

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xdb IE3 Three-Phase

Product code : 12383829

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

Catalog # : E11018XT3YAX315SMF3W

|                       |                   |                             |                        |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame                 | : 315S/M          | Locked rotor time           | : 59s (cold) 33s (hot) |
| Output                | : 110 kW (150 HP) | Temperature rise            | : 80 K                 |
| Poles                 | : 4               | Duty cycle                  | : S1                   |
| Frequency             | : 50 Hz           | Ambient temperature         | : -20°C to +40°C       |
| Rated voltage         | : 380/660 V       | Altitude                    | : 1000 m.a.s.l.        |
| Rated current         | : 201/116 A       | Protection degree           | : IP56                 |
| L. R. Amperes         | : 1246/718 A      | Cooling method              | : IC411 - TEFC         |
| LRC                   | : 6.2             | Mounting                    | : B3T                  |
| No load current       | : 62.0/35.7 A     | Rotation <sup>1</sup>       | : Both (CW and CCW)    |
| Rated speed           | : 1489 rpm        | Noise level <sup>2</sup>    | : 71.0 dB(A)           |
| Slip                  | : 0.73 %          | Starting method             | : Direct On Line       |
| Rated torque          | : 521 ft.lb       | Approx. weight <sup>3</sup> | : 2729 lb              |
| Locked rotor torque   | : 200 %           |                             |                        |
| Breakdown torque      | : 240 %           |                             |                        |
| Insulation class      | : F               |                             |                        |
| Service factor        | : 1.00            |                             |                        |
| Moment of inertia (J) | : 68.7 sq.ft.lb   |                             |                        |
| Design                | : N               |                             |                        |

|                |      |      |      |      |                  |      |      |      |                  |           |
|----------------|------|------|------|------|------------------|------|------|------|------------------|-----------|
| Output         | 25%  | 50%  | 75%  | 100% | Foundation loads |      |      |      |                  |           |
| Efficiency (%) | 94.9 | 94.5 | 95.0 | 94.7 | 95.5             | 95.5 | 95.5 | 95.6 | Max. traction    | : 1640 lb |
|                | 94.2 | 92.9 | 94.4 | 93.7 | 95.4             | 95.0 | 95.5 | 95.8 |                  |           |
| Power Factor   | 0.53 | 0.48 | 0.78 | 0.74 | 0.85             | 0.82 | 0.87 | 0.86 | Max. compression | : 4370 lb |
|                | 0.45 | 0.47 | 0.71 | 0.73 | 0.81             | 0.82 | 0.85 | 0.85 |                  |           |

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

|            |                |     |     |     |     |
|------------|----------------|-----|-----|-----|-----|
| Losses (%) | P1 (0,9;1,0)   | 4.7 | 4.6 | 4.7 | 4.4 |
|            | P2 (0,5;1,0)   | 3.6 | 3.5 | 3.6 | 3.3 |
|            | P3 (0,25;1,0)  | 3.1 | 3.0 | 3.1 | 2.8 |
|            | P4 (0,9;0,5)   | 2.6 | 2.5 | 2.6 | 2.4 |
|            | P5 (0,5;0,5)   | 1.6 | 1.6 | 1.6 | 1.5 |
|            | P6 (0,5;0,25)  | 1.2 | 1.1 | 1.2 | 1.1 |
|            | P7 (0,25;0,25) | 0.7 | 0.6 | 0.7 | 0.6 |

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
|                      |   | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type         | : | 6319 C3          | 6316 C3              |
| Sealing              | : | Viton Oil Seal   | Viton Oil Seal       |
| Lubrication interval | : | 11000 h          | 13000 h              |
| Lubricant amount     | : | 45 g             | 34 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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