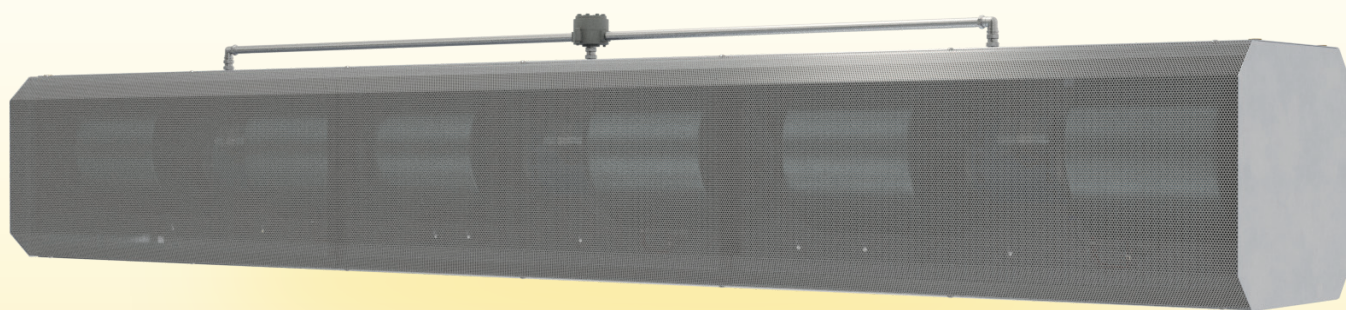




LDX

LIGHT DUTY

The LDX air curtain provides spark resistant construction for hazardous areas. This model is unheated and is manufactured for Class I Division 1 Group C & D and Class II Group F & G hazardous areas. The Hazardous Environment air curtains have been used in dewatering, pharmaceutical, and hazardous warehousing facilities.



AT A GLANCE

Single Incremental Widths

3' to 12'

Max Installation Height

12'

Heavy Duty Motors

 $\frac{3}{4}$ HP

KEY DESIGN FEATURES

- Case is 18 gauge 304 stainless steel in a number three finish.
- Motors are $\frac{3}{4}$ HP explosion proof suitable for Class I Group D and Class II F&G. 1630 rpm each
- Aluminum fans. Tangential type blowers and coupling connection shall not be permitted in order to prevent sparks.
- All internal wiring is encased in hard pipe and ran to an explosion proof junction box.
- Air intake screen is perforated 304 stainless steel with mill grain finish.
- High efficiency discharge plenum with directional air foil vane factory set to facilitate deflection of air stream +/- 20°.
- Hazardous area door switch for activation.

APPLICATIONS

- Manufacturing
- Painting
- Power Rooms
- Grain Storage Facilities
- Mining Industry
- Combustible Liquid Storage
- Locations where spark resistant equipment is required

► LDX | PERFORMANCE

LDX | Performance Table

MODEL	Nozzle Width (in.)	Max. FPM at Nozzle	Max. CFM at Nozzle	Outlet Velocity Uniformity	Number of Motors	Motor HP	Weight (lbs)
LDX-1-36	36	4218	2899	95%	1	3/4	98
LDX-1-42	42	4218	3384	93%	1	3/4	106
LDX-1-48	48	4218	3867	92%	1	3/4	115
LDX-1-60	60	4218	4374	91%	1	3/4	125
LDX-2-72	72	4218	5803	95%	2	3/4	185
LDX-2-84	84	4218	6766	93%	2	3/4	205
LDX-2-96	96	4218	7732	92%	2	3/4	223
LDX-3-108	108	4218	8702	95%	3	3/4	271
LDX-3-120	118	4218	9668	94%	3	3/4	302
LDX-3-132	133	4218	10853	95%	3	3/4	318
LDX-4-144	145	4218	11606	95%	4	3/4	370

! For a unit over 12 feet long, consult factory.

