

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 15058465

|                       |                           |                             |                        |
|-----------------------|---------------------------|-----------------------------|------------------------|
| Frame                 | : L80                     | Locked rotor time           | : 23s (cold) 13s (hot) |
| Output                | : 1 HP (0.75 kW)          | Temperature rise            | : 80 K                 |
| Poles                 | : 4                       | Duty cycle                  | : S1                   |
| Frequency             | : 60 Hz                   | Ambient temperature         | : -20°C to +40°C       |
| Rated voltage         | : 208-230/460 V           | Altitude                    | : 1000 m.a.s.l.        |
| Rated current         | : 3.20-2.90/1.45 A        | Protection degree           | : IP55                 |
| L. R. Amperes         | : 25.9-23.5/11.7 A        | Cooling method              | : IC411 - TEFC         |
| LRC                   | : 8.1                     | Mounting                    | : B35L(E)              |
| No load current       | : 2.08-1.88/0.940 A       | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| Rated speed           | : 1736 rpm                | Noise level <sup>2</sup>    | : 48.0 dB(A)           |
| Slip                  | : 3.56 %                  | Starting method             | : Direct On Line       |
| Rated torque          | : 0.418 kgfm              | Approx. weight <sup>3</sup> | : 19.0 kg              |
| Locked rotor torque   | : 350 %                   |                             |                        |
| Breakdown torque      | : 360 %                   |                             |                        |
| Insulation class      | : F                       |                             |                        |
| Service factor        | : 1.25                    |                             |                        |
| Moment of inertia (J) | : 0.0037 kgm <sup>2</sup> |                             |                        |
| Design                | : N                       |                             |                        |

|                |      |      |      |      |                  |          |
|----------------|------|------|------|------|------------------|----------|
| Output         | 25%  | 50%  | 75%  | 100% | Foundation loads |          |
| Efficiency (%) | 71.3 | 80.0 | 83.0 | 85.5 | Max. traction    | : 38 kgf |
| Power Factor   | 0.36 | 0.53 | 0.67 | 0.76 | Max. compression | : 57 kgf |

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

|              |              |               |              |              |               |                |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| P1 (0,9;1,0) | P2 (0,5;1,0) | P3 (0,25;1,0) | P4 (0,9;0,5) | P5 (0,5;0,5) | P6 (0,5;0,25) | P7 (0,25;0,25) |
| 15.9         | 12.9         | 13.1          | 10.0         | 6.8          | 5.5           | 3.9            |

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type         | : | 6204 ZZ          | 6203 ZZ              |
| Sealing              | : | V'Ring           | V'Ring               |
| Lubrication interval | : | 0 h              | 0 h                  |
| Lubricant amount     | : | 0 g              | 0 g                  |
| 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 |                 |           |         |          |
| Checked by   |                 |           | Page    | Revision |
| Date         | 15/01/2024      |           | 1 / 2   |          |

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

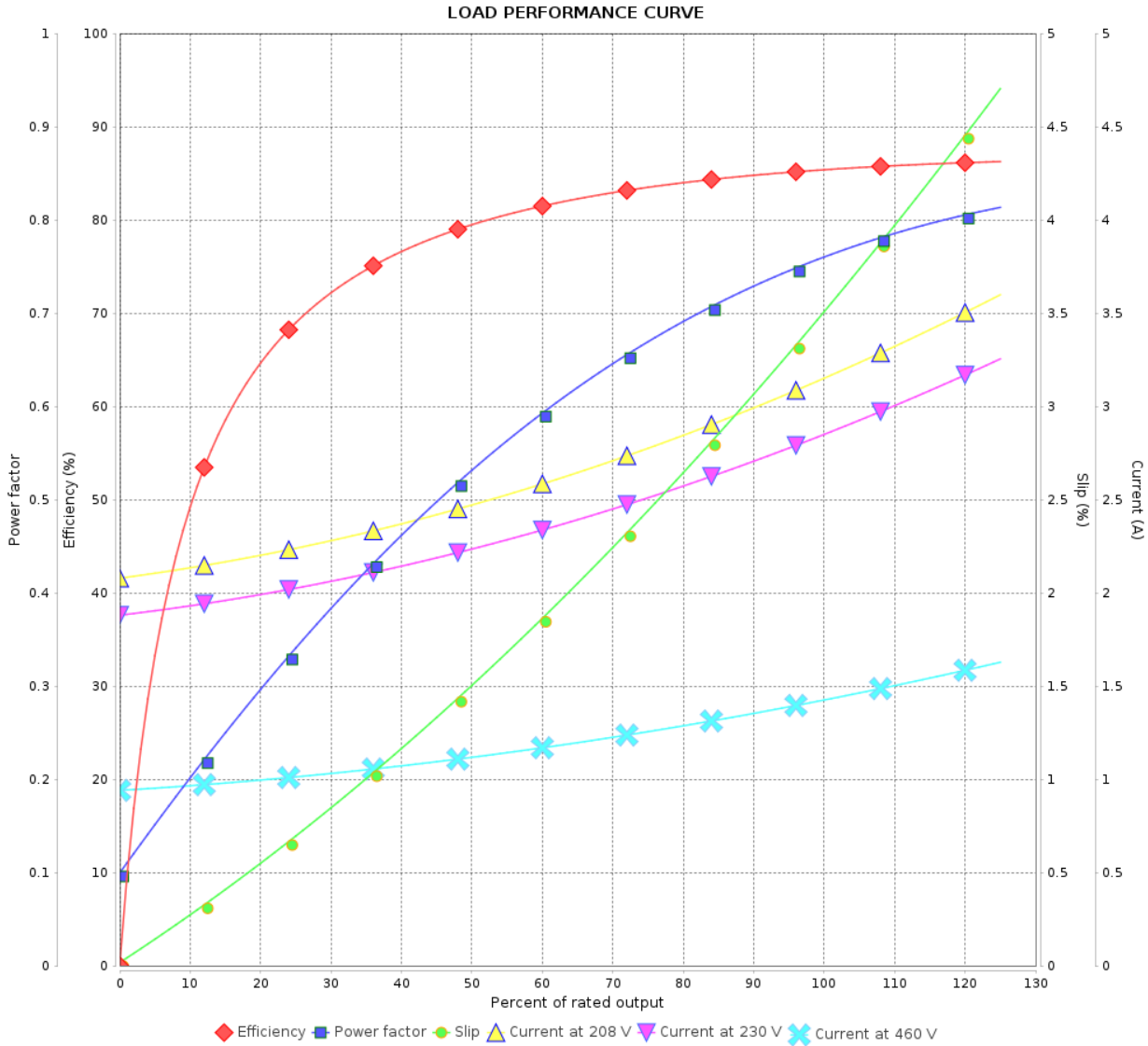


Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

15058465



Performance : 208-230/460 V 60 Hz 4P

Rated current : 3.20-2.90/1.45 A  
 LRC : 8.1  
 Rated torque : 0.418 kgfm  
 Locked rotor torque : 350 %  
 Breakdown torque : 360 %  
 Rated speed : 1736 rpm

Moment of inertia (J) : 0.0037 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

| Rev.         | Changes Summary | Performed | Checked | Date     |
|--------------|-----------------|-----------|---------|----------|
|              |                 |           |         |          |
| Performed by |                 |           | Page    | Revision |
| Checked by   |                 |           | 2 / 2   |          |
| Date         | 15/01/2024      |           |         |          |