

UNIT HEATERS

LF MODELS



ALLIEDTM
Commercial

ENDURING PERFORMANCE

ALLIED COMMERCIAL™ UNIT HEATERS ARE BUILT TO LAST, SEASON AFTER SEASON

Designed and built for durability and peak performance, Allied Commercial unit heaters incorporate advanced technology and proven materials into reliable, time-tested equipment.

COMPACT UNIT HEATERS AT A GLANCE:

Ideal for hard-to-heat applications requiring fresh air for combustion due to excessive dust, dirt and humidity or negative pressure

Easy access to components through a hinged door

Heat capacity ranging from 30,000–75,000 Btuh

STANDARD UNIT HEATERS AT A GLANCE:

Meet a wide range of residential and commercial heating applications

Stainless steel heat exchanger available

Heat capacity ranging from 100,000–390,000 Btuh

EFFICIENCY RATING

Up to 81% thermal efficiency

WARRANTY

15-YEAR LIMITED WARRANTY on stainless steel heat exchanger

10-YEAR LIMITED WARRANTY on aluminized heat exchanger

1-YEAR LIMITED WARRANTY on covered components

See warranty certificate for actual details.

The tubular heat exchanger that is standard on all Allied Commercial unit heaters is designed to stand the test of time, delivering efficient and reliable heat. The curved design of the exchanger completely exposes the heating surface to the air stream, resulting in excellent heat transfer. This aluminum heat exchanger is also available in stainless steel on select models.

Other advanced features include the easily cleaned, easy-to-reach, inshot burner assembly and permanently lubricated blower motor for minimal maintenance. By using a self-diagnostic board, Allied Commercial unit heaters offer advanced safety and troubleshooting capabilities as well.



INSTALLATION IS QUICK AND SIMPLE

For application flexibility, units may be vented horizontally or vertically. Tight spaces aren't an issue thanks to the low cabinet profile of the compact and standard models. For faster installation, units are fully tested at the factory, including complete start-up and shutdown cycles, as well as gas and electrical operation verification. Installation is further simplified through the use of mounting brackets or spotnuts, and centrally located connections for gas, line voltage, and thermostats.

Allied Commercial units are stocked near you, allowing for quick delivery and installation.



TWO DIFFERENT DESIGNS. ONE STANDARD OF PERFORMANCE.

For convenience and installation ease, Allied Commercial unit heaters come in two different configurations: standard and compact. But the flexibility doesn't stop there. Multiple heating capacities are available for convenient and efficient heating of small and large spaces. Natural gas and propane are both available as fuel sources. Several wall venting options are available, including horizontal and vertical. In short, Allied Commercial has the heater you need, how you need it.



