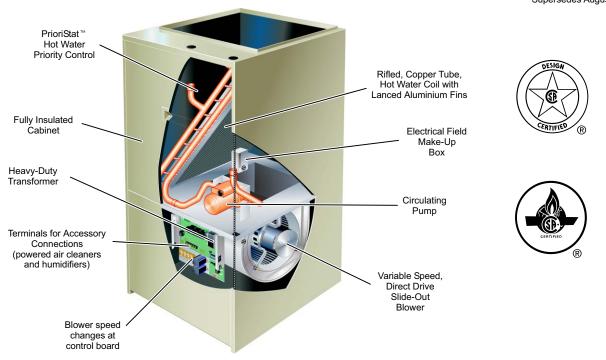


WATER HEATING / BOILERS

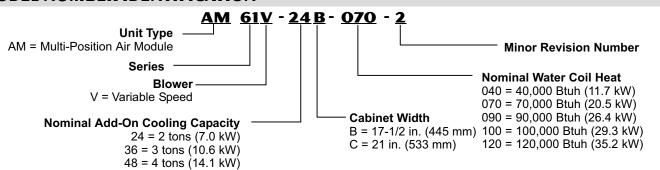
AM61V

RESIDENTIAL SPACE HEATING AIR MODULE Space Heating Input - 40,000 to 120,000 Btuh Nominal Add-on Cooling - 2 to 5 Tons

Bulletin No. 210404 November 2004 Supersedes August 2003



MODEL NUMBER IDENTIFICATION



FEATURES

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Installation Clearances Page 4
Model Number Identification Page 1
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WARRANTY

All covered components - limited five year warranty in residential applications.

Refer to Lennox Equipment Limited Warranty certificate included with equipment for details.

Visit us at www.lennox.com
For the latest technical information, www.davenet.com

FEATURES

SEQUENCE OF OPERATION

AM61V Air Module includes supply air blower, water circulating pump, hot water coil, and blower/pump control.

When demand for space heat is received from the thermostat, the blower/pump control activates the circulating pump.

After timed-on delay (adjustable) the blower energizes at heating speed.

When heating demand is satisfied, the circulating pump shuts off. After a timed-off delay (fixed) the supply air blower shuts off.

PrioriStat™ (furnished with AM61V) will control AM61V blower operation and give potable water heating priority when used with a properly sized water heating device. The PrioriStat™ is factory set for optimal performance.

APPROVALS

Units certified by CSA International.

Blower data from unit tests conducted in Lennox Laboratory air test chamber.

APPLICATION

AM61V can be used with properly sized gas-fired or oil-fired water heating devices.

Suitable for use with potable water.

AM61V circulates hot water through a hot water coil, supply air blower moves the return air past the coil to extract the heat and then distribute the heated air throughout the conditioned space. AM61V is a multi-position (up-flow, down-flow, or horizontal) blower/hot water coil unit.

Lennox add-on indoor coil with remote air conditioning unit, air cleaners, automatic humidifier, and all Lennox Indoor Air Quality products can easily be added for a complete all season system.

HEATING SYSTEM

Hot Water Coil

Corrugated/lanced aluminum fins.

Seamless corrosion resistant copper tubes.

Fin collars grip tubing for maximum contact area.

Flared shoulder tubing connections and silver soldering provides tight, leakproof joints.

Factory tested under high pressure.

Entire coil accessible for cleaning.

Circulating Pump

Bronze construction.

Carbon bearings.

Self lubricating.

Non-metallic impeller.

Impedance protected.

Motor and impeller removable as single unit for servicing.

Freezestat

Protects system from freezing temperatures when unit is installed in unconditioned areas.

Thermostat automatically energizes circulating pump when water line temperature falls below 45°F (7°C).

OPTIONS

Auxiliary Pump

For remote applications over 30 equivalent feet (9.1 m).

Field installed anywhere in-between AM61 and water heating device.

Anti-Thermal Siphon Kit

In-line check valve prevents thermal siphoning when AM61 is located above the water heating device.

CABINET

Heavy gauge steel construction with five station metal wash process and baked-on enamel paint finish.

Foil faced fiberglass insulation on hot water coil access door panel, side panels and on back panel reduces cabinet temperatures.

Black mat faced fiberglass in blower compartment assures quiet operation.

Complete service access by removing hot water coil section and blower compartment access panels.

Blower assembly completely removable for easy servicing.

Blower deck rails angle down for easy blower removal.

Electrical inlets in both sides of the cabinet.

Safety interlock switch automatically shuts off power to unit when blower compartment access door is removed.

Return air entry on either side or bottom of cabinet.

AM61 air module is applicable to up-flow, horizontal, or down-flow installations.

Field Make-up Box

Furnished for line voltage wiring.

Box may be installed on either side of AM61 cabinet.

OPTIONS

Down-flow Base

Provides clearance for routing water lines for down-flow applications without an indoor coil.

Horizontal Support Frame Kit

Provides support of unit in horizontal applications.

