

Type : 3EL160L6E-PD-BA-000**Date** : 28/10/2025

Power [kW]	: 11.0
Input Voltage [V]	: 400
Connection Type [Δ / Y]	: Δ
Frequency [Hz]	: 50
Pole Number	: 6
Nominal Speed [rpm]	: 972
Nominal Current [A]	: 23.1
Nominal Moment [Nm]	: 108
Nominal Efficiency [η]	: 90.3
Power Factor [$\cos\phi$]	: 0.76
Locked Rotor Current [I_a/I_n]	: 6.6
Locked Rotor Torque [M_a/M_n]	: 2.9
Breakdown Torque [M_k/M_n]	: 3.1
Motor Color	: RAL 7031
Ambient Temperature	: -15°C / +40°C

Efficiency Class	: IE3
Duty Cycle	: S1
Service Factor	: 1.20
Frame Size	: 160L
Weight [kg]	: 104
Insulation Class	: F [155°C]
Temperature Rise	: B [80°K]
Protection Class	: IP55
Vibration Severity Grade	: A
Method of Cooling	: IC411 (TEFC)
Direction of Rotation	: Bidirectional
Balance	: Half Key
Motor Thermal Protection	: PTC
Altitude Above Sea Level	: 1000m
Sound Pressure Level [dBA]	: 62

ELECTRICAL DATA

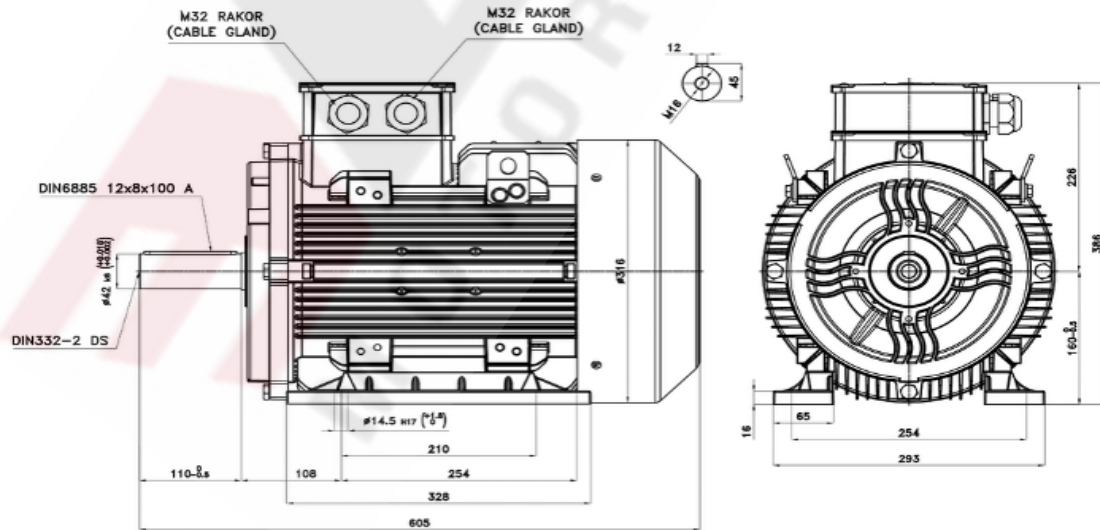
Δ / Y	U [V]	f [Hz]	P [kW]	n [rpm]	I [A]	η [%100]	η [%75]	η [%50]	$\cos\phi$	Cl
Δ	400	50	11.0	972	23.1	90.3	90.9	90.5	0.76	IE3
Y	690	50	11.0	972	13.3	90.3	90.9	90.5	0.76	IE3
Δ	460	60	11.0	1172	20.1	91.7	92.0	91.9	0.75	IE3
Δ	460	60	12.8	1170	22.4	91.7	91.9	91.8	0.78	IE3

MECHANICAL DATA

Moment of Inertia [kgm ²]	: 0.08580
Bearing [DS / NS]	: 6309ZZ C3 / 6209ZZ 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	: 2xM32x1.5
Terminal Box Blind Cap	: --
Contact Screw Thread	: M6

