

PRODUCT INFORMATION PACKET



Model No: 6RN180L06E36U461041

Catalog No: 6RN180L06E36U46@1041

18.50 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1000 rpm, D400/Y690V 50Hz,
180L Frame B3, IC411



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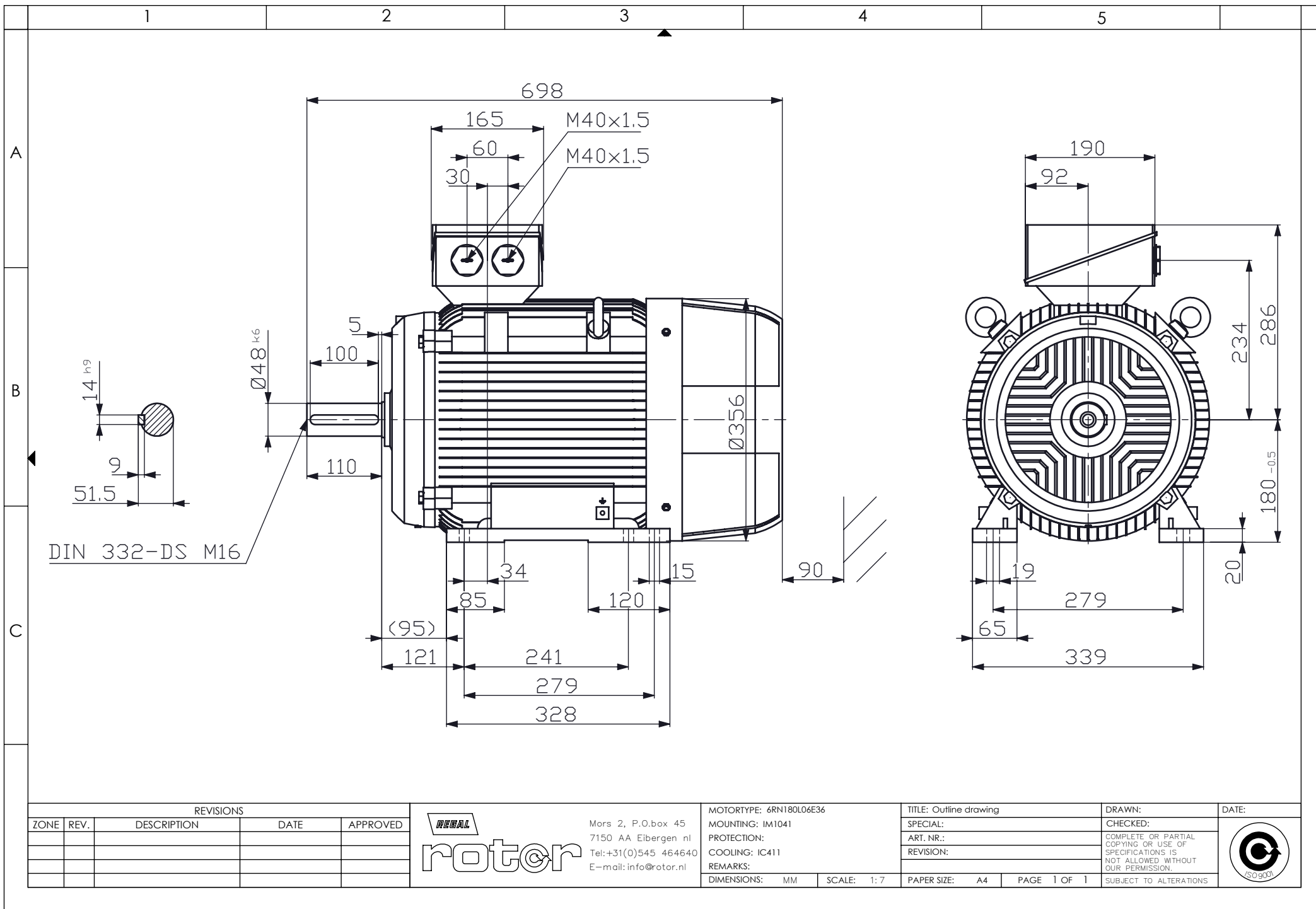
Nameplate Specifications

Output HP	25 Hp	Output KW	18.5 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	38.00 A	Speed	975 rpm
Service Factor	1	Phase	3
Efficiency	91.7 %	Power Factor	0.77
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	6	Rotation	Clockwise Shaft End
Mounting	B3	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Outline Drawing	6RN180L06E36U461041		

