



Rooftop Inducers



The alternative to in-line inducers:

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

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



Features:

- Stainless steel backward inclined impeller repels soot and lint
- Clamshell design for easy installation, inspection and service
- Patented motor cooling system automatically activates, extending motor life
- PSC ball bearing motors with -40°F low temp lubricant
- Hi-temp powder coat finish



Proudly Made in the U.S.A.

Maximize Performance & Efficiency of Equipment Served by Common Vents



COP2 Controller

A common chase, duct or vent does not efficiently exhaust multiple sources that operate independently. Clothes dryers, boilers and water heaters all depend on a consistent, moderate exhaust to operate properly. When they share a common exhaust duct or vent their performance and efficiency is compromised by wide swings in exhaust/draft pressure as equipment cycles and in some cases modulates.

When paired with the RT-Series fans the COP2 Constant Operating Pressure control modulates fan speed to match changing exhaust or draft requirements. It incorporates a 120/1/60 Variable Frequency Drive to produce the best speed range and efficiency achievable for these exhaust applications.

Pressure is monitored in a chase, duct or vent pipe at the farthest point from the exhaust fan with the included pressure transducer and sensing tube kit. As exhaust volume increases within the duct/chase/vent the resulting reduction in measured pressure causes the COP2 control to increase frequency to the fan. It speeds the fan up to handle the additional exhaust volume and slows it down when the exhaust volume is reduced, modulating fan speed to maintain a constant exhaust pressure. Changes in wind, temperature and building pressure are automatically compensated for. Set point adjustable from -0.05" to -0.53" w.c. in 0.01" increments.

When used to exhaust gas or oil fired heating equipment, a CIC1 Burner Interlock Control must be installed in conjunction with the COP2 Controller. The CIC1 includes a UC1 Universal Interlock Control and Isolation relay.

Draft and Exhaust Application Guide

DRAFT APPLICATIONS	INDUCER MODEL	CONTROLS	REQUIRED ACCESSORIES	OPTIONAL ACCESSORIES
Multiple &/or Modulating Power Burner/Fan Assisted Heaters Multiple Atmospheric Heaters with Flue Dampers Draft Applications affected by Fluctuating Negative Building Pressures (Restaurants)	RT750 OR RT1500	COP2 and CIC1 Heater Interlock Control	**ABD-Series Balancing Baffle **DC-Series Draft Control	DH750 or DH1500 Discharge Hoods RTS8 or RTS12 Rooftop Stand
Gas Heaters with Draft Hoods or Draft Diverters Gas Fireplace Gas Oven Oil Heater Single Gas Power Burner	RT750 OR RT1500 Both Include PSA-1 Fan Prover	UCRT Interlock w/Speed Control	**DC-Series Draft Control for Heaters without Draft Hoods or Diverters	DH750 or DH1500 Discharge Hoods RTS8 or RTS12 Rooftop Stand
Solid Fuel Stove, Fireplace, Oven	RT750H OR RT1500H	"H" Suffix Models Include Manual Speed Control		
EXHAUST APPLICATIONS	INDUCER MODEL	CONTROLS	REQUIRED ACCESSORIES	OPTIONAL ACCESSORIES
Multiple Clothes Dryers Common Vented Chase Exhaust for Kitchen & Baths or Dryers in Multi-Story Buildings	RT750 OR RT1500	COP2 For Exhaust (No Interlock)	DH750 or DH1500 Discharge Hoods	RTS8 or RTS12 Rooftop Stand

**Select size to match heater flue outlet diameter

RT-Series Inducers



Select model based on application and then based on sizing guide or off curves if desired CFM and pressure drop are known.

COP2 Constant Operating Pressure Control



Monitors exhaust/draft and modulates fan with VFD and Transducer to maintain set point.

CIC1 Burner Interlock Control



Interlocks gas and oil burners with COP2 control. Add MAC1E or MAC4E for additional heaters.

UCRT



Inducer interlock control for 1 heater. Includes manually adjusted motor speed control. Use MAC1E or MAC4E for additional heaters.

MAC1E and MAC4E Multiple Appliance Interlock Controls



Expand number of heaters that interlock with CIC1 and UCRT controls. Use MAC1E for 1 additional heater and MAC4E for up to 4 additional heaters.

ABD-Series Balancing Baffles



Installed in vent riser after draft control to balance draft on common manifold serving multiple heaters. ABD-4, 5, 6, 7, 8, 9, 10, 12, 14. Inserts into ID of like diameter vent pipe.

