

PRODUCT INFORMATION PACKET



Model No: 6RN280S02E40U461041

Catalog No: 6RN280S02E40U46@1041

75.00 kW General Purpose Low Voltage IEC Motor IE4, 3 phase, 3000 rpm, D400/Y690V 50Hz,
280S Frame B3, IC411

Regal and Rotor nl are trademarks of Regal Rexnord Corporation or one of its affiliated companies.
©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E





Nameplate Specifications

Output HP	100.00 Hp	Output KW	75.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	126.40 A	Speed	2980 rpm
Service Factor	1	Phase	3
Efficiency	95.6 %	Power Factor	0.89
Duty	S1	Insulation Class	F
Frame	280S	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	IE4

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
Outline Drawing	6RN280S02E40_1041		

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:01/19/2023

Datasheet

rotor nl®

rotor B.V.

Mors 1-5, 7151 MX Eibergen NL
 www.rotor.nl tel.: +31 545 464640
 sales@rotor.nl tel.: +31 545 464646

Model No. 2-Pole cage motor 6RN 280S 75kW D400V 50Hz IM1041

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	75	100	127	2980	240	IE4	95,9	95,8	95,2	0,89	0,87	0,80	8,90	2,69	3,53
690	Y				73,3												
460	D	60	84	112,6	124	3580	224	IE4	95,5	95,3	94,4	0,90	0,87	0,81	8,90	2,99	3,41

Motor type	6RN280S02E40
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	280S
Duty	S1
Voltage	400 V
Frequency	50 Hz
Power output	75 kW
Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	44 K
Temperature rise surface	21 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6315/C3
Lubrication method	25gr/4000hrs
Type of grease	Unirex N3

Phase resistance at 20°C	0,0440 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	269%	881%	241%	353%	34,7 A
@ D 460V 60Hz	299%	879%	233%	341%	31,5 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

This is an uncontrolled copy, data can be changed anytime.

Degree of protection	IP55
Mounting type	IM1041
Cooling method	IC411
Motor weight - approx.	590 kg
Gross weight - approx.	610 kg
Motor inertia	0,9400 kgm ²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	72 dB(A)

