



TFD-E

LIGHT INDUSTRIAL



The TFD-E is the go-to air curtain for industrial doors ranging between 10 and 14 feet. This versatile air curtain can be used to cover openings on dock doors, shipping doors, delivery doors or other areas needing to separate environments. With the addition of electric heat, the TFD-E effectively blocks cold winter air from entering through an open door while also helping improve employee comfort and prevent the buildup of ice water around the door.

The TFD-E air door is manufactured as a single unit that can be joined together to cover openings up to 14' wide. To streamline access, the TFD-E has top and bottom panels that expedite the service process. All industrial units are direct drive, which avoids misalignment of couplers and outboard bearings and eliminates periodic belt replacement. The motor/blower plate comes out as an entire piece and all parts on the outside of the unit are constructed of stainless steel.



OPTIONS

HEATING

Electric, Hot Water, Steam, Indirect Gas

AT A GLANCE

Single Incremental Widths

3' to 14'

Max Installation Height

14'

Heavy Duty Motors

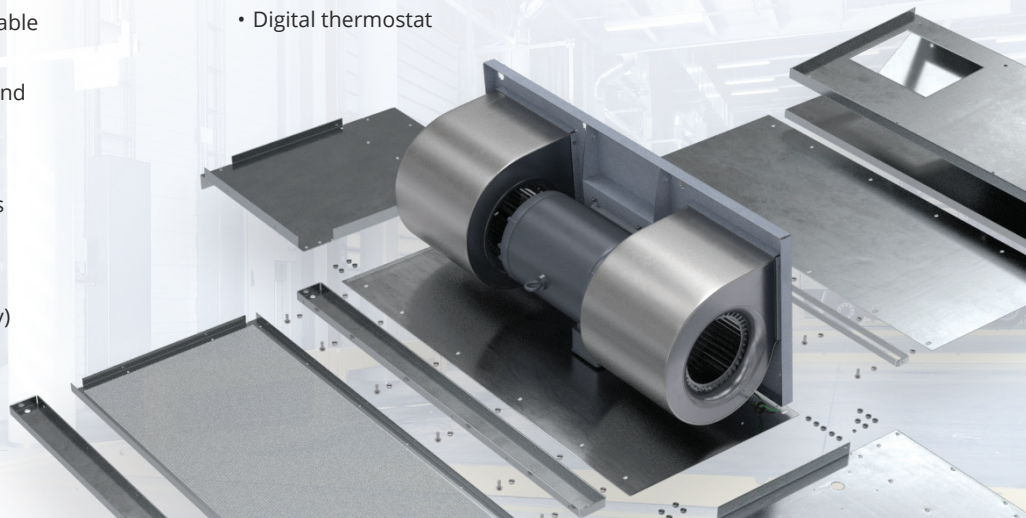
1.5 HP

KEY DESIGN FEATURES

- Outer cabinet constructed of 18-gauge 304 stainless steel with #3 finish
- 1.5 HP TEAO (Totally Enclosed Air Over) direct-drive single-speed motor(s)
- High-efficiency discharge plenum with adjustable air foil vane (+/-20°)
- Top and bottom access panels for servicing and removal of motor-blower assembly
- NEMA 12 control panel
- Factory mounted single-stage electric heaters
- Single point power connection available (see electrical table)
- Alternate heater kW available (consult factory)

RECOMMENDED CONTROLS

- Activation by 24V magnetic door switch
- Toggle disconnect switch(s)
- Hand/Off/Auto selector switch
- Heat On/Off selector switch
- Digital thermostat



