

TSD

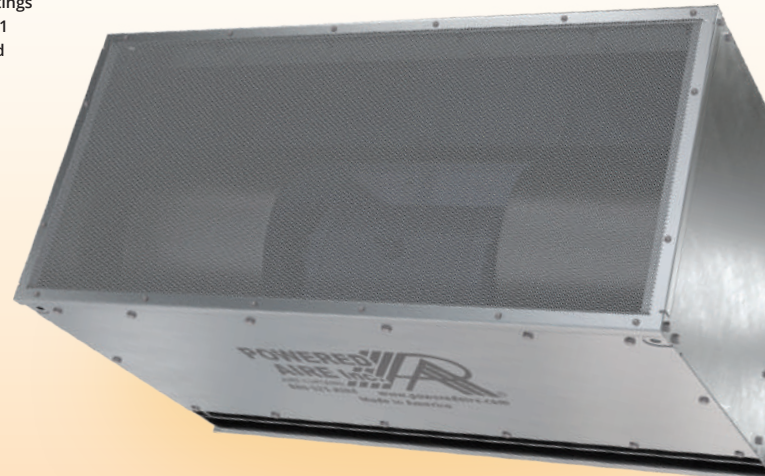


May 2020
PAAC-401



The TSD is typically used over dock doors, ground level doors or large openings in an industrial environment. All industrial units are direct drive, which avoids misalignment of couplers and outboard bearings and eliminates periodic belt replacement.

Powered Aire, Inc. certifies model TSD shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only. (May 2016)



AT A GLANCE

Single Incremental Widths

4' to 30'

Max Installation Height

17'

Heavy Duty Motors

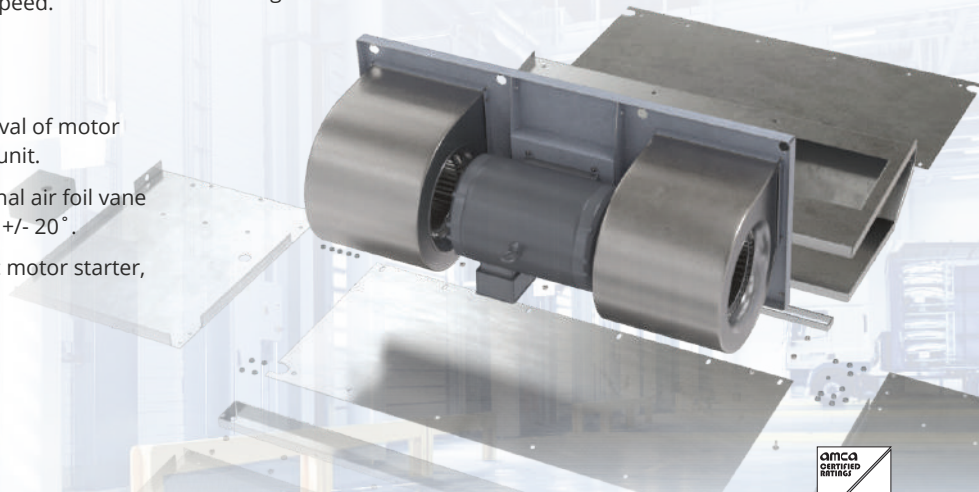
3 HP

KEY DESIGN FEATURES

- TSD has heavy duty 3 HP Total Enclosed Aire Over (TEAO) motors at 1160 rpm each, 50/60 cycle. Single speed.
- Galvanized fans.
- Air intake screen is perforated galvanized steel.
- Access panels for inspection, cleaning or removal of motor blower assembly, without having to lower the unit.
- High efficiency discharge plenum with directional air foil vane factory set to facilitate deflection of air stream +/- 20°.
- Includes NEMA 12 control panel with magnetic motor starter, overload relays and control transformer.

