

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xdb IE3 Three-Phase

Product code : 16696557

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

Catalog # : E13236XT3YAX315SMF3W

Frame : 315S/M  
Output : 132 kW (175 HP)  
Poles : 2  
Frequency : 50 Hz  
Rated voltage : 380/660 V  
Rated current : 233/134 A  
L. R. Amperes : 1608/926 A  
LRC : 6.9  
No load current : 61.0/35.1 A  
Rated speed : 2977 rpm  
Slip : 0.77 %  
Rated torque : 313 ft.lb  
Locked rotor torque : 200 %  
Breakdown torque : 280 %  
Insulation class : F  
Service factor : 1.00  
Moment of inertia (J) : 46.4 sq.ft.lb  
Design : N

Locked rotor time : 61s (cold) 34s (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> : 77.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 2.2 lb

| Output         | 25%  |      | 50%  |      | 75%  |      | 100% |      |
|----------------|------|------|------|------|------|------|------|------|
| Efficiency (%) | 94.5 | 94.2 | 94.7 | 94.5 | 95.5 | 95.4 | 95.6 | 95.6 |
|                | 94.0 | 92.0 | 94.3 | 92.9 | 95.4 | 94.5 | 95.6 | 95.4 |
| Power Factor   | 0.57 | 0.54 | 0.81 | 0.78 | 0.87 | 0.86 | 0.90 | 0.89 |
|                | 0.50 | 0.53 | 0.75 | 0.77 | 0.84 | 0.85 | 0.88 | 0.88 |

Foundation loads  
Max. traction : 2117 lb  
Max. compression : 2119 lb

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

|            |                |     |     |     |     |
|------------|----------------|-----|-----|-----|-----|
| Losses (%) | P1 (0,9;1,0)   | 4.4 | 4.4 | 4.4 | 4.6 |
|            | P2 (0,5;1,0)   | 3.2 | 3.2 | 3.2 | 3.3 |
|            | P3 (0,25;1,0)  | 2.8 | 2.8 | 2.8 | 2.9 |
|            | P4 (0,9;0,5)   | 2.5 | 2.5 | 2.5 | 2.6 |
|            | P5 (0,5;0,5)   | 1.4 | 1.4 | 1.4 | 1.5 |
|            | P6 (0,5;0,25)  | 1.0 | 1.0 | 1.0 | 1.0 |
|            | P7 (0,25;0,25) | 0.5 | 0.5 | 0.5 | 0.5 |

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type         | : | 6314 C3          | 6314 C3              |
| Sealing              | : | Viton Oil Seal   | Viton Oil Seal       |
| Lubrication interval | : | 5000 h           | 5000 h               |
| Lubricant amount     | : | 27 g             | 27 g                 |
| Lubricant type       | : | Mobil Polyrex EM |                      |

Notes:

ATEX  
INERIS 16ATEX0036X  
CML 21UKEX1315X  
II 2G Ex db IIB T4 Gb  
EAC  
EAЭC 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

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

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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

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