

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



|  |   |      |
|--|---|------|
| Customer :   |   |      |
| Product line   | : NEMA Premium Efficiency Three-Phase                   |      |
| Product code :   | 12751161  |      |
| Frame  | : 182/4T  |      |
| Insulation class   | : F   |      |
| Duty cycle   | : Cont.(S1)   |      |
| Ambient temperature  | : -20°C to +40°C  |      |
| Altitude   | : 1000 m.a.s.l.   |      |
| Protection degree  | : IP55  |      |
| Design   | : B   |      |
| Cooling method   | : IC411 - TEFC  |      |
| Mounting   | : F-1   |      |
| Rotation <sup>1</sup>  | : Both (CW and CCW)                                     |      |
| Starting method  | : Direct On Line  |      |
| Approx. weight <sup>2</sup>  | : 37.3 kg   |      |
| Moment of inertia (J)  | : 0.0088 kgm <sup>2</sup>                               |      |
| Output [HP]  | 5   |      |
| Poles  | 2   |      |
| Frequency [Hz]   | 60  |      |
| Rated voltage [V]  | 230/460   |      |
| Rated current [A]  | 11.8/5.90   |      |
| L. R. Amperes [A]  | 92.0/46.0   |      |
| LRC [A]  | 7.8x(Code J)  |      |
| No load current [A]  | 4.40/2.20   |      |
| Rated speed [RPM]  | 3500  |      |
| Slip [%]   | 2.78  |      |
| Rated torque [kgfm]  | 1.04  |      |
| Locked rotor torque [%]  | 220   |      |
| Breakdown torque [%]   | 300   |      |
| Service factor   | 1.15  |      |
| Temperature rise   | 80 K  |      |
| Locked rotor time  | 30s (cold) 17s (hot)                                    |      |
| Noise level <sup>2</sup>   | 68.0 dB(A)  |      |
| Efficiency (%)   | 25%   | 87.2 |
|  | 50%   | 87.5 |
|  | 75%   | 88.5 |
|  | 100%  | 88.5 |
| Power Factor   | 25%   | 0.49 |
|  | 50%   | 0.76 |
|  | 75%   | 0.85 |
|  | 100%  | 0.89 |
| Bearing type   | : <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6205 ZZ |      |
| Sealing  | : V'Ring Without Bearing Seal                           |      |
| Lubrication interval   | : -   |      |
| Lubricant amount   | : -   |      |
| Lubricant type   | : Mobil Polyrex EM                                      |      |
| Foundation loads   | Max. traction : 55 kgf                                  |      |
|  | Max. compression : 92 kgf                               |      |
| Notes<br>USABLE @208V 13.1A SF 1.00 SFA 13.1A  |   |      |
| 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 by   | Performed   |      |
| Checked by   | Checked   |      |
| Date   | 13/05/2022  |      |
| Page   | 1 / 4   |      |
| Revision   |   |      |

