

# DATA SHEET

## Single Phase Induction Motor - Squirrel Cage



|  |   |  |                           |          |
|--|---|--|---------------------------|----------|
| Customer :   |   |  |                           |          |
| Product line   |   | : Jet Pump - J type Single-Phase   | Product code : 14627823   |          |
| Frame  | : 56J                                       | Cooling method   | : IC01 - ODP              |          |
| Insulation class   | : F   | Mounting   | : F-1                     |          |
| Duty cycle   | : Cont.(S1)                                 | Rotation <sup>1</sup>  | : CCW                     |          |
| Ambient temperature  | : -20°C to +40°C                            | Starting method  | : Direct On Line          |          |
| Altitude   | : 1000 m.a.s.l.                             | Approx. weight <sup>3</sup>  | : 21.0 kg                 |          |
| Design   | : L   | Moment of inertia (J)  | : 0.0040 kgm <sup>2</sup> |          |
| Output [HP]  | 3   |  |                           |          |
| Poles  | 2   |  |                           |          |
| Frequency [Hz]   | 60  |  |                           |          |
| Rated voltage [V]  | 230   |  |                           |          |
| Rated current [A]  | 12.2  |  |                           |          |
| L. R. Amperes [A]  | 100   |  |                           |          |
| LRC [A]  | 8.2x(Code J)                                |  |                           |          |
| No load current [A]  | 3.90  |  |                           |          |
| Rated speed [RPM]  | 3500  |  |                           |          |
| Slip [%]   | 2.78  |  |                           |          |
| Rated torque [kgfm]  | 0.622                                       |  |                           |          |
| Locked rotor torque [%]  | 220   |  |                           |          |
| Breakdown torque [%]   | 280   |  |                           |          |
| Service factor   | 1.15  |  |                           |          |
| Temperature rise   | 80 K  |  |                           |          |
| Locked rotor time  | 10s (cold) 6s (hot)                         |  |                           |          |
| Noise level <sup>2</sup>   | 58.0 dB(A)                                  |  |                           |          |
| Efficiency (%)   | 25%   |  |                           |          |
|  | 50%   | 76.0   |                           |          |
|  | 75%   | 81.0   |                           |          |
|  | 100%  | 84.1   |                           |          |
| Power Factor   | 25%   |  |                           |          |
|  | 50%   | 0.87   |                           |          |
|  | 75%   | 0.92   |                           |          |
|  | 100%  | 0.93   |                           |          |
| Bearing type   | : Drive end 6203 2RS Non drive end 6202 2RS | Foundation loads   |                           |          |
| Sealing  | : Without Bearing Seal Without Bearing Seal | Max. traction : 45 kgf   |                           |          |
|  |   | Max. compression : 66 kgf  |                           |          |
| 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  |
|  |   |  |                           |          |
| Performed by   |   |  |                           |          |
| Checked by   |   |  | Page                      | Revision |
| Date   | 17/05/2022                                  |  | 1 / 2                     |          |

