

Reznor® Model ACB with Optional Power Venter and Filter Cabinet.

## DESCRIPTION

Reznor Model ACB indirect fired heating units are designed for indoor installation in industrial and commercial applications. These air handling units are suitable for a variety of space heating, cooling and ventilating applications.

Model ACB units are shop assembled and wired complete with burner, primary combustion chamber and secondary heat transfer surfaces, mechanical combustion system, propeller and motor assembly, sheet metal casing, controls and safety devices, flame tested at the manufacturer's plant and shipped as a complete package assembly. Accessories required, are mounted in factory. Units will be split only when required for shipping purposes.

Model ACB units offer a complete range of sizes for air handling capacities from 4,500 to 65,000 CFM and heating outputs from 240,000 to 2,500,000 BTUH.

The primary combustion chamber is all-welded 400 series stainless steel construction with a minimum of 16 gauge material on tank, 16 gauge material on headers. Combustion chamber is free of all refractory lining. Metal temperature when fired at guaranteed rates is designed not to exceed 75% of the scaling temperature of the metal. The secondary heat exchanger section is constructed of staggered banks of 3" carbon steel tubes 16 gauge minimum and complete with headers and flue connections. Secondary tubes are completely welded to headers. Stainless steel tubing and headers available are recommended when heater handles air temperatures 40°F. inlet temperature or below.

Unit casing is structural steel all welded framework washed with a three step process to remove oils and residue after welding and provide a phosphatized coating. After wash, framework is primed with a rust inhibiting primer and finish coated. Exterior



skin is minimum 16 gauge galvanized steel fastened to frame with mechanical fasteners. Heat exchange section has internal heat shields to protect the exterior unit skin and allow air to travel between the exterior skin and heat shields.

Intake and supply plenums are fabricated from galvanized steel with punched pattern openings on four sides to provide a minimum of 50% free area.

Each heater is equipped with a suitable number of industrial grade propeller fans complete with V-belt drives sized for 50% greater than the required brake horse power. Fan motors are ODP and mounted on adjust-able bases.

Safety controls include an electronic burner safety relay with main and pilot sensing and timer for purging the combustion chamber before every start-up, or as required. An automatic electric ignition system, magnetic three-phase-across-the-line-overload protected starters with manual reset overloads, fuse blocks, fan and limit switches, draft switches, combustion air switches and control transformer to provide 115 volt 60 cycle single phase current to be provided on each unit. Units include a return air thermostat.

Burners are available for use with natural gas, propane, fuel oil or gas/oil combination. Gas burners include pilot ignition for use with (natural/manu-factured mixed liquefied petroleum gas/liq-uefied petroleum gas-air mix-ture). Included in the manifold are main gas electric shut off valves with linkage to combustion air dampers. Main and pilot gas pressure regulator, pilots, solenoids, and necessary control and safety devices are also included.

Fuel oil burner is high pressure oil atomizing type with mechanically forced draft suitable for burning No. 2 fuel oil. Unit incorporates oil pump combustion air fan and drive, combustion air damper, oil solenoid valve in the burner control cabinet.

Combination fuel power burner equipped with components as included in gas burner and light oil burner described above. Automatic, fuel change-over accomplished by means of electrical toggle switch on the burner control cabinet.

All listed burners are available with either on-off, two-stage, or full modu-lated firing rates. Also available are FM, IRI compliance, or UL or ETL approvals.

Model ACB units are guaranteed against defective material and workman-ship for a period of one year from date of start-up or 15 months from date of shipment (whichever occurs first) providing the unit has been oper-ated under normal conditions and in accordance with the manufacturer's instructions.