Consists of (2) 1 x 1-1/2 x 32-5/8 in. (25 x 38 x 829 mm) and (2) 1 x 3 x 53-7/8 in. (25 x 76 x 1368 mm) painted heavy gauge cold rolled steel support channels with assembly and suspending holes.

Bolts and nuts furnished for field assembly.

Suspending rods must be field provided.

RAB Return Air Base

Cabinet is pre-painted steel to match the furnace.

See Dimension Drawing.

Air Filter and Rack Kit for Horizontal Return Air (End) Applications

Washable or vacuum cleanable polyurethane frame type filter and external end return air rack available for field installation.

Rack has filter door for easy filter servicing.

Flanges on rack allow easy duct connection.

See dimension drawing.

Air Filter and Rack Kit for Up-Flow Side Return Air Applications - Not for use with RAB Return Air Base

Washable or vacuum cleanable polyurethane frame type filter and external side return air rack available for field installation. Available in single and ten pack kits.

Rack has filter door for easy filter servicing.

Flanges on rack allow easy duct connection.

Field installs on either side of unit cabinet. See dimension drawing.

EZ Filter Base for Up-Flow Bottom Return Air Applications

Hinged door with thumbscrew for easy filter access.

Uses standard size filters (field provided).

FEATURES

CONTROLS

Blower/Pump Control Board

Blower "timed-on" delay jumper (15 to 60 seconds, adjustable) factory setting 15 seconds, blower "timed-off" delay setting 30 seconds (fixed).

Automatically circulates water for 30 seconds every 6 hours (delays pump operation during cooling demand).

Control voltage terminal strips for thermostat connections.

120 volt (less than 4 amps) accessory terminals furnished for humidifiers and powered air cleaners.

Blower cooling relay for air-conditioning operation.

Metal oxide varistor, mounted on board, protects against voltage spikes.

Diagnostic LED furnished as an aid in troubleshooting.

BDC3 Electronic Blower Control

Blower control interfaces variable speed motor with thermostat. Solid-state board controls evaporator humidity by controlling blower and compressor speed on two-stage outdoor units.

Two COOL speeds and one HEAT speed (with four different air volume selections for each) are made by simple jumper pins on board

ADJUST jumper pin allows approximately 10% higher, normal, or 10% lower motor speed selection within HEAT and COOL speeds selected for fine tuning the air volume.

DELAY jumper pin allows selection blower motor de-humidification profiles during cooling mode.

Option 1 - Motor runs at 100% of capacity until demand met. Once demand is met, motor ramps down to stop.

Option 2 - Motor runs at 100% of capacity until demand is satisfied. Motor runs at 100% of capacity for 60 seconds then ramps down to stop.

Option 3 - Motor runs at 82% of capacity for approximately 7-1/2 minutes. If demand is not satisfied, motor runs at 100% capacity until demand is satisfied. Once demand is met, motor ramps down to stop.

Option 4 - Motor runs at 50% capacity for 30 seconds, then 82% capacity for approximately 7-1/2 minutes. If demand is not satisfied, motor runs at 100% capacity until demand is met. Once demand is met, motor runs at 50% capacity for 30 seconds, then ramps down to stop.

BDC3 control has two diagnostic indicator lights, "CFM" and "RUN", to assist in servicing.

Accessory relay terminals provide connections for power humidifiers or electronic air cleaners.

Control is factory installed in the unit control box.

24 Volt Transformer

Furnished in AM61 control box.

OPTIONS

SignatureStat™ Home Comfort Controller

Combination temperature and humidity control in cooling mode.

2 Heat/2 Cool

Auto-changeover

Easy-to-use, menu driven thermostat with a back-lit, dot-matrix LCD screen.

Remote outdoor sensor (furnished) allows the thermostat to display outdoor

temperature and adjust indoor dewpoint temperature for precision humidity control in cooling mode.

LENNOX-

See the SignatureStat Engineering Handbook bulletin in the Controls section for more information.

BLOWER

Variable Speed Blower Motor

Variable speed motor (VSM) maintains specified air volume from 0 though 0.80 in. w.g. (0 through 200 Pa) static range.

Gradual acceleration and deceleration of variable speed blower motor when starting and stopping over a specific time frame results in extremely quiet operation.

Motor is controlled by BDC3 Control Board.

Motor is resiliently mounted.

When units are used with Harmony Zone Control System, blower motor operates from predetermined minimum to maximum air volumes to satisfy zone requirements.

Variable Speed Blower

Each blower assembly statically and dynamically balanced. Change in blower speed is easily accomplished by simple jumper pin position change on BDC3 Control Board. Blower assembly completely removable for easy servicing. See blower performance tables.

PRIORISTAT™ HOT WATER PRIORITY CONTROL

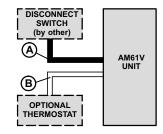
Furnished and factory installed on the hot water coil.

Control will allow any demand for potable hot water to have priority over hot water needed for space heating.

