

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|  |                           |                  |                             |  |               |                |
|--|---------------------------|------------------|-----------------------------|--|---------------|----------------|
| Customer :   |                           |                  |                             |  |               |                |
| Product line : W22 NEMA Premium Efficiency Three-Phase   |                           |                  | Product code : 12717664     |  |               |                |
| Frame  | : 143/5T                  |                  | Locked rotor time           | : 37s (cold) 21s (hot)   |               |                |
| Output   | : 1.5 HP (1.1 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  | : 1.57 A                  |                  | Protection degree           | : IP55   |               |                |
| L. R. Amperes  | : 14.0 A                  |                  | Cooling method              | : IC411 - TEFC   |               |                |
| LRC  | : 8.9x(Code L)            |                  | Mounting                    | : F-1  |               |                |
| No load current  | : 0.664 A                 |                  | Rotation <sup>1</sup>       | : Both (CW and CCW)  |               |                |
| Rated speed  | : 3480 rpm                |                  | Noise level <sup>2</sup>    | : 68.0 dB(A)   |               |                |
| Slip   | : 3.33 %                  |                  | Starting method             | : Direct On Line   |               |                |
| Rated torque   | : 0.313 kgfm              |                  | Approx. weight <sup>3</sup> | : 19.9 kg  |               |                |
| Locked rotor torque  | : 310 %                   |                  |                             |  |               |                |
| Breakdown torque   | : 370 %                   |                  |                             |  |               |                |
| Insulation class   | : F                       |                  |                             |  |               |                |
| Service factor   | : 1.25                    |                  |                             |  |               |                |
| Moment of inertia (J)  | : 0.0020 kgm <sup>2</sup> |                  |                             |  |               |                |
| Design   | : B                       |                  |                             |  |               |                |
| Output   | 50%                       | 75%              | 100%                        | Foundation loads   |               |                |
| Efficiency (%)   | 81.5                      | 84.0             | 84.0                        | Max. traction : 23 kgf   |               |                |
| Power Factor   | 0.68                      | 0.78             | 0.84                        | Max. compression : 43 kgf  |               |                |
| Losses at normative operating points (speed;torque), in percentage of rated output power   |                           |                  |                             |  |               |                |
| P1 (0,9;1,0)   | P2 (0,5;1,0)              | P3 (0,25;1,0)    | P4 (0,9;0,5)                | P5 (0,5;0,5)   | P6 (0,5;0,25) | P7 (0,25;0,25) |
| 17.7   | 13.3                      | 12.1             | 9.8                         | 5.6  | 3.8           | 2.4            |
|  |                           | <u>Drive end</u> |                             | <u>Non drive end</u>   |               |                |
| Bearing type   | :                         | 6205 ZZ          |                             | 6204 ZZ  |               |                |
| Sealing  | :                         | V'Ring           |                             | V'Ring   |               |                |
| 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   | 31/01/2024                |                  |                             |  | 1 / 2         |                |

# LOAD PERFORMANCE CURVE

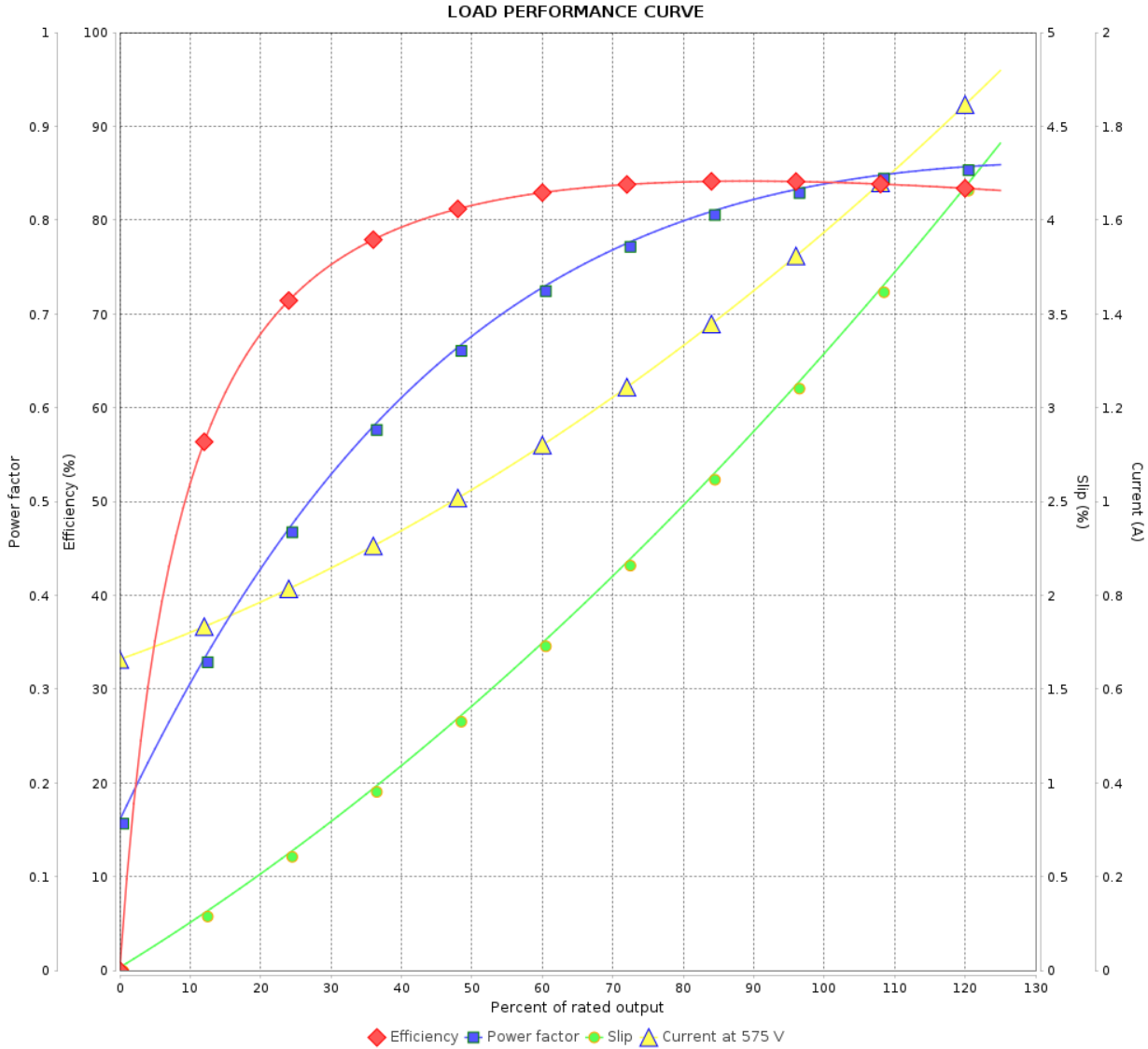
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Customer : \_\_\_\_\_

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12717664



Performance : 575 V 60 Hz 2P

Rated current : 1.57 A  
 LRC : 8.9  
 Rated torque : 0.313 kgfm  
 Locked rotor torque : 310 %  
 Breakdown torque : 370 %  
 Rated speed : 3480 rpm

Moment of inertia (J) : 0.0020 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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| Performed by |                 |           | Page<br>2 / 2 | Revision |
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