ELK MOTOR SAN. ve TİC. A.Ş.
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# DATASHEET

**THREE PHASE INDUCTION MOTOR - SQUIRREL CAGE**

**IE3**

**Type** : 3EL132M4D-PA-B0-000 **Date** : 01.06.2024

| | | | |
|---|---|---|---|
| Power [kW] | : 7.50 | Efficiency Class | : IE3 |
| Input Voltage [V] | : 400 | Duty Cycle | : S1 |
| Connection Type [Δ / Y] | : Δ | Service Factor | : 1.20 |
| Frequency [Hz] | : 50 | Frame Size | : 132M |
| Pole Number | : 4 | Weight [kg] | : 59.5 |
| Nominal Speed [rpm] | : 1465 | Insulation Class | : F [155°C] |
| Nominal Current [A] | : 14.8 | Temperature Rise | : B [80°K] |
| Nominal Moment [Nm] | : 48.9 | Protection Class | : IP55 |
| Nominal Efficiency [η] | : 90.4 | Vibration Severity Grade | : A |
| Power Factor [cosφ] | : 0.81 | Method of Cooling | : IC411 (TEFC) |
| Locked Rotor Current [Ia/In] | : 7.8 | Direction of Rotation | : Bidirectional |
| Locked Rotor Torque [Ma/Mn] | : 3.2 | Balance | : Half Key |
| Breakdown Torque [Mk/Mn] | : 3.4 | Motor Thermal Protection | : -- |
| Motor Color | : RAL 7031 | Altitude Above Sea Level | : 1000m |
| Ambient Temperature | : -15°C / +40°C | Sound Pressure Level [dBA] | : 61 |

## ELECTRICAL DATA

| Δ / Y | U [V] | f [Hz] | P [kW] | n [rpm] | I [A] | η [%100] | η [%75] | η [%50] | Cosφ | Cl |
|---|---|---|---|---|---|---|---|---|---|---|
| Δ | 400 | 50 | 7.50 | 1465 | 14.8 | 90.4 | 91.0 | 90.5 | 0.81 | IE3 |
| Y | 690 | 50 | 7.50 | 1465 | 8.55 | 90.4 | 91.0 | 90.5 | 0.81 | IE3 |
| Δ | 460 | 60 | 7.50 | 1770 | 13.0 | 91.7 | 91.6 | 90.2 | 0.79 | IE3 |
| Δ | 460 | 60 | 8.70 | 1760 | 14.9 | 89.5 | 90.0 | 89.4 | 0.82 | IE2 |

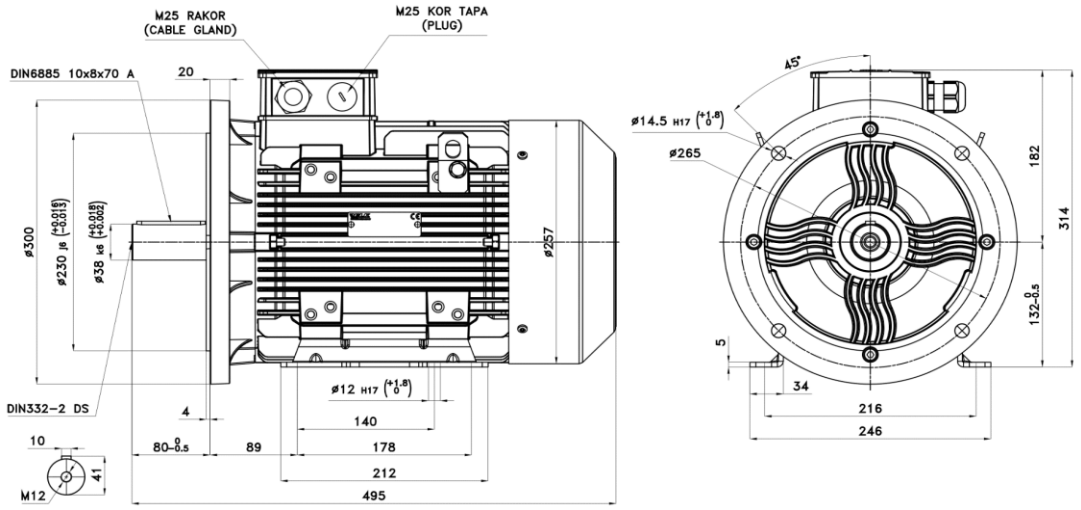
## MECHANICAL DATA

| | |
|---|---|
| Moment of Inertia [kgm$^2$] | : 0.03418 |
| Bearing [DS / NS] | : 6208ZZ C3 / 6208ZZ C3 |
| Frame Material | : Aluminum |
| Flange Type / Material | : B35 / Aluminum |
| Cooling Fan Material | : Plastic |
| End Shield Material | : Aluminum |

