

Type : 2EL071M2B-PD-A0-000**Date** : 01.01.2023

| | | | |
|------------------------------|-----------------|----------------------------|-----------------|
| Power [kW] | : 0.55 | Efficiency Class | : IE2 |
| Input Voltage [V] | : 400 | Duty Cycle | : S1 |
| Connection Type [Δ / Y] | : Y | Service Factor | : 1.15 |
| Frequency [Hz] | : 50 | Frame Size | : 071M |
| Pole Number | : 2 | Weight [kg] | : 6.20 |
| Nominal Speed [rpm] | : 2790 | Insulation Class | : F [155°C] |
| Nominal Current [A] | : 1.27 | Temperature Rise | : B [80°K] |
| Nominal Moment [Nm] | : 1.88 | Protection Class | : IP55 |
| Nominal Efficiency [η] | : 75.8 | Vibration Severity Grade | : A |
| Power Factor [cosφ] | : 0.82 | Method of Cooling | : IC411 (TEFC) |
| Locked Rotor Current [Ia/In] | : 5.0 | Direction of Rotation | : Bidirectional |
| Locked Rotor Torque [Ma/Mn] | : 2.8 | Balance | : Half Key |
| Breakdown Torque [Mk/Mn] | : 2.9 | Motor Thermal Protection | : -- |
| Motor Color | : RAL 7031 | Altitude Above Sea Level | : 1000m |
| Ambient Temperature | : -15°C / +40°C | Sound Pressure Level [dBA] | : 54 |

ELECTRICAL DATA

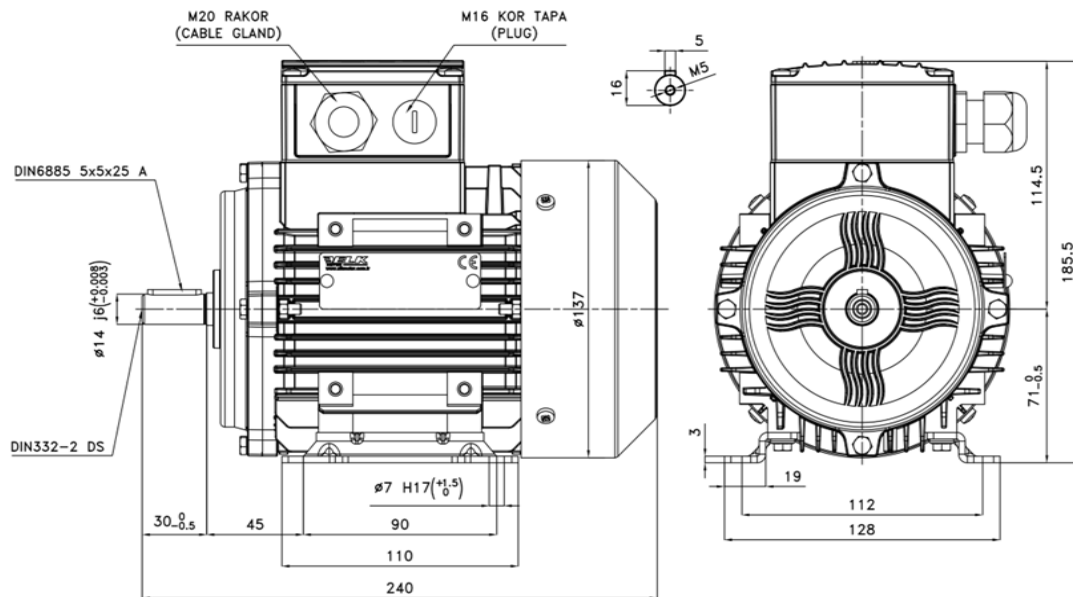
| Δ / Y | U [V] | f [Hz] | P [kW] | n [rpm] | I [A] | η [%100] | η [%75] | η [%50] | Cosφ | Cl |
|-------|-------|--------|--------|---------|-------|----------|---------|---------|------|-----|
| Δ | 230 | 50 | 0.55 | 2790 | 2.20 | 75.8 | 77.0 | 76.0 | 0.82 | IE2 |
| Y | 400 | 50 | 0.55 | 2790 | 1.27 | 75.8 | 77.0 | 76.0 | 0.82 | IE2 |
| Y | 460 | 60 | 0.55 | 3420 | 1.13 | 77.3 | 78.1 | 75.3 | 0.79 | IE2 |
| Y | 460 | 60 | 0.64 | 3400 | 1.26 | 77.5 | 78.3 | 75.5 | 0.82 | IE2 |

