

# PRODUCT INFORMATION PACKET

rotor nl®

Model No: 6RN225M04E32U46B1042

Catalog No: 6RN225M04E32U46B@1042

45.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D400/Y690V 50Hz,  
225M Frame B3, IC411



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### Nameplate Specifications

Output HP	60.00 Hp	Output KW	45.0 kW
Frequency	50 Hz	Voltage	D400/Y690 V
Current	81.20 A	Speed	1478 rpm
Service Factor	1	Phase	3
Efficiency	94.2 %	Power Factor	0.85
Duty	S1	Insulation Class	F
Frame	225M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6313/C3	Opp Drive End Bearing Size	6313/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	4	Rotation	Clockwise Shaft End
Mounting	B3	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	60 mm	Shaft Extension	140 mm
Outline Drawing	6RN225M04E32_1041		

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## Datasheet


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Model No. 4-Pole cage motor 6RN 225M 45kW D400V 50Hz IM1042

U (V)	$\Delta / Y$	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 <sub>A</sub> /I <sub>N</sub> [pu]	T <sub>A</sub> /T <sub>N</sub> [pu]	T <sub>R</sub> /T <sub>N</sub> [pu]
400	D	50	45	60	81,2	1478	290	IE3	93,8 94,5 94,6	0,85 0,82 0,74	6,57	2,55	2,59
690	Y				46,9								
460	D	60	52	69,71	80,6	1778	279	IE2	94,4 94,9 94,9	0,86 0,83 0,76	6,67	2,47	2,51

Motor type	6RN225M04E32	Degree of protection	IP55
Enclosure	Totally Enclosed Fan Cooling	Mounting type	IM1042
Frame Material	Cast iron	Cooling method	IC411
Frame size	225M	Motor weight - approx.	330 kg
Duty	S1	Gross weight - approx.	340 kg
Voltage	400 V	Motor inertia	0,4700 kgm <sup>2</sup>
Frequency	50 Hz	Vibration level	according IEC60034-14
Power output	45 kW	Noise level (pressure) acc 60034-9	57 dB(A)
Insulation class	F		
Ambient temperature	-20 till 40 °C		
Temperature rise	temp.rise acc. B (80K)		
Temperature rise winding	66 K		
Temperature rise surface	39 K		
Altitude above sea level	1000 mtr		
Hazardous area classification	Safe area		

Rotor type	Cage motor	
Bearing type	6313/C3 - 6313/C3	
Lubrication method	22gr/10200hrs	
Type of grease	Unirex N3	
Phase resistance at 20°C	0,1344 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	255%	657%	224%	259%	26,8 A
@ D 460V 60Hz	247%	667%	215%	251%	25 A

## NOTE

All performance values at rated voltage and frequency.

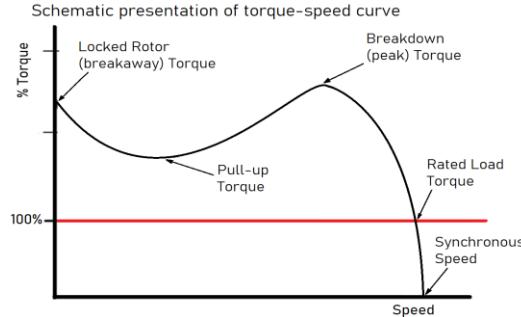
All performance parameters are subjected to standard tolerance as per IEC 60034-1

