

PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN90S06E30U243041

Catalog No: 6RN90S06E30U24@3041

0.75 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1000 rpm, D230/Y400V 50Hz,
90S Frame B5, IC411



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Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	50 Hz	Voltage	D230/Y400 V
Current	3.39 A	Speed	945 rpm
Service Factor	1	Phase	3
Efficiency	78.9 %	Power Factor	0.70
Duty	S1	Insulation Class	F
Frame	90S	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6205-2Z/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	6	Rotation	Clockwise Shaft End
Mounting	B5	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	24 mm	Shaft Extension	50 mm
Outline Drawing	6RN90S06E30U243041		

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Datasheet

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Model No. 6-Pole cage motor 6RN 90S 0,75kW D230V 50Hz IM3041-FF165

U (V)	Δ / Y Conn	f [Hz]	P [kW]	P [hp]	I [A]	n [RPM]	T [Nm]	IE Class	% EFF at __ load			PF at __load			I _A /I _N [pu]	T _A /T _N [pu]	T _K /T _N [pu]
									FL	3/4FL	1/2FL	FL	3/4FL	1/2FL			
230	D	50	0,75	1	3,39	945	7,59	IE3	78,5	79,6	78,4	0,70	0,62	0,50	4,54	2,12	2,57
400	Y				1,96												
265	D	60	0,86	1,153	3,24	1145	7,2	IE3	81,3	82,1	80,6	0,69	0,61	0,49	4,90	2,04	2,67
460	Y				1,88												

Motor type	6RN90S06E30
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Aluminum
Frame size	90S
Duty	S1
Voltage	230 V
Frequency	50 Hz
Power output	0,75 kW

Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	45 K
Temperature rise surface	
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6004-2Z/C3WT

Type of grease	Unirex N3
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Phase resistance at 20°C	8,7229 Ohm
Country of origin	CZ

Voltage/Freq	Locked rotor Torque [% nom]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 230V 50Hz	212%	454%	211%	257%	2,18 A
@ D 265V 60Hz	204%	490%	204%	267%	2,03 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.

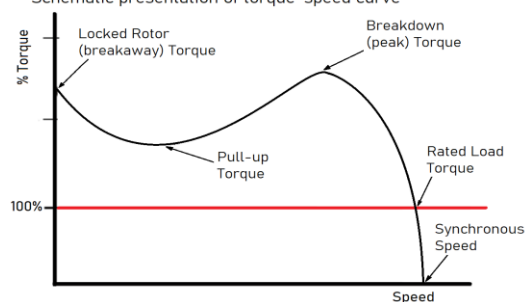
Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30

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Degree of protection	IP55
Mounting type	IM3041-FF165
Cooling method	IC411
Motor weight - approx.	18 kg
Gross weight - approx.	19 kg
Motor inertia	0,0040 kgm ²
Vibration level	according IEC60034-14

Direction of rotation	cw / ccw
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Schematic presentation of torque-speed curve



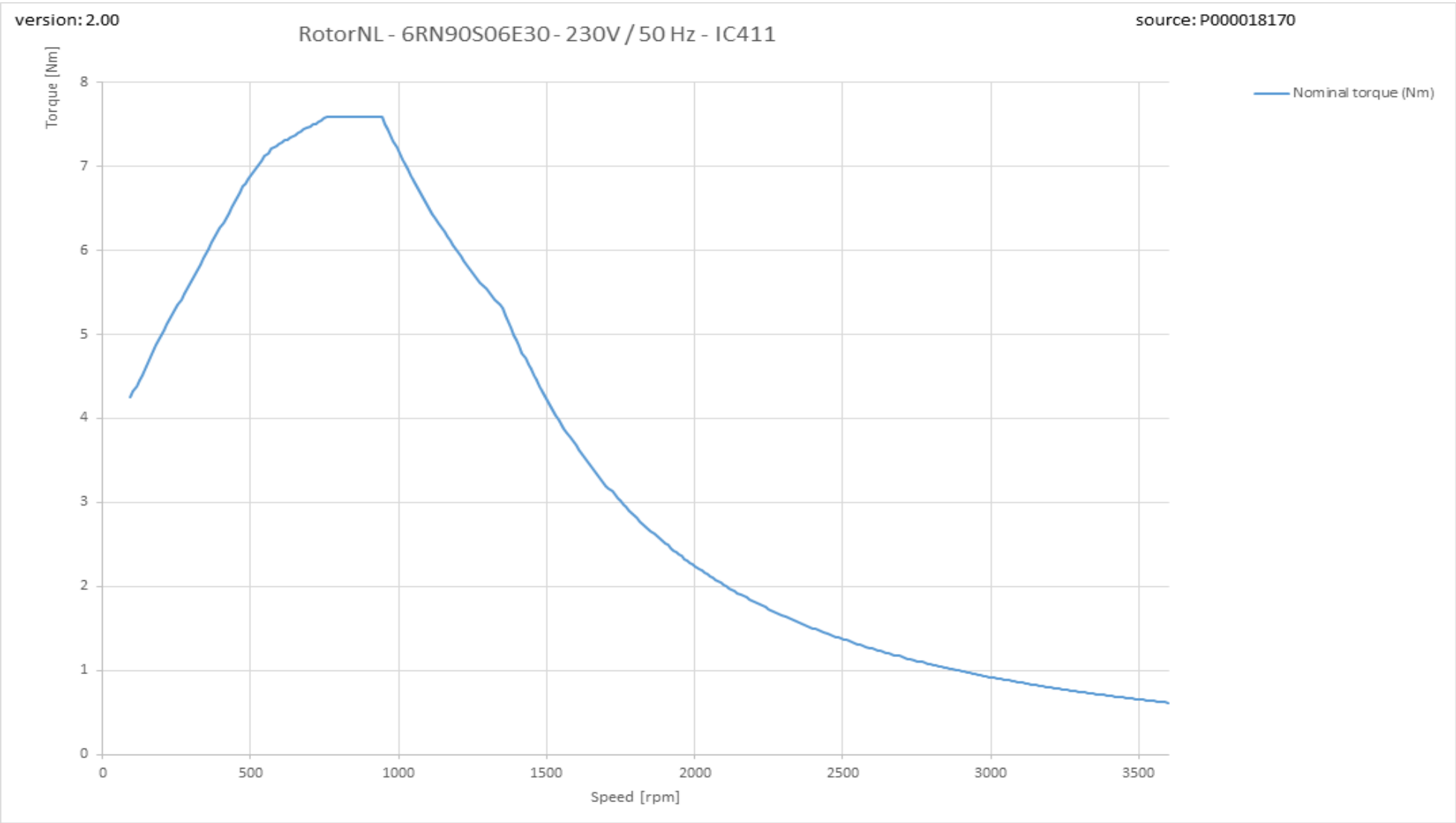
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6RN90S06E30 6-pole 0,75kW D/Y 230/400V 50Hz S1 IC411 IE3

