

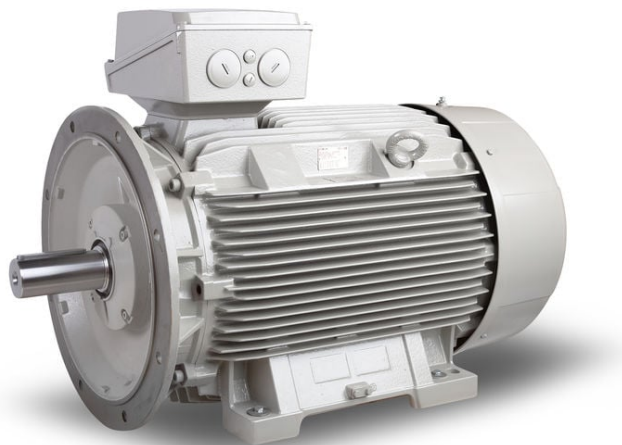
PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN90L02E36U243041

Catalog No: 6RN90L02E36U24@3041

3.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 3000 rpm, D230/Y400V 50Hz,
90L Frame B5, IC411



Regal and Rotor nl are trademarks of Regal Rexnord Corporation or one of its affiliated companies.
©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord



Nameplate Specifications

Output HP	4.00 Hp	Output KW	3.0 kW
Frequency	50 Hz	Voltage	D230/Y400 V
Current	10.22 A	Speed	2920 rpm
Service Factor	1	Phase	3
Efficiency	87.9 %	Power Factor	0.84
Duty	S1	Insulation Class	F
Frame	90L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6205-2Z/C3WT (-40°C/+160°C)	Opp Drive End Bearing Size	6004-2Z/C3WT (-40°C/+160°C)
UL	No	CSA	Optional
CE	Yes	IP Code	IP55
Number of Speeds	1	Efficiency Class	IE3

Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	2	Rotation	Clockwise Shaft End
Mounting	B5	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:01/19/2023

Datasheet

rotor nl®

rotor B.V.

Mors 1-5, 7151 MX Eibergen NL
 www.rotor.nl tel.: +31 545 464640
 sales@rotor.nl tel.: +31 545 464646

Model No. 2-Pole cage motor 6RN 90L 3kW D230V 50Hz IM3041-FF165

U (V)	Δ / Y Conn	f [Hz]	P [kW]	P [hp]	I [A]	n [RPM]	T [Nm]	IE Class	% EFF at __ load FL 3/4FL 1/2FL	PF at __ load FL 3/4FL 1/2FL	I _A /I _N [pu]	T _A /T _N [pu]	T _K /T _N [pu]
230	D	50	3	4	10,2	2920	9,81	IE3	87,9 88,2 86,8	0,84 0,78 0,66	10,20	4,39	4,55
400	Y				5,9								
265	D	60	3,45	4,625	9,9	3515	9,38	IE3	88,5	0,86	11,00	4,22	4,81
460	Y				5,7								

Motor type	6RN90L02E36
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Aluminum
Frame size	90L
Duty	S1
Voltage	230 V
Frequency	50 Hz
Power output	3 kW
Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	38 K
Temperature rise surface	21 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Degree of protection	IP55
Mounting type	IM3041-FF165
Cooling method	IC411
Motor weight - approx.	22 kg
Gross weight - approx.	23 kg

Vibration level according IEC60034-14

Direction of rotation cw / ccw

Rotor type	Cage motor
Bearing type	6004-2Z/C3WT

Type of grease Unirex N3

Phase resistance at 20°C	1,5015 Ohm
Country of origin	CZ

Voltage/Freq	Locked rotor Torque [% nom]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 230V 50Hz	439%	1019%		455%	4,85 A
@ D 265V 60Hz	422%	1090%		481%	2,46 A

NOTE

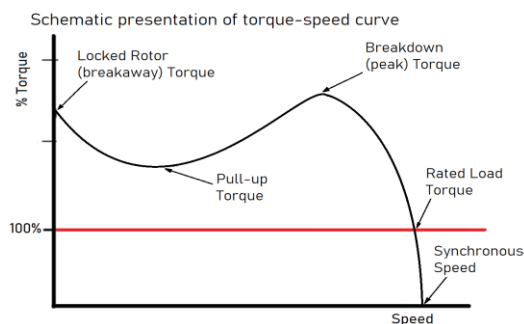
All performance values at rated voltage and frequency.

