

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|  |  |                         |  |           |                            |          |
|--|--|-------------------------|--|-----------|----------------------------|----------|
| Customer :   |  |                         |  |           |                            |          |
| Product line : W40 NEMA Premium Efficiency Three-Phase   |  | Product code : 14270938 |  |           |                            |          |
| Frame : 364/5T<br>Output : 60 HP (45 kW)<br>Poles : 4<br>Frequency : 60 Hz<br>Rated voltage : 575 V<br>Rated current : 55.9 A<br>L. R. Amperes : 363 A<br>LRC : 6.5x(Code G)<br>No load current : 19.8 A<br>Rated speed : 1780 rpm<br>Slip : 1.11 %<br>Rated torque : 24.5 kgfm<br>Locked rotor torque : 200 %<br>Breakdown torque : 240 %<br>Insulation class : F<br>Service factor : 1.25<br>Moment of inertia (J) : 0.6555 kgm <sup>2</sup><br>Design : B | Locked rotor time : 34s (cold) 19s (hot)<br>Temperature rise : 80 K<br>Duty cycle : Cont.(S1)<br>Ambient temperature : -20°C to +40°C<br>Altitude : 1000 m.a.s.l.<br>Protection degree : IP23<br>Cooling method : IC01 - ODP<br>Mounting : F-1<br>Rotation <sup>1</sup> : Both (CW and CCW)<br>Noise level <sup>2</sup> : 69.0 dB(A)<br>Starting method : Direct On Line<br>Approx. weight <sup>3</sup> : 337 kg |                         |  |           |                            |          |
| Output   | 25%  | 50%                     | 75%  | 100%      | Foundation loads           |          |
| Efficiency (%)   | 94.4   | 94.5                    | 95.0   | 95.0      | Max. traction : 491 kgf    |          |
| Power Factor   | 0.48   | 0.73                    | 0.82   | 0.85      | Max. compression : 828 kgf |          |
|  |  | <u>Drive end</u>        |  |           | <u>Non drive end</u>       |          |
| Bearing type   | :  | 6314 C3                 |  |           | 6212 Z C3                  |          |
| Sealing  | :  | Without Bearing Seal    |  |           | Without Bearing Seal       |          |
| Lubrication interval   | :  | 20000 h                 |  |           | 20000 h                    |          |
| Lubricant amount   | :  | 27 g                    |  |           | 13 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   | 15/01/2024   |                         |  |           | 1 / 2                      |          |

# LOAD PERFORMANCE CURVE

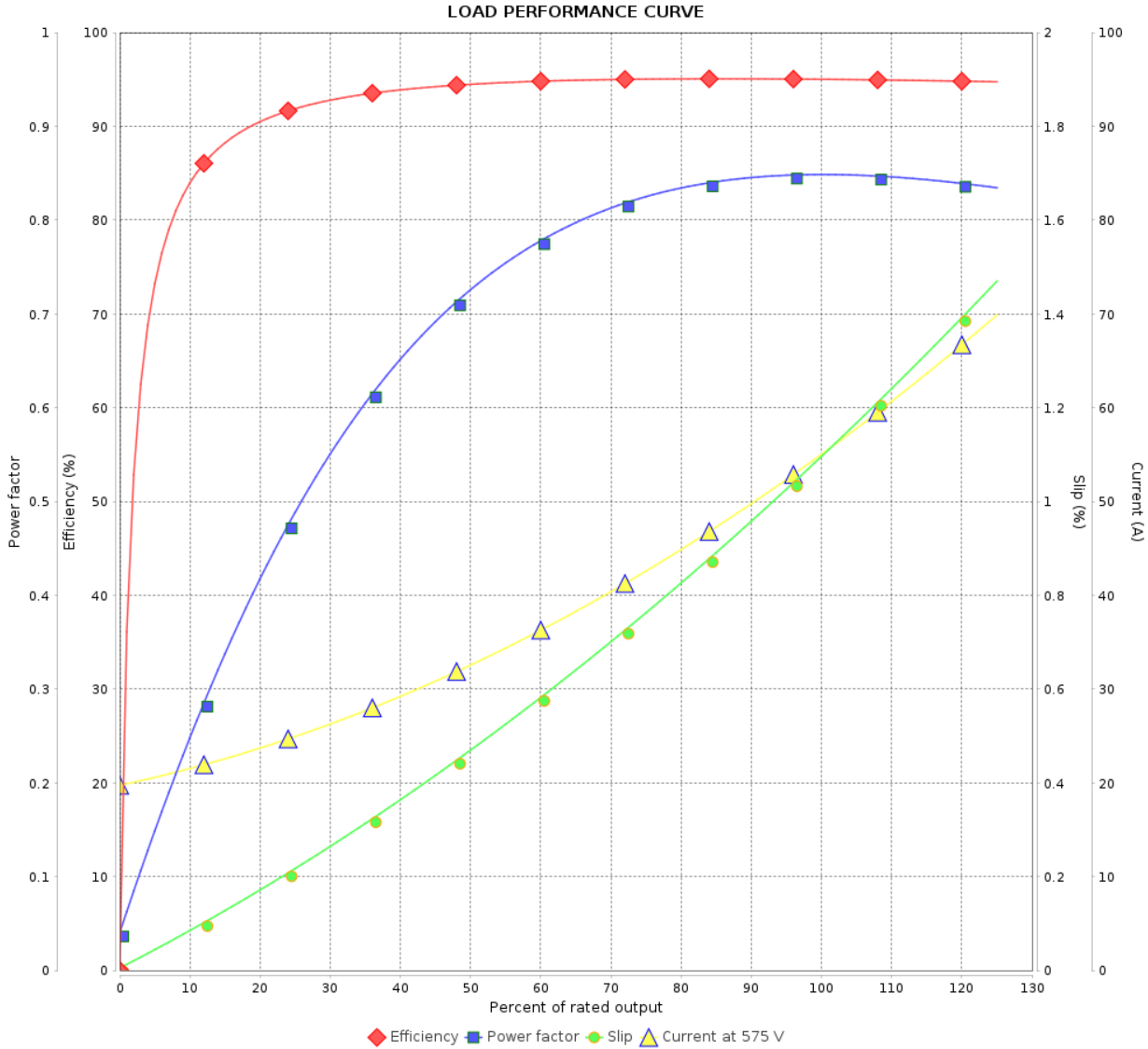
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Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14270938



Performance : 575 V 60 Hz 4P

Rated current : 55.9 A  
 LRC : 6.5  
 Rated torque : 24.5 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.6555 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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