



60HZ TECHNICAL DATA SHEET

CATALOG No: **BC4N001-4D**

ISSUED: 28-Apr-22

GENERAL INFORMATION

HP	KW	Pole	RPM	Frame	Voltage	Hz	Phase	IP Rating
1	0.75	4	1800	143TD	230/460 V	60	3	IP55

Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEFC	F	1.25	Continuous	B	-15 to 40 C*	<3300 ft

TYPICAL PERFORMANCE

Efficiency (%)			Power Factor (%)		
Full Load	3/4 Load	1/2 Load	Full Load	3/4 Load	1/2 Load
85.5	85.0	82.0	0.72	0.65	0.52

LRT%	BDT %	Full Load Amps	Locked Rotor Amps	Full Load RPM
		460 V	460 V	
300	320	1.50	11.20	1740

NEMA KVA Code	Bearing Size		Oil Seal		Sound Level
	Drive End	Non-Drive End	Drive End	Non-Drive End	dB(A)
K	62052Z	62032Z	25 x 35 x 7	17 x 28 x 6	57

*Weights shown are estimated and based on standard foot mounted motor designs

VFD DUTY INFORMATION

	Variable Torque	Constant Torque	Rating
-	3 - 60 Hz	4 - 60 Hz	CSA Approved Class I; Div 2; Groups A, B, C, & D, T3
-	-	-	

Click Link Below For Drawing

<http://brookcrompton.com/Drawings/W-NEMA/NEMA%20Cast%20Iron%20B35/WP-DF143.5TD.pdf>

Click Link Below For Connection Diagram

<http://www.brookcrompton.com/Connections/Connection%20Diagram%209%20Lead%202X4%20NEMA.pdf>

Notes:

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ISSUED: 28-Apr-22

GENERAL INFORMATION

HP	KW	Pole	RPM	Frame	Voltage	Hz	Phase	IP Rating
1	0.75	4	1500	143TD	400 V	50	3	IP55

Enclosure	Ins. Class	Service Factor	Time Rating	NEMA Design	Rated Amb.	Rated Altitude
TEFC	F	1.00	S1	B	-15 to 40 C°	<3300 ft

TYPICAL PERFORMANCE

Efficiency (%)			Power Factor (%)		
Full Load	3/4 Load	1/2 Load	Full Load	3/4 Load	1/2 Load
78.5	79.5	78.0	0.79	0.73	0.61

LRT %	BDT %	Full Load Amps		Locked Rotor Amps		Full Load RPM
		400 V		400 V		
300	320	1.73		12.88		1400

NEMA KVA Code	Bearing Size		Oil Seal		Sound Level
	Drive End	Non-Drive End	Drive End	Non-Drive End	dB(A)
K	62052Z	62032Z	25 x 35 x 7	17 x 28 x 6	57

*Weights shown are estimated and based on standard foot mounted motor designs

VFD DUTY INFORMATION

	Variable Torque	Constant Torque	Rating
-	3 - 60 Hz	4 - 60 Hz	CSA Approved Class I; Div 2; Groups A, B, C, & D, T3
-	-	-	

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<http://brookcromptonna.com/Drawings/W-NEMA/NEMA%20Cast%20Iron%20B35/WP-DF143.5TD.pdf>

Click Link Below For Connection Diagram

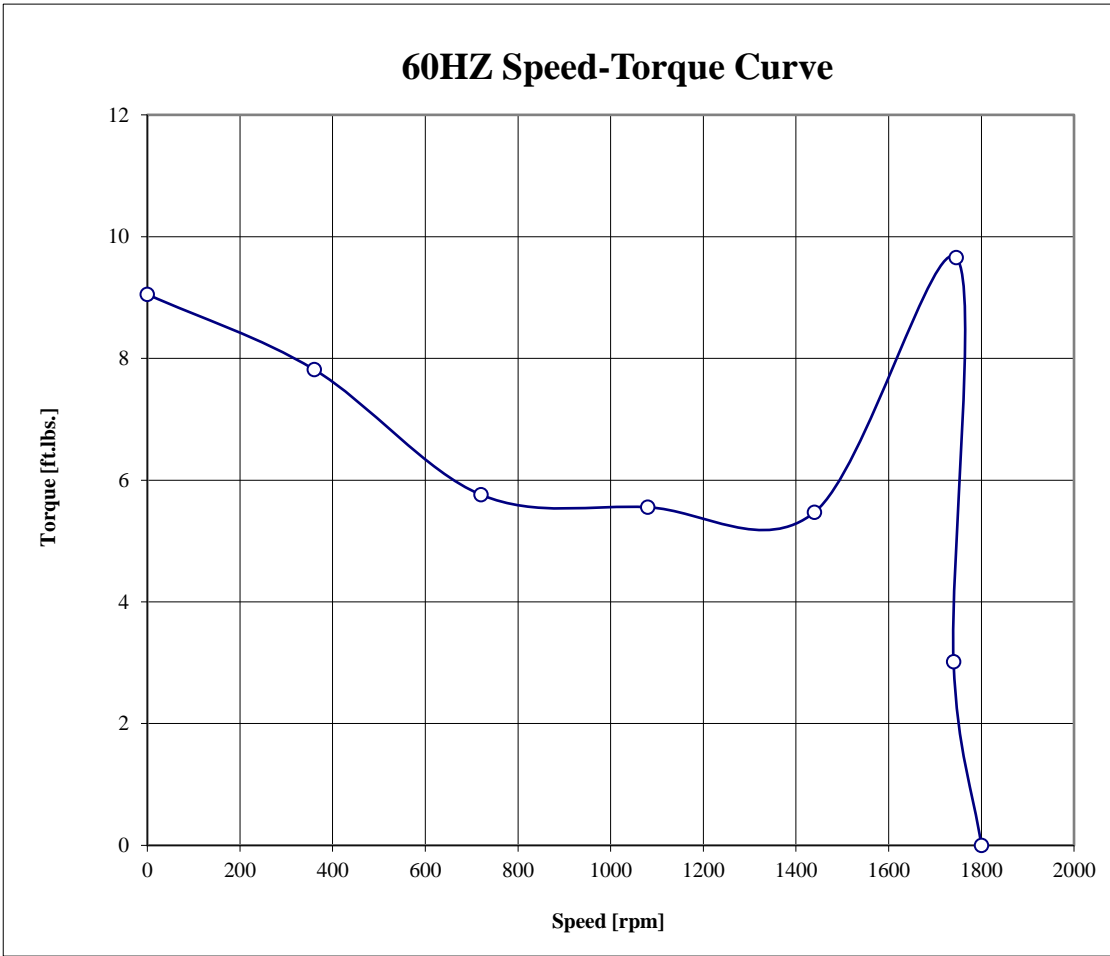
<http://www.brookcromptonna.com/Connections/Connection%20Diagram%209%20Lead%202X4%20NEMA.pdf>

