



TSD-HW



TSD-ST

# TSD-HW/ST



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.

## OPTIONS

### HEATING

Unheated . . . . .	pg 153
Electric. . . . .	pg 157
Indirect Gas. . . . .	pg 167
Direct Gas. . . . .	pg 173



## AT A GLANCE

Single Incremental Widths

4' to 30'

Max Installation Height

17'

Heavy Duty Motors

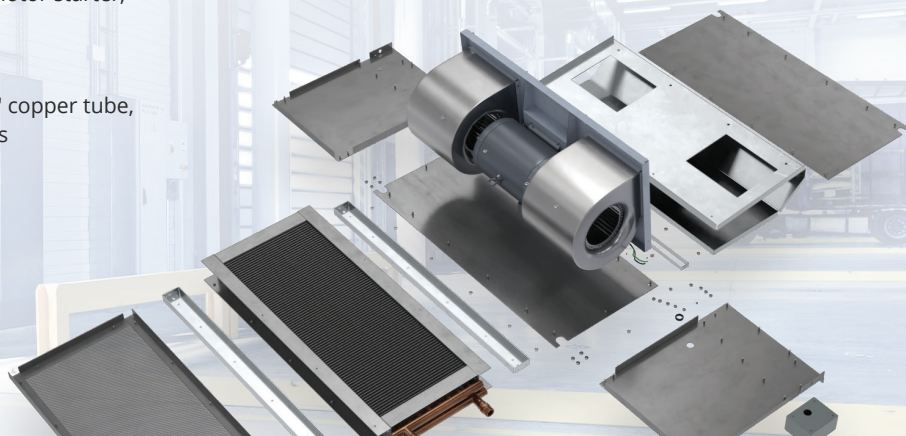
3 HP

### KEY DESIGN FEATURES

- Outer cabinet constructed of 18-gauge 304 stainless steel with #3 finish
- 3 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 with factory installed magnetic motor starter, overload relays, and control transformer
- Coil made to AHRI Standard 410
- Hot water coil comprised of galvanized steel casing, 5/8" copper tube, aluminum fins, and same end supply/return connections
- Leak tested at 450 psi
- Single length hot water coils up to 14 ft
- Single length steam coils up to 10 ft
- Custom coil selections available (consult factory)

### RECOMMENDED CONTROLS

- Activation by 24V magnetic door switch
- Toggle disconnect switch
- Hand/Off/Auto selector switch
- Heat On/Off selector switch
- Digital thermostat
- Hot water or steam control valve with actuator



## ► TSD-HW/ST | PERFORMANCE

### TSD-HW/ST | Performance Table

Model	Hot Water		Steam		Weight (lbs.)
	mbtu/Hour	Temp. Rise (°F)	mbtu/Hour	Temp. Rise (°F)	
TSD-1-48HW/ST	164.3	35.5	160.9	34.8	416
TSD-1-60HW/ST	185.4	35.0	181.0	34.2	473
TSD-1-72HW/ST	220.3	36.2	213.3	35.1	511
TSD-2-96HW/ST	324.2	35.0	323.0	34.9	829
TSD-2-108HW/ST	358.0	36.2	352.3	35.7	886
TSD-2-120HW/ST	367.8	34.8	365.0	34.5	942
TSD-2-132HW/ST	401.2	35.3	396.7	34.9	981
TSD-2-144HW/ST	434.5	35.7	428.1	35.2	1019
TSD-3-144HW/ST	492.5	35.4	495.0	35.7	1242
TSD-3-156HW/ST	515.9	35.5	516.0	35.6	1299
TSD-3-168HW/ST	529.0	34.9	513.8	34.0	1337
TSD-3-180HW/ST	593.2	35.0	598.6	35.4	1394
TSD-3-192HW/ST	629.0	35.0	631.2	35.7	1432
TSD-4-192HW/ST	648.4	35.0	646.0	34.9	1655
TSD-3-204HW/ST	610.8	35.1	604.0	34.8	1489
TSD-4-204HW/ST	665.2	35.9	663.8	35.9	1712
TSD-3-216HW/ST	643.0	35.6	634.0	35.0	1527
TSD-4-216HW/ST	716.0	36.2	704.6	35.7	1750
TSD-4-228HW/ST	715.0	35.0	733.2	36.0	1807
TSD-4-240HW/ST	735.6	34.8	730.0	34.5	1845
TSD-5-240HW/ST	825.2	35.6	798.8	34.6	2068



### INFO

For additional **performance information** on TSD-HW/ST, reference performance table on page 154.

