

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|  |                                       |                                |  |           |          |
|--|---------------------------------------|--------------------------------|--|-----------|----------|
| Customer   | :                                     |                                |  |           |          |
| Product line   | : NEMA Premium Efficiency Three-Phase | Product code :                 | 12845572   |           |          |
| Frame  | : 254/6TC                             | Cooling method                 | : IC411 - TEFC   |           |          |
| Insulation class   | : F                                   | Mounting                       | : F-1  |           |          |
| Duty cycle   | : Cont.(S1)                           | Rotation <sup>1</sup>          | : Both (CW and CCW)  |           |          |
| Ambient temperature  | : -20°C to +40°C                      | Starting method                | : Direct On Line   |           |          |
| Altitude   | : 1000 m.a.s.l.                       | Approx. weight <sup>3</sup>    | : 87.9 kg  |           |          |
| Protection degree  | : IP55                                | Moment of inertia (J)          | : 0.0367 kgm <sup>2</sup>  |           |          |
| Design   | : B                                   |                                |  |           |          |
| Output [HP]  | 15                                    |                                |  |           |          |
| Poles  | 2                                     |                                |  |           |          |
| Frequency [Hz]   | 60                                    |                                |  |           |          |
| Rated voltage [V]  | 575                                   |                                |  |           |          |
| Rated current [A]  | 13.9                                  |                                |  |           |          |
| L. R. Amperes [A]  | 94.7                                  |                                |  |           |          |
| LRC [A]  | 6.8x(Code G)                          |                                |  |           |          |
| No load current [A]  | 5.20                                  |                                |  |           |          |
| Rated speed [RPM]  | 3525                                  |                                |  |           |          |
| Slip [%]   | 2.08                                  |                                |  |           |          |
| Rated torque [kgfm]  | 3.09                                  |                                |  |           |          |
| Locked rotor torque [%]  | 200                                   |                                |  |           |          |
| Breakdown torque [%]   | 300                                   |                                |  |           |          |
| Service factor   | 1.15                                  |                                |  |           |          |
| Temperature rise   | 80 K                                  |                                |  |           |          |
| Locked rotor time  | 25s (cold) 14s (hot)                  |                                |  |           |          |
| Noise level <sup>2</sup>   | 75.0 dB(A)                            |                                |  |           |          |
| Efficiency (%)   | 25%                                   | 89.2                           |  |           |          |
|  | 50%                                   | 89.5                           |  |           |          |
|  | 75%                                   | 91.0                           |  |           |          |
|  | 100%                                  | 91.0                           |  |           |          |
| Power Factor   | 25%                                   | 0.47                           |  |           |          |
|  | 50%                                   | 0.73                           |  |           |          |
|  | 75%                                   | 0.83                           |  |           |          |
|  | 100%                                  | 0.87                           |  |           |          |
| Bearing type   | : <u>Drive end</u> 6309 Z C3          | <u>Non drive end</u> 6208 Z C3 | Foundation loads   |           |          |
| Sealing  | : V'Ring                              | Without Bearing Seal           | Max. traction  | : 101 kgf |          |
| Lubrication interval   | : 15797 h                             | 20000 h                        | Max. compression   | : 189 kgf |          |
| Lubricant amount   | : 13 g                                | 8 g                            |  |           |          |
| Lubricant type   | : Mobil Polyrex EM                    |                                |  |           |          |
| Notes  |                                       |                                |  |           |          |
| This revision replaces and cancel the previous one, which must be eliminated.<br>(1) Looking the motor from the shaft end.<br>(2) Measured at 1m and with tolerance of +3dB(A).<br>(3) Approximate weight subject to changes after manufacturing process.<br>(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   |                                       |                                |  | Page      | Revision |
| Date   | 13/05/2022                            |                                |  | 1 / 2     |          |