► TFD-E | PERFORMANCE

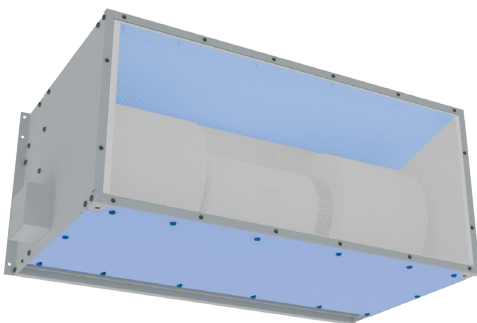
TFD-E | Performance Table

Model	Nozzle Width (in.)	Max. FPM at Nozzle	Avg. Outlet Velocity FPM	CFM at Nozzle	Outlet Velocity Uniformity	Power Rating (kW)	Number of Motors	Motor HP	Sound Pressure (dBA)*	Sound Power [LWA] (dBA)	Weight (lbs.)
TFD-1-36E	36	4800	3108	2331	92.0%	1.2	1	1.5	73	87	141
TFD-1-48E	48	4800	3565	2565	94.0%	1.3	1	1.5	76	90	181
TFD-1-60E	60	4800	2146	2682	73.0%	1.3	1	1.5	69	82	225
TFD-2-72E	72	4800	3108	4662	92.0%	2.4	2	1.5	76	90	300
TFD-2-84E	84	4800	2798	4896	92.0%	2.6	2	1.5	79	93	342
TFD-2-96E	96	4800	2565	5130	94.0%	2.6	2	1.5	79	93	375
TFD-2-108E	108	4800	2332	5247	73.0%	2.6	2	1.5	79	93	409
TFD-3-108E	108	4800	3108	6993	92.0%	3.6	3	1.5	77	92	445
TFD-3-120E	120	4800	2891	7227	92.0%	3.7	3	1.5	80	95	494
TFD-3-132E	132	4800	2713	7461	92.0%	3.8	3	1.5	80	95	570
TFD-4-144E	144	4800	3108	9324	92.0%	4.8	4	1.5	79	93	598
TFD-4-156E	156	4800	2941	9558	92.0%	4.9	4	1.5	82	96	618
TFD-4-168E	168	4800	2798	9792	92.0%	5.0	4	1.5	82	96	638

*Calculation based on spherical free field at 5 ft.



For a unit over 14 feet long, consult factory.
For Top Intake, consult factory.



Performance Highlight

The TFD-E has top and bottom access panels to replace or service motors or blowers without lowering entire unit or bottom half of unit. With hot water and steam heat these access panels enable service to the unit without removing the coils.

TFD-E | ELECTRICAL

AMP Draw, Circuits & Breaker Size Table

ALL AMP DRAWS LISTED BELOW INCLUDE TOTAL DRAW (MOTOR AND HEATERS INCLUDED)

* Single Point Power (SPP) includes branch fusing and may require remote control panel.

‡ High amp draws may be prohibitive. Reduced and custom kW available. Contact factory.

