

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



|                                                                                                                                                                                                                                                                                        |                      |                                   |                                                                                                                          |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------|
| Customer :                                                                                                                                                                                                                                                                             |                      |                                   |                                                                                                                          |          |
| Product line                                                                                                                                                                                                                                                                           |                      | : Standard Efficiency Three-Phase | Product code :                                                                                                           | 12894831 |
| Frame                                                                                                                                                                                                                                                                                  | : 56C                | 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>       | : 10.3 kg                                                                                                                |          |
| Protection degree                                                                                                                                                                                                                                                                      | : IP55               | Moment of inertia (J)             | : 0.0027 kgm <sup>2</sup>                                                                                                |          |
| Output [HP]                                                                                                                                                                                                                                                                            | 0.75                 |                                   |                                                                                                                          |          |
| Poles                                                                                                                                                                                                                                                                                  | 4                    |                                   |                                                                                                                          |          |
| Frequency [Hz]                                                                                                                                                                                                                                                                         | 60                   |                                   |                                                                                                                          |          |
| Rated voltage [V]                                                                                                                                                                                                                                                                      | 575                  |                                   |                                                                                                                          |          |
| Rated current [A]                                                                                                                                                                                                                                                                      | 0.976                |                                   |                                                                                                                          |          |
| L. R. Amperes [A]                                                                                                                                                                                                                                                                      | 6.73                 |                                   |                                                                                                                          |          |
| LRC [A]                                                                                                                                                                                                                                                                                | 6.9x(Code K)         |                                   |                                                                                                                          |          |
| No load current [A]                                                                                                                                                                                                                                                                    | 0.720                |                                   |                                                                                                                          |          |
| Rated speed [RPM]                                                                                                                                                                                                                                                                      | 1755                 |                                   |                                                                                                                          |          |
| Slip [%]                                                                                                                                                                                                                                                                               | 2.50                 |                                   |                                                                                                                          |          |
| Rated torque [kgfm]                                                                                                                                                                                                                                                                    | 0.310                |                                   |                                                                                                                          |          |
| Locked rotor torque [%]                                                                                                                                                                                                                                                                | 240                  |                                   |                                                                                                                          |          |
| Breakdown torque [%]                                                                                                                                                                                                                                                                   | 300                  |                                   |                                                                                                                          |          |
| Service factor                                                                                                                                                                                                                                                                         | 1.15                 |                                   |                                                                                                                          |          |
| Temperature rise                                                                                                                                                                                                                                                                       | 80 K                 |                                   |                                                                                                                          |          |
| Locked rotor time                                                                                                                                                                                                                                                                      | 30s (cold) 17s (hot) |                                   |                                                                                                                          |          |
| Noise level <sup>2</sup>                                                                                                                                                                                                                                                               | 52.0 dB(A)           |                                   |                                                                                                                          |          |
| Efficiency (%)                                                                                                                                                                                                                                                                         | 25%                  | 70.4                              |                                                                                                                          |          |
|                                                                                                                                                                                                                                                                                        | 50%                  | 72.0                              |                                                                                                                          |          |
|                                                                                                                                                                                                                                                                                        | 75%                  | 77.0                              |                                                                                                                          |          |
|                                                                                                                                                                                                                                                                                        | 100%                 | 78.5                              |                                                                                                                          |          |
| Power Factor                                                                                                                                                                                                                                                                           | 25%                  | 0.26                              |                                                                                                                          |          |
|                                                                                                                                                                                                                                                                                        | 50%                  | 0.48                              |                                                                                                                          |          |
|                                                                                                                                                                                                                                                                                        | 75%                  | 0.61                              |                                                                                                                          |          |
|                                                                                                                                                                                                                                                                                        | 100%                 | 0.72                              |                                                                                                                          |          |
| Bearing type                                                                                                                                                                                                                                                                           | : Drive end 6203 ZZ  | Non drive end 6202 ZZ             | Foundation loads                                                                                                         |          |
| Sealing                                                                                                                                                                                                                                                                                | : V'Ring             | Without Bearing Seal              | Max. traction : 24 kgf                                                                                                   |          |
| Lubrication interval                                                                                                                                                                                                                                                                   | : -                  | -                                 | Max. compression : 35 kgf                                                                                                |          |
| Lubricant amount                                                                                                                                                                                                                                                                       | : -                  | -                                 |                                                                                                                          |          |
| 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  |
|                                                                                                                                                                                                                                                                                        |                      |                                   |                                                                                                                          |          |
| Performed by                                                                                                                                                                                                                                                                           |                      |                                   |                                                                                                                          |          |
| Checked by                                                                                                                                                                                                                                                                             |                      |                                   | Page                                                                                                                     | Revision |
| Date                                                                                                                                                                                                                                                                                   | 13/05/2022           |                                   | 1 / 2                                                                                                                    |          |

