

# DATA SHEET

## Single Phase Induction Motor - Squirrel Cage



Customer :

Product line : Wjet Pump Single-Phase Start Capacitor Product code : 10877766

|                       |                           |                             |                       |
|-----------------------|---------------------------|-----------------------------|-----------------------|
| Frame                 | : E56C                    | Locked rotor time           | : 10s (cold) 6s (hot) |
| Output                | : 2 HP (1.5 kW)           | Temperature rise            | : 80 K                |
| Poles                 | : 2                       | Duty cycle                  | : Cont.(S1)           |
| Frequency             | : 60 Hz                   | Ambient temperature         | : -20°C to +40°C      |
| Rated voltage         | : 115/208-230 V           | Altitude                    | : 1000 m.a.s.l.       |
| Rated current         | : 23.0/11.6-11.5 A        | Protection degree           | : IP21                |
| L. R. Amperes         | : 136/68.4-67.9 A         | Cooling method              | : IC01 - ODP          |
| LRC                   | : 5.9x(Code J)            | Mounting                    | : F-1                 |
| No load current       | : 15.0/6.47-7.50 A        | Rotation <sup>1</sup>       | : Both (CW and CCW)   |
| Rated speed           | : 3450 rpm                | Starting method             | : Direct On Line      |
| Slip                  | : 4.17 %                  | Approx. weight <sup>3</sup> | : 14.8 kg             |
| Rated torque          | : 0.421 kgfm              |                             |                       |
| Locked rotor torque   | : 160 %                   |                             |                       |
| Breakdown torque      | : 220 %                   |                             |                       |
| Insulation class      | : B                       |                             |                       |
| Service factor        | : 1.20                    |                             |                       |
| Moment of inertia (J) | : 0.0185 kgm <sup>2</sup> |                             |                       |

|                |      |      |      |                  |          |
|----------------|------|------|------|------------------|----------|
| Output         | 50%  | 75%  | 100% | Foundation loads |          |
| Efficiency (%) | 65.0 | 70.0 | 70.0 | Max. traction    | : 22 kgf |
| Power Factor   | 0.63 | 0.73 | 0.80 | Max. compression | : 37 kgf |

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | Drive end        | Non drive end        |
| Bearing type         | : | 6203 2RS         | 6203 2RS             |
| Sealing              | : | Slinger          | Without Bearing Seal |
| Lubrication interval | : | -                | -                    |
| Lubricant amount     | : | -                | -                    |
| Lubricant type       | : | Mobil Polyrex EM |                      |

### Notes

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (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 |                 | Page Revision<br>1 / 2 |         |      |
| Checked by   |                 |                        |         |      |
| Date         | 24/10/2024      |                        |         |      |

