

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
NEMA Premium Efficiency Three-Phase  
Product code : 12775267

|                                      |   |
|--------------------------------------|---|
| Frame : 182/4JM                      | 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> : 42.5 kg           |
| Protection degree : IP55             | Moment of inertia (J) : 0.0206 kgm <sup>2</sup> |
| Design : B                           |   |

|                          |                      |                      |                      |                      |
|--------------------------|----------------------|----------------------|----------------------|----------------------|
| Output [HP]              | 1.5                  | 1.5                  | 1.5                  | 1.5                  |
| Poles                    | 6                    | 6                    | 6                    | 6                    |
| Frequency [Hz]           | 60                   | 50                   | 50                   | 50                   |
| Rated voltage [V]        | 230/460              | 380                  | 400                  | 415                  |
| Rated current [A]        | 5.08/2.54            | 2.68                 | 2.62                 | 2.64                 |
| L. R. Amperes [A]        | 39.6/19.8            | 16.9                 | 18.1                 | 19.5                 |
| LRC [A]                  | 7.8x(Code M)         | 6.3x(Code J)         | 6.9x(Code K)         | 7.4x(Code L)         |
| No load current [A]      | 3.25/1.63            | 1.60                 | 1.71                 | 1.80                 |
| Rated speed [RPM]        | 1170                 | 955                  | 960                  | 965                  |
| Slip [%]                 | 2.50                 | 4.50                 | 4.00                 | 3.50                 |
| Rated torque [kgfm]      | 0.930                | 1.14                 | 1.13                 | 1.13                 |
| Locked rotor torque [%]  | 320                  | 250                  | 300                  | 330                  |
| Breakdown torque [%]     | 400                  | 290                  | 330                  | 370                  |
| Service factor           | 1.25                 | 1.00                 | 1.00                 | 1.00                 |
| Temperature rise         | 80 K                 | 80 K                 | 80 K                 | 80 K                 |
| Locked rotor time        | 28s (cold) 16s (hot) | 25s (cold) 14s (hot) | 25s (cold) 14s (hot) | 25s (cold) 14s (hot) |
| Noise level <sup>2</sup> | 52.0 dB(A)           | 49.0 dB(A)           | 49.0 dB(A)           | 49.0 dB(A)           |
| Efficiency (%)           | 25%                  |                      |                      |                      |
|                          | 50%                  | 84.0                 | 85.5                 | 84.5                 |
|                          | 75%                  | 86.5                 | 86.5                 | 86.5                 |
|                          | 100%                 | 87.5                 | 85.5                 | 86.5                 |
| Power Factor             | 25%                  |                      |                      |                      |
|                          | 50%                  | 0.45                 | 0.52                 | 0.48                 |
|                          | 75%                  | 0.54                 | 0.63                 | 0.60                 |
|                          | 100%                 | 0.62                 | 0.73                 | 0.70                 |

Losses at normative operating points (speed;torque), in percentage of rated output power

|            |                |      |      |      |      |
|------------|----------------|------|------|------|------|
| Losses (%) | P1 (0,9;1,0)   | 13.4 | 13.4 | 13.4 | 13.4 |
|            | P2 (0,5;1,0)   | 10.3 | 10.3 | 10.3 | 10.3 |
|            | P3 (0,25;1,0)  | 9.3  | 9.3  | 9.3  | 9.3  |
|            | P4 (0,9;0,5)   | 8.8  | 8.8  | 8.8  | 8.8  |
|            | P5 (0,5;0,5)   | 5.8  | 5.8  | 5.8  | 5.8  |
|            | P6 (0,5;0,25)  | 4.8  | 4.8  | 4.8  | 4.8  |
|            | P7 (0,25;0,25) | 3.5  | 3.5  | 3.5  | 3.5  |

|                      |                    |                      |                            |
|----------------------|--------------------|----------------------|----------------------------|
|                      | <u>Drive end</u>   | <u>Non drive end</u> | Foundation loads           |
| Bearing type         | : 6307 ZZ          | 6206 ZZ              | Max. traction : 66 kgf     |
| Sealing              | : V'Ring           | V'Ring               | Max. compression : 108 kgf |
| Lubrication interval | : -                | -                    |                            |
| Lubricant amount     | : -                | -                    |                            |
| Lubricant type       | : Mobil Polyrex EM |                      |                            |

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).

