HIGH MODULATION INDIRECT GAS-FIRED AIR HEATER

(GROSS CAPACITY FROM 120 TO 400 MBH)

LD(E) SERIES

OUTDOOR INSTALLATION

SPECIFICATIONS MANUAL

MANUFACTURED BY

BOUSQUET
Technologies

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DESCRIPTION

The LD(E) series air heaters manufactured by Bousquet Technologies is a ventilation unit designed for heating make-up and/or recirculated air and is listed by cETLus.

Compact, economical and easily maintained, these units incorporate a centrifugal fan, an indirect gas-fired coil with high modulation, motorized dampers and an air intake hood with integrated bird screen and filters.

Optional equipment for these units can include a mixing box with filter, return damper and a coil section with drain pan for energy recovery or cooling.

The range of capacities for these units include airflows from 740 CFM up to 4938 CFM (351 to 2330 l/s.), with heating capacities from 96MBH up to 320MBH output (28 to 94 KW) and a temperature rise of 60°F up to 120°F (33°C to 67°C).

CONSTRUCTION

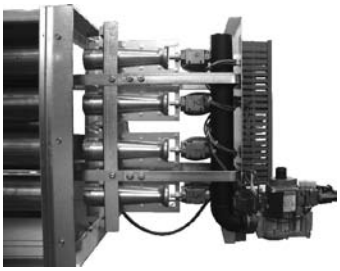
The LD(E) series heater are manufactured with 1-inch thick wall panels made of 20G galvanized steel, with internal reinforce fibre insulation, assembled on a galvanized steel frame of 14G thickness with lifting lugs for handling.

The heaters are factory tested for combustion and sequence of operation to ensure good working operation on site. A series of inspections throughout all manufacturing steps guarantees the superior quality of these units.

GAS COILS

The gas coils used in the LD(E) air heaters are manufactured with 304L stainless steel tubes and are designed to provide high turndown ratios even with small capacities.

Each tube of the coil is equipped with a tubular injection venturi burner with an effective retention head and an ignition system using the latest technologies. Each burner is individually controlled by means of a solenoid valve.



Furthermore, the main gas supply to the venturi burners passes through a 2-step control valve to enable burners operation at 60% or 100% of their nominal capacity.

This combination provides multiple steps of capacity, called multi-stages modulation, making it possible to obtain higher turndown ratios for a more precise temperature control and an increased comfort for the occupants.

In mid-heating season, this mode of multiple stages modulation eliminates the heat surges caused by the frequent stops/starts of conventional units operating in on/off mode or modulating with a lower turndown ratio. It also contributes to prolong the service life of the heater and its controls.

The heater coils are equipped with a high quality power venter with safety devices that ensure the exhaust of the combustion products, as well as the introduction of combustion air to each burner.

CHARACTERISTICS

- Multiple stages modulation from 8:1 to 20:1
- Operates with inlet gas pressure of 8'' w.c. (2 kPa)
- Express delivery
- Very compact
- Easy installation
- Small heating capacities
- Outdoor installation

ADVANTAGES OF MULTIPLE STAGES MODULATION

Multiple stages modulation has proven itself. Since its beginning, it never ceases to demonstrate that it is reliable, simple and gives expected results. Comparing it with a 4:1 modulation used in tubular or clam-shell gravity heat exchangers, the advantages of precise temperatures at low capacity are notable.

In concrete terms, these advantages translate themselves by energy savings, reduced number of cycles and a precise leaving air temperature of ±1°F while being simple.

Model	Stages	Minimum Fire MBH	Modulation Ratio
LD(E)-120	6	15	8:1
LD(E)-180	9	15	12:1
LD(E)-240	12	15	16:1
LD(E)-300	9	20	15:1
LD(E)-350	10	20	18:1
LD(E)-400	12	20	20:1

APPLICATIONS (COMMERCIAL AND INSTITUTIONAL)

- For Heating :
    - o Supermarket entrances
    - o Garage doors
    - o Warehouses and factories
    - o Etc.

- Fresh air supply :
    - o Apartment building pressurization
    - o Schools and old age homes
    - o Laboratories and factories
    - o Etc.

