

Type : 3EL160M2C-PD-BA-000**Date** : 12/08/2025

Power [kW] : 15.0
Input Voltage [V] : 400
Connection Type [Δ / Y] : Δ
Frequency [Hz] : 50
Pole Number : 2
Nominal Speed [rpm] : 2950
Nominal Current [A] : 26.5
Nominal Moment [Nm] : 48.6
Nominal Efficiency [η] : 91.9
Power Factor [$\cos\phi$] : 0.89
Locked Rotor Current [I_a/I_n] : 8.9
Locked Rotor Torque [M_a/M_n] : 3.1
Breakdown Torque [M_k/M_n] : 4.2
Motor Color : RAL 7031
Ambient Temperature : -15°C / +40°C

Efficiency Class : IE3
Duty Cycle : S1
Service Factor : 1.20
Frame Size : 160M
Weight [kg] : 86.0
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] : 69

ELECTRICAL DATA

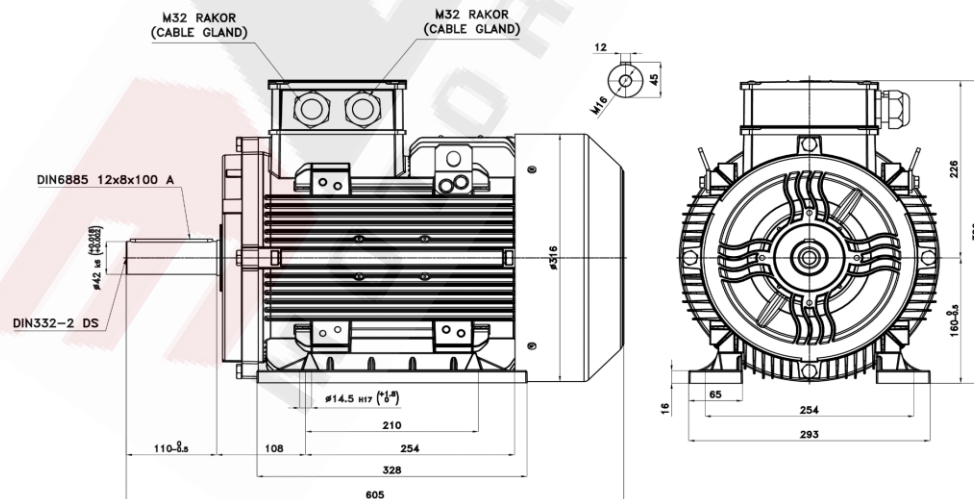
Δ / Y	U [V]	f [Hz]	P [kW]	n [rpm]	I [A]	η [%100]	η [%75]	η [%50]	$\cos\phi$	CI
Δ	400	50	15.0	2950	26.5	91.9	92.1	91.6	0.89	IE3
Y	690	50	15.0	2950	15.3	91.9	92.1	91.6	0.89	IE3
Δ	460	60	15.0	3545	23.1	91.8	92.0	91.5	0.89	IE3
Δ	460	60	17.4	3540	26.4	92.0	92.2	91.7	0.90	IE3

MECHANICAL DATA

Moment of Inertia [kgm^2] : 0.03913
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: 01.01.2023



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

Type : 3EL160M2C-PD-BA-000

Date : 12/08/2025

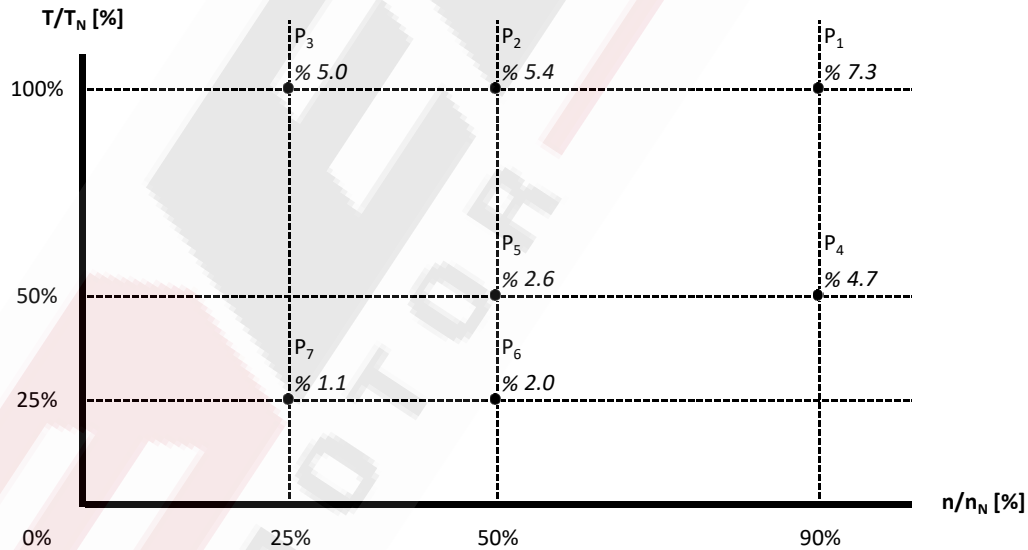
NAMEPLATE DATA

Power [kW]	: 15.0	Nominal Speed [rpm]	: 2950
Nominal Voltage [V]	: 400	Nominal Current [A]	: 26.5
Connection Type [Δ / Y]	: Δ	Nominal Moment [Nm]	: 48.6
Nominal Frequency [Hz]	: 50	Nominal Efficiency [η %]	: 91.9