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   |                 |           |               |          |
| Date         | 23/10/2024      |           | Page<br>1 / 6 | Revision |

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## Three Phase Induction Motor - Squirrel Cage



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

Notes  
USABLE @208V 5.62A SF 1.15 SFA 6.46A

| Rev.         | Changes Summary |  | Performed     | Checked | Date     |
|--------------|-----------------|--|---------------|---------|----------|
|              |                 |  |               |         |          |
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| Checked by   |                 |  |               |         |          |
| Date         | 23/10/2024      |  |               |         |          |

# LOAD PERFORMANCE CURVE

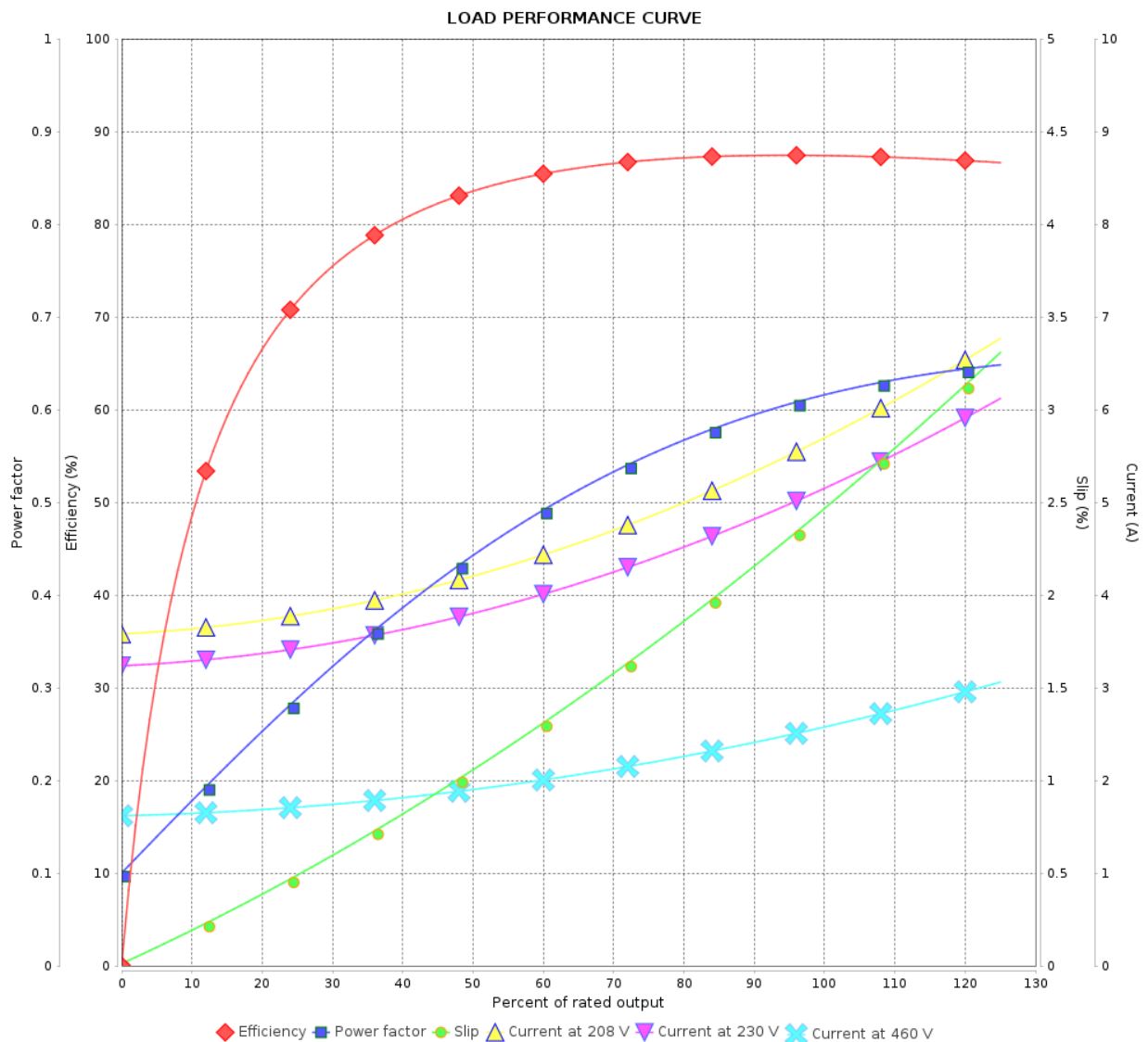
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
NEMA Premium Efficiency Three-Phase

