

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



|   |                           |                             |   |         |          |
|---|---------------------------|-----------------------------|---|---------|----------|
| Customer  |                           |                             |   |         |          |
| Product line  | : Three-Phase             | Product code                | : 14453335  |         |          |
| Frame   | : W56                     | Cooling method              | : IC411 - TEFC  |         |          |
| Insulation class  | : F                       | Mounting                    | : F-1   |         |          |
| Duty cycle  | : Cont.(S1)               | Rotation <sup>1</sup>       | : Both (CW and CCW)   |         |          |
| Ambient temperature   | : -20°C to +40°C          | Starting method             | : Direct On Line  |         |          |
| Altitude  | : 1000 m.a.s.l.           | Approx. weight <sup>3</sup> | : 8.2 kg  |         |          |
| Protection degree   | : IP55                    | Moment of inertia (J)       | : 0.0008 kgm <sup>2</sup>   |         |          |
| Output [HP]   | 0.5                       |                             |   |         |          |
| Poles   | 2                         |                             |   |         |          |
| Frequency [Hz]  | 60                        |                             |   |         |          |
| Rated voltage [V]   | 575                       |                             |   |         |          |
| Rated current [A]   | 0.627                     |                             |   |         |          |
| L. R. Amperes [A]   | 4.83                      |                             |   |         |          |
| LRC [A]   | 7.7x(Code L)              |                             |   |         |          |
| No load current [A]   | 0.334                     |                             |   |         |          |
| Rated speed [RPM]   | 3435                      |                             |   |         |          |
| Slip [%]  | 4.58                      |                             |   |         |          |
| Rated torque [kgfm]   | 0.106                     |                             |   |         |          |
| Locked rotor torque [%]   | 330                       |                             |   |         |          |
| Breakdown torque [%]  | 360                       |                             |   |         |          |
| Service factor  | 1.15                      |                             |   |         |          |
| Temperature rise  | 80 K                      |                             |   |         |          |
| Locked rotor time   | 32s (cold) 18s (hot)      |                             |   |         |          |
| Noise level <sup>2</sup>  | 65.0 dB(A)                |                             |   |         |          |
| Efficiency (%)  | 25%                       |                             |   |         |          |
|   | 50%                       | 68.0                        |   |         |          |
|   | 75%                       | 72.0                        |   |         |          |
|   | 100%                      | 74.0                        |   |         |          |
| Power Factor  | 25%                       |                             |   |         |          |
|   | 50%                       | 0.64                        |   |         |          |
|   | 75%                       | 0.75                        |   |         |          |
|   | 100%                      | 0.80                        |   |         |          |
| Bearing type  | : Drive end               | 6203 ZZ                     | Non drive end   | 6202 ZZ |          |
| Sealing   | : V'Ring                  |                             | V'Ring  |         |          |
| Lubrication interval  | : -                       |                             | -   |         |          |
| Lubricant amount  | : -                       |                             | -   |         |          |
| Lubricant type  | : Mobil Polyrex EM        |                             |   |         |          |
| Foundation loads  | Max. traction : 8 kgf     |                             |   |         |          |
|   | Max. compression : 16 kgf |                             |   |         |          |
| Notes   |                           |                             |   |         |          |
| <p>This revision replaces and cancel the previous one, which must be eliminated.</p> <p>(1) Looking the motor from the shaft end.</p> <p>(2) Measured at 1m and with tolerance of +3dB(A).</p> <p>(3) Approximate weight subject to changes after manufacturing process.</p> <p>(4) At 100% of full load.</p> |                           |                             | <p>These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.</p> |         |          |
| Rev.  | Changes Summary           |                             | Performed   | Checked | Date     |
| Performed by  |                           |                             |   |         |          |
| Checked by  |                           |                             |   | Page    | Revision |
| Date  | 17/05/2022                |                             |   | 1 / 2   |          |

