

| Type                         | : 2EL080M6B-PD-A0-000 | Date                       | : 04/11/2025    |
|------------------------------|-----------------------|----------------------------|-----------------|
| 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                 | : 080M          |
| Pole Number                  | : 6                   | Weight [kg]                | : 9.90          |
| Nominal Speed [rpm]          | : 932                 | Insulation Class           | : F [155°C]     |
| Nominal Current [A]          | : 1.50                | Temperature Rise           | : B [80°K]      |
| Nominal Moment [Nm]          | : 5.63                | Protection Class           | : IP55          |
| Nominal Efficiency [η]       | : 73.5                | Vibration Severity Grade   | : A             |
| Power Factor [cosφ]          | : 0.72                | Method of Cooling          | : IC411 (TEFC)  |
| Locked Rotor Current [Ia/In] | : 4.2                 | Direction of Rotation      | : Bidirectional |
| Locked Rotor Torque [Ma/Mn]  | : 2.1                 | Balance                    | : Half Key      |
| Breakdown Torque [Mk/Mn]     | : 2.6                 | Motor Thermal Protection   | : --            |
| Motor Color                  | : RAL 7031            | Altitude Above Sea Level   | : 1000m         |
| Ambient Temperature          | : -15°C / +40°C       | Sound Pressure Level [dBA] | : 45            |

## ELECTRICAL DATA

| $\Delta / Y$ | U [V] | f [Hz] | P [kW] | n [rpm] | I [A] | $\eta$ [%100] | $\eta$ [%75] | $\eta$ [%50] | Cos $\varphi$ | Cl  |
|--------------|-------|--------|--------|---------|-------|---------------|--------------|--------------|---------------|-----|
| $\Delta$     | 230   | 50     | 0.55   | 932     | 2.60  | 73.5          | 74.0         | 71.0         | 0.72          | IE2 |
| Y            | 400   | 50     | 0.55   | 932     | 1.50  | 73.5          | 74.0         | 71.0         | 0.72          | IE2 |
| Y            | 460   | 60     | 0.55   | 1140    | 1.39  | 75.1          | 75.3         | 72.1         | 0.66          | IE2 |
| Y            | 460   | 60     | 0.64   | 1135    | 1.50  | 75.1          | 75.2         | 72.0         | 0.71          | IE2 |

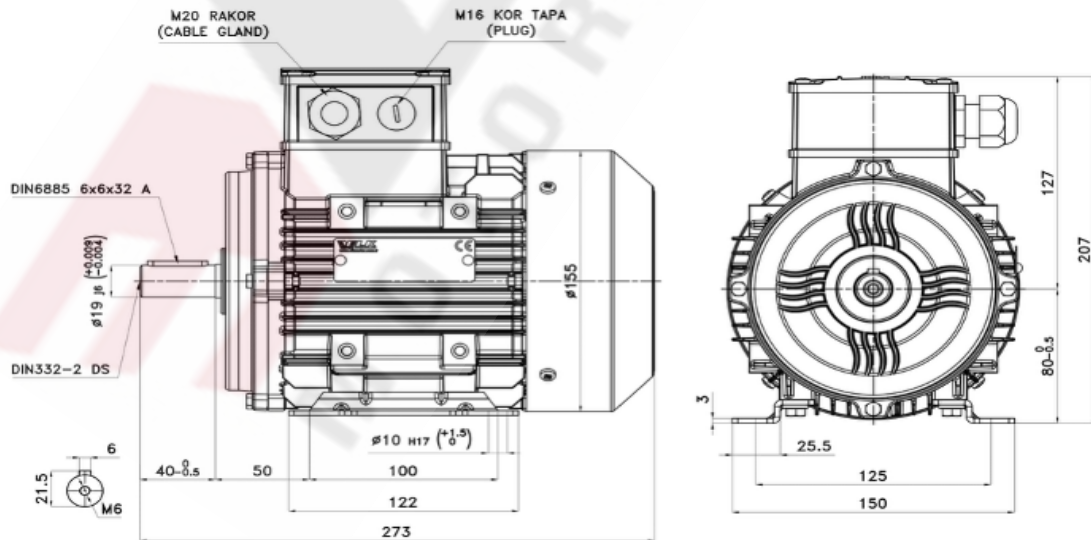
## MECHANICAL DATA

|                                       |                         |
|---------------------------------------|-------------------------|
| Moment of Inertia [kgm <sup>2</sup> ] | : 0.00202               |
| Bearing [DS / NS]                     | : 6204ZZ C3 / 6204ZZ C3 |
| 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.