Senses the water temperature supplied to the AM61V and prevents blower operation when temperature drops below a fixed setting.

Factory set with a built-in differential.

FIELD WIRING



- A Two wire power with ground
- B Three wire control voltage (Heating Only) Four wire control voltage (Cooling)

AM61V blower operation is controlled by PrioriStat.

- Field wiring not furnished -

All wiring must conform to NEC or CEC and local electrical codes.

SPECIFIC	CATIONS						
	Model	No.	AM61V -24B-040	AM61V -36B-070	AM61V -36C-090	AM61V -60C-100	AM61V -60C-120
Heating	Nominal heating capacity - Btuh (kW)	40,000 (11.7)	70,000 (20.5)	90,000 (26.4)	100,000 (29.3)	120,000 (35.1)
Performance	¹ Temperature rise range - (°F °C)	32 - 66 (18 - 37)	45 - 80 (25 - 45)	51 - 80 (28 - 45)	41 - 76 (23 - 42)	45 - 85 (25 - 47)
Maximu	m Inlet Water Temperature - °F (°C)	180 (82)	180 (82)	180 (82)	180 (82)	180 (82)
Indoor	Wheel nom. diameter x width	in.	10 x 8	10 x 8	10 x 8	11-1/2 x 10	11-1/2 x 10
Blower	ı	mm	254 x 203	254 x 203	254 x 203	292 x 254	292 x 254
	Blower motor output - hp	(W)	1/2 (373)	1/2 (373)	1/2 (373)	1 (746)	1 (746)
	Tons (kW) of add-on coo	ling	2 - 3 (7.0 - 10.6)	2 - 3 (7.0 - 10.6)	2 - 3 (7.0 - 10.6)	3.5 - 5 (12.3 - 17.6)	3.5 - 5 (12.3 - 17.6)
Circulating	Motor output - hp	(W)	1/40 (19)	1/40 (19)	1/25 (30)	1/25 (30)	
pump	Capacity - U.S. gpm (L	/m)	6 (23)	6 (23)	9.5 (36)	9.5 (36)	9.5 (36)
Pressure di	rop thru coil @ rated flow - psi (k	Pa)	3 (20)	3 (20)	3 (20)	3 (20)	3 (20)
Heating	Heating capacity range	Btuh	23,700 - 58,500	30,300 - 85,400	31,400 - 96,100	49,600 - 125,400	55,000 - 152,000
Coil		kW	6.9 - 17.1	8.9 - 25.0	9.2 - 23.1	14.5 - 36.7	16.1 - 44.5
	Net face area - sq. ft. (m ²)	3.83 (.36)	3.83 (.36)	4.33 (.40)	4.33 (.40)	4.33 (.40)
Tul	be diameter & no. of rows - in. (n	nm)	3/8 (9.5) - 1	3/8 (9.5) - 2	3/8 (9.5) - 2	3/8 (9.5) - 2	3/8 (9.5) - 3
	Fins per inch	(m)	16 (630)	16 (630)	16 (630)	16 (630)	16 (630)
Water Line C		nlet	3/4 (19)	3/4 (19)	1 (25.4)	1 (25.4)	1 (25.4)
(sweat) - in. ((mm) I.D.	utlet	3/4 (19)	3/4 (19)	1 (25.4)	1 (25.4)	1 (25.4)
Shipping Dat	ta lbs. (kg) - 1 packa	age	127 (58)	144 (65)	157 (71)	157 (71)	165 (75)
ELECTRIC	AL DATA						
	Electrical characteris	tics		120 v	olts - 60 hertz -	1 phase	
	Minimum Circuit Ampa	city	10.2	10.2	10.4	16.8	16.8
	² Maximum Overcurrent Protect	ion	15	15	15	20	20
OPTIONAL	ACCESSORIES (MUST BE C	RD	ERED EXTRA)			
³ Air Filter & Rack Kit Size of filter	Horizontal (end) - in. (n	nm)		L 96 57 x 635 x 25)	20 x 25 :	87L97 x 1 in. (508 x 635	x 25 mm)
Olze of filter	Side Return - in. (n	nm)	Single 44	J22 or Ten Pac	k (66K63) - (1) 1	6 x 25 x 1 (406 x	(635 x 25)
Anti-Therma	l Siphon Kit		73J84	73J84	73J84	73J84	73J84
Auxiliary Pur	mp		99K69	99K69	53J76	53J76	53J76
Down-flow B			68M03	68M03	68M03	68M03	68M03
EZ Filter Base	Catalog Number - Ship.	Wt.	73P56 - 8	lbs. (4 kg)	7	3P57 - 8 lbs. (4 k	(g)
Dase	Dimensions - H x W x D (n	· in. nm)		8 x 28-5/8 48 x 727)		4 x 21-5/8 x 28-5/ (102 x 549 x 727	
	Size of field provided filter - in. (n	nm)	16 x 25 x 1 (4	06 x 635 x25)	20 x	25 x 1 (508 x 63	5 x25)
Horizontal Sup	pport Frame Kit - Ship. Wt lbs. (kg)	56J18 - 18 (8)	56J18 - 18 (8)	56J18 - 18 (8)	56J18 - 18 (8)	56J18 - 18 (8)
RAB Return	Air Base		RAB-B-6	RAB-B-6	RAB-C-6	RAB-C-6	RAB-C-6

¹ Minimum temperature rise is based off 140°F (60°C) entering water temperature and the maximum heating air volume. Maximum temperature rise is based off 160°F (71°C) entering water temperature and the minimum heating air volume using Harmony Zone Control.

