

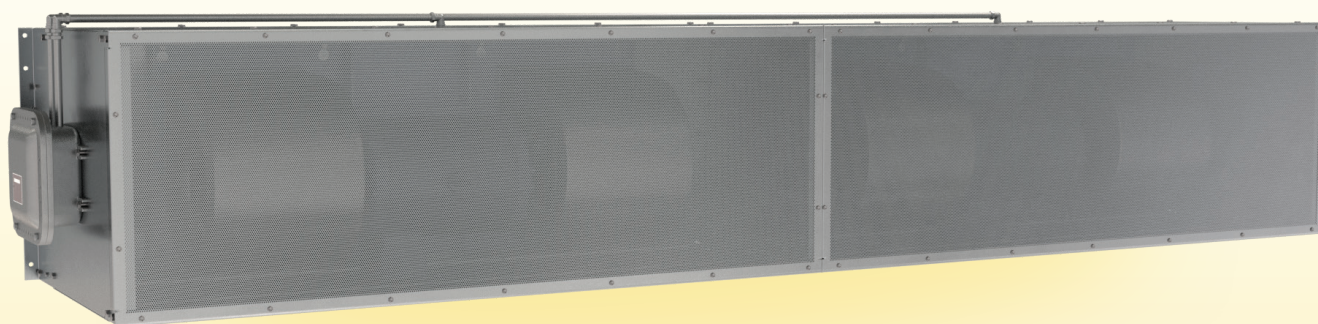


HDX

HEAVY DUTY



The HDX 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 Area air curtains have been used in dewatering, pharmaceutical, and hazardous warehousing facilities.



AT A GLANCE

Single Incremental Widths

5' to 16'

Max Installation Height*

17'

Heavy Duty Motors*

3 HP

KEY DESIGN FEATURES

- Case is 18 gauge 304 stainless steel in a number three finish.
- Motors are 3 HP explosion proof suitable for Class I Group D and Class II F&G. Total Enclosed Air Over (TEAO) motors 1630 rpm each.
- Aluminum fans and matched blower housings. To prevent a possible spark form occurring, no outboard bearings or flexible couplings will be acceptable.
- Access panels for motor and fan assembly so that these can be removed without lowering the unit.
- 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°.

APPLICATIONS

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

*5 HP option available for openings higher than 17 feet.

► HDX | PERFORMANCE

HDX | Performance Table

MODEL	Nozzle Width (in.)	Max. FPM at Nozzle	Max. CFM at Nozzle	Outlet Velocity Uniformity	Number of Motors	Motor HP	Weight (lbs)
HDX-1-60	60	5800	4855	92%	1	3	396
HDX-1-72	72	5900	5579	86.3%	1	3	418
HDX-2-120	120	5800	9710	92%	2	3	785
HDX-2-132	132	5900	10434	86.3%	2	3	805
HDX-2-144	144	5900	11158	86.3%	2	3	826
HDX-3-180	180	6200	14988	86.3%	3	3	1152
HDX-3-192	192	6200	15712	86.3%	3	3	1173

! For a unit over 16 feet long, consult factory.
A 5 HP version of model HDX is available for needs higher than 17 feet; contact factory

HDX | Sound Levels

High Speed 69 dBA Measured 10 ft. from unit in a free field based on a 1 motor unit

HDX | Three Phase Motor Options

Voltages available 208 240 480 575 / 3 / 60

TSD | Amp Draw and Breaker Options

Model/Number of Motors	208V Amp Draw (Breaker size)	240V Amp Draw (Breaker size)	480V Amp Draw (Breaker size)	575V Amp Draw (Breaker size)
TSD-1-48, 60, 72	13.1A (25)	12.2A (20)	6.1A (15)	3.9A (15)
TSD-2-96, 108, 120, 132, 144	26.2A (40)	24.4A (40)	12.2A (20)	7.8A (15)
TSD-3-144, 156, 168, 180, 192, 204, 216	39.3A (60)	36.6A (60)	18.3A (30)	11.7A (20)
TSD-4-192, 204, 216, 228, 240, 252	52.4A (80)	48.8A (70)	24.4A (35)	15.6A (25)
TSD-5-240	20.0A (90)	61.0A (90)	30.5A (45)	19.5A (30)

► HDX | CONTROL PANEL OPTIONS

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, 115 volt control transformer and terminal provisions for field wiring.
- SWITCHES:
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

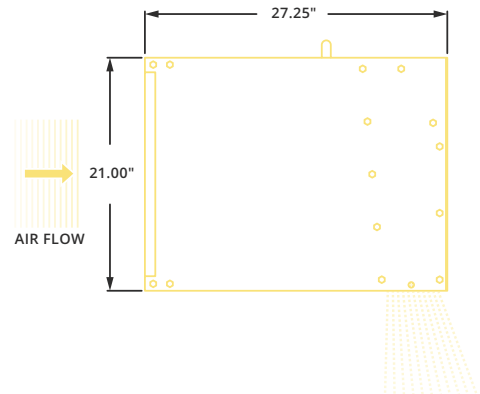
- If standard controls are to be remote mounted in a non-hazardous area, a standard control panel and ON / OFF switch can be utilized. Standard control panel shall be a NEMA 12 enclosure.
- Enclosure will encase magnetic motor starter, overload relays, 115 volt control transformer and terminal provisions for field wiring.
- 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.

