

PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN100L02E34U46B2181-A

Catalog No: 6RN100L02E34U46B@2181-A

3.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 3000 rpm, D400/Y690V 50Hz,
100L Frame B34, IC411



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Nameplate Specifications

Output HP	4 Hp	Output KW	3.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	5.60 A	Speed	2920 rpm
Service Factor	1	Phase	3
Efficiency	87.1 %	Power Factor	0.88
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	2	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	6RN100L02E34U46B2181-A		

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Datasheet



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Model No. 2-Pole cage motor 6RN 100L 3kW D400V 50Hz IM2181-FT130

U (V)	Δ / Y Conn	f [Hz]	P		I [A]	n [RPM]	T [Nm]	IE Class	% EFF at __ load			PF at __load			I _A /I _N [pu]	T _A /T _N [pu]	T _R /T _N [pu]
			[kW]	[hp]					FL	3/4FL	1/2FL	FL	3/4FL	1/2FL			
400	D	50	3	4	5,6	2920	9,8	IE3	87,1	87,1	86,1	0,88	0,85	0,78	8,10	3,20	4,60
690	Y				3,23												
460	D	60	3,45	4,625	5,56	3520	9,37	IE2	87,6			0,89			9,12	2,66	4,53

Motor type	6RN100L02E34
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	51 K
Temperature rise surface	
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
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Phase resistance at 20°C	4,4800 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	320%	810%	250%	460%	2,16 A
@ D 460V 60Hz	266%	911%	226%	453%	1,99 A

NOTE

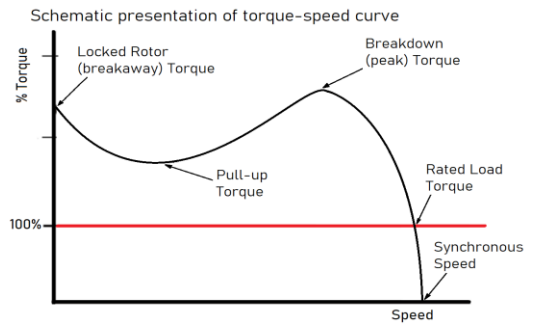
All performance values at rated voltage and frequency.
 All performance parameters are subjected to standard tolerance as per IEC 60034-1
 Voltage, Frequency are as per IEC60034-1
 Technical data are subject to change. There may be discrepancies between calculated and name plate values.

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

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Degree of protection	IP55
Mounting type	IM2181-FT130
Cooling method	IC411
Motor weight - approx.	36 kg
Gross weight - approx.	37 kg
Motor inertia	0,0054 kgm²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	67 dB(A)

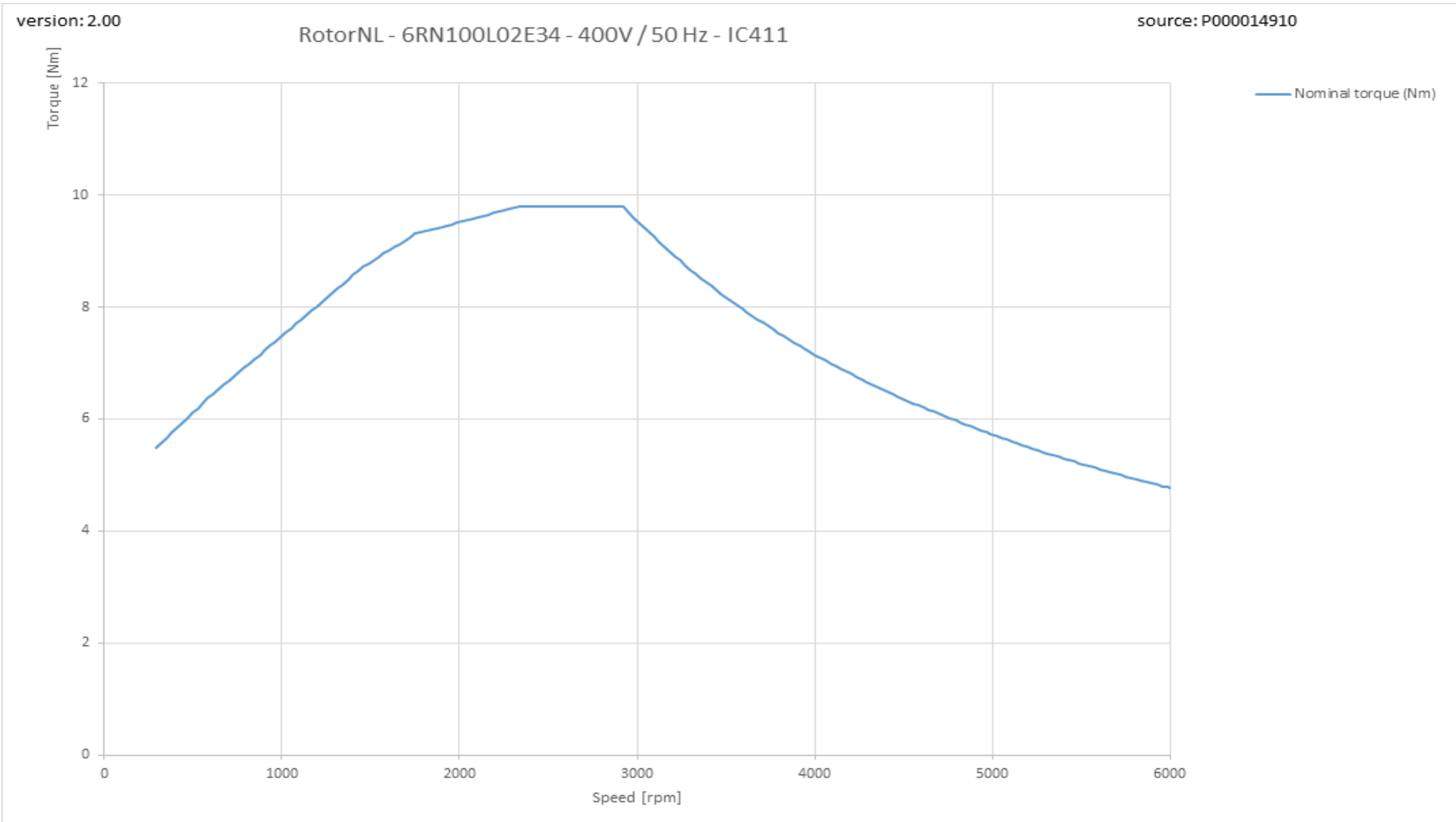
Direction of rotation	cw / ccw
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6RN100L02E34 2-pole 3,00kW D/Y 400/690V 50Hz S1 IC411 IE3



