

Type 4EG160L4F-PD-BA-C34

RE : 894253

Date : 01.01.2025

Power [kW]	: 15.0
Input Voltage [V]	: 400
Connection Type [Δ / Y]	: Δ
Frequency [Hz]	: 50
Pole Number	: 4
Nominal Speed [rpm]	: 1475
Nominal Current [A]	: 28.9
Nominal Moment [Nm]	: 97.1
Nominal Efficiency [η]	: 93.9
Power Factor [$\cos\phi$]	: 0.80
Locked Rotor Current [I_a/I_n]	: 8.7
Locked Rotor Torque [Ma/Mn]	: 3.7
Breakdown Torque [Mk/Mn]	: 4.3
Motor Color	: RAL 7031
Ambient Temperature	: -15°C / +40°C

Efficiency Class	: IE4
Duty Cycle	: S1
Service Factor	: 1.25
Frame Size	: 160L
Weight [kg]	: 160
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]	: 64

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	15.0	1475	28.9	93.9	94.1	93.8	0.80	IE4
Y	690	50	15.0	1475	16.7	93.9	94.1	93.8	0.80	IE4
Δ	460	60	15.0	1775	25.3	94.1	94.0	93.2	0.79	IE4
Δ	460	60	17.4	1770	28.5	94.5	94.6	94.3	0.81	IE4

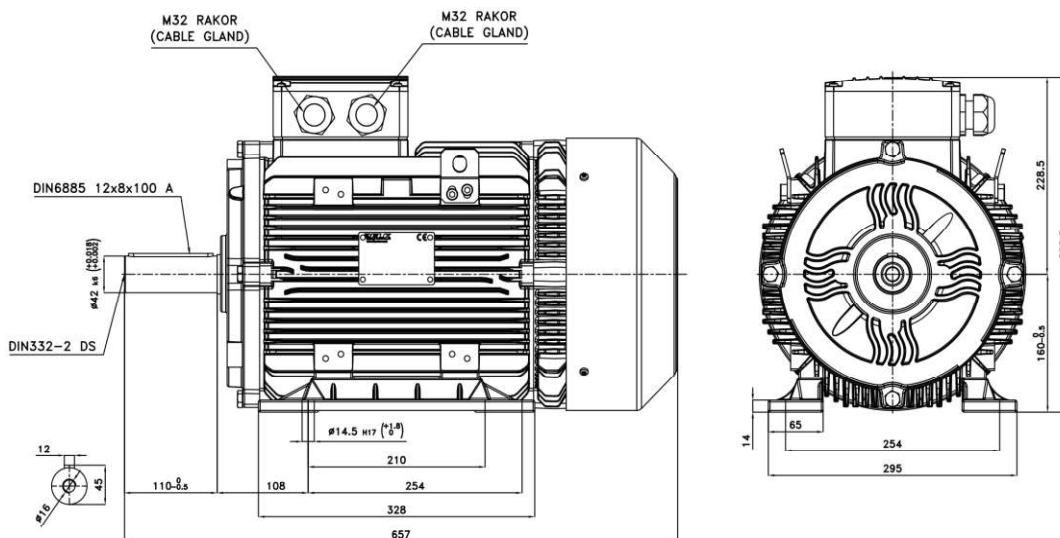
MECHANICAL DATA

Moment of Inertia [kgm ²]	: 0.12000
Bearing [DS / NS]	: 6309ZZ C3 / 6209ZZ C3
Frame Material	: Cast Iron
Flange Type / Material	: B3 / Cast Iron
Cooling Fan Material	: Plastic
End Shield Material	: Cast Iron

TERMINAL BOX

Terminal Box Material	: Cast Iron
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.

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

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

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

Type : 4EG160L4F-PD-BA-000

Date : 01.01.2025

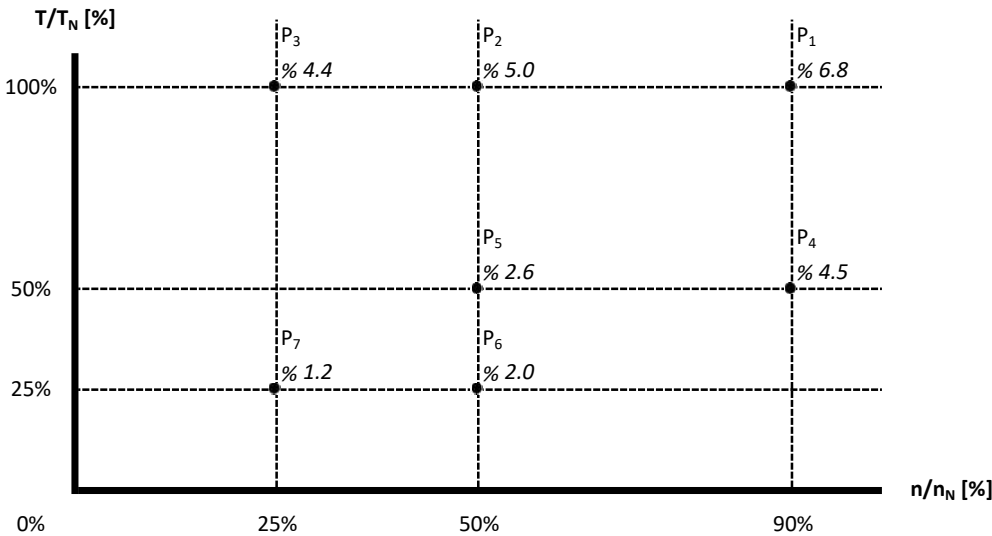
NAMEPLATE DATA

Power [kW]	: 15.0	Nominal Speed [rpm]	: 1475
Nominal Voltage [V]	: 400	Nominal Current [A]	: 28.9
Connection Type [Δ / Y]	: Δ	Nominal Moment [Nm]	: 97.1
Nominal Frequency [Hz]	: 50	Nominal Efficiency [η %]	: 93.9

