

Type : 4EG315L4F-PD-BA-000**Date** : 01.01.2024

Power [kW]	: 160	Efficiency Class	: IE4
Input Voltage [V]	: 400	Duty Cycle	: S1
Connection Type [Δ / Y]	: Δ	Service Factor	: 1.25
Frequency [Hz]	: 50	Frame Size	: 315L
Pole Number	: 4	Weight [kg]	: 1370
Nominal Speed [rpm]	: 1492	Insulation Class	: F [155°C]
Nominal Current [A]	: 272	Temperature Rise	: B [80°K]
Nominal Moment [Nm]	: 1024	Protection Class	: IP55
Nominal Efficiency [η]	: 96.6	Vibration Severity Grade	: A
Power Factor [cosφ]	: 0.88	Method of Cooling	: IC411 (TEFC)
Locked Rotor Current [Ia/In]	: 8.9	Direction of Rotation	: Bidirectional
Locked Rotor Torque [Ma/Mn]	: 3.1	Balance	: Half Key
Breakdown Torque [Mk/Mn]	: 3.4	Motor Thermal Protection	: PTC
Motor Color	: RAL 7031	Altitude Above Sea Level	: 1000m
Ambient Temperature	: -15°C / +40°C	Sound Pressure Level [dBA]	: 76

ELECTRICAL DATA

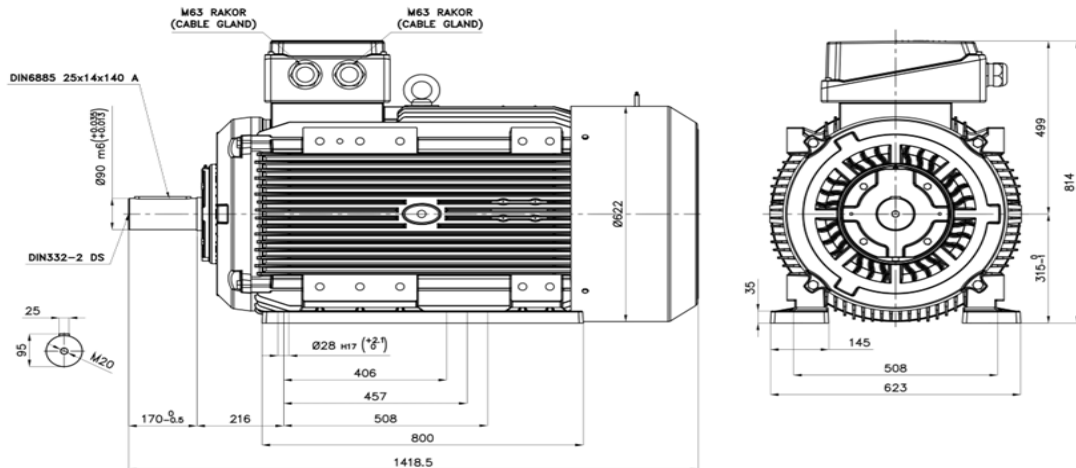
Δ / Y	U [V]	f [Hz]	P [kW]	n [rpm]	I [A]	η [%100]	η [%75]	η [%50]	Cosφ	Cl
Δ	400	50	160	1492	272	96.6	96.9	96.5	0.88	IE4
Y	690	50	160	1492	157	96.6	96.9	96.5	0.88	IE4
Δ	460	60	160	1793	239	96.5	96.4	95.6	0.87	IE4
Δ	460	60	186	1792	272	96.5	96.5	96.0	0.89	IE4

MECHANICAL DATA

Moment of Inertia [kgm ²]	: 4.40000
Bearing [DS / NS]	: 6319 / 6319
Frame Material	: Cast Iron
Flange Type / Material	: B3 / Cast Iron
Cooling Fan Material	: Plastic
End Shield Material	: Cast Iron
Lubrication of Bearings [DS / NS]	: 6400h-45gr / 6900h-45gr MOBIL Polyrex EM

TERMINAL BOX

Terminal Box Material	: Cast Iron
Terminal Box Position	: Top
Terminal Box Cable Entry	: 2xM63x1.5
Terminal Box Blind Cap	: --
Contact Screw Thread	: M16