# LOAD PERFORMANCE CURVE

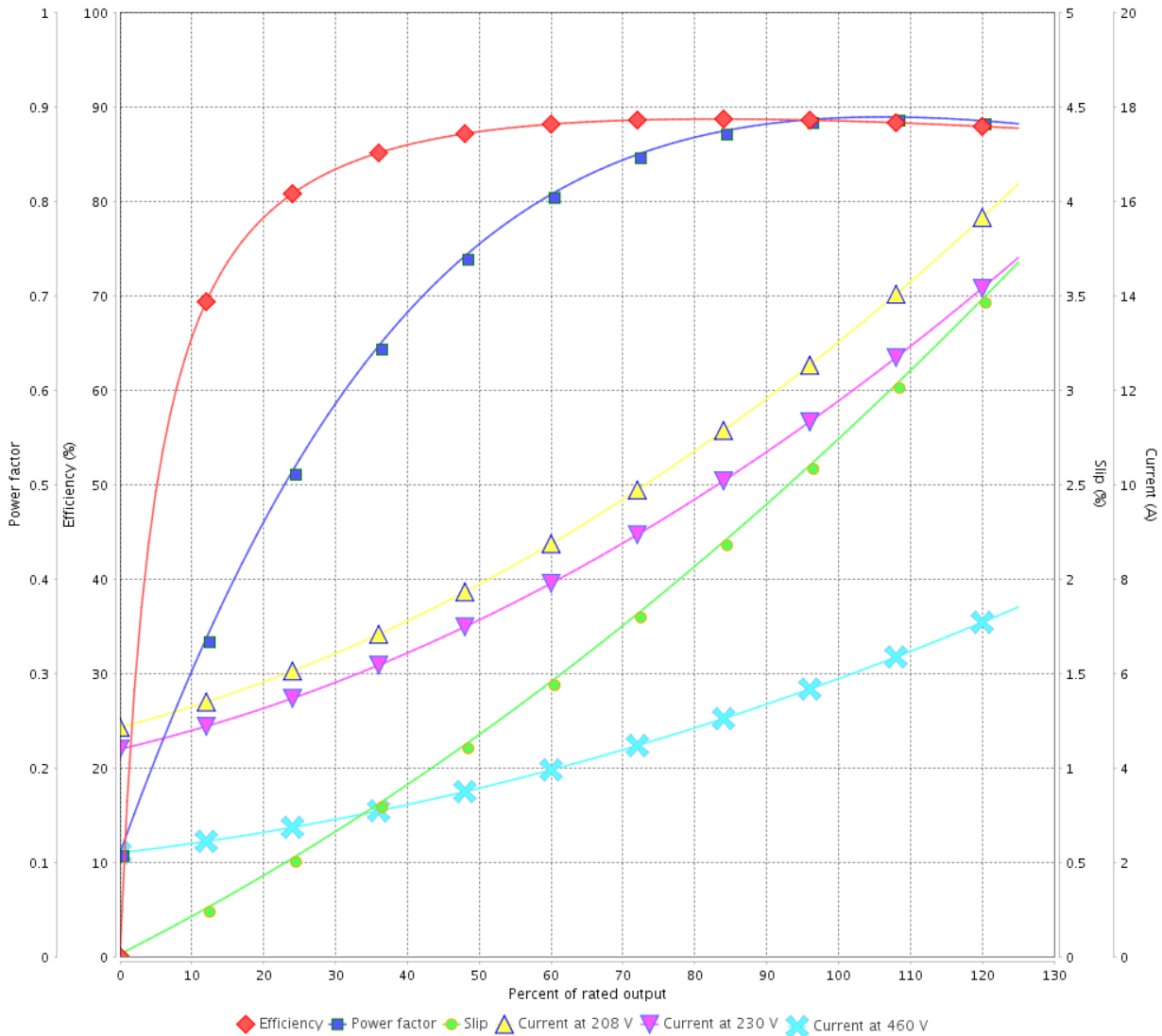
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12751161

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 11.8/5.90 A  
 LRC : 7.8  
 Rated torque : 1.04 kgfm  
 Locked rotor torque : 220 %  
 Breakdown torque : 300 %  
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0088 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked | Date     |
|--------------|-----------------|-----------|---------|----------|
|              |                 |           |         |          |
| Performed by |                 |           | Page    | Revision |
| Checked by   |                 |           |         |          |
| Date         |                 |           |         |          |

