

PRODUCT INFORMATION PACKET



Model No: 6RN280S04E30U461041

Catalog No: 6RN280S04E30U46@1041

75.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D400/Y690V 50Hz,
280S Frame B3, IC411



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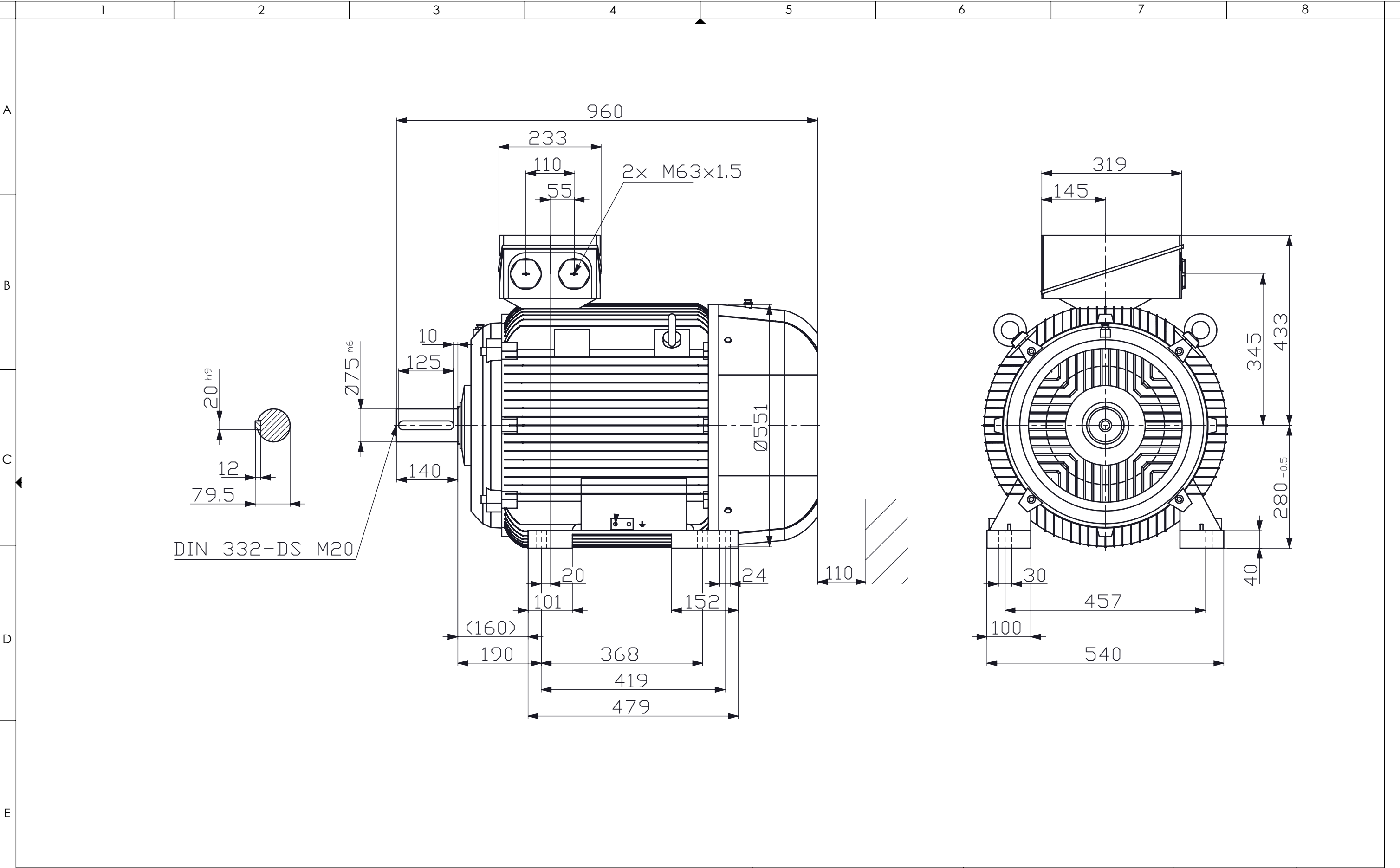
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	132.80 A	Speed	1485 rpm
Service Factor	1	Phase	3
Efficiency	95 %	Power Factor	0.86
Duty	S1	Insulation Class	F
Frame	280S	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6317/C3	Opp Drive End Bearing Size	6317/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	4	Rotation	Clockwise Shaft End
Mounting	B3	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	75 mm	Shaft Extension	140 mm
Outline Drawing	6RN280S04E30U461041		