LDX | Sound Levels

High Speed 63 dBA Measured 10 ft. from unit in a free field based on a 1 motor unit

LDX | Motor Options

Voltages available 120 208 240 / 1 / 60 240 480 575 / 3 / 60

► LDX | CONTROL PANEL OPTIONS

If a control panel is required

OPTION 1

- Non-sparking construction for hazardous areas.
- Control panel shall be an explosion proof NEMA type 7 and 9, Class II, Division I and Group E, F, or G.
- Enclosure will encase magnetic motor starter, overload relays, control transformer and terminal provisions for field wiring.
- SWITCHES:
An optional remote mounted explosion proof HAND / OFF / AUTO selector switch and an hazardous area door switch can be utilized for turning unit on while the door is open in the automatic position, or having the unit run continuously regardless of the door in the hand position if specified.

OPTION 2

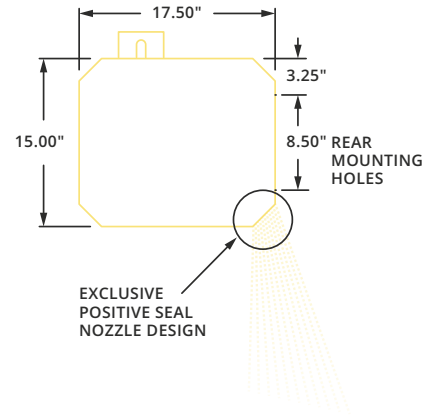
- If standard controls are to be remote mounted in a non-hazardous area, a standard control panel and ON / OFF switch can be utilized. Standard control panel shall be a NEMA 12 enclosure.
- Enclosure will encase magnetic motor starter, overload relays, 115 volt control transformer and terminal provisions for field wiring.
- Optional ON / OFF selector switch will also need to be placed in a non-hazardous proof area if specified.
- If a door switch is required, it will need to be rated for hazardous areas.

► LDX | MECHANICAL DETAILS & DRAWINGS

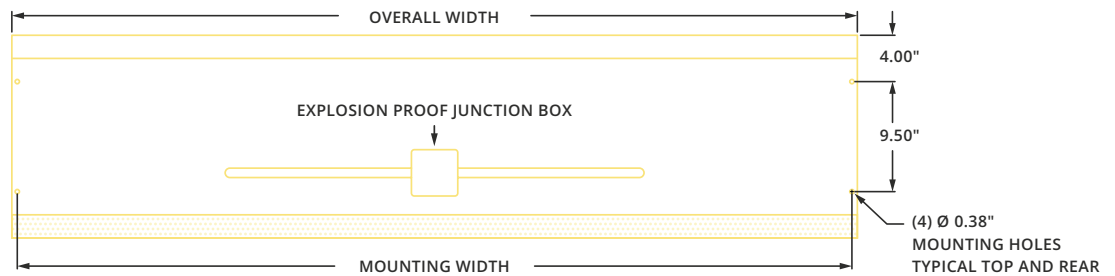
LDX | Mechanical Information Table

MODEL	Overall Width (in.)	Nozzle Width (in.)	Mounting Width Top and Rear (in.)
LDX-1-36	37	36	36.06
LDX-1-42	43	42	42.06
LDX-1-48	49	48	48.06
LDX-1-60	61	60	60.06
LDX-2-72	73	72	72.06
LDX-2-84	85	84	84.06
LDX-2-96	97	96	96.06
LDX-3-108	109	108	108.06
LDX-3-120	119	118	118.06
LDX-3-132	134	133	133.06
LDX-4-144	146	145	145.06

