

PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN280M02E36U46B2021

Catalog No: 6RN280M02E36U46B@2021

110.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 3000 rpm, D400/Y690V 50Hz,
280M Frame B35, IC411



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Nameplate Specifications

Output HP	150.00 Hp	Output KW	110.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	183.00 A	Speed	2975 rpm
Service Factor	1	Phase	3
Efficiency	95.2 %	Power Factor	0.91
Duty	S1	Insulation Class	F
Frame	280M	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	B35	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Outline Drawing	6RN280M02E36_2021		

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Datasheet


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Model No. 2-Pole cage motor 6RN 280M 110kW D400V 50Hz IM2021-FF500

U (V)	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [RPM]	T [Nm]	IE Class	% EFF at __ load FL 3/4FL 1/2FL	PF at __ load FL 3/4FL 1/2FL	I _A /I _N [pu]	T _A /T _N [pu]	T _R /T _N [pu]
400	D	50	110	150	183	2975	353	IE3	95,2	0,91	8,20	2,40	3,10
690	Y				106								
460	D	60	123	164,9	179	3575	329	N/A	95,0	0,91	7,60	2,60	3,10

Motor type	6RN280M02E36	Degree of protection	IP55
Enclosure	Totally Enclosed Fan Cooling	Mounting type	IM2021-FF500
Frame Material	Cast iron	Cooling method	IC411
Frame size	280M	Motor weight - approx.	680 kg
Duty	S1	Gross weight - approx.	700 kg
Voltage	400 V	Motor inertia	1,1000 kgm ²
Frequency	50 Hz	Vibration level	according IEC60034-14
Power output	110 kW		
Insulation class	F		
Ambient temperature	-20 till 40 °C		
Temperature rise	temp.rise acc. B (80K)		
Temperature rise winding	70 K		
Temperature rise surface	35 K	Direction of rotation	cw /ccw
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	0,0335 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	240%	819%	215%	310%	39,7 A
@ D 460V 60Hz	260%	759%		310%	

NOTE

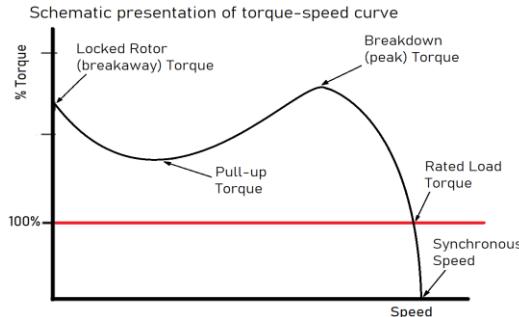
All performance values at rated voltage and frequency.