CERTIFICATIONS

The LD(E) series Make-up air heaters with capacities of less than 400MBH input are listed by cETLus for Canada and the United States according to the CAN/CSA C22.2 3.2 standards No 236-95 and ANSI/UL 1995 Third Edition respectively.

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SELECTION TABLE (Imperial version)

MODELS LD(E) 120 to 400

With the selection table below, choose the LD(E) model and its motor size according to airflow, external static pressure and the required temperature rise.

Model	Temperature Rise (From 60F to 120F)	Airflow[3]	Fan DWDI	Motor (HP)							
				External pressure loss[1,2] (inch.w.c)							
	ºF	**CFM**		**0.25**	**0.5**	**0.75**	**1**	**1.25**	**1.5**	**1.75**	**2**
LD(E) 120	120	740	9-7	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4
	100	889		1/2	1/2	1/2	1/2	3/4	3/4	3/4	1
	90	988		1/2	1/2	1/2	3/4	3/4	3/4	1	1
	80	1111		1/2	3/4	3/4	3/4	1	1	1	1-1/2
	70	1270		3/4	3/4	1	1	1-1/2	1-1/2	1-1/2	1-1/2
	60	1481		1	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	2	2
LD(E) 180	120	1111	9-9	1/2	1/2	1/2	3/4	3/4	1	1	1-1/2
	100	1333		1/2	3/4	3/4	1	1	1-1/2	1-1/2	1-1/2
	90	1481		3/4	3/4	1	1	1	1-1/2	1-1/2	1-1/2
	80	1667		1	1	1	1-1/2	1-1/2	1-1/2	1-1/2	2
	70	1905		1-1/2	1-1/2	1-1/2	1-1/2	2	2	2	3
	60	2222		1-1/2	2	2	2	3	3	3	3
LD(E) 240	120	1481	10-10	1/2	3/4	3/4	3/4	1	1	1-1/2	1-1/2
	100	1778		3/4	3/4	1	1	1-1/2	1-1/2	1-1/2	2
	90	1975		3/4	1	1	1-1/2	1-1/2	1-1/2	2	2
	80	2222		1	1-1/2	1-1/2	1-1/2	1-1/2	2	2	2
	70	2540		1-1/2	2	2	2	3	3	3	3
	60	2963		2	3	3	3	3	3	3	5
LD(E) 300	120	1851	10-10	3/4	3/4	3/4	1	1	1-1/2	1-1/2	2
	100	2222		1	1	1-1/2	1-1/2	1-1/2	1-1/2	2	2
	90	2469		1-1/2	1-1/2	1-1/2	1-1/2	2	2	2	2
	80	2778		1-1/2	1-1/2	2	2	2	3	3	3
	70	3175		2	3	3	3	3	3	5	5
	60	3705		3	5	5	5	5	5	5	5
LD(E) 350	120	2160	12-12	3/4	3/4	1	1-1/2	1-1/2	1-1/2	2	2
	100	2593		1	1-1/2	1-1/2	1-1/2	2	2	2	2
	90	2881		1-1/2	1-1/2	1-1/2	1-1/2	2	2	3	3
	80	3241		2	2	2	3	3	3	3	2
	70	3704		3	3	3	3	3	5	5	5
	60	4321		3	3	3	5	5	5	5	5
LD(E) 400	120	2469	15-11	3/4	1	1-1/2	1-1/2	1-1/2	2	2	2
	100	2963		1	1-1/2	1-1/2	1-1/2	2	2	2	3
	90	3292		1-1/2	1-1/2	1-1/2	2	2	3	3	3
	80	3704		2	2	2	3	3	3	3	3
	70	4233		3	3	3	3	3	5	5	5
	60	4938		5	5	5	5	5	5	5	5

NOTES:

1. The external static pressure must not include the fresh air inlet, dampers, filters and gas coil. For a higher static pressure, lower and higher airflows, consult manufacturer. To get fan RPM, consult selection software.
2. Add static pressure loss of the cooling or recovery coil to duct static pressure loss when they are required.
3. When using the airflow contact in the PLC, airflow can be reduced by 50%.

