

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11797196

|                       |                   |                             |                         |
|-----------------------|-------------------|-----------------------------|-------------------------|
| Frame                 | : 213TC           | Locked rotor time           | : 136s (cold) 76s (hot) |
| Output                | : 3 HP (2.2 kW)   | Temperature rise            | : 80 K                  |
| Poles                 | : 6               | Duty cycle                  | : Cont.(S1)             |
| Frequency             | : 60 Hz           | Ambient temperature         | : -20°C to +40°C        |
| Rated voltage         | : 230/460 V       | Altitude                    | : 1000 m.a.s.l.         |
| Rated current         | : 8.64/4.32 A     | Protection degree           | : IP55                  |
| L. R. Amperes         | : 57.9/28.9 A     | Cooling method              | : IC411 - TEFC          |
| LRC                   | : 6.7x(Code J)    | Mounting                    | : F-1                   |
| No load current       | : 5.00/2.50 A     | Rotation <sup>1</sup>       | : Both (CW and CCW)     |
| Rated speed           | : 1170 rpm        | Noise level <sup>2</sup>    | : 55.0 dB(A)            |
| Slip                  | : 2.50 %          | Starting method             | : Direct On Line        |
| Rated torque          | : 13.5 ft.lb      | Approx. weight <sup>3</sup> | : 110 lb                |
| Locked rotor torque   | : 180 %           |                             |                         |
| Breakdown torque      | : 240 %           |                             |                         |
| Insulation class      | : F               |                             |                         |
| Service factor        | : 1.25            |                             |                         |
| Moment of inertia (J) | : 0.9933 sq.ft.lb |                             |                         |
| Design                | : B               |                             |                         |

|                |      |      |      |                  |          |
|----------------|------|------|------|------------------|----------|
| Output         | 50%  | 75%  | 100% | Foundation loads |          |
| Efficiency (%) | 84.0 | 86.5 | 87.5 | Max. traction    | : 169 lb |
| Power Factor   | 0.55 | 0.66 | 0.73 | Max. compression | : 307 lb |

Losses at normative operating points (speed;torque), in percentage of rated output power

| P1 (0,9;1,0) | P2 (0,5;1,0) | P3 (0,25;1,0) | P4 (0,9;0,5) | P5 (0,5;0,5) | P6 (0,5;0,25) | P7 (0,25;0,25) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 13.4         | 10.6         | 10.0          | 7.9          | 5.3          | 4.1           | 3.0            |

|                      | Drive end | Non drive end |
|----------------------|-----------|---------------|
| Bearing type         | : 6308 ZZ | 6207 ZZ       |
| Sealing              | : V'Ring  | V'Ring        |
| Lubrication interval | : -       | -             |
| Lubricant amount     | : -       | -             |
| Lubricant type       | : 00088   |               |

### Notes

USABLE @208V 9.42A SF 1.15 SFA 10.8A

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

| Rev.         | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|------|
|              |                 |           |         |      |
| Performed by |                 |           |         |      |
| Checked by   |                 |           |         |      |
| Date         | 21/07/2026      |           |         |      |

