

PRODUCT INFORMATION PACKET

rotor nl[®]

Model No: 6RN180L02E36U463021

Catalog No: 6RN180L02E36U46@3021

30.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 3000 rpm, D400/Y690V 50Hz,
180L Frame B5, IC411



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Nameplate Specifications

Output HP	40 Hp	Output KW	30.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	53.00 A	Speed	2950 rpm
Service Factor	1	Phase	3
Efficiency	93.3 %	Power Factor	0.88
Duty	S1	Insulation Class	F
Frame	180L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6310-2Z/C3WT (-40°C/+160°C)	Opp Drive End Bearing Size	6310-2Z/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	B5	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Outline Drawing	6RN180L02E36U463021		

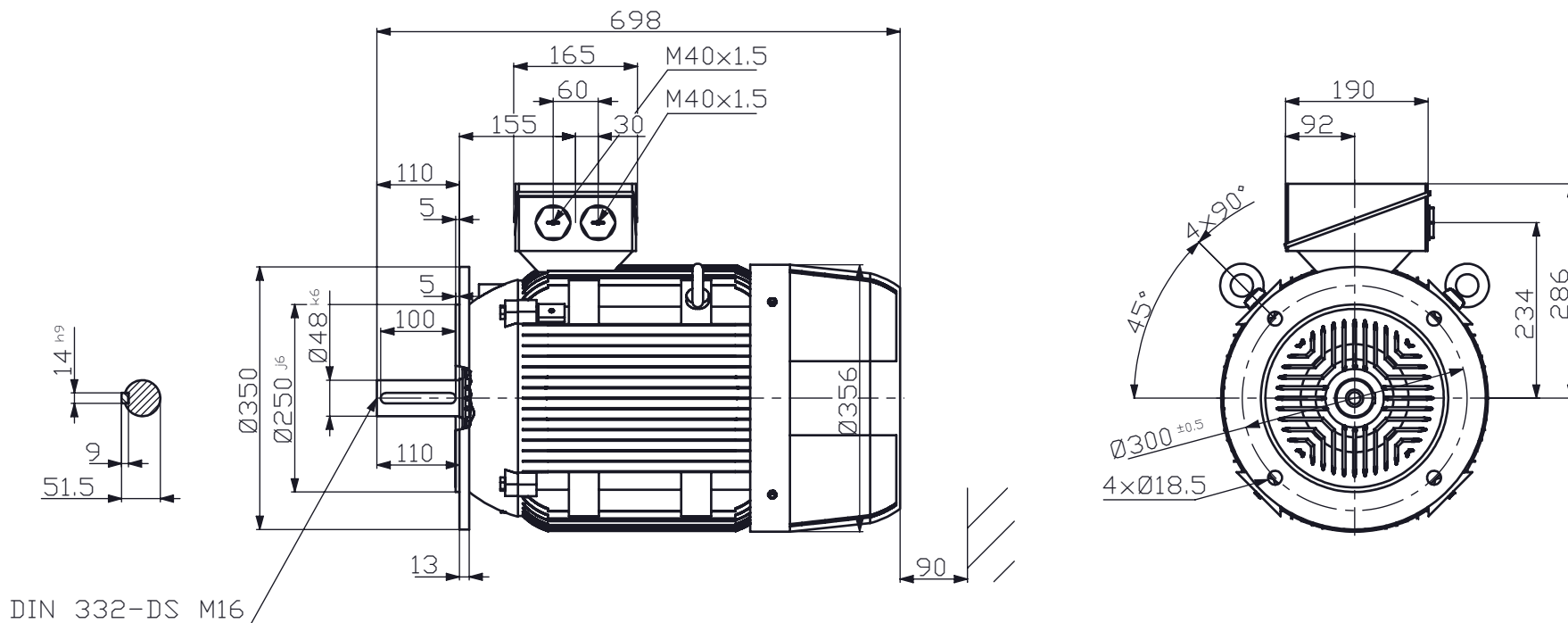
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REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



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MOTORTYPE: 6RN180L02E36
MOUNTING: IM3041
PROTECTION:
COOLING: IC411
REMARKS:
DIMENSIONS: MM
SCALE: 1:9

TITLE: Outline drawing
SPECIAL:
ART. NR.:
REVISION:
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PAGE 1 OF 1

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Datasheet



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Model No. 2-Pole cage motor 6RN 180L 30kW D400V 50Hz IM3021-FF300

