

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|  |                           |   |  |                            |          |
|--|---------------------------|---|--|----------------------------|----------|
| Customer :   |                           |   |  |                            |          |
| Product line   |                           | : Saw Arbor Motor Standard Efficiency Three-Phase |  | Product code : 10733249    |          |
| Frame  | : 80M/MS                  | Locked rotor time                                 | : 12s (cold) 7s (hot)  |                            |          |
| Output   | : 5 HP (3.7 kW)           | Temperature rise                                  | : 80 K   |                            |          |
| Poles  | : 2                       | Duty cycle  | : S1   |                            |          |
| Frequency  | : 60 Hz                   | Ambient temperature                               | : -20°C to +40°C   |                            |          |
| Rated voltage  | : 575 V                   | Altitude  | : 1000 m.a.s.l.  |                            |          |
| Rated current  | : 5.32 A                  | Protection degree                                 | : IP54   |                            |          |
| L. R. Amperes  | : 42.5 A                  | Cooling method                                    | : IC411 - TEFC   |                            |          |
| LRC  | : 8.0                     | Mounting  | : B3R(D)   |                            |          |
| No load current  | : 2.30 A                  | Rotation <sup>1</sup>                             | : CW   |                            |          |
| Rated speed  | : 3470 rpm                | Noise level <sup>2</sup>                          | : 62.0 dB(A)   |                            |          |
| Slip   | : 3.61 %                  | Starting method                                   | : Direct On Line   |                            |          |
| Rated torque   | : 1.05 kgfm               | Approx. weight <sup>3</sup>                       | : 45.0 kg  |                            |          |
| Locked rotor torque  | : 340 %                   |   |  |                            |          |
| Breakdown torque   | : 409 %                   |   |  |                            |          |
| Insulation class   | : F                       |   |  |                            |          |
| Service factor   | : 1.00                    |   |  |                            |          |
| Moment of inertia (J)  | : 0.0041 kgm <sup>2</sup> |   |  |                            |          |
| Design   | : N                       |   |  |                            |          |
| Output   | 50%                       | 75%   | 100%   | Foundation loads           |          |
| Efficiency (%)   | 82.0                      | 84.5  | 85.0   | Max. traction : 67 kgf     |          |
| Power Factor   | 0.66                      | 0.77  | 0.82   | Max. compression : 112 kgf |          |
|  |                           | <u>Drive end</u>                                  | <u>Non drive end</u>   |                            |          |
| Bearing type   | :                         | 6307 ZZ   | 6207 ZZ  |                            |          |
| Sealing  | :                         | Without Bearing Seal                              | Without Bearing Seal   |                            |          |
| Lubrication interval   | :                         | -   | -  |                            |          |
| 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                    | Date     |
| Performed by   |                           |   |  |                            |          |
| Checked by   |                           |   |  | Page                       | Revision |
| Date   | 14/01/2024                |   |  | 1 / 2                      |          |

