

# PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN250M04E32U46B1041-Uni  
Catalog No: 6RN250M04E32U46B@1041-Uni  
55.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D400/Y690V 50Hz,  
250M Frame B3, IC411



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### Nameplate Specifications

Output HP	75.00 Hp	Output KW	55.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	96.00 A	Speed	1482 rpm
Service Factor	1	Phase	3
Efficiency	94.6 %	Power Factor	0.87
Duty	S1	Insulation Class	F
Frame	250M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6315/C3	Opp Drive End Bearing Size	6315/C3
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	4	Rotation	Clockwise Shaft End
Mounting	B3	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	65 mm	Shaft Extension	140 mm
Outline Drawing	6RN250M04E32_1041		

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Datasheet



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**Model No.** 4-Pole cage motor 6RN 250M 55kW D400V 50Hz IM1041

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	55	72,5	96	1482	354	IE3	94,6	95,1	95,0	0,87	0,83	0,75	7,08	2,32	2,80
690	Y				55												
460	D	60	55	72,5	84,8	1786	294	IE3	95,3	95,5	95,0	0,85	0,82	0,73	7,87	2,71	3,13

Motor type	<b>6RN250M04E32</b>
Enclosure	<b>Totally Enclosed Fan Cooling</b>
Frame Material	<b>Cast iron</b>
Frame size	<b>250M</b>
Duty	<b>S1</b>
Voltage	<b>400 V</b>
Frequency	<b>50 Hz</b>
Power output	<b>55 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>38 K</b>
Altitude above sea level	<b>1000 mtr</b>
Hazardous area classification	<b>Safe area</b>

Degree of protection	<b>IP55</b>
Mounting type	<b>IM1041</b>
Cooling method	<b>IC411</b>
Motor weight - approx.	<b>430 kg</b>
Gross weight - approx.	<b>440 kg</b>
Motor inertia	<b>0,8500 kgm<sup>2</sup></b>
Vibration level	<b>according IEC60034-14</b>
Noise level (pressure) acc 60034-9	<b>57 dB(A)</b>

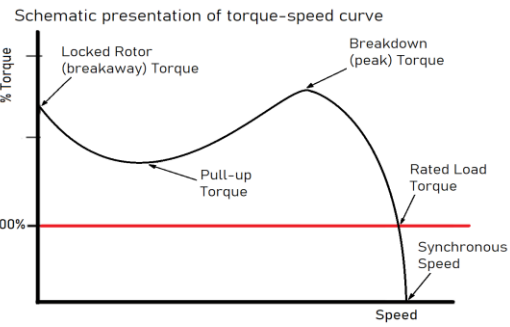
Rotor type	<b>Cage motor</b>
Bearing type	<b>6315/C3 - 6315/C3</b>
Lubrication method	<b>25gr/8000hrs</b>
Type of grease	<b>Unirex N3</b>

Phase resistance at 20°C	<b>0,0924 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	232%	708%	180%	280%	31,5 A
@ D 460V 60Hz	271%	786%	220%	313%	29,5 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