U (V)	Δ / Y Conn	f [Hz]	P		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 _R /T _N [pu]
			[kW]	[hp]					FL	3/4FL	1/2FL	FL	3/4FL	1/2FL			
400	D	50	30	40	53	2950	97,1	IE3	93,7	93,8	93,7	0,88	0,84	0,76	9,17	2,60	3,90
690	Y		30,8														
460	D	60	33,5	44,91	51	3550	90,1	IE3	94,2	94,0	93,8	0,88	0,85	0,78	9,37	2,55	3,95

Motor type	6RN180L02E36
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	180L
Duty	S1
Voltage	400 V
Frequency	50 Hz
Power output	30 kW
Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	74 K
Temperature rise surface	27 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Degree of protection	IP55
Mounting type	IM3021-FF300
Cooling method	IC411
Motor weight - approx.	181 kg
Gross weight - approx.	186 kg
Motor inertia	0,0940 kgm²
Vibration level	according IEC60034-14
Direction of rotation	cw / ccw

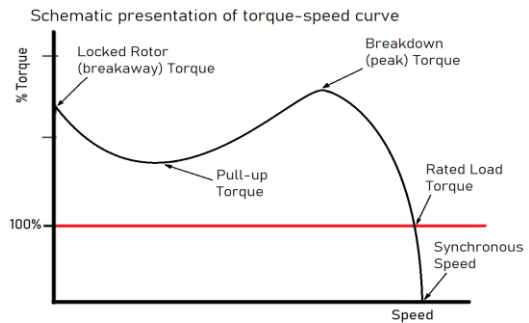
Rotor type	Cage motor
Bearing type	6310-2Z/C3WT
Type of grease	Unirex N3
Phase resistance at 20°C	0,1999 Ohm
Country of origin	CZ

Voltage/Freq	Locked rotor Torque [nom] [%]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 400V 50Hz	260%	916%	230%	390%	17,8 A
@ D 460V 60Hz	255%	935%	240%	395%	15,6 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



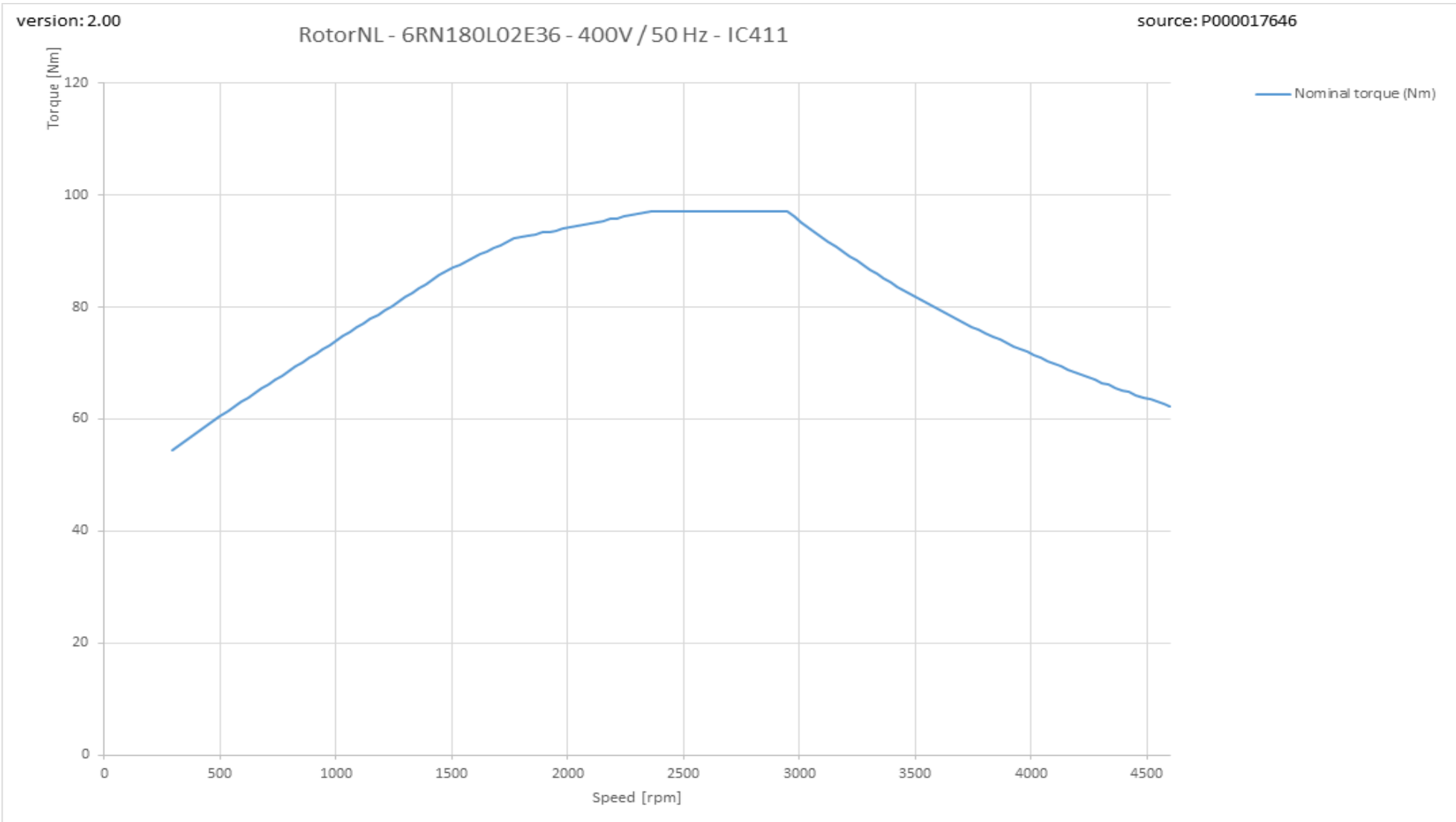
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6RN180L02E36 2-pole 30,00kW D/Y 400/690V 50Hz S1 IC411 IE3