# LOAD PERFORMANCE CURVE

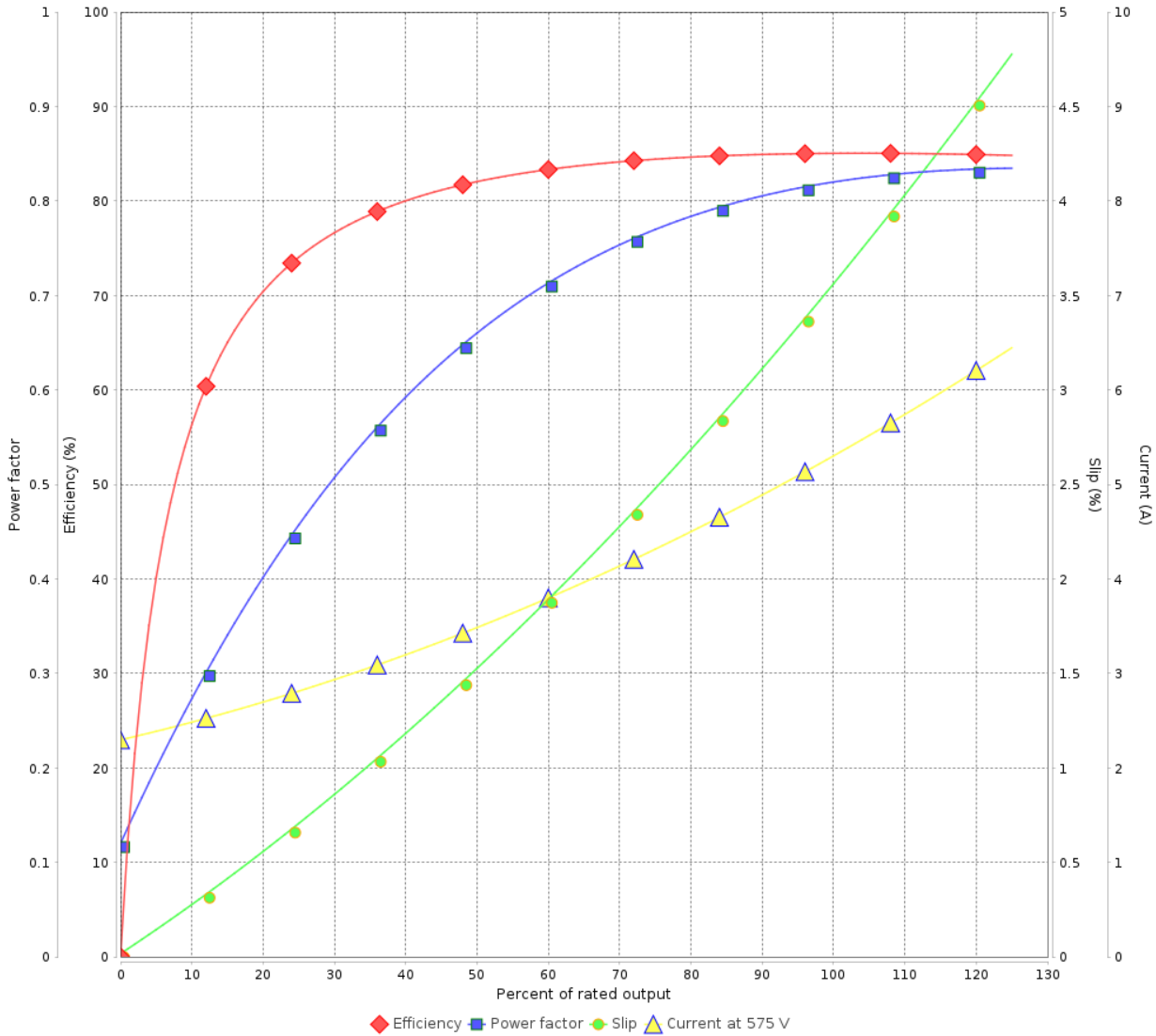
Three Phase Induction Motor - Squirrel Cage



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

Product line : Saw Arbor Motor Standard Efficiency Three-Phase      Product code : 10733249

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 2P

|                     |             |                       |                           |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current       | : 5.32 A    | Moment of inertia (J) | : 0.0041 kgm <sup>2</sup> |
| LRC                 | : 8.0       | Duty cycle            | : S1                      |
| Rated torque        | : 1.05 kgfm | Insulation class      | : F                       |
| Locked rotor torque | : 340 %     | Service factor        | : 1.00                    |
| Breakdown torque    | : 409 %     | Temperature rise      | : 80 K                    |
| Rated speed         | : 3470 rpm  | Design                | : N                       |

| Rev.         | Changes Summary | Performed | Checked       | Date     |
|--------------|-----------------|-----------|---------------|----------|
|              |                 |           |               |          |
| Performed by |                 |           | Page<br>2 / 2 | Revision |
| Checked by   |                 |           |               |          |
| Date         | 14/01/2024      |           |               |          |