V2.06

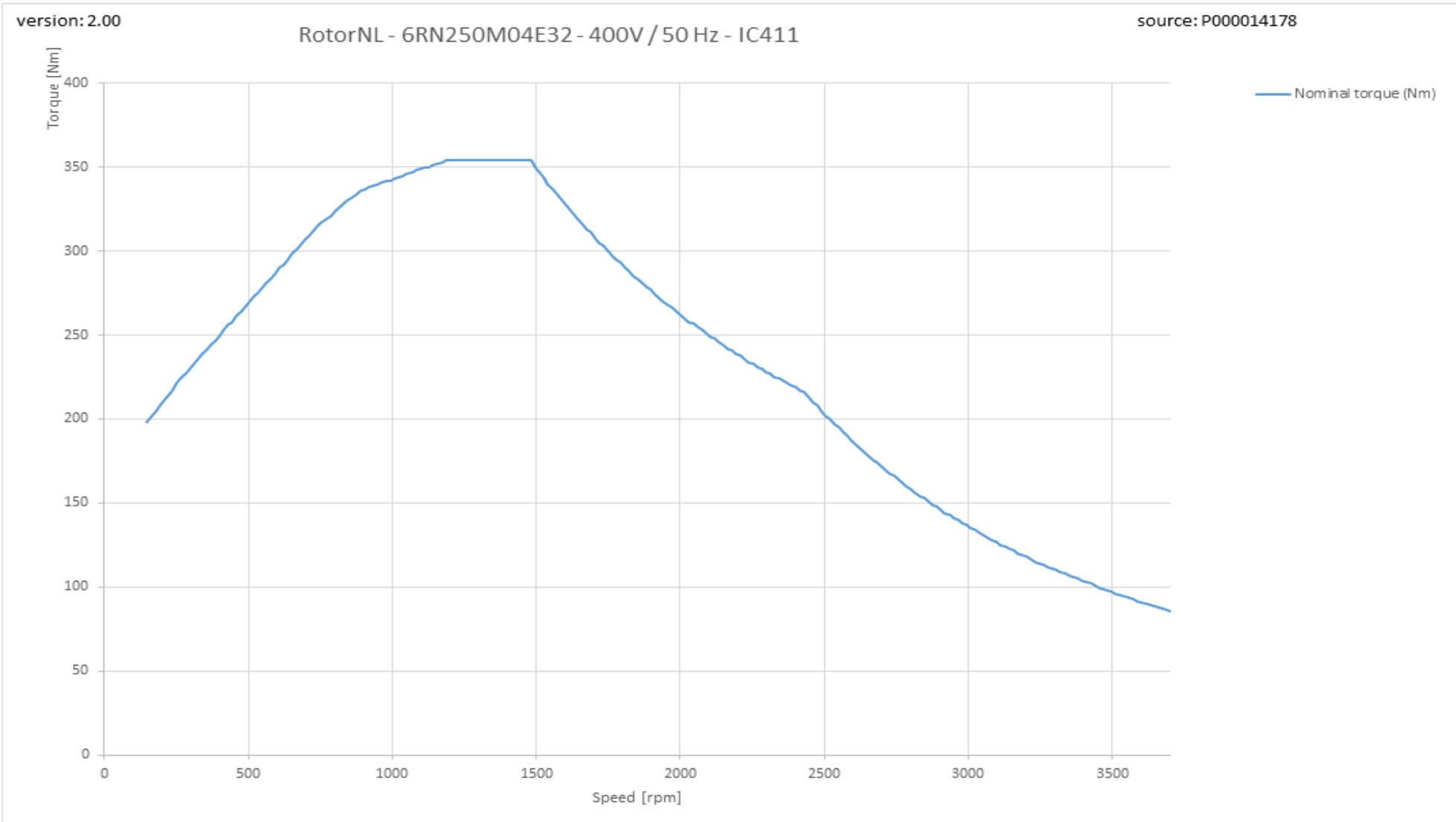
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6RN250M04E32 4-pole 55,00kW D/Y 400/690V 50Hz S1 IC411 IE3

