

## **DATA SHEET**

## **Squirrel Cage Induction Motors**

Three-phase Motor Type\* 1TZ9503-2AA53-4\_A4 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 37. kW
Output at 60Hz 41.5 kW

Frame Size 200L cast iron

Speed at 50Hz 2955 rpm

Speed at 60Hz

Wiring Diagram

STAR DELTA

 Current at 380V 50Hz
 68.A

 Current at 400V 50Hz
 65.A

 Current at 415V 50Hz
 63.A

 Current at 460V 60Hz
 63.A

Efficiency Class (at 50Hz) IE3

Percentage Load	125%	100%	75%	50%	25%
Efficiency at 50Hz	92.9%	93.7%	94.2%	94.0%	91.3%
Efficiency at 60Hz	92.9%	93.6%	93.9%	93.4%	90.2%
Power factor (cos fi) at 50Hz	0.89	0.88	0.85	0.78	0.58

0.89

0.87

0.80

0.61

Rated Torque at 50Hz 120. Nm
Rated Torque at 60Hz 111. Nm

Duty Cycle S1

Power factor (cos fi) at 60Hz

Starting Current Ratio7.1 (50Hz)Starting Torque Ratio2.5 (50Hz)Breakdown Torque Ratio3.2 (50Hz)

**Internal Protection / Cooling** IP55 / IC411 (TEFC)

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

0.90

**Acoustic Pressure** 67 dB(A) at 50Hz speed / 77 dB(A) at 60Hz speed

**Standard Mountings** B3, B5, B3/B5

Weight 250. kg

Moment of Inertia 0.158 kgm²

**Bearing DE/NDE** 6312 Z C3 / 6312 Z 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