

PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN90L02E34U24B3641-A

Catalog No: 6RN90L02E34U24B@3641-A

2.20 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 3000 rpm, D230/Y400V 50Hz,
90L Frame B14, IC411



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Nameplate Specifications

Output HP	3.00 Hp	Output KW	2.2 kW
Frequency	50 Hz	Voltage	D230/Y400 V
Current	7.31 A	Speed	2920 rpm
Service Factor	1	Phase	3
Efficiency	85.9 %	Power Factor	0.88
Duty	S1	Insulation Class	F
Frame	90L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6205-2Z/C3WT (-40°C/+160°C)	Opp Drive End Bearing Size	6004-2Z/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	B14	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	24 mm	Shaft Extension	50 mm
Outline Drawing	6RN90L02E34_3641-A		

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Datasheet


rotor B.V.

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 90L 2,2kW D230V 50Hz IM3641-FT115

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 _K /T _N [pu]
230	D	50	2,2	3	7,3	2920	7,2	IE3	85,9	0,88 0,85 0,78	8,20	2,60	4,00
400	Y				4,2								
265	D	60	2,55	3,418	7,3	3515	6,9	IE3	86,5 86,5 85,5	0,88	8,20	2,70	4,40
460	Y				4,21								

Motor type	6RN90L02E34	Degree of protection	IP55
Enclosure	Totally Enclosed Fan Cooling	Mounting type	IM3641-FT115
Frame Material	Aluminum	Cooling method	IC411
Frame size	90L	Motor weight - approx.	20 kg
Duty	S1	Gross weight - approx.	21 kg
Voltage	230 V	Motor inertia	0,0021 kgm ²
Frequency	50 Hz	Vibration level	according IEC60034-14
Power output	2,2 kW	Noise level (pressure) acc 60034-9	65 dB(A)
Insulation class	F		
Ambient temperature	-20 till 40 °C		
Temperature rise	temp.rise acc. B (80K)		
Temperature rise winding	38 K		
Temperature rise surface	20 K	Direction of rotation	cw /ccw
Altitude above sea level	1000 mtr		
Hazardous area classification	Safe area		

Rotor type	Cage motor
Bearing type	6004-2Z/C3WT
Type of grease	Unirex N3
Phase resistance at 20°C	2,6253 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 230V 50Hz	260%	857%		400%	3,13 A
@ D 265V 60Hz	270%	819%	270%	440%	

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.	Schematic presentation of torque-speed curve
Efficiency Europe	Global IEC	
Standards EN-IEC: 60034-30	IEC: 60034-30	

