

# Torit® Backward Inclined Fans

**TBI-3, 5, 7.5, 10, 15, 20, 25 and 30**

Torit Backward Inclined (TBI) Fans provide a convenient, cost-effective method of integrating a high efficiency fan with a Donaldson® Torit® dust collector.

- Mounts directly to the clean-air plenum of the dust collector.
  - Eliminating costly transition ducting
  - Reducing footprint of system
- Sizes range from 3 to 30 hp.
- Capacities from 1,400 to 10,300 cfm.
- Backward inclined fan wheel provides high efficiency operation.
- Direct-drive operation eliminates maintenance of fan bearings and belts.
- Computer balanced fan and motor assembly ensures vibration-free operation.
- All necessary hardware for quick and easy installation is included.
- Standard paint finish is blue.



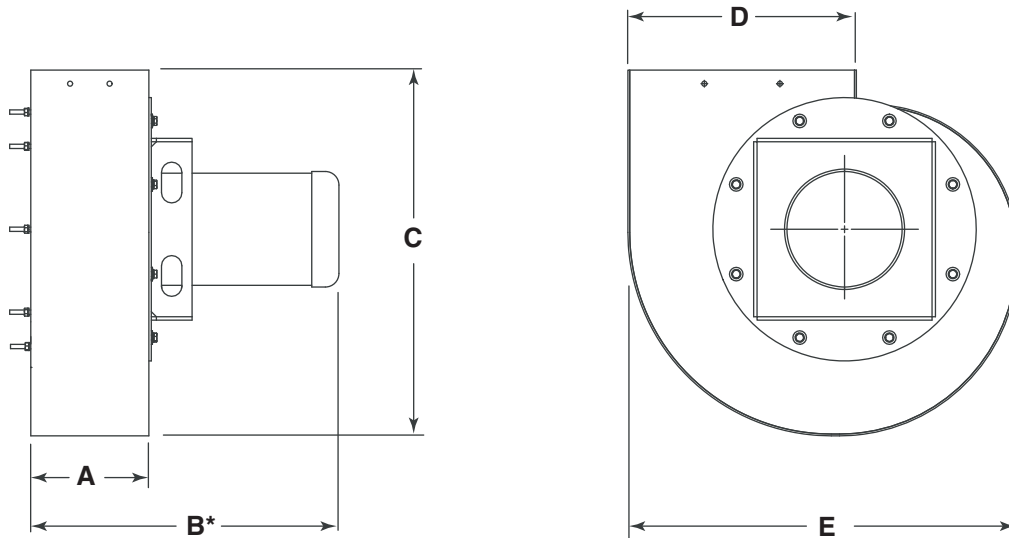
**TBI-15 (60 Cycle)**

## Equipment Options

- High performance Torit-Built® silencer (60 cycle only)
- Aluminum fan wheel
- Explosion-proof motors - NEMA
- Outlet dampers
- High temperature version available
- 50 cycle/IEC motor configurations
- Flanges for exhaust ductwork

# Torit Backward Inclined Fans

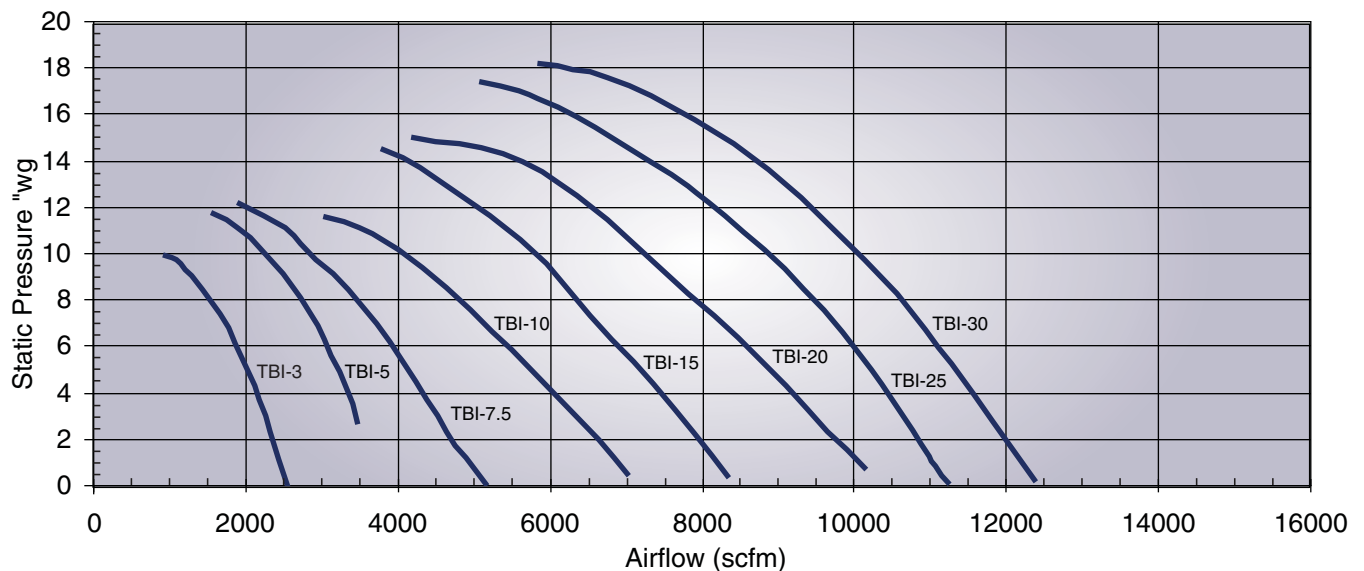
## Dimensions & Specifications for 60 Cycle TBI Fan