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SELECTION TABLE (Metric version)

MODELS LD(E) 120 to 400

With the selection table below, choose the LD(E) model and its motor size according to airflow, external static pressure and the required temperature rise.

Model	Temperature Rise (From 33°C to 67°C) °C	Airflow [3] L/s	Fan DWDI	Motor (KW)							
				External pressure loss[1,2] (Pa)							
				62	124	187	249	311	373	436	498
LD(E) 120	67	349	9-7	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56
	56	420		0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.75
	50	466		0.37	0.37	0.37	0.75	0.56	0.56	0.75	0.75
	44	524		0.37	0.75	0.56	0.56	0.75	0.75	0.75	1.12
	39	599		0.56	0.56	0.75	0.75	1.12	1.12	1.12	1.12
	33	699		0.75	1.12	1.12	1.12	1.12	1.12	1.49	1.49
LD(E) 180	67	524	9-9	0.37	0.37	0.37	0.56	0.56	0.75	0.75	1.12
	56	629		0.37	0.56	0.56	0.75	0.75	1.12	1.12	1.12
	50	699		0.56	0.56	0.75	0.75	0.75	1.12	1.12	1.12
	44	787		0.75	0.75	0.75	1.12	1.12	1.12	1.12	1.49
	39	899		1.12	1.12	1.12	1.12	1.49	1.49	1.49	2.24
	33	1049		1.12	1.49	1.49	1.49	2.24	2.24	2.24	2.24
LD(E) 240	67	699	10-10	0.37	0.56	0.56	0.56	0.75	0.75	1.12	1.12
	56	839		0.56	0.56	0.75	0.75	1.12	1.12	1.12	1.49
	50	932		0.56	0.75	0.75	1.12	1.12	1.12	1.49	1.49
	44	1049		0.75	1.12	1.12	1.12	1.12	1.49	1.49	1.49
	39	1199		1.12	1.49	1.49	1.49	2.24	2.24	2.24	2.24
	33	1398		1.49	2.24	2.24	2.24	2.24	2.24	2.24	3.73
LD(E) 300	67	874	10-10	0.56	0.56	0.56	0.75	0.75	1.12	1.12	1.49
	56	1049		0.75	0.75	1.12	1.12	1.12	1.12	1.49	1.49
	50	1165		1.12	1.12	1.12	1.12	1.49	1.49	1.49	1.49
	44	1311		1.12	1.12	1.49	1.49	1.49	2.24	2.24	2.24
	39	1498		1.49	2.24	2.24	2.24	2.24	2.24	3.73	3.73
	33	1749		2.24	3.73	3.73	3.73	3.73	3.73	3.73	3.73
LD(E) 350	67	1019	12-12	0.56	0.56	0.75	1.12	1.12	1.12	1.49	1.49
	56	1224		0.75	1.12	1.12	1.12	1.49	1.49	1.49	1.49
	50	1360		1.12	1.12	1.12	1.12	1.49	1.49	2.24	2.24
	44	1530		1.49	1.49	1.49	2.24	2.24	2.24	2.24	2.24
	39	1749		2.24	2.24	2.24	2.24	2.24	3.73	3.73	3.73
	33	2039		2.24	2.24	2.24	3.73	3.73	3.73	3.73	3.73
LD(E) 400	67	1165	15-11	0.56	0.75	1.12	1.12	1.12	1.49	1.49	1.49
	56	1398		0.75	1.12	1.12	1.12	1.49	1.49	1.49	2.24
	50	1554		1.12	1.12	1.12	1.49	1.49	2.24	2.24	2.24
	44	1748		1.49	1.49	1.49	2.24	2.24	2.24	2.24	2.24
	39	1998		2.24	2.24	2.24	2.24	2.24	3.73	3.73	3.73
	33	2330		3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73

NOTES:

1. The external static pressure must not include the fresh air inlet, dampers, filters and gas coil. For a higher static pressure, lower and higher airflows, consult manufacturer. To get fan RPM, consult selection software.
2. Add static pressure loss of the cooling or recovery coil to duct static pressure loss when they are required.
3. When using the airflow contact in the PLC, airflow can be reduced by 50%.

