

# PRODUCT INFORMATION PACKET

rotor nl<sup>®</sup>

Model No: 6RN80M02E32U241081

Catalog No: 6RN80M02E32U24@1081

0.75 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 3000 rpm, D230/Y400V 50Hz,  
80M Frame B3, IC411



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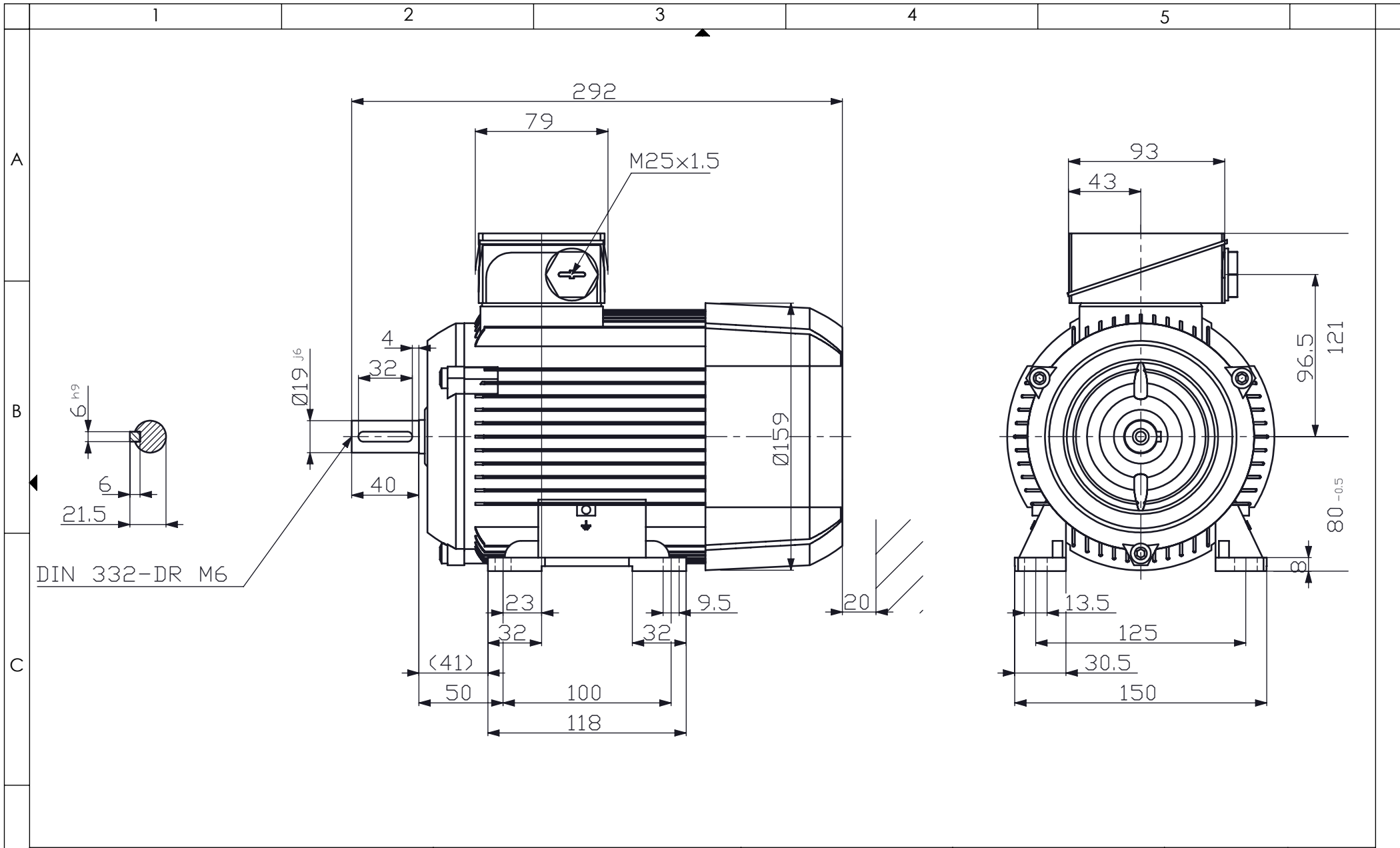
### Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	50 Hz	Voltage	D230/Y400 V
Current	2.75 A	Speed	2850 rpm
Service Factor	1	Phase	3
Efficiency	80.7 %	Power Factor	0.86
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	B3	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	19 mm	Shaft Extension	40 mm
Outline Drawing	6RN80M02E32U241081		