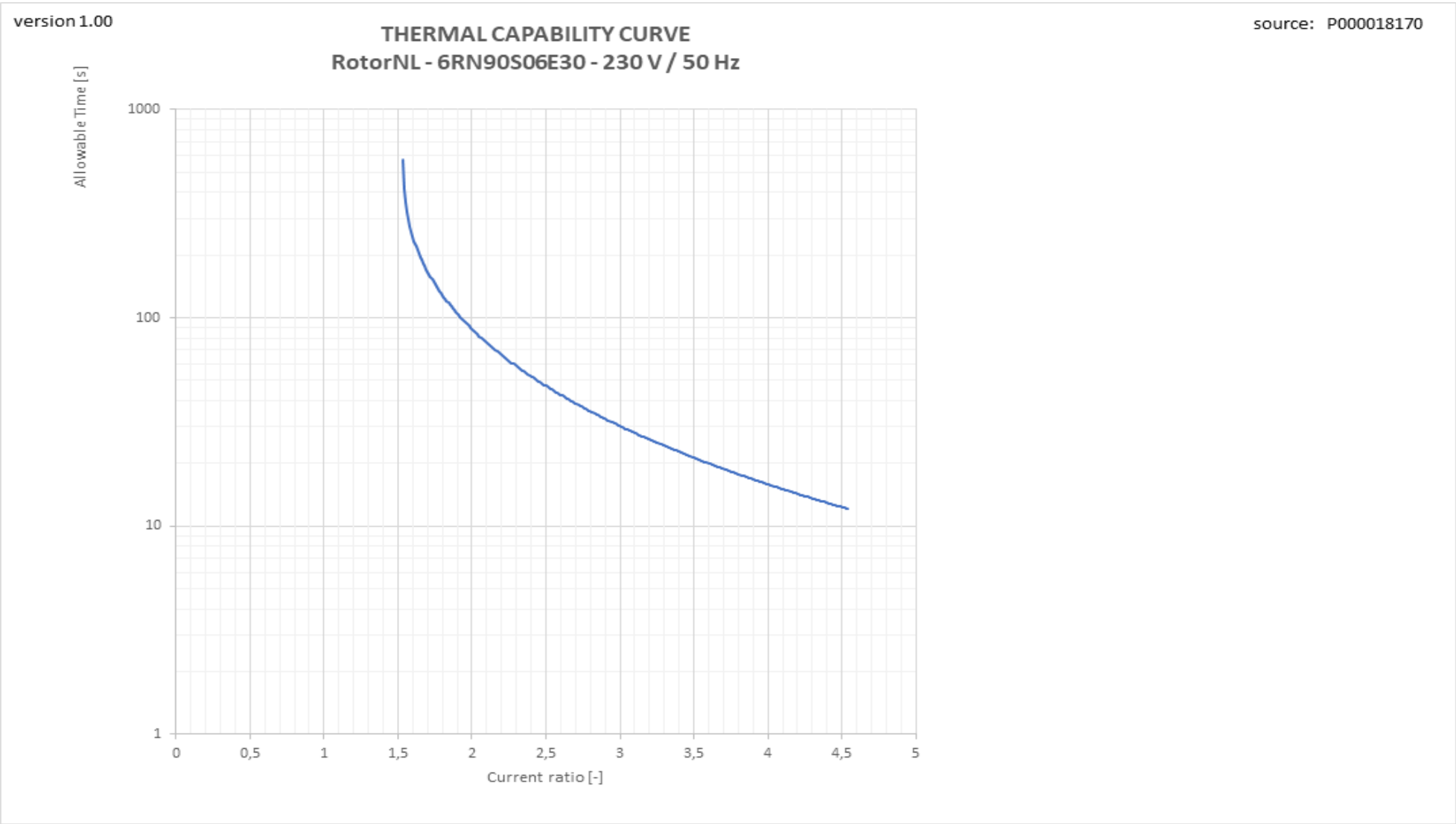


Torque versus Speed curve with variable frequency drive



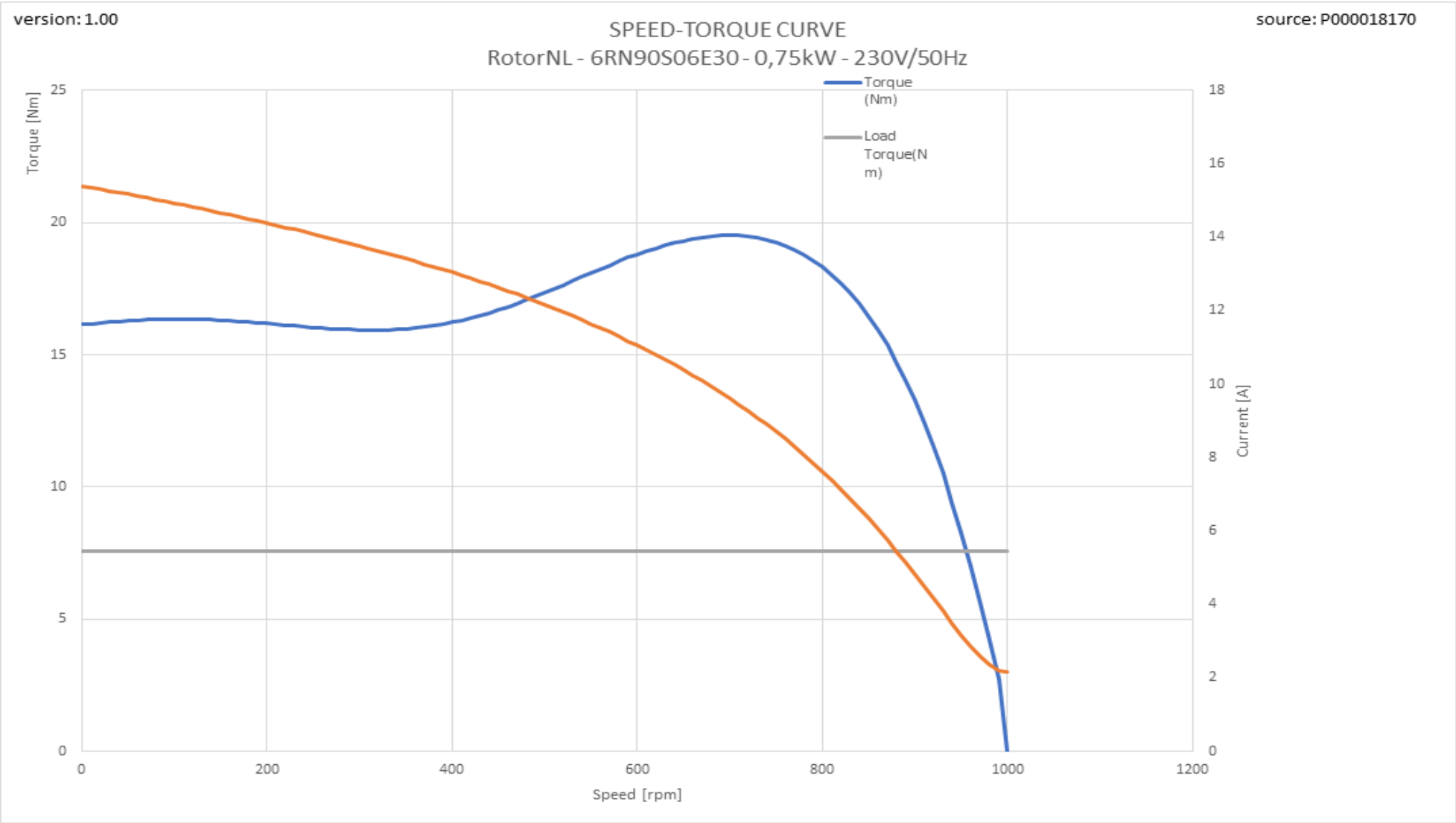
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Therm_VSD graph



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Tn graph



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