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Datasheet

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Model No. 6-Pole cage motor 6RN 180L 18,5kW 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	18,5	24,8	38	975	180	IE3	91,7			0,77			6,90	2,58	3,30
690	Y				22												
460	D	60	22	30	37,5	1175	178	IE3	93,0	93,5	93,4	0,79	0,73	0,62	6,90	2,40	3,10

Motor type	6RN180L06E36
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	180L
Duty	S1
Voltage	400 V
Frequency	50 Hz
Power output	18,5 kW

Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	67 K
Temperature rise surface	35 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6310-2Z/C3WT

Type of grease	Unirex N3
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Phase resistance at 20°C	0,3737 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	258%	689%	230%	330%	19,3 A
@ D 460V 60Hz	240%	688%	220%	310%	17,6 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

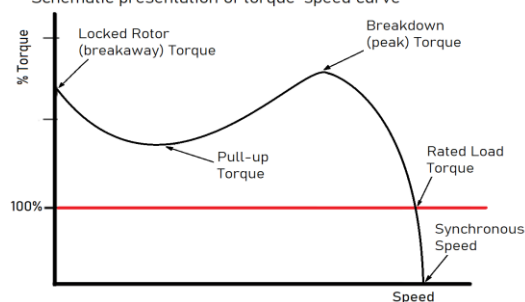
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Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30

Degree of protection	IP55
Mounting type	IM1041
Cooling method	IC411
Motor weight - approx.	185 kg
Gross weight - approx.	191 kg
Motor inertia	0,2470 kgm ²
Vibration level	according IEC60034-14

