

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



|                                                                                                                                                                                                                                                                                        |                 |                                                                                                                                                                                                                  |                         |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------|
| Customer :                                                                                                                                                                                                                                                                             |                 |                                                                                                                                                                                                                  |                         |          |
| Product line                                                                                                                                                                                                                                                                           |                 | : Standard Efficiency Three-Phase                                                                                                                                                                                | Product code : 12894791 |          |
| Frame : 56C<br>Insulation class : F<br>Duty cycle : Cont.(S1)<br>Ambient temperature : -20°C to +40°C<br>Altitude : 1000 m.a.s.l.<br>Protection degree : IP55<br>Design : A                                                                                                            |                 | Cooling method : IC411 - TEFC<br>Mounting : F-1<br>Rotation <sup>1</sup> : Both (CW and CCW)<br>Starting method : Direct On Line<br>Approx. weight <sup>3</sup> : 12.3 kg<br>Moment of inertia (J) : 0.0033 kgm² |                         |          |
| Output [HP]                                                                                                                                                                                                                                                                            |                 | 1.5                                                                                                                                                                                                              |                         |          |
| Poles                                                                                                                                                                                                                                                                                  |                 | 2                                                                                                                                                                                                                |                         |          |
| Frequency [Hz]                                                                                                                                                                                                                                                                         |                 | 60                                                                                                                                                                                                               |                         |          |
| Rated voltage [V]                                                                                                                                                                                                                                                                      |                 | 575                                                                                                                                                                                                              |                         |          |
| Rated current [A]                                                                                                                                                                                                                                                                      |                 | 1.59                                                                                                                                                                                                             |                         |          |
| L. R. Amperes [A]                                                                                                                                                                                                                                                                      |                 | 11.5                                                                                                                                                                                                             |                         |          |
| LRC [A]                                                                                                                                                                                                                                                                                |                 | 7.2x(Code J)                                                                                                                                                                                                     |                         |          |
| No load current [A]                                                                                                                                                                                                                                                                    |                 | 0.652                                                                                                                                                                                                            |                         |          |
| Rated speed [RPM]                                                                                                                                                                                                                                                                      |                 | 3460                                                                                                                                                                                                             |                         |          |
| Slip [%]                                                                                                                                                                                                                                                                               |                 | 3.89                                                                                                                                                                                                             |                         |          |
| Rated torque [kgfm]                                                                                                                                                                                                                                                                    |                 | 0.315                                                                                                                                                                                                            |                         |          |
| Locked rotor torque [%]                                                                                                                                                                                                                                                                |                 | 240                                                                                                                                                                                                              |                         |          |
| Breakdown torque [%]                                                                                                                                                                                                                                                                   |                 | 270                                                                                                                                                                                                              |                         |          |
| Service factor                                                                                                                                                                                                                                                                         |                 | 1.15                                                                                                                                                                                                             |                         |          |
| Temperature rise                                                                                                                                                                                                                                                                       |                 | 80 K                                                                                                                                                                                                             |                         |          |
| Locked rotor time                                                                                                                                                                                                                                                                      |                 | 21s (cold) 12s (hot)                                                                                                                                                                                             |                         |          |
| Noise level <sup>2</sup>                                                                                                                                                                                                                                                               |                 | 68.0 dB(A)                                                                                                                                                                                                       |                         |          |
| Efficiency (%)                                                                                                                                                                                                                                                                         | 25%             | 70.4                                                                                                                                                                                                             |                         |          |
|                                                                                                                                                                                                                                                                                        | 50%             | 72.0                                                                                                                                                                                                             |                         |          |
|                                                                                                                                                                                                                                                                                        | 75%             | 75.5                                                                                                                                                                                                             |                         |          |
|                                                                                                                                                                                                                                                                                        | 100%            | 77.0                                                                                                                                                                                                             |                         |          |
| Power Factor                                                                                                                                                                                                                                                                           | 25%             | 0.49                                                                                                                                                                                                             |                         |          |
|                                                                                                                                                                                                                                                                                        | 50%             | 0.76                                                                                                                                                                                                             |                         |          |
|                                                                                                                                                                                                                                                                                        | 75%             | 0.85                                                                                                                                                                                                             |                         |          |
|                                                                                                                                                                                                                                                                                        | 100%            | 0.90                                                                                                                                                                                                             |                         |          |
| Bearing type : Drive end 6204 ZZ Non drive end 6202 ZZ<br>Sealing : V'Ring Without Bearing Seal<br>Lubrication interval : - -<br>Lubricant amount : - -<br>Lubricant type : Mobil Polyrex EM                                                                                           |                 | Foundation loads<br>Max. traction : 21 kgf<br>Max. compression : 33 kgf                                                                                                                                          |                         |          |
| 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                   |          |

