

# DATA SHEET

## Single Phase Induction Motor - Squirrel Cage



|                                                                                                                                                                                                                                                                                        |                     |                                                                                                                                                                                                                              |            |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|
| Customer :                                                                                                                                                                                                                                                                             |                     |                                                                                                                                                                                                                              |            |          |
| Product line : Single-Phase                                                                                                                                                                                                                                                            |                     | Product code : 13509613                                                                                                                                                                                                      |            |          |
| 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 : N                                                                                                            |                     | 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> : 14.1 kg<br>Moment of inertia (J) : 0.0020 kgm <sup>2</sup> |            |          |
| Output [HP]                                                                                                                                                                                                                                                                            | 1                   |                                                                                                                                                                                                                              |            |          |
| Poles                                                                                                                                                                                                                                                                                  | 2                   |                                                                                                                                                                                                                              |            |          |
| Frequency [Hz]                                                                                                                                                                                                                                                                         | 60                  |                                                                                                                                                                                                                              |            |          |
| Rated voltage [V]                                                                                                                                                                                                                                                                      | 115/208-230         |                                                                                                                                                                                                                              |            |          |
| Rated current [A]                                                                                                                                                                                                                                                                      | 10.1/5.64-5.06      |                                                                                                                                                                                                                              |            |          |
| L. R. Amperes [A]                                                                                                                                                                                                                                                                      | 85.0/47.4-42.5      |                                                                                                                                                                                                                              |            |          |
| LRC [A]                                                                                                                                                                                                                                                                                | 8.4x(Code L)        |                                                                                                                                                                                                                              |            |          |
| No load current [A]                                                                                                                                                                                                                                                                    | 5.50/2.37-2.75      |                                                                                                                                                                                                                              |            |          |
| Rated speed [RPM]                                                                                                                                                                                                                                                                      | 3500                |                                                                                                                                                                                                                              |            |          |
| Slip [%]                                                                                                                                                                                                                                                                               | 2.78                |                                                                                                                                                                                                                              |            |          |
| Rated torque [kgfm]                                                                                                                                                                                                                                                                    | 0.207               |                                                                                                                                                                                                                              |            |          |
| Locked rotor torque [%]                                                                                                                                                                                                                                                                | 280                 |                                                                                                                                                                                                                              |            |          |
| Breakdown torque [%]                                                                                                                                                                                                                                                                   | 280                 |                                                                                                                                                                                                                              |            |          |
| Service factor                                                                                                                                                                                                                                                                         |                     |                                                                                                                                                                                                                              |            |          |
| Temperature rise                                                                                                                                                                                                                                                                       | 80 K                |                                                                                                                                                                                                                              |            |          |
| Locked rotor time                                                                                                                                                                                                                                                                      | 14s (cold) 8s (hot) |                                                                                                                                                                                                                              |            |          |
| Noise level <sup>2</sup>                                                                                                                                                                                                                                                               | 68.0 dB(A)          |                                                                                                                                                                                                                              |            |          |
| Efficiency (%)                                                                                                                                                                                                                                                                         | 25%                 | 51.0                                                                                                                                                                                                                         |            |          |
|                                                                                                                                                                                                                                                                                        | 50%                 | 55.0                                                                                                                                                                                                                         |            |          |
|                                                                                                                                                                                                                                                                                        | 75%                 | 64.0                                                                                                                                                                                                                         |            |          |
|                                                                                                                                                                                                                                                                                        | 100%                | 70.0                                                                                                                                                                                                                         |            |          |
| Power Factor                                                                                                                                                                                                                                                                           | 25%                 | 0.51                                                                                                                                                                                                                         |            |          |
|                                                                                                                                                                                                                                                                                        | 50%                 | 0.82                                                                                                                                                                                                                         |            |          |
|                                                                                                                                                                                                                                                                                        | 75%                 | 0.88                                                                                                                                                                                                                         |            |          |
|                                                                                                                                                                                                                                                                                        | 100%                | 0.92                                                                                                                                                                                                                         |            |          |
| 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 : 11 kgf<br>Max. compression : 25 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                                                                                                                                                                                                                                                                             |                     |                                                                                                                                                                                                                              |            |          |
| Date                                                                                                                                                                                                                                                                                   | 11/05/2022          |                                                                                                                                                                                                                              | Page 1 / 2 | Revision |

