

PRODUCT INFORMATION PACKET



Model No: 6RN160L02E36U46B2081

Catalog No: 6RN160L02E36U46B@2081

22.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 3000 rpm, D400/Y690V 50Hz,
160L Frame B35, IC411

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Nameplate Specifications

Output HP	30 Hp	Output KW	22.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	37.50 A	Speed	2950 rpm
Service Factor	1	Phase	3
Efficiency	92.7 %	Power Factor	0.91
Duty	S1	Insulation Class	F
Frame	160L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6309-2Z/C3WT (-40°C/+160°C)	Opp Drive End Bearing Size	6309-2Z/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	2	Rotation	Clockwise Shaft End
Mounting	B35	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	42 mm	Shaft Extension	110 mm
Outline Drawing	6RN160L02E36_2041		

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Datasheet

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Model No. 2-Pole cage motor 6RN 160L 22kW D400V 50Hz IM2081-FF300

U (V)	Δ / Y Conn	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 _K /T _N [pu]
400	D	50	22	30	37,5	2950	71	IE3	93,0	0,91	9,32	3,16	3,91
690	Y				22								
460	D	60	25,3	33,91	38	3550	68,1	IE3	92,8	0,92	9,05	3,11	3,80

Motor type	6RN160L02E36
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	160L
Duty	S1
Voltage	400 V
Frequency	50 Hz
Power output	22 kW
Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	61 K
Temperature rise surface	19 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6309-2Z/C3WT

Type of grease	Unirex N3
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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	316%	930%	289%	391%	9,53 A
@ D 460V 60Hz	311%	905%	280%	380%	8,92 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

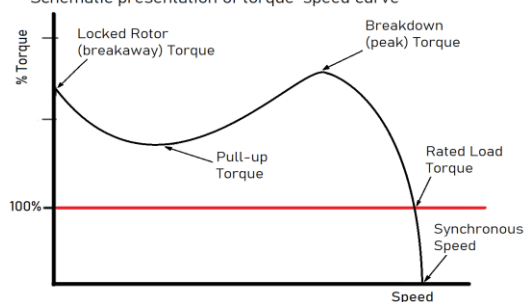
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Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30