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	7.3	92.6
P ₂	50	100	5.4	90.2
P ₃	25	100	5.0	83.3
P ₄	90	50	4.7	90.6
P ₅	50	50	2.6	90.4
P ₆	50	25	2.0	86.3
P ₇	25	25	1.1	84.9

MAP OF RELATIVE POWER LOSSES P_L/P_N [%]



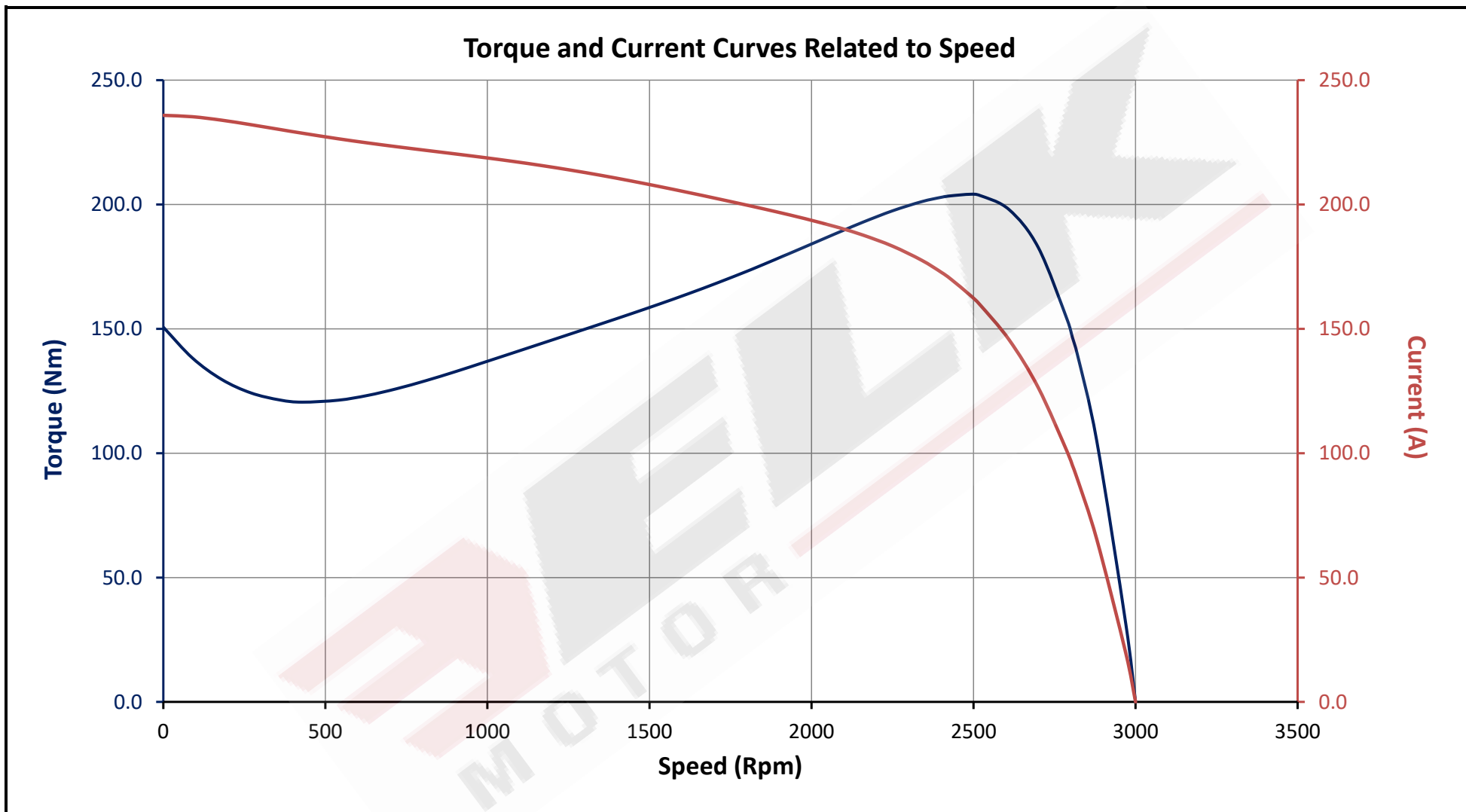
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Performance Curves Related to Rated Output