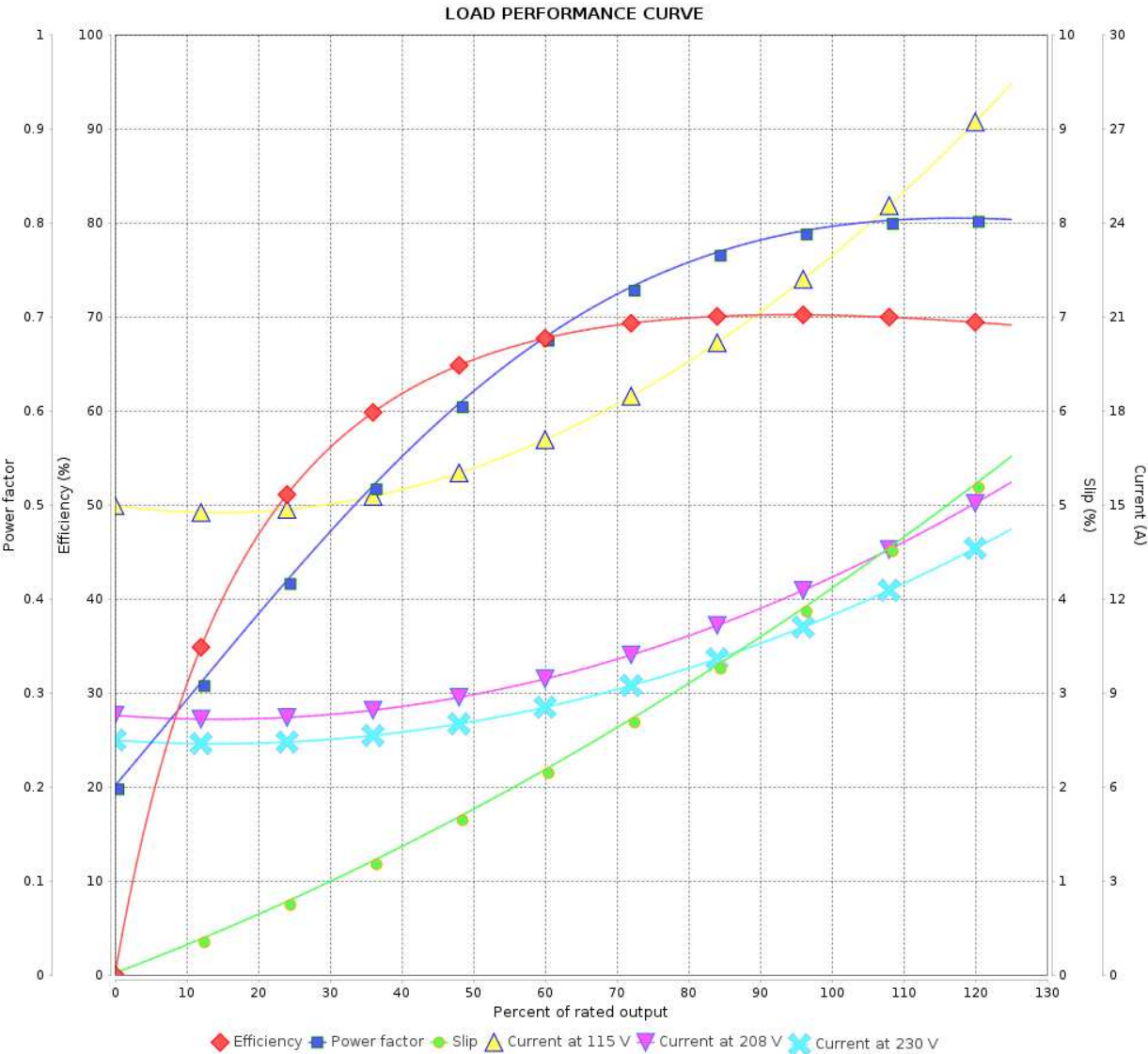
# LOAD PERFORMANCE CURVE

Single Phase Induction Motor - Squirrel Cage



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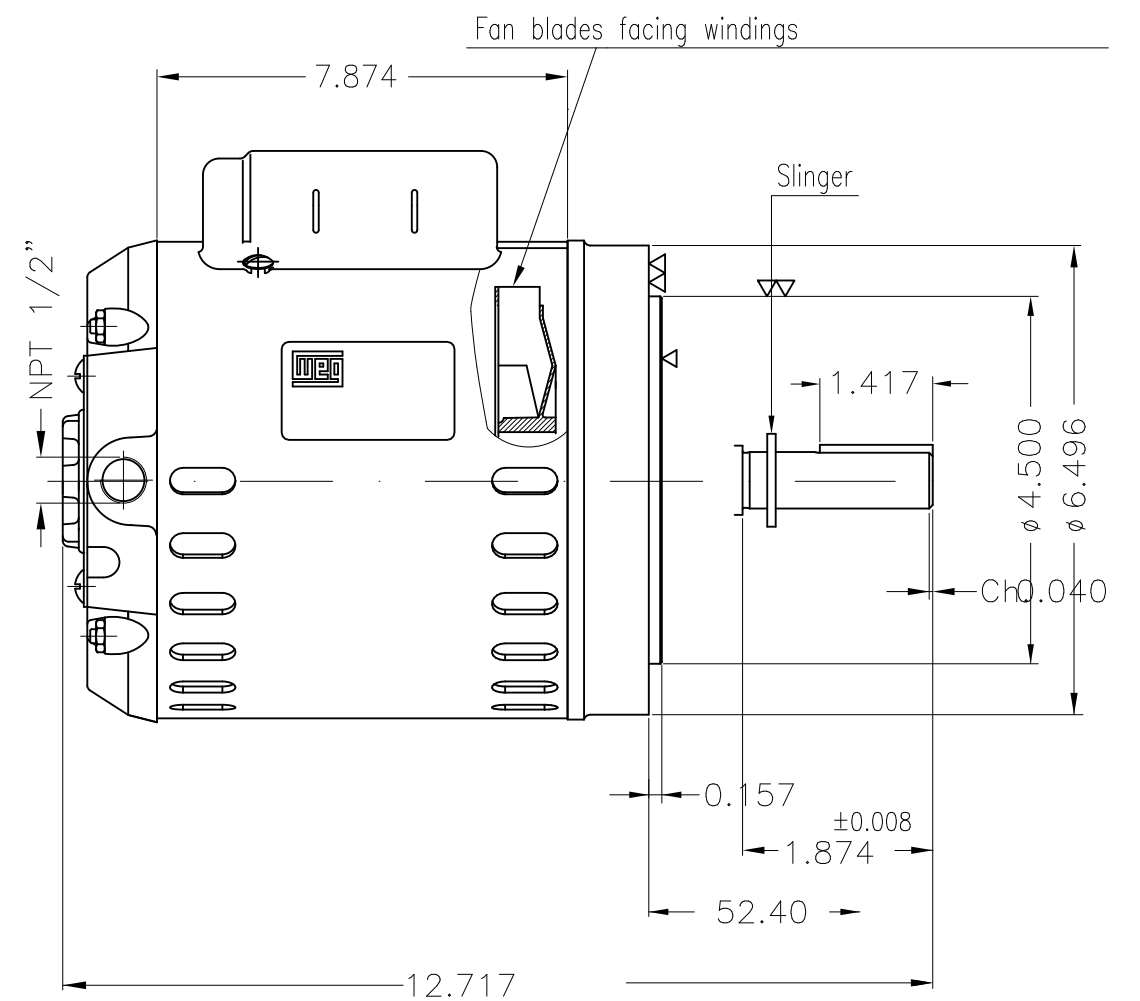
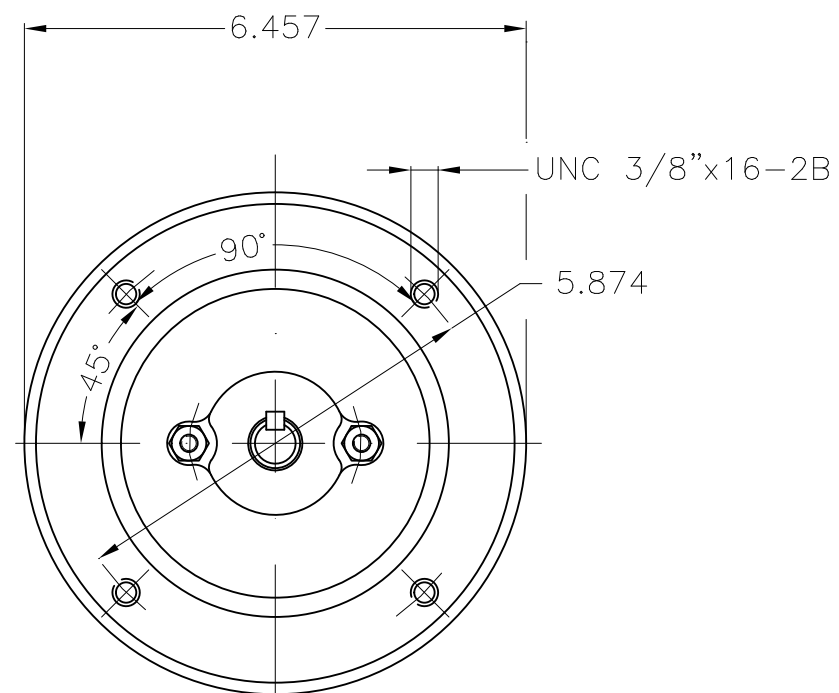