All performance parameters are subjected to standard tolerance as per IEC 60034-1

Voltage, Frequency are as per IEC60034-1

Technical data are subject to change. There may be discrepancies between calculated and name plate values.

Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30



rotor
is a
ISO 9001
certified
company

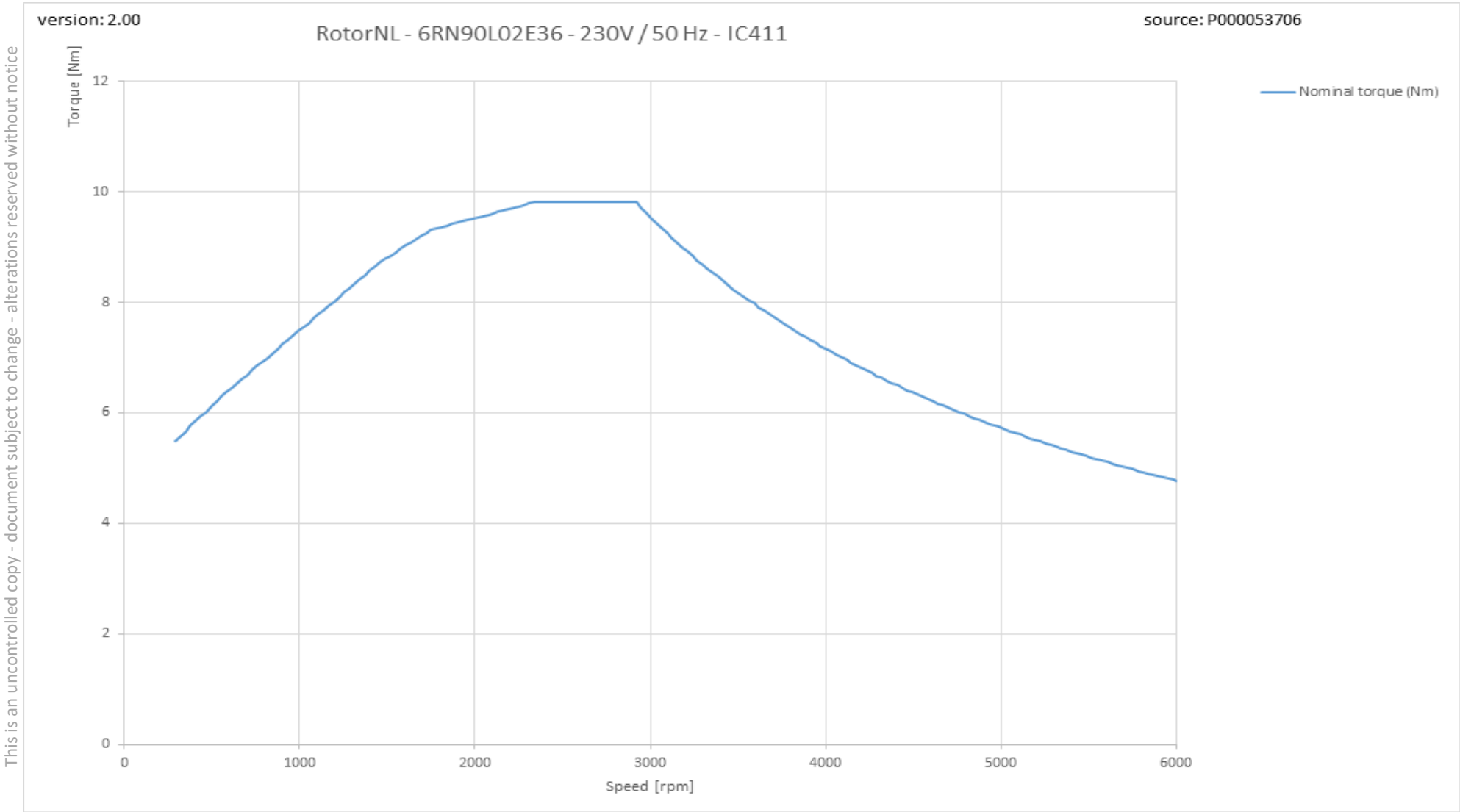
This is an uncontrolled copy, data can be changed anytime.