Product code : 12775267



Performance : 230/460 V 60 Hz 6P

Rated current : 5.08/2.54 A  
LRC : 7.8  
Rated torque : 0.930 kgfm  
Locked rotor torque : 320 %  
Breakdown torque : 400 %  
Rated speed : 1170 rpm

Moment of inertia (J) : 0.0206 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

| Rev.         | Changes Summary |  | Performed     | Checked | Date     |
|--------------|-----------------|--|---------------|---------|----------|
|              |                 |  |               |         |          |
| Performed by |                 |  | Page<br>3 / 6 |         | Revision |
| Checked by   |                 |  |               |         |          |
| Date         |                 |  |               |         |          |

# LOAD PERFORMANCE CURVE

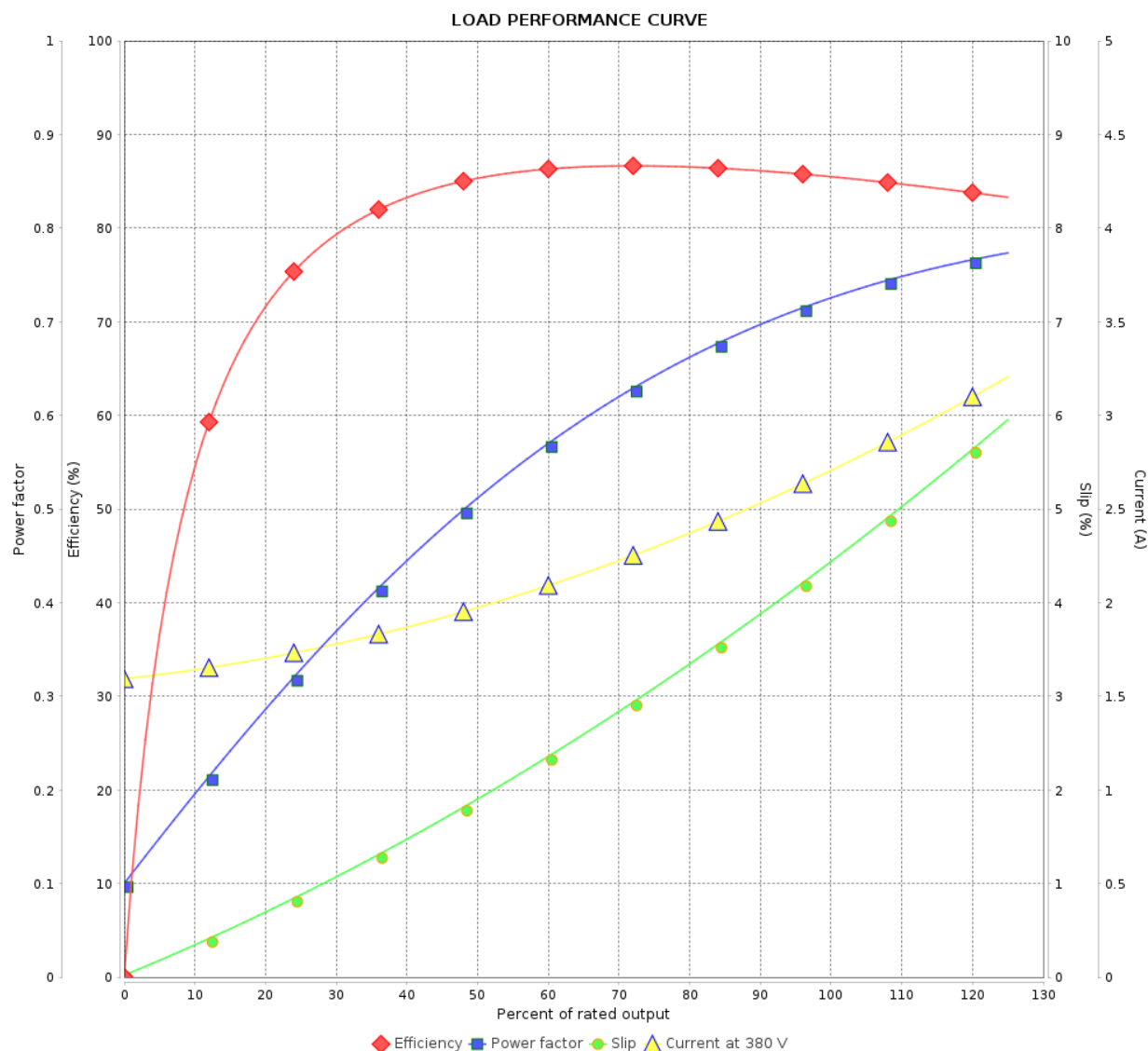
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
NEMA Premium Efficiency Three-Phase