60 Cycle Fans	Dimensions										Shipping Weight	
	A		B*		C		D		E		(lbs)	(kg)
	(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)		
<b>TBI-3</b>	7.9	20.1	19.8	50.3	26.9	68.3	16.8	42.7	28.7	72.9	155	70
<b>TBI-5</b>	8.7	22.1	22.7	57.6	26.9	68.3	16.8	42.7	28.7	72.9	178	81
<b>TBI-7.5</b>	10.1	25.6	25.8	65.5	26.9	68.3	16.8	42.7	28.7	72.9	211	96
<b>TBI-10</b>	11.4	28.9	27.1	68.8	26.9	68.3	16.8	42.7	28.7	72.9	242	110
<b>TBI-15</b>	11.9	30.2	28.8	73.2	32.2	81.8	20.4	51.8	34.8	88.4	387	176
<b>TBI-20</b>	13.6	34.4	30.2	76.7	35.5	90.2	20.4	51.8	34.8	88.4	431	196
<b>TBI-25</b>	14.8	37.5	33.8	85.8	37.3	94.7	22.4	56.9	38.3	97.3	622	282
<b>TBI-30</b>	14.8	37.5	38.4	97.5	37.3	94.7	22.4	56.9	38.3	97.3	640	290

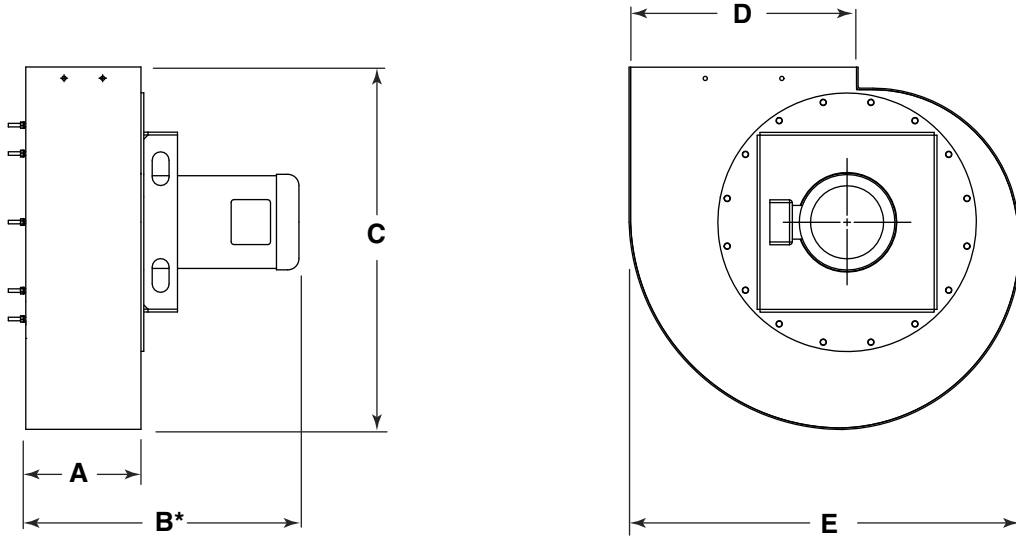
\* This dimension is subject to change based on the motor manufacturer chosen and on the motor enclosure type (TEFC or EP). If this dimension is critical, you should verify the information with your sales representative.