**NOTE:** Not certified for residential use.

**WARNING: HEATER IS NOT DESIGNED FOR USE IN HAZARDOUS ATMOSPHERES CONTAINING FLAMMABLE VAPORS OR COMBUSTIBLE DUST, OR ATMOSPHERES CONTAINING CHLORINATED OR HALOGENATED HYDROCARBONS.**

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**STANDARD FEATURES**

- Air volume range from 4,500 to 65,000 CFM
- Heating outputs range from 240,000 to 2,500,000 BTUH
- 400 series stainless steel primary combustion chamber
- Minimum 16 gauge galvanized modular construction
- Safety controls
- Single or multiple propeller fans (belt driven)
- Lifting Channels
- Full floating heat exchanger
- Full access to all compartments
- Double wall heat exchanger section
- Return air thermostat - mounted
- Necessary operating starters, relays, switches, safety controls and fuses
- Step down transformer to 120v for control circuit
- Inlet and discharge screened plenums
- Variable pitch driver pulley
- 208/230/460/3/60 ph. open drip proof NEMA rated motors
- ETL listed
- Factory test fired

**OPTIONAL FEATURES**

- Burners for natural gas, propane gas, fuel oil, or gas/oil combination with FM, IRI compliance or UL or ETL approvals.
- Vibration isolators (pad mounted neoprene, pad mounted spring)
- Stainless steel secondary heat exchanger
- 48" high field assembled extension plenums
- High gas pressure regulator
- TEFC and high efficiency motors
- Painted unit

**CONTROL OPTIONS**

- Exhaust fan interlock
- Fused disconnect switch
- 8.1 remote station (S/O/W switch and 3 operating lights)
- 8.5 remote station (S/O/W switch, 3 operating lights and room thermostat)
- Night setback with switch, skip-a-day time clock or 7-day time clock
- Room thermostat
- Unit mounted on/off toggle switch
- Pre or post-purge
- Audible alarm
- UL label on main control panel

**HOW TO SELECT MODEL NUMBER****Model Selection**

Model:	ACB	
Number of Fans:	1	
Fan Prop Size:	36"	
Heat Exchanger:	450 MBH	
Motor HP:	Low	

**ACB 136-45 L****Unit size, CFM output and horsepower reflect units with no accessories.**

Consult factory representative for units with filters, dampers or any other accessory item. Prices will be higher for units with accessories.

In keeping with our policy of continuous product improvement, we reserve the right to alter, at any time, the design, construction, dimensions, weights, etc., of equipment information shown here.



# MODEL ACB

## INDUSTRIAL AIR TURNOVER UNITS FOR INDOOR INSTALLATION

### TECHNICAL DATA

UNIT SIZE	CFM	MOTOR HP	Max Output (MBH)	FAN DIAMETER (INCHES)	SONES	HEAT EXCHANGER SIZE/TEMPERATURE RISE °F								
						45	75	100	125	150	175	225	250	
136	4,500	L-Low CFM	1	750	240	13	93°	154°	■	■	■	■	■	■
	9,000	S-STD CFM	1.5	750	240	16	46°	77°	■	■	■	■	■	■
	12,000	H-High CFM	2	750	240	18	35°	58°	■	■	■	■	■	■
148	16,000	S-STD CFM	3	750	240	18	26°	43°	■	■	■	■	■	■
154	14,000	L-Low CFM	3	1,250	240	17	30°	50°	66°	83°	■	■	■	■
	22,000	S-STD CFM	5	1,250	240	20	19°	32°	42°	53°	■	■	■	■
	30,000	H-High CFM	7.5	1,250	520	22	14°	23°	31°	39°	■	■	■	■
236	9,000	L-Low CFM	1	1,000	240	14	46°	77°	103°	■	■	■	■	■
	18,000	S-STD CFM	1.5	1,000	240	17	23°	39°	51°	■	■	■	■	■
	24,000	H-High CFM	2	1,000	520	19	17°	29°	39°	■	■	■	■	■
242	21,000	S-STD CFM	2	1,250	240	16	■	33°	44°	55°	■	■	■	■
	31,000	H-High CFM	3	1,250	520	23	■	22°	30°	37°	■	■	■	■
248	35,000	S-STD CFM	3	1,500	520	19	■	20°	26°	33°	40°	■	■	■
	45,000	H-High CFM	5	1,500	560	33	■	15°	21°	26°	31°	■	■	■
254	40,000	L-Low CFM	3	2,500	560	21	■	■	■	■	35°	41°	52°	58°
	60,000	S-STD CFM	5	2,500	600	23	■	■	■	■	23°	27°	35°	39°
	65,000	H-High CFM	7.5	2,500	600	45	■	■	■	■	21°	25°	32°	36°