COMPACT COMBUSTION HEATERS

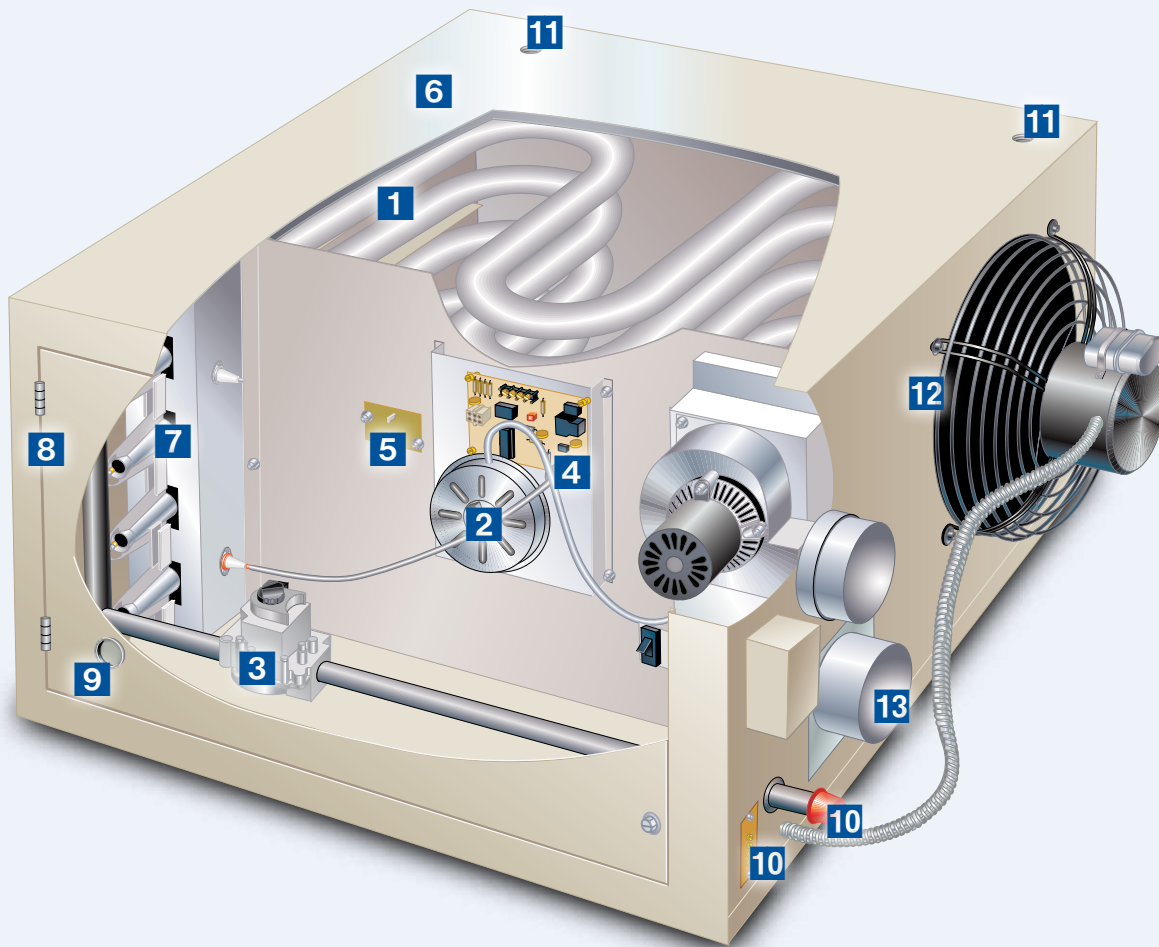
- Ideal for hard-to-heat applications where excessive dust, dirt or humidity or negative pressure is a concern
- Durable tubular heat exchanger
- Heating capacities from 30,000–75,000 Btuh
- Up to 81% thermal efficiency
- Compact cabinet design
- Hinged door allows easy access to components
- Sidewall venting eliminates roof penetrations
- Self-diagnostic board with LED display improves troubleshooting efficiency and accuracy

STANDARD UNIT HEATERS

- Ideal for a wide range of residential and commercial applications
- Heating capacities from 100,000–390,000 Btuh
- Up to 80.5% thermal efficiency
- Optional stainless steel heat exchanger (for 100,000 Btuh and greater models) is available for longer product life
- Sidewall venting eliminates roof penetrations
- Self-diagnostic board with LED display improves troubleshooting efficiency and accuracy



UNIT HEATERS



PRECISE PERFORMANCE, RELIABILITY AND DURABILITY

- 1 TUBULAR HEAT EXCHANGER**—Proven design for efficiency and durability. Available in stainless steel on 100,000–390,000 Btuh models.
- 2 COMBUSTION AIR INDUCER PROVING SWITCH**—Prevents unit operation if combustion air vent is blocked.
- 3 24V COMBINATION GAS CONTROL VALVE WITH 100% SAFETY SHUTOFF**—Increases control and protects units.
- 4 INTEGRATED CONTROL BOARD WITH DIRECT SPARK IGNITION**—Improves unit operation and efficiency.
- 5 LIMIT CONTROL**—Provides protection from overheat conditions.
- 6 HEAVY-GAUGE STEEL CABINET**—Resists corrosion and provides structural stability.
- FLAME ROLLOUT SENSOR (NOT SHOWN)**—Improves safety.

