

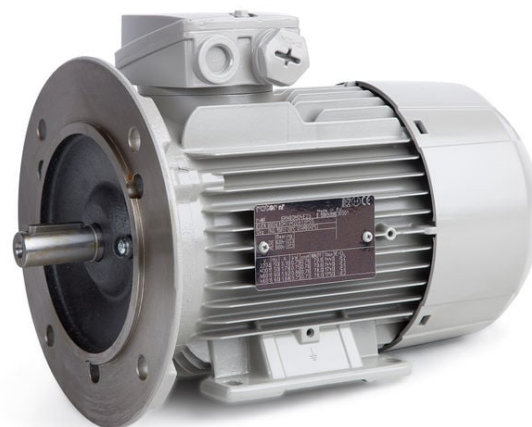
# PRODUCT INFORMATION PACKET

rotor nl<sup>®</sup>

Model No: 6RN80M02E33U24B2081

Catalog No: 6RN80M02E33U24B@2081

1.10 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 3000 rpm, D230/Y400V 50Hz,  
80M Frame B35, IC411



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### Nameplate Specifications

Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	50 Hz	Voltage	D230/Y400 V
Current	3.70 A	Speed	2885 rpm
Service Factor	1	Phase	3
Efficiency	82.7 %	Power Factor	0.84
Duty	S1	Insulation Class	F
Frame	80M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6204-2Z/C3WT (-40°C/+160°C)	Opp Drive End Bearing Size	6004-2Z/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	B35	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	19 mm	Shaft Extension	40 mm
Outline Drawing	6RN80M02E33_2041		

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Datasheet



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**Model No.** 2-Pole cage motor 6RN 80M 1,1kW D230V 50Hz IM2081-FF165

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			
230	D	50	1,1	1 1/2	3,9	2885	3,66	IE3	83,7			0,84			7,40	2,80	3,80
400	Y				2,25												
265	D	60	1,27	1,702	3,9	3480	3,5	IE3	84,0	84,0		0,85		7,40	2,80	3,80	
460	Y				2,25												

Motor type	<b>6RN80M02E33</b>
Enclosure	<b>Totally Enclosed Fan Cooling</b>
Frame Material	<b>Aluminum</b>
Frame size	<b>80M</b>
Duty	<b>S1</b>
Voltage	<b>230 V</b>
Frequency	<b>50 Hz</b>
Power output	<b>1,1 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>39 K</b>
Temperature rise surface	
Altitude above sea level	<b>1000 mtr</b>
Hazardous area classification	<b>Safe area</b>

Degree of protection	<b>IP55</b>
Mounting type	<b>IM2081-FF165</b>
Cooling method	<b>IC411</b>
Motor weight - approx.	<b>13 kg</b>
Gross weight - approx.	<b>13 kg</b>
Motor inertia	<b>0,0013 kgm<sup>2</sup></b>
Vibration level	<b>according IEC60034-14</b>
Direction of rotation	<b>cw / ccw</b>

Rotor type	<b>Cage motor</b>
Bearing type	<b>6004-2Z/C3WT</b>
Type of grease	<b>Unirex N3</b>
Phase resistance at 20°C	<b>5,0036 Ohm</b>
Country of origin	<b>CZ</b>

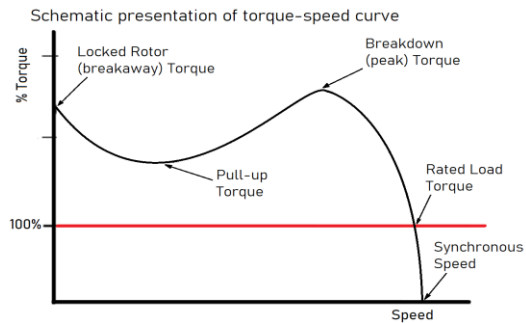
Voltage/Freq	Locked rotor Torque [nom] [%]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 230V 50Hz	280%	748%	250%	380%	1,88 A
@ D 265V 60Hz	280%	741%		380%	1,57 A

