

PRODUCT INFORMATION PACKET

rotor nl[®]

Model No: 6RN280S02E30U461041

Catalog No: 6RN280S02E30U46@1041

75.00 kW General Purpose Low Voltage IEC Motor IE3, 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

RegalRexnord



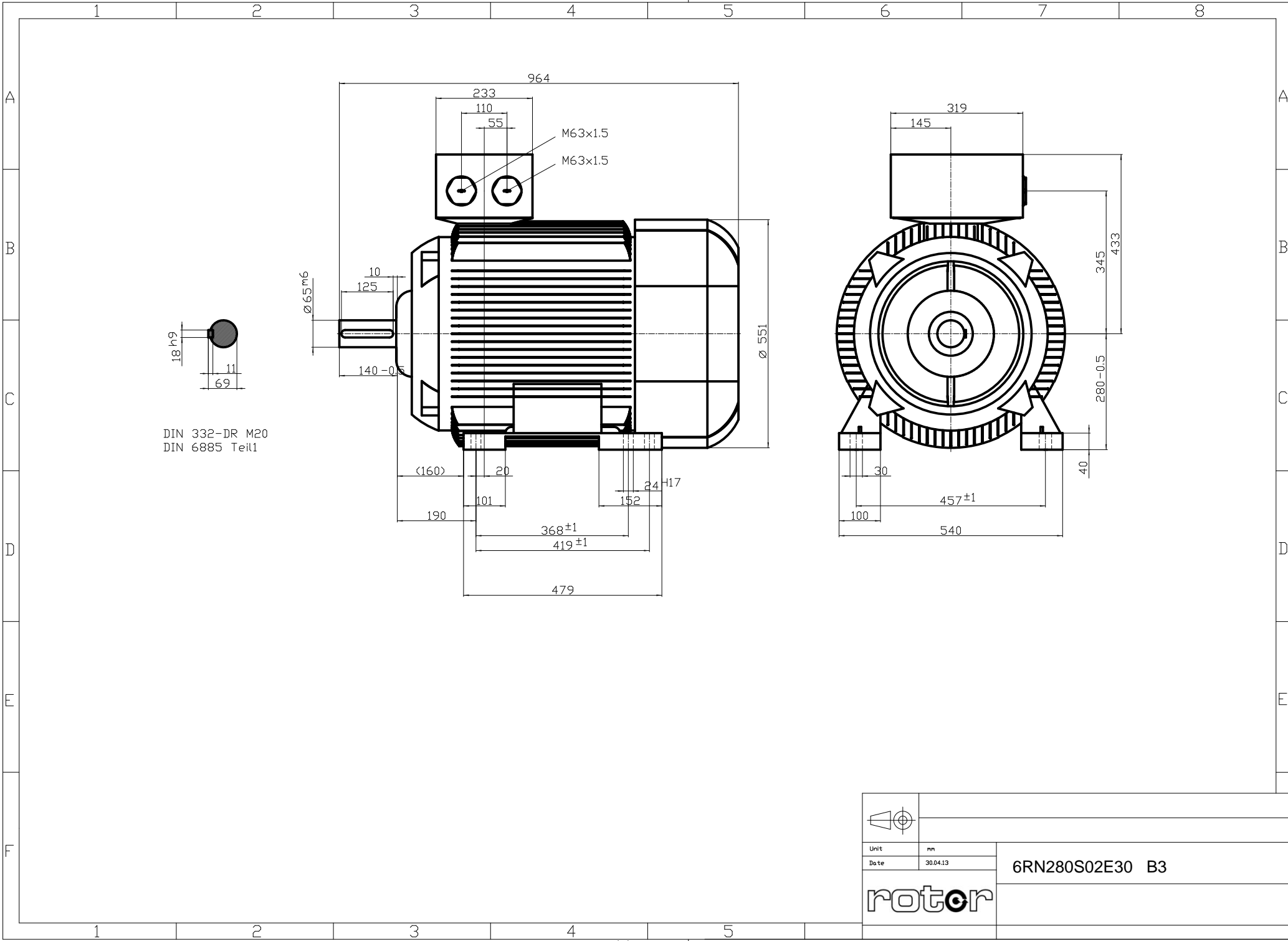
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	129.70 A	Speed	2975 rpm
Service Factor	1	Phase	3
Efficiency	94.7 %	Power Factor	0.88
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	IE3

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
Shaft Diameter	65 mm	Shaft Extension	140 mm
Outline Drawing	6RN280S02E30U461041		

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



DIN 332-DR M20
 DIN 6885 Teil1

Unit	mm	6RN280S02E30 B3	
Date	30.04.13		

Datasheet



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		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	75	100	129	2975	240	IE3	94,4	94,5	93,8	0,88	0,86	0,80	7,10	2,20	2,93
690	Y		74,9														
460	D	60	75	100	113	3578	200	IE3	94,4	94,2	93,0	0,88	0,86	0,79	7,92	2,59	3,22

Motor type	6RN280S02E30
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	74 K
Temperature rise surface	36 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	0,0601 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	220%	713%	180%	293%	36,4 A
@ D 460V 60Hz	259%	792%	210%	322%	33,1 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.