## TERMINAL BOX

| | |
|---|---|
| Terminal Box Material | : Aluminum |
| Terminal Box Position | : Top |
| Terminal Box Cable Entry | : M25x1.5 |
| Terminal Box Blind Cap | : M25x1.5 |
| Contact Screw Thread | : M5 |

## MECHANICAL DIMENSIONS




Manufactured and tested in accordance with IEC 60034



*Technical data are subject to change! There may be discrepancies between calculated and rating plate values.
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# TECHNICAL DATASHEET ACCORDING TO COMMISSION REGULATION (EU) 2019/1781

## THREE PHASE INDUCTION MOTOR - SQUIRREL CAGE

**Type** : 3EL132M4D-PA-B0-000 **Date** : 01.06.2024

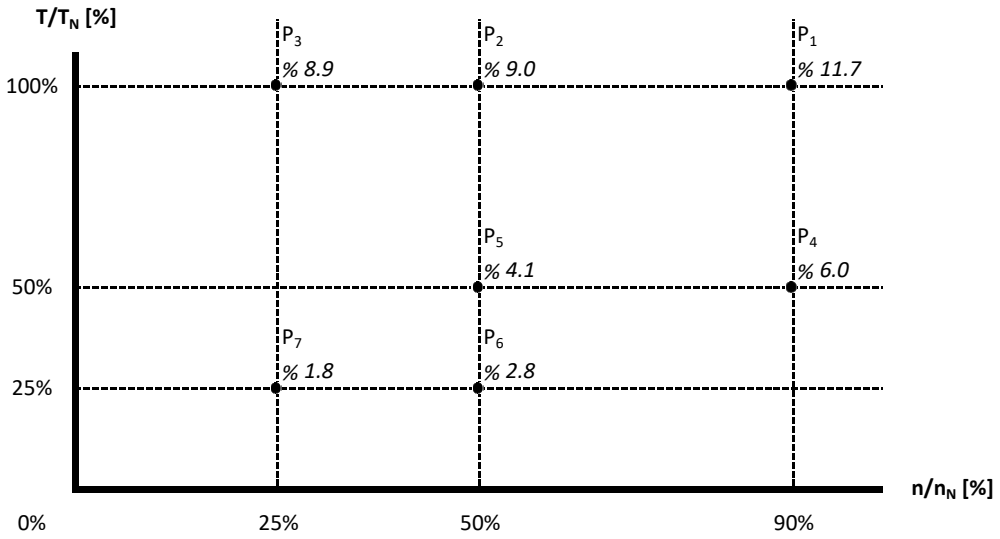
### NAMEPLATE DATA

| | | | |
|---|---|---|---|
| Power [kW] | : 7.50 | Nominal Speed [rpm] | : 1465 |
| Nominal Voltage [V] | : 400 | Nominal Current [A] | : 14.8 |
| Connection Type [Δ / Y] | : Δ | Nominal Moment [Nm] | : 48.9 |
| Nominal Frequency [Hz] | : 50 | Nominal Efficiency [η%] | : 90.4 |

### THE POWER LOSSES AT SEVEN OPERATING POINTS ACCORDING TO COMMISSION REGULATION (EU) 2019/1781

| Operating Point Number | Speed $n/n_N$ [%] | Torque $T/T_N$ [%] | Relative Power Losses $P_L/P_N$ [%] | Efficiency η [%] |
|---|---|---|---|---|
| $P_1$ | 90 | 100 | 11.7 | 88.6 |
| $P_2$ | 50 | 100 | 9.0 | 84.8 |
| $P_3$ | 25 | 100 | 8.9 | 73.7 |
| $P_4$ | 90 | 50 | 6.0 | 88.2 |
| $P_5$ | 50 | 50 | 4.1 | 86.0 |
| $P_6$ | 50 | 25 | 2.8 | 81.5 |
| $P_7$ | 25 | 25 | 1.8 | 77.9 |

