



# TFD

LIGHT INDUSTRIAL



The TFD is typically used over medium sized dock doors, or openings in an industrial environment. Available in unheated, hot water heated, steam heated, indirect gas fired (closed combustion heaters are available), and direct gas fired versions.

## OPTIONS

### HEATING

- Electrical . . . . . pg 143
- Hot Water . . . . . pg 147
- Steam . . . . . pg 147
- Indirect Gas . . . . . pg 149

### FILTER

1" Cleanable (Unheated, Hot Water and Steam Units)



## AT A GLANCE

Single Incremental Widths

3' to 14'

Max Installation Height

14'

Heavy Duty Motors

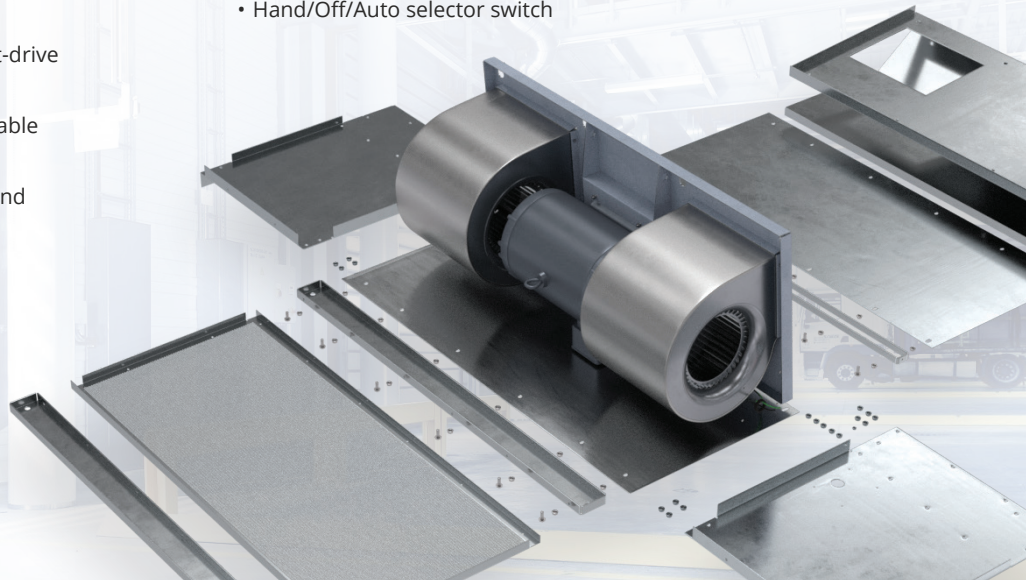
1.5 HP

### KEY DESIGN FEATURES

- AMCA tested performance
- 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

### RECOMMENDED CONTROLS

- Activation by 24V magnetic door switch
- Toggle disconnect switch
- Hand/Off/Auto selector switch





TFD-HW



TFD-ST

## ▶ TFD-HW/ST | PERFORMANCE

### TFD-HW/ST | 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)	Hot Water		Steam		Weight (lbs.)
											mbtu/ Hour	Temp. Rise (°F)	mbtu/ Hour	Temp. Rise (°F)	
TFD-1-36HW/ST	36	4500	3108	2331	92.0%	1.2	1	1.5	73	87	85	34	90	36	165
TFD-1-48HW/ST	48	4500	3565	2565	94.0%	1.3	1	1.5	76	90	100	36	95	34	182
TFD-1-60HW/ST	60	4500	2146	2682	73.0%	1.3	1	1.5	69	82	103	36	101	35	212
TFD-2-72HW/ST	72	4500	3108	4662	92.0%	2.4	2	1.5	76	90	180	36	179	36	335
TFD-2-84HW/ST	84	4500	2798	4896	92.0%	2.6	2	1.5	79	93	184	35	187	35	346
TFD-2-96HW/ST	96	4500	2565	5130	94.0%	2.6	2	1.5	79	93	183	33	192	35	360
TFD-2-108HW/ST	108	4500	2332	5247	73.0%	2.6	2	1.5	79	93	196	35	205	36	382
TFD-3-108HW/ST	108	4500	3108	6993	92.0%	3.6	3	1.5	77	92	256	34	266	35	500
TFD-3-120HW/ST	120	4500	2891	7227	92.0%	3.7	3	1.5	80	95	274	35	268	34	516
TFD-3-132HW/ST	132	4500	2713	7461	92.0%	3.8	3	1.5	80	95	291	36			526
TFD-4-144HW/ST	144	4500	3108	9324	92.0%	4.8	4	1.5	79	93	346	34			665
TFD-4-156HW/ST	156	4500	2941	9558	92.0%	4.9	4	1.5	82	96	364	35	**		681
TFD-4-168HW/ST	168	4500	2798	9792	92.0%	5.0	4	1.5	82	96	381	36			692

