

## DATA SHEET



**Squirrel Cage Induction Motors** 

Three-phase Motor Type*	1T79503-2	1TZ9503-2BB23-4 A4				
Area	1TZ9503-2BB23-4_A4 4pole Safe Area					
<b>Environmental Conditions</b>	-20°C to +40°C, up to 1000 metres above sea level					
Rated Voltage	400/690V 50Hz, 460VD 60Hz					
Output at 50Hz	45. kW					
Output at 60Hz	52. kW					
Frame Size	225M cast iron					
Speed at 50Hz	1478 rpm					
Speed at 60Hz	1778 rpm 5T			Wiring Dia STAR	agram DELTA	
Current at 380V 50Hz	84.A					
Current at 400V 50Hz	80.A					
Current at 415V 50Hz	77.A					
Current at 460V 60Hz	81.A LI L2 L3 LI L2 L3					
Efficiency Class (at 50Hz)	IE3					
Percentage Load	125%	100%	75%	50%	25%	
Efficiency at 50Hz	93.2%	94.2%	94.9%	95.1%	93.2%	
Efficiency at 60Hz	93.3%	94.1%	94.6%	94.6%	92.5%	
Power factor (cos fi) at 50Hz	0.87	0.86	0.83	0.74	0.54	
Power factor (cos fi) at 60Hz	0.87	0.86	0.83	0.76	0.55	
Rated Torque at 50Hz	291. Nm					
Rated Torque at 60Hz	274. Nm					
Duty Cycle	S1					
Starting Current Ratio	6.4 (50Hz)					
Starting Torque Ratio	2.6 (50Hz)					
Breakdown Torque Ratio	2.7 (50Hz)					
Internal Protection / Cooling	IP55 / IC411 (TEFC)					
Insulation Class	F (155°C), temperature rise B (80k)					
Acoustic Pressure	57 dB(A) at 50Hz speed / 60 dB(A) at 60Hz speed					
Standard Mountings	B3, B5, B3/B5					
Weight	320. kg					
Moment of Inertia	0.47 kgm <sup>2</sup>					
Bearing DE/NDE	6313 Z C3 / 6313 Z C3 (Bearing located at NDE)					
Bearing Lubrication	Esso Unire	Esso Unirex N3				

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

## Made in the Czech Republic

Technical data are subject to change without prior notice. This DataSheet has been issued for standard motor execution.