### APPROXIMATE UNIT SHIPPING WEIGHTS (lbs.)

UNIT SIZE	HEAT EXCHANGER SIZE							
	45	75	100	125	150	175	225	250
136	2,235	2,280	■	■	■	■	■	■
148	3,255	3,300	■	■	■	■	■	■
154	3,940	3,985	4,115	4,220	■	■	■	■
236	3,945	3,990	4,065	■	■	■	■	■
242	■	4,965	5,065	5,240	■	■	■	■
248	■	5,990	6,115	6,115	6,270	■	■	■
254	■	■	■	■	7,640	7,640	7,970	8,310

\*Weights include top and bottom plenums, blower section with fan, burner section with heat exchanger and two motors. Burner weight must be added. Weights for selected options such as mixing section or filter section must also be added.

### ESTIMATED BURNER SHIPPING WEIGHTS

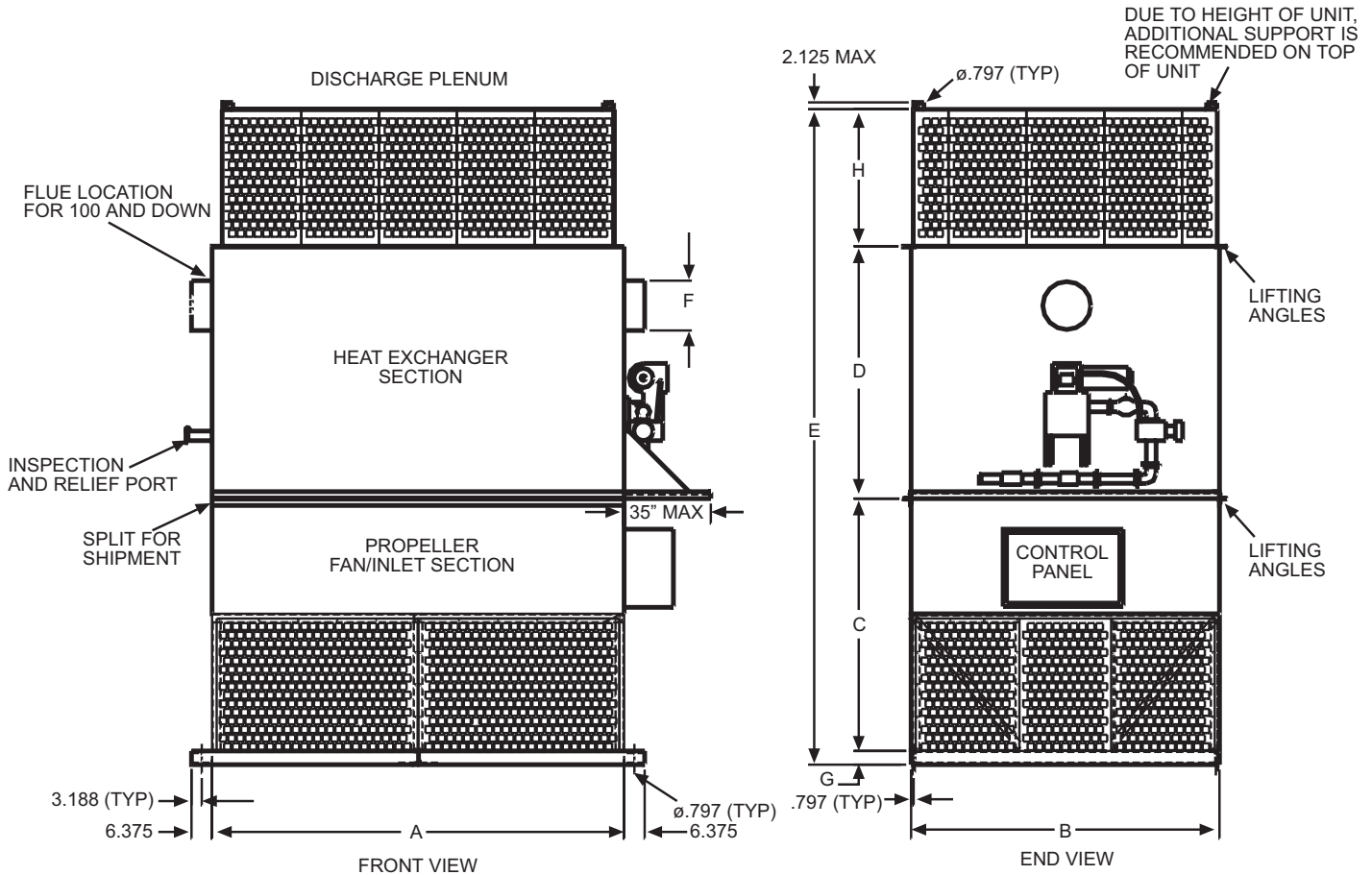
GAS BURNER	MBH Input Range	300-625	626-938	939-1,250	1,251-1,875	1,876-2,500
	Gas Train Size	1"	1"	1-1/4"	1-1/2"	2"
	<b>WT.</b>	<b>155</b>	<b>190</b>	<b>230</b>	<b>290</b>	<b>300</b>
#2 OIL BURNER	GPH Input Range	2.5-4.5	4.6-6.7	6.8-8.9	9-13.4	13.5-17.9
	<b>WT.</b>	<b>125</b>	<b>125</b>	<b>220</b>	<b>220</b>	<b>310</b>
COMBO GAS & OIL BURNER	MBH Input Range	300-625	626-938	939-1,250	1,251-1,875	1,876-2,500
	GPH Input Range	2.5-4.5	4.6-6.7	6.8-8.9	9-13.4	13.5-17.9
	<b>WT.</b>	<b>200</b>	<b>240</b>	<b>270</b>	<b>360</b>	<b>400</b>