RECOMMENDED CONTROLS

- Panel mounted HAND / OFF / AUTO switch
- Magnetic Door Switch for activation



► TSD | PERFORMANCE

TSD | Performance Table

MODEL	Door Width (ft)	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	Weight (lbs)
TSD-1-48	4	48	6200	3443	4590	95.1%	2.1	1	3	342
TSD-1-60	5	60	5800	3006	4855	92%	2.1	1	3	380
TSD-1-72	6	72	5900	2891	5579	86.3%	2.5	1	3	400
TSD-2-96	8	96	6200	3443	9180	95.1%	4.2	2	3	681
TSD-2-108	9	108	6200	3200	9445	92%	4.2	2	3	719
TSD-2-120	10	120	5800	3006	9710	92%	4.2	2	3	757
TSD-2-132	11	132	5900	2943	10434	86.3%	4.6	2	3	777
TSD-2-144	12	144	5900	2891	11158	86.3%	5	2	3	797
TSD-3-144	12	144	6200	3443	13770	95.1%	6.3	3	3	1020
TSD-3-156	13	156	6200	3275	14035	92%	6.3	3	3	1058
TSD-3-168	14	168	6200	3206	14759	86.3%	6.7	3	3	1078
TSD-3-180	15	180	6200	3077	15024	86.3%	6.7	3	3	1116
TSD-3-192	16	192	6200	3029	15748	86.3%	7.1	3	3	1136
TSD-4-192	16	192	6200	3443	18360	95.1%	8.4	4	3	1359
TSD-3-204	17	204	5900	2925	16013	86.3%	7.1	3	3	1174
TSD-4-204	17	204	6200	3314	18625	92%	8.4	4	3	1397
TSD-3-216	18	216	5900	2891	16737	86.3%	7.5	3	3	1194
TSD-4-216	18	216	6200	3259	19349	86.3%	8.8	4	3	1417
TSD-4-228	19	228	6200	3154	19614	86.3%	8.8	4	3	1455
TSD-4-240	20	240	6200	3112	20338	86.3%	9.2	4	3	1475
TSD-5-240	20	240	6200	3443	22950	95.1%	10.5	5	3	1698
TSD-4-252	21	252	6200	3024	20603	86.3%	9.2	4	3	1513

TSD | Velocity Projection Model (Model TSD-1-48)

Distance From Nozzle	4 ft.	12 ft.	18 ft.
Core Velocity (fpm)	2289	1415	1184

TSD | Sound Levels

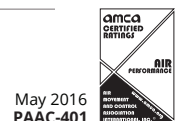
High Speed	69 dBA	Measured 10 ft. from unit in a free field based on a 1 motor unit	
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TSD | Three-Phase Motor Options

Voltages available	208	240	480	575
Amp draw per motor	13.1	12.2	6.1	5.0

The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only. Rated data shown are based on tests of units with heating elements present but not in use.

Powered Aire Inc. certifies that the Model TSD Air Curtain shown herein is licensed to bear the AMCA Seal for Air Performance. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



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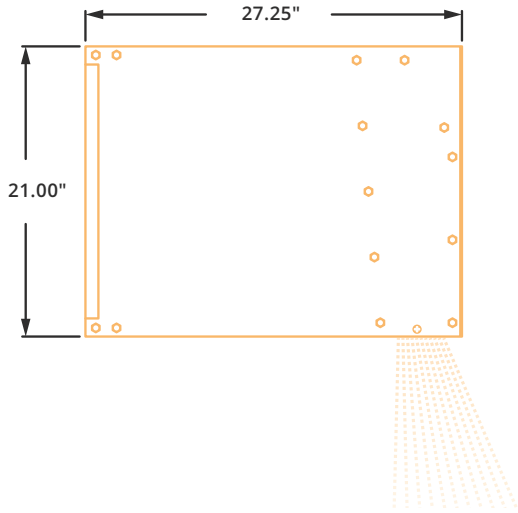
▶ TSD | MECHANICAL DETAILS

