

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE4 Three-Phase

Product code : 17300409  
Catalog # : 11012EG3Y315L-W22

|                       |                   |                             |                        |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame                 | : 315L            | Locked rotor time           | : 79s (cold) 44s (hot) |
| Output                | : 150 HP (110 kW) | Temperature rise            | : 80 K                 |
| Poles                 | : 6               | Duty cycle                  | : S1                   |
| Frequency             | : 50 Hz           | Ambient temperature         | : -20°C to +40°C       |
| Rated voltage         | : 380 V           | Altitude                    | : 1000 m.a.s.l.        |
| Rated current         | : 210 A           | Protection degree           | : IP55                 |
| L. R. Amperes         | : 1449 A          | Cooling method              | : IC411 - TEFC         |
| LRC                   | : 6.9             | Mounting                    | : B3L(E)               |
| No load current       | : 83.0 A          | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| Rated speed           | : 990 rpm         | Noise level <sup>2</sup>    | : 68.0 dB(A)           |
| Slip                  | : 1.00 %          | Starting method             | : Direct On Line       |
| Rated torque          | : 796 ft.lb       | Approx. weight <sup>3</sup> | : 2889 lb              |
| Locked rotor torque   | : 220 %           |                             |                        |
| Breakdown torque      | : 240 %           |                             |                        |
| Insulation class      | : F               |                             |                        |
| Service factor        | : 1.00            |                             |                        |
| Moment of inertia (J) | : 210 sq.ft.lb    |                             |                        |
| Design                | : NE              |                             |                        |

|                |       |      |      |      |                  |      |      |                         |                            |
|----------------|-------|------|------|------|------------------|------|------|-------------------------|----------------------------|
| Output         | 25%   | 50%  | 75%  | 100% | Foundation loads |      |      |                         |                            |
| Efficiency (%) | 0.000 | 95.2 | 95.0 | 95.7 | 95.7             | 95.8 | 95.8 | Max. traction : 3312 lb |                            |
|                | 0.000 | 94.8 | 94.8 | 95.6 | 95.8             | 95.8 | 96.2 |                         |                            |
|                | 0.000 |      |      |      |                  |      |      |                         |                            |
| Power Factor   | 0.00  | 0.00 | 0.69 | 0.65 | 0.79             | 0.77 | 0.83 | 0.82                    | Max. compression : 6201 lb |
|                | 0.00  | 0.00 | 0.63 | 0.62 | 0.75             | 0.75 | 0.80 | 0.81                    |                            |

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

|            |                |     |     |     |     |
|------------|----------------|-----|-----|-----|-----|
| Losses (%) | P1 (0,9;1,0)   | 4.3 | 4.3 | 4.3 | 4.0 |
|            | P2 (0,5;1,0)   | 3.4 | 3.4 | 3.4 | 3.1 |
|            | P3 (0,25;1,0)  | 3.0 | 3.0 | 3.0 | 2.8 |
|            | P4 (0,9;0,5)   | 2.4 | 2.4 | 2.4 | 2.2 |
|            | P5 (0,5;0,5)   | 1.5 | 1.5 | 1.5 | 1.4 |
|            | P6 (0,5;0,25)  | 1.1 | 1.1 | 1.1 | 1.0 |
|            | P7 (0,25;0,25) | 0.7 | 0.7 | 0.7 | 0.7 |

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type         | : | 6319 C3          | 6316 C3              |
| Sealing              | : | WSeal            | WSeal                |
| Lubrication interval | : | 13000 h          | 16000 h              |
| Lubricant amount     | : | 45 g             | 34 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 |                 | Page<br>1 / 1 |          |      |
| Checked by   |                 |               |          |      |
| Date         | 26/03/2024      |               |          |      |
|              |                 |               | Revision |      |