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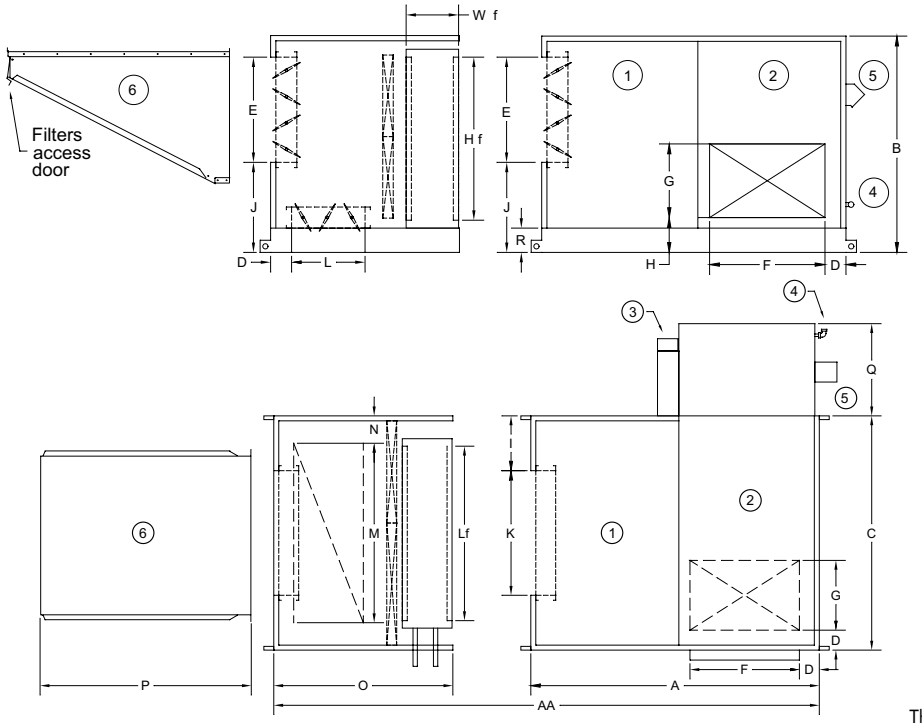
HEATER DIMENSIONS



DESCRIPTION:

① Fan Section
② Heat Exchange
③ Main Disconnect
④ Gas Inlet 3/4''
⑤ Flue Outlet
⑥ Fresh Air Hood

NOTES:

1. Weight of unit with air inlet.
2. Weight of unit with mixing box and air inlet.
3. Weight of unit with mixing box, standard air inlet and coil.
4. Maximum dimensions for fin area.
5. Maximum thickness of coil.
6. Length of unit with optional mixing box, filter and coil section.

The dimensions are subject to tolerances of 1/8'' (3mm)