RTS8 (RT750-Series) or RTS12 (RT1500-Series) Rooftop Stands



Supports inducer and adjusts from 10" to 16" from inducer inlet to the roof surface. For flat roofs only.

DC Series Barometric Draft Controls



Single Acting Barometric Draft Controls allow precise draft to be maintained on heaters extremely sensitive to draft variations. DC4, 6, 7, 8, 10. Match flue outlet diameter.

DH750 and DH1500 Discharge Hoods with Gravity Close Damper

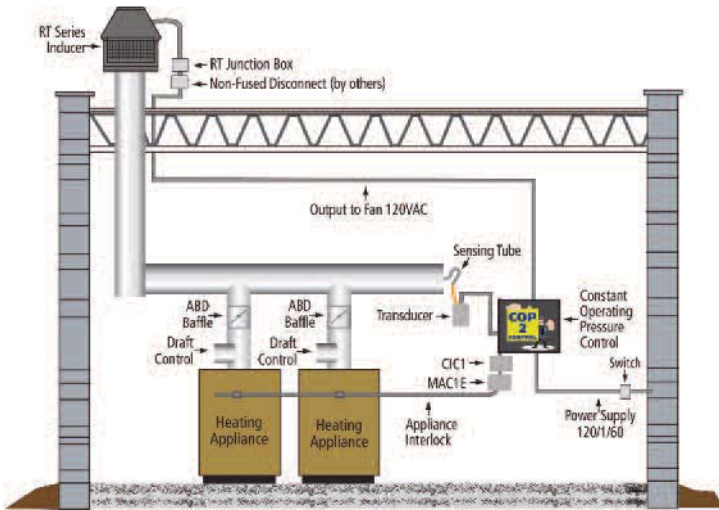


Used for dryer exhaust applications or where an off-cycle damper is desired for inducer. Kit includes two DH-Series hoods to replace standard screened discharges.

RT-Series Typical Applications

COP2 – Draft

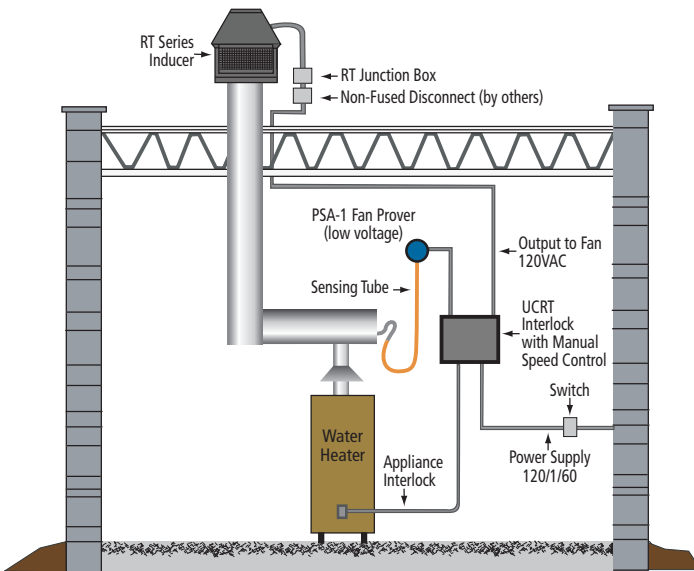
- 1) Intercepted call for heat activates COP2.
- 2) Draft is monitored and compared to set point.
- 3) RT-Fan ramps up to meet set point.
- 4) CIC1 interlock enables burner circuit.
- 5) RT-Fan modulates to maintain draft set point as flue gas volume, temperature, building pressure and stack effect change.
- 6) When call for heat is satisfied the burner shuts off and the fan continues running for a timed post-purge period.



Multiple Heaters

UCRT

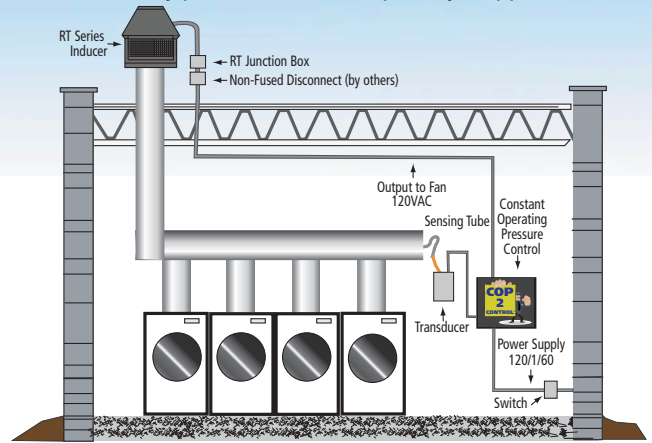
- 1) Intercepted call for heat activates Inducer.
- 2) Inducer speed determined by manually adjusted setting.
- 3) PSA-1 fan prover closes enabling burner call circuit.
- 4) When call for heat is satisfied Inducer operates for post purge time setting and shuts off.



