

# PRODUCT INFORMATION PACKET

rotor nl<sup>®</sup>

Model No: 6RN180L06E36U243021

Catalog No: 6RN180L06E36U24@3021

18.50 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1000 rpm, D230/Y400V 50Hz,  
180L Frame B5, IC411



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**Nameplate Specifications**

Efficiency Class	IE3
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**Technical Specifications**

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## Datasheet

rotor nl®

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**Model No.** 6-Pole cage motor 6RN 180L 18,5kW D230V 50Hz IM3021-FF300

U (V)	Δ / Y Conn	f [Hz]	P [kW]	P [hp]	I [A]	n [RPM]	T [Nm]	IE Class	% EFF at __ load			PF at __load			I <sub>A</sub> /I <sub>N</sub> [pu]	T <sub>A</sub> /T <sub>N</sub> [pu]	T <sub>K</sub> /T <sub>N</sub> [pu]
									FL	3/4FL	1/2FL	FL	3/4FL	1/2FL			
230	D	50	18,5	24,8	65,8	975	180	IE3	91,7			0,77			6,90	2,58	3,30
400	Y				38												
265	D	60	22	30	65	1175	178	IE3	93,0	93,5	93,4	0,79	0,73	0,62	6,90	2,40	3,10

Motor type	6RN180L06E36
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	180L
Duty	S1
Voltage	230 V
Frequency	50 Hz
Power output	18,5 kW

Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	67 K
Temperature rise surface	35 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6310-2Z/C3WT

Type of grease	Unirex N3
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Country of origin	CZ
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Voltage/Freq	Locked rotor Torque [% nom]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 230V 50Hz	258%	689%	230%	330%	33,4 A
@ D 265V 60Hz	240%	689%	220%	310%	30,4 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.

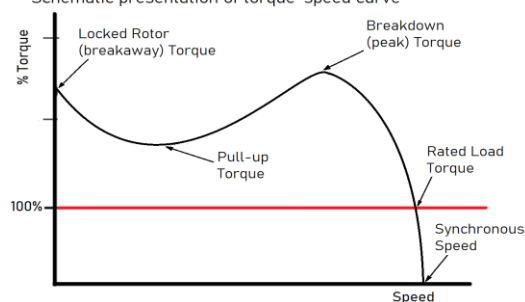
Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30

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Degree of protection	IP55
Mounting type	IM3021-FF300
Cooling method	IC411
Motor weight - approx.	180 kg
Gross weight - approx.	185 kg
Motor inertia	0,2470 kgm <sup>2</sup>
Vibration level	according IEC60034-14

Direction of rotation	cw /ccw
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Schematic presentation of torque-speed curve



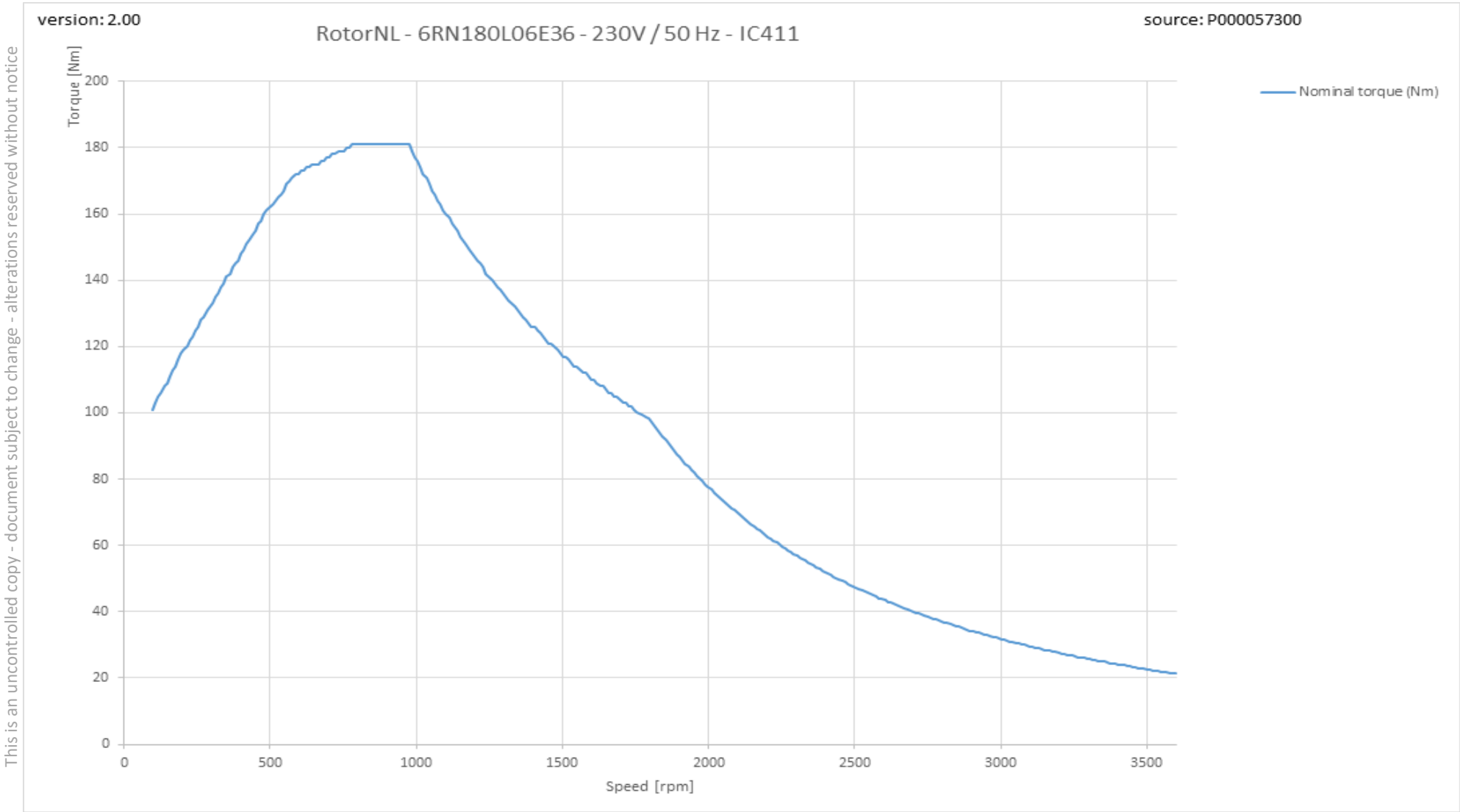
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6RN180L06E36 6-pole 18,50kW D/Y 230/400V 50Hz S1 IC411 IE3

