

## STOL SERIES 16' (4.9M) HVLS FAN

Technical Specifications	
<b>Model</b>	STOL-1649
<b>Diameter</b>	16 FT / 4.9 Meters
<b>Number of Airfoils</b>	6 STOL Airfoils
<b>Airfoil Finish</b>	Anodized Aluminum
<b>Frame &amp; Mounting Finish</b>	1/4" Black Powder Coated Steel
<b>Wingtip</b>	6 Standard SBF Wingtips (Red)
<b>Installed Weight</b>	250 lb (113 kg)
<b>Maximum Speed</b>	65 RPM
<b>Air Displacement</b>	166,856 CFM / 4,725 CMM
<b>Available Input Power</b>	115 VAC (99-126 VAC) 25A Peak @ 48-62 Hz 1 Phase
	240 VAC (198-264 VAC) 16.8A Peak @ 48-62 Hz 1 Phase
	240 VAC (198-264 VAC) 13.2A Peak @ 48-62 Hz 3 Phase
	480 VAC (342-528 VAC) 7.6A Peak @ 48-62 Hz 3 Phase
	575 VAC (450-660 VAC) 3.7A Peak @ 48-62 Hz 3 Phase
<b>Reducer</b>	Premium Viton double lip output seals, lifetime synthetic oil, robust 1.25" dia. output shaft, lubed for life, painted SB Blue
<b>Nominal Motor Horsepower</b>	1.5 HP (1.12 kW)
<b>Motor RPM</b>	1735 RPM
<b>Speed Controller Options</b>	UltraLite, Yoke, VLD, Touch 'N' Go, AutoPilot, Radar
<b>Controller Connection</b>	10V DC Analog
<b>VFD Enclosure</b>	NEMA1, IP 10 metal enclosure with hinged door. NEMA 4x, IP 66 available
<b>VFD Motor Supply Cable</b>	25 feet / 7.62 Meters
<b>Safety Components</b>	Airfoil Boomerang Brackets (6), Guy Wires (4), Safety Cable (1), Safety Z Brackets (6)
<b>Disconnect Switch</b>	25A lockable
<b>dBA at Max. RPM</b>	< 45 dBA*
<b>Recommended Airfoil Clearance</b>	Horizontal from Wingtips: 30" (0.76 Meters)
	Vertical from Mounting Point: 65" (1.6 Meters)
<b>Extension Bar</b>	1 FT standard, available in 1 FT increments up to 10 FT
<b>Motor Pallet Dimensions/Weight</b>	30.5"x33"x30.5" (0.77 x 0.83 x 0.77 Meters) / 228 lbs (103 kg)
<b>Airfoil Pallet Dimensions/Weight</b>	24"x7'6"x17" (0.60 x 2.28 x 0.43 Meters) / 120 lbs (55 kg)
<b>Certification</b>	ANSI/UL 507
	CAN/CSA C22.2 No. 113-10
	CE, C-Tick

\*dBA values were obtained from sound testing at maximum speed in a controlled environment. Actual results may vary.



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# STOL SPECIFICATIONS

## APPROVALS

- ETL
- CE
- C-Tick

## AIRFOILS

- Equipped with 6 airfoils
- Extruded anodized aluminum
- High performance STOL design

## GEARBOX

- Precision finished gears for low noise & long service life
- Sealed with lifetime synthetic oil
- Robust 3" output shaft for strength
- Nylon bushing on input

## CONSTRUCTION

- Mounting is to be 1/4" powder coated steel
- All construction is to be protected from the elements
- Stainless steel safety brackets

## VFD

- NEMA1, IP 10 metal enclosure with hinged door. (NEMA 4x, IP 66 available)
- Factory assembled & programmed
- Minimum start/stop torque loads

## WINGTIP FENCE

- Equipped with 6 wingtip fences
- Constructed of nylon 66
- Redirect outward airflow into downward airflow

## MOTOR

- Totally enclosed, fan cooled (TEFC)
- IP55 rating
- Class F insulation
- 1.5HP (1.12 kW) nominal horsepower

## STANDARD LIMITED WARRANTY

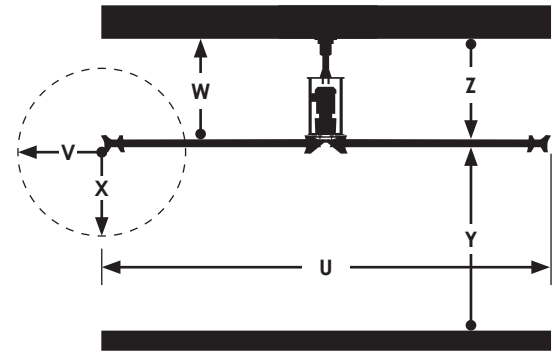
- 3 year: Motor & Reducer
- 1 year: Electronics
- Lifetime: Airfoil
- Extended warranties available.

# STOL SERIES SAFETY CLEARANCES & DROP HEIGHT<sup>1</sup>

MODEL #	DIAMETER [U]	SIDE [V]	ABOVE [W]	BELOW [X]	MIN. AIRFOIL HEIGHT [Y]	AIRFOIL DROP HEIGHT [Z]
STOL-1649	16 Ft (4.9 m)	30"	39"	30"	10'	46"

<sup>1</sup> All dimensions are based on a standard 1 ft. extension bar.

Safety Clearances & Drop Height



# STOL SERIES MAX EFFECTIVE DIAMETER

DISTANCE FROM CENTER	AIR VELOCITY <sup>2</sup>	COOLING SENSATION <sup>2</sup>
0' - 20' (0-6.1m)	620 - 900 fpm 3 - 4.5 m/s	14 - 15°F 8 - 10°C
21' - 40' (6.2-12.2m)		
41' - 60' (12.3-18.3m)	340 - 620 fpm 1.7 - 3 m/s	9 - 15°F 5 - 8°C
61' - 80' (18.4-24.4m)		
81' - 100' (24.5-30.5m)	0 - 340 fpm 0 - 1.7 m/s	0 - 9°F 0 - 5°C
101' - 120' (30.6-36.6m)		

<sup>2</sup> Stated values are estimations based on standard installation at maximum power. Values such as building layout, obstructions, ceiling height, and drop ceiling height may effect these numbers.