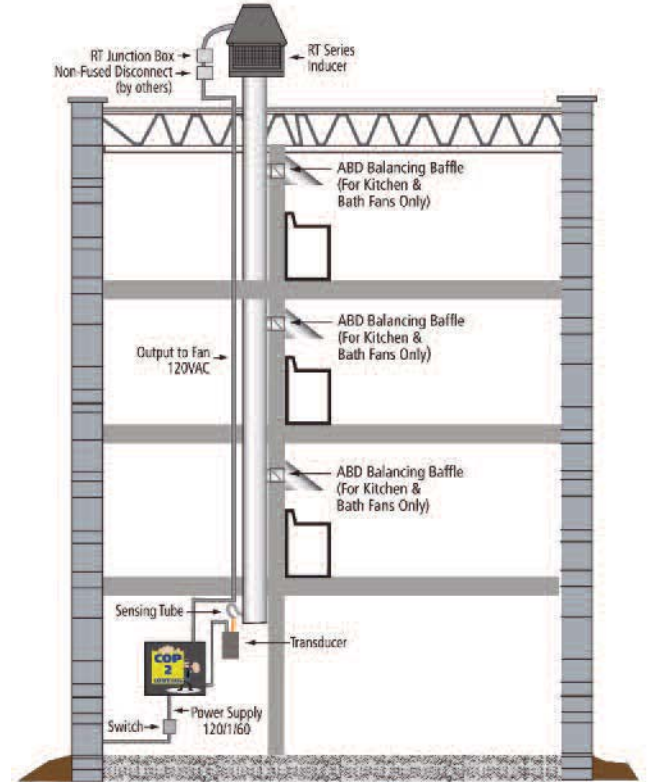
Atmospheric Gas with Draft Hood/Diverter

COP2 – Exhaust

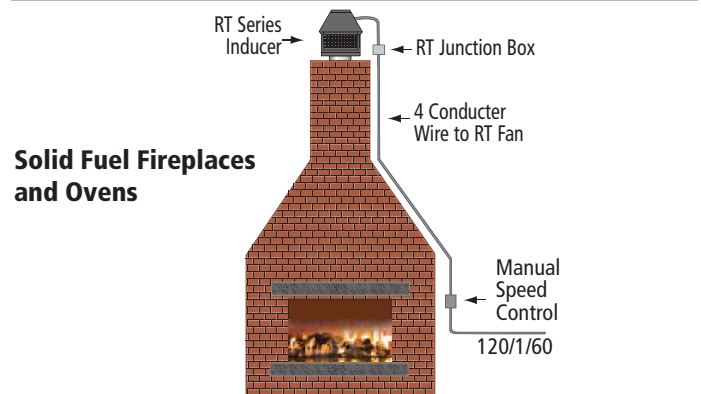
Triggered by an external switch or continuously operating, the COP2 maintains a consistent negative pressure as range hoods, bath fans or dryers cycle on and off. A minimum of 1200 FPM exhaust velocity prevents lint build up in dryer applications.



Multiple Clothes Dryers Common Vented



Chase Exhaust for Kitchens & Baths or Dryers



Solid Fuel Fireplaces and Ovens

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.



Selection Guide for Gas & Oil Applications Models RT750 & RT1500

MODEL	VENT PIPE DIAMETER*	BTU/HR. INPUT, GAS WITH DRAFT HOOD/DIVERTER	BTU/HR. INPUT, GAS/OIL WITH BAROMETRIC CONTROL	MAX. EQUIVALENT** VENT LENGTH (FT) @ 400°F
RT750	8"	400,000 to 700,000	500,000 to 900,000	100'
	10"	700,000 to 1,000,000	900,000 to 1,200,000	50'
RT1500	12"	1,000,000 to 2,000,000	1,200,000 to 2,700,000	100'
	14"	2,000,000 to 2,500,000	2,700,000 to 3,500,000	50'

Note: Due to their extended speed reduction capabilities, COP2 controlled inducers minimum burner inputs are reduced to 100,000 BTU/Hr. for all draft applications.