Product code : 12775267



Performance : 380 V 50 Hz 6P IE4

Rated current : 2.68 A  
LRC : 6.3  
Rated torque : 1.14 kgfm  
Locked rotor torque : 250 %  
Breakdown torque : 290 %  
Rated speed : 955 rpm

Moment of inertia (J) : 0.0206 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : B

| Rev.         | Changes Summary | Performed             | Checked | Date |
|--------------|-----------------|-----------------------|---------|------|
|              |                 |                       |         |      |
| Performed by |                 | Page<br>4 / 6Revision |         |      |
| Checked by   |                 |                       |         |      |
| Date         | 23/10/2024      |                       |         |      |

# LOAD PERFORMANCE CURVE

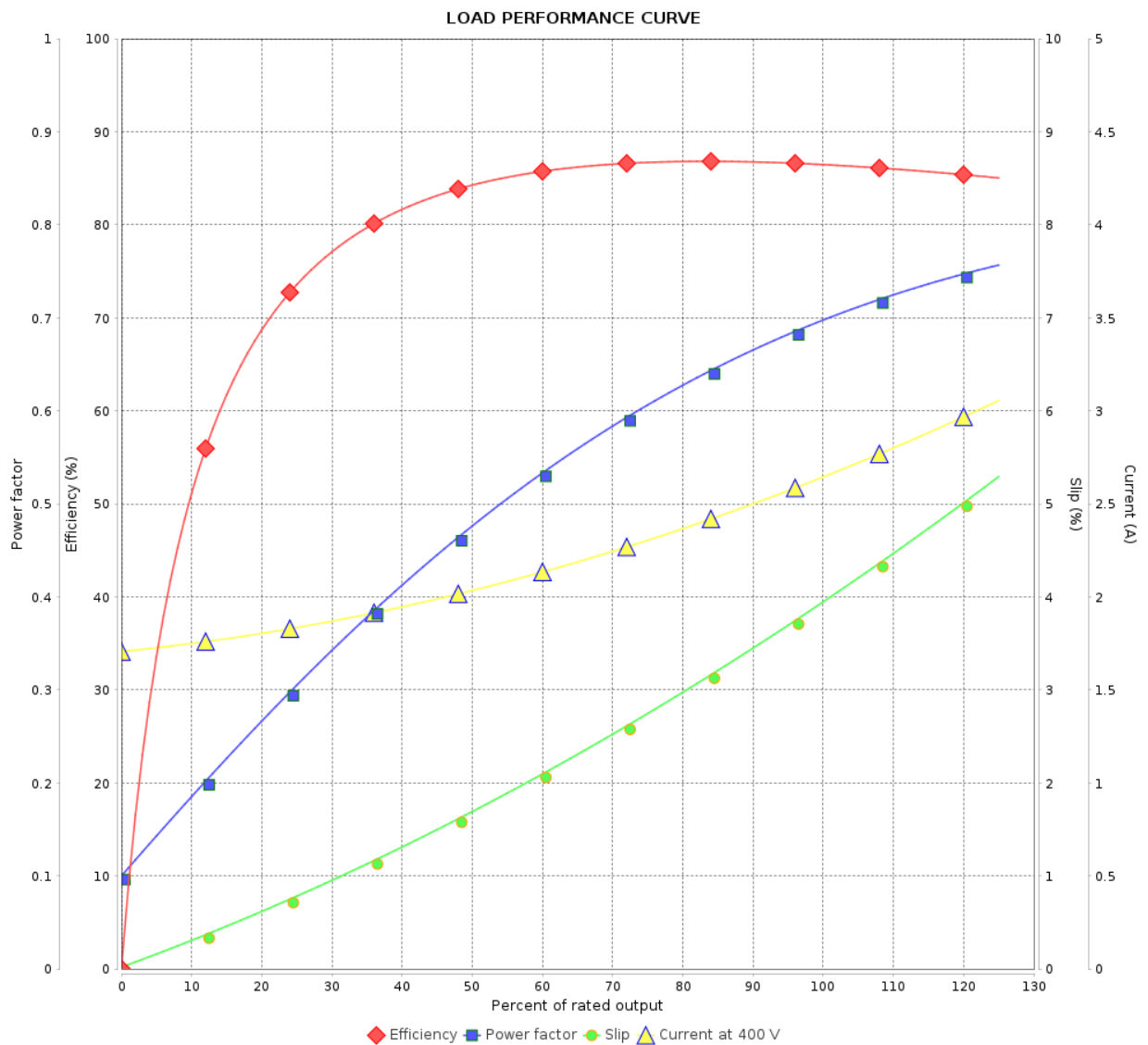
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
NEMA Premium Efficiency Three-Phase