2 HACR type breaker or fuse.

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SignatureStat™ Home Comfort Controller

INSTALLATION CLEARANCES														
	AM61V Up-flow / Down-flow	AM61V Horizontal												
Sides	0 inches (0 mm)	0 inches (0 mm)												
Rear	0 inches (0 mm)	0 inches (0 mm)												
Тор	0 inches (0 mm)	¹ 0 inches (0 mm)												
Front	² 0 inches (0 mm)	² 0 inches (0 mm)												
Floor	Combustible	0 inches (0 mm)												

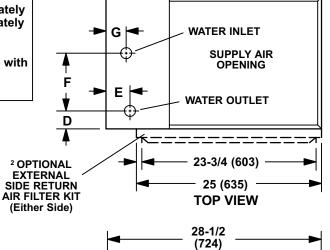
NOTE-Termination location must conform to the methods outlined in American National Standard (ANSI-Z223.1) National Fuel Gas Code or National Standard of Canada CAN/CGA-149.1, and CAN/CGA-149.2 "Installation Code for Gas Burning Appliances".

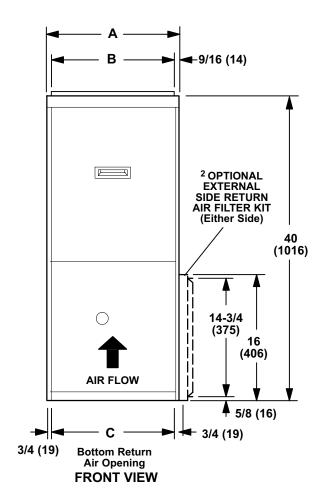
³ Cleanable polyurethane frame type filter.

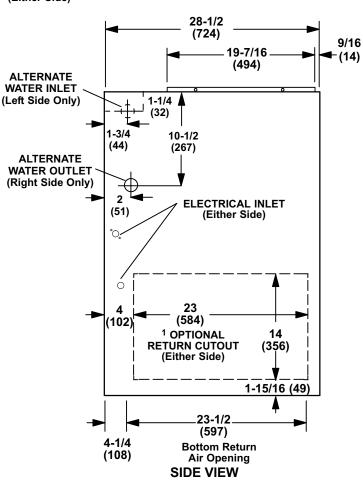
¹ Line contact installation permissible between jacket top or sides and building joists 2 Front clearance for alcove installations is 30 inches (762 mm).

¹ NOTE - Single side inlet applications result in approximately 4% reduction of air volume on B-size units and approximately 5% reduction of air volume on C-size units.

² Optional External Side Return Air Filter Kit is not for use with the optional RAB Return Air Base.



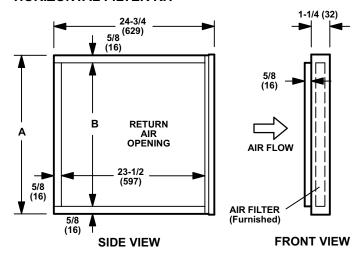




Model No.	Α		В		С		D		E		F		G	
wiodei No.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
AM61V-24B-040 AM61V-36B-070	17-1/2	446	16-3/8	416	16	406	1-1/2	38	1-3/4	44	8	203	2	51
AM61V-36C-090 AM61V-60C-100 AM61V-60C-130	21	533	19-7/8	454	19-1/2	495	2	51	2-1/2	64	9-1/2	241	1-1/2	38

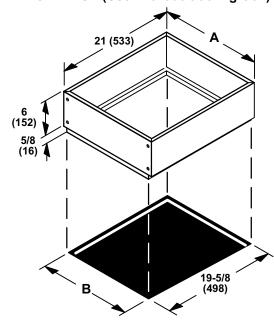
OPTIONAL ACCESSORY DIMENSIONS - INCHES (MM)

HORIZONTAL FILTER KIT



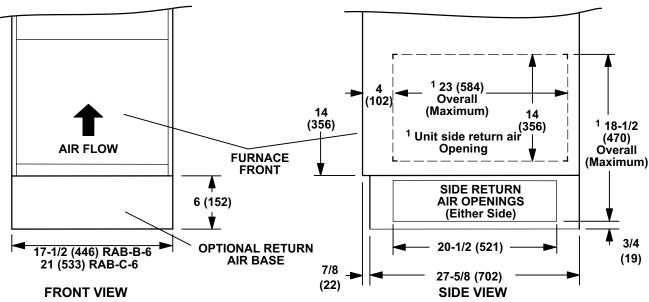
Ostala - Namala - n	Δ	\	В	
Catalog Number	inch	mm	inch	mm
87L96	18	457	16-3/4	425
87L97	21	533	18-3/4	476