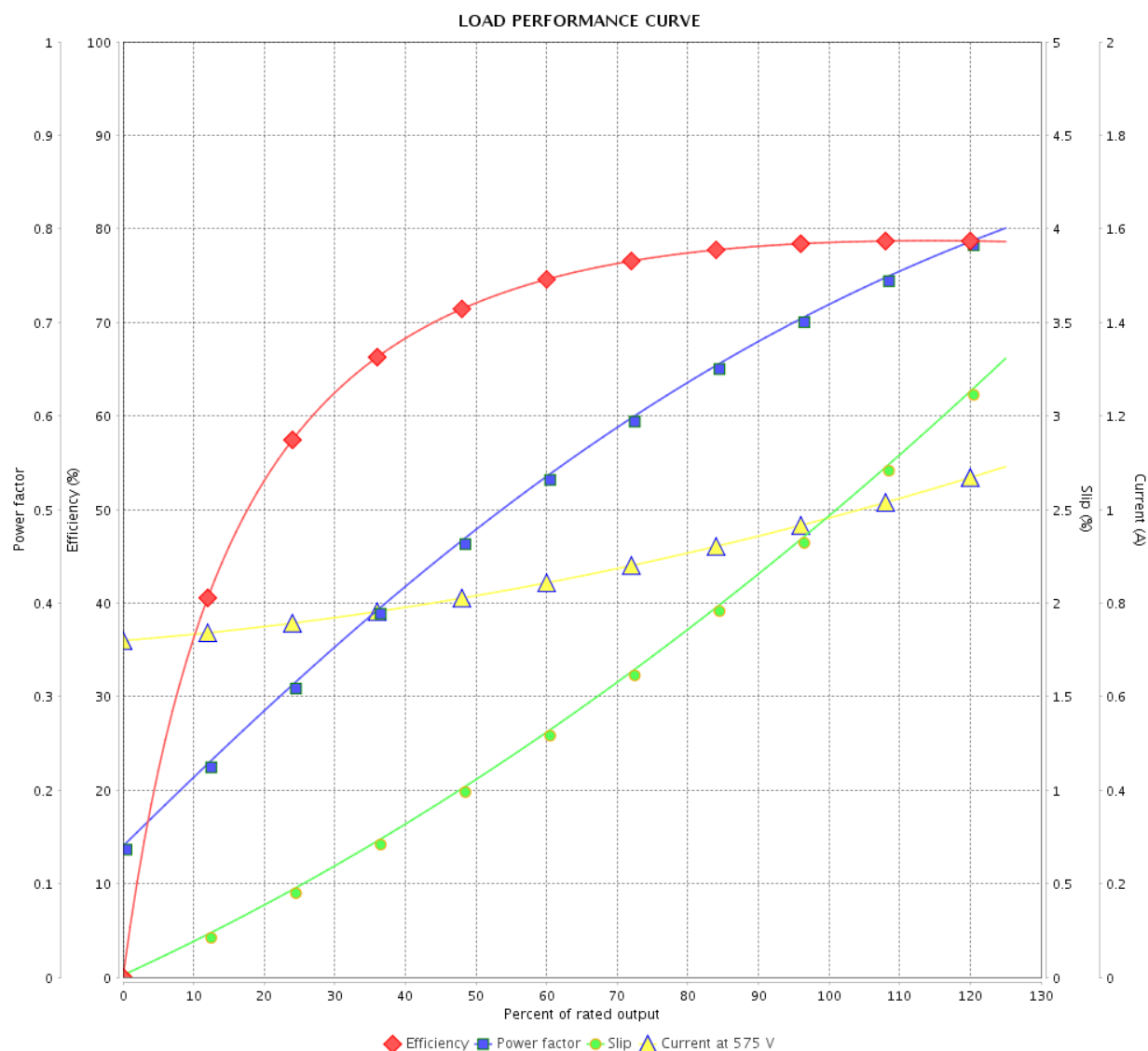
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 12894831



Performance : 575 V 60 Hz 4P

Rated current : 0.976 A  
 LRC : 6.9  
 Rated torque : 0.310 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 300 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.0027 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K

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