MECHANICAL DATA

| | |
|---------------------------------------|-------------------|
| Moment of Inertia [kgm ²] | : 0.00037 |
| Bearing [DS / NS] | : 6202ZZ / 6202ZZ |
| Frame Material | : Aluminum |
| Flange Type / Material | : B3 / Aluminum |
| Cooling Fan Material | : Plastic |
| End Shield Material | : Aluminum |

TERMINAL BOX

| | |
|--------------------------|------------|
| Terminal Box Material | : Aluminum |
| Terminal Box Position | : Top |
| Terminal Box Cable Entry | : M20x1.5 |
| Terminal Box Blind Cap | : M16x1.5 |
| Contact Screw Thread | : M4 |

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.

*ELK Motor has right to change all the data without prior notice.

FR.AG.010 REV.NO: 04 REV.DATE: 01.01.2023



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TECHNICAL DATASHEET ACCORDING TO COMMISSION REGULATION (EU) 2019/1781 THREE PHASE INDUCTION MOTOR - SQUIRREL CAGE

Type : 2EL071M2B-PD-A0-000

Date : 01.01.2023

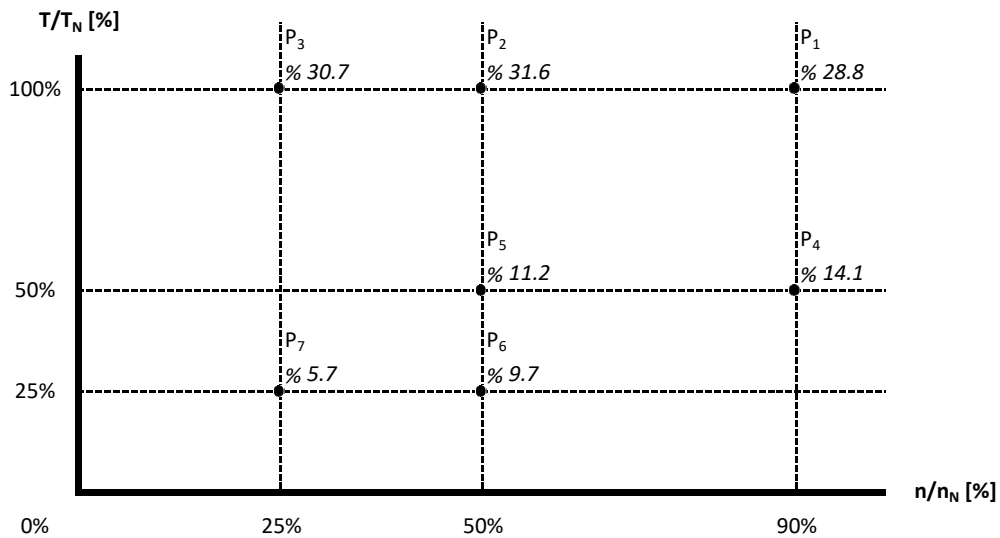
NAMEPLATE DATA

| | | | |
|---------------------------------|--------|--------------------------------|--------|
| Power [kW] | : 0.55 | Nominal Speed [rpm] | : 2790 |
| Nominal Voltage [V] | : 400 | Nominal Current [A] | : 1.27 |
| Connection Type [Δ / Y] | : Y | Nominal Moment [Nm] | : 1.88 |
| Nominal Frequency [Hz] | : 50 | Nominal Efficiency [η %] | : 75.8 |

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 | 28.8 | 75.7 |
| P ₂ | 50 | 100 | 31.6 | 61.3 |
| P ₃ | 25 | 100 | 30.7 | 44.9 |
| P ₄ | 90 | 50 | 14.1 | 76.2 |
| P ₅ | 50 | 50 | 11.2 | 69.1 |
| P ₆ | 50 | 25 | 9.7 | 56.4 |
| P ₇ | 25 | 25 | 5.7 | 52.1 |