Page 1 / 5  
Revision

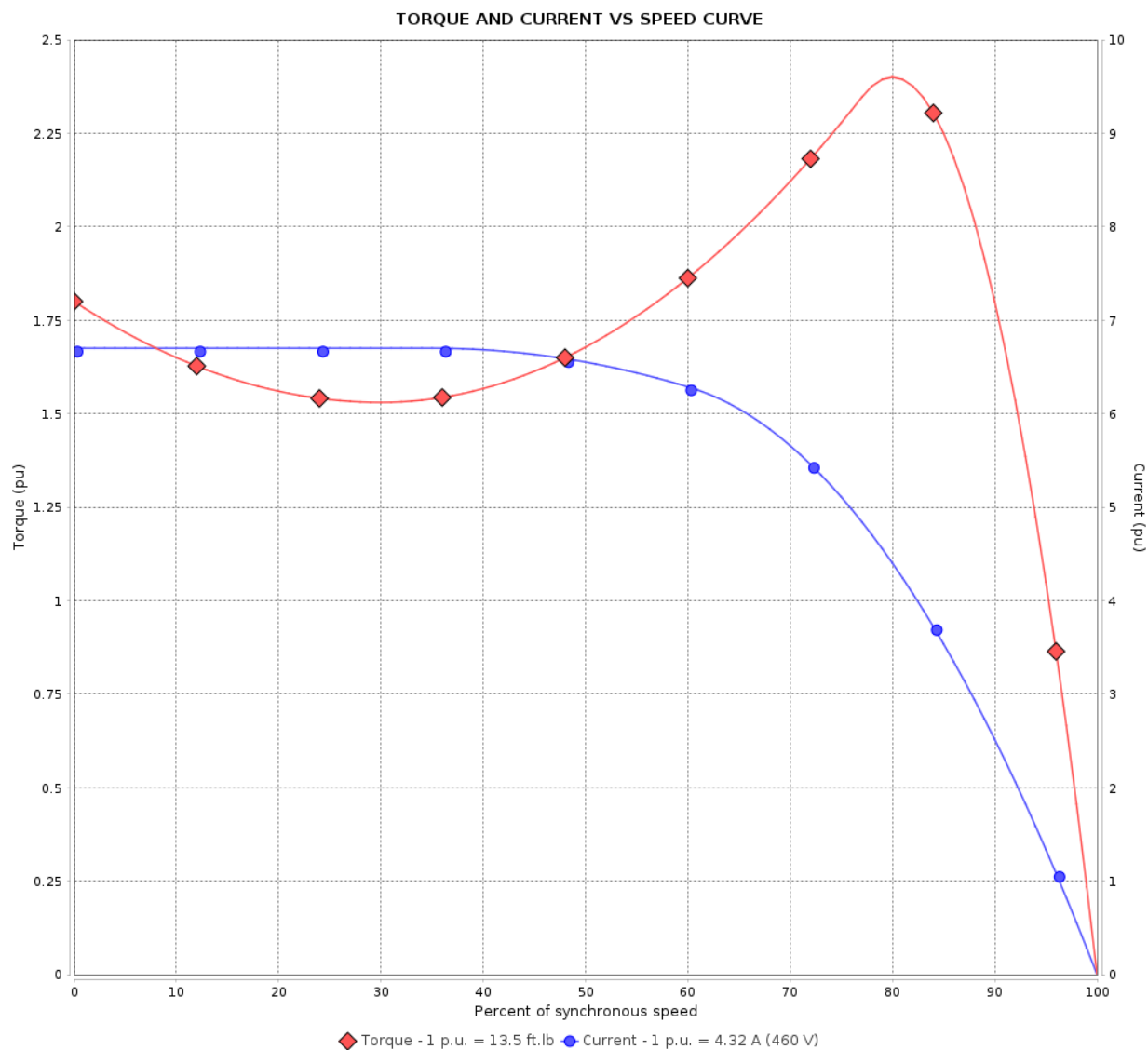
# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11797196



Performance : 230/460 V 60 Hz 6P

Rated current : 8.64/4.32 A  
LRC : 6.7  
Rated torque : 13.5 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 240 %  
Rated speed : 1170 rpm

Moment of inertia (J) : 0.9933 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Locked rotor time : 136s (cold) 76s (hot)

| Rev.         | Changes Summary | Performed             | Checked | Date |
|--------------|-----------------|-----------------------|---------|------|
|              |                 |                       |         |      |
| Performed by |                 | Page<br>2 / 5Revision |         |      |
| Checked by   |                 |                       |         |      |
| Date         | 21/07/2026      |                       |         |      |

