

PRODUCT INFORMATION PACKET



Model No: 6RN315L04E46U46B2021

Catalog No: 6RN315L04E46U46B@2021

250.00 kW General Purpose Low Voltage IEC Motor IE4, 3 phase, 1500 rpm, D400/Y690V 50Hz,
315L Frame B35, IC411

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Nameplate Specifications

Output HP	335.00 Hp	Output KW	250.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	434.80 A	Speed	1488 rpm
Service Factor	1	Phase	3
Efficiency	96.7 %	Power Factor	0.86
Duty	S1	Insulation Class	F
Frame	315L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6319/C3	Opp Drive End Bearing Size	6319/C3
UL	No	CSA	Optional
CE	Yes	IP Code	IP55
Number of Speeds	1	Efficiency Class	IE4

Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	4	Rotation	Clockwise Shaft End
Mounting	B35	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Outline Drawing	6RN315L04E46_2021		

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Datasheet

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Model No. 4-Pole cage motor 6RN 315L 250kW D400V 50Hz IM2021-FF600

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			
400	D	50	250	335	440	1491	1600	IE4	96,6	96,6	96,1	0,83	0,79	0,68	9,00	4,00	3,69
690	Y				254												
460	D	60	250	335	380	1792	1330	IE4	96,9	96,6	95,7	0,83	0,78	0,67	10,20	4,40	4,08

Motor type	6RN315L04E46
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	315L
Duty	S1
Voltage	400 V
Frequency	50 Hz
Power output	250 kW
Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	56 K
Temperature rise surface	19 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6319/C3
Lubrication method	40gr/6000hrs
Type of grease	Unirex N3

Phase resistance at 20°C	0,0105 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	400%	913%	298%	369%	171 A
@ D 460V 60Hz	440%	1047%	321%	408%	153 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

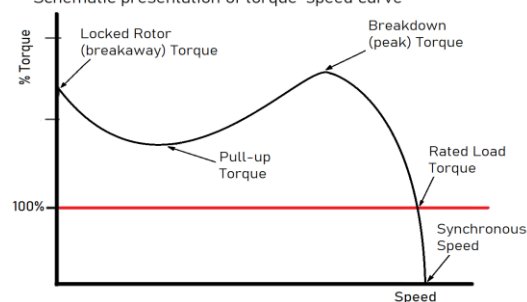
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Degree of protection	IP55
Mounting type	IM2021-FF600
Cooling method	IC411
Motor weight - approx.	1460 kg
Gross weight - approx.	1500 kg
Motor inertia	4,6000 kgm ²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	71 dB(A)

Direction of rotation	cw / ccw
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PTC 150°C

Schematic presentation of torque-speed curve



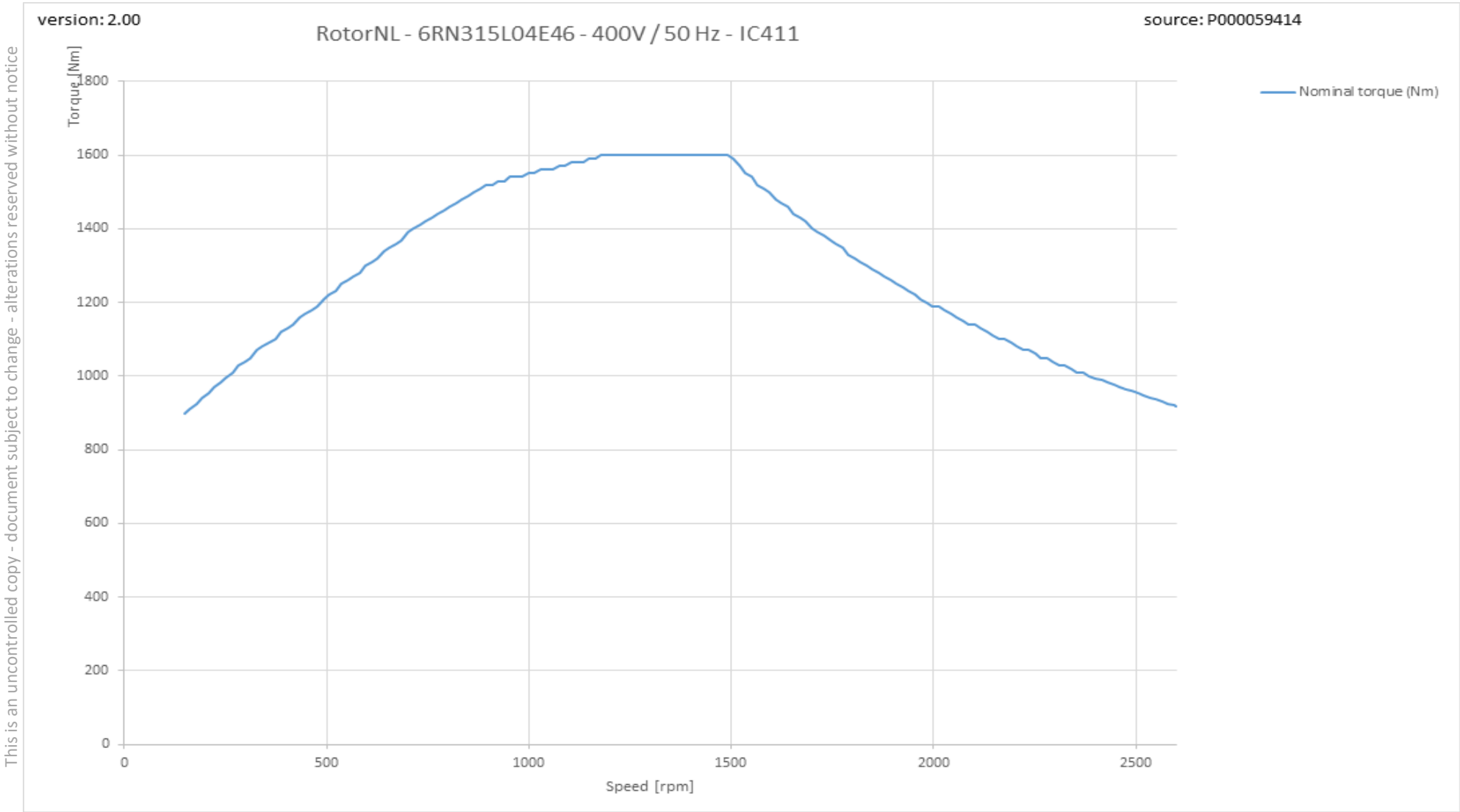
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6RN315L04E46 4-pole 250,00kW D/Y 400/690V 50Hz S1 IC411 IE4