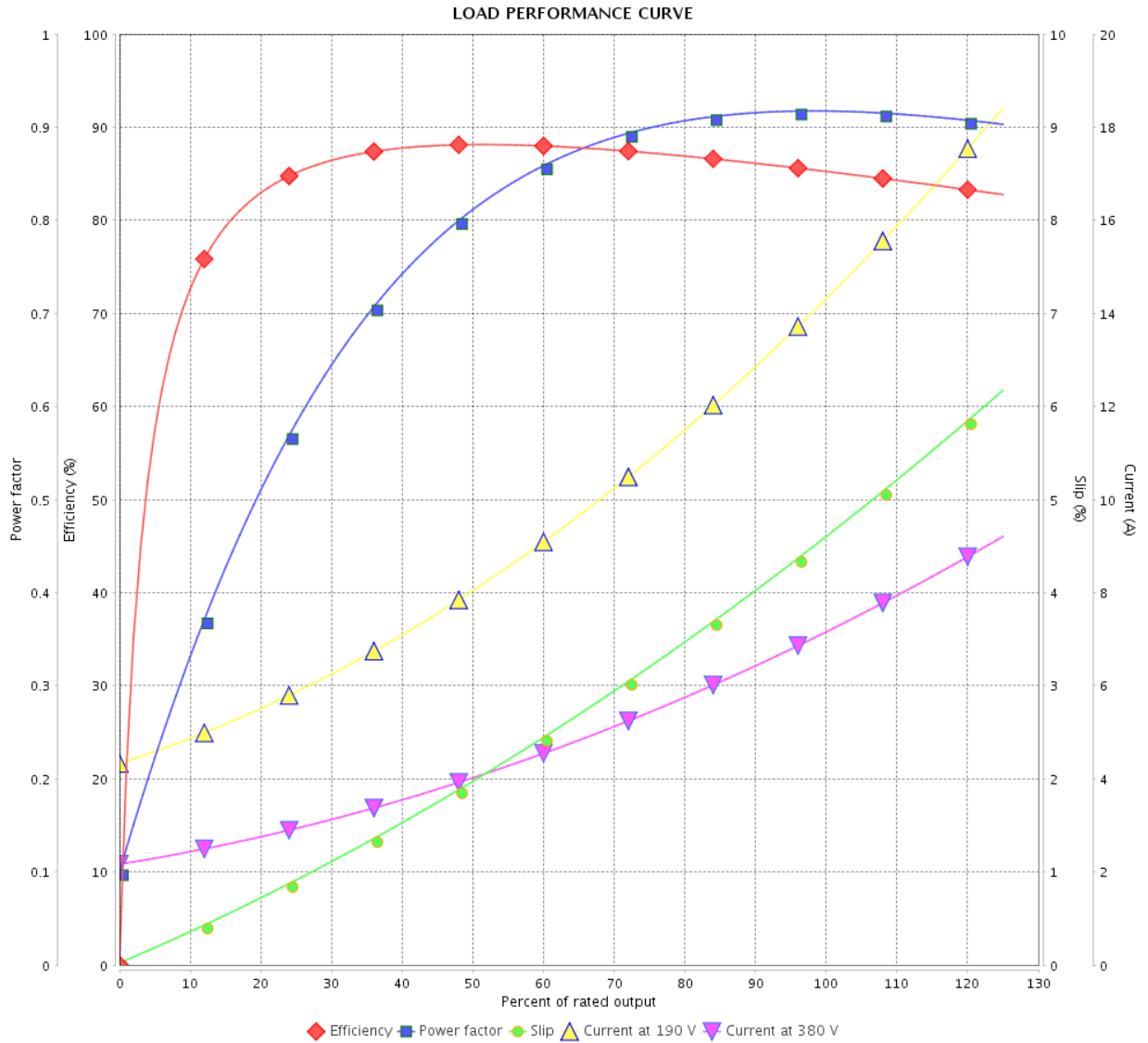
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12751161



Performance : 190/380 V 50 Hz 2P

Rated current : 14.3/7.17 A  
 LRC : 6.4  
 Rated torque : 1.27 kgfm  
 Locked rotor torque : 180 %  
 Breakdown torque : 250 %  
 Rated speed : 2860 rpm

Moment of inertia (J) : 0.0088 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

| Rev.         | Changes Summary | Performed  | Checked | Date     |
|--------------|-----------------|------------|---------|----------|
|              |                 |            |         |          |
| Performed by |                 | Page       |         | Revision |
| Checked by   |                 | 3 / 4      |         |          |
| Date         |                 | 13/05/2022 |         |          |

