

60HZ TECHNICAL DATA SHEET

CATALOG No: **BC2N010-4C**

ISSUED: 28-Apr-22

GENERAL INFORMATION

| HP | KW | Pole | RPM | Frame | Voltage | Hz | Phase | IP Rating |
|----|------|------|------|-------|-----------|----|-------|-----------|
| 10 | 7.50 | 2 | 3600 | 215TC | 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 |
| 90.2 | 91.0 | 90.2 | 0.90 | 0.89 | 0.79 |

| LRT% | BDT % | Full Load Amps | Locked Rotor Amps | Full Load RPM |
|------|-------|----------------|-------------------|---------------|
| | | 460 V | 460 V | |
| 240 | 500 | 11.60 | 90.00 | 3515 |

| NEMA KVA Code | Bearing Size | | Oil Seal | | Sound Level |
|---------------|--------------|---------------|-------------|---------------|-------------|
| | Drive End | Non-Drive End | Drive End | Non-Drive End | dB(A) |
| J | 62082Z | 63052Z | 40 x 52 x 7 | 25 x 37 x 7 | 60 |

*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%20B34/WP-DF213.5TC.pdf>

Click Link Below For Connection Diagram

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

Notes:



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GENERAL INFORMATION

| HP | KW | Pole | RPM | Frame | Voltage | Hz | Phase | IP Rating |
|----|------|------|------|-------|---------|----|-------|-----------|
| 10 | 7.50 | 2 | 3000 | 215TC | 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 |
| 88.5 | 90.5 | 91.0 | 0.91 | 0.93 | 0.93 |

| LRT % | BDT % | Full Load Amps | | Locked Rotor Amps | | Full Load RPM |
|-------|-------|----------------|--|-------------------|--|---------------|
| | | 400 V | | 400 V | | |
| 240 | 500 | 13.34 | | 103.50 | | 2860 |

| NEMA KVA Code | Bearing Size | | Oil Seal | | Sound Level |
|---------------|--------------|---------------|-------------|---------------|-------------|
| | Drive End | Non-Drive End | Drive End | Non-Drive End | dB(A) |
| J | 62082Z | 63052Z | 40 x 52 x 7 | 25 x 37 x 7 | 60 |

*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://brookcromptonna.com/Drawings/W-NEMA/NEMA%20Cast%20Iron%20B34/WP-DF213.5TC.pdf>

Click Link Below For Connection Diagram

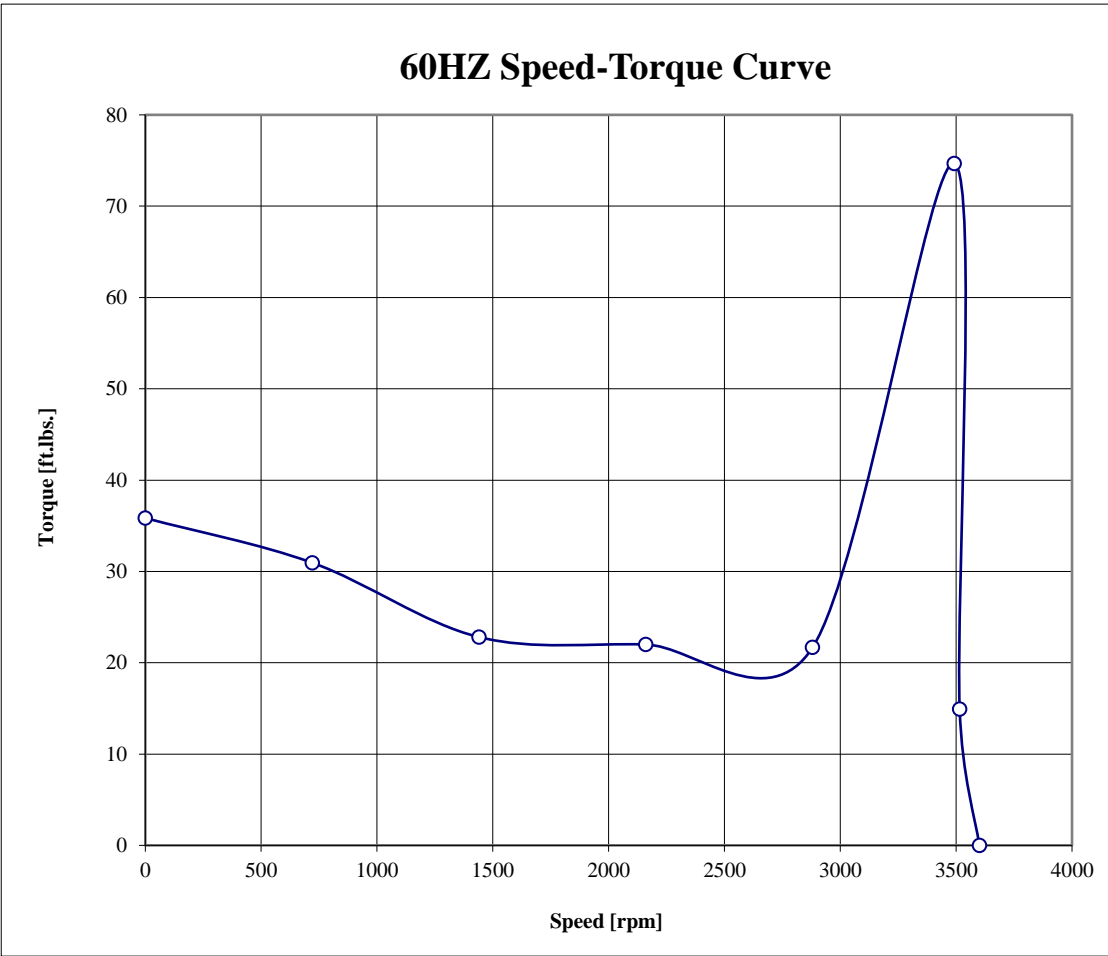
<http://www.brookcromptonna.com/Connections/Connection%20Diagram%209%20Lead%202X4%20NEMA.pdf>