# LOAD PERFORMANCE CURVE

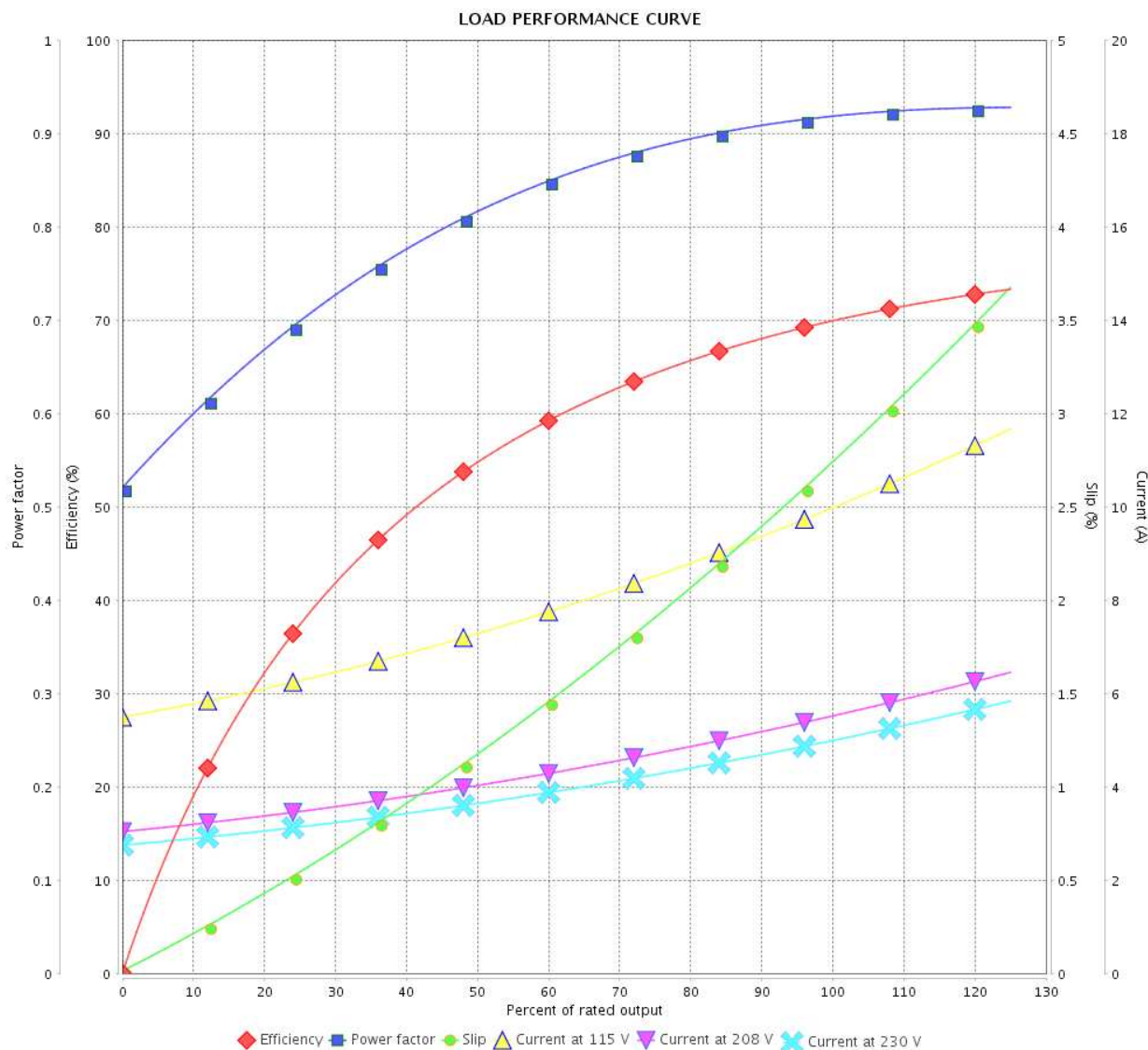
Single Phase Induction Motor - Squirrel Cage



Customer :

Product line : Single-Phase

Product code : 13509613



Performance : 115/208-230 V 60 Hz 2P

Rated current : 10.1/5.64-5.06 A  
 LRC : 8.4  
 Rated torque : 0.207 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 280 %  
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0020 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : N

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|--------------|-----------------|--|-----------|---------|----------|
|              |                 |  |           |         |          |
| Performed by |                 |  |           | Page    | Revision |
| Checked by   |                 |  |           | 2 / 2   |          |
| Date         |                 |  |           |         |          |