DOWN-FLOW BASE (Use Without Cooling Coil)



M - d - l N -	Α		В					
Model No.	inch	mm	inch	mm				
AM61V-24B-040 AM61V-36B-070	17-7/8	454	16-1/2	419				
AM61V-36C-090 AM61V-60C-100 AM61V-60C-120	21-3/8	543	20	508				

RAB RETURN AIR BASE (Up-Flow Applications Only)

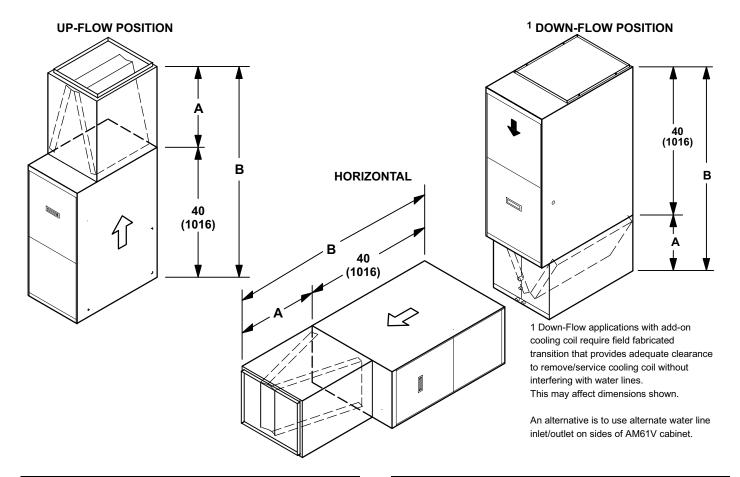


NOTE- Optional Side Return Air Filter Kits are not for use with RAB Return Air Base.

Side return air openings must be cut in the field. There are cutting guides stenciled on the cabinet for the side return air opening. The size of the opening must not extend beyond the markings on the furnace cabinet.

¹ Both the unit return air opening and the base return air opening must be covered by a single plenum or IAQ cabinet. Minimum unit side return air opening dimensions for units requiring 1800 cfm or more of air: 23 (584) W X 11 (279) H. The opening can be cut as needed to accommodate plenum or IAQ cabinet.

DIMENSIONS - INCHES (MM) - FURNACE/COIL COMBINATIONS



Maratal Mar	Α		В	
Model No.	in.	mm	in.	mm
Up-Flow Uncased				
C33-24B-2	13-7/8	352	53-7/8	1368
C33-30B-2	17-3/4	451	57-3/4	1467
C33-48B-2	22-1/8	562	62-1/8	1578
C33-36B-2	21-7/8	556	61-7/8	1572
C33-24C-2, C33-30C-2, C33-36C-2	21-1/4	540	61-1/4	1556
C33-38B-2	22	559	62	1575
C33-42B-2	21-7/8	556	61-7/8	1572
C33-44C-2, C33-48C-2	21-1/2	546	61-1/2	1562
C33-50/60C-2, C33-60D-2	24-3/4	629	64-3/4	1645
C33-62D-2	28-3/4	730	68-3/4	1746
Up-Flow Cased				
C33-24B-2F, CX34-18/24B-6F	16-1/2	419	56-1/2	1435
C33-30B-2F, CX34-30B-6F	20-1/2	521	60-1/2	1537
C33-24C-2F, C33-30C-2F, C33-36B-2F, C33-36C-2F, C33-38B-2F, C33-42B-2F, C33-44C-2F, C33-48B-2F, C33-48C-2F, CX34-18/24C-6F, CX34-30C-6F, CX34-36B-6F, CX34-36C-6F, CX34-38B-6F, CX34-42B-6F, CX34-44/48C-6F, CX34-44/48B-6F	24-1/2	622	64-1/2	1638
C33-50/60C-2F, CX34-50/60C-6F	27-1/2	699	67-1/2	1715
C33-60D-2F, CX34-60D-6F	25-1/2	648	65-1/2	1664
C33-62D-2F, CX34-62D-6F	29-1/2	749	69-1/2	1765