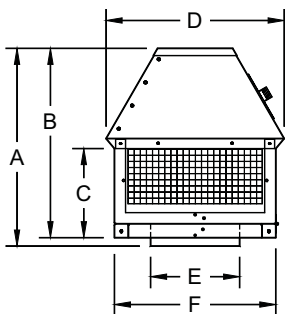
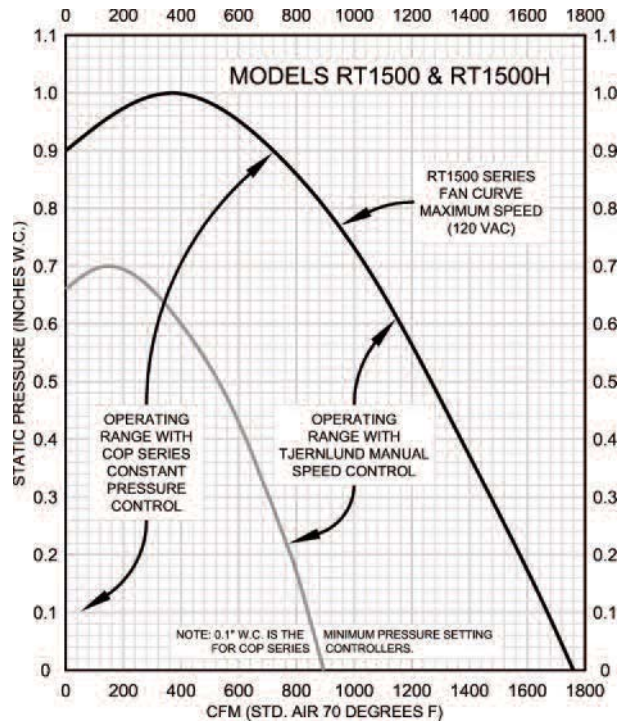
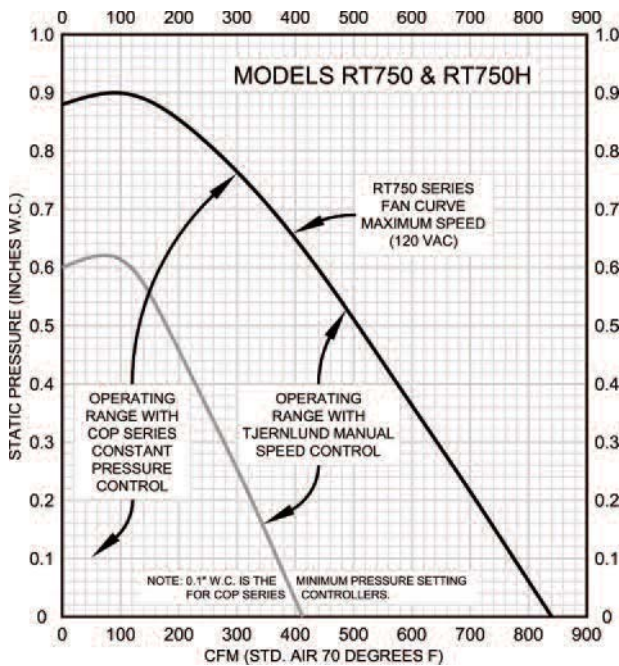
* Select inducer based on BTU/hr. input of appliance(s) rather than diameter of appliance vent outlet or chimney.

**To determine equivalent ft., add the total length of straight vent pipe plus 10 ft. for each 90° elbow and 5 ft. for each 45° elbow.

Selection Guide for Fireplaces and Ovens

MODEL	MAXIMUM FACE AREA OF FIREPLACE‡
RT750H	14 SQUARE FEET
RT1500H	28 SQUARE FEET

‡Determine vertical and horizontal face opening of hearth in sq. ft. (If open on sides or back, total all openings)



Model	RT750(H)	RT1500(H)
A	17 1/2"	22 1/2"
B	16 3/4"	21 3/4"
C	8"	11 1/4"
D	16"	18 1/2"
E (Inlet)	7 15/16"	11 15/16"
F	14 1/2"	17"



ETL Listed to UL378, UL705 & CAN/CSA B255-M81

Model	RT750(H)	RT1500(H)
Voltage	120 VAC	120 VAC
HP	1/12	1/2
Amps	1.2	5.8
Weight	34 lbs	47 lbs



For More Info



TJERNLUND PRODUCTS, INC.

1601 Ninth Street White Bear Lake, MN 55110-6794
 Phone: 651.426.2993 800.255.4208 Fax: 651.426.9547
 Visit our web site: www.tjernlund.com