# DATA SHEET

Three Phase Induction Motor - Squirrel Cage

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#### Customer

| Product line  | : W22 I<br>Three-I                   |                               | EMA Premium     | Efficien              | ncy F                       | Product c | ode :                     | 13016                     | 466    |                          |
|---|--------------------------------------|-------------------------------|-----------------|-----------------------|-----------------------------|-----------|---------------------------|---------------------------|--------|--------------------------|
| Frame<br>Insulation class   |                                      | : 145HP<br>: F                |                 |                       | Cooling method<br>Mounting  |           |                           | : IC411 - TEFC<br>: W-6   |        |                          |
| Duty cycle  | : Cont.(S1)                          |                               |                 | Rotation <sup>1</sup> |                             |           | : Both (CW and CCW)       |                           |        |                          |
| Ambient tempera   | : -20°C to +40°C                     |                               |                 | Starting method       |                             |           | : Direct On Line          |                           |        |                          |
| Altitude  |                                      | : 1000 m.a.s.l.               |                 |                       | Approx. weight <sup>3</sup> |           |                           | : 26.5 kg                 |        |                          |
| Protection degree   | : IP55                               |                               |                 | Moment of inertia (J) |                             |           | : 0.0060 kgm <sup>2</sup> |                           |        |                          |
| Design  |                                      | : B                           |                 |                       |                             |           |                           |                           | -      |                          |
| Dutput [HP]   |                                      | 1.5                           |                 | 1.5                   |                             |           | 1.5                       |                           |        | 1.5                      |
| Poles   |                                      | 4                             |                 | 4                     |                             |           | 4                         |                           |        | 4                        |
| Frequency [Hz]  |                                      | 60                            |                 | 50                    |                             |           | 50                        |                           |        | 50                       |
| Rated voltage [V]   |                                      | 230/460                       |                 | 380                   |                             |           | 400                       |                           | 415    |                          |
| Rated current [A]   |                                      | 4.04/2.02                     |                 | 2.42                  |                             |           | 2.33                      |                           |        | 2.30                     |
| L. R. Amperes [A]   |                                      | 33.9/17.0                     |                 | 15.5                  |                             |           | 16.3                      |                           |        | 17.0                     |
| LRC [A]   |                                      | 8.4x(Code L)                  |                 | 6.4x(Code H)          |                             |           | 7.0x(Code J)              |                           | 7.4    | x(Code K)                |
| No load current [A]   |                                      | 2.20/1.10                     |                 | 1.10                  |                             |           | 1.20                      |                           |        | 1.30                     |
| Rated speed [RPM]   |                                      | 1755                          |                 | 1440                  |                             |           | 1445                      |                           |        | 1450                     |
| Slip [%]  |                                      | 2.50                          |                 | 4.00                  |                             |           | 3.67                      |                           |        | 3.33                     |
| Rated torque [kgfm]   |                                      | 0.620                         |                 | 0.756                 |                             |           | 0.753                     |                           | 0.751  |                          |
| ocked rotor torqu   |                                      | 290                           |                 | 220                   |                             |           | 250                       |                           | 280    |                          |
| Breakdown torque  |                                      | 350                           |                 |                       | 250                         |           | 290                       |                           | 320    |                          |
| Service factor  |                                      |                               | 1.25            |                       | 1.25                        |           | 1.25                      |                           | 1.25   |                          |
| Temperature rise  |                                      |                               | 30 K            |                       | 80 K                        |           | 80 1                      |                           |        | 80 K                     |
| _ocked rotor time   |                                      | 25s (cold) 14s (hot)          |                 | 255 (0                | 25s (cold) 14s (hot)        |           | 25s (cold) 14s (hot)      |                           | 25s (c | old) 14s (hot)           |
| Noise level <sup>2</sup>  |                                      | 51.0 dB(A)                    |                 |                       | 49.0 dB(A)                  |           | 49.0 dB(A)                |                           |        | 9.0 dB(A)                |
|   | 25%                                  |                               | 31.3            |                       | 82.0                        |           | 82.                       |                           |        | 80.5                     |
| Efficiency (%)  | 50%                                  |                               | 32.5            | 82.5                  |                             |           | 82.5                      |                           |        | 81.0                     |