	LD(E) 120		LD(E) 180		LD(E) 240		LD(E) 300		LD(E) 350		LD(E) 400	
	9-7		9-9		10-10		10-10		12-12		15-11	
Fan Size	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
Filters in the cabinet	2-16x25	2-406x635	2-16x25	2-406x635	2-16x25	2-406x635	2-16x20	2-406x508	2-16x20 2-20x25	2-406x508 2-508x635	2-16x20 2-20x25	2-406x508 2-508x635
Filters in the air intake	1-20x20 1-20x25	1-508x508 1-508x635	1-20x20 1-20x25	1-508x508 1-508x635	1-20x20 1-20x25	1-508x508 1-508x635	1-20x20 1-20x25	1-508x508 1-508x635	2-16x20 2-16x25	2-406x508 2-406x635	2-16x20 2-16x25	2-406x508 2-406x635
A	44	1118	50	1270	56	1422	55	1397	58	1473	65	1651
AA[6]	75	1905	82	2083	90	2286	91	2311	94	2688	100	2540
B	41-1/2	1054	41-1/2	1054	41-1/2	1054	49-1/4	1251	49-1/4	1251	50-3/4	1289
C	35	889	35	889	35	882	45	1143	45	1143	45	1143
D	4	102	4	102	4	102	4	102	4	102	4	102
E	20	508	20	508	20	508	20	508	20	508	20	508
F	10	254	16	406	22	556	18	457	21-1/4	540	24-1/2	622
G	13	330	12	305	11	279	16	406	17	432	17	432
H	6-5/8	168	6-5/8	168	6-5/8	168	6-5/8	168	6-5/8	168	6-5/8	168
I	7-1/2	191	7-1/2	191	7-1/2	191	12-1/2	318	10	254	10	254
J	17-1/2	445	17-1/2	445	17-1/2	445	25-1/4	641	25-1/4	641	26-5/8	676
K	20	508	20	508	20	508	20	508	25	635	25	635
L	10	254	10	254	10	254	14	356	14	356	14	356
M	27	686	27	686	27	686	37	940	37	940	37	940
N	4	102	4	102	4	102	4	102	4	102	4	102
O	31	787	32	813	34	864	36	914	36	914	35	889
P	42-1/2	1080	42-1/2	1080	42-1/2	1080	42-1/2	1080	42-1/2	1080	42-1/2	1080
Q	22	559	22	559	22	559	24	610	24	610	24	610
R	4-5/8	117	4-5/8	117	4-5/8	117	4-5/8	117	4-5/8	117	4-5/8	117
Hf[4]	32-3/4	832	32-3/4	832	32-3/4	832	40-1/2	1029	40-1/2	1029	42	1067
Lf[4]	27-1/2	699	27-1/2	699	27-1/2	699	37-1/2	699	37-1/2	699	37-1/2	699
Wf[5]	10	254	10	254	10	254	10	254	10	254	10	254
Gaz	3/4	19	3/4	19	3/4	19	3/4	19	3/4	19	3/4	19
Poids[1]	642 lb	291 kg	773 lb	351 kg	868 lb	394 kg	889 lb	403 kg	956 lb	434 kg	1034 lb	469 kg
Poids[2]	723 lb	328 kg	856 lb	388 kg	956 lb	434 kg	1010 lb	458 kg	1077 lb	489 kg	1153 lb	523 kg
Poids[3]	831 lb	377 kg	992 lb	450 kg	1121 lb	508 kg	1176 lb	533 kg	1245 lb	565 kg	1336 lb	606 kg

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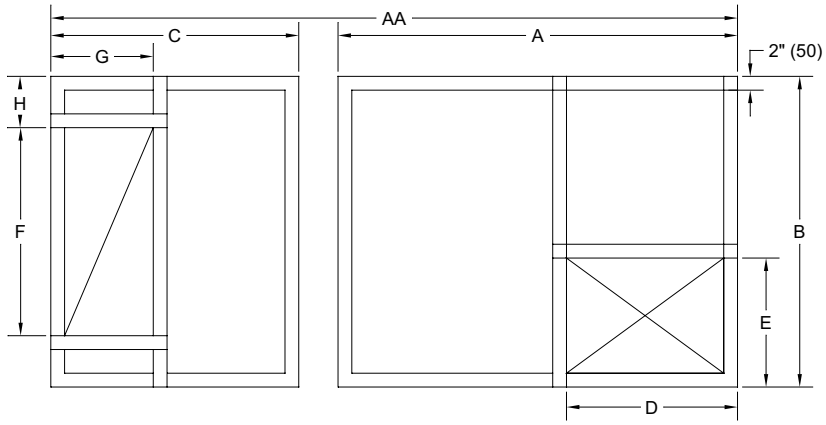
ROOF CURB DIMENSIONS

