

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xdb IE2 Three-Phase

Product code : 12383858

Area classification : ZONA 1, GRUPO IIB, T4 (135 °C)

Catalog # : E09012XP3YAX315SMF3W

Frame : 315S/M  
Output : 90 kW (125 HP)  
Poles : 6  
Frequency : 50 Hz  
Rated voltage : 380/660 V  
Rated current : 177/102 A  
L. R. Amperes : 1062/611 A  
LRC : 6.0  
No load current : 66.0/38.0 A  
Rated speed : 990 rpm  
Slip : 1.00 %  
Rated torque : 641 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 220 %  
Insulation class : F  
Service factor : 1.00  
Moment of inertia (J) : 108 sq.ft.lb  
Design : N

Locked rotor time : 39s (cold) 22s (hot)  
Temperature rise : 80 K  
Duty cycle : S1  
Ambient temperature : -20°C to +40°C  
Altitude : 1000 m.a.s.l.  
Protection degree : IP56  
Cooling method : IC411 - TEFC  
Mounting : B3T  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 67.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 2556 lb

| Output         | 25%  |      | 50%  |      | 75%  |      | 100% |      |
|----------------|------|------|------|------|------|------|------|------|
| Efficiency (%) | 94.1 | 93.6 | 94.2 | 93.7 | 94.2 | 94.5 | 94.2 | 94.5 |
|                | 93.2 | 93.5 | 93.4 | 93.6 | 94.2 | 94.5 | 94.3 | 94.5 |
| Power Factor   | 0.45 | 0.41 | 0.71 | 0.67 | 0.79 | 0.76 | 0.82 | 0.81 |
|                | 0.38 | 0.39 | 0.64 | 0.64 | 0.74 | 0.75 | 0.80 | 0.80 |

Foundation loads  
Max. traction : 2169 lb  
Max. compression : 4725 lb

|                      | Drive end        | Non drive end  |
|----------------------|------------------|----------------|
| Bearing type         | 6319 C3          | 6316 C3        |
| Sealing              | Viton Oil Seal   | Viton Oil Seal |
| Lubrication interval | 16000 h          | 18000 h        |
| Lubricant amount     | 45 g             | 34 g           |
| Lubricant type       | Mobil Polyrex EM |                |

### Notes:

EAC  
EA3C RU C-BR.AA87.B.00379/20  
1Ex db IIB T4 Gb X  
ООО «НАННО ЦСВЭ»  
IECEX  
IECEX INE 16.0044X  
Ex db IIB T4 Gb

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 IEC 60034-1.

| Rev.         | Changes Summary | Performed     | Checked | Date |
|--------------|-----------------|---------------|---------|------|
|              |                 |               |         |      |
| Performed by |                 | Page<br>1 / 2 |         |      |
| Checked by   |                 |               |         |      |
| Date         | 27/03/2024      |               |         |      |
|              |                 | Revision      |         |      |

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 | 150 °C              |

Space heater information

Voltage: 200 - 240 V

|              |                 |  |           |         |          |
|--------------|-----------------|--|-----------|---------|----------|
| Rev.         | Changes Summary |  | Performed | Checked | Date     |
|              |                 |  |           |         |          |
| Performed by |                 |  |           | Page    | Revision |
| Checked by   |                 |  |           | 2 / 2   |          |
| Date         | 27/03/2024      |  |           |         |          |