Direction of rotation cw / ccw

Schematic presentation of torque-speed curve



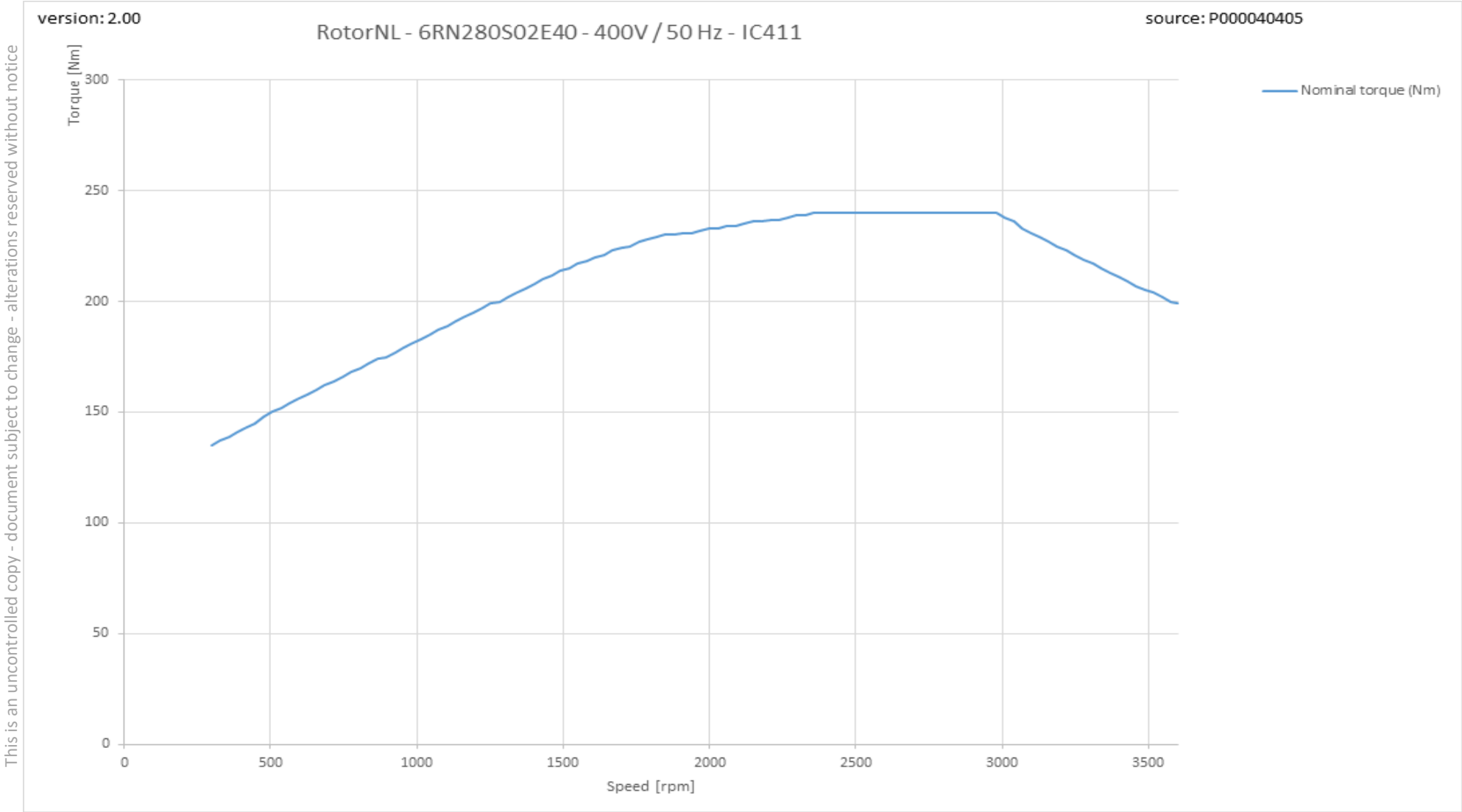
rotor
is a
ISO 9001
certified
company

RegalRexnord

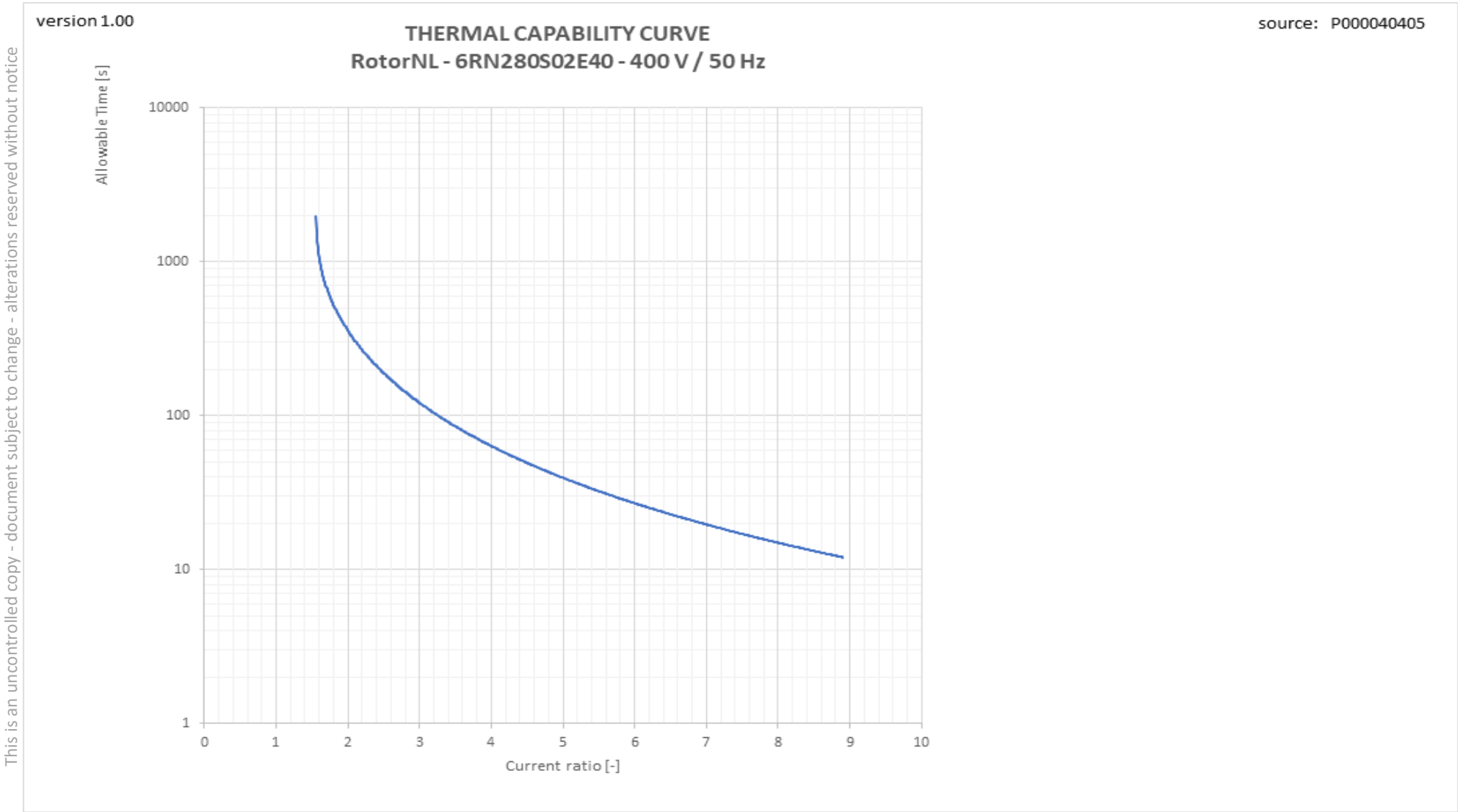
6RN280S02E40 2-pole 75,00kW D/Y 400/690V 50Hz S1 IC411 IE4