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



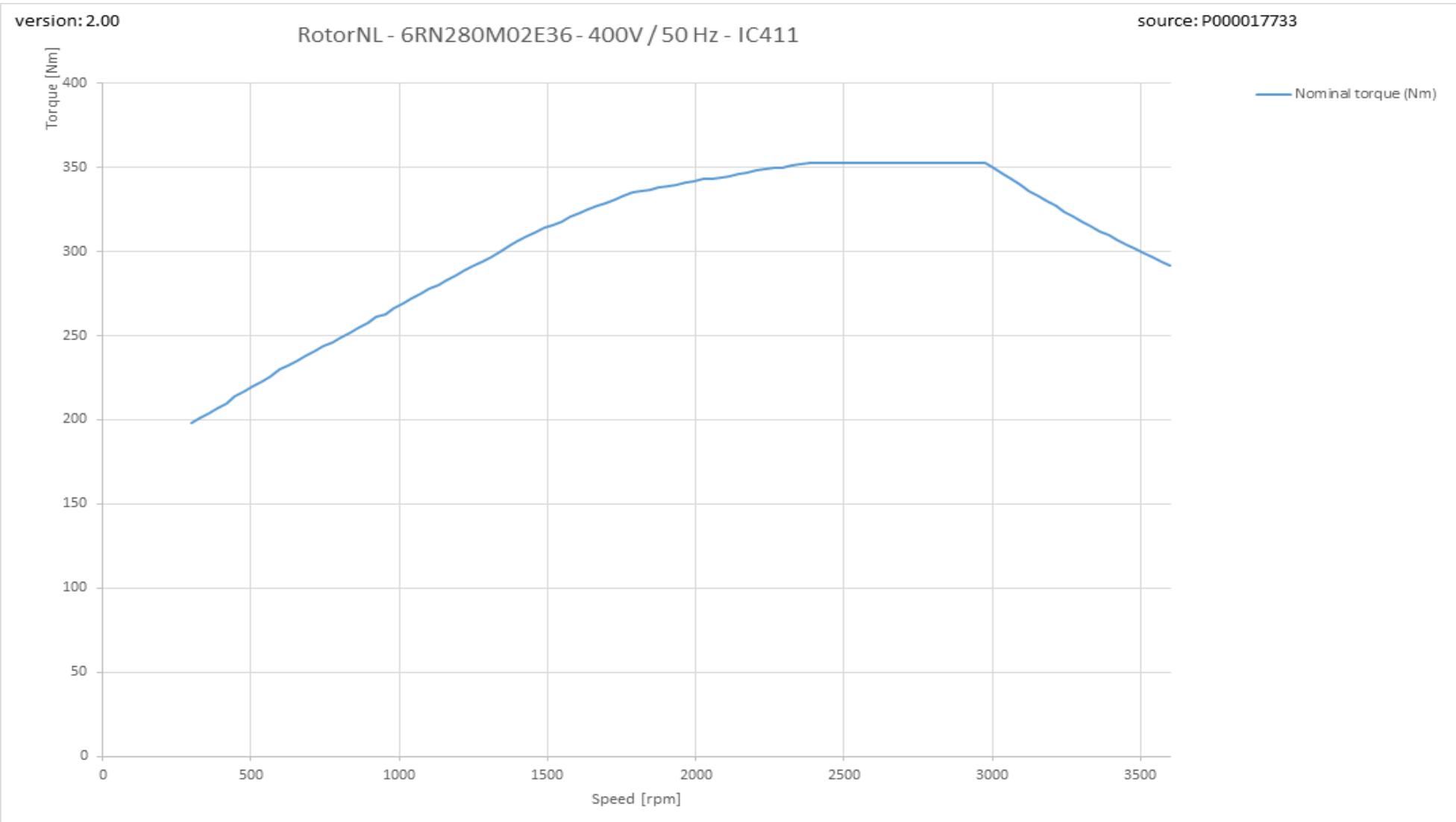
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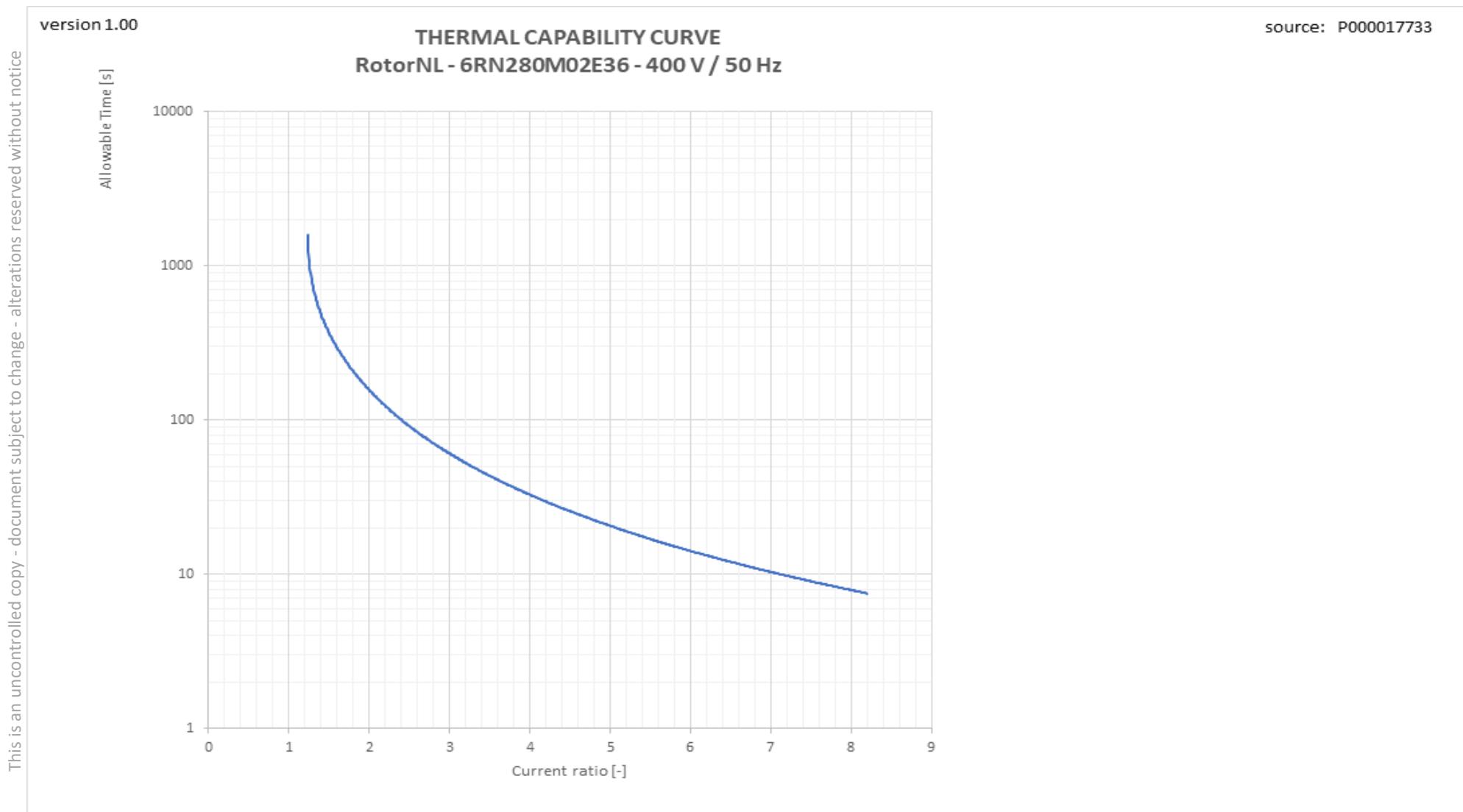
6RN280M02E36 2-pole 110,00kW D/Y 400/690V 50Hz S1 IC411 IE3

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Torque versus Speed curve with variable frequency drive



Therm_VSD graph



Tn graph