# MODEL ACB

## INDUSTRIAL AIR TURNOVER UNITS FOR INDOOR INSTALLATION

### DIMENSIONS



**DIMENSIONS  
(Accurate to  
within 1")**

Fan(s)	136		148		154			236			242			248				254	
	45 - 75	100	45 - 75	100	45 - 75	100	125	45 - 75	100	75	100	125	75	100	125	150	175 - 225	250	
A	60		72		85			90					100				116		130
B	50		60		65			50					55				60		72
C	75		75		86			60					66				66		72
D	53		53		65			53		53	72	53	72	53	72		72	72	90
E	155		155		190			140		152	171	152	171	152	171		184	202	
F	6	8	6	8	6	8	10	6	8	6	8	10	6	8	10	12	12	14	
G	3		3		3			3		3			3				3	4	
H	24		24		36			24		30			30				30	36	

**DIMENSIONS  
(Accurate to  
within 25mm)**

Fan(s)	136		148		154			236			242			248				254	
	45 - 75	100	45 - 75	100	45 - 75	100	125	45 - 75	100	75	100	125	75	100	125	150	175 - 225	250	
A	1,524		1,829		2,159			2,286					2,540				2,946		3,302
B	1,270		1,524		1,651			1,270					1,397				1,524		1,829
C	1,905		1,905		2,184			1,524					1,676				1,676		1,829
D	1,346		1,346		1,651			1,346		1,346	1,829	1,346	1,829	1,346	1,829		1,829	1,829	2,286
E	3,937		3,937		4,826			3,556		3,861	4,343	3,861	4,343	3,861	4,343		4,674	5,131	
F	152	203	152	203	152	203	254	152	203	152	203	254	152	203	254	305	305	305	356
G	76		76		76			76		76			76				76	102	
H	610		610		914			610		762			762				762	914	

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MANUFACTURER OF GAS, OIL, ELECTRIC HEATING AND VENTILATING SYSTEMS

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(Version A)