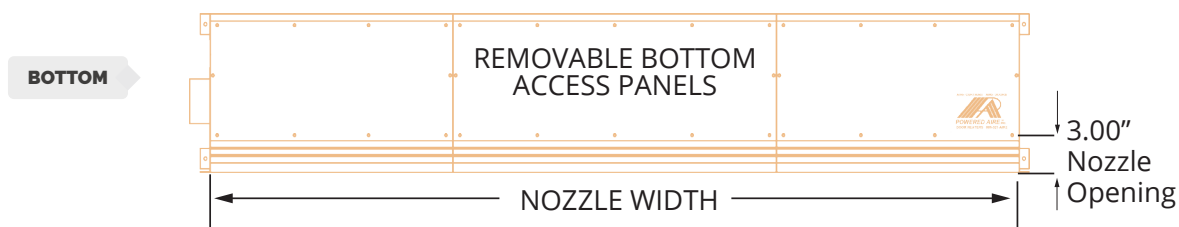
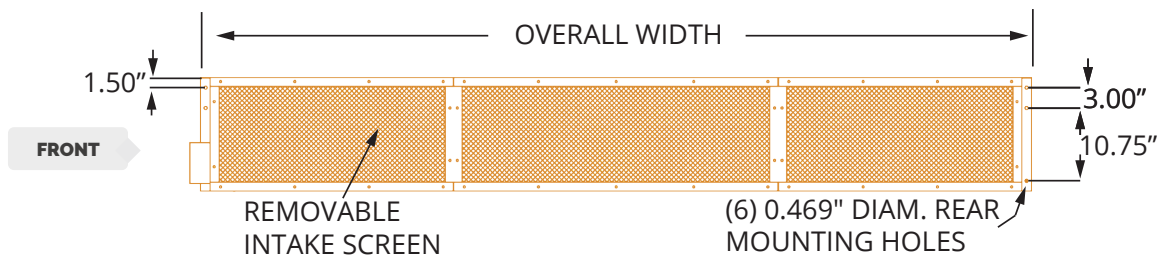
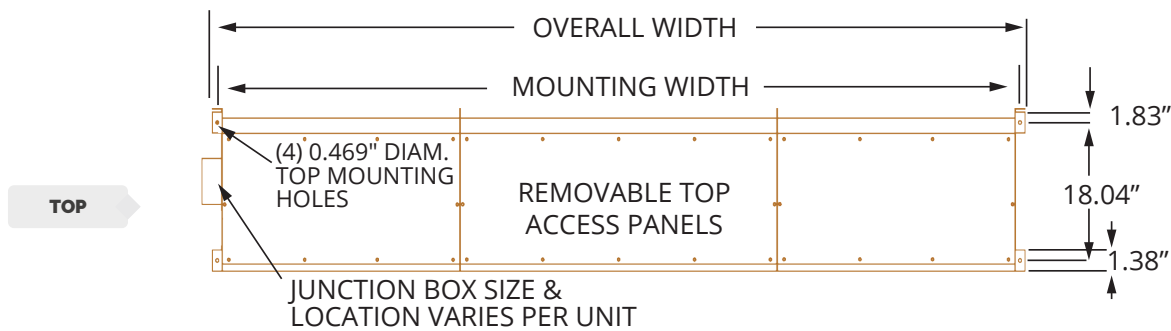
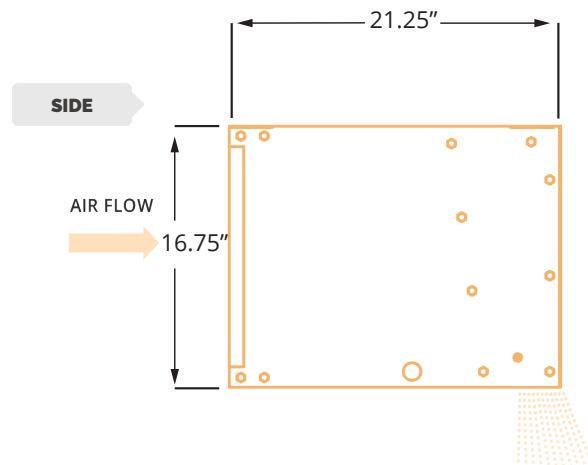
Models	AMP DRAW (Breaker Size)												
	kW	Temp Rise (°F)	208 / 3 / 60						240 / 3 / 60				
			Circuit 1	Circuit 2	Circuit 3	Circuit 4	Circuit 5	SPP	Circuit 1	Circuit 2	Circuit 3	Circuit 4	SPP
TFD-1-36E / 48E / 60E	17.0	20	47.2 (60)	5.0 (15)	-	-	-	52.2 (70)	45.5 (60)	-	-	-	-
TFD-2-72E / 84E / 96E	34.0	21	47.2 (60)	47.2 (60)	10.0 (15)	-	-	104.4 (150)	45.5 (60)	45.5 (60)	-	-	91.0 (125)
TFD-3-108E / 120E / 132E	51.0	22	47.2 (60)	47.2 (60)	47.2 (60)	15.0 (20)	-	‡	45.5 (60)	45.5 (60)	45.5 (60)	-	‡
TFD-4-144E / 156E / 168E	68.0	22	47.2 (60)	47.2 (60)	47.2 (60)	47.2 (60)	20.0 (30)	‡	45.5 (60)	45.5 (60)	45.5 (60)	45.5 (60)	‡