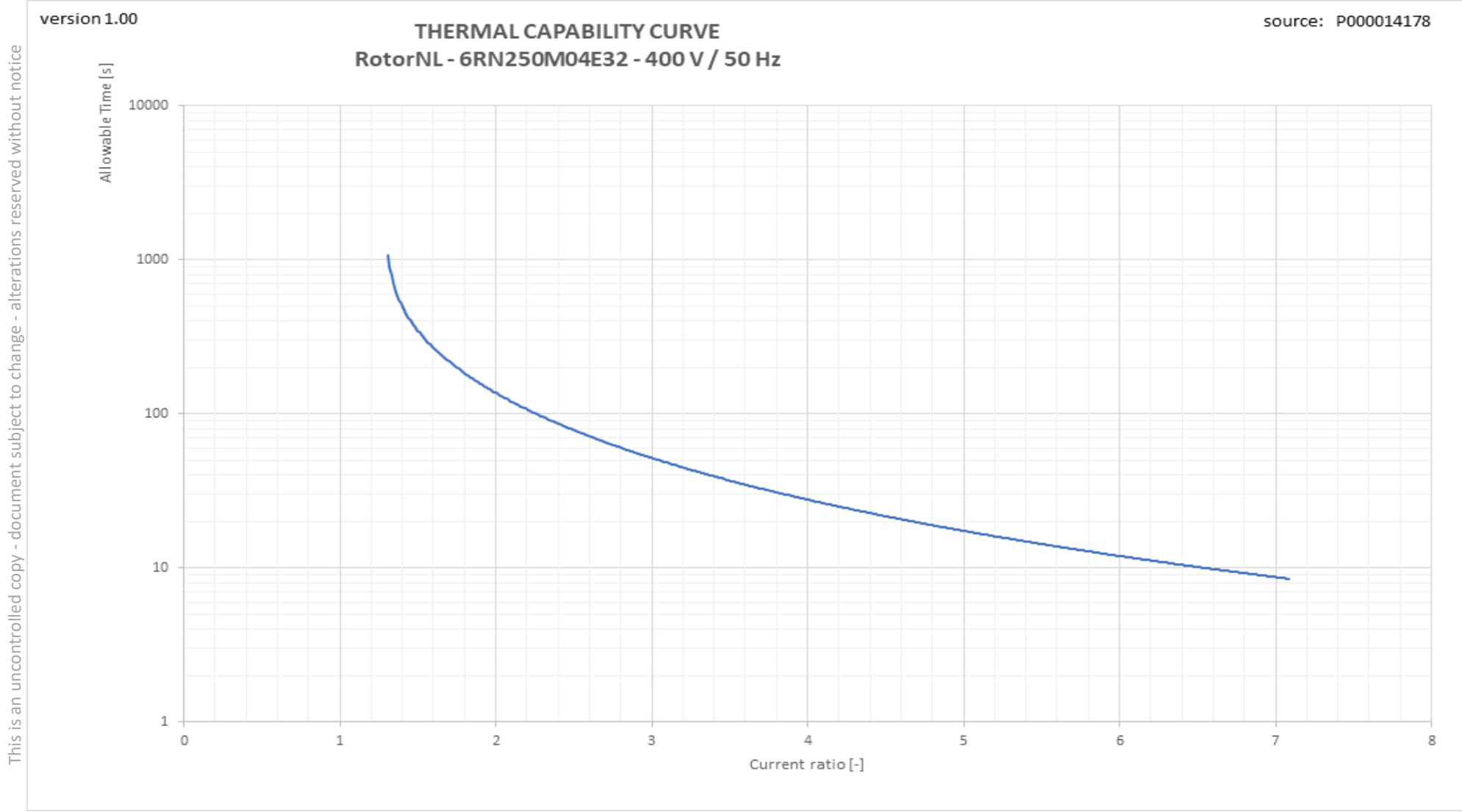


Torque versus Speed curve with variable frequency drive



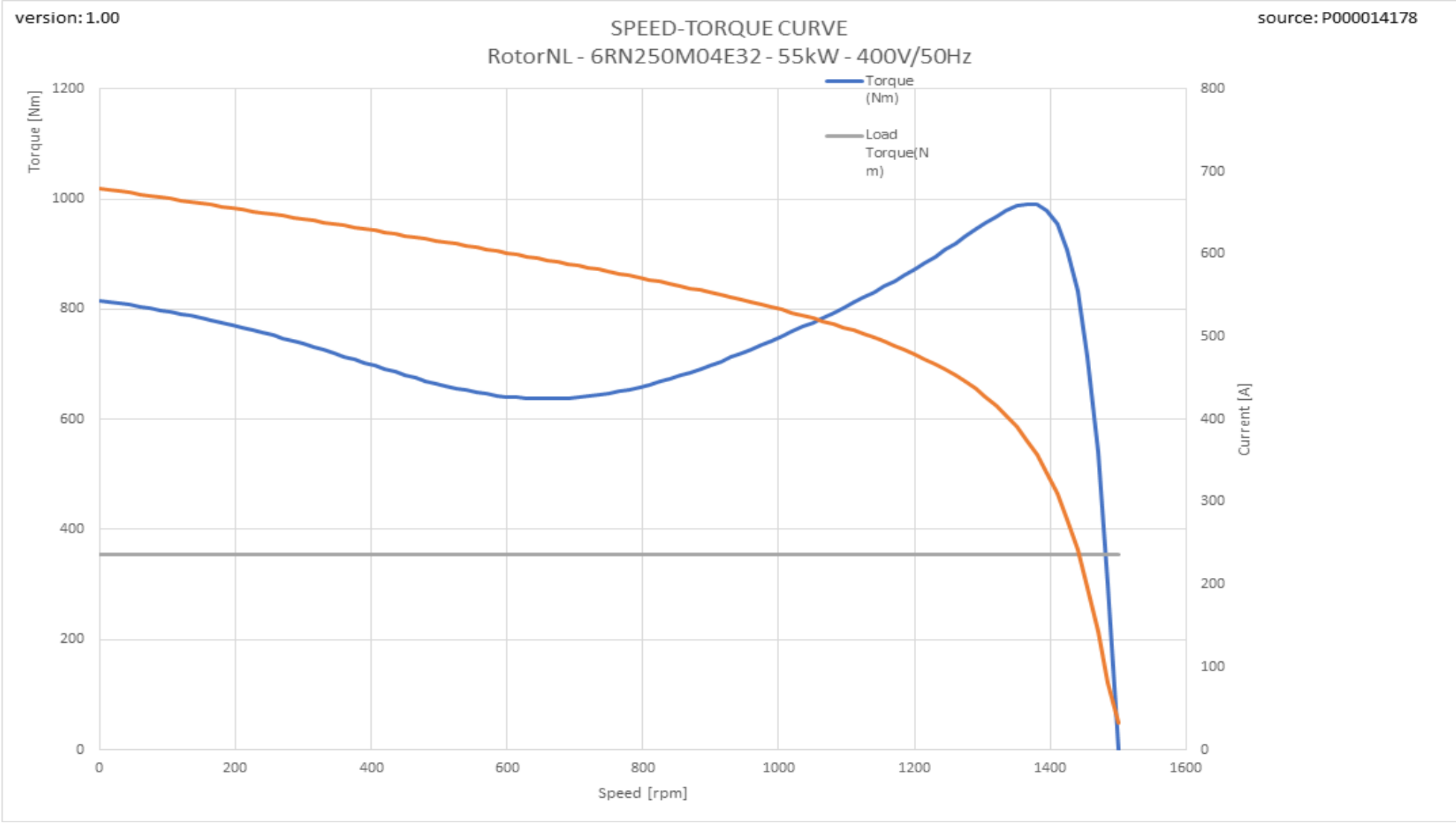
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Therm\_VSD graph



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Tn graph



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