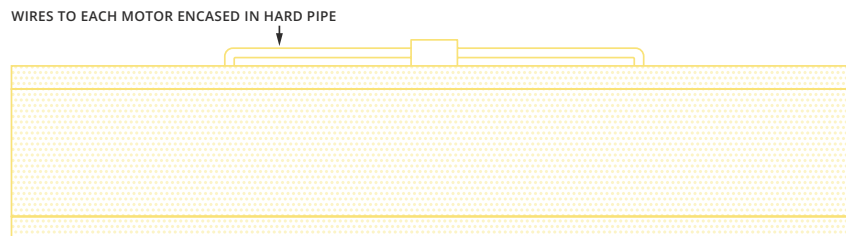
SIDE



TOP



FRONT



BOTTOM



► LDX | INSTALLATION



NOTE

The air curtain should be mounted as close to the door header/opening as possible for maximum performance. For every one inch the bottom of the air curtain is mounted above the door header, the back side of the air curtain should be moved away from the wall ¼ inch.

OPTION 1

TOP MOUNT

Unit has four 3/8-16 threaded inserts for installing one end of threaded rods. The other ends of the threaded rods can be attached to the ceiling. Threaded rod should not extend more than 3/4 inch into air curtain.

*Powered Aire does not supply threaded rods.

OPTION 2

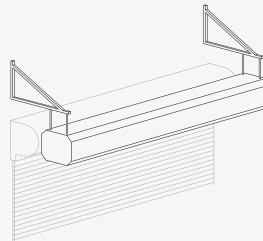
WALL MOUNT

Back side of air curtain has 4 mounting holes capable of accepting four 3/8 mounting bolts or lags, with washers (use these holes only for mounting). Mark and pre-drill mounting surface accurately. A long extension ratchet will negate the need to remove the motor/blower plate when installing. Mounting bolts or lags of sufficient size and strength should be installed and tightened through the four 7/8 inch holes in motor/blower plate. If motor/blower plate has to be removed, the junction box inside the unit must be removed along with any electrical switches that may be in the way. The electrical switches have a lever that slides in one direction to release the switch contacts from the switch body. All wires will then stay intact for easy installation when replacing blower plate. Remove 7/16 whizlock nuts holding plate in place and slide plate out rotating top portion of plate so it comes out first. Remember when installing plate to put bottom of plate in first and rotate top in last.

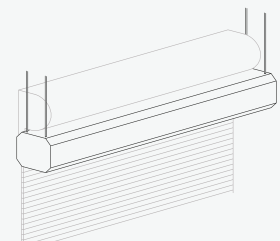
OPTION 3

WALL MOUNT; EXTENSION BRACKETS

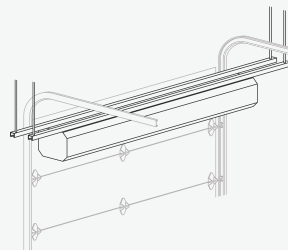
Extension brackets bolt on to the back of the unit, utilizing the 4 original mounting holes, and allowing for external mounting of unit to wall. Brackets have elongated mounting slots that extend the mounting width by 2 1/2 to 3 1/2 inches.



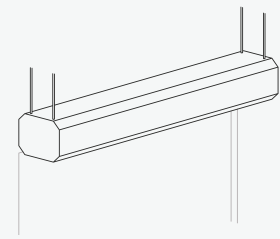
Low Roll-Up Door



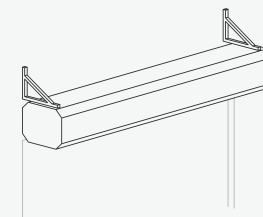
High Roll-Up Door



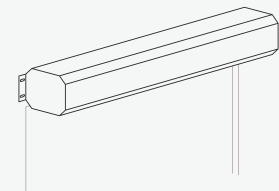
High Turn-Back Track Door



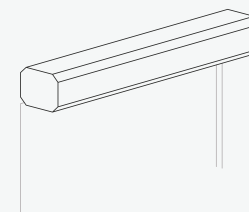
Non-Obstructed Door
Top Mount - Threaded Rod



Non-Obstructed Door
Top Mount - Bracket



Non-Obstructed Door
Wall Mount - Extension Bracket



Non-Obstructed Door
Wall Mount