Model No.	Α		В	
Wiodei No.	in.	mm	in.	mm
Horizontal Cased				
CH33-36B-2F	26-1/2	673	66-1/2	1689
CH33-36C-2F	26-1/2	673	66-1/2	1689
CH33-42B-2F	26-1/2	673	66-1/2	1689
CH33-44/48B-2F	31-1/2	800	71-1/2	1816
CH33-48C-2F	26-1/2	673	66-1/2	1689
CH33-50/60C-2F	31-1/2	800	71-1/2	1816
CH33-60D-2F	26-1/2	673	66-1/2	1689
CH33-62D-2F	31-1/2	800	71-1/2	1816
Down-Flow Cased				
CR26-18N-F	12-3/4	324	52-3/4	1340
CR26-30N-F	12-3/4	324	52-3/4	1340
CR26-36N-F	15-3/8	391	55-3/8	1407
CR26-36W-F	15-3/8	391	55-3/8	1407
CR26-48N-F	19-1/8	486	59-1/8	1502
CR26-48W-F	19-1/8	486	59-1/8	1502
CR26-60N-F	22-7/8	581	62-7/8	1597
CR26-60W-F	22-7/8	581	62-7/8	1597

BLOWER DATA

AM61V-24B-040 Blower Performance

0 through 0.80 in. w.g. (0 Through 200 Pa) External Static Pressure Range

									В	DC3	Jum	oer S	peed	Pos	sition	s								
"ADJUST"			"Н	EAT	" Spe	ed				Firs	t Sta	ge "C	COOL	." Sp	eed		5	Seco	nd St	tage	"CO	OL"	Speed	ł
Jumper Setting	1		1 ;	2	3		4	ļ	1	1	2	2	3	}	4	•	1 -	1	2	!	3		4	ļ
	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s
+	820	385	990	465	1180	555	1340	630	610	290	770	365	930	440	1010	475	880	415	1120	530	1340	630	1440	680
¹ NORM	750	355	900	425	1070	505	1230	580	560	265	700	330	830	390	910	430	800	375	1000	470	1200	565	1300	615
_	670	315	810	380	940	445	1080	510	510	240	630	295	750	355	810	380	720	340	900	425	1080	510	1170	550

AM61V-36B-070 Blower Performance

0 through 0.80 in. w.g. (0 Through 200 Pa) External Static Pressure Range

″AD !!!									В	DC3	Jum	oer S	peed	Pos	sition	s								
"ADJUST" Jumper			"Н	EAT	" Spe	ed				Firs	t Stag	ge "C	COOL	." Sp	eed		5	Seco	nd S	tage	"CO	OL"	Speed	k
Setting	1		2	2	3	3	1,	4	1		2	2	1 ;	3	4		1		2		1 ;	3	4	ļ
	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s
+	790	370	980	465	1140	540	1310	620	590	280	745	350	895	420	975	460	850	400	1090	515	1300	620	1430	675
¹ NORM	730	345	870	410	1040	490	1190	560	545	255	680	320	805	380	890	420	775	365	990	465	1190	560	1280	605
_	640	300	770	360	920	435	1070	505	490	230	600	280	725	340	780	370	700	330	870	410	1065	500	1150	540

AM61V-36C-090 Blower Performance

0 through 0.80 in. w.g. (0 Through 200 Pa) External Static Pressure Range

									E	BDC3	Jum	per S	peed	Pos	itions	;								
"ADJUST"			"Н	IEAT	" Spe	ed				First	t Stag	ge "C	OOL	." Sp	eed		,	Seco	nd St	age	"coc	DL" S	Speed	l
Jumper Setting	1		2		3		1	4	1		2	<u> </u>	1 ;	3	4		1		2		1 ;	3	4	ļ
	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s
+	820	385	1000	470	1180	555	1340	630	620	290	770	365	930	440	1010	475	890	420	1130	535	1340	630	1450	685
¹ NORM	760	360	900	425	1070	505	1220	575	570	270	700	330	830	390	910	430	800	380	1020	480	1220	575	1310	620
_	675	320	810	380	950	450	1100	520	520	245	630	295	760	360	810	380	720	340	900	425	1100	520	1180	555

AM61V-60C-100 Blower Performance

0 through 0.80 in. w.g. (0 Through 200 Pa) External Static Pressure Range

						В	DC3	Jum	per S	Speed	Pos	itions									
"ADJUST"		"HEAT	" Speed				First	t Stag	je "C	OOL	" Sp	eed		5	Seco	nd St	age	"COC	L" S	Speed	i
Jumper Setting	1	2	3	14		1		2		3		1 2	ļ	1		2	!	3		1	4
	cfm L/s	cfm L/s	cfm L/s	cfm I	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s
+	1500 710	1700 800	1880 885	2100 9	990	1110	525	1250	590	1380	650	1530	720	1540	725	1760	830	1970	930	2200	1040
¹ NORM	1370 645	1540 725	1720 810	1920 9	905	1000	470	1130	535	1250	590	1380	650	1400	660	1600	755	1800	850	1980	935
	1250 590	1380 650	1540 725	1720 8	810	930	440	1040	490	1130	535	1260	595	1270	600	1420	670	1600	755	1780	840