MAP OF RELATIVE POWER LOSSES P_L/P_N [%]



Manufactured and tested in accordance with IEC 60034

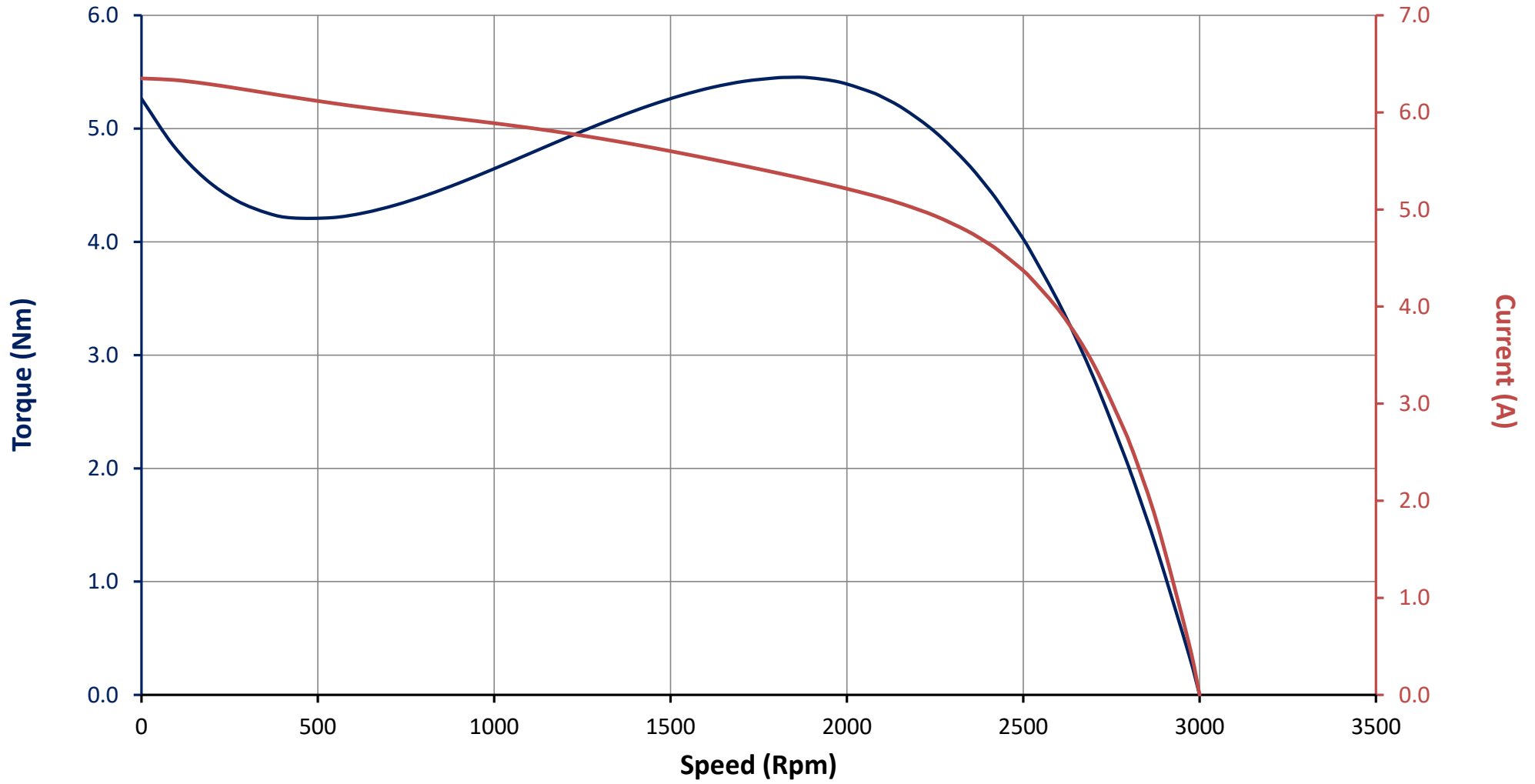
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Motor Code : 2EL071M2B-PD-A0-000

Torque and Current Curves Related to Speed



Motor Code : 2EL071M2B-PD-A0-000

Performance Curves Related to Rated Output

