

PRODUCT INFORMATION PACKET

rotor nl[®]

Model No: 6RN90L04E34U243041

Catalog No: 6RN90L04E34U24@3041

1.50 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D230/Y400V 50Hz,
90L Frame B5, IC411



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RegalRexnord



Nameplate Specifications

Output HP	2 Hp	Output KW	1.5 kW
Frequency	50 Hz	Voltage	D230/Y400 V
Current	5.61 A	Speed	1445 rpm
Service Factor	1	Phase	3
Efficiency	85.3 %	Power Factor	0.79
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	4	Rotation	Clockwise Shaft End
Mounting	B5	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	24 mm	Shaft Extension	50 mm
Outline Drawing	6RN90L04E34U243041		

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1 2 3 4 5 6 7 8

A A

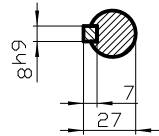
B B

C C

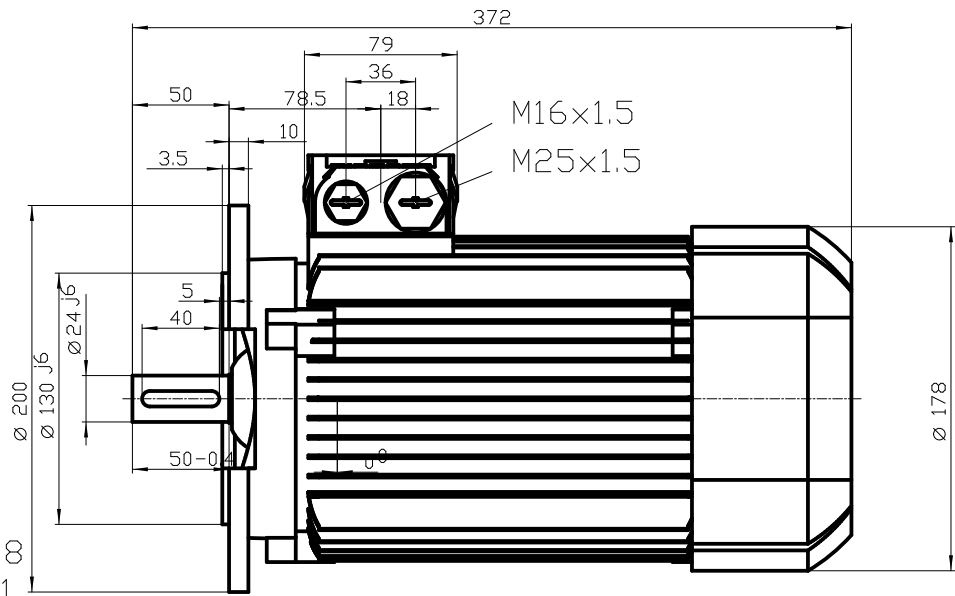
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E E

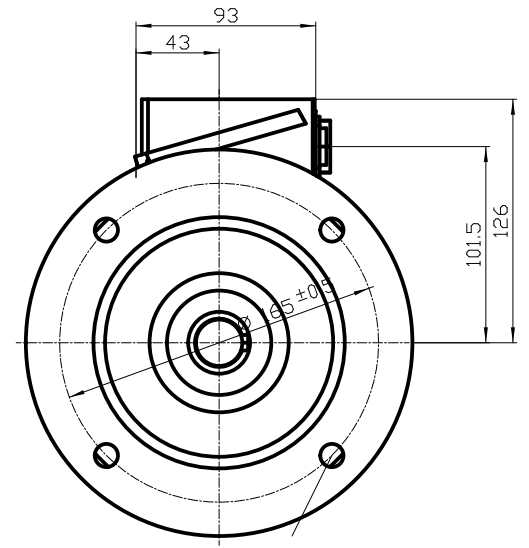
F F



DIN 332-DR M8
DIN 6885 Teil1



M16x1.5
M25x1.5



Unit	mm	
Date	30.04.13	
rotor		6RN90L04E34 B5 / V1 (no canopy)

Datasheet



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Model No. 4-Pole cage motor 6RN 90L 1,5kW D230V 50Hz IM3041-FF165

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			
230	D	50	1,5	2	5,61	1445	9,92	IE3	85,0	85,3	84,3	0,79	0,75	0,65	7,05	2,80	3,64
400	Y				3,25												
265	D	60	1,75	2 1/3	5,46	1745	9,6	IE3	86,5	86,5	85,5	0,80	0,75	0,65	7,70	3,90	2,80
460	Y				3,15												