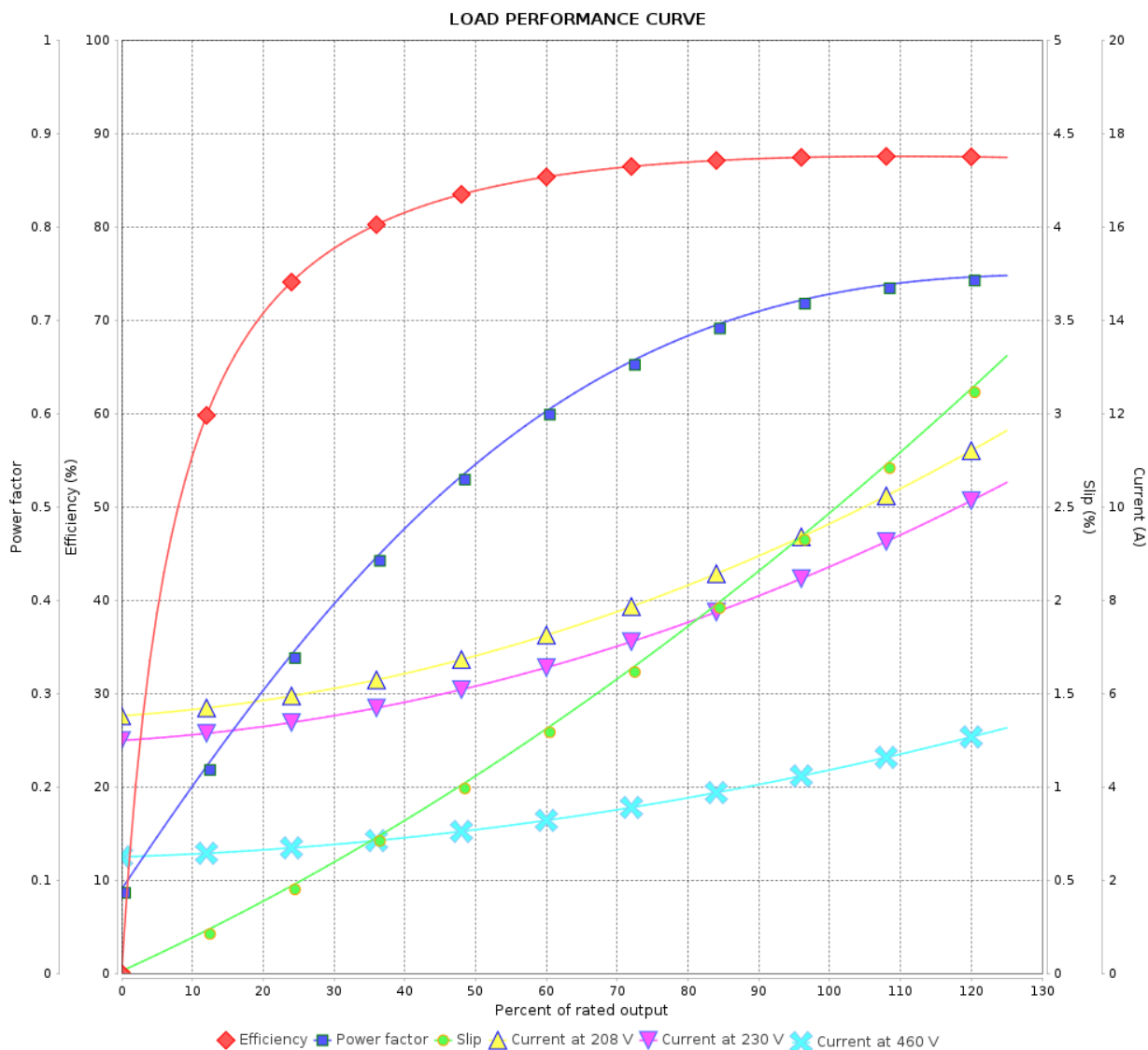
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11797196



Performance : 230/460 V 60 Hz 6P

Rated current : 8.64/4.32 A  
LRC : 6.7  
Rated torque : 13.5 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 240 %  
Rated speed : 1170 rpm

Moment of inertia (J) : 0.9933 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|--------------|-----------------|--|-----------|---------|----------|
|              |                 |  |           |         |          |
| Performed by |                 |  |           | Page    | Revision |
| Checked by   |                 |  |           | 3 / 5   |          |
| Date         |                 |  |           |         |          |