\*Calculation based on spherical free field at 5 ft.

\*\*Contact factory for availability



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

### TFD HW-ST | Amp Draw and Breaker Options

Motors	208-230V Amp Draw (Breaker size)	240V Amp Draw (Breaker size)	480V Amp Draw (Breaker size)	575V Amp Draw (Breaker size)
TFD-HWST-1-36, 42, 48, 60	5.0A (15)	4.6A (15)	2.6A (15)	1.9A (15)
TFD-HWST-2-72, 84, 96, 108	10.0A (15)	9.2A (15)	5.2A (15)	3.8A (15)
TFD-HWST-3-108, 120, 132	15.0A (20)	13.8A (20)	7.8A (15)	5.7A (15)
TFD-HWST-4-144, 156, 168	20.0A (30)	18.4A (25)	10.4A (15)	7.6A (15)

#### KEY DESIGN FEATURES

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- 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
- 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)

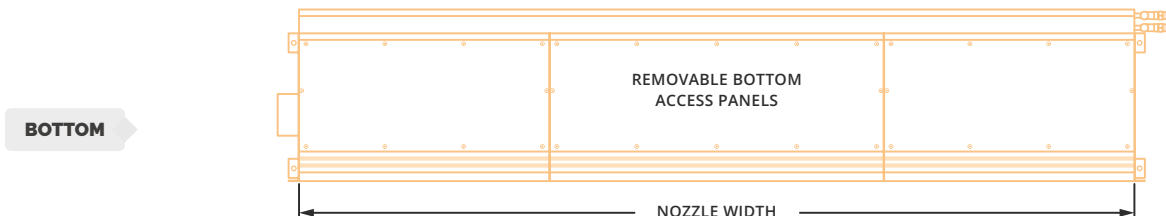
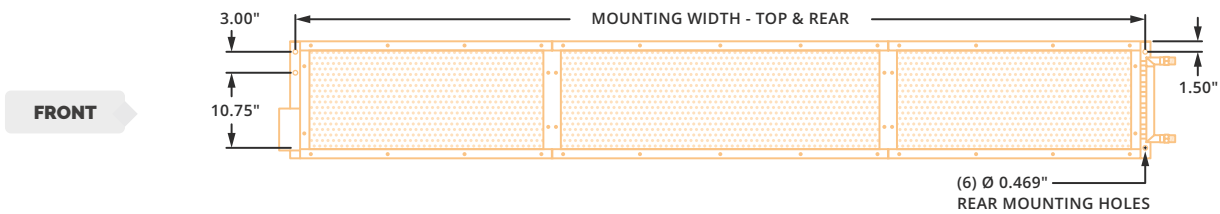
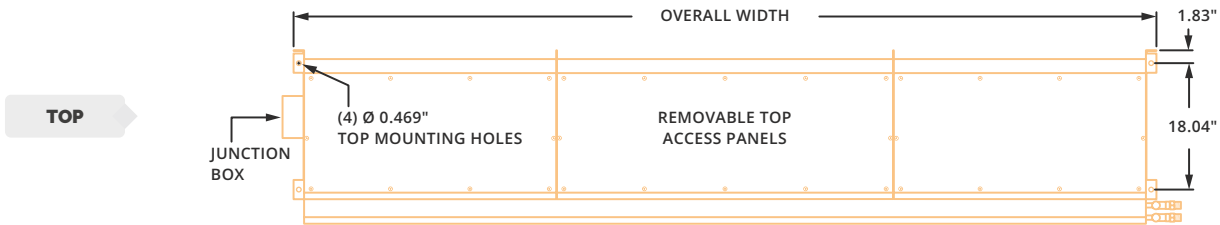
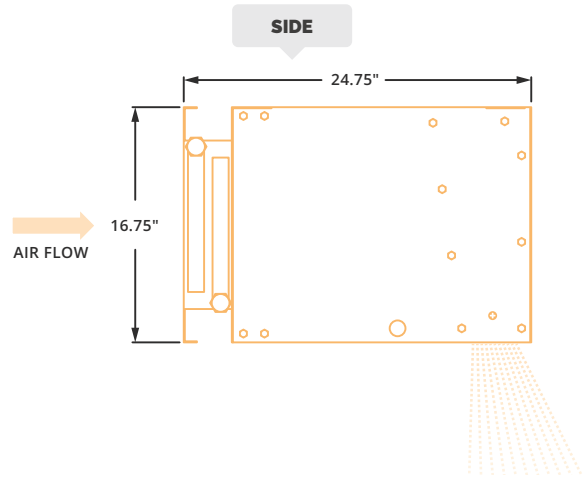
#### RECOMMENDED CONTROLS