Models	AMP DRAW (Breaker Size)								
	kW	Temp Rise (°F)	480 / 3 / 60				575 / 3 / 60		
			Circuit 1	Circuit 2	Circuit 3	SPP	Circuit 1	Circuit 2	SPP
TFD-1-36E / 48E / 60E	20.0	24	26.7 (35)	-	-	-	22.0 (30)	-	-
TFD-2-72E / 84E / 96E	40.0	24	29.3 (40)	24.1 (35)	-	53.3 (70)	44.0 (60)	-	-
TFD-3-108E / 120E / 132E	60.0	26	31.9 (40)	24.1 (35)	24.1 (35)	80.0 (100)	40.2 (60)	25.8 (35)	65.9 (90)
TFD-4-144E / 156E / 168E	80.0	26	47.6 (60)	34.5 (45)	23.8 (30)	106.6 (150)	47.8 (60)	40.2 (60)	87.9 (110)

► TFD-E | MECHANICAL DETAILS & DRAWINGS

TFD-E | Mechanical Information Table

MODEL	Overall Width* (in.)	Nozzle Width (in.)	Mounting Width Rear and Top (in.)
TFD-1-36E	39	36	37.5
TFD-1-48E	51	48	49.5
TFD-1-60E	63	60	61.5
TFD-2-72E	75.07	72.07	73.57
TFD-2-84E	87.07	84.07	85.57
TFD-2-96E	99.07	96.07	97.57
TFD-2-108E	111.07	108.07	109.57
TFD-3-108E	111.15	108.15	109.65
TFD-3-120E	123.15	120.15	121.65
TFD-3-132E	135.15	132.15	133.65
TFD-4-144E	147.22	144.22	145.72
TFD-4-156E	159.22	156.22	157.72
TFD-4-168E	171.22	168.22	169.72



► TFD, TFD-E & TFD-HW/ST | INSTALLATION



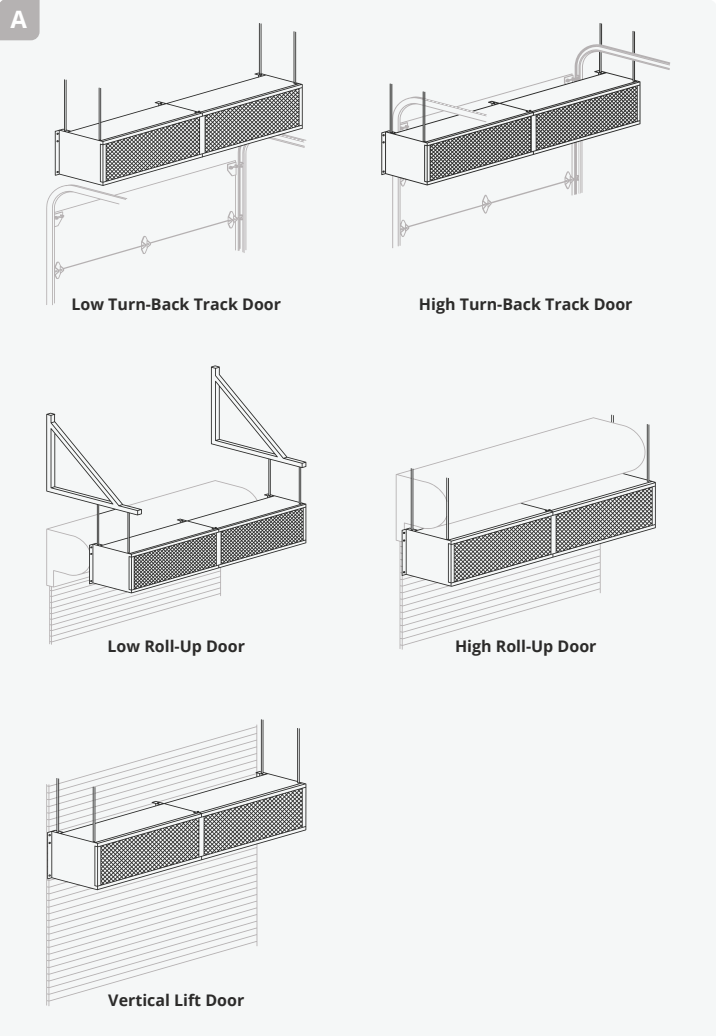
NOTE

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.



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.