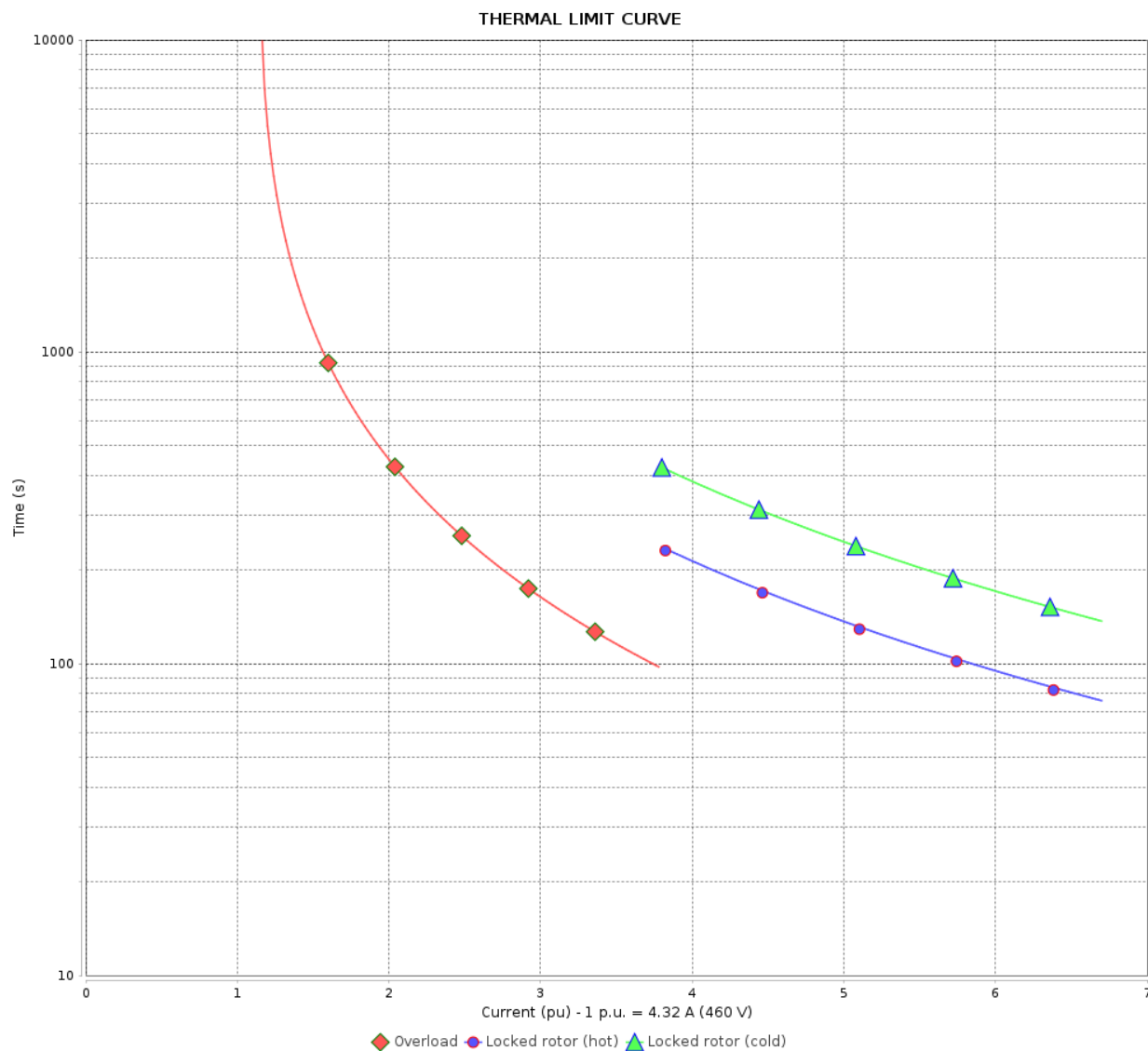
# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11797196



Performance : 230/460 V 60 Hz 6P

Rated current : 8.64/4.32 A  
LRC : 6.7  
Rated torque : 13.5 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 240 %  
Rated speed : 1170 rpm

Moment of inertia (J) : 0.9933 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

| Rev.         | Changes Summary |                       | Performed | Checked | Date |
|--------------|-----------------|-----------------------|-----------|---------|------|
|              |                 |                       |           |         |      |
| Performed by |                 | Page<br>4 / 5Revision |           |         |      |
| Checked by   |                 |                       |           |         |      |
| Date         | 21/07/2026      |                       |           |         |      |