Notes:

Motor: BC2N010-4C

| | | | | | |
|--|------------------|-------|--------------|-------|----------|
| | Frame: | 215TC | 10 HP | 460 V | |
| | Pole no.: | 2 | 14.9 ft.lbs. | 60 Hz | 3515 rpm |

| | | | | | | | | |
|-------------------------------|-----|-----|------|------|------|------|-------|------|
| Speed | 0 | 720 | 1440 | 2160 | 2880 | 3492 | 3515 | 3600 |
| Speed ratios | 0 | 0.2 | 0.4 | 0.6 | 0.8 | 0.97 | 0.976 | 1 |
| Mot. torque ratios | 2.4 | 2.1 | 1.5 | 1.5 | 1.5 | 5 | 1 | 0 |
| Motor torque / ft.lbs. | 36 | 31 | 23 | 22 | 22 | 75 | 15 | 0 |

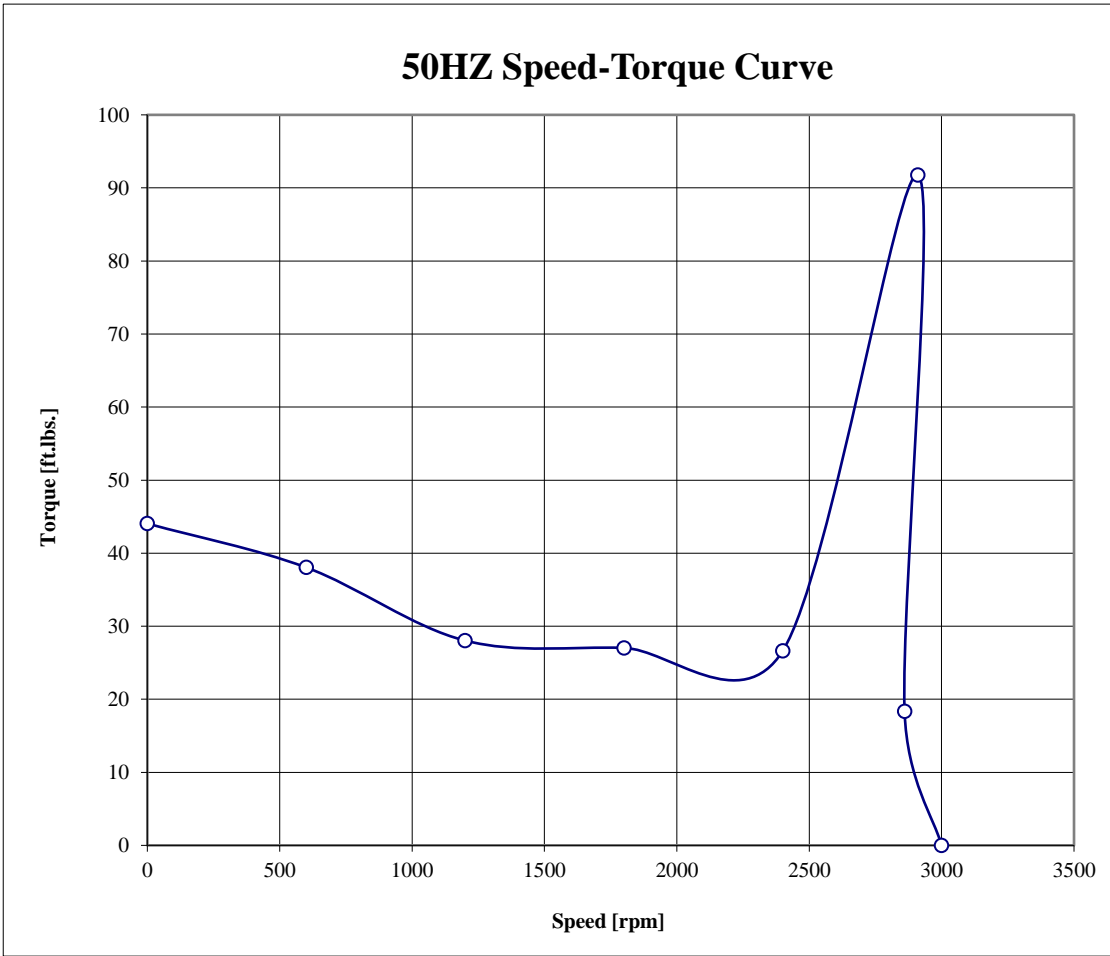


*Curve base on calculated values

Motor: BC2N010-4C

| | | | | | |
|--|------------------|-------|--------------|-------|----------|
| | Frame: | 215TC | 10 HP | 400 V | |
| | Pole no.: | 2 | 18.4 ft.lbs. | 50 Hz | 2860 rpm |

| | | | | | | | | |
|-------------------------------|-----|-----|------|------|------|------|-------|------|
| Speed | 0 | 600 | 1200 | 1800 | 2400 | 2910 | 2860 | 3000 |
| Speed ratios | 0 | 0.2 | 0.4 | 0.6 | 0.8 | 0.97 | 0.953 | 1 |
| Mot. torque ratios | 2.4 | 2.1 | 1.5 | 1.5 | 1.5 | 5 | 1 | 0 |
| Motor torque / ft.lbs. | 44 | 38 | 28 | 27 | 27 | 92 | 18 | 0 |



*Curve base on calculated values