

# PRODUCT INFORMATION PACKET



Model No: 6RN112M02E42U46B2081

Catalog No: 6RN112M02E42U46B@2081

4.00 kW General Purpose Low Voltage IEC Motor IE4, 3 phase, 3000 rpm, D400/Y690V 50Hz,  
112M Frame B35, IC411

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### Nameplate Specifications

Output HP	5.50 Hp	Output KW	4.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	7.21 A	Speed	2950 rpm
Service Factor	1	Phase	3
Efficiency	90 %	Power Factor	0.89
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	IE4

### Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	2	Rotation	Clockwise Shaft End
Mounting	B35	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Outline Drawing	6RN112M02E42_2041		

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Datasheet



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**Model No.** 2-Pole cage motor 6RN 112M 4kW D400V 50Hz IM2081-FF215

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>R</sub> /T <sub>N</sub> [pu]
			[kW]	[hp]					FL	3/4FL	1/2FL	FL	3/4FL	1/2FL			
400	D	50	4	5 1/3	7,21	2950	12,9	IE4	89,7	90,1	89,3	0,89	0,86	0,79	9,81	2,58	4,08
690	Y		4,16														
460	D	60	4,55	6,099	7,2	3550	12,2	IE4	89,8	89,4	87,6	0,88	0,84	0,76	10,10	2,64	4,16

Motor type	<b>6RN112M02E42</b>
Enclosure	<b>Totally Enclosed Fan Cooling</b>
Frame Material	<b>Cast iron</b>
Frame size	<b>112M</b>
Duty	<b>S1</b>
Voltage	<b>400 V</b>
Frequency	<b>50 Hz</b>
Power output	<b>4 kW</b>
Insulation class	<b>F</b>
Ambient temperature	<b>-20 till 40 °C</b>
Temperature rise	<b>temp.rise acc. B (80K)</b>
Temperature rise winding	<b>42 K</b>
Temperature rise surface	
Altitude above sea level	<b>1000 mtr</b>
Hazardous area classification	<b>Safe area</b>

Rotor type	<b>Cage motor</b>
Bearing type	<b>6306-2Z/C3WT</b>

Type of grease	<b>Unirex N3</b>
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Phase resistance at 20°C	<b>3,0330 Ohm</b>
Country of origin	<b>CZ</b>

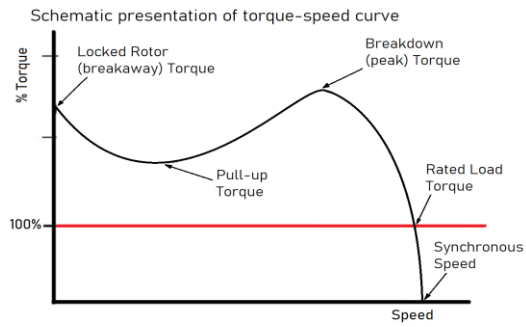
Voltage/Freq	Locked rotor Torque [nom] [%]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 400V 50Hz	258%	983%	189%	408%	2,36 A
@ D 460V 60Hz	264%	1011%	174%	416%	2,16 A

**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

Degree of protection	<b>IP55</b>
Mounting type	<b>IM2081-FF215</b>
Cooling method	<b>IC411</b>
Motor weight - approx.	<b>43 kg</b>
Gross weight - approx.	<b>44 kg</b>
Motor inertia	<b>0,0120 kgm<sup>2</sup></b>
Vibration level	<b>according IEC60034-14</b>
Noise level (pressure) acc 60034-9	<b>69 dB(A)</b>