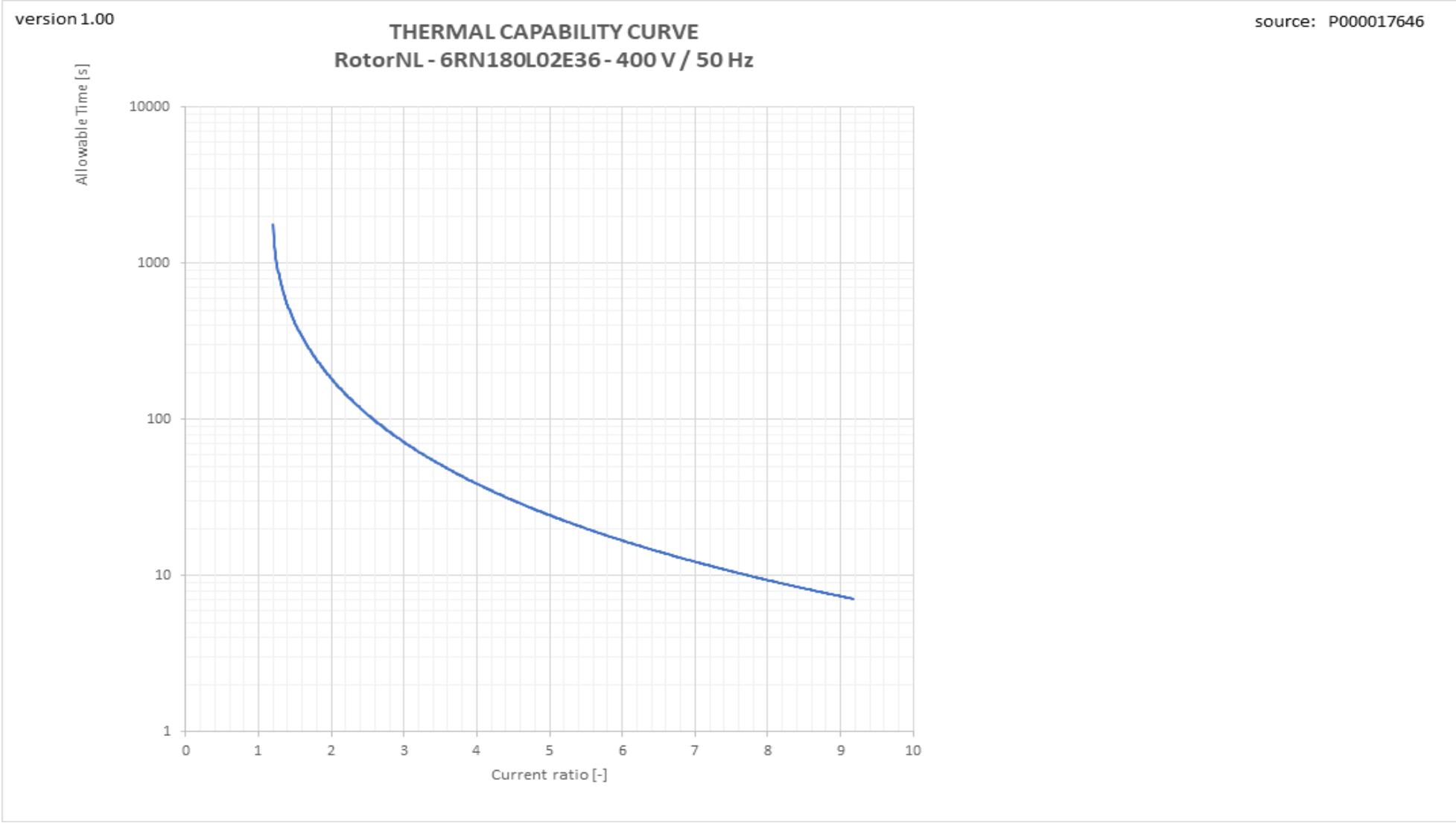
Torque versus Speed curve with variable frequency drive