# LOAD PERFORMANCE CURVE

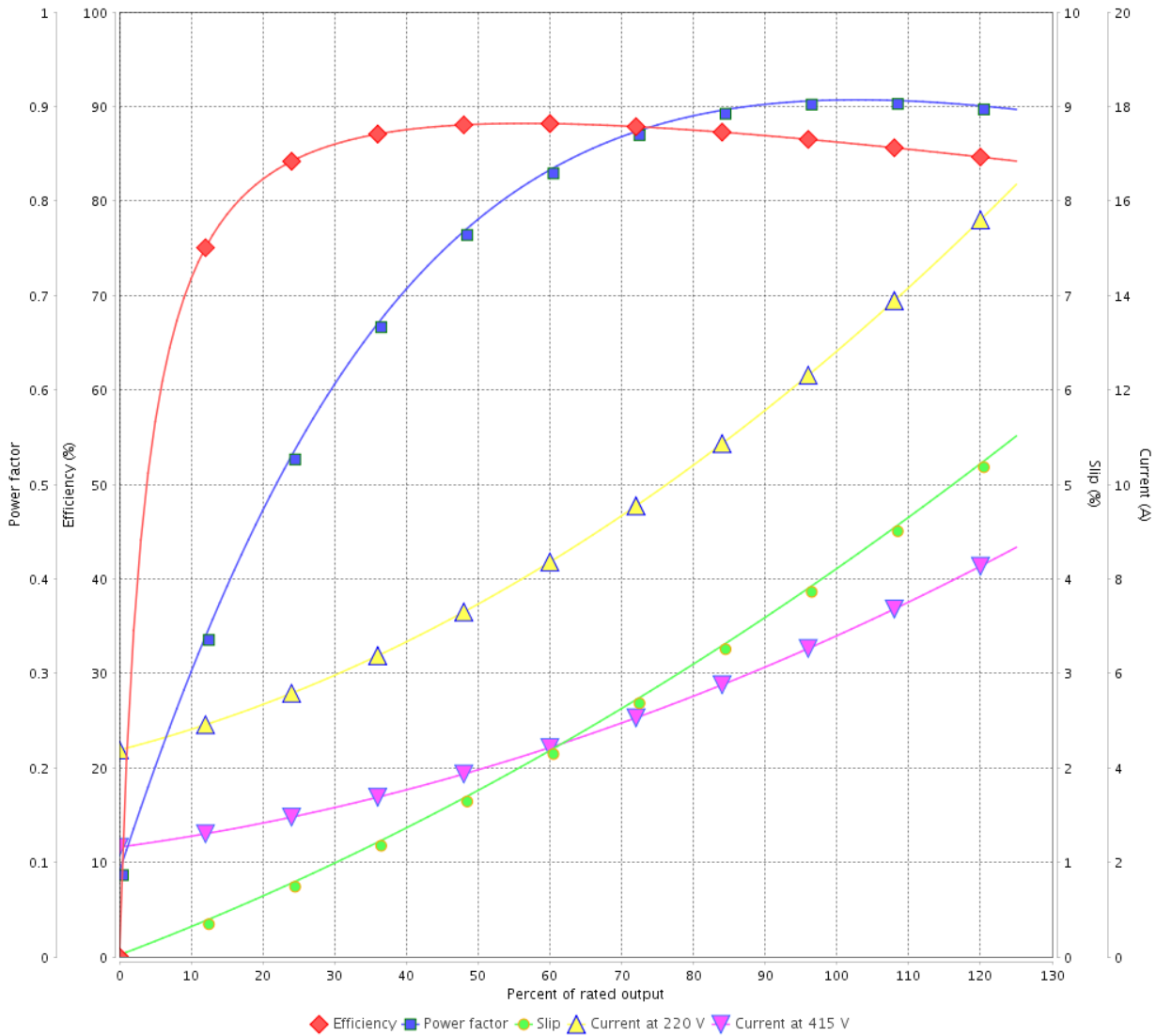
Three Phase Induction Motor - Squirrel Cage



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

Product line : NEMA Premium Efficiency Three-Phase      Product code : 12751161

LOAD PERFORMANCE CURVE



Performance : 220/415 V 50 Hz 2P

Rated current : 12.8/6.81 A  
 LRC : 7.1  
 Rated torque : 1.26 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 280 %  
 Rated speed : 2875 rpm

Moment of inertia (J) : 0.0088 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked | Date     |
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|              |                 |           |         |          |
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