Notes:

Motor: BC4N001-4D

	Frame:	143TD	1 HP	460 V	
	Pole no.:	4	3.0 ft.lbs.	60 Hz	1740 rpm

Speed	0	360	720	1080	1440	1746	1740	1800
Speed ratios	0	0.2	0.4	0.6	0.8	0.97	0.967	1
Mot. torque ratios	3	2.6	1.9	1.8	1.8	3.2	1	0
Motor torque / ft.lbs.	9	8	6	6	5	10	3	0

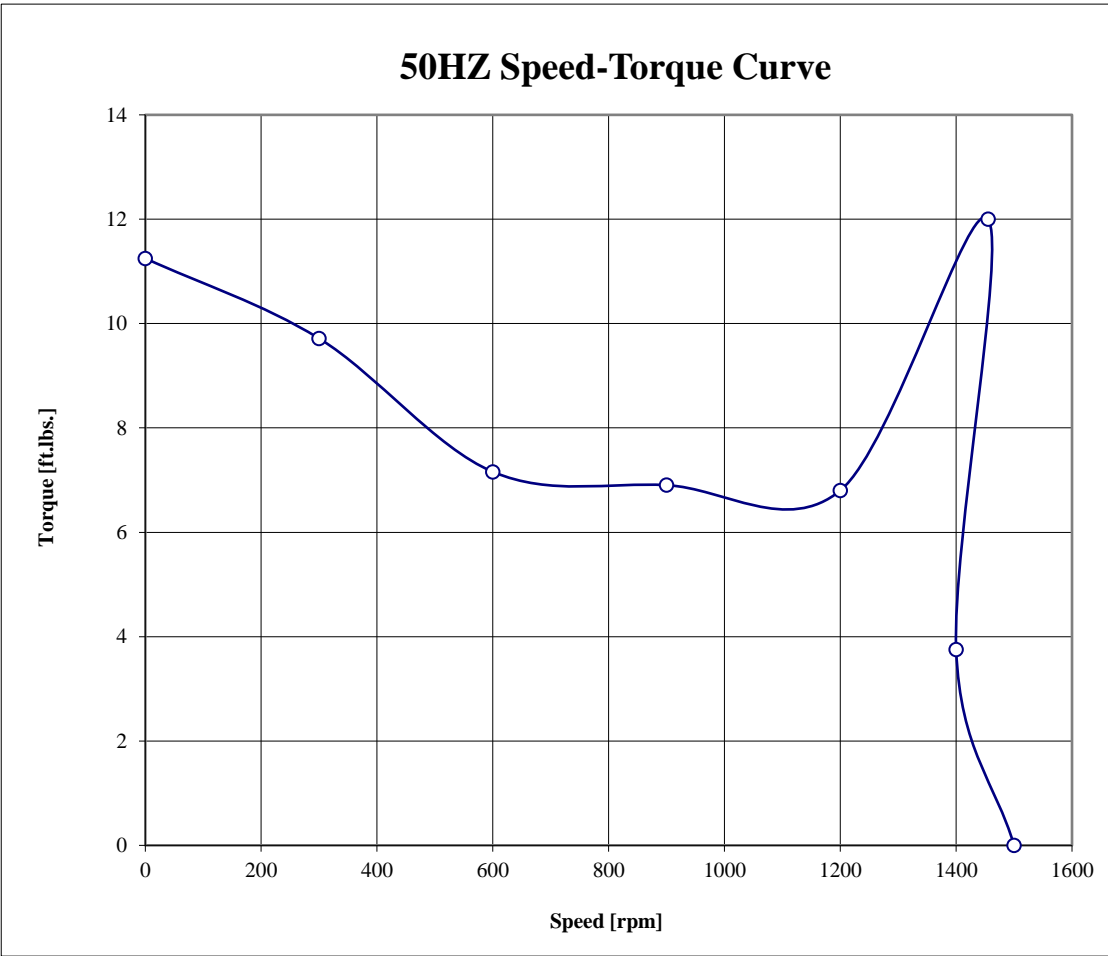


*Curve base on calculated values

Motor: BC4N001-4D

	Frame:	143TD	1 HP	400 V	
	Pole no.:	4	3.8 ft.lbs.	50 Hz	1400 rpm

Speed	0	300	600	900	1200	1455	1400	1500
Speed ratios	0	0.2	0.4	0.6	0.8	0.97	0.933	1
Mot. torque ratios	3	2.6	1.9	1.8	1.8	3.2	1	0
Motor torque / ft.lbs.	11	10	7	7	7	12	4	0



*Curve base on calculated values