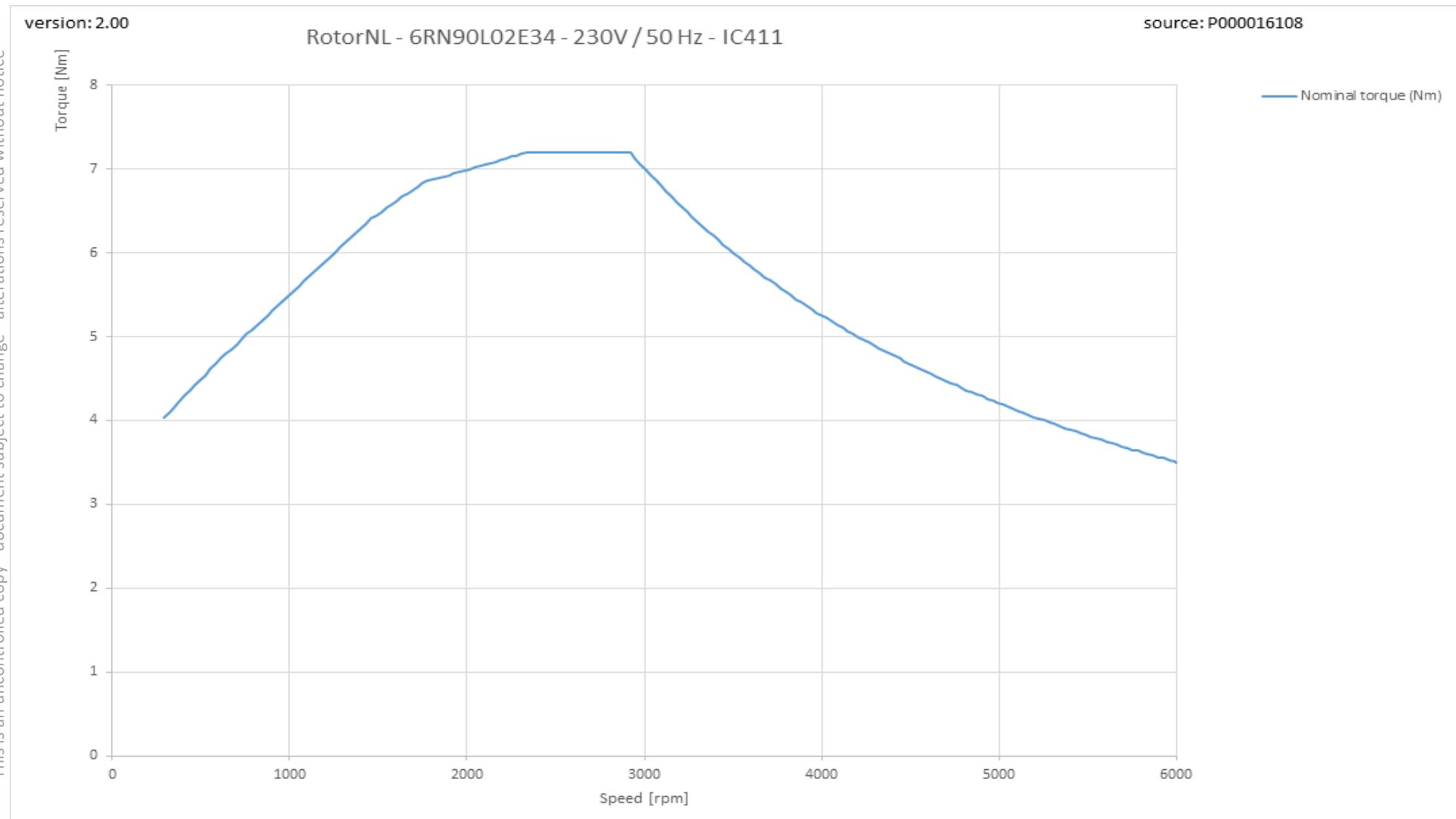
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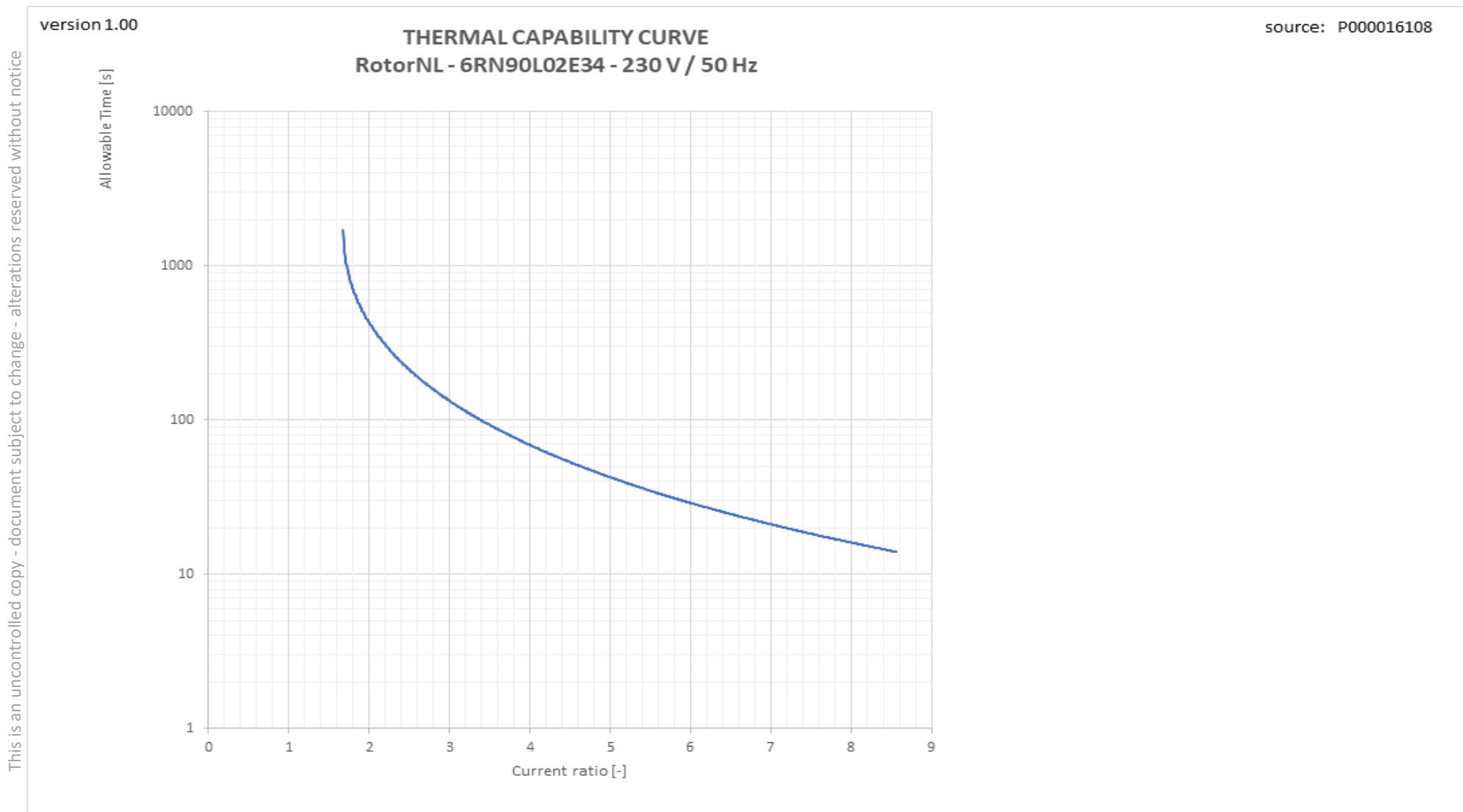
6RN90L02E34 2-pole 2,20kW D/Y 230/400V 50Hz S1 IC411 IE3

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Torque versus Speed curve with variable frequency drive



Therm_VSD graph



Tn graph