Torque versus Speed curve with variable frequency drive

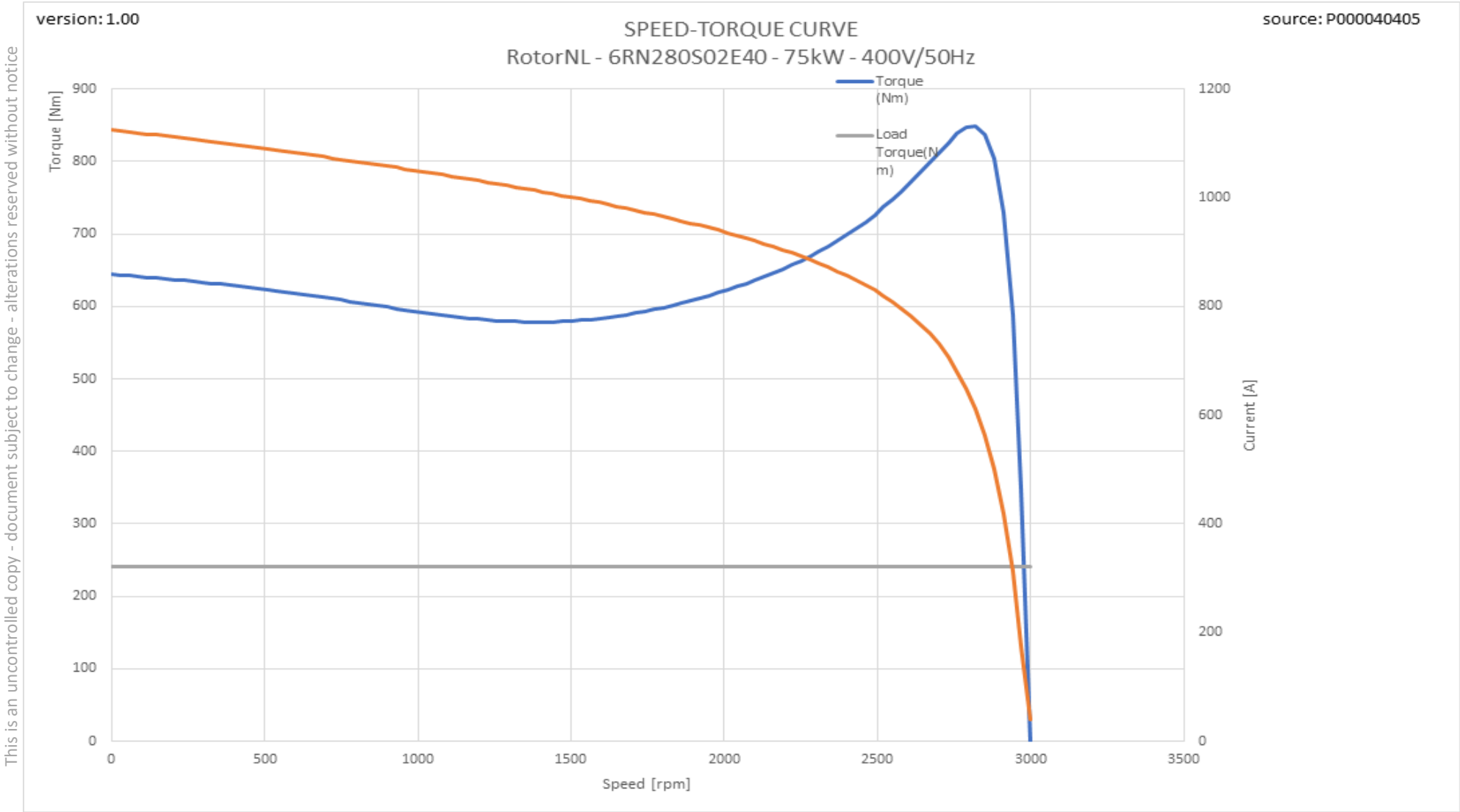


Therm_VSD graph



This is an uncontrolled copy - document subject to change - alterations reserved without notice

Tn graph



This is an uncontrolled copy - document subject to change - alterations reserved without notice