Product code : 12775267



Performance : 400 V 50 Hz 6P IE4

Rated current : 2.62 A  
LRC : 6.9  
Rated torque : 1.13 kgfm  
Locked rotor torque : 300 %  
Breakdown torque : 330 %  
Rated speed : 960 rpm

Moment of inertia (J) : 0.0206 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : B

| Rev.         | Changes Summary | Performed              | Checked | Date |
|--------------|-----------------|------------------------|---------|------|
|              |                 |                        |         |      |
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| Checked by   |                 |                        |         |      |
| Date         | 23/10/2024      |                        |         |      |

# LOAD PERFORMANCE CURVE

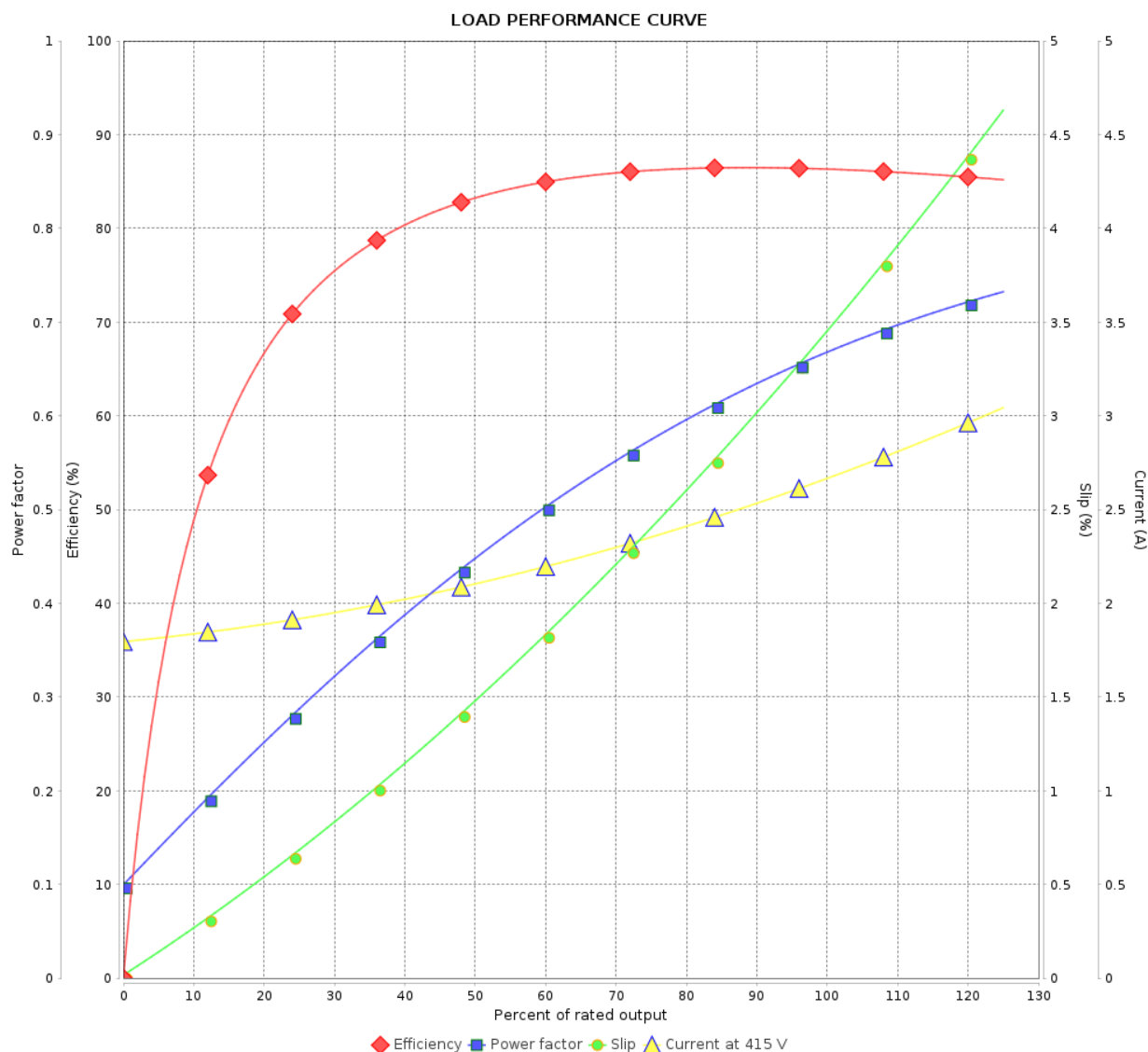
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM  
NEMA Premium Efficiency Three-  
Phase