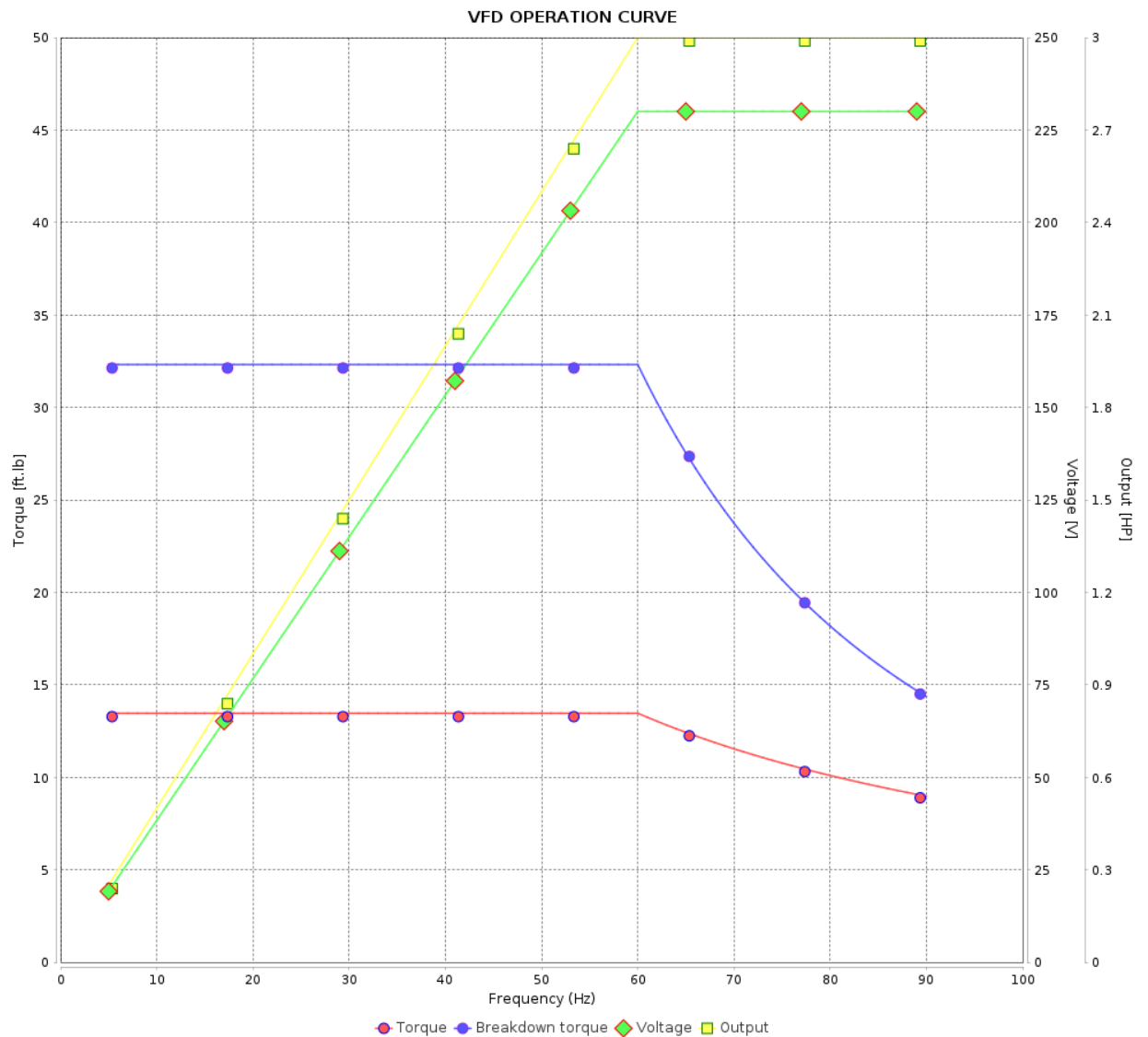
# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11797196



Performance : 230/460 V 60 Hz 6P

Rated current : 8.64/4.32 A  
LRC : 6.7  
Rated torque : 13.5 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 240 %  
Rated speed : 1170 rpm

Moment of inertia (J) : 0.9933 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

| Rev.         | Changes Summary | Performed             | Checked | Date |
|--------------|-----------------|-----------------------|---------|------|
|              |                 |                       |         |      |
| Performed by |                 | Page<br>5 / 5Revision |         |      |
| Checked by   |                 |                       |         |      |
| Date         | 21/07/2026      |                       |         |      |

