

# 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

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 -65°F low temp lubricant
- Hi-temp powder coat finish



# Up to 70% Energy Savings with Demand-Based Draft or Exhaust

#### The Draft COP

When paired with the RT-Series Rooftop Inducers the Draft COP delivers precise draft and reduces Inducer motor power consumption by modulating the Inducer's speed to meet exhaust demand. Ideal for non-condensing modulating gas and oil fired heaters and multiple heaters tied into a common vent.

Economical and simple the Draft COP combines pressure sensing, set point adjustment, patented motor speed control and a burner interlock with pre & post purge into a single, easy to install package.

The Draft COP controller features soft start and soft transition between speeds. This means quick and extremely smooth reaction to firing rate changes.

#### The Exhaust COP

The Exhaust Cop operates identically to the Draft COP but does not incorporate a burner interlock control.



Applications include exhausting multiple clothes dryers in a common vent or controlling pressure of an exhaust chase serving multiple floors. In both cases the RT-Series fan ramps up and slows down automatically as demand changes.

#### **Draft and Exhaust Application Guide INDUCER CONTROLS REQUIRED OPTIONAL** DRAFT MODEL **ACCESSORIES APPLICATIONS ACCESSORIES** Multiple &/or Modulating Power RT750 Burner/Fan Assisted Heaters \*\*ABD-Series Balancing DH750 or DH1500 OR Raffle Discharge Hoods Multiple Atmospheric Heaters with RT1500 DCOP1 Flue Dampers Draft COP **Both Include** Draft Applications affected by RTS8 or RTS12 \*\*DC-Series Draft PSA-1 Fluctuating Negative Building **Rooftop Stand** Fan Prover Control Pressures (Restaurants) Gas Heaters with Draft Hoods or Draft Diverters RT750 OR DH750 or DH1500 Gas Firenlace \*\*DC-Series Draft RT1500 UCRT Discharge Hoods Gas Oven Control for Heaters Interlock **Both Include** without Draft Hoods or Oil Heater w/Speed Control PSA-1 RTS8 or RTS12 Single Gas Power Burner Diverters **Rooftop Stand** Fan Prover "H" Suffix RT750H Models Include Solid Fuel Stove, Fireplace, Oven OR Manual Speed RT1500H Control **OPTIONAL REQUIRED EXHAUST CONTROLS INDUCER APPLICATIONS** MODEL **ACCESSORIES ACCESSORIES** Multiple Clothes Dryers Common Vented RT750 XCOP1 DH750 or DH1500 RTS8 or RTS12 **Exhaust COP** Discharge Hoods **Rooftop Stand** Chase Exhaust for Kitchen & Baths or Dryers RT1500 (No Interlock) in Multi-Story Buildings

#### **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.

#### DCOP1 Constant Operating Pressure Control



Monitors draft and modulates Inducer to maintain set point. Includes 1 heater interlock. Use 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.

#### XCOP1 Constant Operating Pressure Control



Monitors exhaust and modulates Inducer to maintain setpoint.

#### 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.

#### MAC1E and MAC4E Multiple Appliance Interlock Controls



Expand number of heaters that interlock with DCOP1 and UCRT controls. Use MAC1E for 1 additional heater and MAC4E for up to 4 additional heaters.

#### 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, 5, 6, 7, 8, 9, 10. Match flue outlet diameter.

#### DH750 and DH1500 Discharge Hoods with Gravity Close Damper



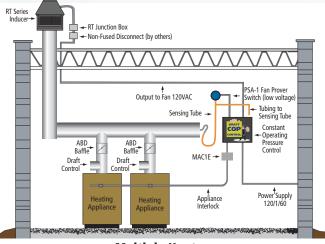
Used for dryer exhaust applications or where an off-cycle damper is desired for inducer. Kit includes two DH-Series hoods to replace standard screened discharges.

<sup>\*\*</sup>Select size to match heater flue outlet diameter

### **RT-Series Typical Applications**

#### **Draft COP (DCOP1)**

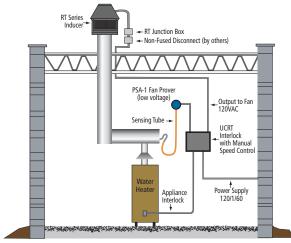
- 1) Intercepted call for heat activates Draft COP.
- 2) Draft is measured and compared to set point.
- 3) Inducer ramps up to meet draft set point.
- 4) PSA-1 fan prover closes enabling burner call circuit.
- Inducer modulates to maintain draft set point as flue gas volume, building pressure, stack effect and winds change.
- 6) When call for heat is satisfied Inducer maintains draft set point for post purge time setting and shuts off.