INSTALLATION AND MAINTENANCE MADE EASY

- 7 ALUMINIZED STEEL INSHOT BURNERS**—Are low maintenance and easy to clean.
- 4 INTEGRATED CONTROL BOARD WITH DIAGNOSTICS**—Improves operation and aids in troubleshooting.
- 8 HINGED DOOR**—Provides easy access to components.
- 9 BURNER VIEW PORT**—For easy flame viewing during routine maintenance.
- 10 EXTERNAL GAS, LINE VOLTAGE AND THERMOSTAT CONNECTIONS**—Speed installation.
- 11 MOUNTING SPOTNUTS**—Allow for threaded rod installation (100,000–300,000 Btuh models).
- 12 PERMANENTLY LUBRICATED BLOWER MOTOR**—Offers minimal maintenance and solid performance.

APPLICATION SOLUTIONS

- 13 SEPARATED COMBUSTION AIR INLET**—Provides fresh outdoor air for proper combustion.

LF24 COMPACT UNIT HEATER PERFORMANCE SPECIFICATIONS

MODEL*	GAS HEATING PERFORMANCE				CONNECTIONS			FAN DATA**						PHYSICAL DATA		
	HEATING CAPACITY INPUT BTUH [KW]	HEATING OUTPUT BTUH [KW]	STEADY STATE EFFICIENCY	TEMP. RISE °F [°C]	VERT. FLUE SIZE ROUND INCHES [MM]	HORIZ. FLUE SIZE ROUND INCHES [MM]	GAS PIPING SIZE INCHES [NPT]	NO. OF FANS	DIAMETER INCHES [MM]	NO. OF BLADES	MOTOR OUTPUT HP [W]	MOTOR FULL LOAD AMPS	MOTOR RPM	AIR VOL. CFM [L/S]	DIMENSIONS H X W X L [INCHES]	SHIP WT. [LBS.]
LF24-30A	30,000 [8.8]	24,300 [7.1]	81.0%	42 [23]	3 ¹ [76]	4 ³ [102]	1/2	1	10 [254]	4	1/20 [37]	1.7	1650	535 [250]	13 x 25 x 24	60
LF24-45A	45,000 [13.2]	36,500 [10.7]	81.0%	45 [25]	3 ¹ [76]	4 ³ [102]	1/2	1	10 [254]	4	1/20 [37]	1.7	1650	750 [355]	13 x 25 x 24	63
LF24-60A	60,000 [17.6]	48,000 [14.1]	80.0%	55 [31]	4 ² [102]	5 ⁴ [127]	1/2	1	14 [356]	3	1/8 [93]	4.1	1050	830 [390]	18 x 25 x 25	87
LF24-75A	75,000 [22.0]	60,000 [17.6]	80.0%	60 [33]	4 ² [102]	5 ⁴ [127]	1/2	1	14 [356]	3	1/8 [93]	4.1	1050	950 [450]	18 x 25 x 25	91

*"A" denotes aluminized steel heat exchanger. All models are 115 volts, 60 hertz, 1 phase.

¹2-1/8 x 3 in. (54 x 76 mm) diameter adaptor is furnished with unit for flue connection.

²2 x 4 in. (51 x 102 mm) diameter adaptor is furnished with unit for flue connection.

³3 x 4 in. (76 x 102 mm) vent adaptor required (not furnished) for horizontal venting in residential applications.

⁴4 x 5 in. (102 x 127 mm) vent adaptor required (not furnished) for horizontal venting in residential applications.

