

PRODUCT INFORMATION PACKET



Model No: 6RN280M04E32U243021

Catalog No: 6RN280M04E32U24@3021

90.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D230/Y400V 50Hz,
280M Frame B5, IC411



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Nameplate Specifications

Output HP	120.00 Hp	Output KW	90.0 kW
Frequency	50 Hz	Voltage	D230/Y400 V
Current	273.00 A	Speed	1485 rpm
Service Factor	1	Phase	3
Efficiency	95.2 %	Power Factor	0.86
Duty	S1	Insulation Class	F
Frame	280M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6317/C3	Opp Drive End Bearing Size	6317/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	B5	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed
Shaft Diameter	75 mm	Shaft Extension	140 mm
Outline Drawing	6RN280M04E32_3021		

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Datasheet

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Model No. 4-Pole cage motor 6RN 280M 90kW D230V 50Hz IM3021-FF500

U (V)	Δ / Y Conn	f [Hz]	P [kW]	P [hp]	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 _K /T _N [pu]
FL	3/4FL	1/2FL	FL	3/4FL	1/2FL												
230	D	50	90	120	273	1485	578	IE3	95,3	95,6	95,4	0,86	0,83	0,75	7,47	2,52	2,99
400	Y				158												

Motor type	6RN280M04E32
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	280M
Duty	S1
Voltage	230 V
Frequency	50 Hz
Power output	90 kW
Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	54 K
Temperature rise surface	33 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Rotor type	Cage motor
Bearing type	6317/C3
Lubrication method	30gr/8000hrs
Type of grease	Unirex N3

Phase resistance at 20°C	0,0149 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	252%	743%	210%	299%	85,7 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.

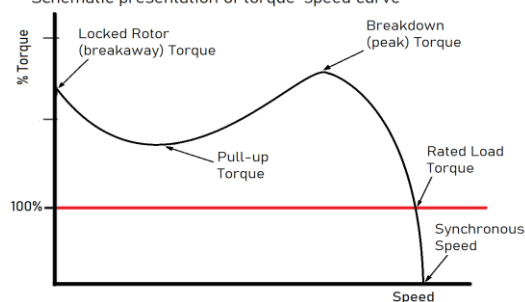
Efficiency	Europe	Global IEC
Standards	EN-IEC: 60034-30	IEC: 60034-30

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Degree of protection	IP55
Mounting type	IM3021-FF500
Cooling method	IC411
Motor weight - approx.	670 kg
Gross weight - approx.	690 kg
Motor inertia	1,7000 kgm ²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	65 dB(A)

Direction of rotation	cw / ccw
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Schematic presentation of torque-speed curve



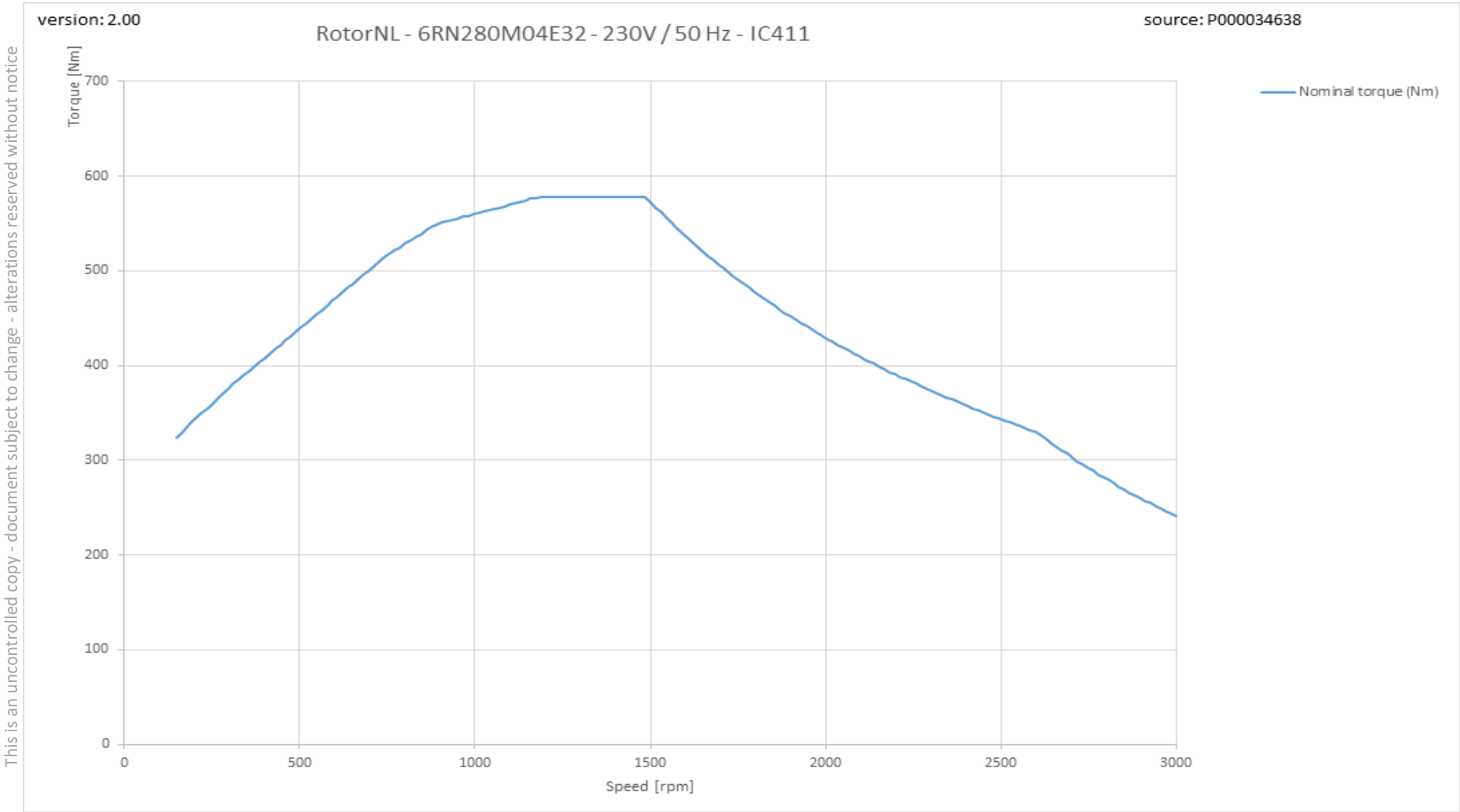
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6RN280M04E32 4-pole 90,00kW D/Y 230/400V 50Hz S1 IC411 IE3