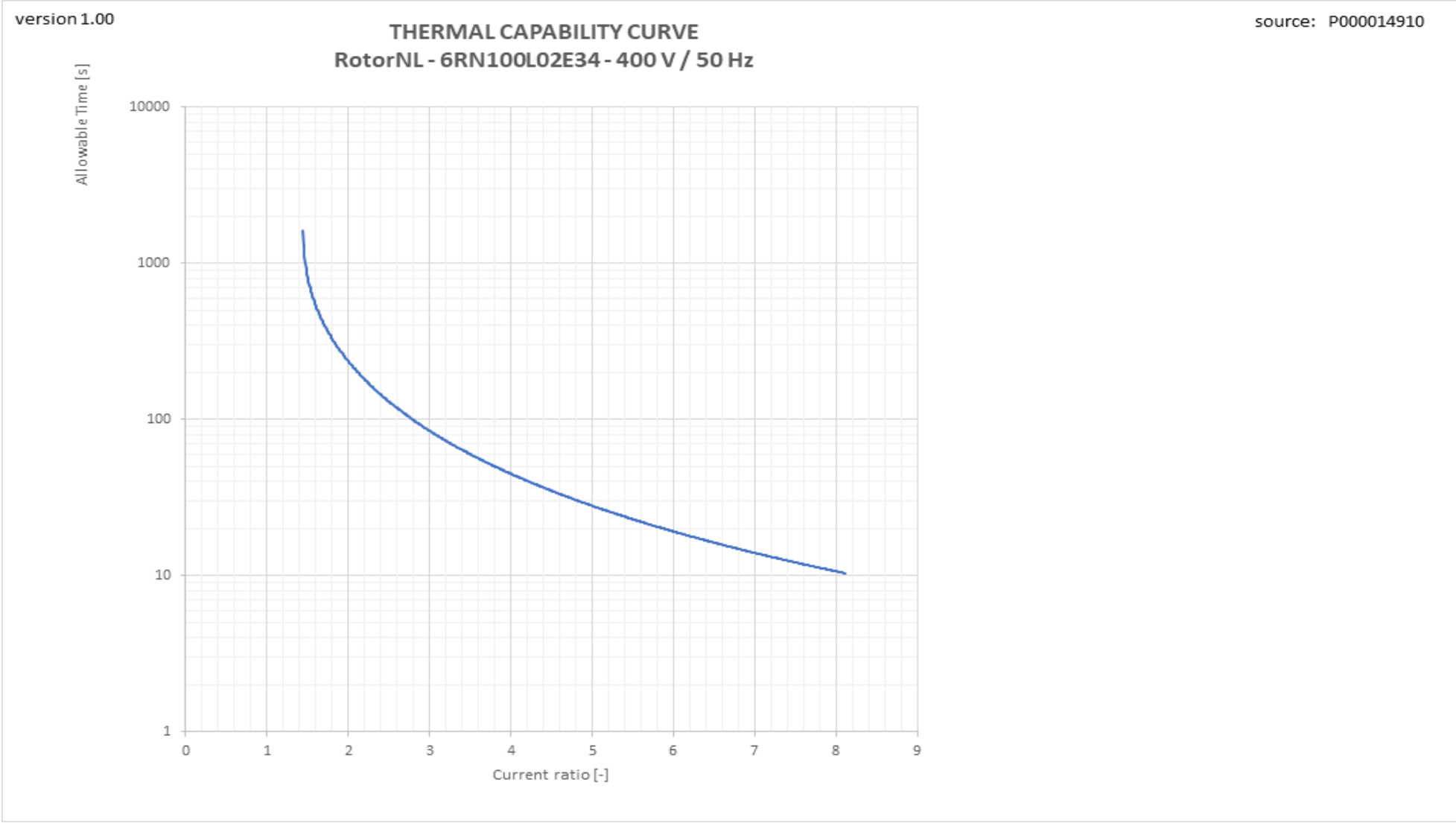
Torque versus Speed curve with variable frequency drive



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Therm_VSD graph

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Tn graph