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

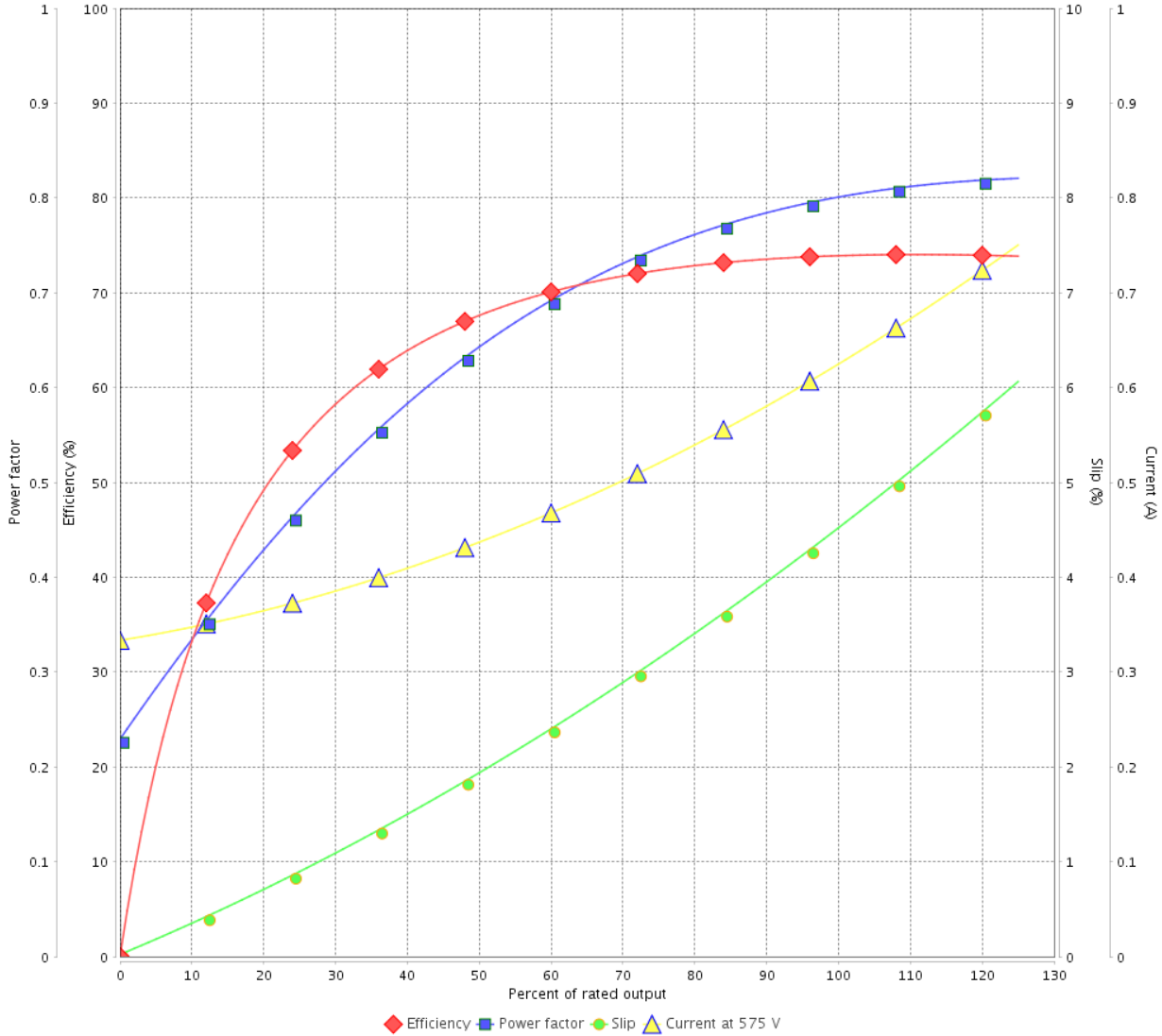


Customer : \_\_\_\_\_

Product line : Three-Phase

Product code : 14453335

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 2P

Rated current : 0.627 A  
 LRC : 7.7  
 Rated torque : 0.106 kgfm  
 Locked rotor torque : 330 %  
 Breakdown torque : 360 %  
 Rated speed : 3435 rpm

Moment of inertia (J) : 0.0008 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K