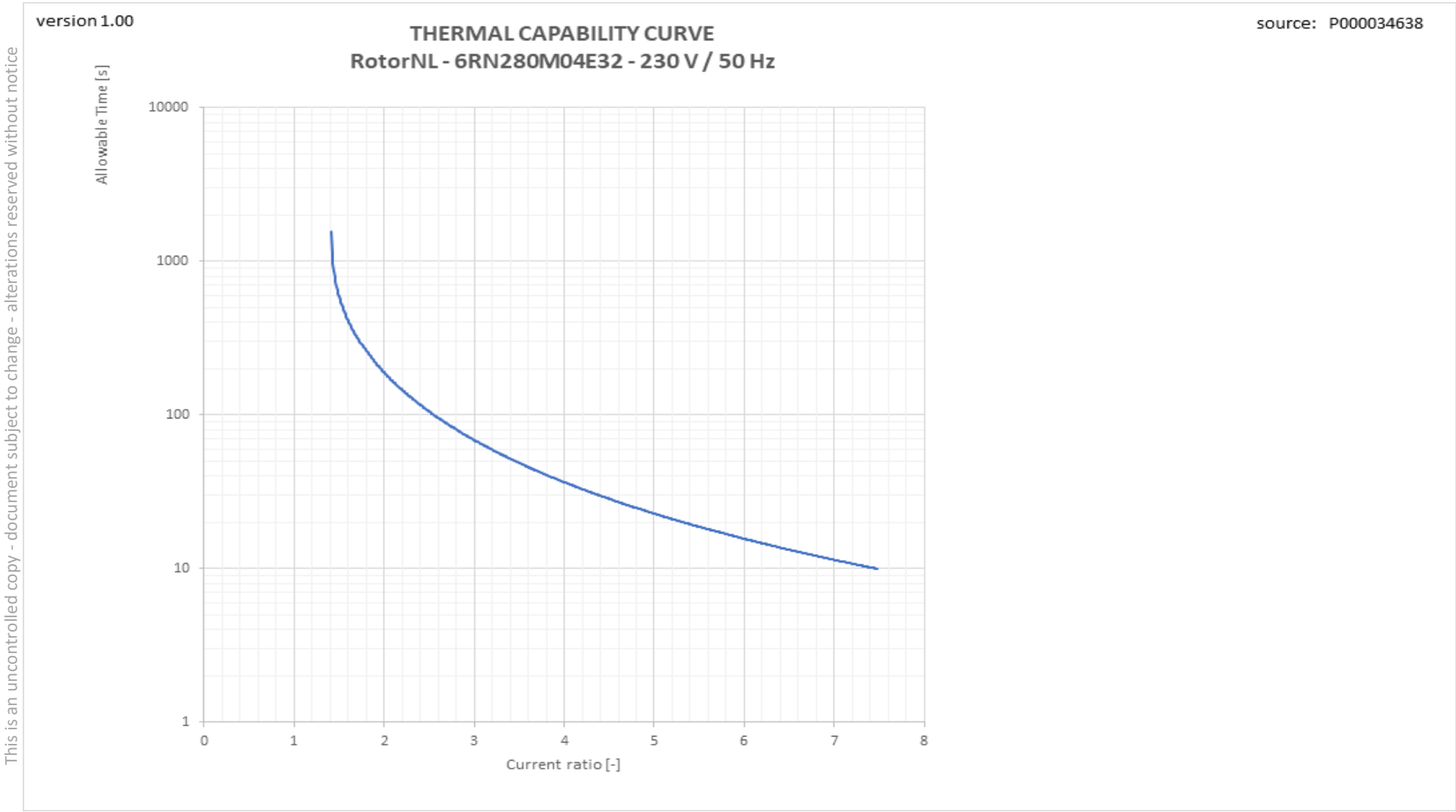


Torque versus Speed curve with variable frequency drive



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Therm_VSD graph



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Tn graph

