

# PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN112M06E36U46B2181-A

Catalog No: 6RN112M06E36U46B@2181-A

3.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1000 rpm, D400/Y690V 50Hz,  
112M 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	6.80 A	Speed	965 rpm
Service Factor	1	Phase	3
Efficiency	85.6 %	Power Factor	0.74
Duty	S1	Insulation Class	F
Frame	112M	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	6	Rotation	Clockwise Shaft End
Mounting	B34	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Outline Drawing	6RN112M06E36U46B2181-A		

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Model No. 6-Pole cage motor 6RN 112M 3kW D400V 50Hz IM1081

U (V)	Δ/Y Conn	f [Hz]	P		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]
			[kW]	[hp]					FL	3/4FL	1/2FL	FL	3/4FL	1/2FL			
400	D	50	3	4	6,8	965	29,7	IE3	85,6			0,74			5,50	2,00	2,70
690	Y		3,93														
460	D	60	3,45	4,625	6,2	1175	28,2	IE2	87,5			0,72			8,19	2,82	3,40

Motor type	6RN112M06E36
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	112M
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	56 K
Temperature rise surface	
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

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

Type of grease	Unirex N3
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Phase resistance at 20°C	4,7800 Ohm
Country of origin	CZ

Voltage/Freq	Locked rotor Torque [nom]	Starting current [%]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 400V 50Hz	200%	550%		270%	4,18 A
@ D 460V 60Hz	282%	819%		340%	3,81 A

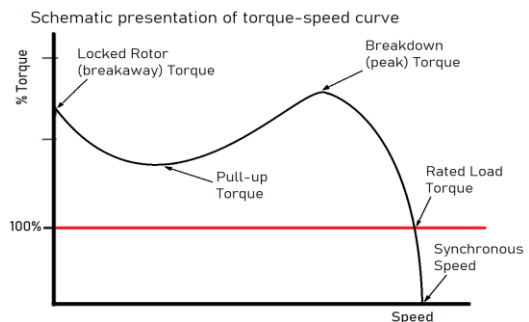
**NOTE**

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.

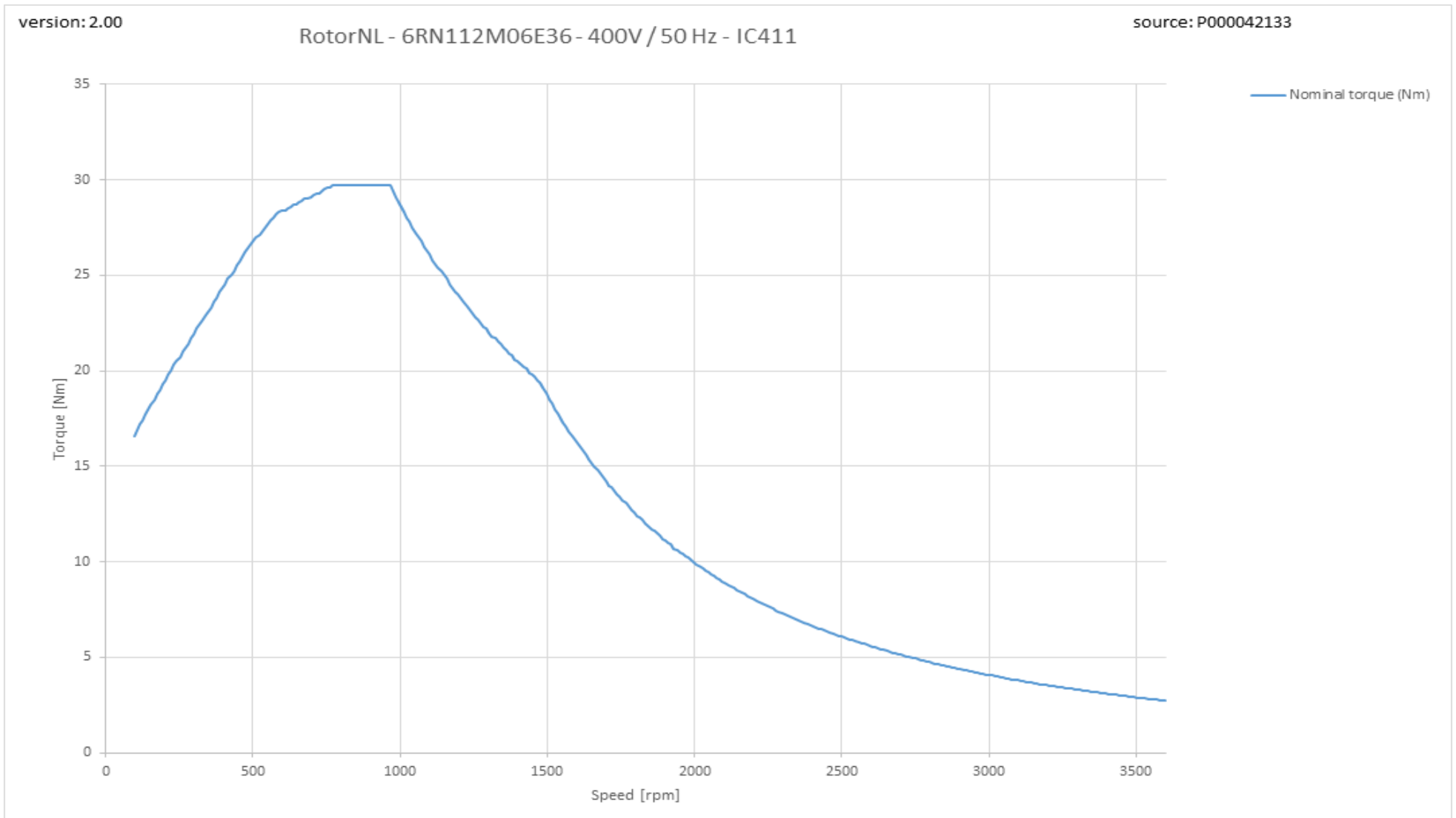
Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30

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Degree of protection	IP55
Mounting type	IM1081
Cooling method	IC411
Motor weight - approx.	46 kg
Gross weight - approx.	47 kg
Motor inertia	0,0146 kgm <sup>2</sup>
Vibration level	according IEC60034-14
Direction of rotation	cw / ccw



Torque versus Speed curve with variable frequency drive



Therm\_VSD graph