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 : 4EG315L4F-PD-BA-000

Date : 01.01.2023

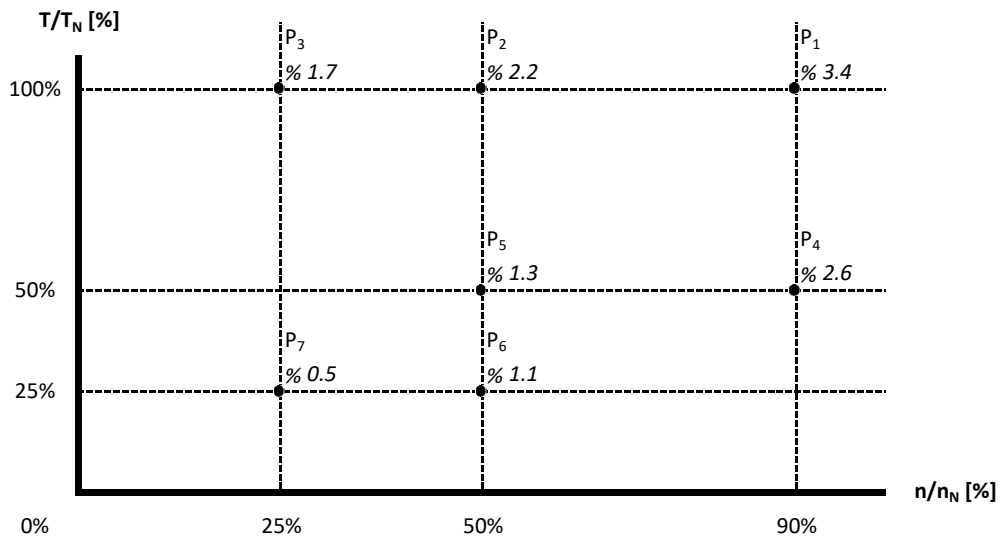
NAMEPLATE DATA

Power [kW]	: 160	Nominal Speed [rpm]	: 1492
Nominal Voltage [V]	: 400	Nominal Current [A]	: 272
Connection Type [Δ / Y]	: Δ	Nominal Moment [Nm]	: 1024
Nominal Frequency [Hz]	: 50	Nominal Efficiency [η %]	: 96.6

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	3.4	96.3
P ₂	50	100	2.2	95.8
P ₃	25	100	1.7	93.8
P ₄	90	50	2.6	94.6
P ₅	50	50	1.3	95.0
P ₆	50	25	1.1	91.9
P ₇	25	25	0.5	91.1

MAP OF RELATIVE POWER LOSSES P_L/P_N [%]



Manufactured and tested in accordance with IEC 60034

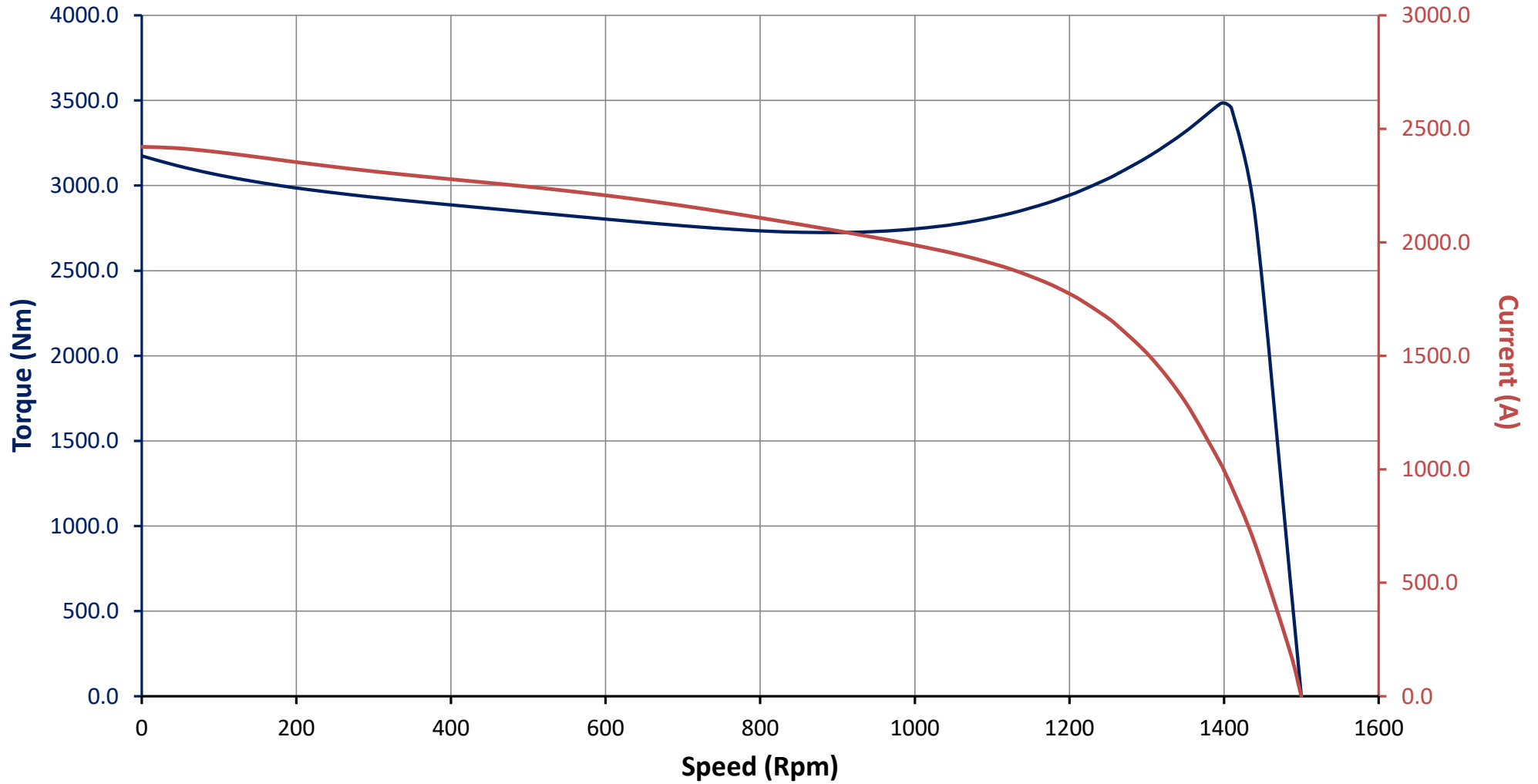
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Motor Code : 4EG315L4F-PD-BA-000

Torque and Current Curves Related to Speed



Motor Code : 4EG315L4F-PD-BA-000

Performance Curves Related to Rated Output