LF24 STANDARD UNIT HEATER PERFORMANCE SPECIFICATIONS

MODEL*	GAS HEATING PERFORMANCE				CONNECTIONS			FAN DATA**						PHYSICAL DATA		
	HEATING CAPACITY INPUT BTUH [KW]	OUTPUT NATURAL BTUH [KW]	OUTPUT LPG/PROPANE BTUH [KW]	STEADY STATE EFFICIENCY		FLUE SIZE ROUND INCHES [MM]	GAS PIPING SIZE INCHES [NPT]	NO. OF FANS	DIA. INCHES [MM]	NO. OF BLADES	NO. OF MOTORS	MOTOR OUTPUT HP [W]	MOTOR FULL LOAD AMPS [TOTAL]	AIR VOL. CFM [L/S]	DIMENSIONS H X W X L [INCHES]	SHIP WT. [LBS.]
				NATURAL	LPG/PROPANE											
LF24-100S LF24-100A	100,000 [114.3]	80,500 [23.6]	82,000 [24.0]	80.5%	81.0%	4 ¹ [102]	1/2	1	16 [406]	4	1	1/8 [93]	2.1	1900 [895]	32-3/16 x 20-3/16 x 39-3/16	140
LF24-115S LF24-115A	115,000 [33.7]	92,000 [27.0]	92,000 [27.0]	80.0%	80.0%	4 ¹ [102]	1/2	1	16 [406]	4	1	1/8 [93]	2.1	1900 [895]	32-3/16 x 20-3/16 x 39-3/16	140
LF24-145S LF24-145A	145,000 [42.5]	116,000 [34.0]	116,000 [34.0]	80.0%	80.0%	4 ¹ [102]	1/2	1	16 [406]	4	1	1/8 [93]	2.1	1900 [895]	32-3/16 x 20-3/16 x 39-3/16	150
LF24-175S LF24-175A	172,500 [50.6]	138,000 [40.4]	138,000 [40.4]	80.0%	80.0%	5 ² [127]	1/2	1	16 [406]	4	1	1/8 [93]	2.1	2200 [1035]	32-3/16 x 23-1/8 x 40	165
LF24-200S LF24-200A	195,000 [56.9]	156,000 [45.6]	156,000 [45.6]	80.0%	80.0%	5 ² [127]	1/2	1	16 [406]	4	1	1/8 [93]	2.1	2200 [1035]	32-3/16 x 23-1/8 x 40	165
LF24-230S LF24-230A	230,000 [67.5]	184,000 [53.9]	184,000 [53.9]	80.0%	80.0%	5 ² [127]	3/4	2	16 [406]	4	2	1/8 [93]	2.1 [4.2]	4400 [2075]	32-3/16 x 41-1/8 x 40	270
LF24-250S LF24-250A	250,000 [73.3]	201,250 [59.0]	205,000 [60.1]	80.5%	81.0%	5 ² [127]	3/4	2	16 [406]	4	2	1/8 [93]	2.1 [4.2]	4400 [2075]	32-3/16 x 41-1/8 x 40	285
LF24-300S LF24-300A	300,000 [87.9]	241,500 [70.8]	246,000 [72.1]	80.5%	81.0%	5 ² [127]	3/4	2	16 [406]	4	2	1/8 [93]	2.1 [4.2]	4400 [2075]	32-3/16 x 41-1/8 x 40	305
LF24-345S LF24-345A	345,000 [101.1]	276,000 [80.9]	281,200 [82.4]	80.0%	81.0%	6 ³ [152]	3/4	2	16 [406]	4	2	1/8 [93]	2.1 [4.2]	4400 [2075]	32-3/16 x 41-1/8 x 41-1/8	310
LF24-400S LF24-400A	390,000 [114.3]	312,000 [91.4]	312,000 [91.4]	80.0%	80.0%	6 ³ [152]	3/4	2	16 [406]	5	2	1/8 [93]	2.1 [4.2]	4400 [2075]	32-3/16 x 41-1/8 x 41-1/8	315

*"S" denotes stainless steel heat exchanger. "A" denotes aluminized steel heat exchanger. All models are 115 volts, 60 hertz, 1 phase.

¹2-1/8 x 4 in. (54 x 102 mm) diameter adaptor is furnished with unit for flue connection.

²2-1/4 x 2-3/4 in. (57 x 70 mm) rectangular to 5 in. (127 mm) round adaptor is furnished with unit for flue connection.

³2-1/4 x 2-3/4 in. (57 x 70 mm) rectangular to 6 in. (152 mm) round adaptor is furnished with unit for flue connection.

Note: Due to Allied Commercial's ongoing commitment to quality, all specifications, ratings and dimensions are subject to change.



Visit us at www.allied-commercial.com or contact us at 1-800-448-5872.
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ACLF-300 05/13 PC73454