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

1 2 3 4 5 6

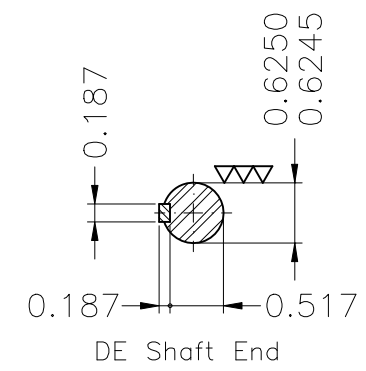
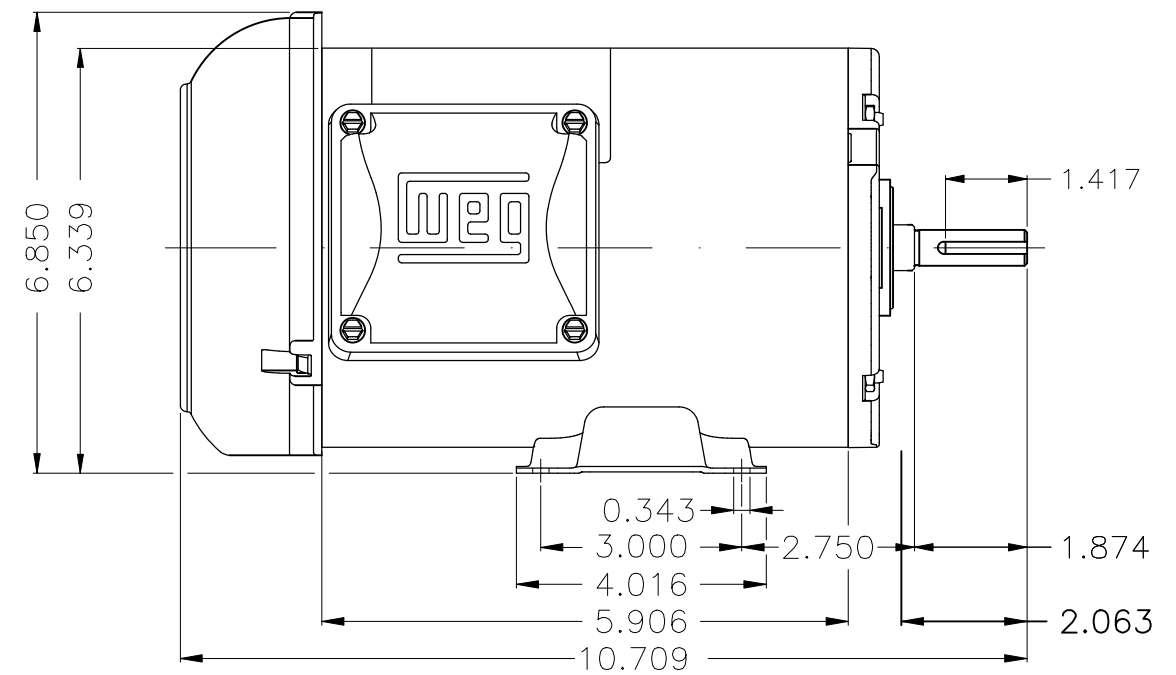
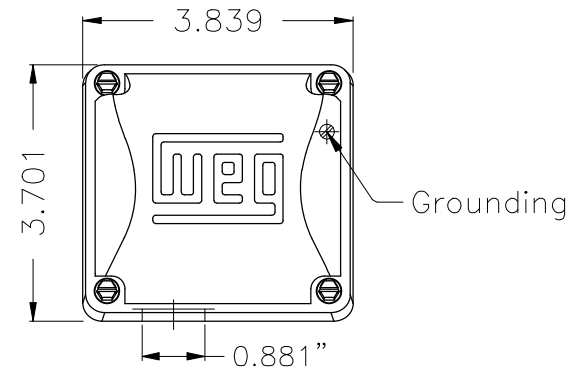
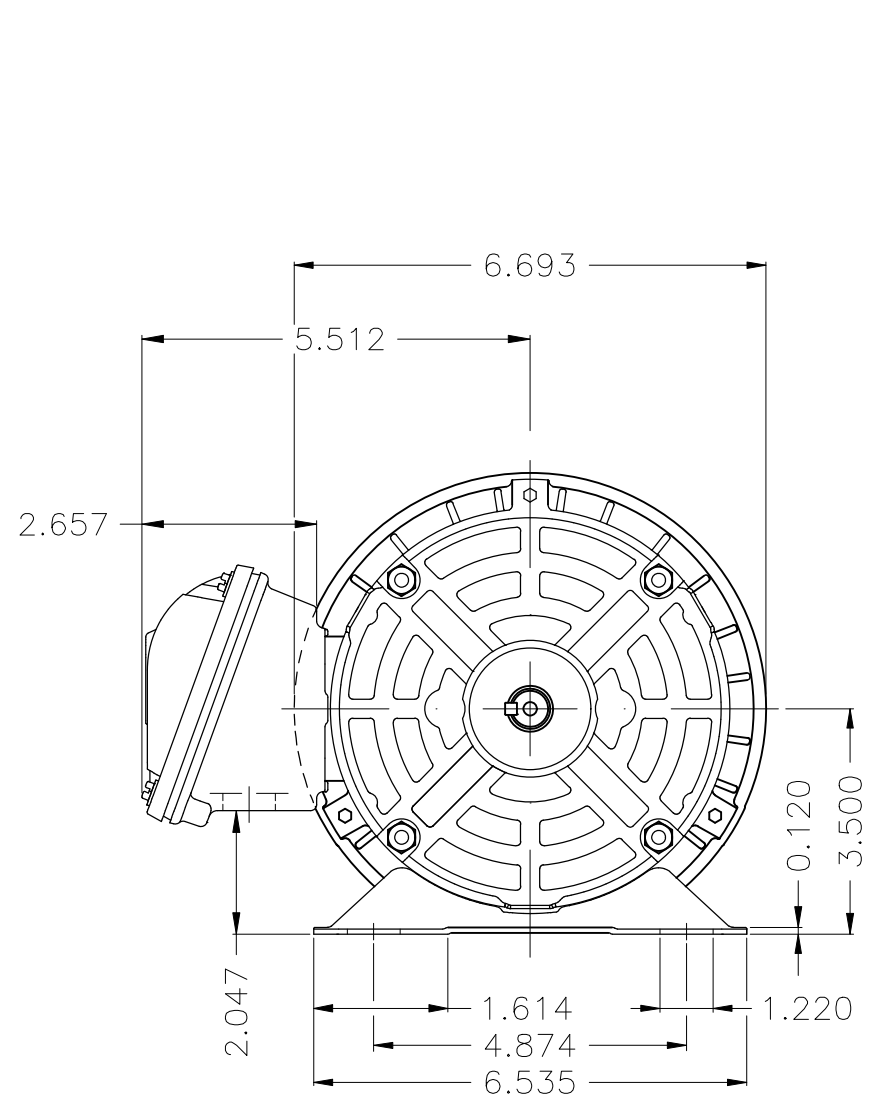
A


B

C

D

E



|                     |            |   |                |                     |   |         |          |      |     |
|---------------------|------------|---|----------------|---------------------|---|---------|----------|------|-----|
| Without coating     |            |   |                |                     |   |         |          |      |     |
| Mounting F-1/B3R(D) |            |   |                |                     |   |         |          |      |     |
|                     |            |   |                |                     |   |         |          |      |     |
|                     |            |   |                |                     |   |         |          |      |     |
|                     |            |   |                |                     | HYBRISUSER  | 00      |          |      |     |
| ECM                 | LOC        | SUMMARY OF MODIFICATIONS                |                |                     | EXECUTED  | CHECKED | RELEASED | DATE | VER |
| EXECUTED            | HYBRISUSER | THREE PH. MOTOR ROLLED STEEL PREM. EFF. |                |                     |  | PREVIEW |          |      |     |
| CHECKED             |            | FRAME W56 IP55 TEFC                     |                |                     |   | WDD     | 00       |      |     |
| RELEASED            |            |   |                |                     |   |         |          |      |     |
| REL. DATE           |            | WMO                                     | Jaragua do Sul | Product Engineering | SHEET   | 1 / 1   |          |      |     |

0.5 HP 02 Poles 60 Hz

A