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

Distance From Nozzle	40 in.	80 in.	120 in.	160 in.	200 in.
Core Velocity (fpm)	3020	2060	1710	1420	1225

### TSD-HW/ST | Sound Levels

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

### TSD-HW/ST | Amp Draw and Breaker Options

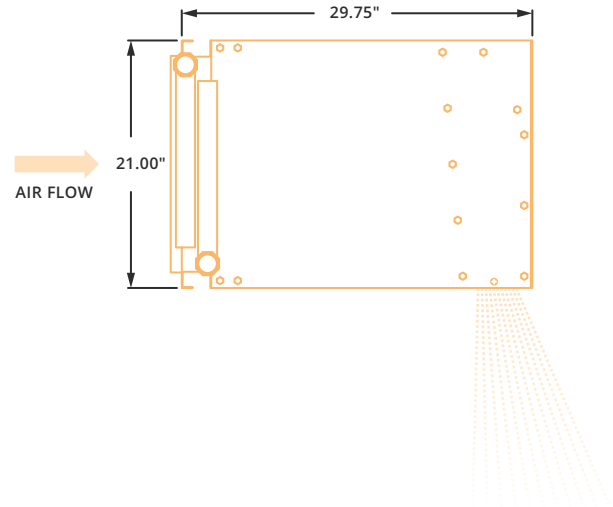
Model/Number of Motors	208V Amp Draw (Breaker size)	240V Amp Draw (Breaker size)	480V Amp Draw (Breaker size)	575V Amp Draw (Breaker size)
TSD-HWST-1-48, 60, 72	13.1A (25)	12.2A (20)	6.1A (15)	3.9A (15)
TSD-HWST-2-96, 108, 120, 132, 144	26.2A (40)	24.4A (40)	12.2A (20)	7.8A (15)
TSD-HWST-3-144, 156,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

# ► TSD-HW/ST | MECHANICAL DETAILS & DRAWINGS

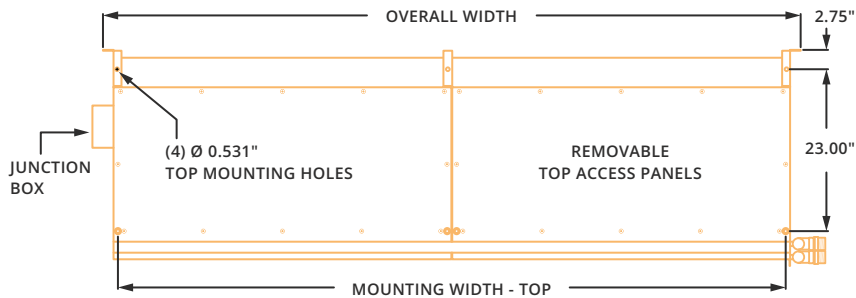
TSD-HW/ST | Mechanical Information Table

MODEL	Overall Width (in.)	Nozzle Width (in.)	Mounting Width Rear (in.)	Mounting Width Top (in.)
TSD-1-48HW/ST	51	48	49.5	47
TSD-1-60HW/ST	63	60	61.5	59
TSD-1-72HW/ST	75	72	73.5	71
TSD-2-96HW/ST	99.12	96.12	97.62	95.12
TSD-2-108HW/ST	111.12	108.12	109.62	107.12
TSD-2-120HW/ST	123.12	120.12	121.62	119.12
TSD-2-132HW/ST	135.12	132.12	133.62	131.12
TSD-2-144HW/ST	147.12	144.12	145.62	143.12
TSD-3-144HW/ST	147.25	144.25	145.75	143.25
TSD-3-156HW/ST	159.25	156.25	157.75	155.25
TSD-3-168HW/ST	171.25	168.25	169.75	167.25
TSD-3-180HW/ST	183.25	180.25	181.75	179.25
TSD-3-192HW/ST	195.25	192.25	193.75	191.25
TSD-4-192HW/ST	195.37	192.37	193.87	191.37