TSD | Mechanical Information Table

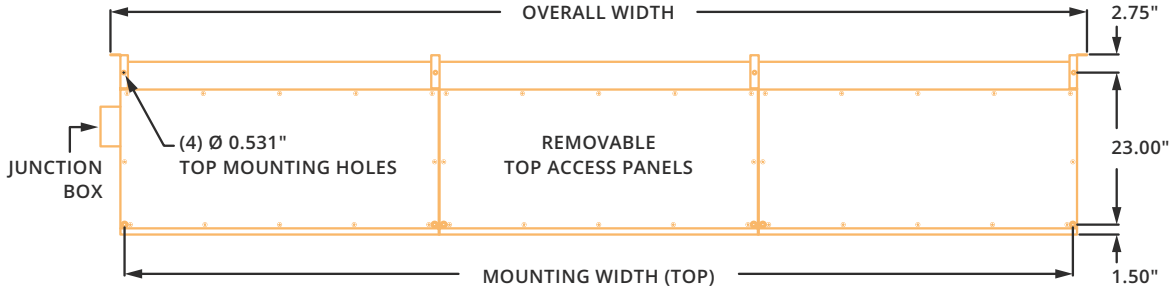
MODEL	Overall Width (in)	Nozzle Width (in)	Mounting Width Rear (in)	Mounting Width Top (in)	MODEL	Overall Width (in)	Nozzle Width (in)	Mounting Width Rear (in)	Mounting Width Top (in)
TSD-1-48	51	48	49.5	47	TSD-4-264	267.36	264.36	265.86	263.36
TSD-1-60	63	60	61.5	59	TSD-5-264	267.48	264.48	265.98	263.48
TSD-1-72	75	72	73.5	71	TSD-4-276	279.36	276.36	277.86	275.36
TSD-2-96	99.12	96.12	97.62	95.12	TSD-5-276	279.48	276.48	277.98	275.48
TSD-2-108	111.12	108.12	109.62	107.12	TSD-4-288	291.36	288.36	289.86	287.36
TSD-2-120	123.12	120.12	121.62	119.12	TSD-5-288	291.48	288.48	289.98	287.48
TSD-2-132	135.12	132.12	133.62	131.12	TSD-6-288	291.6	288.6	290.1	287.6
TSD-2-144	147.12	144.12	145.62	143.12	TSD-5-300	303.48	300.48	301.98	299.48
TSD-3-144	147.24	144.24	145.74	143.24	TSD-6-300	303.6	300.6	302.1	299.6
TSD-3-156	159.24	156.24	157.74	155.24	TSD-5-312	315.48	312.48	313.98	311.48
TSD-3-168	171.24	168.24	169.74	167.24	TSD-6-312	315.6	312.6	314.1	311.6
TSD-3-180	183.24	180.24	181.74	179.24	TSD-5-324	327.48	324.48	325.98	323.48
TSD-3-192	195.24	192.24	193.74	191.24	TSD-6-324	327.6	324.6	326.1	323.6
TSD-4-192	195.36	192.36	193.86	191.36	TSD-5-336	339.48	336.48	337.98	335.48
TSD-3-204	207.24	204.24	205.74	203.24	TSD-6-336	339.6	336.6	338.1	335.6
TSD-4-204	207.36	204.36	205.86	203.36	TSD-7-336	339.72	336.72	338.22	335.72
TSD-3-216	219.24	216.24	217.74	215.24	TSD-5-348	351.48	348.48	349.98	347.48
TSD-4-216	219.36	216.36	217.86	215.36	TSD-6-348	351.6	348.6	350.1	347.6
TSD-4-228	231.36	228.36	229.86	227.36	TSD-7-348	351.72	348.72	350.22	347.72
TSD-4-240	243.36	240.36	241.86	239.36	TSD-5-360	363.48	360.48	361.98	359.48
TSD-5-240	243.48	240.48	241.98	239.48	TSD-6-360	363.6	360.6	362.1	359.6
TSD-4-252	255.36	252.36	253.86	251.36	TSD-7-360	363.72	360.72	362.22	359.72
TSD-5-252	255.48	252.48	253.98	251.48					