- 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

# TFD-HW/ST | MECHANICAL DETAILS & DRAWINGS

## TFD | Mechanical Information Table

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



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



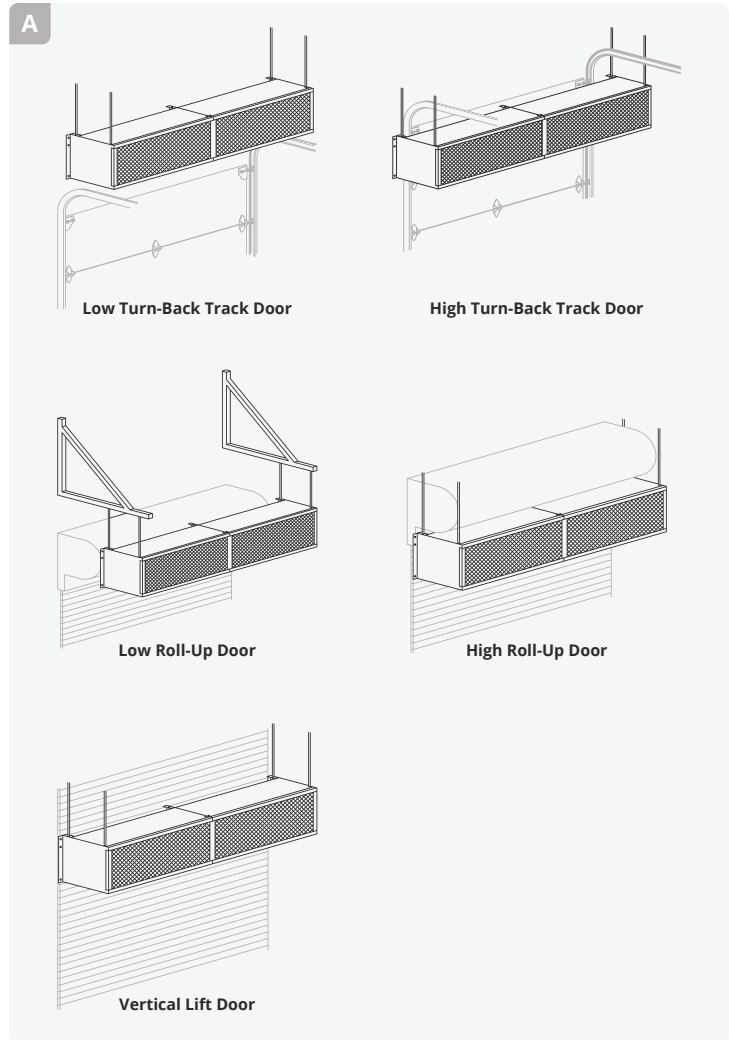
### NOTE

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.