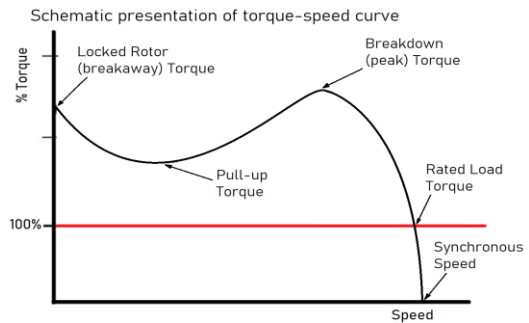
Motor type	6RN90L04E34	Degree of protection	IP55
Enclosure	Totally Enclosed Fan Cooling	Mounting type	IM3041-FF165
Frame Material	Aluminum	Cooling method	IC411
Frame size	90L	Motor weight - approx.	21 kg
Duty	S1	Gross weight - approx.	22 kg
Voltage	230 V	Motor inertia	0,0036 kgm ²
Frequency	50 Hz	Vibration level	according IEC60034-14
Power output	1,5 kW	Noise level (pressure) acc 60034-9	56 dB(A)
Insulation class	F		
Ambient temperature	-20 till 40 °C		
Temperature rise	temp.rise acc. B (80K)		
Temperature rise winding	33 K		
Temperature rise surface			
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
Phase resistance at 20°C	3,8500 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	280%	709%	220%	364%	3,1 A
@ D 265V 60Hz	390%	769%	240%	280%	2,87 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



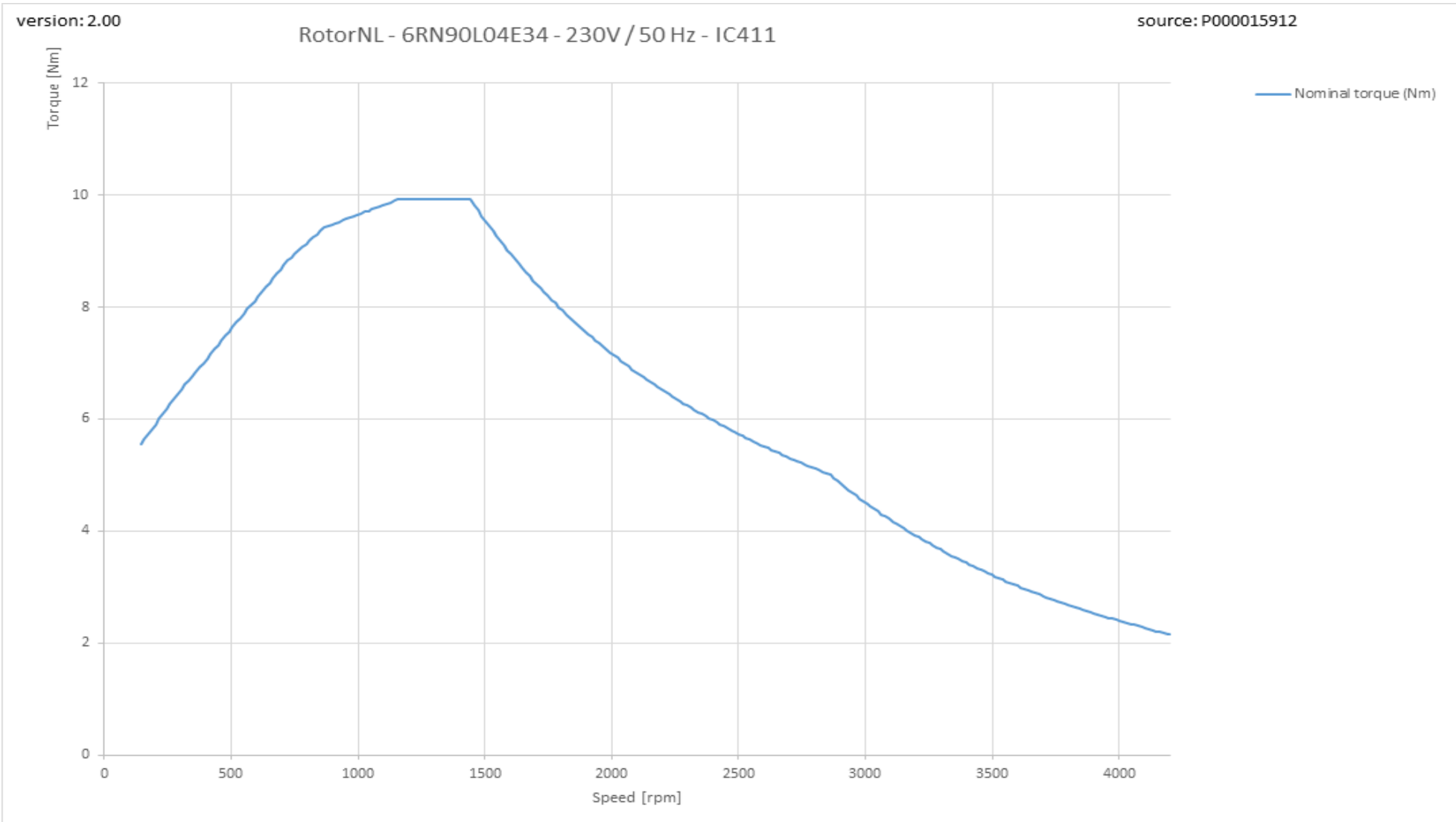
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6RN90L04E34 4-pole 1,50kW D/Y 230/400V 50Hz S1 IC411 IE3