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

Type : 2EL080M6B-PD-A0-000

Date : 04/11/2025

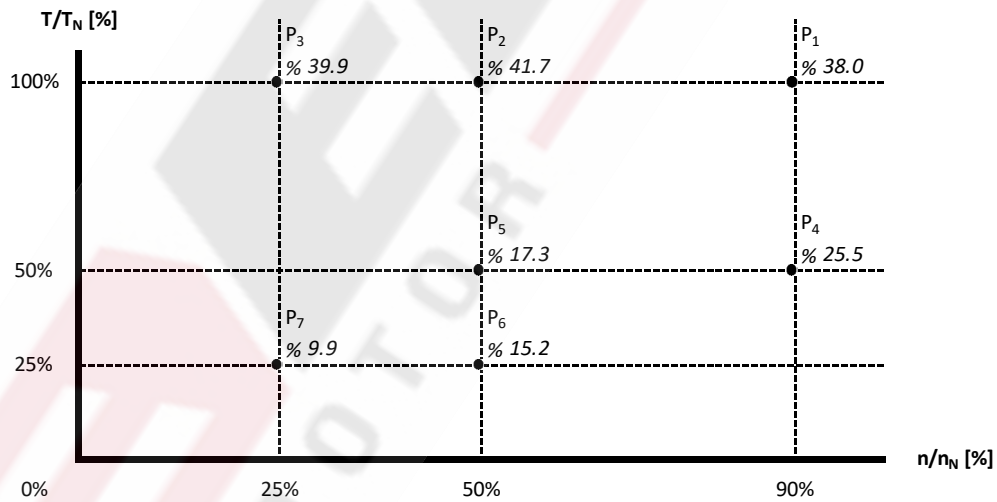
NAMEPLATE DATA

|                                 |        |                                |        |
|---------------------------------|--------|--------------------------------|--------|
| Power [kW]                      | : 0.55 | Nominal Speed [rpm]            | : 932  |
| Nominal Voltage [V]             | : 400  | Nominal Current [A]            | : 1.50 |
| Connection Type [ $\Delta$ / Y] | : Y    | Nominal Moment [Nm]            | : 5.63 |
| Nominal Frequency [Hz]          | : 50   | Nominal Efficiency [ $\eta$ %] | : 73.5 |

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 $\eta$ [%] |
|------------------------|-------------------|--------------------|-------------------------------------|-----------------------|
| P <sub>1</sub>         | 90                | 100                | 38.0                                | 70.3                  |
| P <sub>2</sub>         | 50                | 100                | 41.7                                | 54.5                  |
| P <sub>3</sub>         | 25                | 100                | 39.9                                | 38.6                  |
| P <sub>4</sub>         | 90                | 50                 | 25.5                                | 63.9                  |
| P <sub>5</sub>         | 50                | 50                 | 17.3                                | 59.2                  |
| P <sub>6</sub>         | 50                | 25                 | 15.2                                | 45.2                  |
| P <sub>7</sub>         | 25                | 25                 | 9.9                                 | 38.3                  |

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



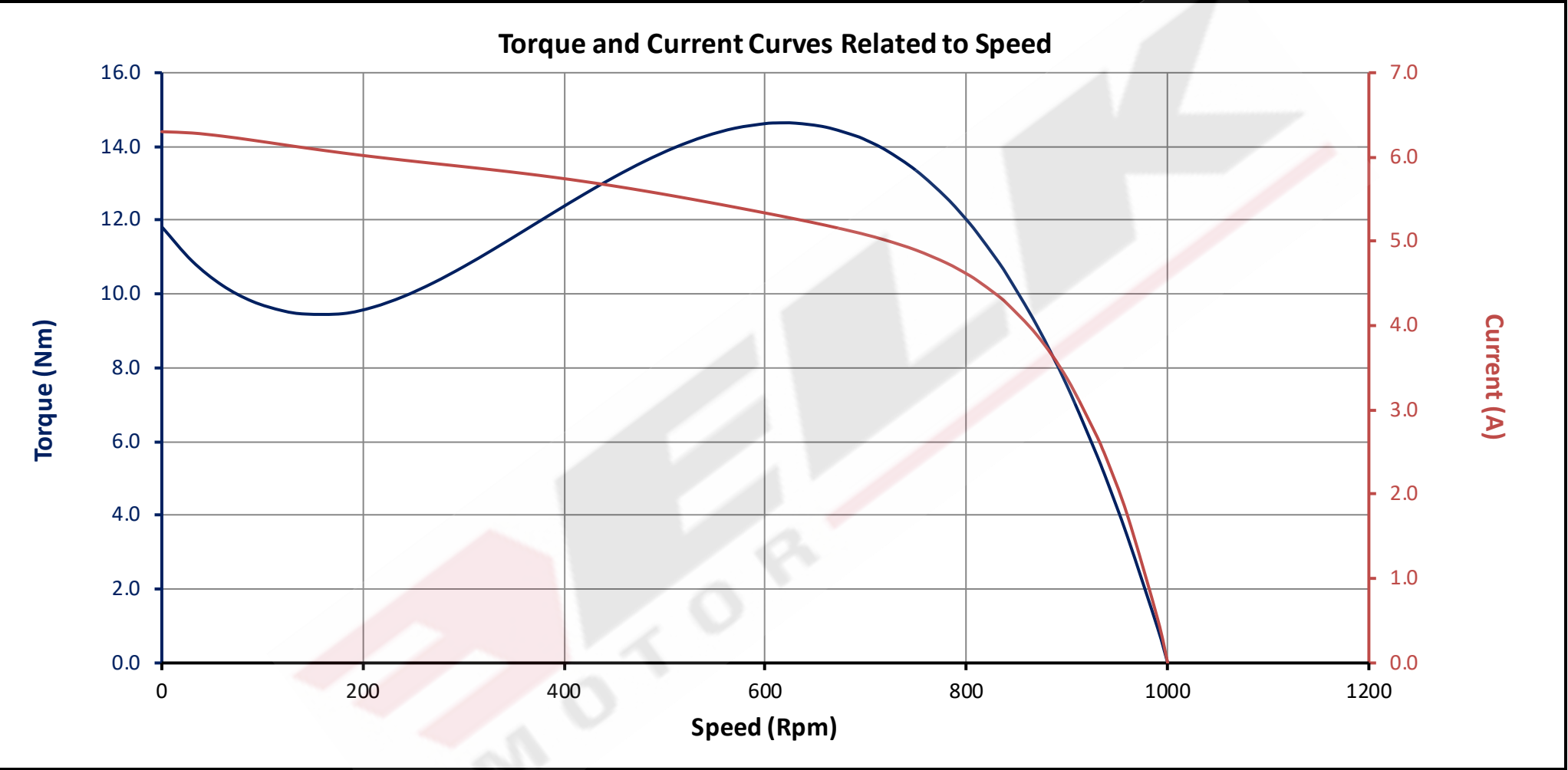
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Performance Curves Related to Rated Output