## Performance Curves for 60 Cycle TBI Fan



# Torit Backward Inclined Fans

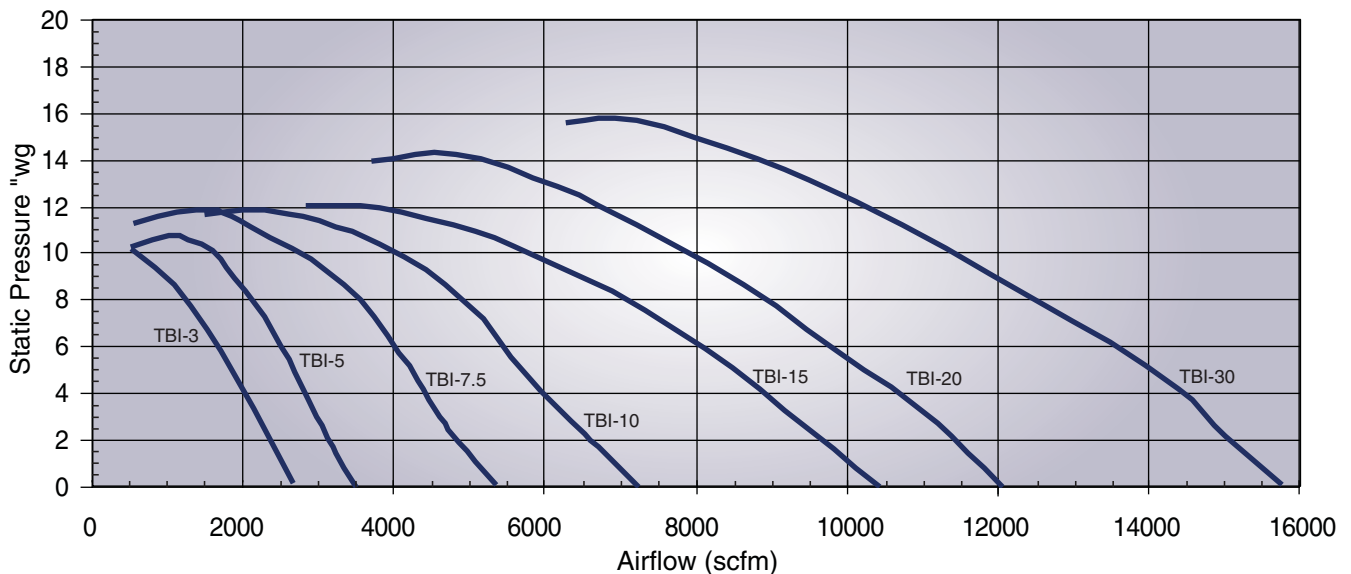
## Dimensions & Specifications for 50 Cycle TBI Fan



50 Cycle Fans	Dimensions										Shipping Weight	
	A		B*		C		D		E		(lbs)	(kg)
	(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)		
<b>TBI-3</b>	8.8	22.5	20.8	52.8	32.2	81.8	20.4	51.8	34.8	88.4	207	94
<b>TBI-5</b>	10.3	26.0	24.3	61.7	32.2	81.8	20.4	51.8	34.8	88.4	233	106
<b>TBI-7.5</b>	11.9	30.2	27.6	70.1	32.2	81.8	20.4	51.8	34.8	88.4	272	123
<b>TBI-10</b>	13.6	34.4	29.3	74.4	32.2	81.8	20.4	51.8	34.8	88.4	303	137
<b>TBI-15</b>	13.9	35.3	30.7	78.0	32.2	81.8	20.4	51.8	34.8	88.4	388	176
<b>TBI-20</b>	15.4	39.2	32.3	82.0	37.4	95.0	22.4	56.9	38.3	97.3	482	219
<b>TBI-30</b>	16.3	41.4	40.0	101.6	40.5	102.9	24.9	63.2	42.5	108.0	683	310

\* This dimension is subject to change based on the motor manufacturer chosen and on the motor enclosure type (TEFC or EP). If this dimension is critical, you should verify the information with your sales representative.

## Performance Curves for 50 Cycle TBI Fan



# Torit Backward Inclined Fans

## 60 Cycle TBI Fan Sound Data\* and AMCA Fan Classes

Model	Overall Assembly Sound <sup>1</sup>		Silencer $\Delta P$ "wg	AMCA Fan Class
	Without Silencer	With Silencer**		
TBI-3	89.7	69	1.0	II
TBI-5	92.0	68	1.0	II
TBI-7.5	96.7	70	1.2	II
TBI-10	93.0	75	1.9	II
TBI-15	96.8	74	0.2	III
TBI-20	98.6	75.5	0.6	III
TBI-25	99.2	75	0.3	III
TBI-30	100.0	75	0.3	III

## 50 Cycle TBI Fan Sound Data\* and AMCA Fan Classes

Model	Overall Assembly Sound <sup>1</sup>		Silencer $\Delta P$ "wg	AMCA Fan Class
	Without Silencer	With Silencer <sup>2</sup>		
TBI-3	86.3	70	0.2	II
TBI-5	88.7	70	0.4	II
TBI-7.5	92.0	70	0.9	II
TBI-10	93.1	70	0.8	II
TBI-15	96.3	70	0.6	III
TBI-20	98.0	70	0.8	III
TBI-30	99.3	70	1.3	III

\* dB(A) sound levels are an average of measurements made in a laboratory environment. Installed sound levels will vary depending on the measurement location, operating conditions, and installation.

\*\* Donaldson Torit high performance silencer.

<sup>1</sup> Sound ratings shown are taken at fan peak efficiency at an operating speed of 3500 rpm on the 60 cycle TBI fans and 2.920 rpm on 50 cycle TBI fans. Sound measurements were taken in a hemianechoic chamber and under free-field conditions and do not reflect the influences of actual operating environments.

<sup>2</sup> Noise level is 70 dBA at 3 ft. at position # 1, with fan located outdoors. The actual measured sound level will be higher, depending on background noise and room conditions.



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