

PRODUCT INFORMATION PACKET



Model No: 6RN90S04E30U46B3641-B

Catalog No: 6RN90S04E30U46B@3641-B

1.10 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D400/Y690V 50Hz,
90S Frame B14, 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





Nameplate Specifications

Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	2.43 A	Speed	1445 rpm
Service Factor	1	Phase	3
Efficiency	84.1 %	Power Factor	0.78
Duty	S1	Insulation Class	F
Frame	90S	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	4	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	6RN90S04E30_3041		

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

Datasheet

rotor nl®

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. 4-Pole cage motor 6RN 90S 1,1kW D400V 50Hz IM3641-FT130

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	1,1	1 1/2	2,43	1445	7,3	IE3	84,5	0,78	6,80	2,31	3,60
690	Y				1,4								
460	D	60	1,27	1,702	2,4	1740	6,98	IE2	85,8	0,79	7,44	2,96	3,75

Motor type	6RN90S04E30	Degree of protection	IP55
Enclosure	Totally Enclosed Fan Cooling	Mounting type	IM3641-FT130
Frame Material	Aluminum	Cooling method	IC411
Frame size	90S	Motor weight - approx.	17 kg
Duty	S1	Gross weight - approx.	18 kg
Voltage	400 V	Motor inertia	0,0028 kgm ²
Frequency	50 Hz	Vibration level	according IEC60034-14
Power output	1,1 kW	Noise level (pressure) acc 60034-9	0 dB(A)
Insulation class	F		
Ambient temperature	-20 till 40 °C		
Temperature rise	temp.rise acc. B (80K)		
Temperature rise winding	27 K		
Temperature rise surface	19 K		
Altitude above sea level	1000 mtr	Direction of rotation	cw /ccw
Hazardous area classification	Safe area		

Rotor type	Cage motor
Bearing type	6004-2Z/C3WT

Type of grease	Unirex N3
----------------	-----------

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	231%	679%		360%	1,38 A
@ D 460V 60Hz	296%	737%	241%	375%	1,28 A

NOTE

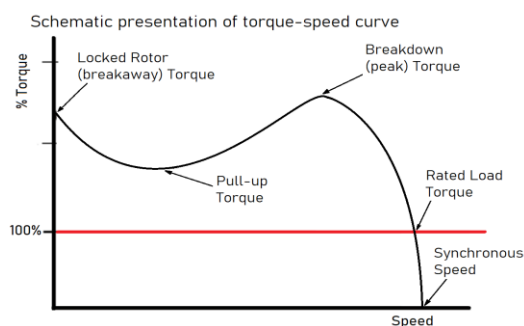
All performance values at rated voltage and frequency.

All performance parameters are subjected to standard tolerance as per IEC 60034-1

Voltage, Frequency are as per IEC60034-1

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



rotor
is a
ISO 9001
certified
company

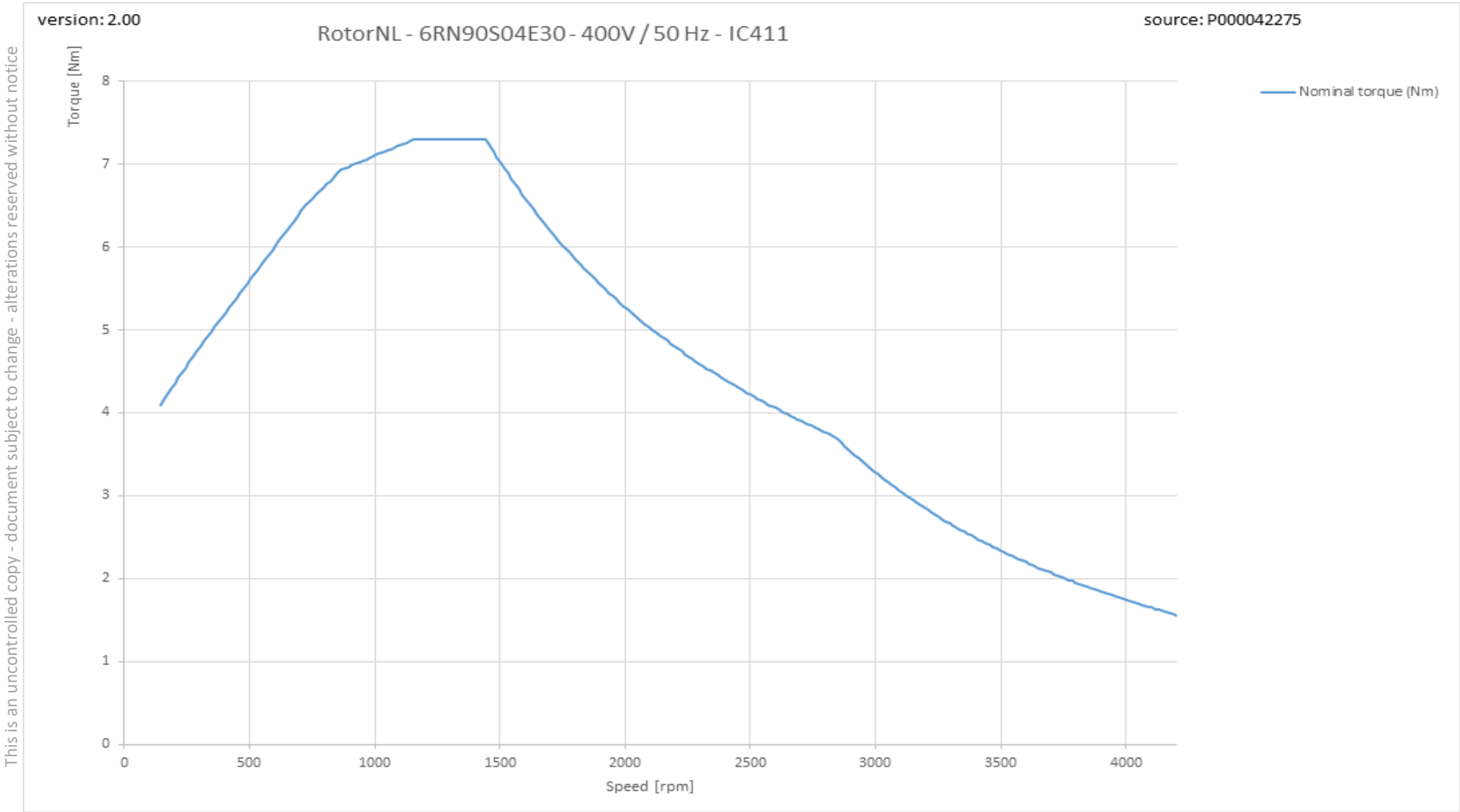
This is an uncontrolled copy, data can be changed anytime.