# LOAD PERFORMANCE CURVE

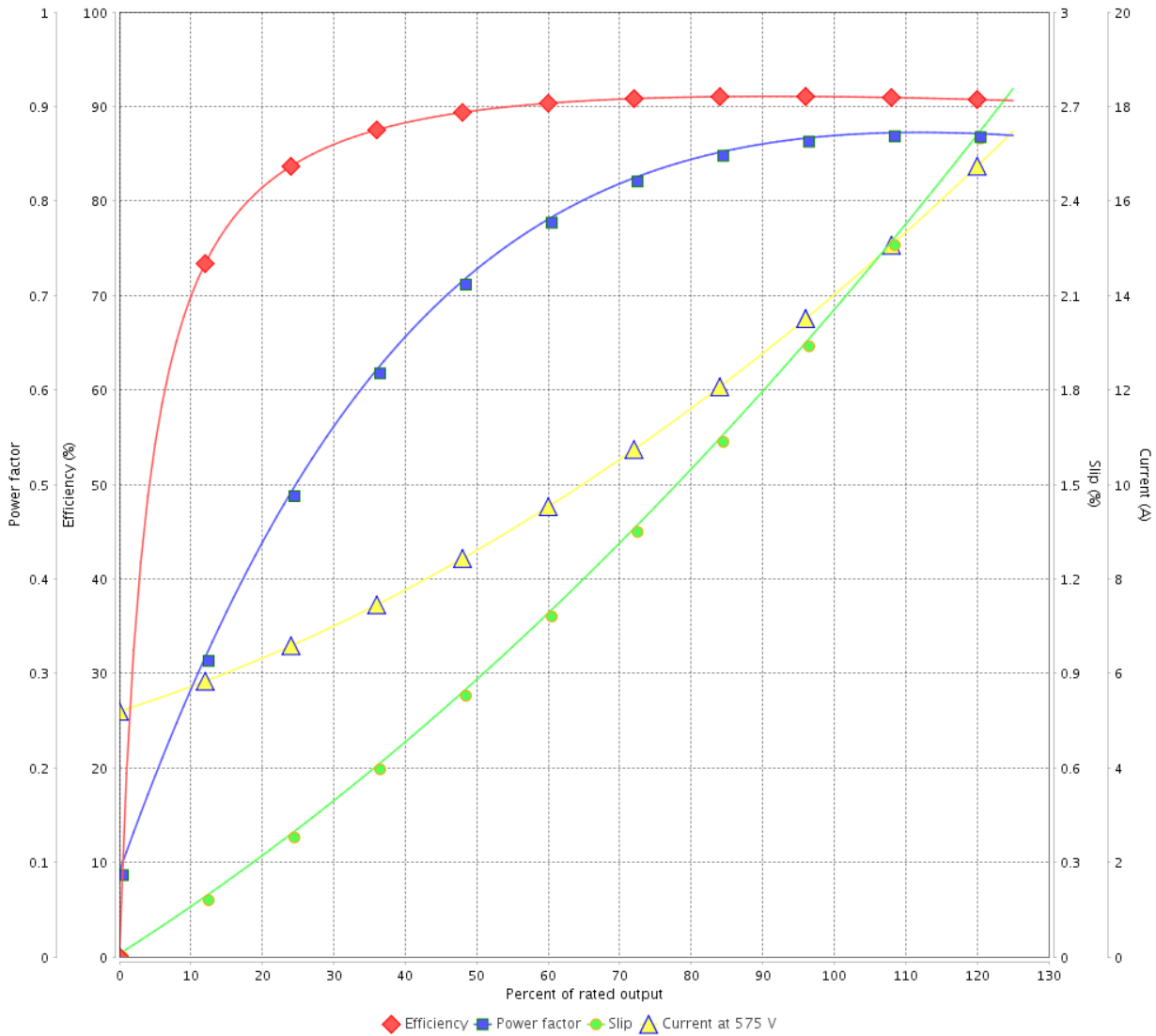
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12845572

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 2P

|                     |             |                       |                           |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current       | : 13.9 A    | Moment of inertia (J) | : 0.0367 kgm <sup>2</sup> |
| LRC                 | : 6.8       | Duty cycle            | : Cont.(S1)               |
| Rated torque        | : 3.09 kgfm | Insulation class      | : F                       |
| Locked rotor torque | : 200 %     | Service factor        | : 1.15                    |
| Breakdown torque    | : 300 %     | Temperature rise      | : 80 K                    |
| Rated speed         | : 3525 rpm  | Design                | : B                       |

| Rev.         | Changes Summary | Performed | Checked       | Date     |
|--------------|-----------------|-----------|---------------|----------|
|              |                 |           |               |          |
| Performed by |                 |           | Page<br>2 / 2 | Revision |
| Checked by   |                 |           |               |          |
| Date         | 13/05/2022      |           |               |          |