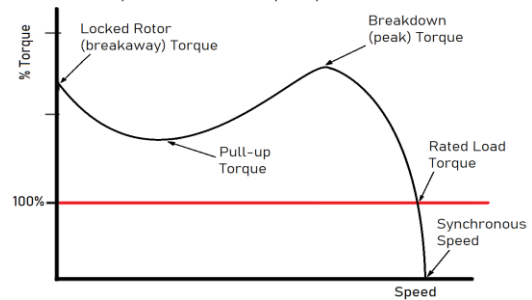
Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30

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

Degree of protection	IP55
Mounting type	IM1041
Cooling method	IC411
Motor weight - approx.	500 kg
Gross weight - approx.	520 kg
Motor inertia	0,7700 kgm²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	73 dB(A)

Direction of rotation **cw / ccw**

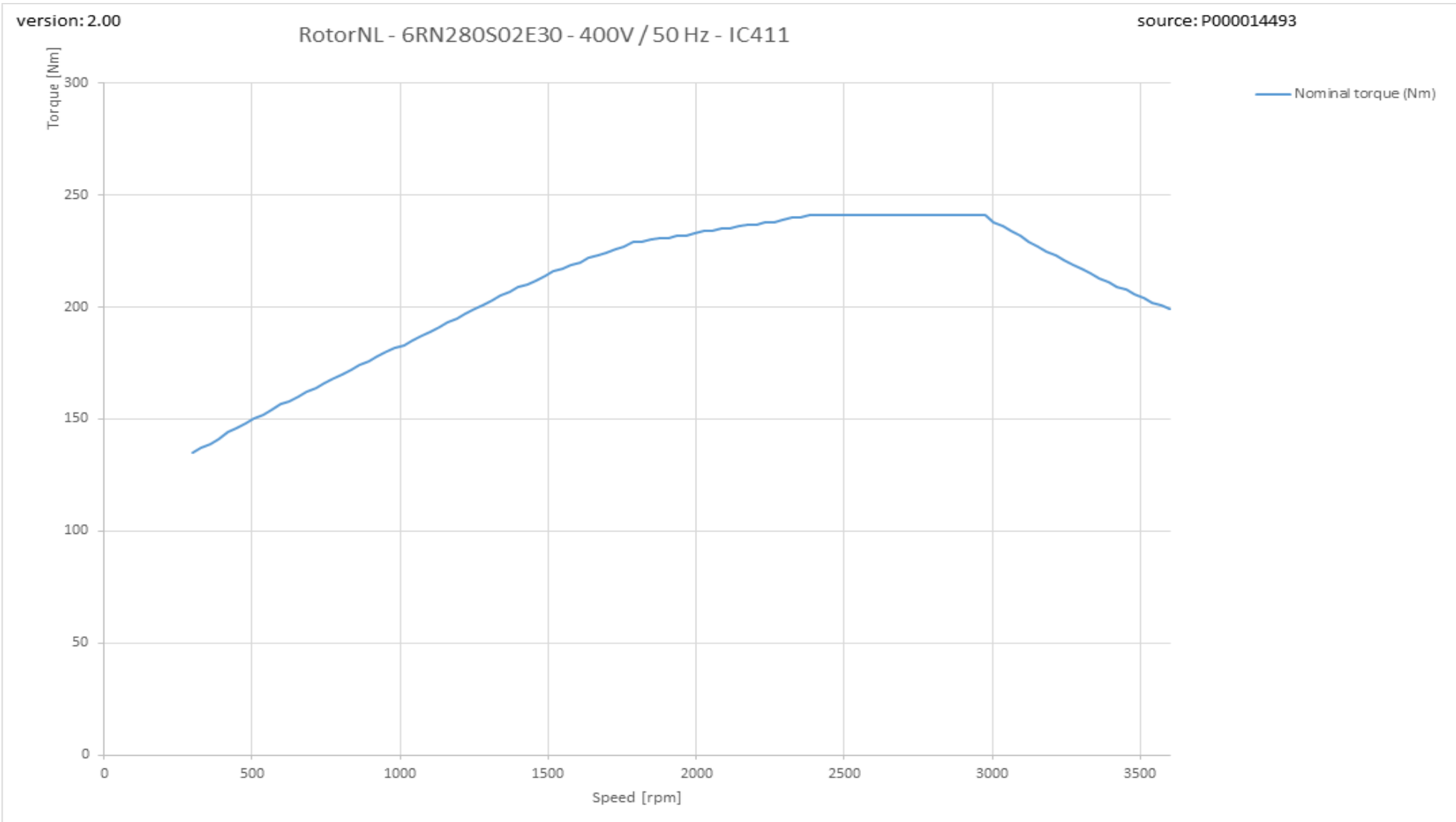
Schematic presentation of torque-speed curve



