

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|  |                                       |                             |  |          |          |
|--|---------------------------------------|-----------------------------|--|----------|----------|
| Customer   | :                                     |                             |  |          |          |
| Product line   | : NEMA Premium Efficiency Three-Phase | Product code :              | 14949919   |          |          |
| Frame  | : 143/5TC                             | Cooling method              | : IC01 - ODP   |          |          |
| Insulation class   | : F                                   | Mounting                    | : W-6  |          |          |
| 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> | : 15.5 kg  |          |          |
| Design   | : B                                   | Moment of inertia (J)       | : 0.0046 kgm <sup>2</sup>  |          |          |
| Output [HP]  | 1                                     |                             |  |          |          |
| Poles  | 4                                     |                             |  |          |          |
| Frequency [Hz]   | 60                                    |                             |  |          |          |
| Rated voltage [V]  | 575                                   |                             |  |          |          |
| Rated current [A]  | 1.21                                  |                             |  |          |          |
| L. R. Amperes [A]  | 9.66                                  |                             |  |          |          |
| LRC [A]  | 8.0x(Code L)                          |                             |  |          |          |
| No load current [A]  | 0.766                                 |                             |  |          |          |
| Rated speed [RPM]  | 1760                                  |                             |  |          |          |
| Slip [%]   | 2.22                                  |                             |  |          |          |
| Rated torque [kgfm]  | 0.412                                 |                             |  |          |          |
| Locked rotor torque [%]  | 290                                   |                             |  |          |          |
| Breakdown torque [%]   | 360                                   |                             |  |          |          |
| Service factor   | 1.15                                  |                             |  |          |          |
| Temperature rise   | 80 K                                  |                             |  |          |          |
| Locked rotor time  | 39s (cold) 22s (hot)                  |                             |  |          |          |
| Noise level <sup>2</sup>   | 52.0 dB(A)                            |                             |  |          |          |
| Efficiency (%)   | 25%                                   |                             |  |          |          |
|  | 50%                                   | 81.5                        |  |          |          |
|  | 75%                                   | 84.0                        |  |          |          |
|  | 100%                                  | 85.5                        |  |          |          |
| Power Factor   | 25%                                   |                             |  |          |          |
|  | 50%                                   | 0.51                        |  |          |          |
|  | 75%                                   | 0.65                        |  |          |          |
|  | 100%                                  | 0.73                        |  |          |          |
| Bearing type   | : Drive end                           | Non drive end               | Foundation loads   |          |          |
| Sealing  | : 6205 ZZ                             | 6203 ZZ                     | Max. traction  | : 34 kgf |          |
| Lubrication interval   | : Without                             | Without                     | Max. compression   | : 50 kgf |          |
| Lubricant amount   | : Bearing Seal                        | Bearing Seal                |  |          |          |
| Lubricant type   | : -                                   | -                           |  |          |          |
| 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   | 12/05/2022                            |                             |  | 1 / 2    |          |