RegalRexnord

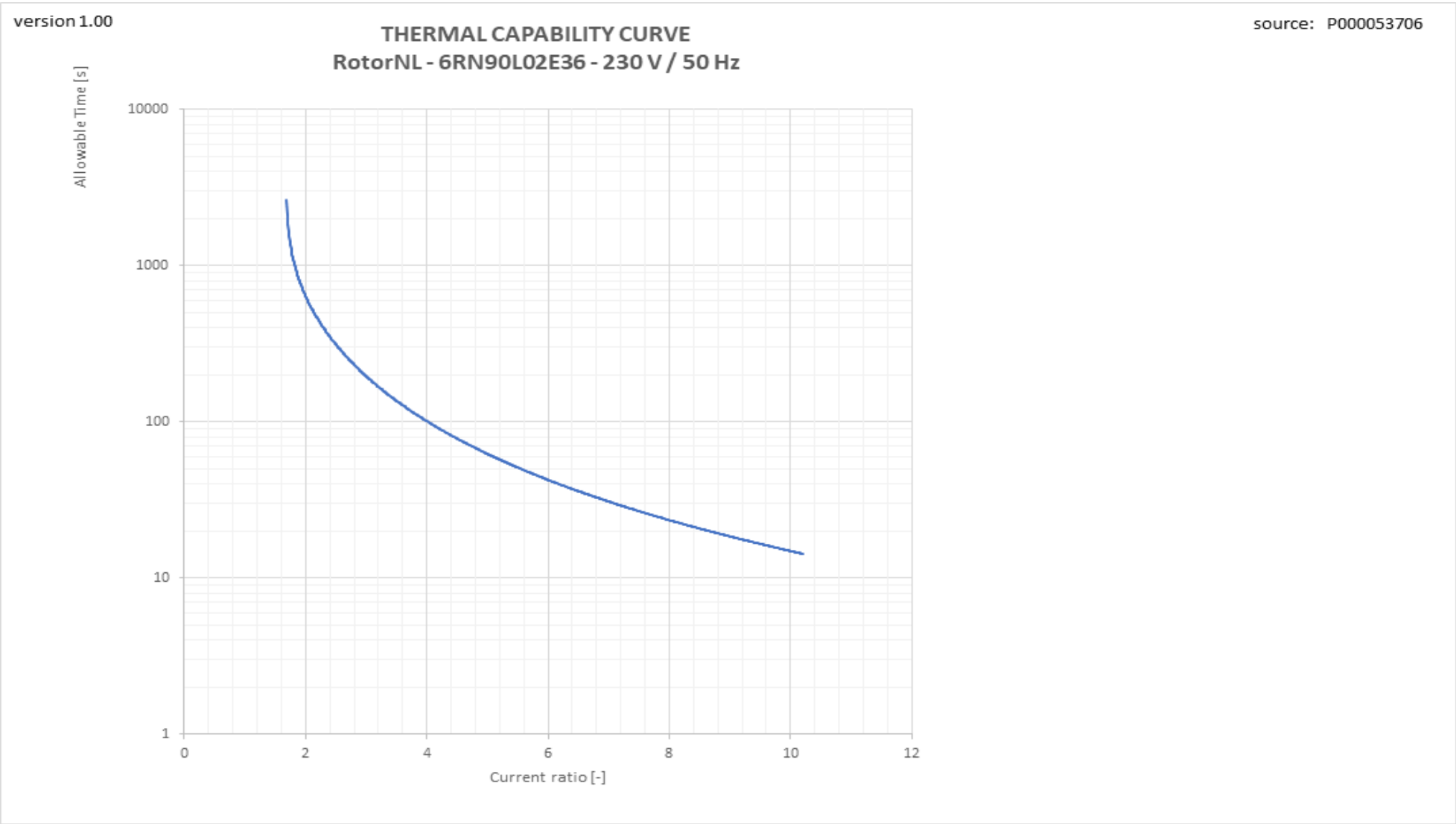
6RN90L02E36 2-pole 3,00kW D/Y 230/400V 50Hz S1 IC411 IE3



Torque versus Speed curve with variable frequency drive



Therm_VSD graph



This is an uncontrolled copy - document subject to change - alterations reserved without notice