

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|  |                           |   |  |                         |                      |          |
|--|---------------------------|---|--|-------------------------|----------------------|----------|
| Customer :   |                           |   |  |                         |                      |          |
| Product line   |                           | : W22 P Base NEMA Premium Efficiency<br>Three-Phase |  | Product code : 13954310 |                      |          |
| Frame  | : 182/4HP                 |   | Locked rotor time  | : 45s (cold) 25s (hot)  |                      |          |
| Output   | : 5 HP (3.7 kW)           |   | Temperature rise   | : 80 K                  |                      |          |
| Poles  | : 2                       |   | Duty cycle   | : Cont.(S1)             |                      |          |
| Frequency  | : 60 Hz                   |   | Ambient temperature  | : -20°C to +40°C        |                      |          |
| Rated voltage  | : 575 V                   |   | Altitude   | : 1000 m.a.s.l.         |                      |          |
| Rated current  | : 4.72 A                  |   | Protection degree  | : IP55                  |                      |          |
| L. R. Amperes  | : 35.9 A                  |   | Cooling method   | : IC411 - TEFC          |                      |          |
| LRC  | : 7.6x(Code J)            |   | Mounting   | : W-6                   |                      |          |
| No load current  | : 1.60 A                  |   | Rotation <sup>1</sup>  | : Both (CW and CCW)     |                      |          |
| Rated speed  | : 3485 rpm                |   | Noise level <sup>2</sup>   | : 69.0 dB(A)            |                      |          |
| Slip   | : 3.19 %                  |   | Starting method  | : Direct On Line        |                      |          |
| Rated torque   | : 1.04 kgfm               |   | Approx. weight <sup>3</sup>  | : 47.0 kg               |                      |          |
| Locked rotor torque  | : 229 %                   |   |  |                         |                      |          |
| Breakdown torque   | : 350 %                   |   |  |                         |                      |          |
| Insulation class   | : F                       |   |  |                         |                      |          |
| Service factor   | : 1.25                    |   |  |                         |                      |          |
| Moment of inertia (J)  | : 0.0094 kgm <sup>2</sup> |   |  |                         |                      |          |
| Design   | : B                       |   |  |                         |                      |          |
| Output   | 25%                       | 50%   | 75%  | 100%                    | Foundation loads     |          |
| Efficiency (%)   | 0.000                     | 86.5  | 88.5   | 88.5                    | Max. traction        |          |
| Power Factor   | 0.00                      | 0.76  | 0.85   | 0.89                    | Max. compression     |          |
|  |                           |   | <u>Drive end</u>   |                         | <u>Non drive end</u> |          |
| Bearing type   | :                         | 6308 ZZ   |  | 6206 ZZ                 |                      |          |
| Sealing  | :                         | V'Ring  |  | V'Ring                  |                      |          |
| Lubrication interval   | :                         | 0 h   |  | 0 h                     |                      |          |
| Lubricant amount   | :                         | 0 g   |  | 0 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

Three Phase Induction Motor - Squirrel Cage

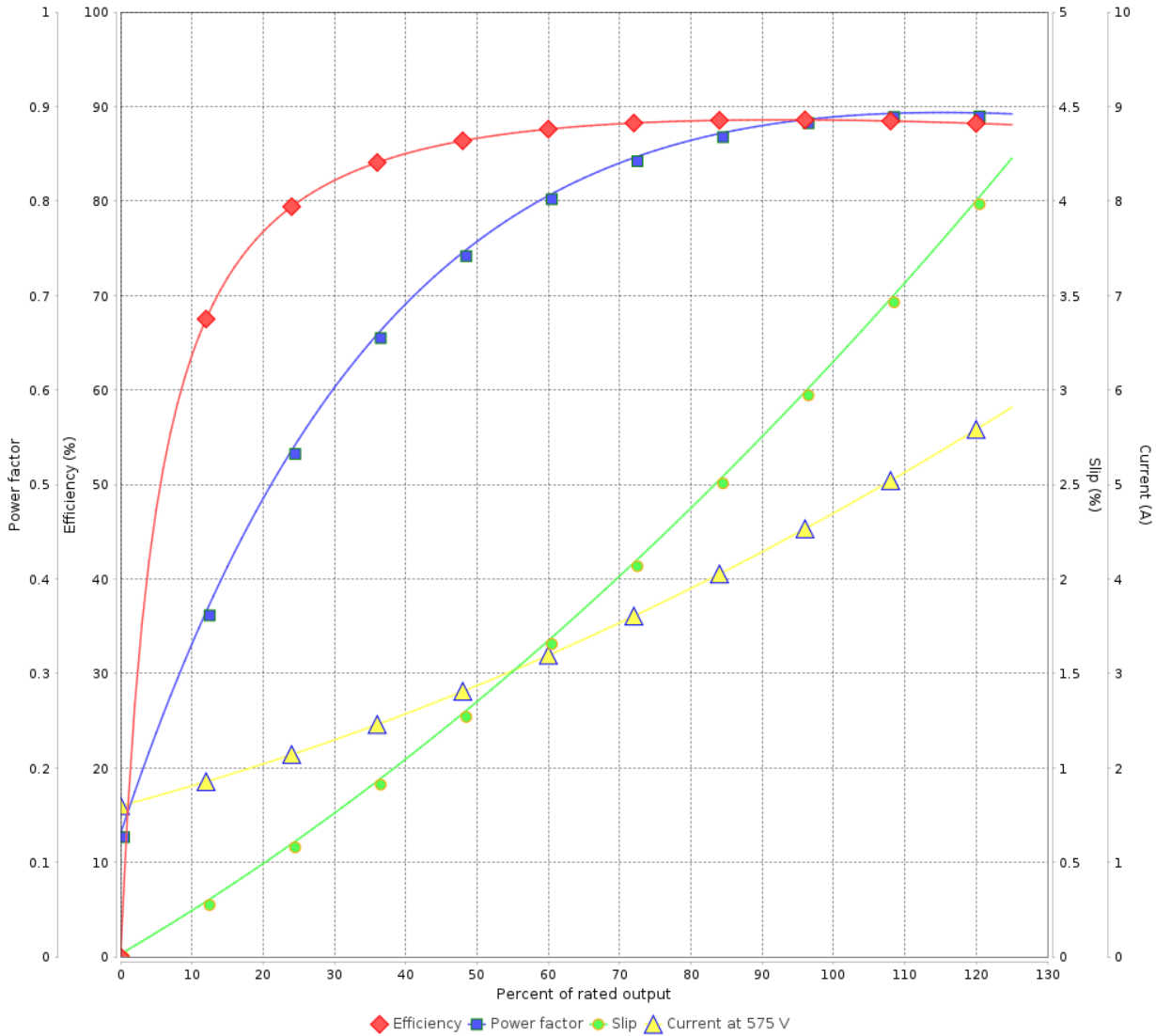


Customer :

Product line : W22 P Base NEMA Premium Efficiency  
Three-Phase

Product code : 13954310

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 2P

Rated current : 4.72 A  
 LRC : 7.6  
 Rated torque : 1.04 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 350 %  
 Rated speed : 3485 rpm

Moment of inertia (J) : 0.0094 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked       | Date     |
|--------------|-----------------|-----------|---------------|----------|
|              |                 |           |               |          |
| Performed by |                 |           | Page<br>2 / 2 | Revision |
| Checked by   |                 |           |               |          |
| Date         | 15/01/2024      |           |               |          |