

DATA SHEET



Squirrel Cage Induction Motors

| Three-phase Motor Type* | 1TZ9003-1 | LDA43-4_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 | 18.5 kW | | | | | |
| Output at 60Hz | 21.3 kW | | | | | |
| Frame Size | 160L Aluminium frame, cast iron endshields/flanges | | | | | |
| Speed at 50Hz | 2955 rpm Wiring Diagram | | | | | |
| Speed at 60Hz | 3555 rpm STAR DELTA | | | | | |
| Current at 380V 50Hz | 33.8A | | | | | |
| Current at 400V 50Hz | 32.A | | | | | |
| Current at 415V 50Hz | 31.A | | | | | |
| Current at 460V 60Hz | 32.A Ē1 Ē2 Ē3 Ē1 Ē2 Ē3 | | | | | |
| Efficiency Class (at 50Hz) | IE3 | | | | | |
| Percentage Load | 125% | 100% | 75% | 50% | 25% | |
| Efficiency at 50Hz | 91.6% | 92.4% | 92.8% | 92.4% | 89.0% | |
| Efficiency at 60Hz | 91.4% | 91.7% | 91.5% | 90.3% | 85.5% | |
| Power factor (cos fi) at 50Hz | 0.91 | 0.90 | 0.87 | 0.80 | 0.60 | |
| Power factor (cos fi) at 60Hz | 0.93 | 0.91 | 0.88 | 0.80 | 0.61 | |
| Rated Torque at 50Hz | 60. Nm | | | | | |
| Rated Torque at 60Hz | 57. Nm | | | | | |
| Duty Cycle | S1 | | | | | |
| Starting Current Ratio | 9.0 (50Hz) | | | | | |
| Starting Torque Ratio | 2.8 (50Hz) | | | | | |
| Breakdown Torque Ratio | 4.2 (50Hz) | | | | | |
| Internal Protection / Cooling | IP55 / IC411 (TEFC) | | | | | |
| Insulation Class | F (155°C), temperature rise B (80k) | | | | | |
| Acoustic Pressure | 70 dB(A) at 50Hz speed / 74 dB(A) at 60Hz speed | | | | | |
| Standard Mountings | B3, B5, B3/B5, B14A, B3/B14A | | | | | |
| Weight | 94. kg | | | | | |
| Moment of Inertia | 0.068 kgm ² | | | | | |
| Bearing DE/NDE | 6309 2Z C3 / 6309 2Z 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.