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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



**rotor**

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MOTORTYPE: 6RN80M02E32	TITLE: Outline drawing
MOUNTING: IM1041	DRAWN:
PROTECTION:	CHECKED:
COOLING: IC411	COMPLETE OR PARTIAL COPYING OR USE OF SPECIFICATIONS IS NOT ALLOWED WITHOUT OUR PERMISSION.
REMARKS:	SUBJECT TO ALTERATIONS
DIMENSIONS: MM	PAPER SIZE: A4
SCALE: 1:3	PAGE 1 OF 1

ART. NR.:	DATE:
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Datasheet



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**Model No.** 2-Pole cage motor 6RN 80M 0,75kW D230V 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>R</sub> /T <sub>N</sub> [pu]
			[kW]	[hp]					FL	3/4FL	1/2FL	FL	3/4FL	1/2FL			
230	D	50	0,75	1	2,75	2850	2,5	IE3	80,7	82,0	81,5	0,86	0,82	0,73	6,20	2,60	3,00
400	Y				1,6												
265	D	60	0,86	1,153	2,85	3450	2,4	IE3	77,0	78,0	77,0	0,86	0,83	0,75	6,40	2,60	3,10
460	Y				1,65												

Motor type	<b>6RN80M02E32</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>0,75 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>62 K</b>
Temperature rise surface	<b>21 K</b>
Altitude above sea level	<b>1000 mtr</b>
Hazardous area classification	<b>Safe area</b>

Rotor type	<b>Cage motor</b>
Bearing type	<b>6004-2Z/C3WT</b>

Type of grease	<b>Unirex N3</b>
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Phase resistance at 20°C	<b>8,4000 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	260%	621%	200%	300%	1,4 A
@ D 265V 60Hz	260%	638%		310%	1,3 A

**NOTE**

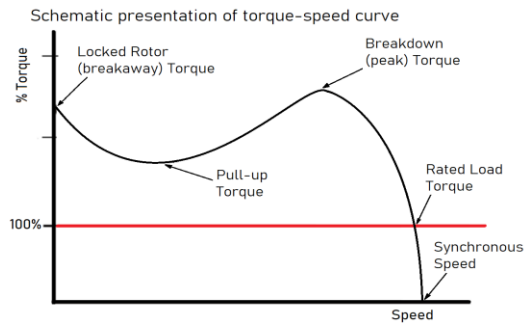
All performance values at rated voltage and frequency.  
 All performance parameters are subjected to standard tolerance as per IEC 60034-1  
 Voltage, Frequency are as per IEC60034-1  
 Technical data are subject to change. There may be discrepancies between calculated and name plate values.

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

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Degree of protection	<b>IP55</b>
Mounting type	<b>IM1081</b>
Cooling method	<b>IC411</b>
Motor weight - approx.	<b>11 kg</b>
Gross weight - approx.	<b>11 kg</b>
Motor inertia	<b>0,0011 kgm<sup>2</sup></b>
Vibration level	<b>according IEC60034-14</b>