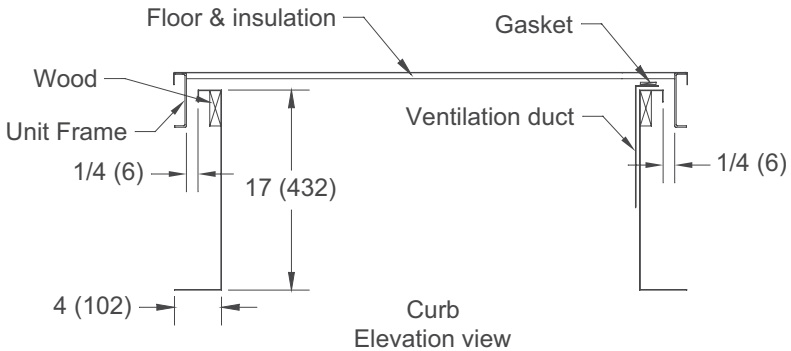


	LD(E) 120		LD(E) 180		LD(E) 240		LD(E) 300		LD(E) 350		LD(E) 400	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	40-3/8	1026	46-3/8	1178	52-3/8	1330	51-3/8	1305	54-3/8	1381	61-3/8	1559
AA[3]	71-3/8	1813	78-3/8	1991	86-3/8	2194	87-3/8	2219	90-3/8	2296	96-3/8	2448
B	31-3/8	797	31-3/8	797	31-3/8	797	41-3/8	1051	41-3/8	1051	41-3/8	1051
C	31	787	32	813	34	864	36	914	36	914	35	889
D	13-3/8	340	18-3/8	467	24-3/8	619	20-3/8	518	23-5/8	600	26-7/8	683
E	15-3/8	391	14-3/8	365	13-3/8	340	18-3/8	467	19-3/8	492	19-3/8	492
F	27	686	27	386	27	686	37	940	37	940	37	940
G	12-3/8	314	12-3/8	314	12-3/8	314	16-3/8	416	16-3/8	416	16-3/8	416
H	2-3/16	56	2-3/16	56	2-3/16	56	2-3/16	56	2-3/16	56	2-3/16	56
Weight[1]	70 lb	32 kg	75 lb	34 kg	81 lb	37 kg	89 lb	40 kg	91 lb	41 kg	99 lb	45 kg
Weight[2]	99 lb	45 kg	105 lb	48 kg	113 lb	51 kg	123 lb	56 kg	125 lb	57 kg	131 lb	59 kg

NOTES:
1. Weight of curb for 100% outdoor air configuration.
2. Weight of curb with mixing box and/or coil section.
3. Length of unit with optional mixing box, filter and coil section.

The dimensions are subject to tolerances of 1/8'' (3 mm).

ROOF CURB MOUNTING ARRANGEMENT



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TECHNICAL CHARACTERISTICS

STANDARD:

- Approved for installation in Canada and the United States by $_{C}ETL_{US}$
- Airflow with bottom vertical discharge
- Structural frame made of 14G galvanized steel with lifting lugs
- 1-inch reinforced face fibre glass insulation
- 20G galvanized steel cabinet with airtight gaskets
- Non welded construction
- Double wall doors with 1-inch insulation and locking screwed knobs
- High temperature insulation and double wall construction over the heat exchanger
- Motorized opposed blade dampers made of galvanized steel
- Air intake hood with rain gutter, 2'' pleaded filters (MERV 7)
- One year warranty on parts and 5 years on heat exchangers

Motor / Fan

- Electrical supply for ___ Volts, __ phases, 60 cycles
- Adjustable motor base
- Forward curved centrifugal fan made of galvanized steel
- Vibration isolation for motor and fan assembly
- Adjustable motor pulley

Gas coils

- Tubular 304L stainless steel heat exchanger
- Pre-calibrated venturi type burner requiring no adjustment
- Minimum inlet gas pressure of 8" w.c. (2 kPa) and max of 14'' w.c. (3.4 kPa)
- Electronic spark ignition with self diagnostic and pre-purge period
- High temperature limit switch and flame spill switch as well as all safety controls
- 1'' high temperature si be glass insulation
- Power venter with flue switch and 3041 stainless steel exhaust hood and collection
- Multi-stages modulation with high modulation ratios (Option SiB)
- All electrical and mechanical components for safe operation

