

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|  |                 |  |              |  |                             |                |                      |
|--|-----------------|--|--------------|--|-----------------------------|----------------|----------------------|
| Customer :   |                 |  |              |  |                             |                |                      |
| Product line   |                 | : W22 IEEE 841 NEMA Premium Efficiency Three-Phase |              |  | Product code :              |                | 11453267             |
| Frame  | :               | 444/5T   |              |  | Locked rotor time           | :              | 48s (cold) 27s (hot) |
| Output   | :               | 125 HP   |              |  | Temperature rise            | :              | 80 K                 |
| Poles  | :               | 4  |              |  | 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  | :               | 111 A  |              |  | Protection degree           | :              | IP56                 |
| L. R. Amperes  | :               | 723 A  |              |  | Cooling method              | :              | IC411 - TEFC         |
| LRC  | :               | 6.5x(Code G)                                       |              |  | Mounting                    | :              | F-1                  |
| No load current  | :               | 32.0 A   |              |  | Rotation <sup>1</sup>       | :              | Both (CW and CCW)    |
| Rated speed  | :               | 1785 rpm   |              |  | Noise level <sup>2</sup>    | :              | 73.0 dB(A)           |
| Slip   | :               | 0.83 %   |              |  | Starting method             | :              | Direct On Line       |
| Rated torque   | :               | 50.8 kgfm  |              |  | Approx. weight <sup>3</sup> | :              | 701 kg               |
| Locked rotor torque  | :               | 200 %  |              |  |                             |                |                      |
| Breakdown torque   | :               | 229 %  |              |  |                             |                |                      |
| Insulation class   | :               | F  |              |  |                             |                |                      |
| Service factor   | :               | 1.15   |              |  |                             |                |                      |
| Moment of inertia (J)  | :               | 2.41 kgm <sup>2</sup>                              |              |  |                             |                |                      |
| Design   | :               | B  |              |  |                             |                |                      |
| Output   | 25%             | 50%  | 75%          | 100%   | Foundation loads            |                |                      |
| Efficiency (%)   | 94.9            | 95.0   | 95.4         | 95.4   | Max. traction               | :              | 672 kgf              |
| Power Factor   | 0.52            | 0.74   | 0.82         | 0.85   | Max. compression            | :              | 1373 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) |                      |
| 4.5  | 3.4             | 3.1  | 2.4          | 1.4  | 0.9                         | 0.5            |                      |
|  |                 | <u>Drive end</u>                                   |              | <u>Non drive end</u>   |                             |                |                      |
| Bearing type   | :               | 6319 C3  |              | 6316 C3  |                             |                |                      |
| Sealing  | :               | Inpro/Seal   |              | Inpro/Seal   |                             |                |                      |
| Lubrication interval   | :               | 8000 h   |              | 10000 h  |                             |                |                      |
| Lubricant amount   | :               | 45 g   |              | 34 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   | 13/01/2024      |  |              |  |                             | 1 / 2          |                      |

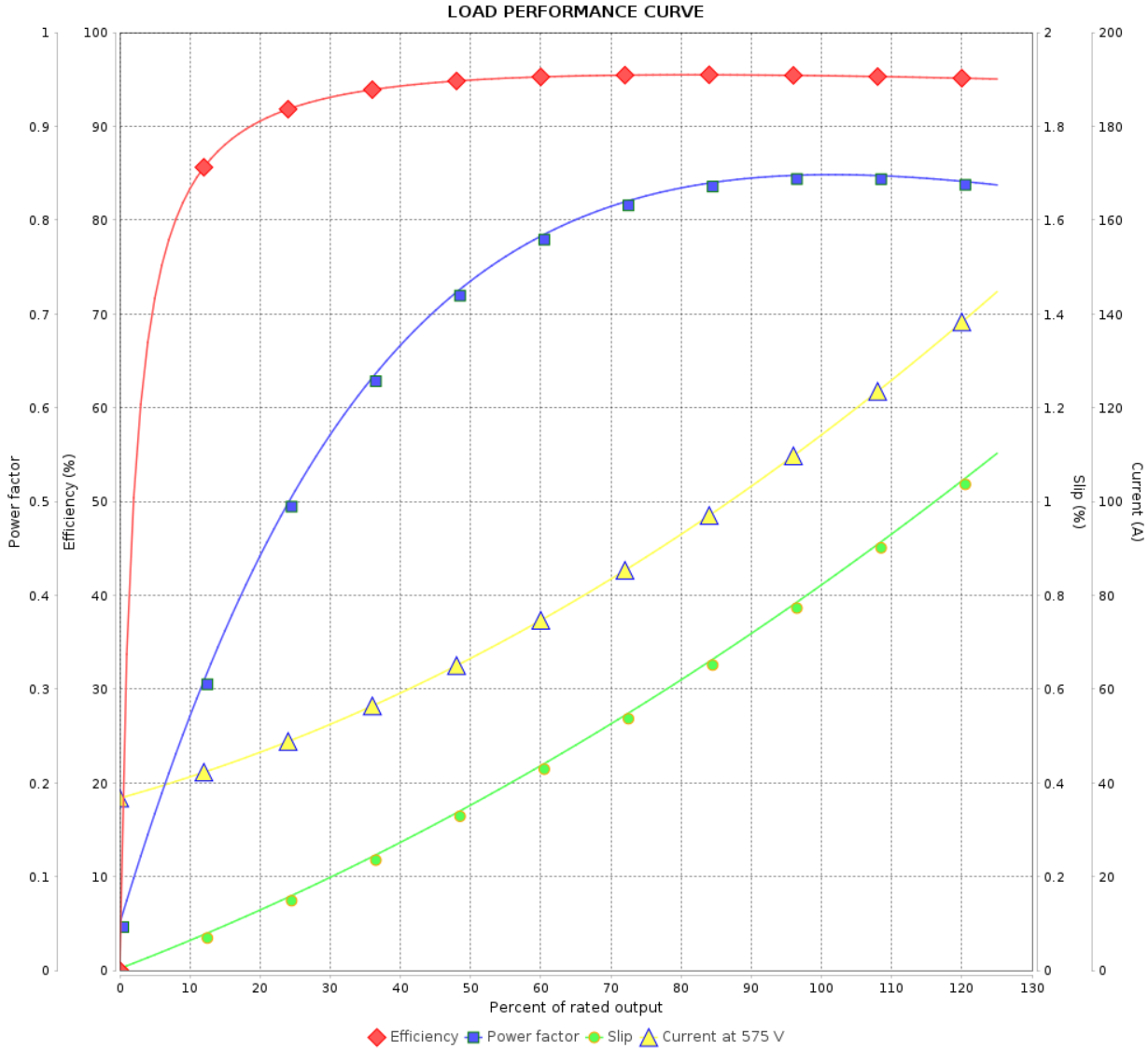
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase      Product code : 11453267



Performance : 575 V 60 Hz 4P

|                     |             |                       |                         |
|---------------------|-------------|-----------------------|-------------------------|
| Rated current       | : 111 A     | Moment of inertia (J) | : 2.41 kgm <sup>2</sup> |
| LRC                 | : 6.5       | Duty cycle            | : Cont.(S1)             |
| Rated torque        | : 50.8 kgfm | Insulation class      | : F                     |
| Locked rotor torque | : 200 %     | Service factor        | : 1.15                  |
| Breakdown torque    | : 229 %     | Temperature rise      | : 80 K                  |
| Rated speed         | : 1785 rpm  | Design                | : B                     |

| Rev.         | Changes Summary | Performed | Checked       | Date     |
|--------------|-----------------|-----------|---------------|----------|
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