

DATA SHEET

Squirrel Cage Induction Motors

STAR

0.86

0.72

1TZ9503-3AA43-4_A4 **Three-phase Motor Type*** 2pole

Area Safe Area

Environmental Conditions -20°C to +40°C, up to 1000 metres above sea level

Rated Voltage 400/690V 50Hz, 460VD 60Hz

Output at 50Hz 160. kW **Output at 60Hz** 180. kW

Frame Size 315L cast iron

Speed at 50Hz 2982 rpm

Wiring Diagram **Speed at 60Hz** 3582 rpm **DELTA**

Current at 380V 50Hz 277.A **Current at 400V 50Hz** 265.A Current at 415V 50Hz 253.A Current at 460V 60Hz 255.A

Efficiency Class (at 50Hz) IE3

125% **Percentage Load** 100% **75% 50%** 25% **Efficiency at 50Hz** 95.2% 95.3% 95.6% 95.7% 92.4% **Efficiency at 60Hz** 95.2% 95.4% 95.1% 94.6% 91.3% Power factor (cos fi) at 50Hz 0.92 0.92 0.91 0.86 0.71

0.92

0.91

Rated Torque at 50Hz 512. Nm

Rated Torque at 60Hz 480. Nm

Duty Cycle S1

Power factor (cos fi) at 60Hz

Starting Current Ratio 7.8 (50Hz) **Starting Torque Ratio** 2.8 (50Hz) **Breakdown Torque Ratio** 3.3 (50Hz)

Internal Protection / Cooling IP55 / IC411 (TEFC)

Insulation Class F (155°C), temperature rise B (80k)

0.92

Acoustic Pressure 76 dB(A) at 50Hz speed / 81 dB(A) at 60Hz speed

Standard Mountings B3, B3/B5, V1

Weight 980. kg **Moment of Inertia** 1.9 kgm²

/ 6316 C3 **Bearing DE/NDE** 6316 C3 (Bearing located at NDE)

Bearing Lubrication Esso Unirex N3

*The 16th digit of the Type Number denominates the motor mounting.

Made in the Czech Republic