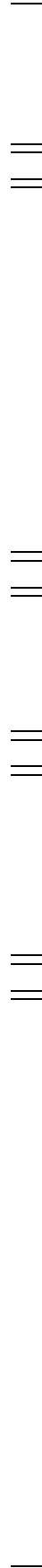
MECHANICAL DIMENSIONS

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 : 3EL160L6E-PD-BA-000

Date : 28/10/2025

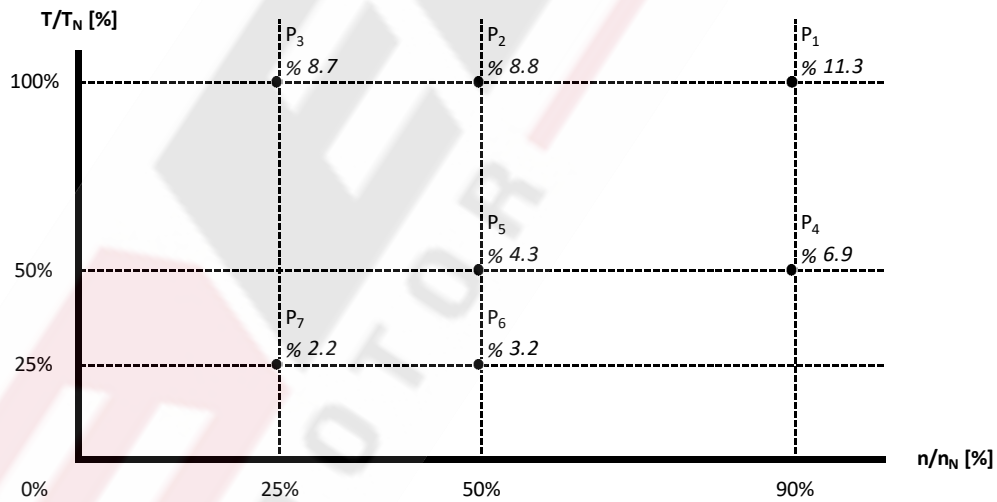
NAMEPLATE DATA

Power [kW]	: 11.0	Nominal Speed [rpm]	: 972
Nominal Voltage [V]	: 400	Nominal Current [A]	: 23.1
Connection Type [Δ / Y]	: Δ	Nominal Moment [Nm]	: 108
Nominal Frequency [Hz]	: 50	Nominal Efficiency [η %]	: 90.3

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	11.3	88.8
P ₂	50	100	8.8	85.0
P ₃	25	100	8.7	74.1
P ₄	90	50	6.9	86.8
P ₅	50	50	4.3	85.4
P ₆	50	25	3.2	79.8
P ₇	25	25	2.2	74.2

MAP OF RELATIVE POWER LOSSES P_L/P_N [%]



Manufactured and tested in accordance with IEC 60034

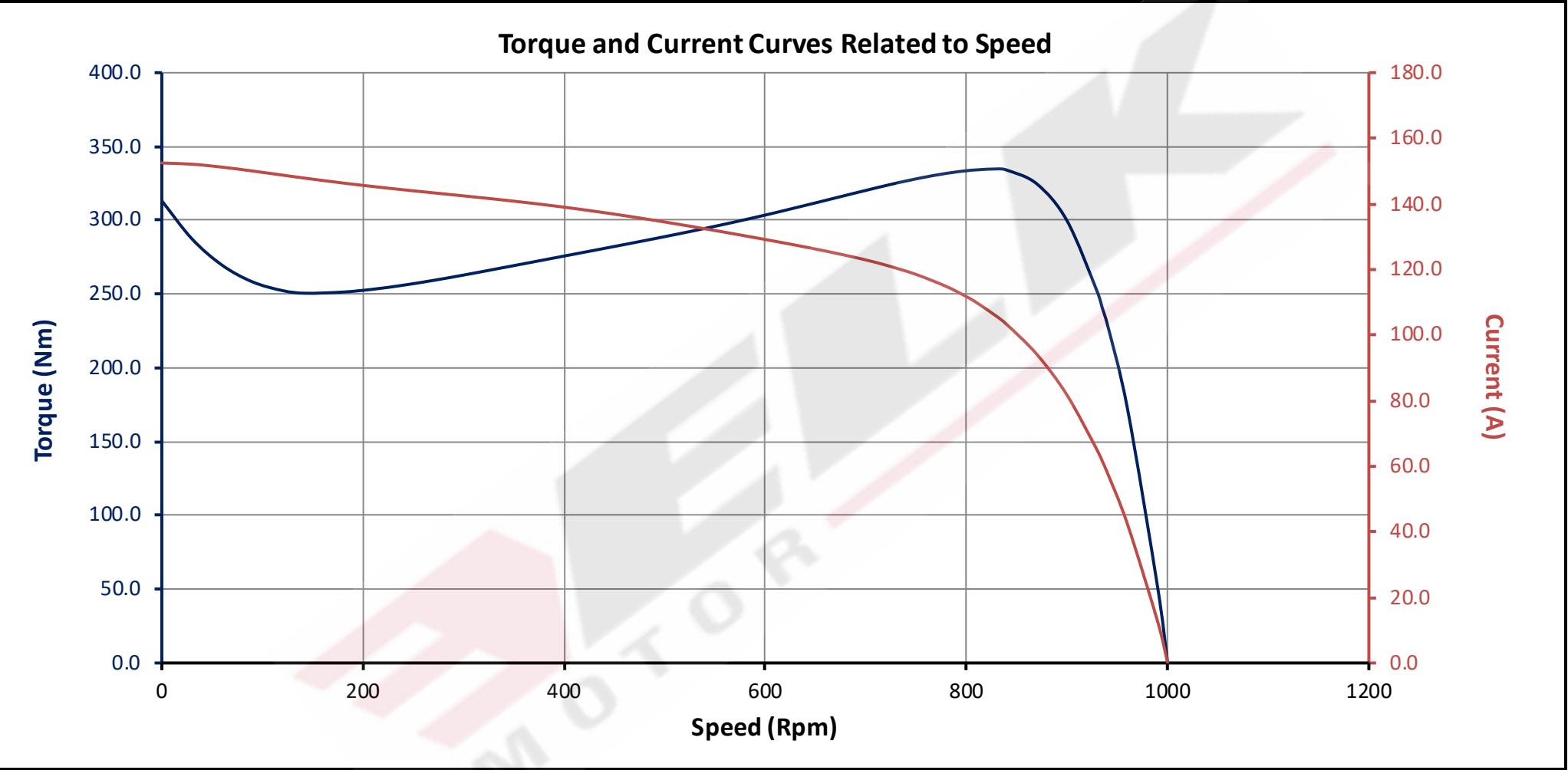
FR.AG.010 REV.NO: 04 REV.DATE: 01.01.2023

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Motor Code : 3EL160L6E-PD-BA-000

Torque and Current Curves Related to Speed



Motor Code : 3EL160L6E-PD-BA-000

Performance Curves Related to Rated Output