# LOAD PERFORMANCE CURVE

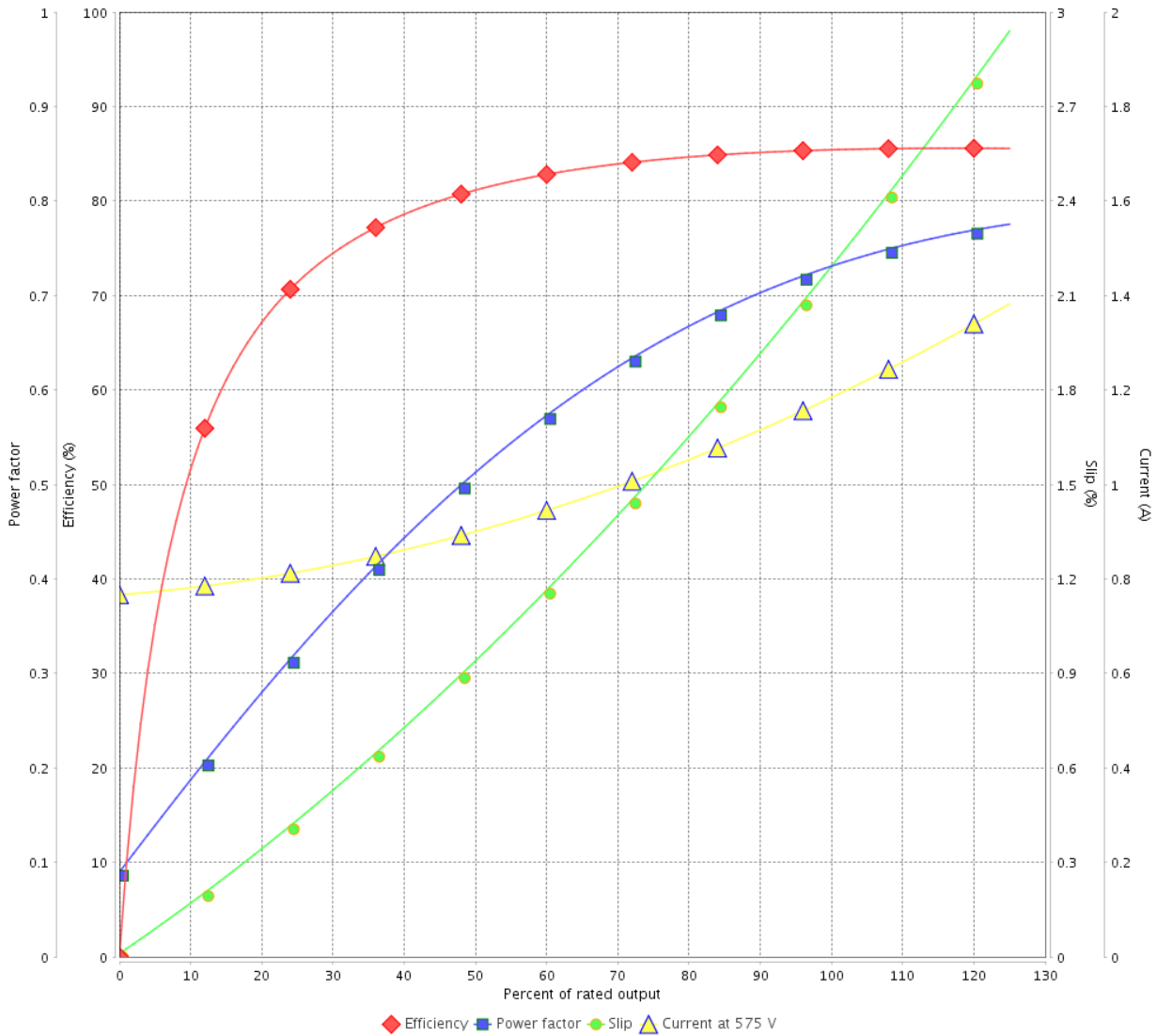
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 14949919

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 4P

|                     |              |                       |                           |
|---------------------|--------------|-----------------------|---------------------------|
| Rated current       | : 1.21 A     | Moment of inertia (J) | : 0.0046 kgm <sup>2</sup> |
| LRC                 | : 8.0        | Duty cycle            | : Cont.(S1)               |
| Rated torque        | : 0.412 kgfm | Insulation class      | : F                       |
| Locked rotor torque | : 290 %      | Service factor        | : 1.15                    |
| Breakdown torque    | : 360 %      | Temperature rise      | : 80 K                    |
| Rated speed         | : 1760 rpm   | Design                | : B                       |

| Rev.         | Changes Summary | Performed | Checked       | Date     |
|--------------|-----------------|-----------|---------------|----------|
|              |                 |           |               |          |
| Performed by |                 |           | Page<br>2 / 2 | Revision |
| Checked by   |                 |           |               |          |
| Date         | 12/05/2022      |           |               |          |