► HDX | MECHANICAL DETAILS & DRAWINGS

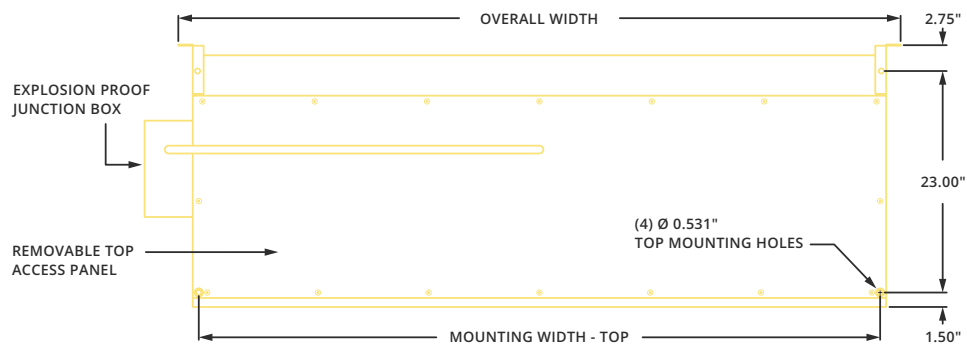
HDX | Mechanical Information Table

MODEL	Overall Width (in.)	Nozzle Width (in.)	Mounting Width Rear (in.)	Mounting Width Top (in.)
HDX-1-60	63	60	61.5	59
HDX-1-72	75	72	73.5	71
HDX-2-120	123.12	120.12	121.62	119.12
HDX-2-132	135.12	132.12	133.62	131.12
HDX-2-144	147.12	144.12	145.62	143.12
HDX-3-180	183.24	180.24	181.74	179.24
HDX-3-192	195.24	192.24	193.74	191.24

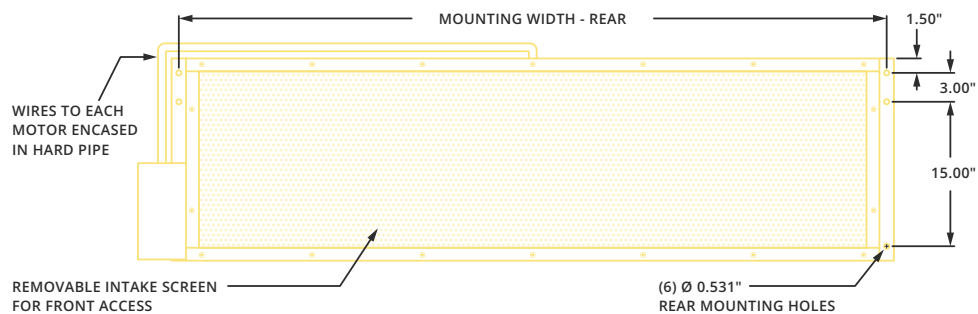
SIDE



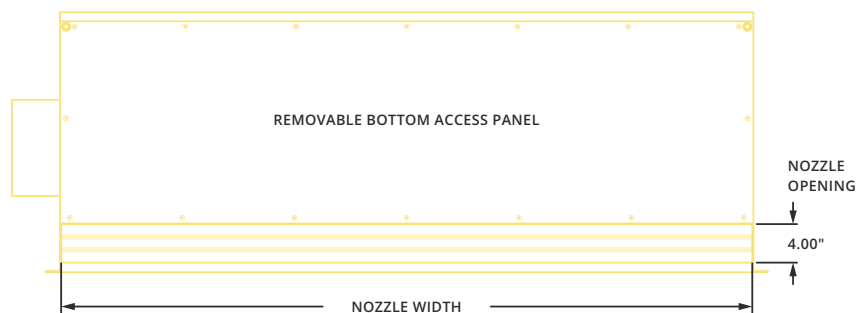
TOP



FRONT



BOTTOM



► HDX | INSTALLATION



NOTE

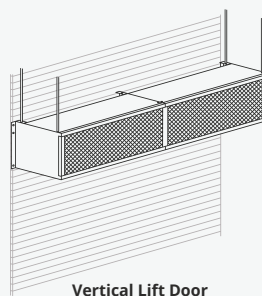
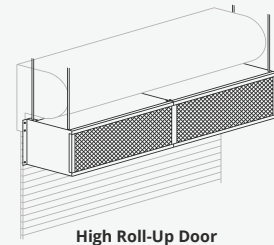
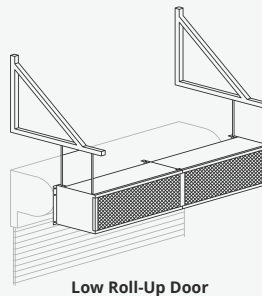
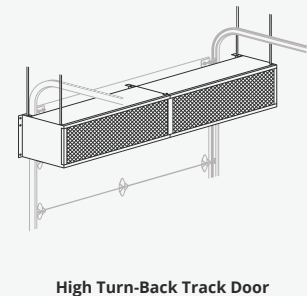
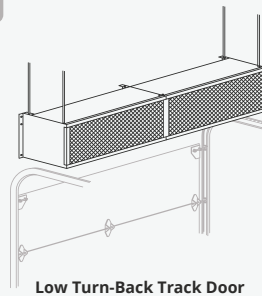
The air curtain should be mounted as close to the door header/opening as possible for maximum performance. For every one inch the bottom of the air curtain is mounted above the door header, the back side of the air curtain should be moved away from the wall ¼ inch.

A TOP MOUNT

Unit has four 15/32 inch holes for installing one end of 7/16" threaded rods. The other ends of the threaded rods can be attached to the ceiling. Washers and lock washers or locknuts are recommended. Mounting structure should be of sufficient strength to hold air curtain, and hardware (supplied by others) should be of sufficient strength and quality to support the unit safely.

*Powered Aire does not supply threaded rods.

A



B WALL MOUNT

Rear flanges of air curtain have six holes, for six 7/16 inch bolts or lags with washers. When wall mounting use all six holes.

B

