

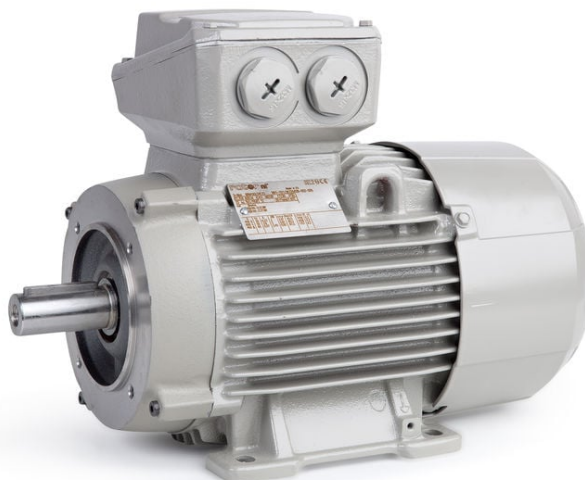
PRODUCT INFORMATION PACKET

rotor nl[®]

Model No: 6RN100L04E35U46B2181-B

Catalog No: 6RN100L04E35U46B@2181-B

3.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D400/Y690V 50Hz,
100L Frame B34, 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 Hp	Output KW	3.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	5.97 A	Speed	1460 rpm
Service Factor	1	Phase	3
Efficiency	87.7 %	Power Factor	0.83
Duty	S1	Insulation Class	F
Frame	100L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6306-2Z/C3WT (-40°C/+160°C)	Opp Drive End Bearing Size	6306-2Z/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	4	Rotation	Clockwise Shaft End
Mounting	B34	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	28 mm	Shaft Extension	60 mm
Outline Drawing	6RN100L04E35U46B2181-B		

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. 4-Pole cage motor 6RN 100L 3kW D400V 50Hz IM2181-FT165

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]
400	D	50	3	4	5,9	1460	19,6	IE3	87,7	0,83	8,30	2,50	3,40
690	Y				3,4								
460	D	60	3	4	5,2	1775	16,1	IE3	89,8	0,80	9,00	2,95	4,84

Motor type	6RN100L04E35
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	100L
Duty	S1
Voltage	400 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	42 K
Temperature rise surface	28 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6306-2Z/C3WT

Type of grease	Unirex N3
----------------	-----------

Phase resistance at 20°C	4,8100 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 400V 50Hz	250%	479%		340%	2,58 A
@ D 460V 60Hz	295%	900%	165%	484%	2,65 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

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

Degree of protection	IP55
Mounting type	IM2181-FT165
Cooling method	IC411
Motor weight - approx.	42 kg
Gross weight - approx.	43 kg
Motor inertia	0,0140 kgm ²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	60 dB(A)