Direction of rotation **cw / ccw**



V2.07

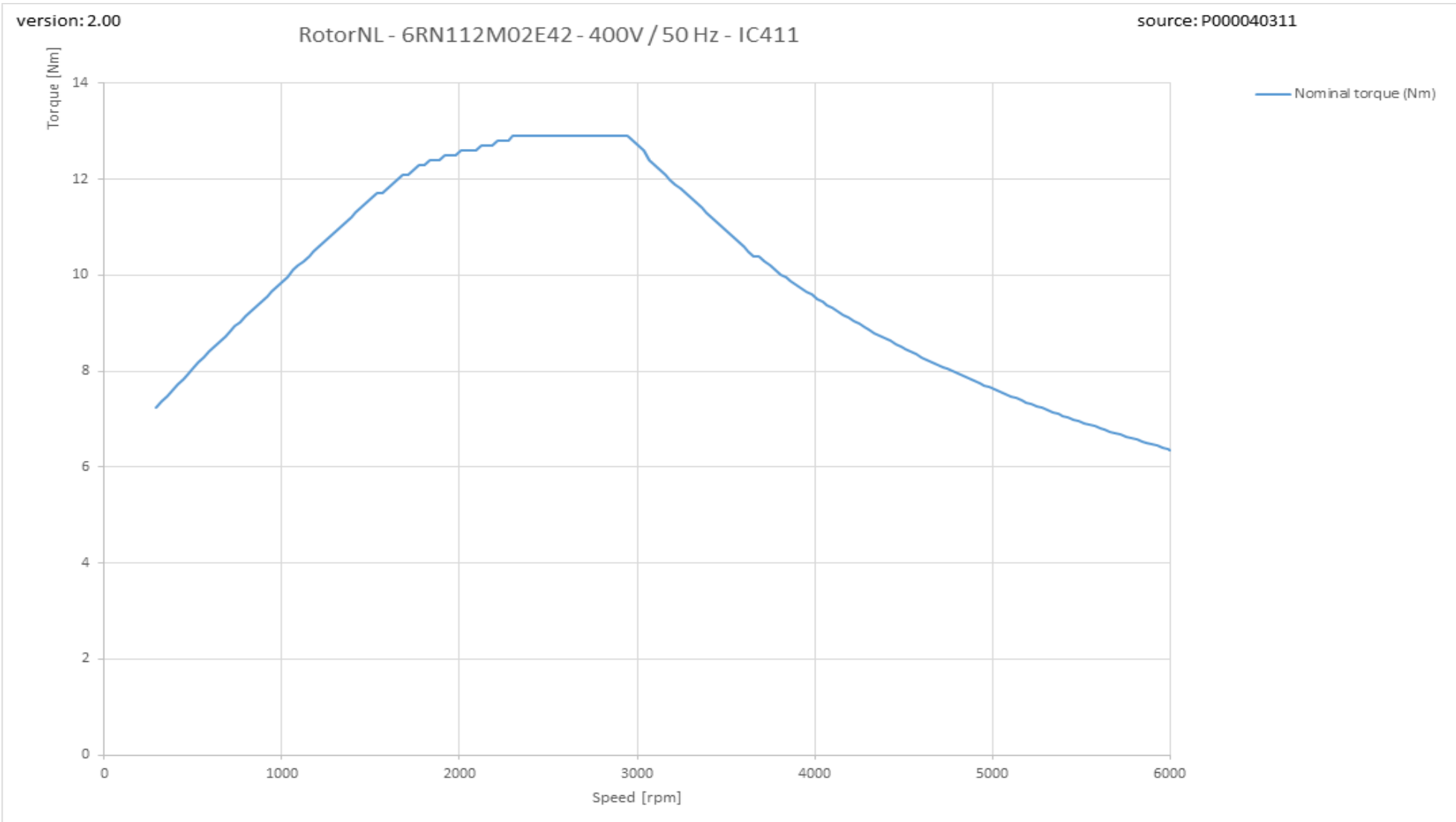
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6RN112M02E42 2-pole 4,00kW D/Y 400/690V 50Hz S1 IC411 IE4