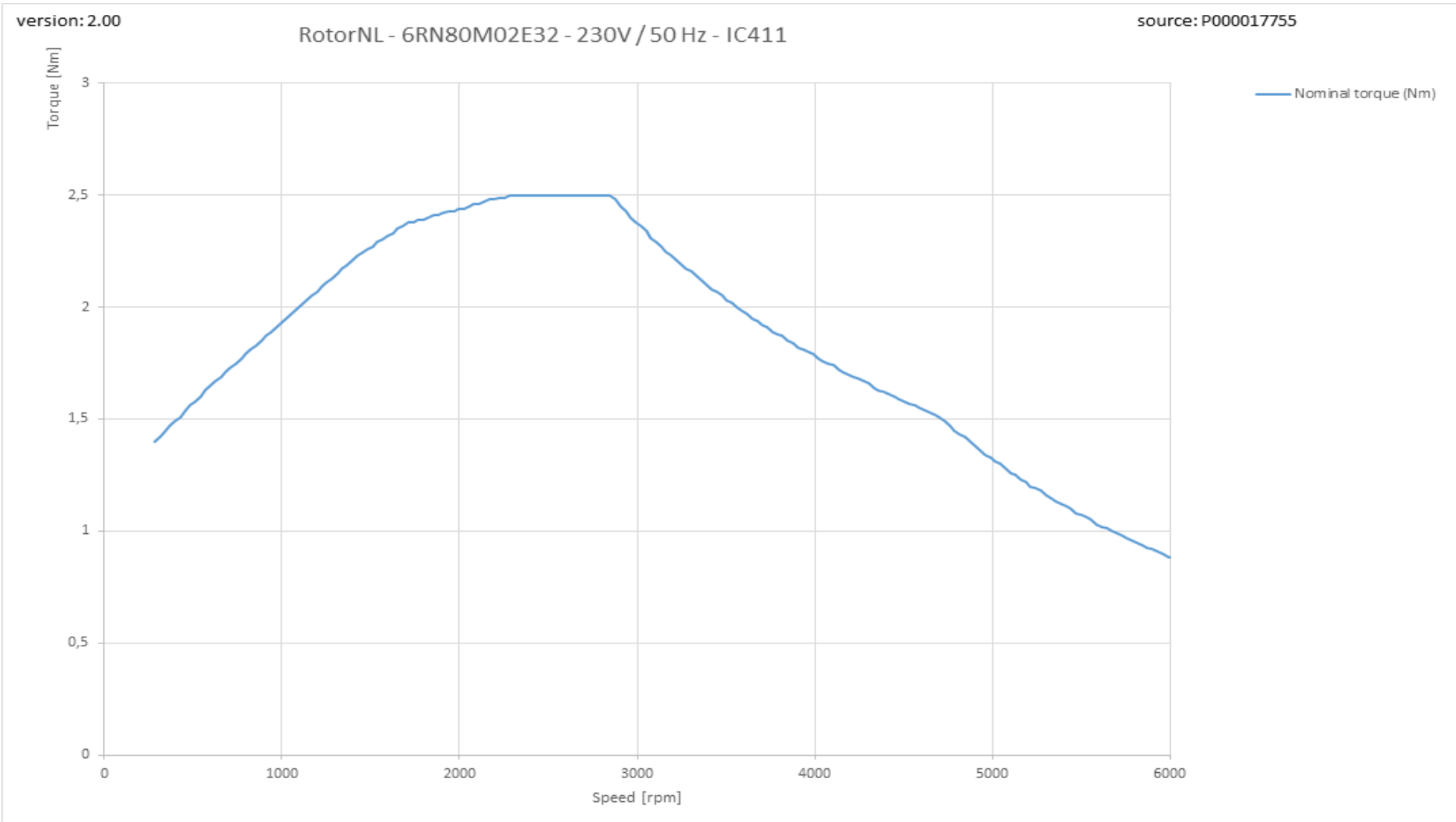
Direction of rotation	<b>cw / ccw</b>
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6RN80M02E32 2-pole 0,75kW D/Y 230/400V 50Hz S1 IC411 IE3

