

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13500624

|                       |                         |                             |                        |
|-----------------------|-------------------------|-----------------------------|------------------------|
| Frame                 | : 586/7TZ               | Locked rotor time           | : 54s (cold) 30s (hot) |
| Output                | : 300 HP (220 kW)       | Temperature rise            | : 80 K                 |
| Poles                 | : 6                     | Duty cycle                  | : Cont.(S1)            |
| Frequency             | : 60 Hz                 | Ambient temperature         | : -20°C to +40°C       |
| Rated voltage         | : 460 V                 | Altitude                    | : 1000 m.a.s.l.        |
| Rated current         | : 360 A                 | Protection degree           | : IP55                 |
| L. R. Amperes         | : 2124 A                | Cooling method              | : IC411 - TEFC         |
| LRC                   | : 5.9x(Code G)          | Mounting                    | : F-1                  |
| No load current       | : 165 A                 | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| Rated speed           | : 1193 rpm              | Noise level <sup>2</sup>    | : 77.0 dB(A)           |
| Slip                  | : 0.58 %                | Starting method             | : Direct On Line       |
| Rated torque          | : 182 kgfm              | Approx. weight <sup>3</sup> | : 1585 kg              |
| Locked rotor torque   | : 220 %                 |                             |                        |
| Breakdown torque      | : 250 %                 |                             |                        |
| Insulation class      | : F                     |                             |                        |
| Service factor        | : 1.15                  |                             |                        |
| Moment of inertia (J) | : 11.7 kgm <sup>2</sup> |                             |                        |
| Design                | : A                     |                             |                        |

|                |       |      |      |      |                  |            |
|----------------|-------|------|------|------|------------------|------------|
| Output         | 25%   | 50%  | 75%  | 100% | Foundation loads |            |
| Efficiency (%) | 0.000 | 95.0 | 95.8 | 95.8 | Max. traction    | : 2331 kgf |
| Power Factor   | 0.00  | 0.65 | 0.75 | 0.80 | Max. compression | : 3916 kgf |

|                      |   |                    |                      |
|----------------------|---|--------------------|----------------------|
|                      |   | <u>Drive end</u>   | <u>Non drive end</u> |
| Bearing type         | : | NU-324 C3          | 6319 C3              |
| Sealing              | : | Taconite Labyrinth | Taconite Labyrinth   |
| Lubrication interval | : | 6000 h             | 13000 h              |
| Lubricant amount     | : | 72 g               | 45 g                 |
| Lubricant type       | : | Mobil Polyrex EM   |                      |

### Notes

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 |
|--------------|-----------------|---------------|----------|------|
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| Date         | 23/10/2023      |               |          |      |
|              |                 |               | Revision |      |

Customer :

Thermal protection

| ID | Application | Type                 | Quantity  | Sensing Temperature |
|----|-------------|----------------------|-----------|---------------------|
| 1  | Winding     | Thermostat - 2 wires | 1 x Phase | 155 °C              |

Space heater information

Voltage: 200 - 240 V

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# LOAD PERFORMANCE CURVE

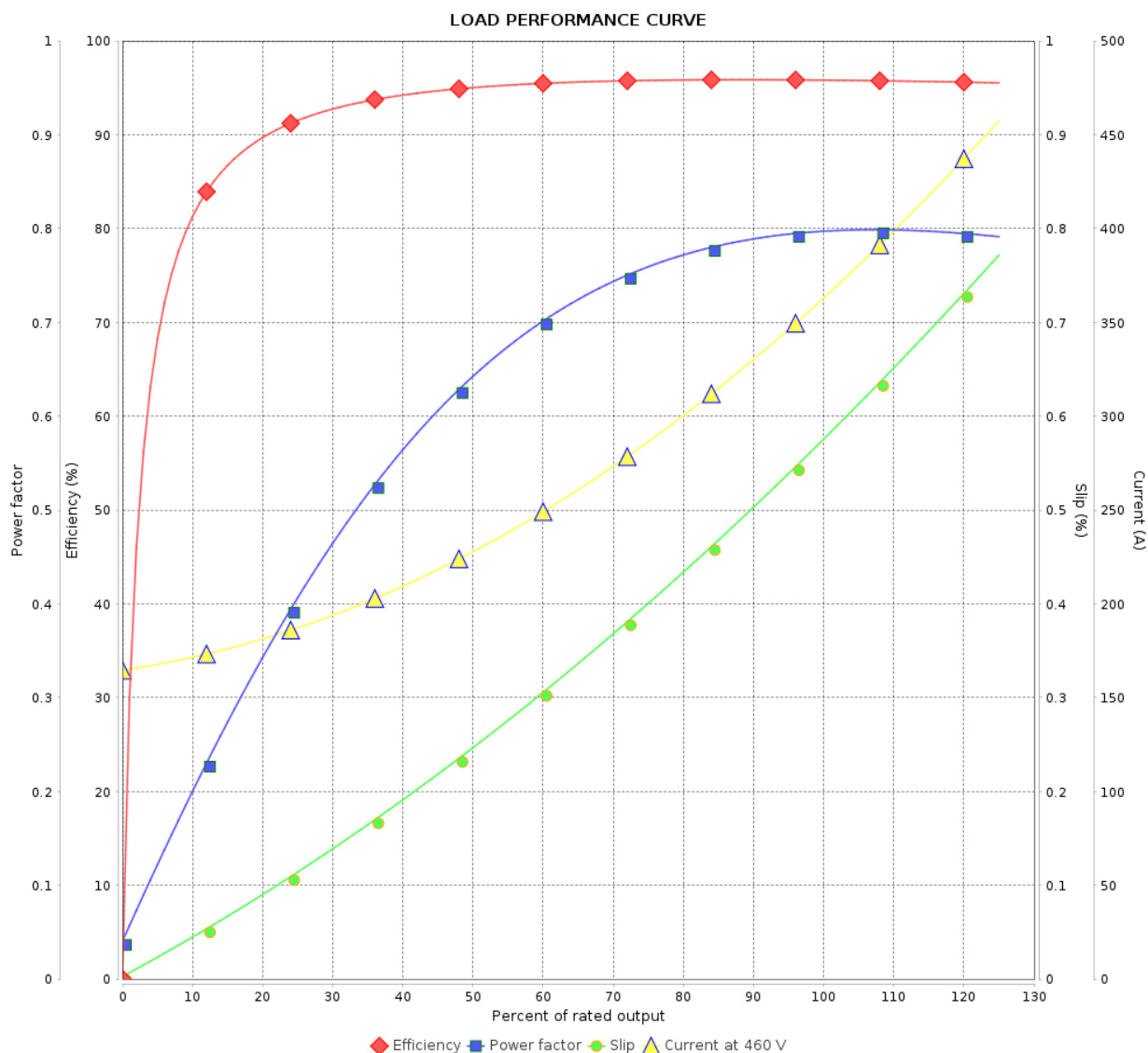
## Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 13500624



Performance : 460 V 60 Hz 6P

Rated current : 360 A  
 LRC : 5.9  
 Rated torque : 182 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 250 %  
 Rated speed : 1193 rpm

Moment of inertia (J) : 11.7 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

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|              |                 | Revision      |         |      |