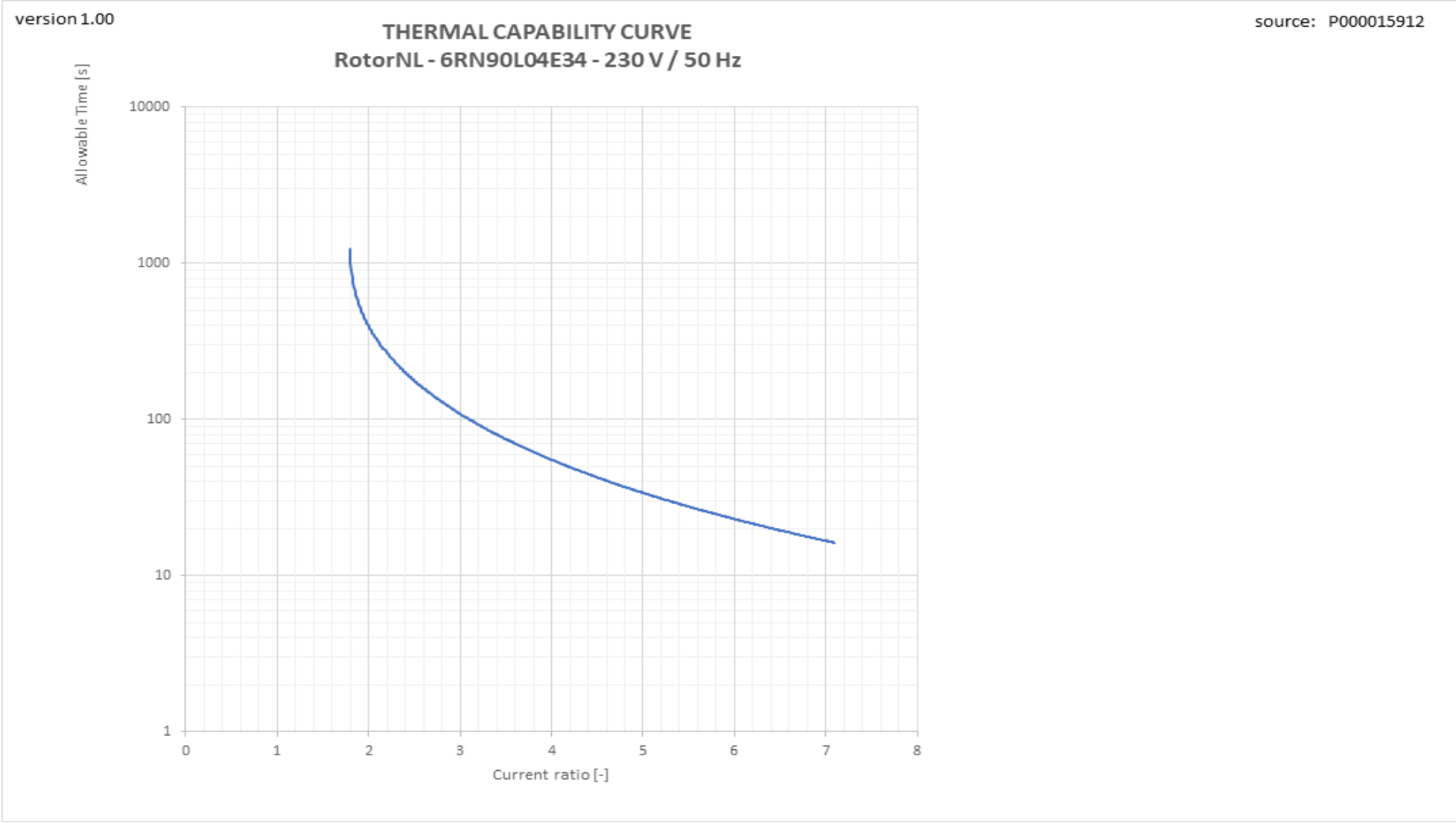
Torque versus Speed curve with variable frequency drive



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Therm_VSD graph

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Tn graph