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



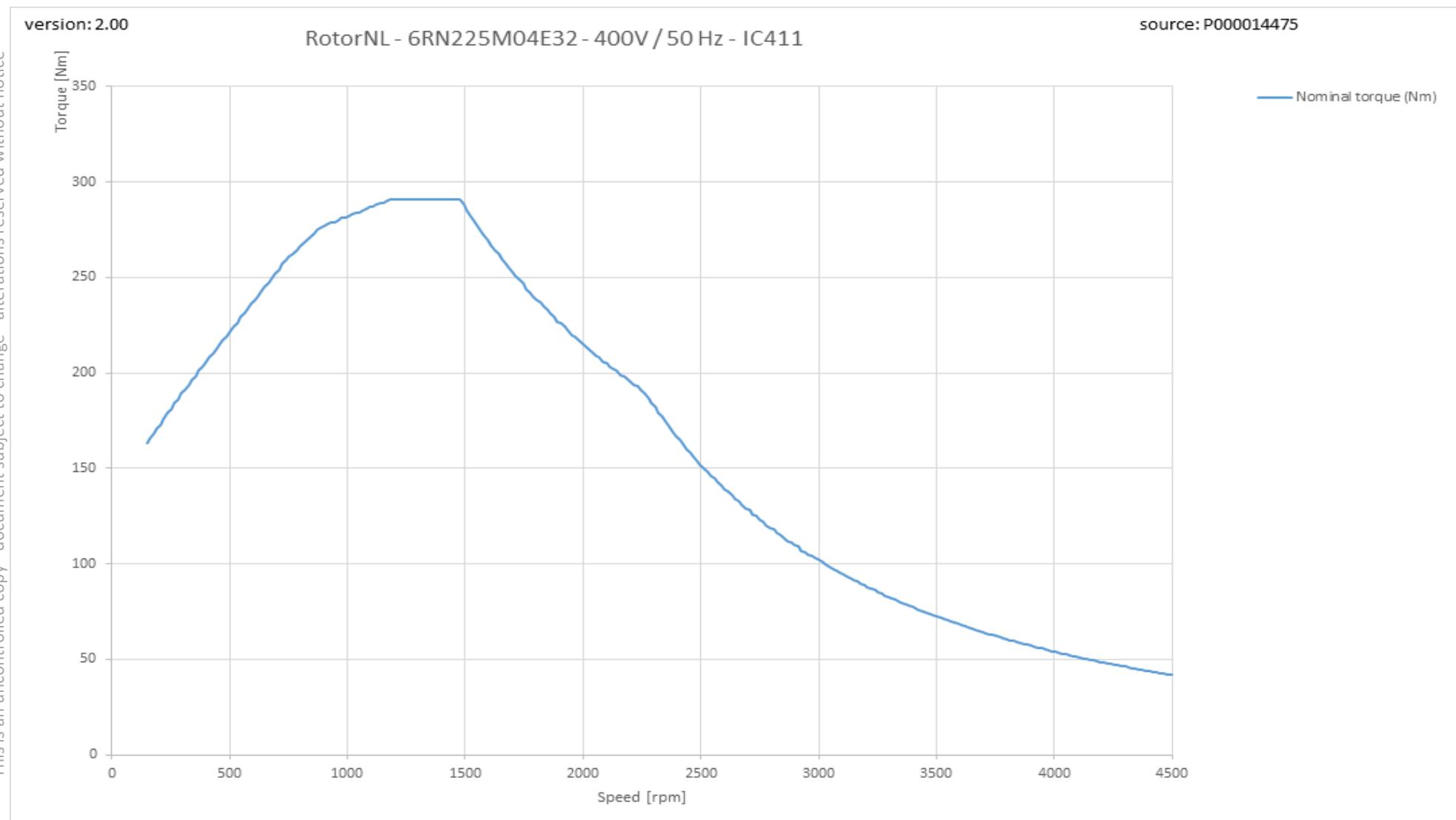
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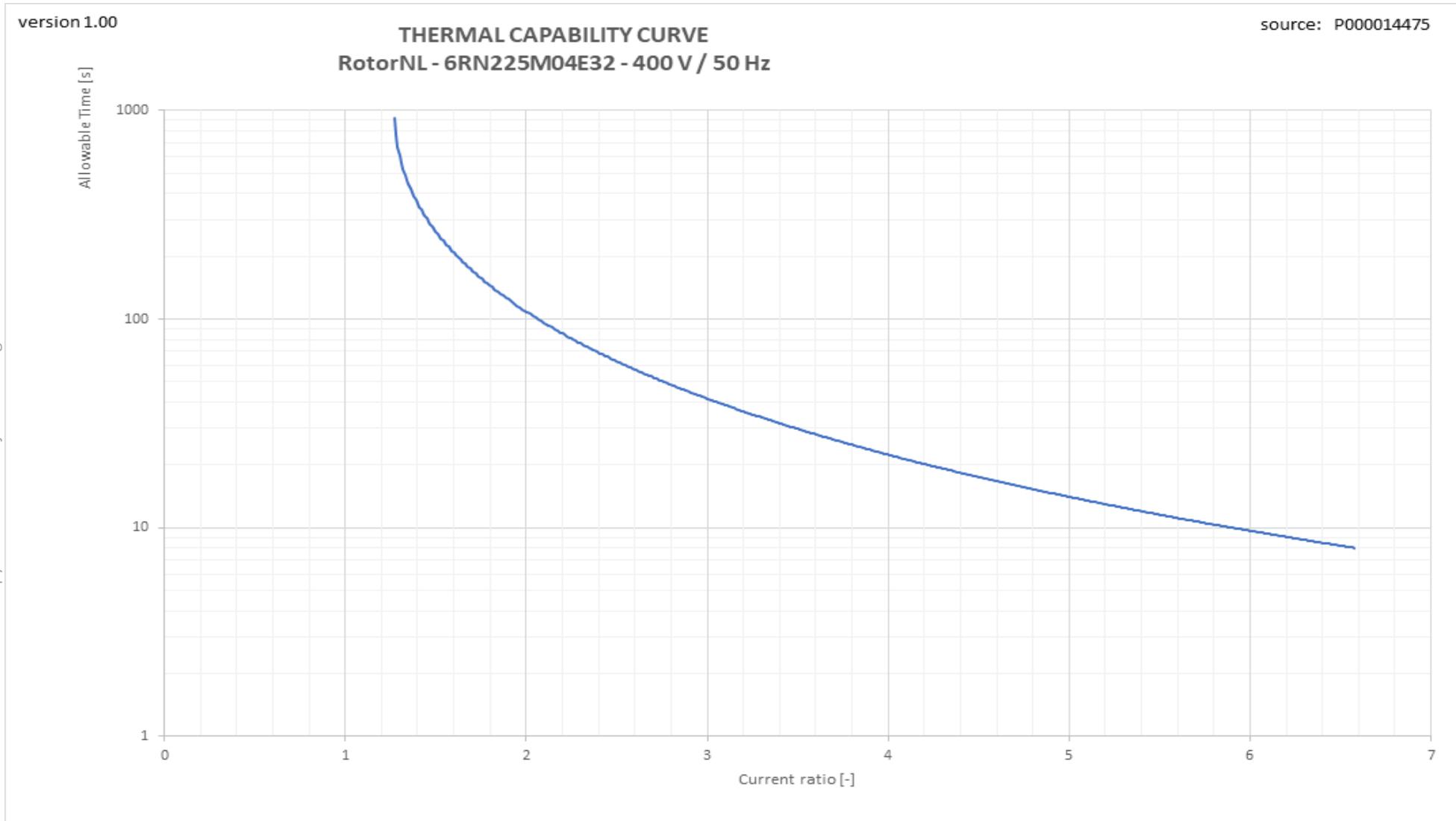
6RN225M04E32 4-pole 45,00kW D/Y 400/690V 50Hz S1 IC411 IE3



Torque versus Speed curve with variable frequency drive



Therm\_VSD graph



Tn graph