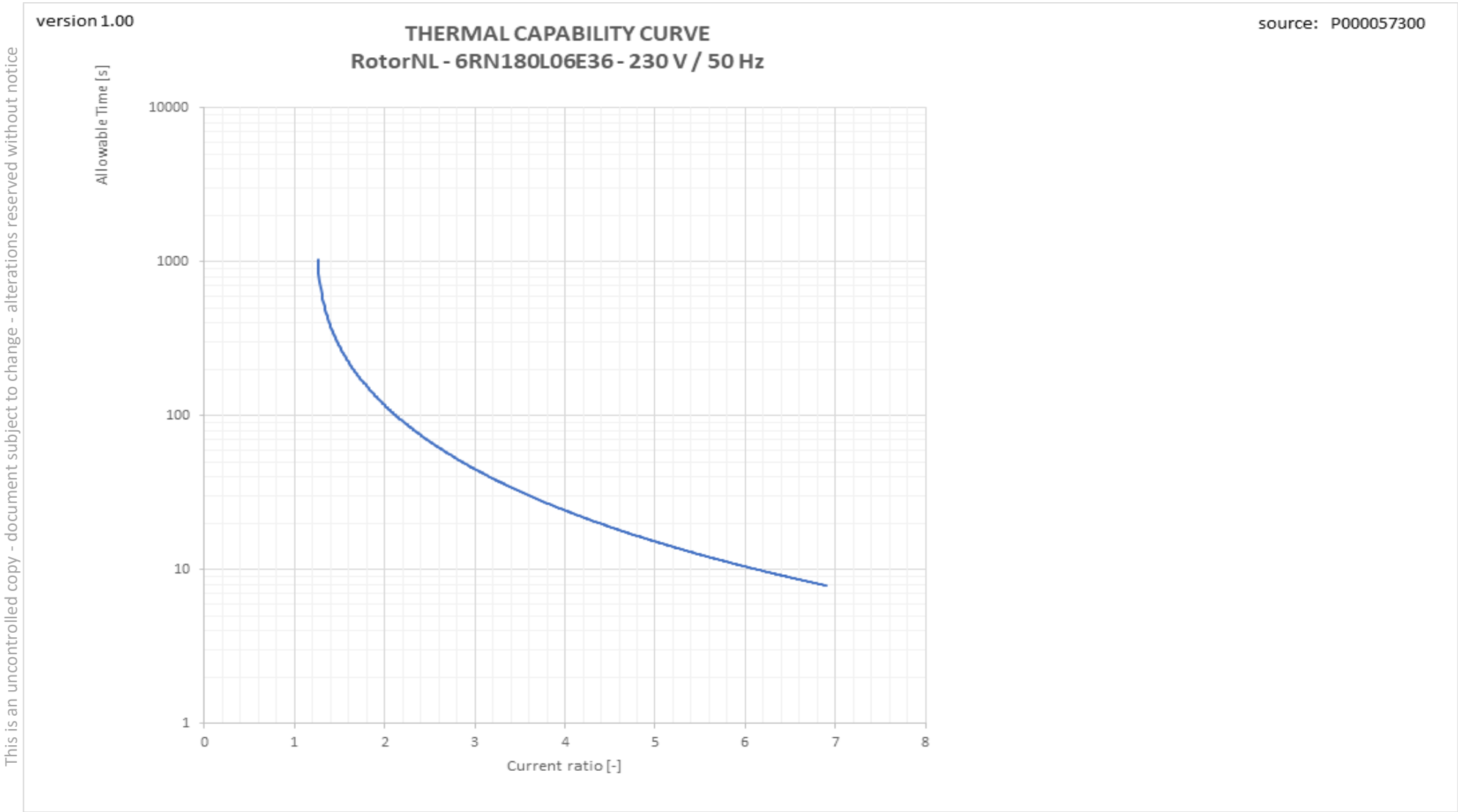


Torque versus Speed curve with variable frequency drive



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Therm\_VSD graph



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