|   | 75%                                  |                               |                 | 84.0                  |                             |           | 84.0                      |                           |        | 84.0                     |
|   | 100%                                 |                               | 85.5            |                       | 84.1                        |           | 84.1                      |                           |        | 84.1                     |
|   | 25%                                  | 86.5<br>0.35                  |                 |                       | 0.41                        |           | 0.37                      |                           |        | 0.34                     |
|   | 50%                                  |                               |                 | 0.67                  |                             |           | 0.63                      |                           |        | 0.54                     |
|   | 50%<br>75%                           | 0.60<br>0.70                  |                 | 0.67                  |                             |           | 0.03                      |                           |        | 0.80                     |
|   | 100%                                 | 0.70                          |                 |                       | 0.82                        |           | 0.74                      |                           |        | 0.70                     |
| Losses at normati   |                                      |                               |                 | n nercei              |                             |           |                           |                           |        |                          |
| Loooco at normat  | P1 (0,                               |                               | 14.6            | ii peroer             | 14                          |           |                           | 14.6                      |        | 14.6                     |
|   | P2 (0,                               |                               | 12.1            |                       | 12                          |           | 12.1                      |                           |        | 12.1                     |
|   |                                      | -                             | 12.1            |                       | 12                          |           | 12.2                      |                           | 12.1   |                          |
| Losses (%)  |                                      | P3 (0,25;1,0)<br>P4 (0,9;0,5) |                 |                       | 8.                          |           | 8.2                       |                           | _      |                          |
| LUSSES (70)   |                                      |                               | 8.2<br>5.7      |                       |                             |           | -                         |                           | 8.2    |                          |
|   |                                      | P5 (0,5;0,5)                  |                 |                       | 5.                          |           | _                         | 5.7                       | 5.7    |                          |
|   |                                      | P6 (0,5;0,25)                 |                 | 4.3                   |                             | 3         |                           | 4.3                       | _      | 4.3                      |
|   | P7 (0,2                              |                               | 3.2             |                       | 3.                          |           |                           | 3.2                       |        | 3.2                      |
| Rooring ture  |                                      | Drive                         |                 | ive end               | Foundatio                   |           |                           |                           |        |                          |
| Bearing type  |                                      | 6307                          |                 | 04 ZZ                 | Max. tract                  |           |                           |                           |        |                          |
| Sealing   |                                      | : V'Ring V'Ring               |                 |                       | Max. compression            |           |                           |                           |        |                          |
| Lubrication interv  |                                      | -                             |                 | -                     |                             |           |                           |                           |        |                          |
| Lubricant amount  |                                      | · · · ·                       |                 |                       |                             |           |                           |                           |        |                          |
| Lubricant type  |                                      | . IV                          | lobil Polyrex E | _1VI                  |                             |           |                           |                           |        |                          |
| This revision repla<br>must be eliminate<br>(1) Looking the m<br>(2) Measured at 1<br>(3) Approximate v | d.<br>otor from the<br>m and with to | shaft end.<br>plerance o      | f +3dB(A).      | nich                  |                             |           |                           | based on te<br>tolerances |        | sinusoidal<br>ed in NEMA |
| (3) Approximate v<br>manufacturing pro  |                                      | to change                     | es allel        |                       |                             |           |                           |                           |        |                          |
| Rev.  | Changes Summary                      |                               |                 |                       | Performed                   |           | med                       | Checked                   |        | Date                     |
|   |                                      |                               |                 |                       |                             |           |                           |                           |        |                          |
| Uortormod by  |                                      |                               |                 |                       |                             |           |                           | -                         |        |                          |
| Performed by  |                                      |                               |                 |                       |                             |           |                           |                           |        |                          |
| Checked by<br>Date  | 14/01/2024                           |                               |                 |                       |                             |           |                           | Page<br>1 / 6             |        | Revision                 |

