

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|  |                 |  |              |  |               |                      |
|--|-----------------|--|--------------|--|---------------|----------------------|
| Customer :   |                 |  |              |  |               |                      |
| Product line   |                 | : W22 IEEE 841 NEMA Premium Efficiency Three-Phase |              | Product code :   |               | 13602414             |
| Frame  | :               | 364/5TD  |              | Locked rotor time  | :             | 46s (cold) 26s (hot) |
| Output   | :               | 40 HP (30 kW)                                      |              | Temperature rise   | :             | 80 K                 |
| Poles  | :               | 8  |              | 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  | :               | 40.7 A   |              | Protection degree  | :             | IP55                 |
| L. R. Amperes  | :               | 240 A  |              | Cooling method   | :             | IC411 - TEFC         |
| LRC  | :               | 5.9x(Code G)                                       |              | Mounting   | :             | F-1                  |
| No load current  | :               | 17.2 A   |              | Rotation <sup>1</sup>  | :             | Both (CW and CCW)    |
| Rated speed  | :               | 882 rpm  |              | Noise level <sup>2</sup>   | :             | 60.0 dB(A)           |
| Slip   | :               | 2.00 %   |              | Starting method  | :             | Direct On Line       |
| Rated torque   | :               | 32.9 kgfm  |              | Approx. weight <sup>3</sup>  | :             | 410 kg               |
| Locked rotor torque  | :               | 170 %  |              |  |               |                      |
| Breakdown torque   | :               | 210 %  |              |  |               |                      |
| Insulation class   | :               | F  |              |  |               |                      |
| Service factor   | :               | 1.25   |              |  |               |                      |
| Moment of inertia (J)  | :               | 1.22 kgm <sup>2</sup>                              |              |  |               |                      |
| Design   | :               | B  |              |  |               |                      |
| Output   | 50%             | 75%  | 100%         | Foundation loads   |               |                      |
| Efficiency (%)   | 92.4            | 93.0   | 92.4         | Max. traction  | :             | 571 kgf              |
| Power Factor   | 0.65            | 0.75   | 0.80         | Max. compression   | :             | 981 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)       |
| 8.1  | 7.1             | 6.5  | 3.6          | 2.6  | 1.6           | 1.2                  |
|  |                 | <u>Drive end</u>                                   |              | <u>Non drive end</u>   |               |                      |
| Bearing type   | :               | 6314 C3  |              | 6314 C3  |               |                      |
| Sealing  | :               | Inpro/Seal   |              | Inpro/Seal   |               |                      |
| Lubrication interval   | :               | 20000 h  |              | 20000 h  |               |                      |
| Lubricant amount   | :               | 27 g   |              | 27 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   | 05/06/2023      |  |              |  | 1 / 2         |                      |

# LOAD PERFORMANCE CURVE

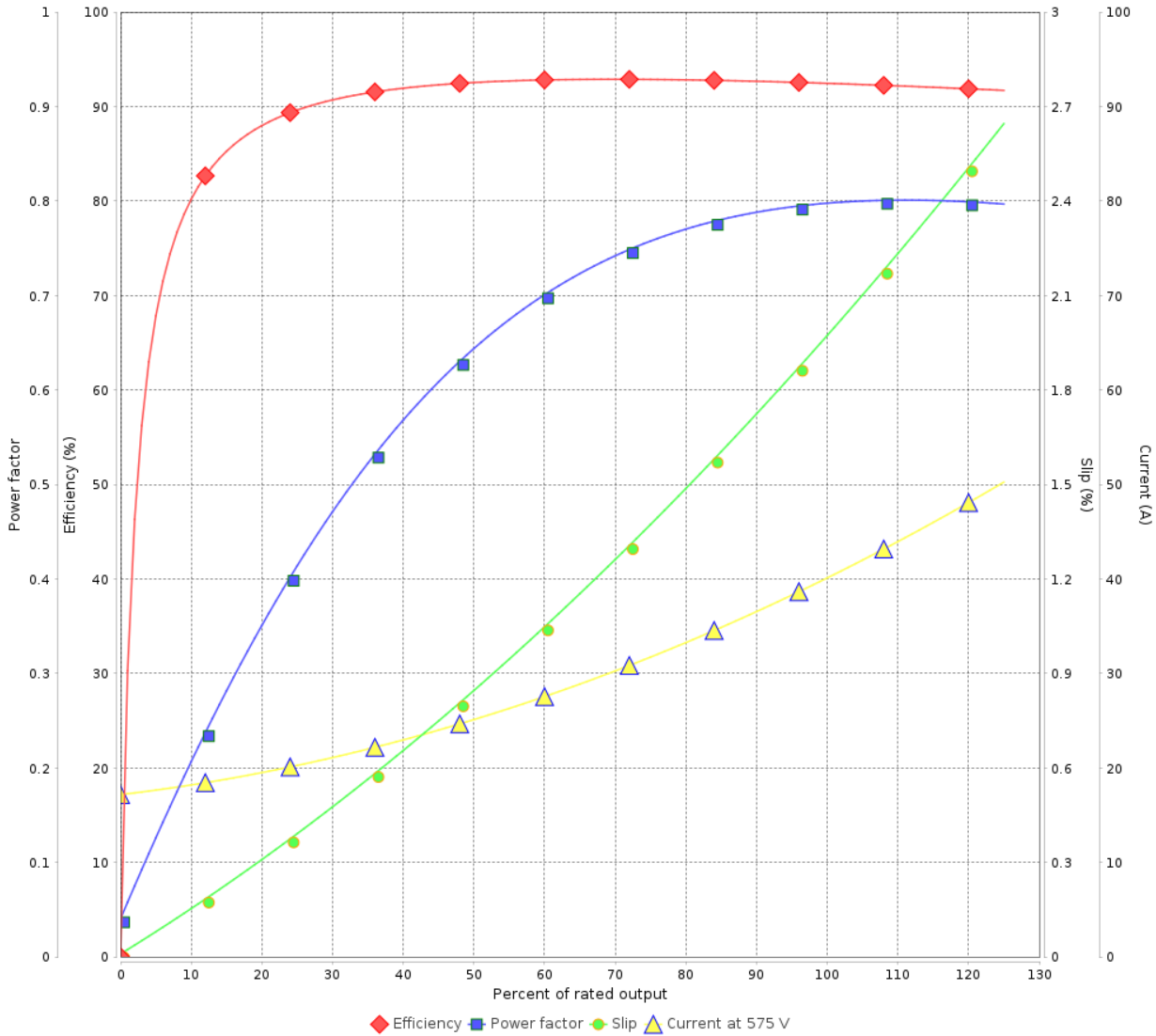
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase      Product code : 13602414

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 8P

|                     |             |                       |                         |
|---------------------|-------------|-----------------------|-------------------------|
| Rated current       | : 40.7 A    | Moment of inertia (J) | : 1.22 kgm <sup>2</sup> |
| LRC                 | : 5.9       | Duty cycle            | : Cont.(S1)             |
| Rated torque        | : 32.9 kgfm | Insulation class      | : F                     |
| Locked rotor torque | : 170 %     | Service factor        | : 1.25                  |
| Breakdown torque    | : 210 %     | Temperature rise      | : 80 K                  |
| Rated speed         | : 882 rpm   | Design                | : B                     |

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