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	6.8	93.0
P ₂	50	100	5.0	90.9
P ₃	25	100	4.4	85.1
P ₄	90	50	4.5	90.8
P ₅	50	50	2.6	90.5
P ₆	50	25	2.0	86.0
P ₇	25	25	1.2	84.0

MAP OF RELATIVE POWER LOSSES P_L / P_N [%]



Manufactured and tested in accordance with IEC 60034

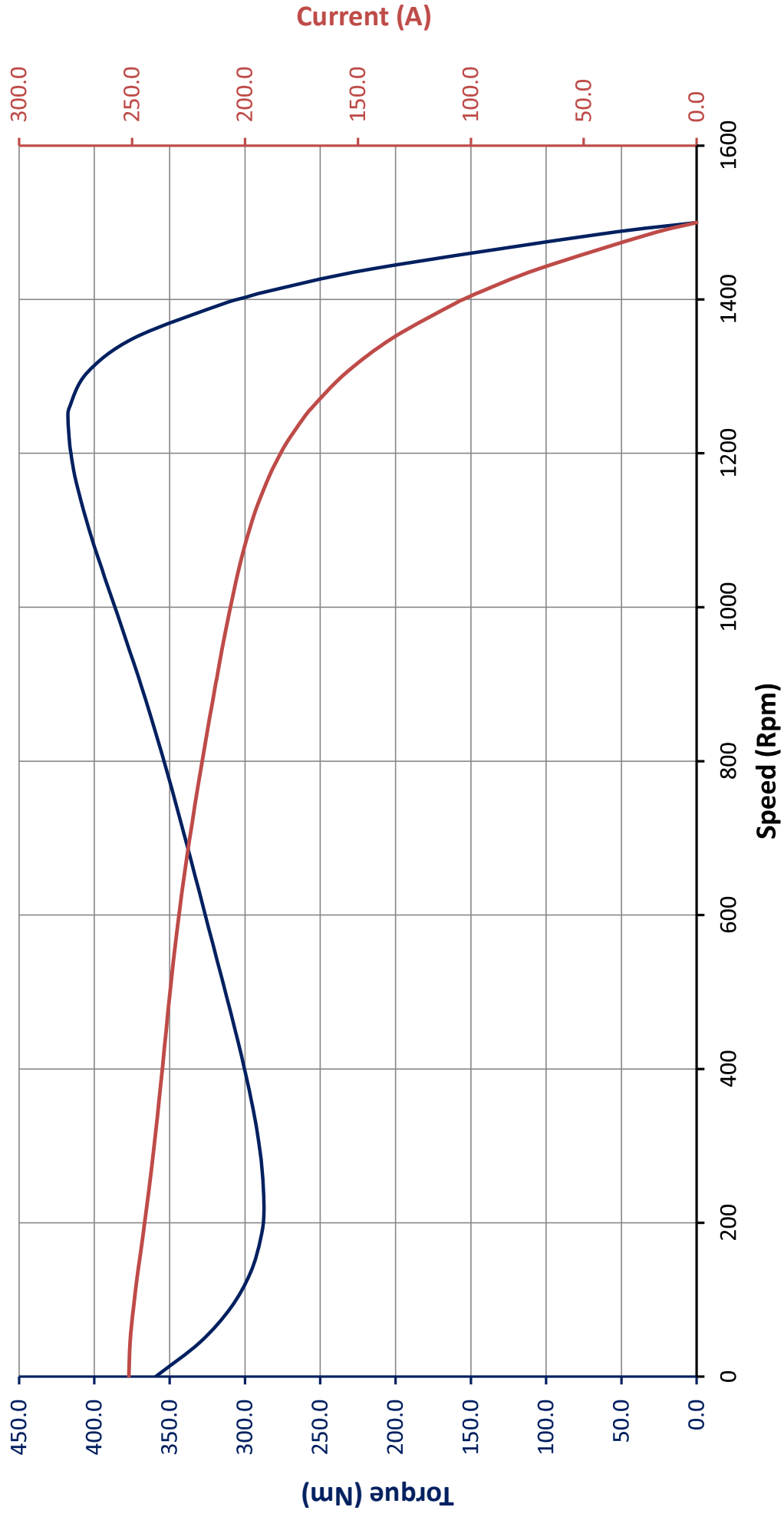
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Motor Code : 4EG160L4F-FC-BA-000

Torque and Current Curves Related to Speed



Motor Code : 4EG160L4F-FC-BA-000

Performance Curves Related to Rated Output