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



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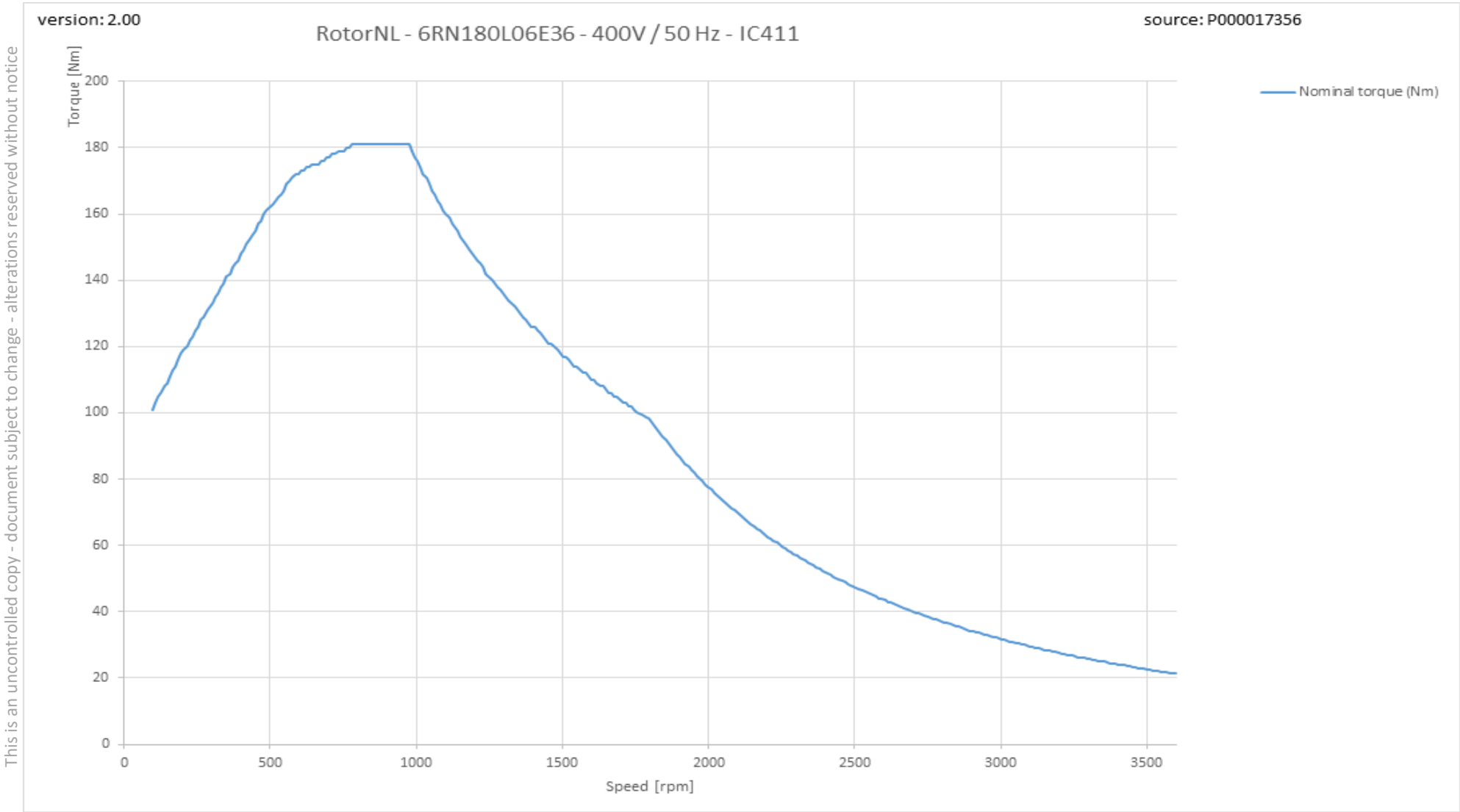
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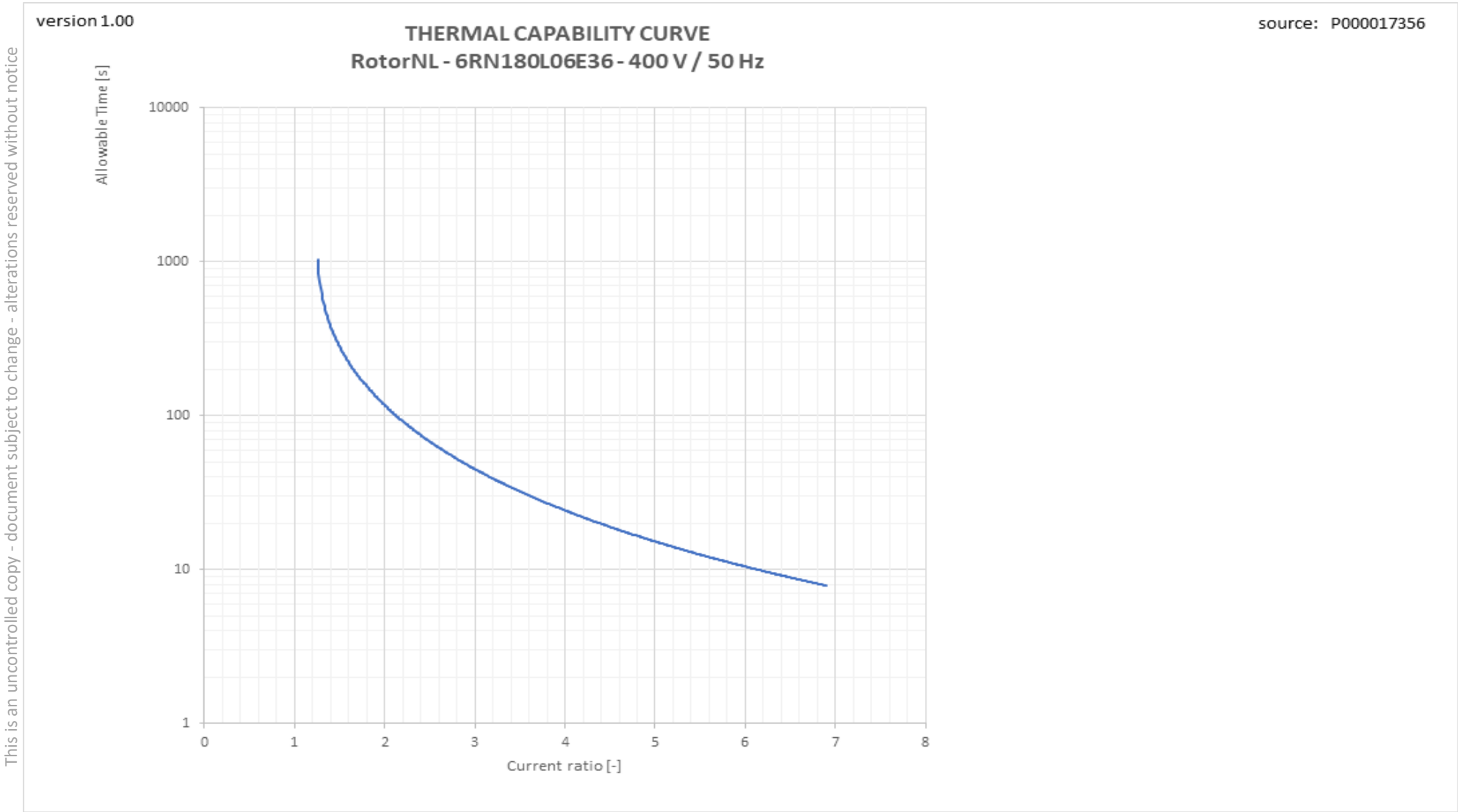
6RN180L06E36 6-pole 18,50kW D/Y 400/690V 50Hz S1 IC411 IE3



