ELECTRIC MOTORS

## DATA SHEET

Squirrel Cage Induction Motors

| Three-phase Motor Type* | 1TZ9503-2DB03-4_A4 |  |  | 4pole |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Safe Area |  |  |  |  |
| Environmental Conditions | $-20^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$, up to 1000 metres above sea level |  |  |  |  |
| Rated Voltage | $400 / 690 \mathrm{~V} 50 \mathrm{~Hz}, 460 \mathrm{VD} 60 \mathrm{~Hz}$ |  |  |  |  |
| Output at 50 Hz | 75. kW |  |  |  |  |
| Output at 60Hz | 86. kW |  |  |  |  |
| Frame Size | 2805 cast iron |  |  |  |  |
| Speed at 50Hz | 1485 rpm |  |  |  |  |
| Speed at 60Hz | 1785 rpm |  |  | Wiring Diagram |  |
| Current at $\mathbf{3 8 0 V} 50 \mathrm{~Hz}$ | 140.A |  |  | $\bigcirc$ | $\bigcirc$ |
| Current at 400V 50Hz | 133.A |  |  |  |  |
| Current at 415V 50Hz | 128.A |  |  | - |  |
| Current at 460 V 60Hz | 131.A |  |  | L3 | L2 |
| Efficiency Class (at 50Hz) | IE3 |  |  |  |  |
| Percentage Load | 125\% | 100\% | 75\% | 50\% | 25\% |
| Efficiency at 50 Hz | 94.4\% | 95.0\% | 95.3\% | 95.0\% | 92.6\% |
| Efficiency at 60 Hz | 94.0\% | 94.5\% | 94.7\% | 94.2\% | 91.4\% |
| Power factor (cos fi) at $\mathbf{5 0 H z}$ | 0.87 | 0.86 | 0.83 | 0.75 | 0.54 |
| Power factor (cos fi) at $\mathbf{6 0 H z}$ | 0.88 | 0.87 | 0.85 | 0.77 | 0.57 |
| Rated Torque at 50 Hz | 482. Nm |  |  |  |  |
| Rated Torque at 60 Hz | 460. Nm |  |  |  |  |
| Duty Cycle | S1 |  |  |  |  |
| Starting Current Ratio | 6.9 (50Hz) |  |  |  |  |
| Starting Torque Ratio | 2.5 (50Hz) |  |  |  |  |
| Breakdown Torque Ratio | 3.0 (50Hz) |  |  |  |  |
| Internal Protection / Cooling | IP55 / IC411 (TEFC) |  |  |  |  |
| Insulation Class | $F\left(155^{\circ} \mathrm{C}\right)$, temperature rise $\mathrm{B}(80 \mathrm{k})$ |  |  |  |  |
| Acoustic Pressure | $65 \mathrm{~dB}(\mathrm{~A})$ at 50 Hz speed $/ 70 \mathrm{~dB}(\mathrm{~A})$ at 60 Hz speed |  |  |  |  |
| Standard Mountings | B3, B5, B3/B5 |  |  |  |  |
| Weight | 570. kg |  |  |  |  |
| Moment of Inertia | $1.4 \mathrm{kgm}^{2}$ |  |  |  |  |
| Bearing DE/NDE | 6317 C | / 6317 | (Bearing located at NDE) |  |  |
| Bearing Lubrication | Esso Unirex N3 |  |  |  |  |

