

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



|  |                                   |                             |  |          |          |
|--|-----------------------------------|-----------------------------|--|----------|----------|
| Customer   | :                                 |                             |  |          |          |
| Product line   | : Standard Efficiency Three-Phase | Product code :              | 12894760   |          |          |
| Frame  | : 56HC                            | 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> | : 14.7 kg  |          |          |
| Protection degree  | : IP55                            | Moment of inertia (J)       | : 0.0041 kgm <sup>2</sup>  |          |          |
| Design   | : A                               |                             |  |          |          |
| Output [HP]  | 2                                 |                             |  |          |          |
| Poles  | 2                                 |                             |  |          |          |
| Frequency [Hz]   | 60                                |                             |  |          |          |
| Rated voltage [V]  | 575                               |                             |  |          |          |
| Rated current [A]  | 2.10                              |                             |  |          |          |
| L. R. Amperes [A]  | 16.1                              |                             |  |          |          |
| LRC [A]  | 7.7x(Code K)                      |                             |  |          |          |
| No load current [A]  | 0.829                             |                             |  |          |          |
| Rated speed [RPM]  | 3475                              |                             |  |          |          |
| Slip [%]   | 3.47                              |                             |  |          |          |
| Rated torque [kgfm]  | 0.418                             |                             |  |          |          |
| Locked rotor torque [%]  | 229                               |                             |  |          |          |
| Breakdown torque [%]   | 290                               |                             |  |          |          |
| Service factor   | 1.15                              |                             |  |          |          |
| Temperature rise   | 80 K                              |                             |  |          |          |
| Locked rotor time  | 19s (cold) 11s (hot)              |                             |  |          |          |
| Noise level <sup>2</sup>   | 68.0 dB(A)                        |                             |  |          |          |
| Efficiency (%)   | 25%                               | 73.9                        |  |          |          |
|  | 50%                               | 75.5                        |  |          |          |
|  | 75%                               | 78.5                        |  |          |          |
|  | 100%                              | 80.0                        |  |          |          |
| Power Factor   | 25%                               | 0.49                        |  |          |          |
|  | 50%                               | 0.76                        |  |          |          |
|  | 75%                               | 0.86                        |  |          |          |
|  | 100%                              | 0.90                        |  |          |          |
| Bearing type   | : Drive end                       | Non drive end               | Foundation loads   |          |          |
| Sealing  | : 6204 ZZ                         | 6202 ZZ                     | Max. traction  | : 31 kgf |          |
| Lubrication interval   | : V'Ring                          | Without                     | Max. compression   | : 46 kgf |          |
| Lubricant amount   |                                   | Bearing Seal                |  |          |          |
| 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    |          |

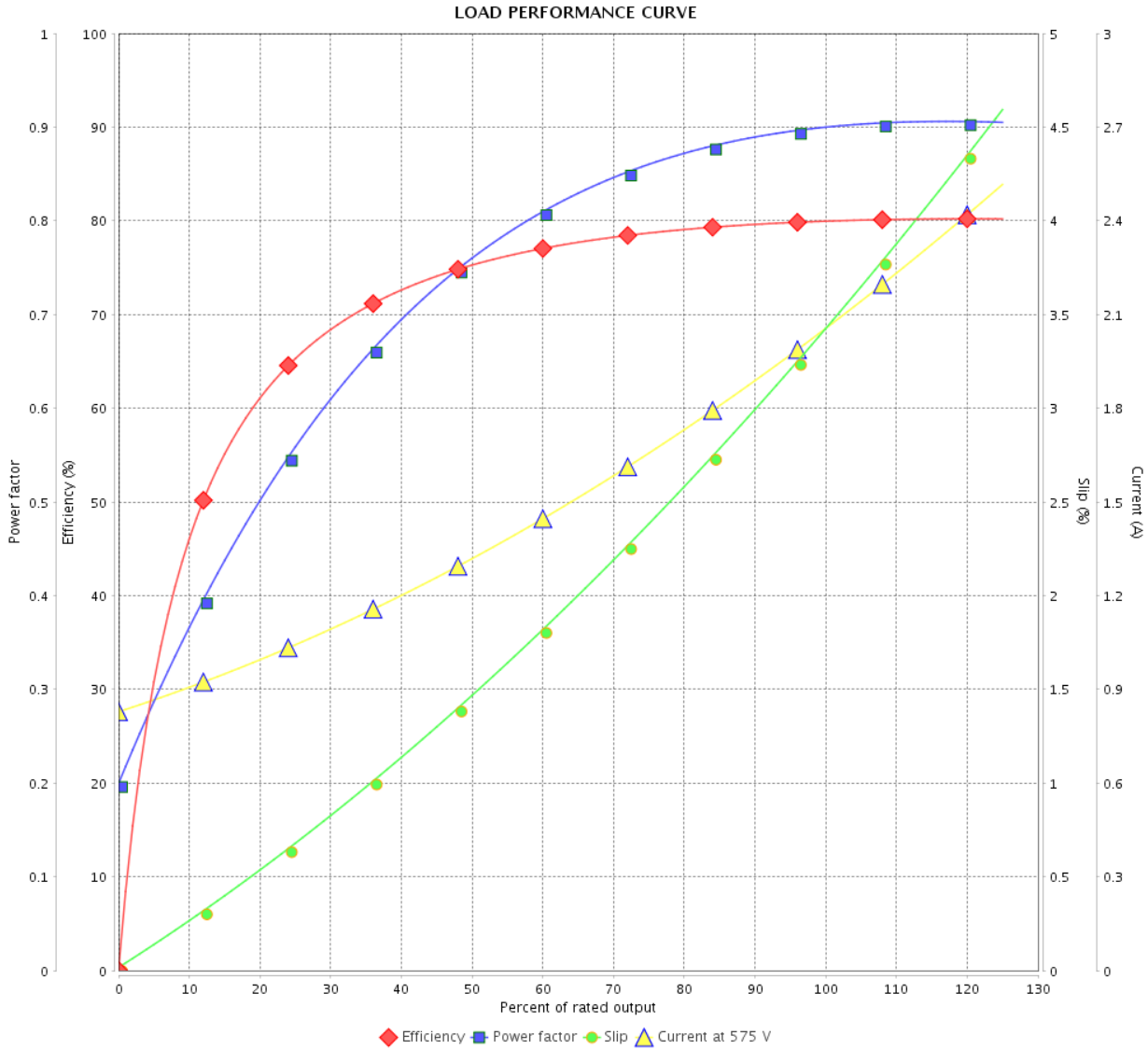
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : Standard Efficiency Three-Phase      Product code : 12894760



Performance : 575 V 60 Hz 2P

|                     |              |                       |                           |
|---------------------|--------------|-----------------------|---------------------------|
| Rated current       | : 2.10 A     | Moment of inertia (J) | : 0.0041 kgm <sup>2</sup> |
| LRC                 | : 7.7        | Duty cycle            | : Cont.(S1)               |
| Rated torque        | : 0.418 kgfm | Insulation class      | : F                       |
| Locked rotor torque | : 229 %      | Service factor        | : 1.15                    |
| Breakdown torque    | : 290 %      | Temperature rise      | : 80 K                    |
| Rated speed         | : 3475 rpm   | Design                | : A                       |

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