

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13500705

Catalog # : 50018ET3GKD580Z-W22

|                       |                   |                             |                        |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame                 | : 586/7TZ         | Locked rotor time           | : 36s (cold) 20s (hot) |
| Output                | : 500 HP (370 kW) | Temperature rise            | : 80 K                 |
| Poles                 | : 4               | 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         | : 575 A           | Protection degree           | : IP55                 |
| L. R. Amperes         | : 4428 A          | Cooling method              | : IC411 - TEFC         |
| LRC                   | : 7.7x(Code H)    | Mounting                    | : F-1                  |
| No load current       | : 190 A           | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| Rated speed           | : 1791 rpm        | Noise level <sup>2</sup>    | : 78.0 dB(A)           |
| Slip                  | : 0.50 %          | Starting method             | : Direct On Line       |
| Rated torque          | : 1470 ft.lb      | Approx. weight <sup>3</sup> | : 3912 lb              |
| Locked rotor torque   | : 280 %           |                             |                        |
| Breakdown torque      | : 250 %           |                             |                        |
| Insulation class      | : F               |                             |                        |
| Service factor        | : 1.00            |                             |                        |
| Moment of inertia (J) | : 228 sq.ft.lb    |                             |                        |
| Design                | : A               |                             |                        |

|                |       |      |      |      |                  |           |
|----------------|-------|------|------|------|------------------|-----------|
| Output         | 25%   | 50%  | 75%  | 100% | Foundation loads |           |
| Efficiency (%) | 0.000 | 95.8 | 96.2 | 96.2 | Max. traction    | : 5691 lb |
| Power Factor   | 0.00  | 0.72 | 0.80 | 0.84 | Max. compression | : 9602 lb |

|                      |   |                    |                      |
|----------------------|---|--------------------|----------------------|
|                      |   | <u>Drive end</u>   | <u>Non drive end</u> |
| Bearing type         | : | NU-324 C3          | 6319 C3              |
| Sealing              | : | Taconite Labyrinth | Taconite Labyrinth   |
| Lubrication interval | : | 3000 h             | 8000 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 |
|--------------|-----------------|---------------------------|---------|------|
|              |                 |                           |         |      |
| Performed by |                 | Page<br>1 / 2<br>Revision |         |      |
| Checked by   |                 |                           |         |      |
| Date         | 27/03/2024      |                           |         |      |

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

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|--------------|-----------------|--|-----------|---------|----------|
|              |                 |  |           |         |          |
| Performed by |                 |  |           | Page    | Revision |
| Checked by   |                 |  |           | 2 / 2   |          |
| Date         | 27/03/2024      |  |           |         |          |