**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

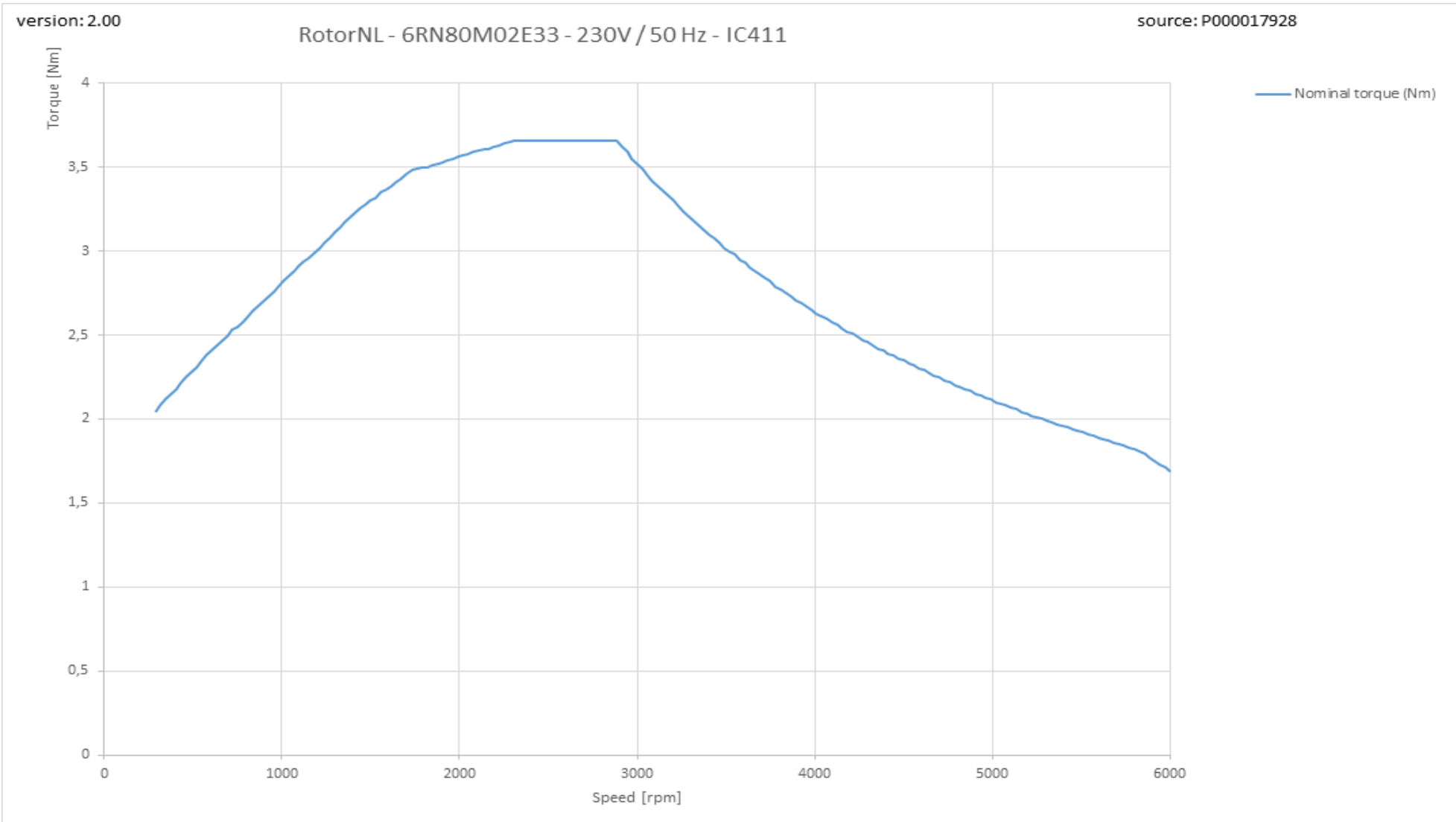
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6RN80M02E33 2-pole 1,10kW D/Y 230/400V 50Hz S1 IC411 IE3