Product code : 12775267

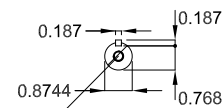
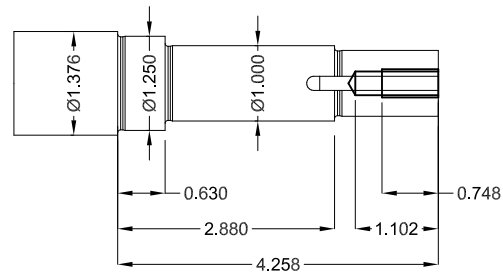
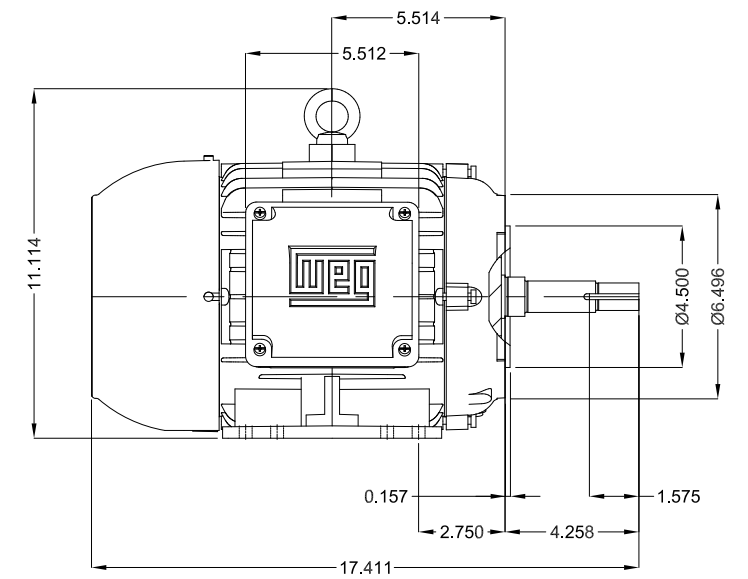
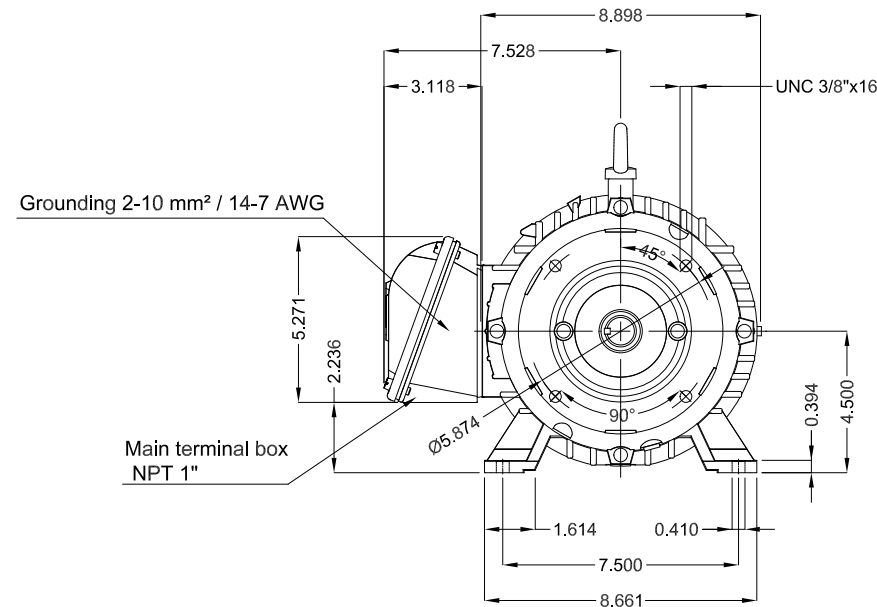


Performance : 415 V 50 Hz 6P IE4



Rated current : 2.64 A  
LRC : 7.4  
Rated torque : 1.13 kgfm  
Locked rotor torque : 330 %  
Breakdown torque : 370 %  
Rated speed : 965 rpm

Moment of inertia (J) : 0.0206 kgm<sup>2</sup>  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : B

| Rev.         | Changes Summary |  | Performed | Checked       | Date     |
|--------------|-----------------|--|-----------|---------------|----------|
|              |                 |  |           |               |          |
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| Checked by   |                 |  |           |               |          |
| Date         | 23/10/2024      |  |           |               |          |



EUNC 3/8"-16 WEG WPR-7309

|                           |            |   |  |                          |  |            |  |          |   |     |
|---------------------------|------------|---|--|--------------------------|--|------------|--|----------|---|-----|
| 1.5 HP   06 Poles   60 Hz |            |   |  |                          |  |            |  |          |   | A   |
|                           |            |   |  |                          |  |            |  |          |   |     |
|                           |            |   |  |                          |  |            |  |          |   |     |
|                           |            |   |  |                          |  | HYBRISUSER |  |          |   | 00  |
| ECM                       |            | LOC   |  | SUMMARY OF MODIFICATIONS |  | EXECUTED   | CHECKED                                | RELEASED | DATE  | VER |
| EXECUTED                  | HYBRISUSER |  | THREE PH. MOTOR JM/JP/JET PUMP W22 NEMA PREM. EFF. |                          |  |            | <div>PREVIEW</div> <div>WDD   00</div> |          |  |     |
| CHECKED                   |            |   | FRAME 182/4JM IP55 TEFC                            |                          |  |            |  |          |   |     |
| RELEASED                  |            |   |  |                          |  |            |  |          |   |     |
| REL. DATE                 |            |   |  |                          |  |            | SHEET /                                |          |   |     |