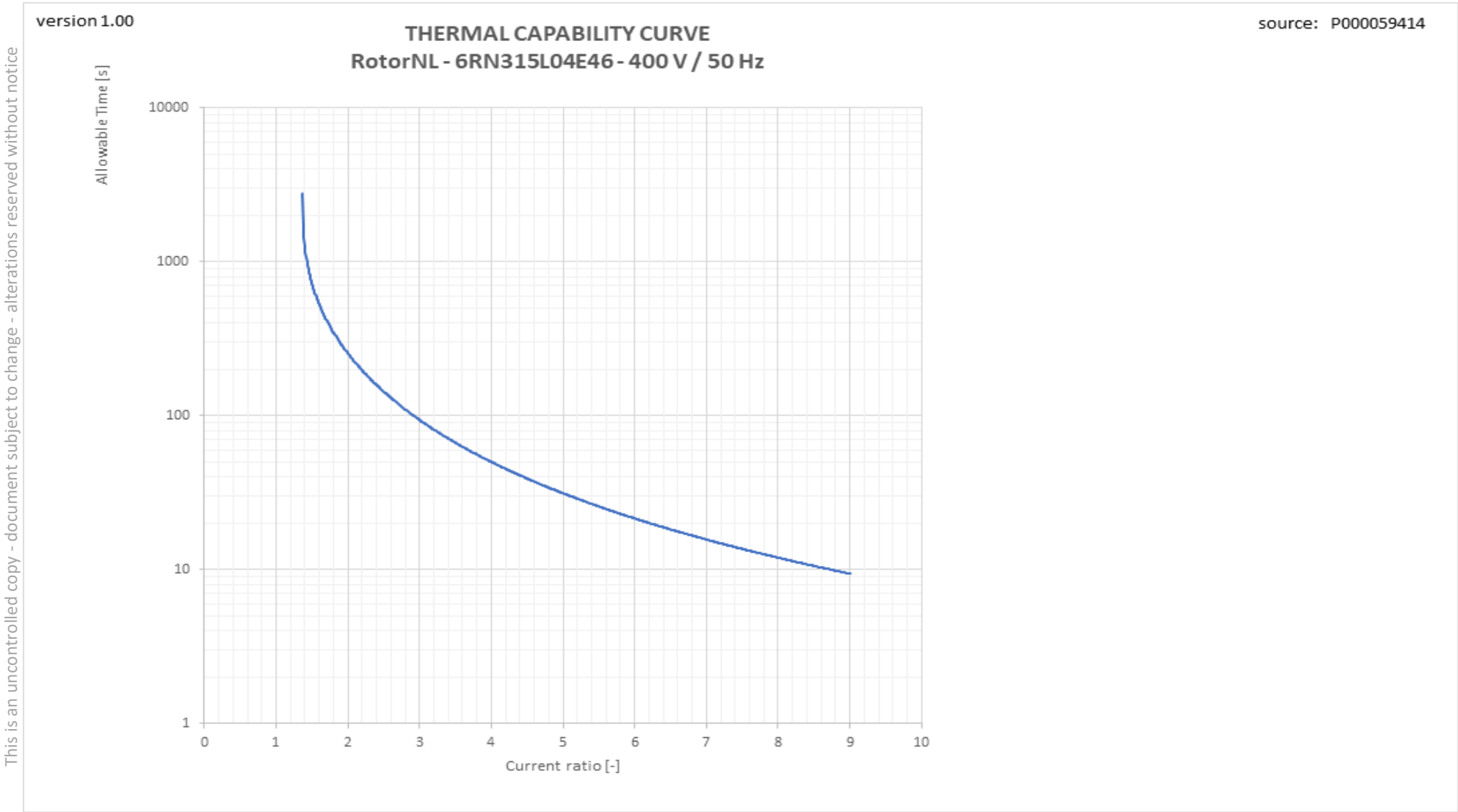


Torque versus Speed curve with variable frequency drive



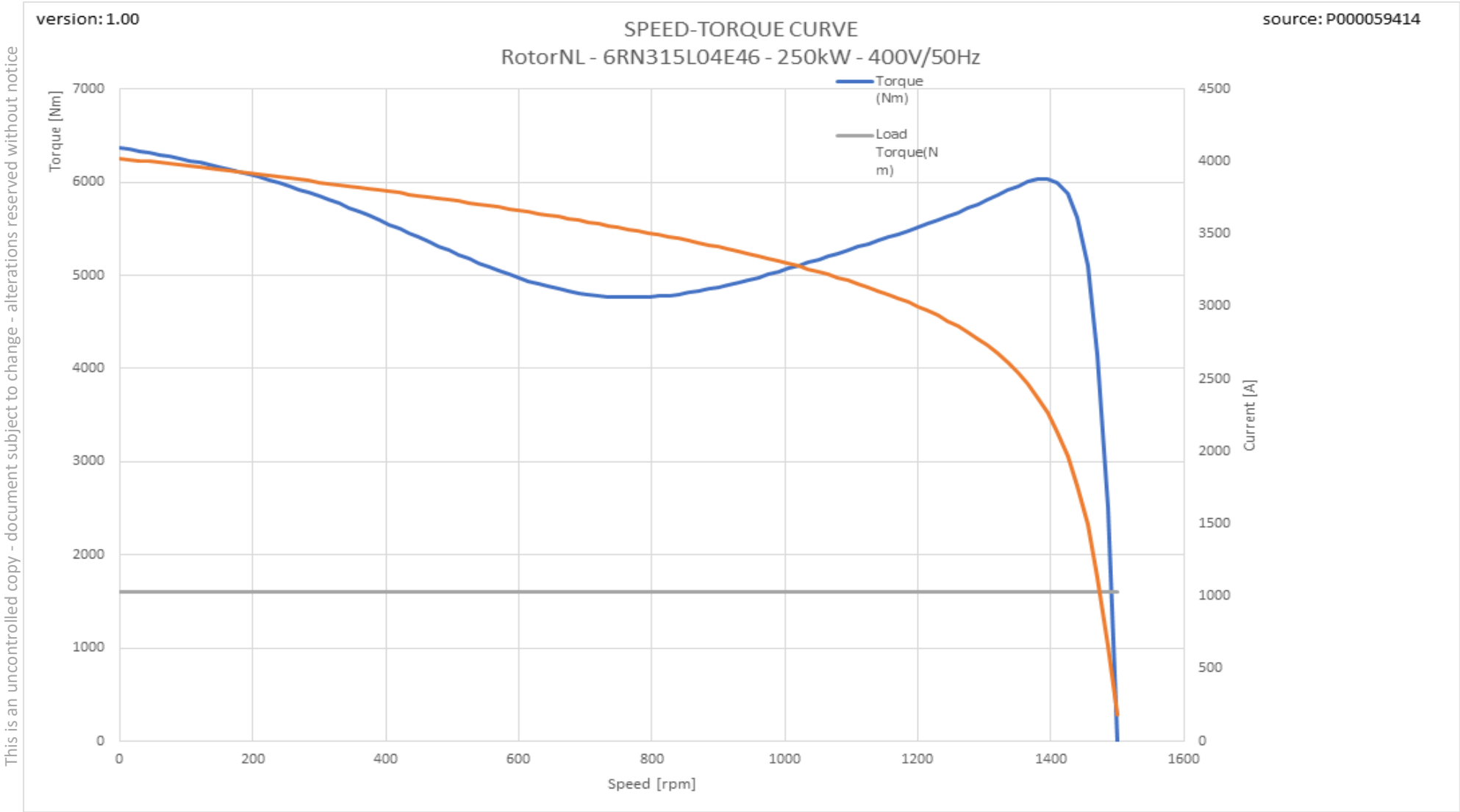
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Therm_VSD graph



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Tn graph



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