Torque versus Speed curve with variable frequency drive

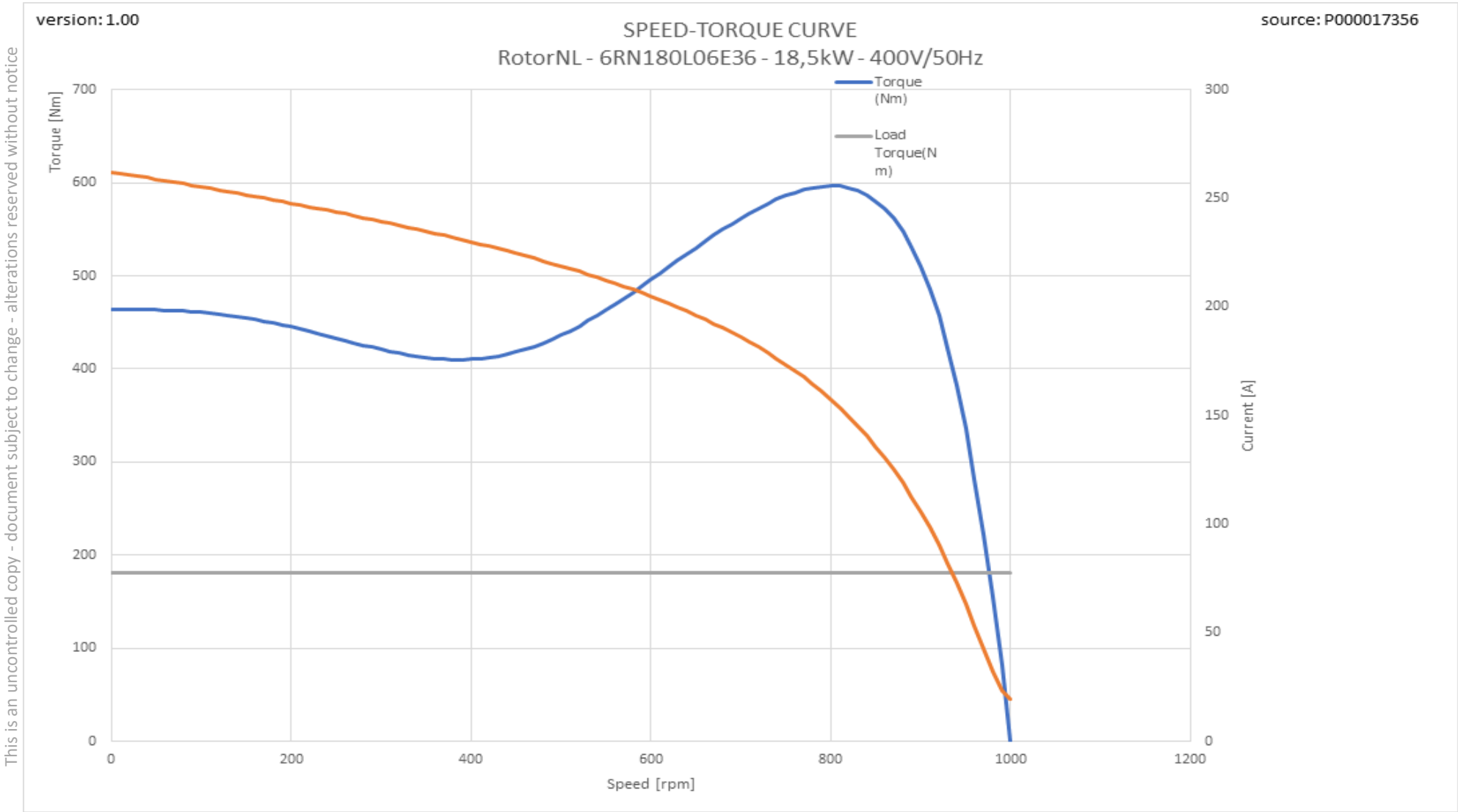


Therm_VSD graph



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Tn graph



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