# LOAD PERFORMANCE CURVE

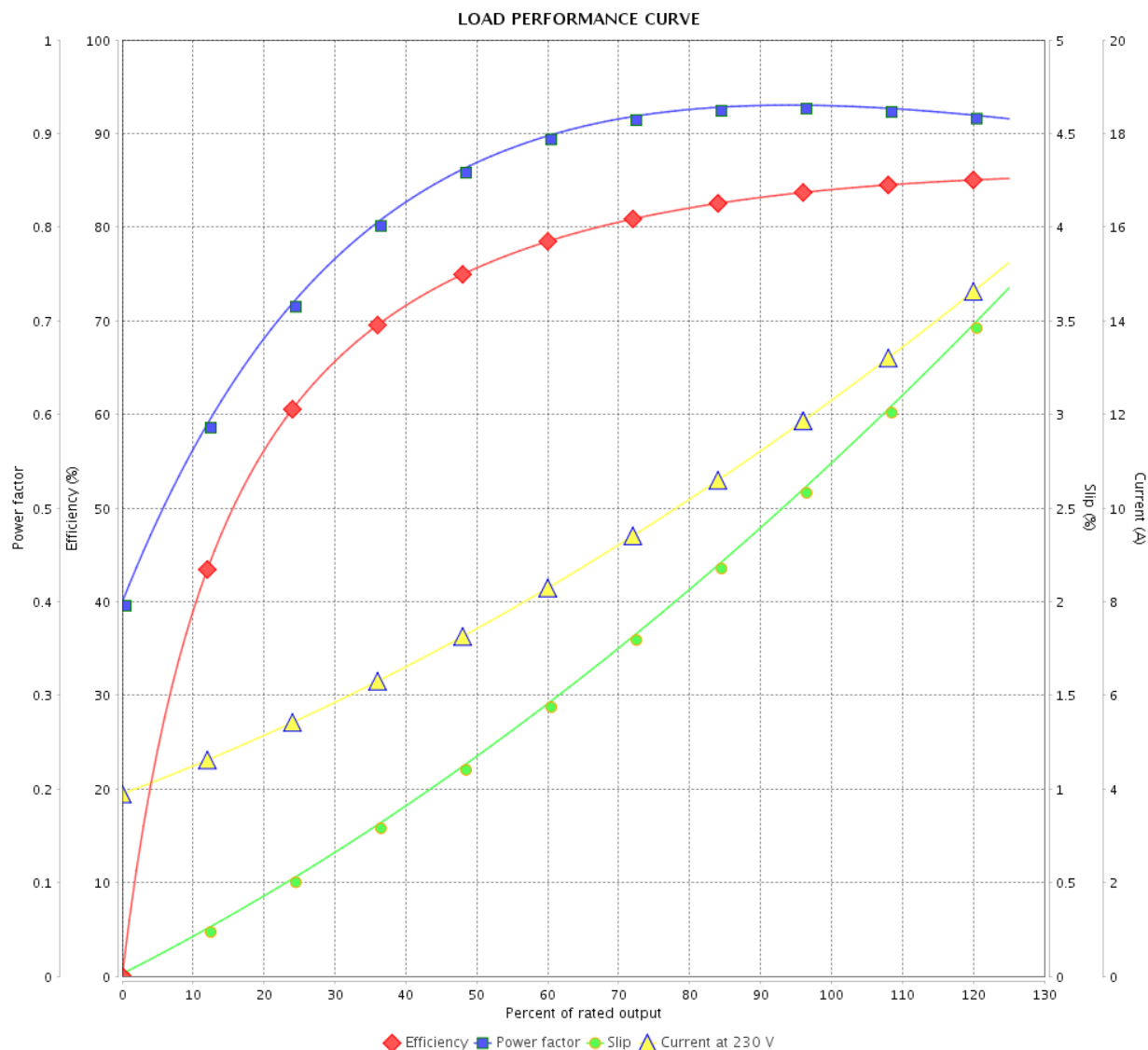
Single Phase Induction Motor - Squirrel Cage



Customer :

