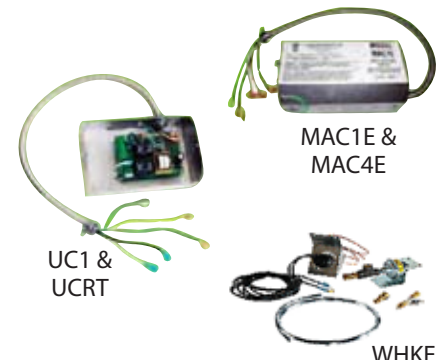
For gas or oil heating equipment, gas fireplaces and gas ovens. Includes PSA-1 Fan Proving Switch.



PSA-1

Optional Controls

- UC1 Interlock Control (For single gas or oil heater w/24 or 120 VAC burner circuit)
- UCRT Interlock Control (Same as UC1 plus an adjustable speed control to fine tune RT-series performance)
- MAC1E and MAC4E Multiple Appliance controls (Allow additional heaters to be interlocked with a single inducer)
- WHKE Millivolt Gas Water Heater Interlock (Interlocks non-powered gas heaters)



UC1 & UCRT

MAC1E & MAC4E

WHKE

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ROOFTOP INDUCERS (cont'd)

RT750H AND RT1500H

For solid fuel fireplaces, stoves, ovens, BBQs, boilers, and general purpose exhaust. Includes wall mount adjustable speed control.

OPTIONAL ROOFTOP STAND

Supports weight of inducer for metal chimney installations. Models RTS8 or RTS12

TILE LINED CHIMNEYS

RT750 Series clamps to rectangular tile liners 6" x 6" through 10" x 14" and round tile liners from 6"-11". RT1500 Series clamps to rectangular tile liners 8" x 8" through 12" x 14" and round tile liners from 10"-14".

METAL VENTS

RT750 Series as small as 8" ID and as large as 12" OD.
RT1500 Series as small as 12" ID and as large as 20" OD.

Dimensions

MODEL	A (")	B (")	C (")	INLET DIA. (")
RT750(H)	16	16	18	8
RT1500(H)	21	21	24	12



Rooftop Stand



Tile Lined Chimney



Speed Control



Metal Vent

Specifications

MODEL	CFM	HP	AMPS	VOLTS	WEIGHT (LBS)
RT750(H)	250-750	1/12	1.0	120	35
RT1500(H)	750-1,500	1/2	6.2	120	55



ETL Listed to UL378, UL705 and CAN/CSA B255-M81. Listed for 600°F continuous operation.

RT750H AND RT1500H SELECTION TABLE FOR GAS AND OIL APPLICATIONS

Sea level atmospheric with draft hood

STOCK #	MODEL	VENT PIPE DIA. (")*	BTU/HOUR INPUT	MAX. EQUIVALENT PIPE LENGTH (ft) @400°F STACK	PRICE
C813000	RT750	8	400,000 to 700,000	100	P.O.A.
C813000	RT750	8	700,000 to 900,000	50	P.O.A.
C813000	RT750	8	900,000 to 1,100,000	25	P.O.A.
C813000	RT750	10	700,000 to 1,000,000	100	P.O.A.
C813000	RT750	10	1,000,000 to 1,200,000	50	P.O.A.
C813000	RT750	10	1,200,000 to 1,300,000	25	P.O.A.
C813000	RT1500	12	1,000,000 to 2,000,000	100	P.O.A.
C813000	RT1500	12	2,000,000 to 2,400,000	50	P.O.A.
C813000	RT1500	12	2,400,000 to 2,600,000	25	P.O.A.
C813000	RT1500	14	2,000,000 to 2,500,000	100	P.O.A.
C813000	RT1500	14	2,500,000 to 2,700,000	50	P.O.A.
C813000	RT1500	14	2,700,000 to 2,900,000	25	P.O.A.

(cont'd on next page)

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ROOFTOP INDUCERS (cont'd)

RT750H AND RT1500H SELECTION TABLE FOR GAS AND OIL APPLICATIONS (cont'd)

Sea level fan assisted / power burner with barometric draft control

STOCK #	MODEL	VENT PIPE DIA. ("*)	BTU/HOUR INPUT	MAX. EQUIVALENT PIPE LENGTH (ft) @400°F STACK	PRICE
C813000	RT750	8	500,000 to 900,000	100	P.O.A.
C813000	RT750	8	900,000 to 1,200,000	50	P.O.A.
C813000	RT750	8	1,200,000 to 1,400,000	25	P.O.A.
C813000	RT750	10	900,000 to 1,200,000	100	P.O.A.
C813000	RT750	10	1,200,000 to 1,500,000	50	P.O.A.
C813000	RT750	10	1,500,000 to 1,700,000	25	P.O.A.
C813000	RT1500	12	1,200,000 to 2,700,000	100	P.O.A.
C813000	RT1500	12	2,700,000 to 3,200,000	50	P.O.A.
C813000	RT1500	12	3,200,000 to 3,500,000	25	P.O.A.
C813000	RT1500	14	2,700,000 to 3,500,000	100	P.O.A.
C813000	RT1500	14	3,500,000 to 3,700,000	50	P.O.A.
C813000	RT1500	14	3,700,000 to 3,900,000	25	P.O.A.

***IMPORTANT:** Select the inducer based on the BTU/hr input of the appliance(s) rather than the diameter of the appliance(s) vent outlet or chimney. Vent/Chimney sizes listed are the smallest inside diameter recommended for the associated BTU/hr input. Use a tapered reducing collar or transition fitting if the vent is reduced to the pipe diameter listed in selection table. To determine equivalent feet, add the total length of straight vent pipe plus 10 feet for each 90° elbow and 5 feet for each 45° elbow. Fan curves available; please contact your ECCO Supply sales representative.

RT750H AND RT1500H SELECTION FOR SOLID FUEL FIREPLACES

Efficient draft that moves smoke up the chimney and keeps it from entering the living area is dependent on maintaining a negative pressure capture velocity at the hearth opening. Even if glass fireplace doors are present, reducing the open area, a negative pressure capture velocity must be calculated based on the entire hearth opening since the doors need to be opened to add additional logs.

Multiply the vertical and horizontal hearth opening to determine the face area opening in square feet. If the fireplace is open on the sides or back total all openings to arrive at the total face area.

If typically the fire can be maintained but smoke drifts into the room, select the model which has a face area capacity equal or greater than the face opening.

Maximum Face Area

RT750H: 14 Ft²

RT1500H: 28 Ft²

Tjernlund offers free design recommendations for unusual fireplace designs, such as free-standing and custom gas fireplaces. If in doubt, please contact your ECCO Supply sales representative.