OPTIONS

- Standard remote control panel (stop, fan, heating)
- Standard remote control panel with optional built in temperature selector
- One stage gas control (S1)
- Two stage gas controls (60% and 100%)
- Exterior surfaces with gray enamel paint
- Side air discharge (opposite to controls)
- Electrical supply (575, 460, 230, 208 Volts / 3 phases or 240 Volts / 1 phase)
- Room temperature sensor
- Supply temperature sensor
- Main electrical disconnect
- TEFC motor with inverter duty rating
- Low temperature limit control
- Low leakage or low leakage and insulated aluminum dampers
- Non-insulated roof curb with duct adaptor
- Return air damper section with flat filters and space for coil
- Section for cooling coil or recovery coil
- Galvanized steel drain pan with drain
- Variable air flow from 50% to 100% of specified minimum

NOTE: For all other options, consult the manufacturer

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TYPICAL SPECIFICATIONS LD(E) SERIE AIR HEATERS

GENERALITIES

Supply and install a Bousquet Technologies Model LD(E)-____ air heater listed by $_{C}ETL_{US}$ for a gross capacity of _____ MBH, for roof installation with a modulation ratio of ____ with ____ stages. The heat exchangers and burners, which do not have these characteristics, will not be acceptable.

PERFORMANCE

The air heater shall heat_____ CFM of air from _____°F to _____°F, with a net capacity of _____ MBH at 80% minimal combustion efficiency.

The burner shall work with a minimal natural gas supply pressure of 8 inches w.c. without affecting flame. The air capacity will be able to modulate from 50 % to 100% of the specified capacity without creating hot spots or affecting efficiency.

The fan motor will be ___HP suplied for ___ Volt __ Phase ___ Hertz and rated for use with a Variable Frequency Drive.

UNIT CONSTRUCTION

Unit base frame will be made of 14 gauges formed galvanized steel and bolted channels members.

Cabinet will be single wall construction, made or 20 gauges galvanized steel panels. Each panel will have double bends on each side at their vertical edges to add structural strength to the walls and roof of the unit. Panels are joined together with galvanized screws, sealed with a PVC gasket and a urethane UV protected caulking. All metal screws perforating the outer liner shall be galvanized and include a sealing gasket.

Entire casing shall be insulated with one inch of “Reinforced Coated Fibreglass”, except at the exchanger section where insulation shall be suitable for high temperature and double with galvanized steel.

The floor will be made of galvanized steel and will be insulated with a 2-inch fibreglass insulation. No welding will be used for the assembly of the casing or the structural frame to prevent surface rust. All prewired electrical controls (120V and 24V) will be inside with a large surface access panel and separated from high voltage powering.

The access doors will be equipped with quick opening knob handles. They need to be equipped with a lockable device requiring a tool to open the doors by the operators as requested by CSA.

GAS COILS

The gas heat exchanger will be made of 304L stainless steel capable of resisting to surface temperatures up to 1450°F and the corrosion of condensation present at each cycle in the combustion products. The heat exchangers made of 409, 409-titanium stainless steel or aluminized steel are not acceptable.

All tubes will be equipped with a venturi type tubular injection burner, fitted with an efficient retention head and includes the gas plumbing and necessary controls for safe operation.

The venturi burner assembly must operate with multiple stages control and deliver a turndown ratio of _____:1 and ___ stages, while maintaining a combustion efficiency complying with ASHRAE 90.1 requirements over the entire modulation range.

The gas coils will be equipped with a high quality power venter with thermal protection ensuring the exhaust of combustion product as well as the combustion air intake to each burner without the use of a draft hood.

Main gas supply to the heater will incorporate a 2-stage gas valve, a pressure regulator, two (2) high limits, a 24 volts control transformer, a flue flow switch and a direct spark ignition system with electronic flame supervision. The modulation systems integrated with temperature controls and flame supervision are not acceptable. Each component of these systems must be manufactured by well-established companies and must be available at heating wholesalers.

The « multiple stages » controls conceived for a 0-10VDC input signal will allows each solenoid valve to open or close as well as activating the main 2-stage valve at low and high fire according to the requested demand will ensure a linear progression of the heating capacity.