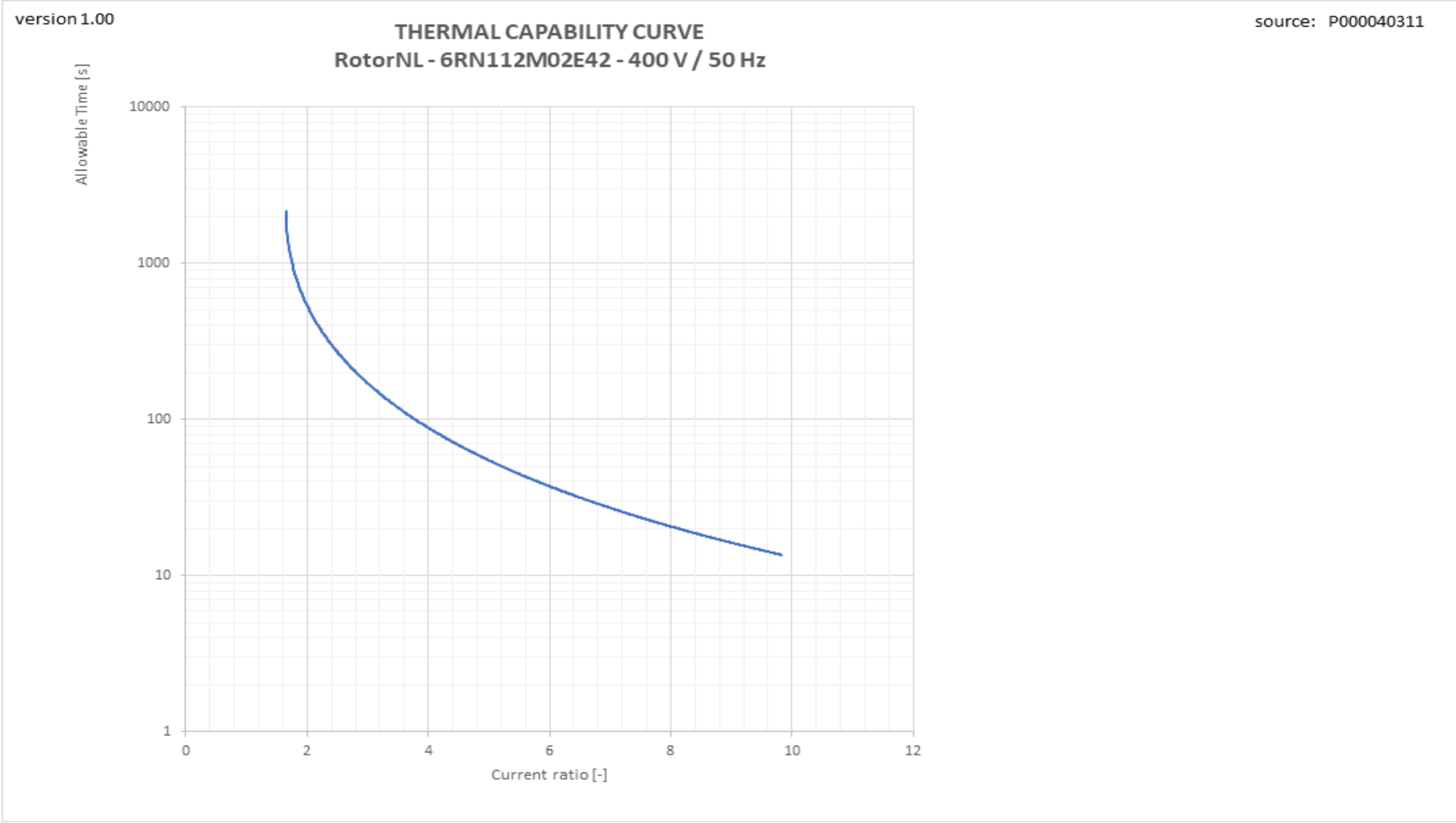
Torque versus Speed curve with variable frequency drive



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Therm\_VSD graph

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Tn graph

