

PRODUCT INFORMATION PACKET

rotor nl[®]

Model No: 6RN280M02E36U463021

Catalog No: 6RN280M02E36U46@3021

110.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 3000 rpm, D400/Y690V 50Hz,
280M Frame B5, 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	150 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	B5	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Outline Drawing	6RN280M02E36U463021		

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

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 280M 110kW D400V 50Hz IM3021-FF500

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	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
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	280M
Duty	S1
Voltage	400 V
Frequency	50 Hz
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
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

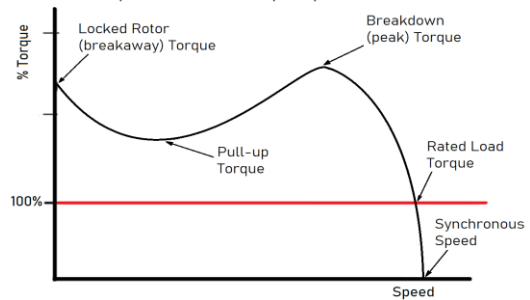
All performance values at rated voltage and frequency.
 All performance parameters are subjected to standard tolerance as per IEC 60034-1
 Voltage, Frequency are as per IEC60034-1
 Technical data are subject to change. There may be discrepancies between calculated and name plate values.

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

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

Degree of protection	IP55
Mounting type	IM3021-FF500
Cooling method	IC411
Motor weight - approx.	kg
Gross weight - approx.	kg
Motor inertia	1,1000 kgm²
Vibration level	according IEC60034-14
Direction of rotation	cw / ccw

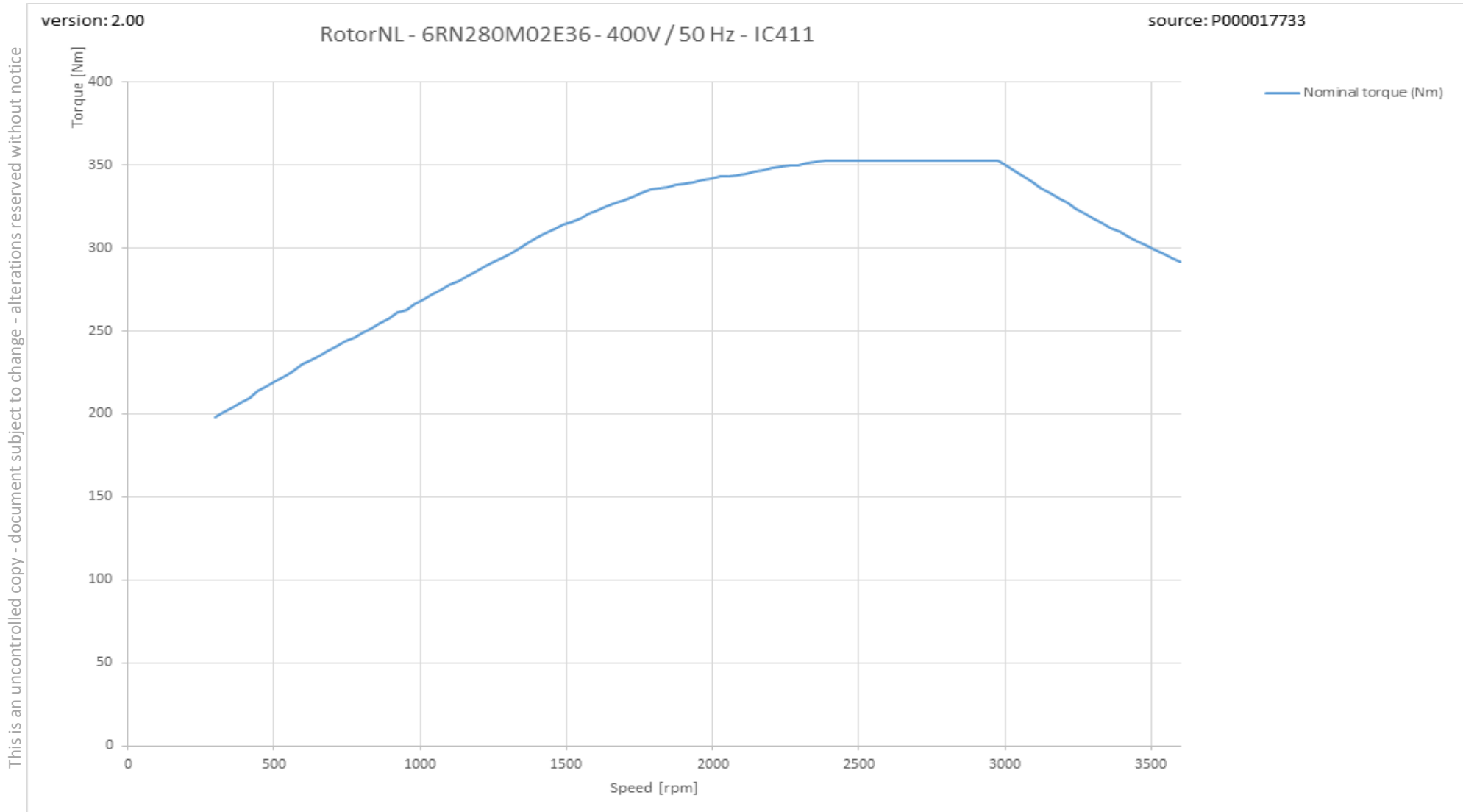
Schematic presentation of torque-speed curve