FAN

The fan will be manufactured according to the Air Movement and Control Association standards. The fan and motor will be equipped with vibration insulators and fixed on a galvanized steel structure without welding. An access door will be provided to enable the maintenance of the fan, motor, bearings, belts and pulleys. The motor will be an open type with a superior efficiency. It will be installed on a base to enable the adjustment of the belt tension and the alignment of the pulleys. The blower will be centrifugal type, double width and double inlets with forward curved blades and will be entirely made of galvanized steel.

ELECTRICITY & CONTROLS

The main electrical supply will be at ___ volts, __ phase(s), 60 cycles, including terminal blocks, magnetic starters for blower motor and air temperature limit controls. An air modulation sensor to be installed in the supply duct and/or in the space is shipped loose as an option.

FILTERS

The filters will be pleated, 2-inch thick disposable type, having a minimal efficiency of 30% and a good resistance to humidity. They will be installed in galvanized steel rails.

DAMPERS

The inlet air dampers will be made of galvanized steel without welding, will have opposed blades and equipped with a brand name actuator that will be on/off or modulating depending on sequence of operation.

AIR INTAKE

The air intake will be equipped with galvanized steel bird screen and rain gutter to eliminate water entrainment. The filters and the air intake will be designed for a maximum inlet velocity of 500 feet per minute.

CERTIFICATION

All the LD(E) series air heaters shall be listed by cETLus for Canada and the United States according to the CAN/CSA C22.2 3.2 standards No 236-05 and ANSI/UL 1995 Third Edition respectively.

START UP & ADJUSTEMENTS

The unit must be tested and adjusted at factory, before shipping. A qualified technician should perform the start up on site.

GENERAL WARRANTY

Subject to the terms and conditions hereof, during the first year after the original installation of the product or eighteen (18) months form date of shipment by Bousquet Technologies Inc. whichever occurs first, we will supply free of charge any component part(s) of our product found to be defective in material or workmanship. Any replacement part(s) so supplied will be warranted for the balance of our product's original warranty. The part(s) to be replaced must be available in exchange for the replacement part(s). Any labor, material, transportation, freight or other charges incurred in connection with the performance of this warranty will be the responsibility of the owner at the hourly rates and prices then in force. This limited warranty is only applicable to new and unused products purchased from us or from our authorized distributors, provided that our user instructions contained in our user guide have been adhered to. You recognize and understand that our obligation is limited to replacing the part found to be defective and that you have no further recourse against us.

THIS WARRANTY DOES NOT COVER:

(a) damages caused by accident, abuse, negligence, misuse, riot, fire, flood or Acts of God (b) damages caused by operating the product in a corrosive atmosphere (c) damages caused by any unauthorized alteration or repair of the system affecting the product's reliability or performance (d) damages caused by improper matching or applications of the product or the product's components (e) damages caused by failing to provide routine and proper maintenance or service to the product (f) expenses incurred for erecting, disconnecting or dismantling the product (g) parts used in connection with normal maintenance, such as filters or belts (h) products no longer at the site of the original installation (i) products installed or operated other than in accordance with the printed instructions, with the local installation or building codes or with good trade practices (j) products lost or stolen.

No one is authorized to change this WARRANTY or to create for us or on our behalf any other obligation or liability in connection with our product(s). There is no other representation, warranty or condition in any respect, expressed or implied, made by or binding upon us other than the above, nor will we be liable in any way for incidental, consequential, or special damages however caused such as but not limited to: loss of productivity, damages caused by delays, loss of profits and management time.

In order to obtain replacement parts under this product's warranty, contact the dealer or contractor who installed or services our products. Only dealers or contractors who are registered with us are authorized to perform this warranty. Should the dealer or the contractor need assistance, the authorized agent for Bousquet is available for support, and we, at Bousquet, in turn, support our agent's efforts.

RETAIN THIS WARRANTY IN YOUR FILES FOR FUTURE REFERENCE

This warranty is expressly given and accepted in lieu of any and all other warranties, express or implied, including without any limitation any warranty of merchantability or fitness for a particular purpose. Some states/provinces do not allow for the disclaimers, limitations and exclusions identified above; as a result, they may not apply to you.

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