RegalRexnord™

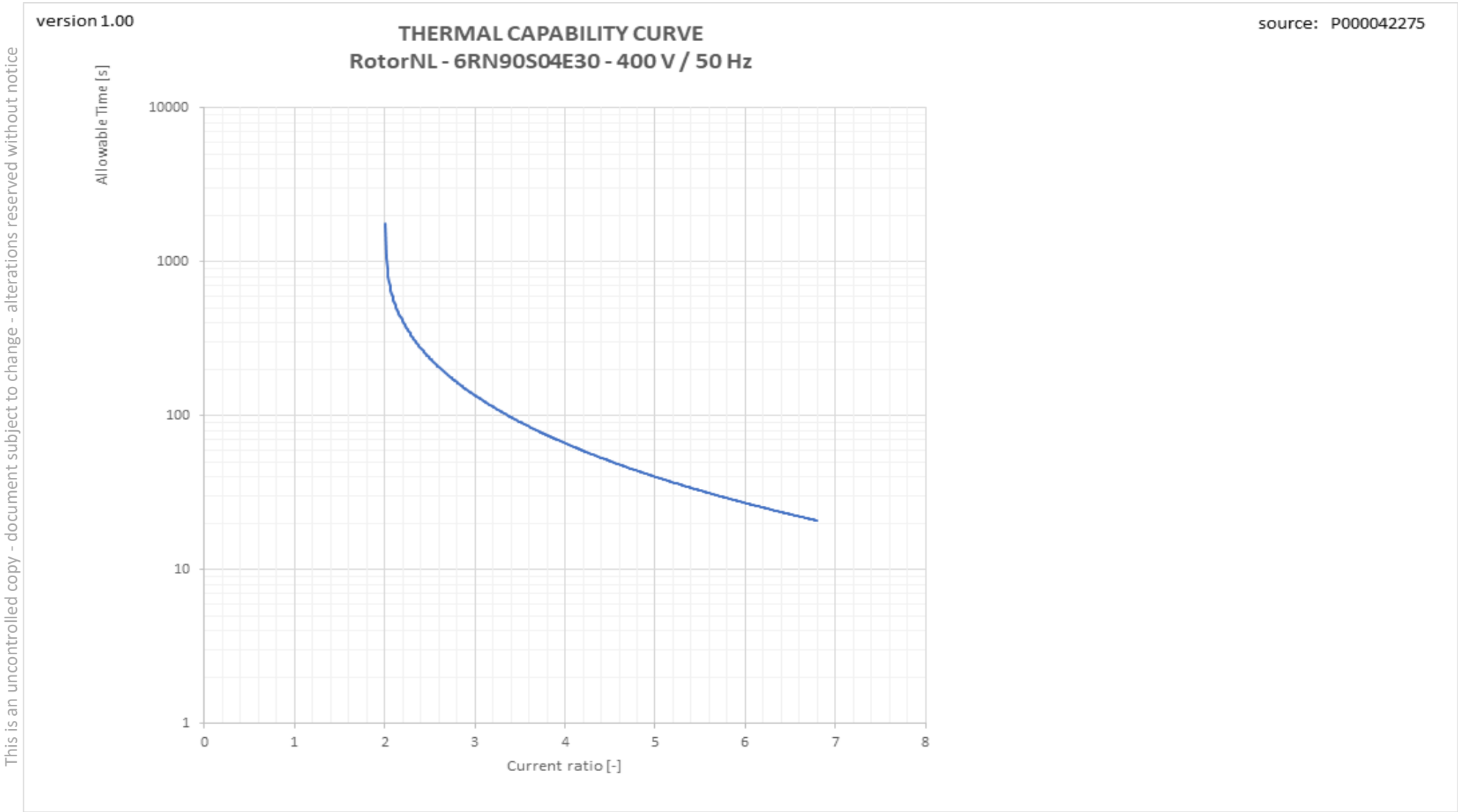
6RN90S04E30 4-pole 1,10kW D/Y 400/690V 50Hz S1 IC411 IE3



Torque versus Speed curve with variable frequency drive



Therm_VSD graph



This is an uncontrolled copy - document subject to change - alterations reserved without notice