AM61V-60C-120 Blower Performance

0 through 0.80 in. w.g. (0 Through 200 Pa) External Static Pressure Range

"AD !!!OT!!	BDC3 Jumper Speed Positions																						
"ADJUST" Jumper	neal Speed							First Stage "COOL" Speed						Second Stage "COOL" Speed									
Setting	1	2		3		1	4	1		2		3		1,	4	1		2	2	3		1,	4
	cfm L/s	cfm L	/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s
+	1510 715	1720 8	10	1900	895	2120	1000	1100	520	1250	590	1400	660	1560	735	1570	740	1800	850	2000	945	2200	1040
¹ NORM	1380 650	1560 1	35	1740	820	1920	905	990	465	1130	535	1260	595	1400	660	1410	665	1620	765	1820	860	2020	955
_	1240 585	1380 6	50	1540	725	1720	810	930	440	1020	480	1130	535	1260	595	1260	595	1440	680	1620	765	1810	855

¹ Factory default jumper setting.

NOTES - The effect of static pressure and filter resistance is included in air volumes shown.

First stage COOL is approximately 70% of the same second stage COOL speed position.

Continuous Fan Only speed is approximately 38% of the same second stage COOL speed position.

Lennox Harmony zone control applications - Minimum blower speed is 400 cfm (189 L/s). Maximum air volume is the same as second stage cool position. Applications with single sided inlets will reduce the air volume by approximately 4% on B-size units and 5% on C-size units.

HEATING PERFORMANCE

AM61V-24B-040 HEATING OUTPUTS - Capacities in bold require Harmony Zone System to reach the air volumes listed

Air Volume		Heating Outputs At Various Water Temperatures											
		140°F ((60°C)	145°F (63°C)		150°F	(65°C)	155°F ((68°C)	160°F (71°C)			
cfm	L/s	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW		
400	190	23,700	6.9	25,300	7.4	26,900	7.9	28,500	8.4	30,100	8.8		
500	235	27,400	8.0	29,300	8.6	31,100	9.1	32,900	9.6	34,800	10.2		
600	285	30,700	9.0	32,700	9.6	34,800	10.2	36,800	10.8	38,900	11.4		
700	330	33,600	9.8	35,800	10.5	38,100	11.2	40,300	11.8	42,600	12.5		
800	380	36,200	10.6	38,600	11.3	41,000	12.0	43,400	12.7	45,900	13.5		
900	425	38,500	11.3	41,100	12.0	43,700	12.8	46,300	13.6	48,800	14.3		
1000	470	40,700	11.9	43,400	12.7	46,100	13.5	48,800	14.3	51,600	15.1		
1100	520	42,700	12.5	45,500	13.3	48,400	14.2	51,200	15.0	54,100	15.9		
1200	565	44,500	13.0	47,500	13.9	50,400	14.8	53,400	15.7	56,400	16.5		
1300	615	46,200	13.5	49,300	14.4	52,400	15.4	55,400	16.2	58,500	17.1		

AM61V-36B-070 HEATING OUTPUTS - Capacities in bold require Harmony Zone System to reach the air volumes listed

Α	ir		Heating Outputs At Various Water Temperatures										
Volume		140°F (60°C)		145°F (63°C)		150°F	(65°C)	155°F ((68°C)	160°F (71°C)			
cfm	L/s	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW		
400	190	30,300	8.9	32,400	9.5	34,400	10.1	36,400	10.7	38,500	11.3		
500	235	36,200	10.6	38,700	11.3	41,100	12.0	43,500	12.7	45,900	13.5		
600	285	41,500	12.2	44,300	13.0	47,100	13.8	49,900	14.6	52,600	15.4		
700	330	46,300	13.6	49,400	14.5	52,500	15.4	55,600	16.3	58,700	17.2		
800	380	50,700	14.9	54,000	15.8	57,400	16.8	60,800	17.8	64,200	18.8		
900	425	54,600	16.0	58,200	17.1	61,900	18.1	65,500	19.2	69,200	20.3		
1000	470	58,200	17.1	62,100	18.2	66,000	19.3	69,900	20.5	73,700	21.6		
1100	520	61,500	18.0	65,600	19.2	69,700	20.4	73,800	21.6	78,000	22.9		
1200	565	64,600	18.9	68,900	20.2	73,200	21.5	77,500	22.7	81,800	24.0		
1300	615	67,400	19.8	71,900	21.1	76,400	22.4	80,900	23.7	85,400	25.0		

AM61V-36C-090 HEATING OUTPUTS - Capacities in bold require Harmony Zone System to reach the air volumes listed