► **TSD | MECHANICAL DRAWINGS**

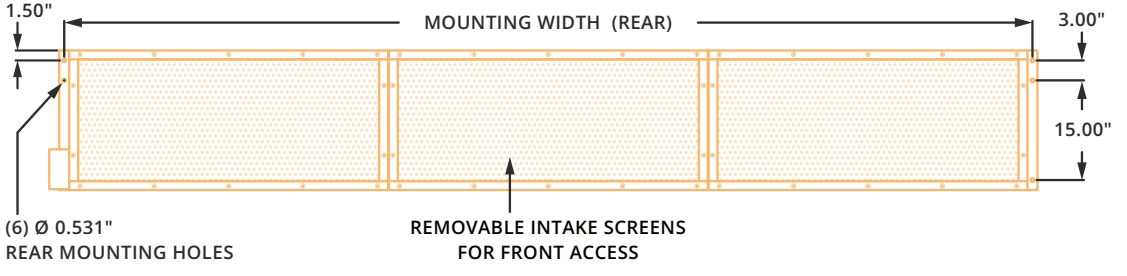
SIDE



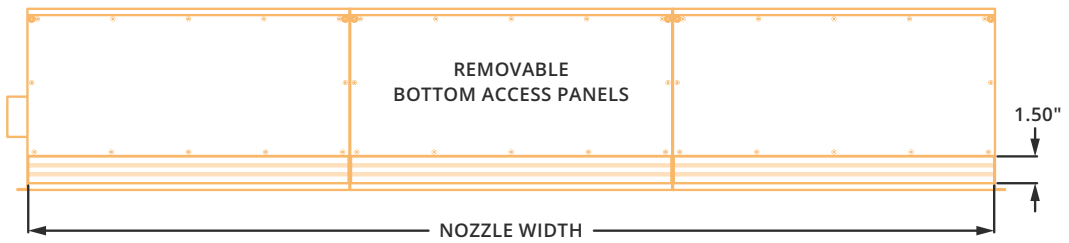
TOP



FRONT



BOTTOM



► TSD | INSTALLATION

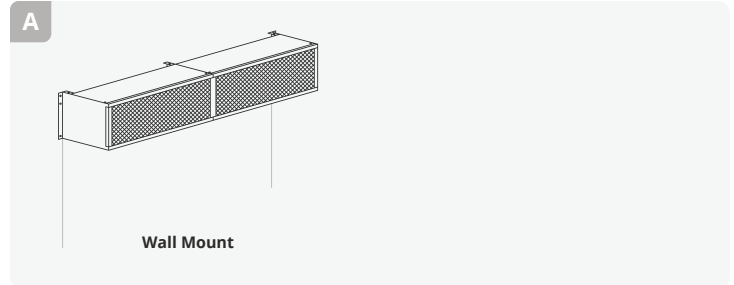


NOTE

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 ½ inch.

A WALL MOUNT

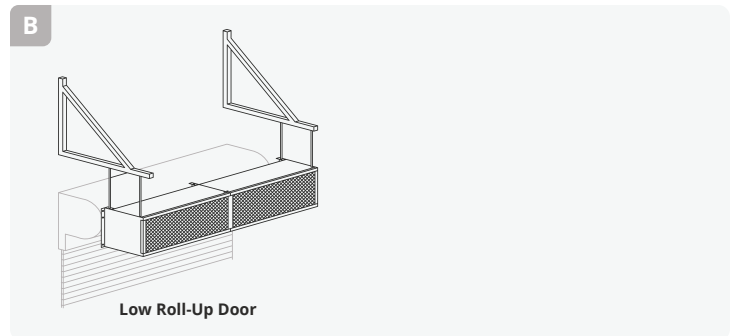
Rear flanges of air curtain have six holes, for six 1/2 inch bolts or lags with washers. When wall mounting use all six holes.



B MOUNTING BRACKETS

Mounting brackets (also called knee, angle or L-brackets) can be flush to the wall or constructed to account for a projection from the wall. For proper size brackets measure standoff distance from wall to back of where air curtain will be.

If required, angle iron or steel tubing can be attached to the top of the air curtain, typically one foot longer at each end, to reach brackets that are mounted outside of the door system.



C TOP MOUNT

Unit has four 17/32 holes for installing one end of 1/2 inch threaded rods. The other ends of the threaded rods can be attached to the ceiling. 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. Additional mounting holes are provided on larger units for buildings where structural support is not adequate for supporting the air curtain from ends only.

*Powered Aire does not supply threaded rods.