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Notes

USABLE @208V 4.36A SF 1.15 SFA 5.01A

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| Rev.         |            | Changes Summary | Performed | Checked | Date     |
|--------------|------------|-----------------|-----------|---------|----------|
|              |            |                 |           |         |          |
| Performed by |            |                 |           |         |          |
| Checked by   |            |                 |           | Page    | Revision |
| Date         | 14/01/2024 |                 |           | 2/6     |          |

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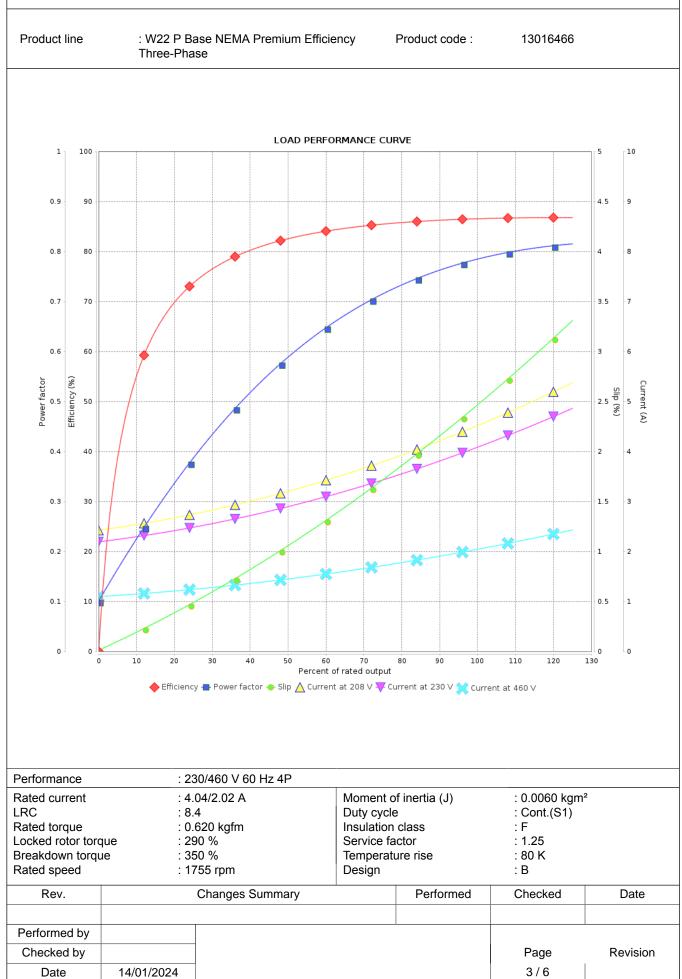