Performance : 115/208-230 V 60 Hz 2P

Rated current : 23.0/11.6-11.5 A  
LRC : 5.9  
Rated torque : 0.421 kgfm  
Locked rotor torque : 160 %  
Breakdown torque : 220 %  
Rated speed : 3450 rpm

Moment of inertia (J) : 0.0185 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : B  
Service factor :  
Temperature rise : 80 K

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|--------------|-----------------|--|-----------|---------|----------|
|              |                 |  |           |         |          |
| Performed by |                 |  |           | Page    | Revision |
| Checked by   |                 |  |           | 2 / 2   |          |
| Date         |                 |  |           |         |          |
|              | 24/10/2024      |  |           |         |          |



|                  |            |                                                                                       |                                                   |                     |       |                                                     |         |                                                                                       |          |
|------------------|------------|---------------------------------------------------------------------------------------|---------------------------------------------------|---------------------|-------|-----------------------------------------------------|---------|---------------------------------------------------------------------------------------|----------|
| Mounting B14R(D) |            |                                                                                       |                                                   |                     |       |                                                     |         |                                                                                       |          |
|                  |            |                                                                                       |                                                   |                     |       |                                                     |         |                                                                                       |          |
|                  |            |                                                                                       |                                                   |                     |       |                                                     |         |                                                                                       |          |
|                  |            |                                                                                       |                                                   |                     |       |                                                     |         |                                                                                       |          |
|                  |            |                                                                                       |                                                   |                     |       | HYBRISUSER                                          |         |                                                                                       | 00       |
| ECM              | LOC        | SUMMARY OF MODIFICATIONS                                                              |                                                   |                     |       | EXECUTED                                            | CHECKED | RELEASED                                                                              | DATE VER |
| EXECUTED         | HYBRISUSER |  | SINGLE PH. MOTOR WJET PUMP<br>FRAME E56C IP21 ODP |                     |       | <div> <div>PREVIEW</div> <div>WDD   00</div> </div> |         |  |          |
| CHECKED          |            |                                                                                       |                                                   |                     |       |                                                     |         |                                                                                       |          |
| RELEASED         |            |                                                                                       |                                                   |                     |       |                                                     |         |                                                                                       |          |
| REL. DATE        |            | WMO                                                                                   | Jaragua do Sul                                    | Product Engineering | SHEET | 1 / 1                                               |         |                                                                                       |          |