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

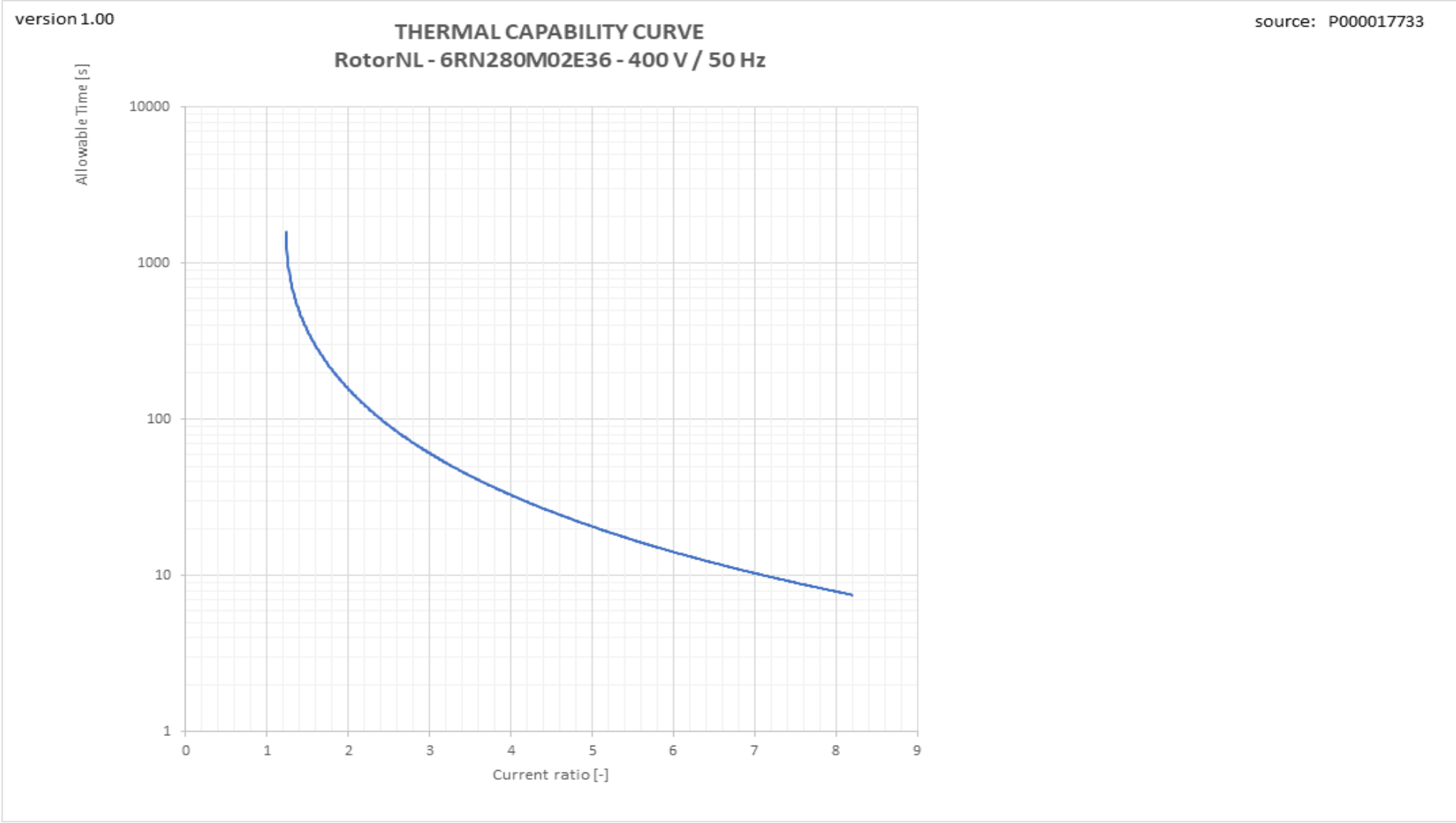


Torque versus Speed curve with variable frequency drive



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