Degree of protection	IP55
Mounting type	IM2081-FF300
Cooling method	IC411
Motor weight - approx.	153 kg
Gross weight - approx.	158 kg
Motor inertia	0,0770 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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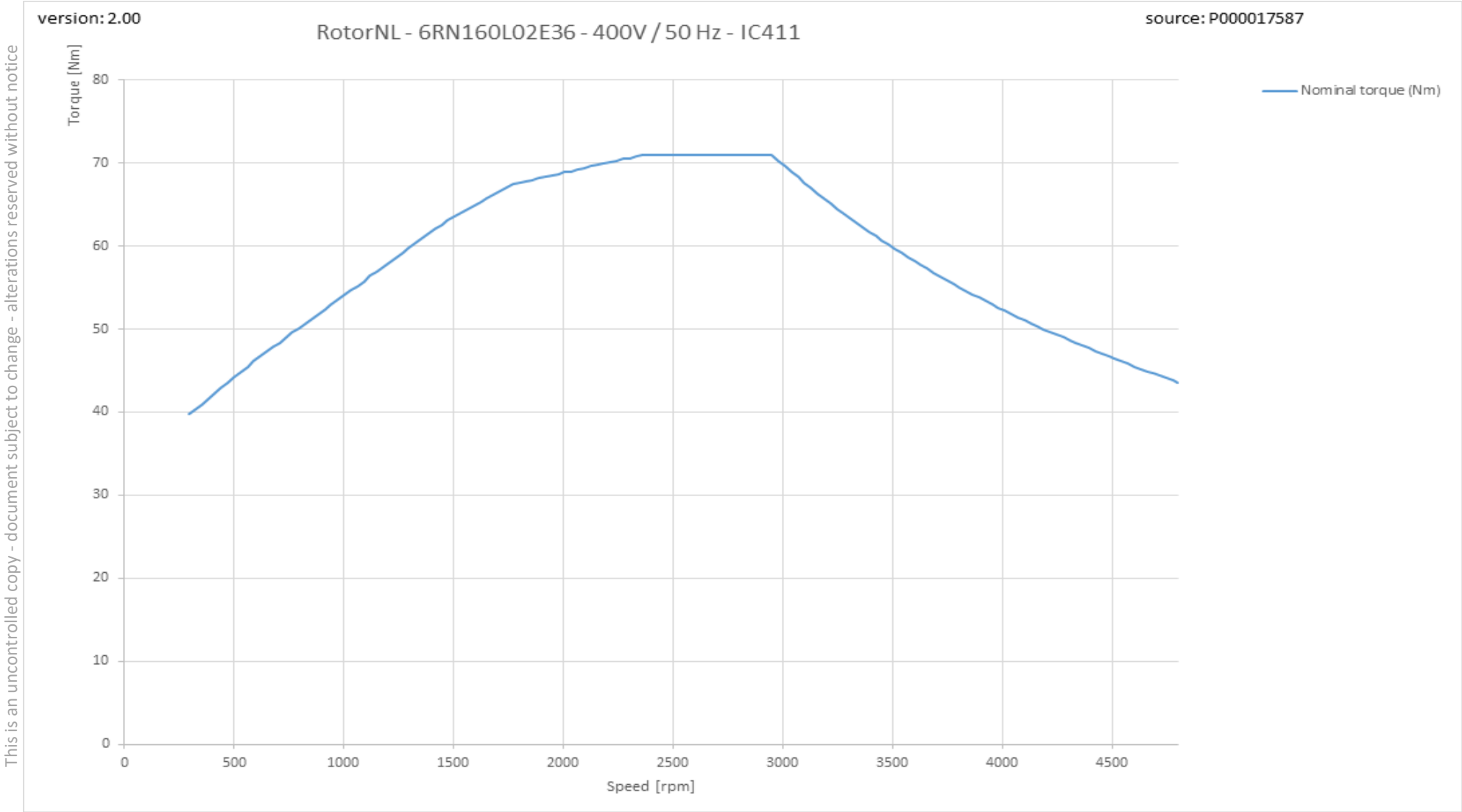
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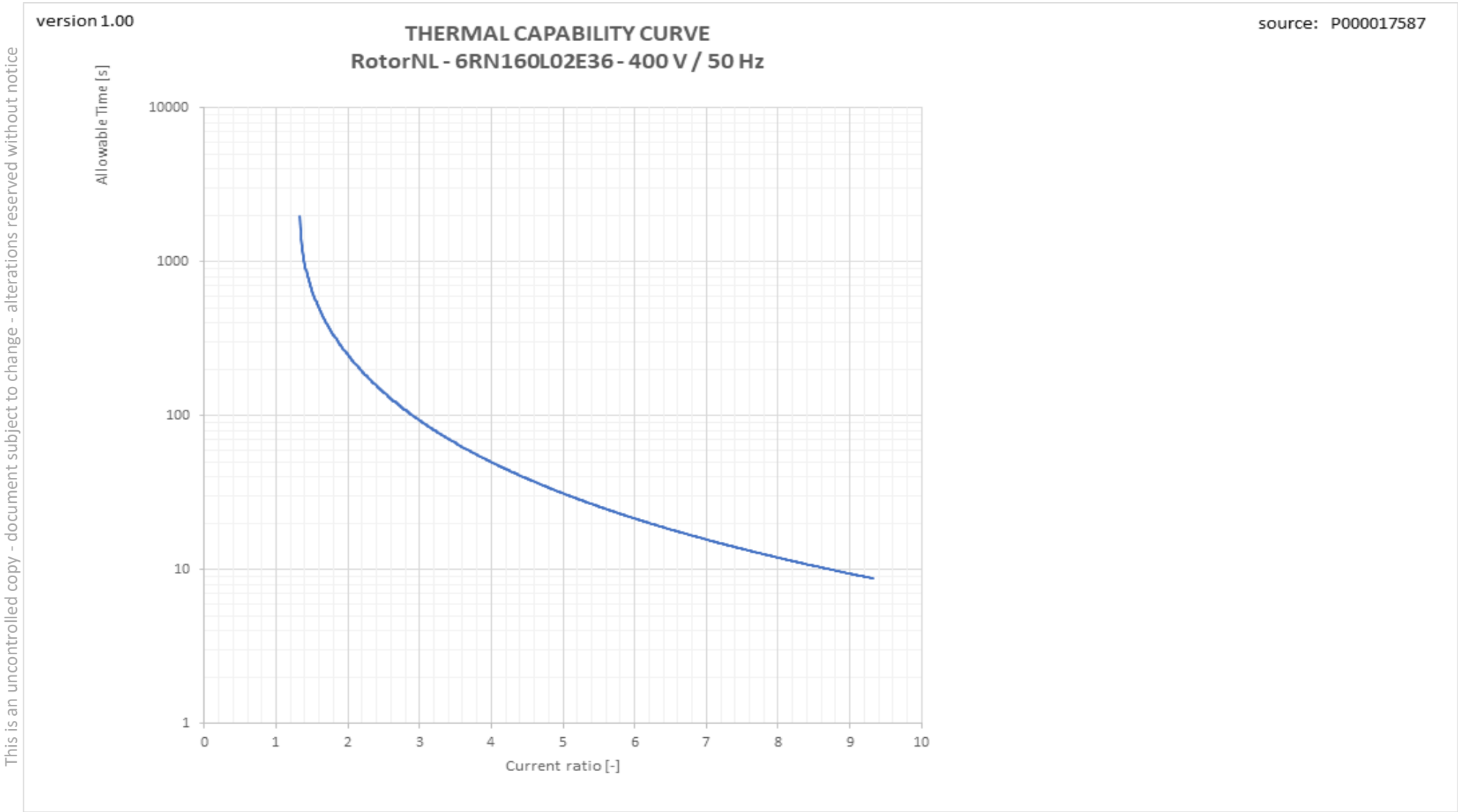
6RN160L02E36 2-pole 22,00kW D/Y 400/690V 50Hz S1 IC411 IE3



Torque versus Speed curve with variable frequency drive



Therm_VSD graph



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