**Multiple Heaters** 

#### **UCRT**

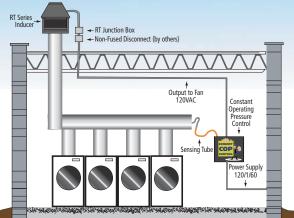
- 1) Intercepted call for heat activates Inducer.
- 2) Inducer speed determined by manually adjusted setting.
- 3) PSA-1 fan prover closes enabling burner call circuit.
- **4)** When call for heat is satisfied Inducer operates for post purge time setting and shuts off.



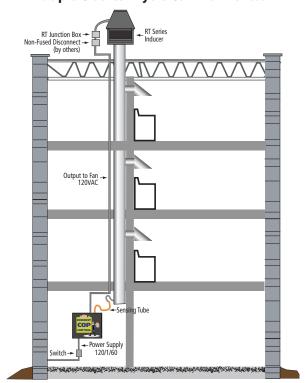
**Atmospheric Gas with Draft Hood/Diverter** 

#### **Exhaust COP (XCOP1)**

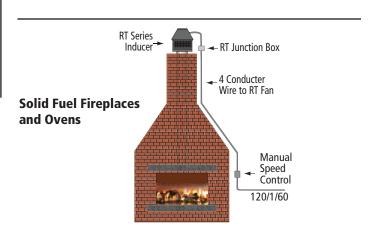
Triggered by an external switch or constantly operating, the Exhaust COP maintains a negative exhaust pressure set point by modulating the speed of the Rooftop Inducer to meet demand.



**Mutiple Clothes Dryers Common Vented** 



**Chase Exhaust for Kitchens & Baths or Dryers** 



## 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'
11750	U	700,000 to 900,000	900,000 to 1,200,000	50'
RT750	10"	700,000 to 1,000,000	900,000 to 1,200,000	100'
		1,000,000 to 1,200,000	1,200,000 to 1,500,000	50'
RT1500	12"	1,000,000 to 2,000,000	1,200,000 to 2,700,000	100'
		2,000,000 to 2,400,000	2,700,000 to 3,200,000	50'
RT1500	14"	2,000,000 to 2,500,000	2,700,000 to 3,500,000	100'
		2,500,000 to 2,700,000	3,500,000 to 3,700,000	50'

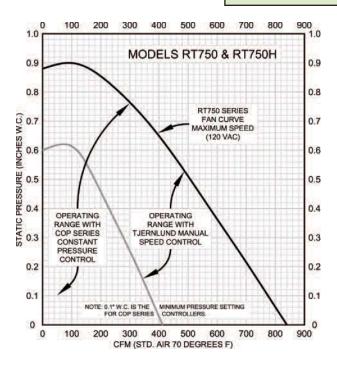
Note: Due to their extended speed reduction capabilities, DCOP1 controlled inducers minimum burner inputs are reduced to 100,000 BTU/Hr. for all draft applications.

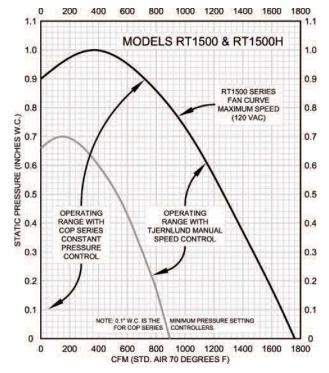
- \* Select inducer based on BTU/hr. input of appliance(s) rather than diameter of appliance vent outlet or chimney.
- \*\*To determine equivalent ft., add the total length of straight vent pipe plus 10 ft. for each 90° elbow and 5 ft. for each 45° elbow.

#### **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)
	Α	16"	21"
	В	16"	21"
	C	18"	24"
	Inlet	8"	12"
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Model	RT750(H)	RT1500(H)	
Motor HP	1/12	1/2	
Motor Amps	1.2	5.8	
Motor Volts	120	120	
Weight	35 lbs	55 lbs	



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