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REVISIONS					REAL rotor Mors 2, P.O.box 45 7150 AA Eibergen nl Tel:+31(0)545 464640 E-mail: info@rotor.nl	MOTORTYPE: 6RN280S04E30		TITLE: Outline drawing		DRAWN:		DATE:	
ZONE	REV.	DESCRIPTION	DATE	APPROVED		MOUNTING: IM1041		SPECIAL:		CHECKED:		ISO 9001	
						PROTECTION:		ART. NR.:		COMPLETE OR PARTIAL COPYING OR USE OF SPECIFICATIONS IS NOT ALLOWED WITHOUT OUR PERMISSION.			
						COOLING: IC411		REVISION:					
						REMARKS:							
						DIMENSIONS: MM		SCALE: 1: 8		PAPER SIZE: A3			
									SUBJECT TO ALTERATIONS				

Datasheet

rotor nl®

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Model No. 4-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	132	1485	482	IE3	94,9	95,2	94,9	0,86	0,83	0,74	7,18	2,32	2,92
690	Y				77												
460	D	60	75	100	115	1788	400	IE3	95,4	95,3	94,4	0,85	0,82	0,72	8,12	2,69	3,21

Motor type	6RN280S04E30
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	59 K
Temperature rise surface	29 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6317/C3
Lubrication method	30gr/8000hrs
Type of grease	Unirex N3

Country of origin	CZ
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Voltage/Freq	Locked rotor Torque [% nom]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 400V 50Hz	232%	721%	200%	292%	42,7 A
@ D 460V 60Hz	269%	816%	220%	321%	40 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

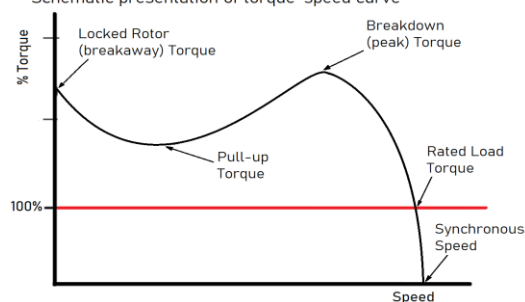
Technical data are subject to change. There may be discrepancies between calculated and name plate values.

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

Degree of protection	IP55
Mounting type	IM1041
Cooling method	IC411
Motor weight - approx.	560 kg
Gross weight - approx.	580 kg
Motor inertia	1,4000 kgm ²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	65 dB(A)

