

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec IE2 Three-Phase

Product code : 12318304

Area classification : ZONA 2/22, GRUPO IIC/IIIB, T3(200 °C)/  
T125 °C

Catalog # : E03736EP3YAX200LF3-W

Frame : 200L  
Output : 37 kW (50 HP)  
Poles : 2  
Frequency : 50 Hz  
Rated voltage : 380/660 V  
Rated current : 69.5/40.0 A  
L. R. Amperes : 528/304 A  
LRC : 7.6  
No load current : 24.0/13.8 A  
Rated speed : 2965 rpm  
Slip : 1.17 %  
Rated torque : 87.9 ft.lb  
Locked rotor torque : 290 %  
Breakdown torque : 280 %  
Insulation class : F  
Service factor : 1.00  
Moment of inertia (J) : 4.63 sq.ft.lb  
Design : N

Locked rotor time : 21s (cold) 12s (hot)  
Temperature rise : 80 K  
Duty cycle : S1  
Ambient temperature : -20°C to +40°C  
Altitude : 1000 m.a.s.l.  
Protection degree : IP55  
Cooling method : IC411 - TEFC  
Mounting : B3T  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 72.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 583 lb

| Output         | 25%  |      | 50%  |      | 75%  |      | 100% |      |
|----------------|------|------|------|------|------|------|------|------|
| Efficiency (%) | 91.8 | 91.9 | 92.0 | 92.3 | 93.0 | 93.0 | 93.0 | 93.3 |
|                | 91.7 | 90.7 | 92.0 | 91.1 | 93.4 | 92.7 | 93.5 | 93.0 |
| Power Factor   | 0.50 | 0.45 | 0.76 | 0.70 | 0.84 | 0.80 | 0.87 | 0.85 |
|                | 0.39 | 0.40 | 0.63 | 0.60 | 0.76 | 0.78 | 0.82 | 0.83 |

Foundation loads  
Max. traction : 742 lb  
Max. compression : 1326 lb

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

|            |                |     |     |     |     |
|------------|----------------|-----|-----|-----|-----|
| Losses (%) | P1 (0,9;1,0)   | 7.1 | 6.8 | 6.6 | 7.1 |
|            | P2 (0,5;1,0)   | 5.7 | 5.5 | 5.3 | 5.7 |
|            | P3 (0,25;1,0)  | 5.5 | 5.2 | 5.0 | 5.5 |
|            | P4 (0,9;0,5)   | 3.8 | 3.6 | 3.5 | 3.8 |
|            | P5 (0,5;0,5)   | 2.4 | 2.3 | 2.2 | 2.4 |
|            | P6 (0,5;0,25)  | 1.6 | 1.6 | 1.5 | 1.6 |
|            | P7 (0,25;0,25) | 1.1 | 1.0 | 1.0 | 1.1 |

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type         | : | 6312 C3          | 6212 C3              |
| Sealing              | : | V'Ring           | V'Ring               |
| Lubrication interval | : | 15000 h          | 18000 h              |
| Lubricant amount     | : | 21 g             | 13 g                 |
| Lubricant type       | : | Mobil Polyrex EM |                      |

Notes:

EAC  
TC RU C-BR.AA87.B.00977/22  
2Ex ec IIC T3 Gc X  
Ex tc IIIB T125°C Dc X  
OOO «НАИО ЛЦБЭ»  
IECEX  
IECEX BAS 10.0099X  
Ex ec IIC T3 Gc  
Ex tc IIIB T125°C Dc

| Rev.         | Changes Summary | Performed     | Checked  | Date |
|--------------|-----------------|---------------|----------|------|
|              |                 |               |          |      |
| Performed by |                 | Page<br>1 / 3 |          |      |
| Checked by   |                 |               |          |      |
| Date         | 27/03/2024      |               |          |      |
|              |                 |               | Revision |      |

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|--------------|-----------------|--|-----------|---------|----------|
|              |                 |  |           |         |          |
| Performed by |                 |  | Page      |         | Revision |
| Checked by   |                 |  |           |         |          |
| Date         | 27/03/2024      |  |           |         |          |

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

### Thermal protection

| ID | Application | Type                 | Quantity  | Sensing Temperature |
|----|-------------|----------------------|-----------|---------------------|
| 1  | Winding     | Thermistor - 2 wires | 1 x Phase | 140 °C              |
| 2  | Winding     | Thermistor - 2 wires | 1 x Phase | 155 °C              |

| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|--------------|-----------------|--|-----------|---------|----------|
|              |                 |  |           |         |          |
| Performed by |                 |  |           | Page    | Revision |
| Checked by   |                 |  |           | 3 / 3   |          |
| Date         | 27/03/2024      |  |           |         |          |