6RN280S02E30 2-pole 75,00kW D/Y 400/690V 50Hz S1 IC411 IE3



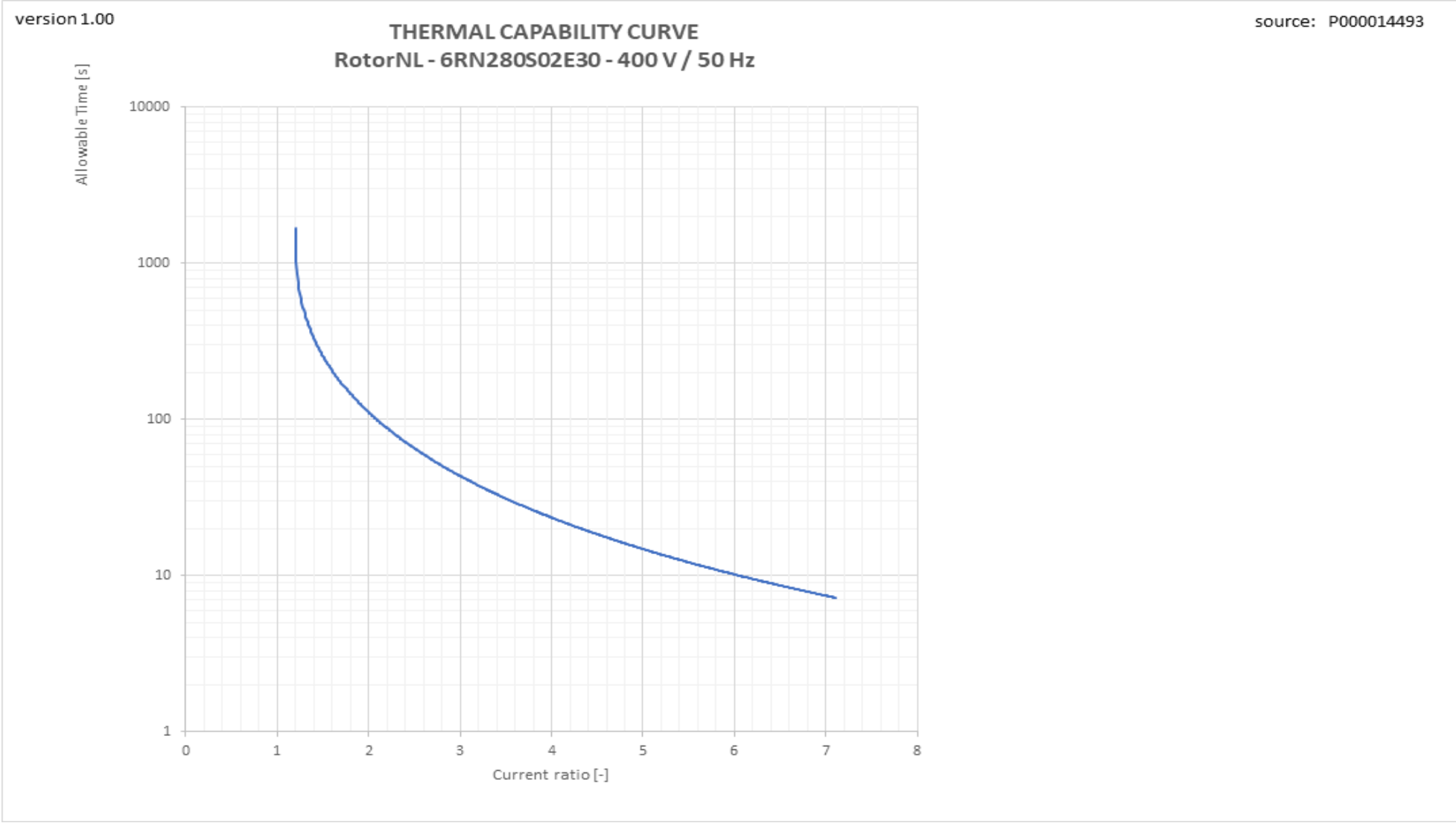
Torque versus Speed curve with variable frequency drive



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

Therm_VSD graph

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



Tn graph