Product line : Jet Pump - J type Single-Phase

Product code : 14627823

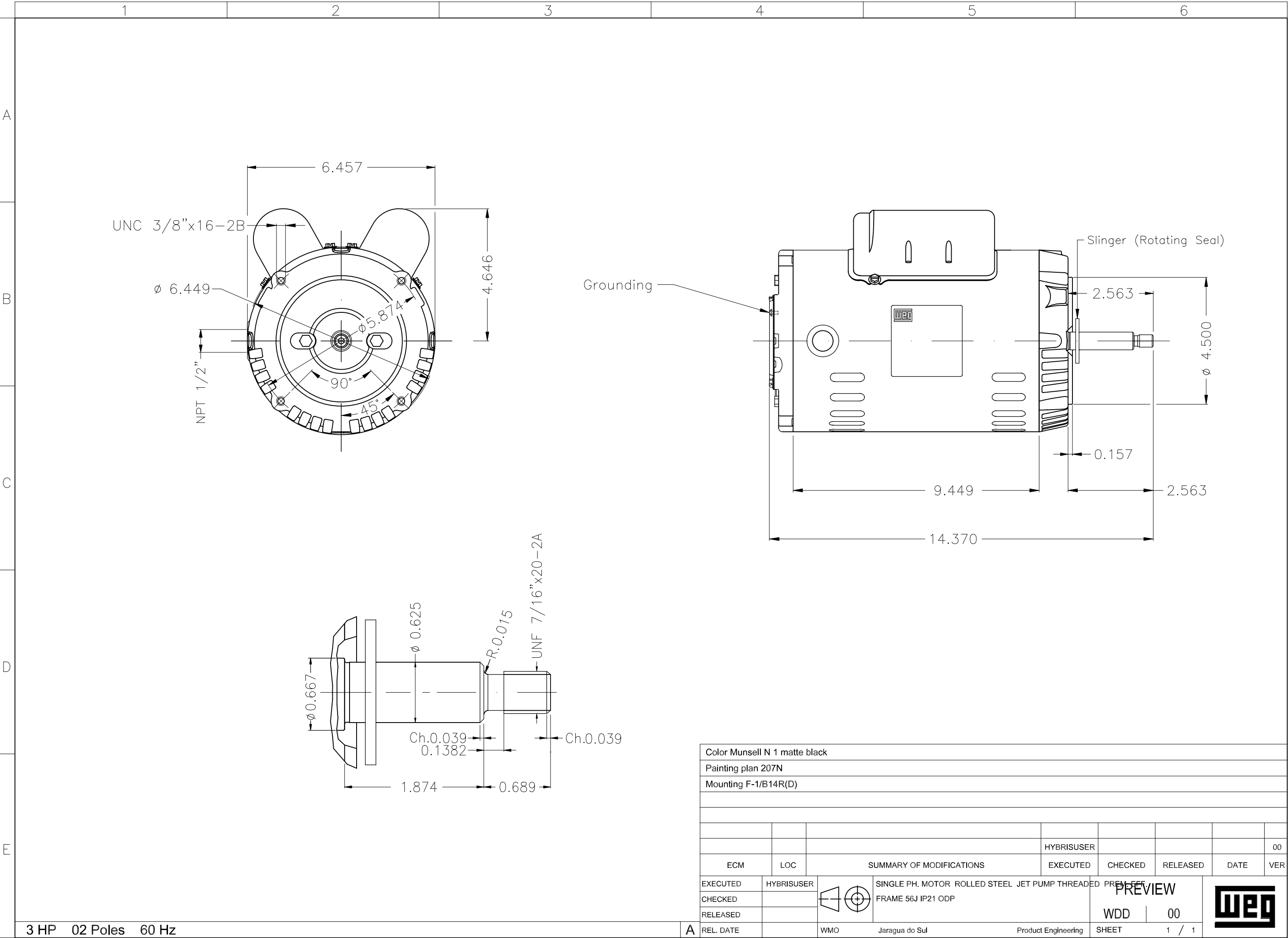


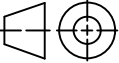

Performance : 230 V 60 Hz 2P

Rated current : 12.2 A  
 LRC : 8.2  
 Rated torque : 0.622 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 280 %  
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0040 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : L

| Rev.         | Changes Summary |  | Performed | Checked       | Date     |
|--------------|-----------------|--|-----------|---------------|----------|
|              |                 |  |           |               |          |
| Performed by |                 |  |           | Page<br>2 / 2 | Revision |
| Checked by   |                 |  |           |               |          |
| Date         | 17/05/2022      |  |           |               |          |



|                               |            |   |   |            |          |         |          |   |     |
|-------------------------------|------------|---|---|------------|----------|---------|----------|---|-----|
| Color Munsell N 1 matte black |            |   |   |            |          |         |          |   |     |
| Painting plan 207N            |            |   |   |            |          |         |          |   |     |
| Mounting F-1/B14R(D)          |            |   |   |            |          |         |          |   |     |
|                               |            |   |   |            |          |         |          |   |     |
|                               |            |   |   |            |          |         |          |   |     |
|                               |            |   |   |            |          |         |          |   |     |
|                               |            |   |   | HYBRISUSER |          |         |          |   | 00  |
| ECM                           | LOC        | SUMMARY OF MODIFICATIONS  |   |            | EXECUTED | CHECKED | RELEASED | DATE  | VER |
| EXECUTED                      | HYBRISUSER |  | SINGLE PH. MOTOR ROLLED STEEL JET PUMP THREADED PRELIMINARY |            |          | PREVIEW |          |  |     |
| CHECKED                       |            |   | FRAME 56J IP21 ODP  |            |          |         |          |   |     |
| RELEASED                      |            |   |   |            |          |         |          |   |     |
| REL. DATE                     |            |   | WMO Jaragua do Sul Product Engineering                      |            |          | SHEET   | 1 / 1    |   |     |