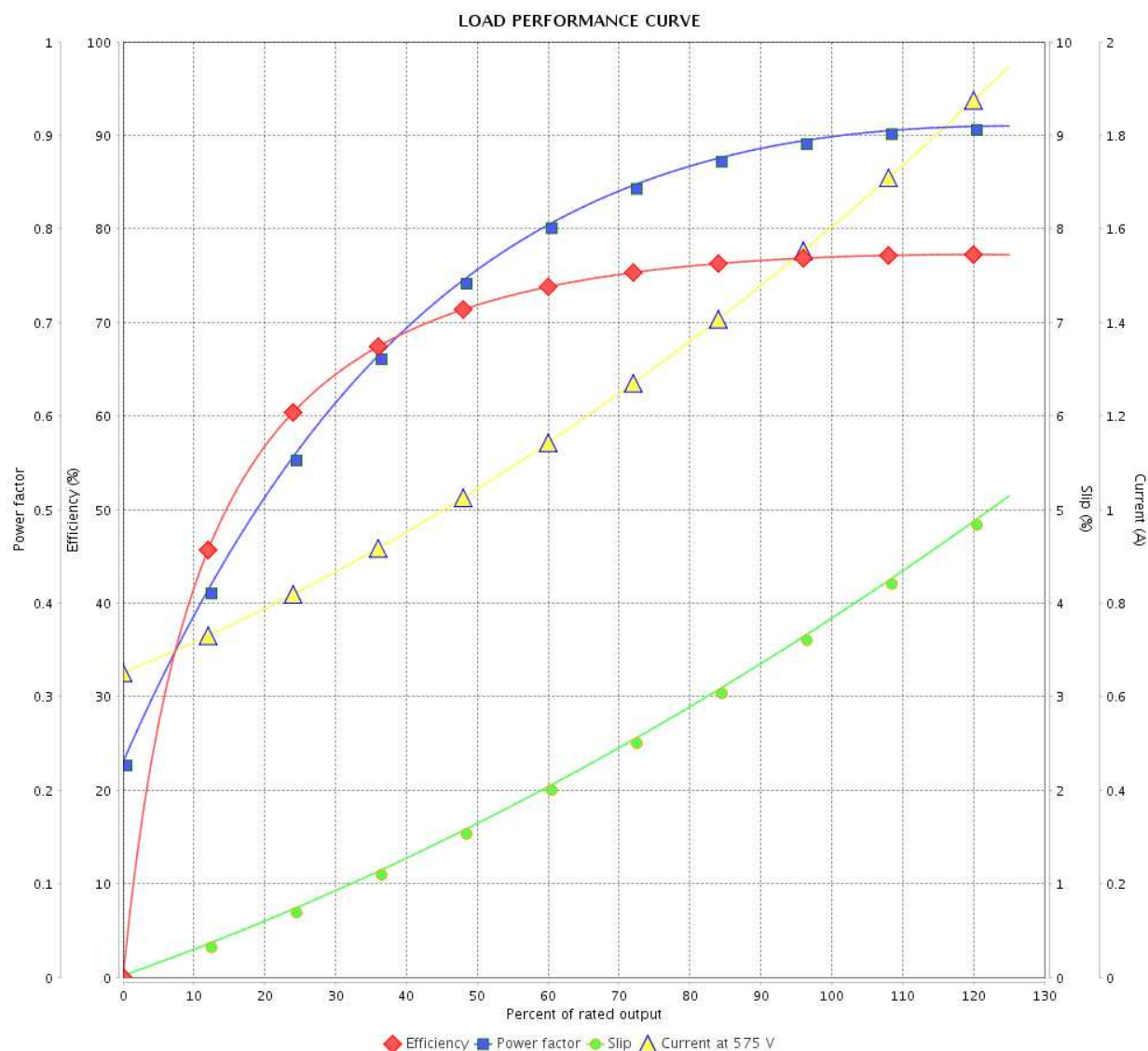
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 12894791



Performance : 575 V 60 Hz 2P

Rated current : 1.59 A  
 LRC : 7.2  
 Rated torque : 0.315 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 270 %  
 Rated speed : 3460 rpm

Moment of inertia (J) : 0.0033 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : A

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