# LOAD PERFORMANCE CURVE

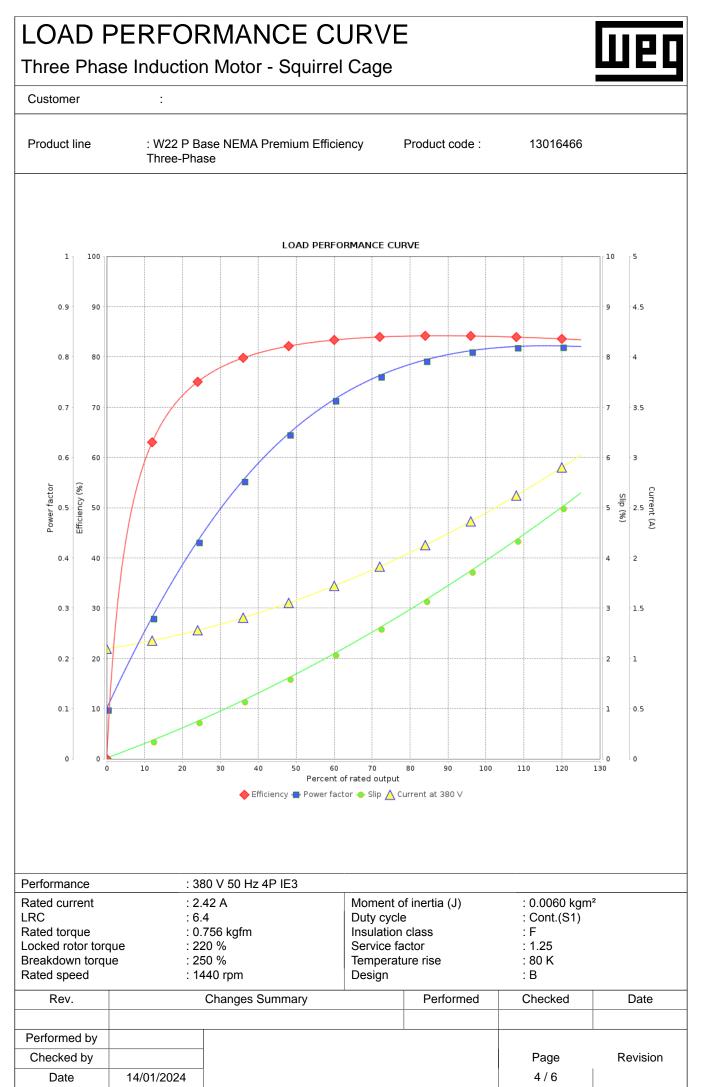
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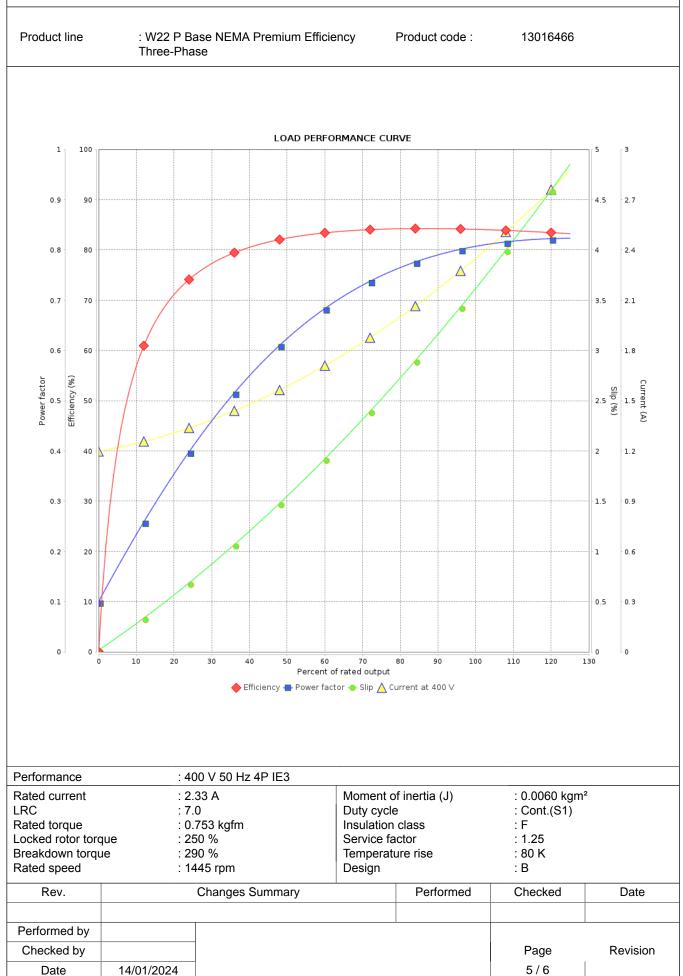
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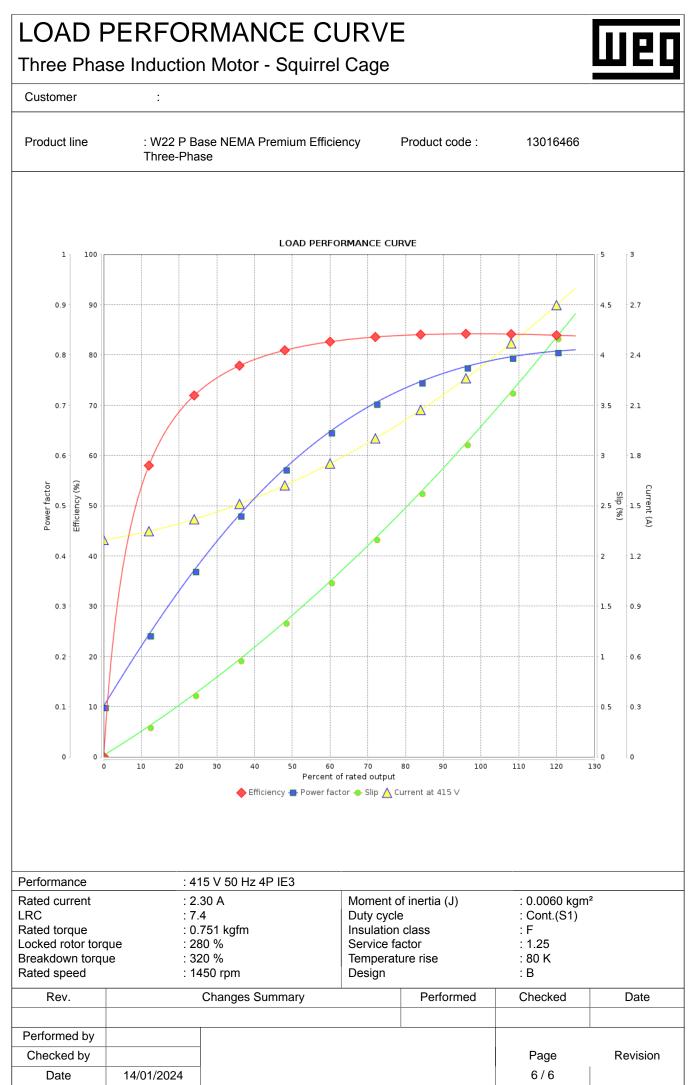
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