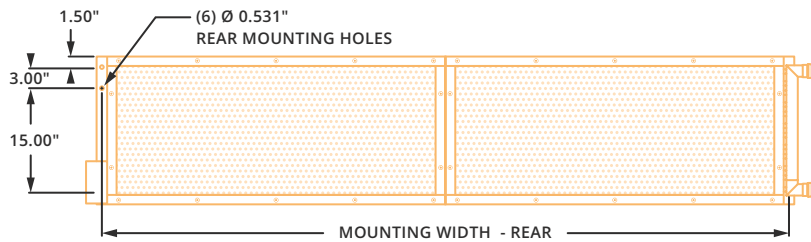
SIDE



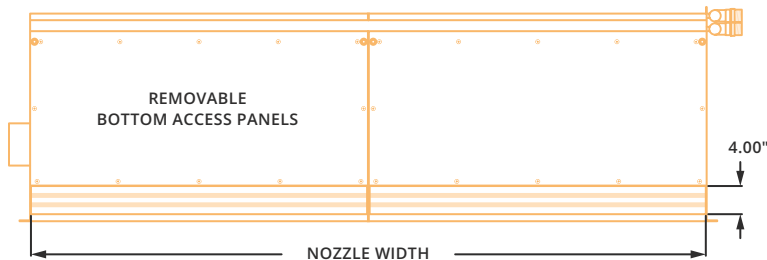
TOP



FRONT



BOTTOM



## ▶ TSD-HW/ST | INSTALLATION



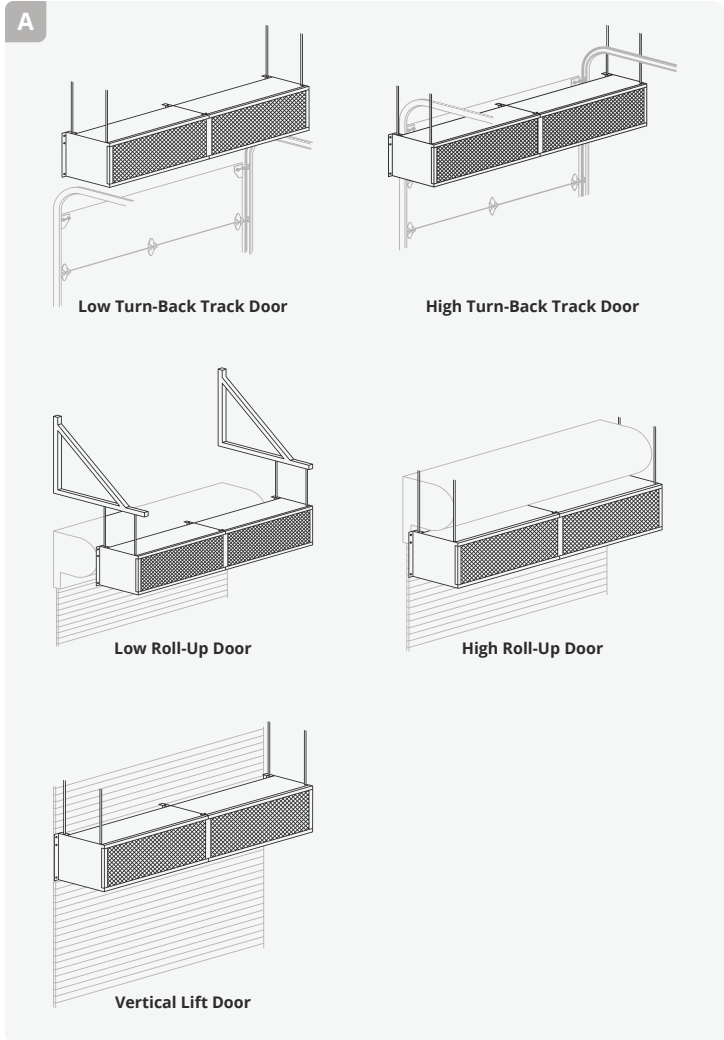
### NOTE

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.