### MAP OF RELATIVE POWER LOSSES $P_L/P_N$ [%]

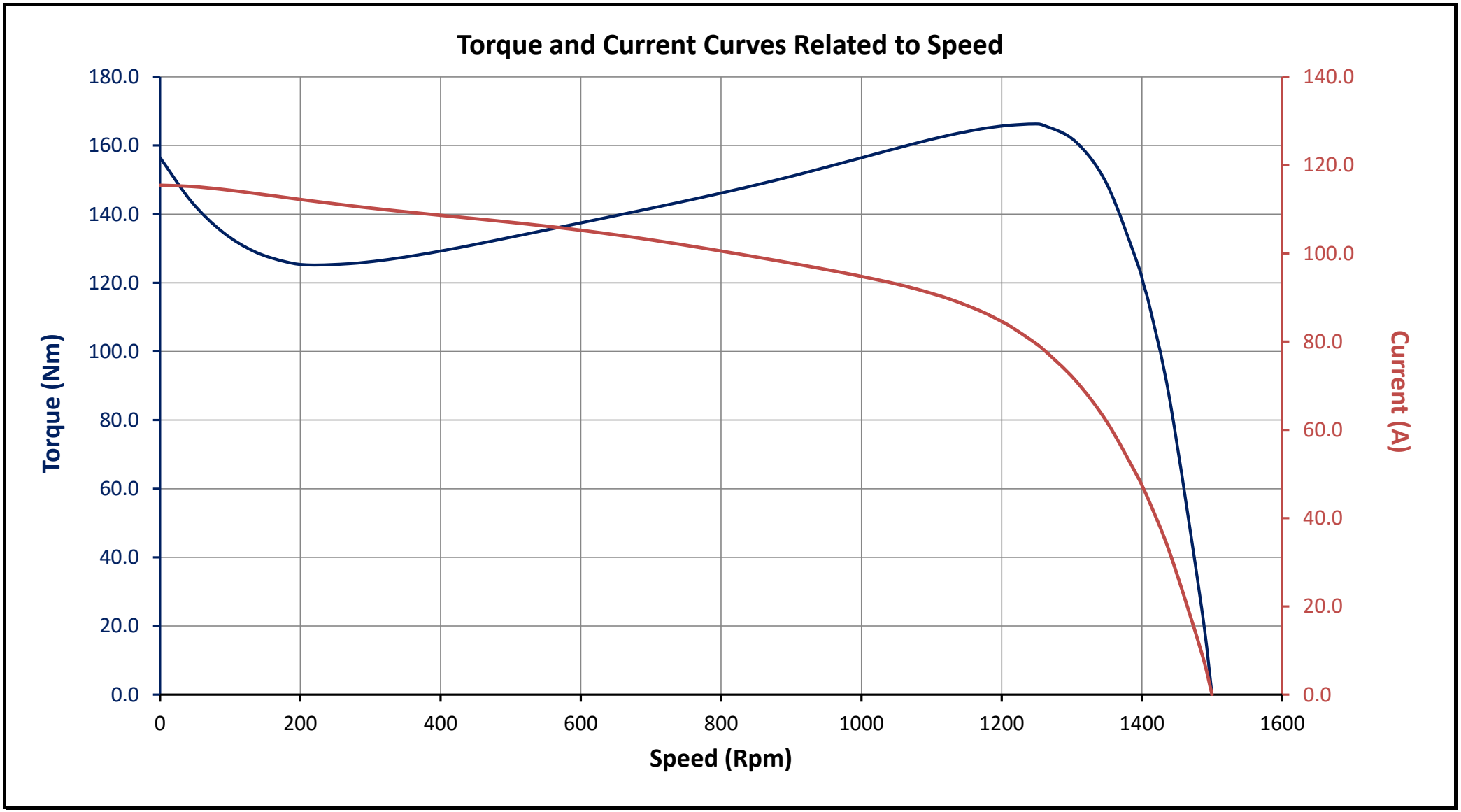



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**Motor Code :** 3EL132M4D-PA-B0-000



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