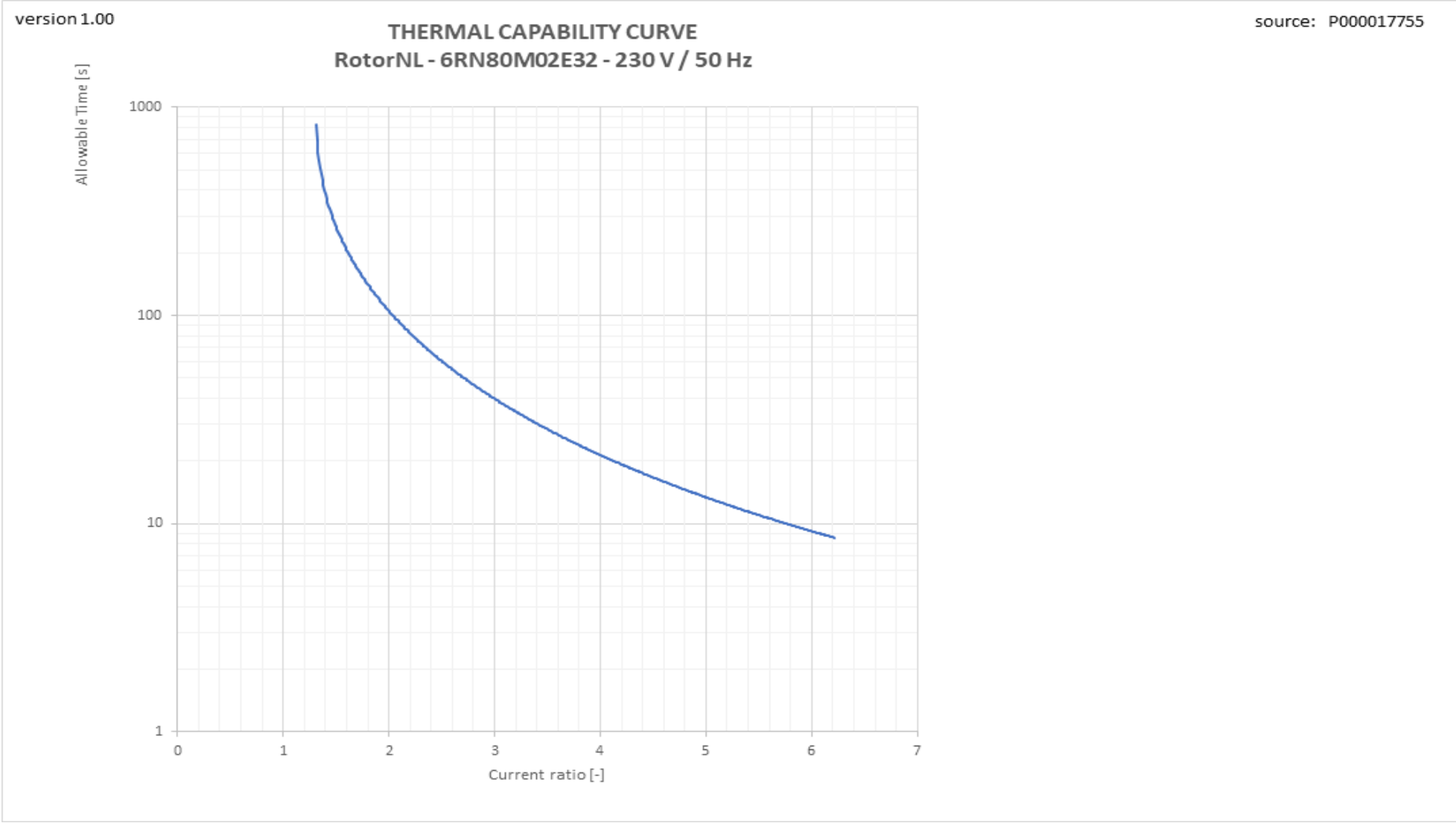


Torque versus Speed curve with variable frequency drive



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Therm\_VSD graph



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Tn graph