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



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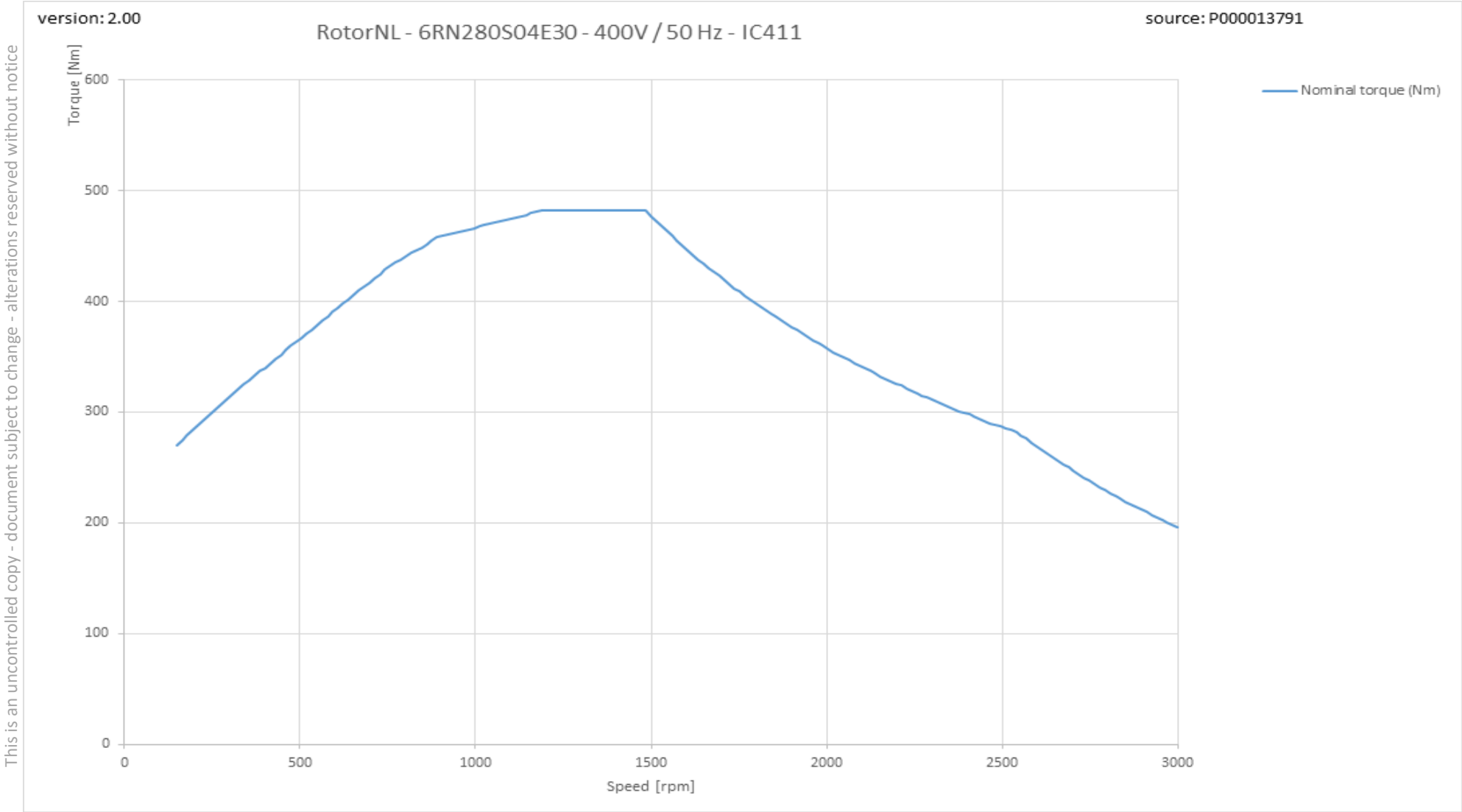
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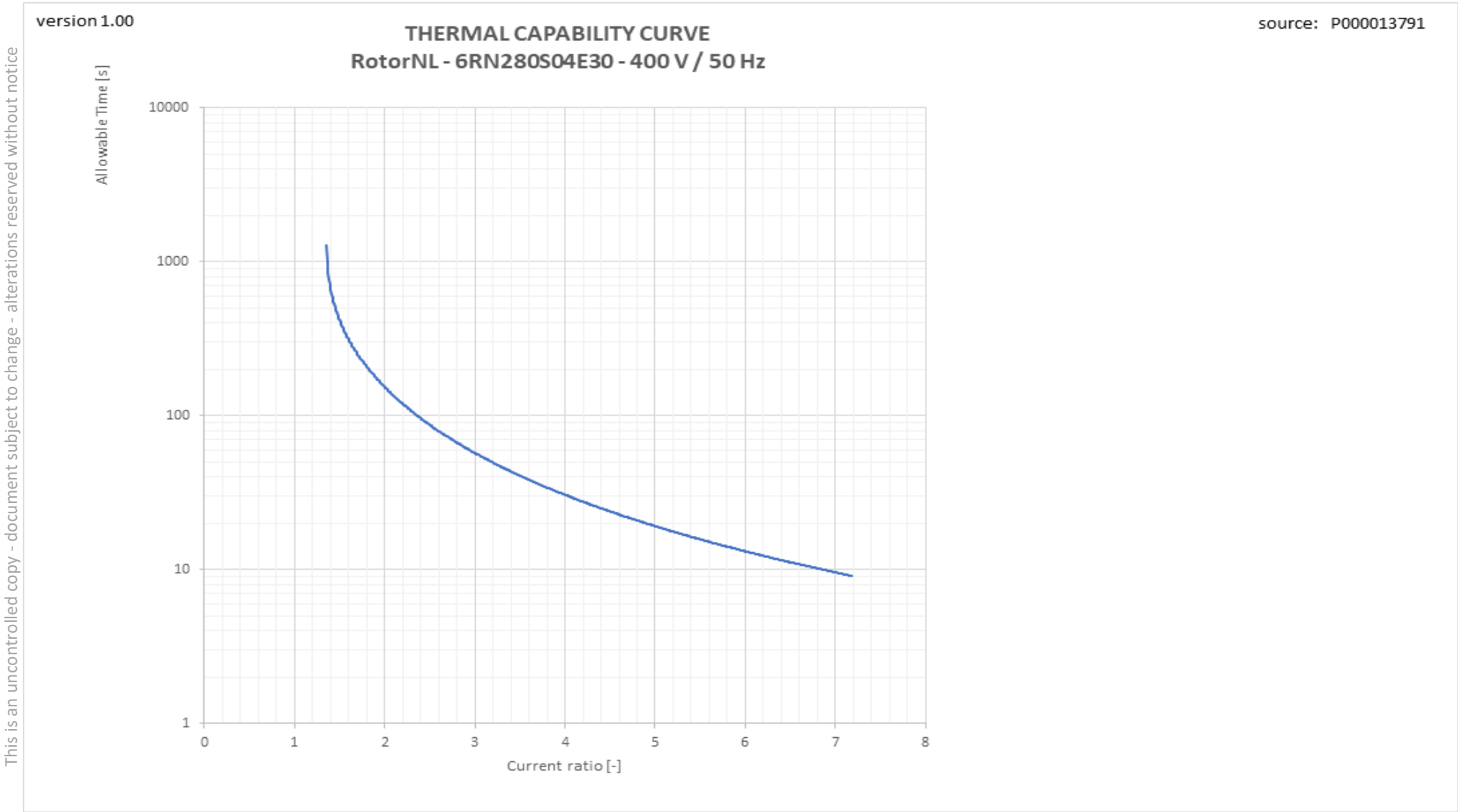
6RN280S04E30 4-pole 75,00kW D/Y 400/690V 50Hz S1 IC411 IE3



Torque versus Speed curve with variable frequency drive



Therm_VSD graph



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