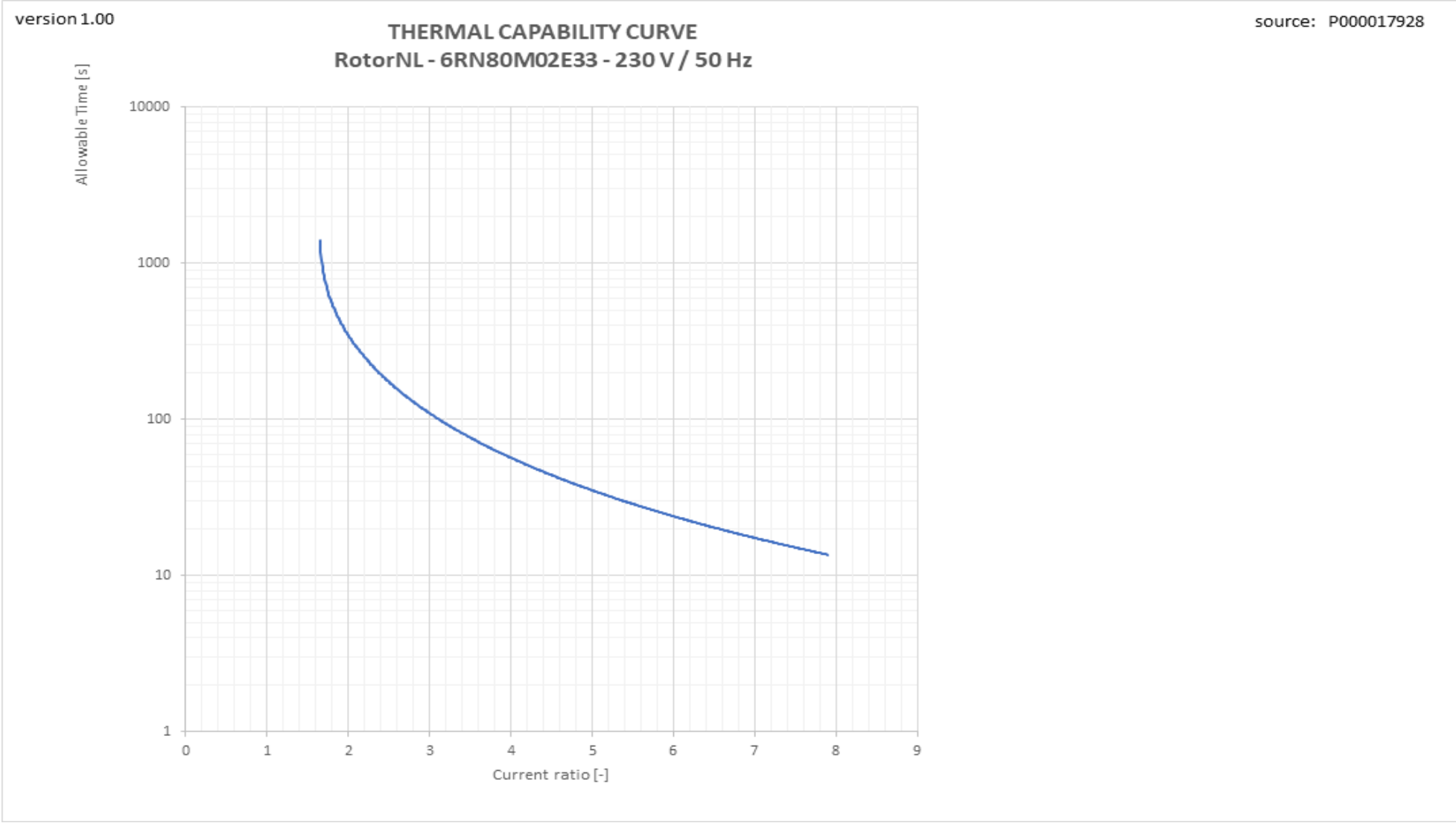
Torque versus Speed curve with variable frequency drive



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Therm\_VSD graph

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Tn graph