Direction of rotation	cw / ccw
-----------------------	----------

Schematic presentation of torque-speed curve



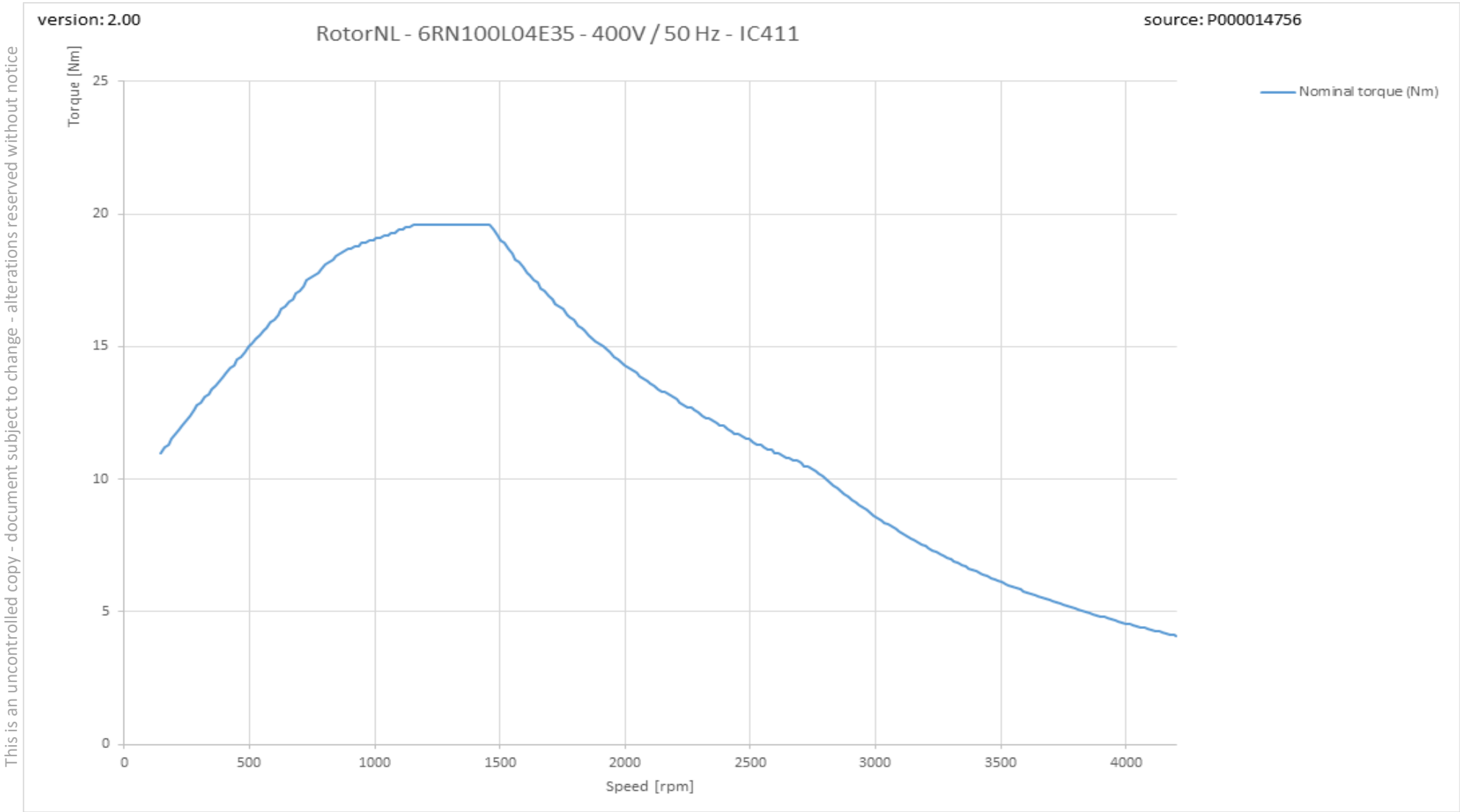
rotor
is a
ISO 9001
certified
company

RegalRexnord™

6RN100L04E35 4-pole 3,00kW D/Y 400/690V 50Hz S1 IC411 IE3

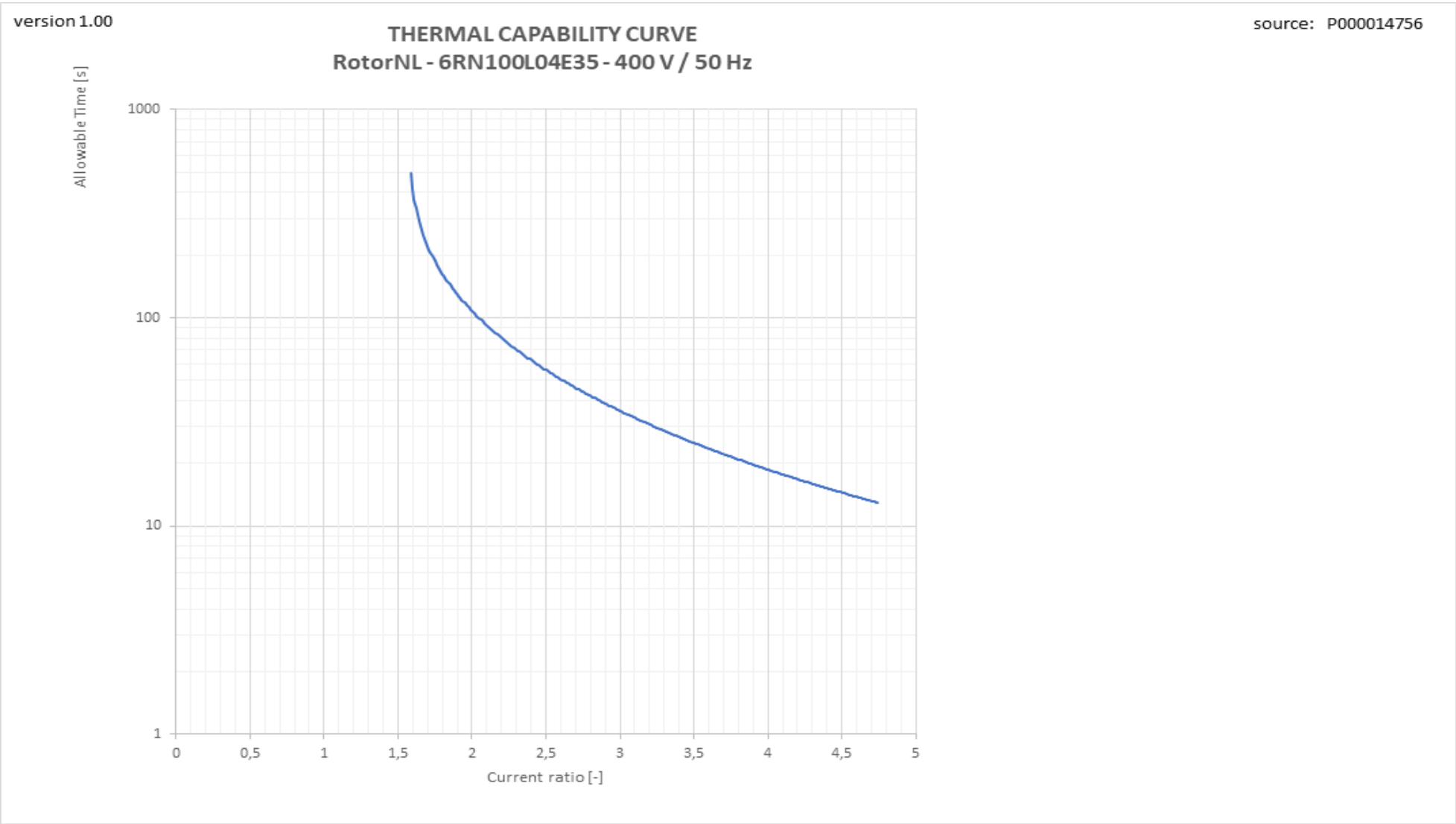


Torque versus Speed curve with variable frequency drive



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

Therm_VSD graph



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

Tn graph