	Air	Heating Outputs At Various Water Temperatures											
Volume		140°F (60°C)		145°F (63°C)		150°F	(65°C)	155°F	(68°C)	160°F (71°C)			
cfm	L/s	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW		
400	190	31,400	9.2	33,500	9.8	35,600	10.4	37,700	11.0	39,800	11.7		
500	235	38,000	11.1	40,500	11.9	43,000	12.6	45,600	13.4	48,100	14.1		
600	285	44,000	12.9	47,000	13.8	49,900	14.6	52,800	15.5	55,800	16.4		
700	330	49,600	14.5	52,900	15.5	56,200	16.5	59,500	17.4	62,900	18.4		
800	380	54,800	16.1	58,400	17.1	62,100	18.2	65,700	19.3	69,400	20.3		
900	425	59,600	17.5	63,600	18.6	67,500	19.8	71,500	21.0	75,500	22.1		
1000	470	64,100	18.8	68,300	20.0	72,600	21.3	76,900	22.5	81,200	23.8		
1100	520	68,300	20.0	72,800	21.3	77,400	22.7	81,900	24.0	86,500	25.4		
1200	565	72,200	21.2	77,000	22.6	81,800	24.0	86,600	25.4	91,400	26.8		
1300	615	75,900	22.2	80,900	23.7	86,000	25.2	91,000	26.7	96,100	28.2		

CORRECTION FACTOR FOR DIFFERENT INLET AIR TEMPERATURES

No Change
Minus 6%
Minus 12%

HEATING PERFORMANCE

AM61V-60C-100 HEATING OUTPUTS - Capacities in bold require Harmony Zone System to reach the air volumes listed

Α		Heating Outputs At Various Water Temperatures											
Volume		140°F	(60°C)	145°F ((63°C)	150°F ((65°C)	155°F (68°C)	160°F (71°C)			
cfm	L/s	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW		
700	330	49,600	14.5	52,900	15.5	56,200	16.5	59,500	17.4	62,900	18.4		
800	380	54,800	16.1	58,400	17.1	62,100	18.2	65,700	19.3	69,400	20.3		
900	425	59,600	17.5	63,600	18.6	67,500	19.8	71,500	21.0	75,500	22.1		
1000	470	64,100	18.8	68,300	20.0	72,600	21.3	76,900	22.5	81,200	23.8		
1100	520	68,300	20.0	72,800	21.3	77,400	22.7	81,900	24.0	86,500	25.4		
1200	565	72,200	21.2	77,000	22.6	81,800	24.0	86,600	25.4	91,400	26.8		
1300	615	75,900	22.2	80,900	23.7	86,000	25.2	91,000	26.7	96,100	28.2		
1400	660	79,300	23.2	84,600	24.8	89,900	26.3	95,200	27.9	100,500	29.5		
1500	710	82,600	24.2	88,100	25.8	93,600	27.4	99,100	29.0	104,600	30.7		
1550	730	84,200	24.7	89,800	26.3	95,400	28.0	101,000	29.6	106,600	31.2		
1700	800	88,600	26.0	92,200	27.0	100,400	29.4	106,400	31.2	112,300	32.9		
1900	895	94,000	27.5	100,300	29.4	106,600	31.2	112,900	33.1	119,100	34.9		
2100	990	99,000	29.0	105,600	30.9	112,200	32.9	118,800	34.8	125,400	36.8		

AM61V-60C-120 HEATING OUTPUTS - Capacities in bold require Harmony Zone System to reach the air volumes listed.

Ai				Heating Outputs At Various Water Temperatures									
Volume		140°F (60°C)	145°F (63°C)	150°F (65°C)	155°F (68°C)	160°F (71°C)			
cfm	L/s	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW		
700	330	55,000	16.1	58,700	17.2	62,400	18.3	66,100	19.4	69,700	20.4		
800	380	61,600	18.1	65,700	19.3	69,800	20.5	73,900	21.7	78,000	22.9		
900	425	67,700	19.8	72,200	21.2	76,700	22.5	81,300	23.8	85,800	25.1		
1000	470	73,500	21.5	78,400	23.0	83,300	24.4	88,200	25.8	93,100	27.3		
1100	520	79,000	23.2	84,300	24.7	89,500	26.2	94,800	27.8	100,100	29.3		
1200	565	84,100	24.6	89,800	26.3	95,400	28.0	101,000	29.6	106,600	31.2		
1300	615	89,000	26.1	95,000	27.8	100,900	29.6	106,800	31.3	112,800	33.1		
1400	660	93,600	27.4	99,400	29.1	106,100	31.1	112,400	32.9	118,600	34.8		
1500	710	98,000	28.7	104,600	30.7	111,100	32.6	117,600	34.5	124,200	36.4		
1550	730	100,100	29.3	106,800	31.3	113,500	33.3	120,100	35.2	126,800	37.2		
1700	800	106,100	31.1	113,200	33.2	120,200	35.2	127,300	37.3	134,400	39.4		
1900	895	113,400	33.2	120,900	35.4	128,500	37.7	136,100	39.9	143,600	42.1		
2100	990	120,000	35.2	128,000	37.5	136,000	39.9	144,000	42.2	152,000	44.5		

CORRECTION FACTOR FOR DIFFERENT INLET AIR TEMPERATURES

60°F (15.5°C)	Add 6%
(10.0 0)	7100 070
65°F (18.3°C)	No Change
70°F (21.1°C)	Minus 6%
75°F (23.9°C)	Minus 12%