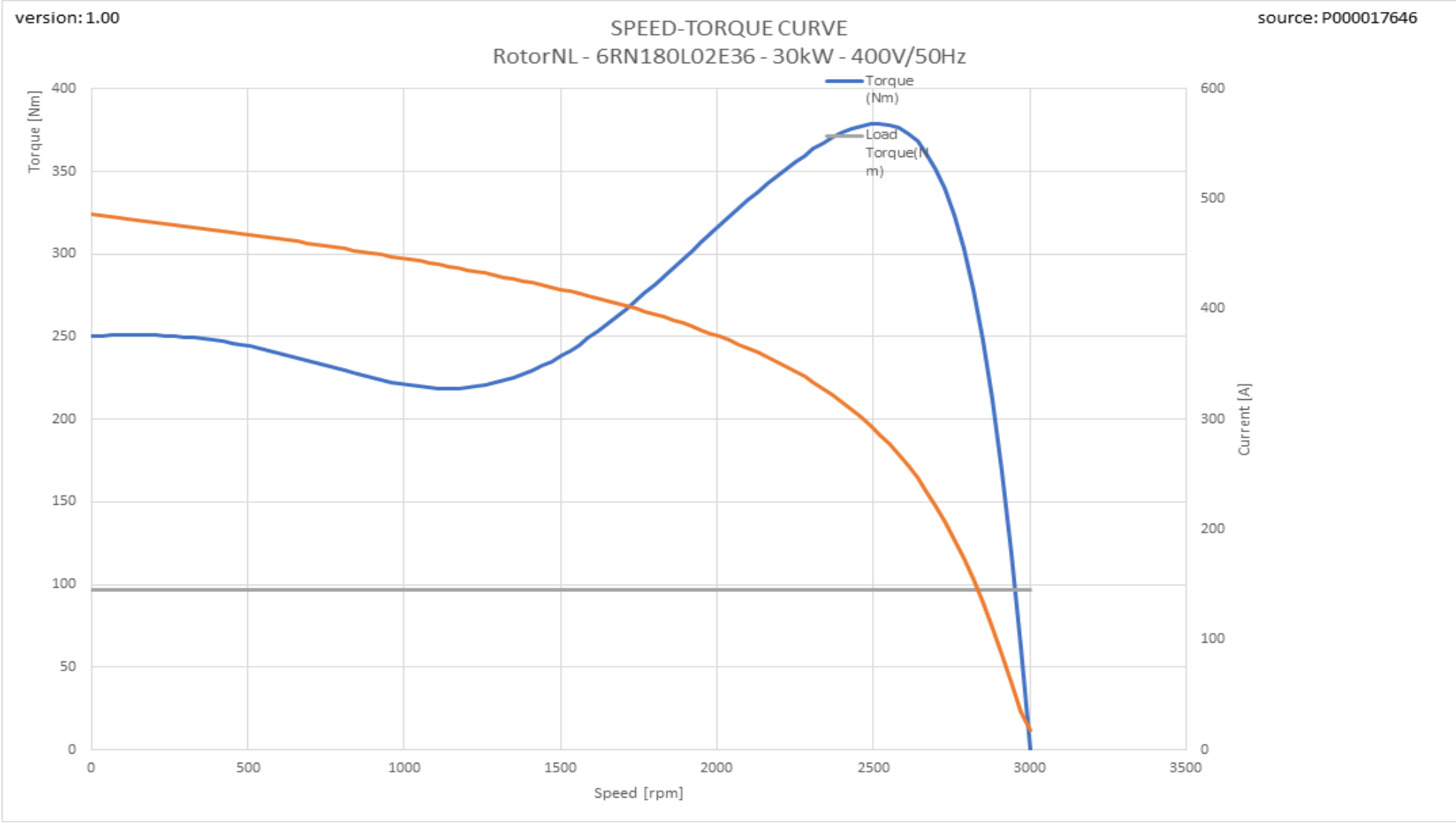
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Therm_VSD graph

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Tn graph



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