

# PRODUCT INFORMATION PACKET



Model No: 6RN280S06E40U461041

Catalog No: 6RN280S06E40U46@1041

45.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1000 rpm, D400/Y690V 50Hz,  
280S 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	81.00 A	Speed	990 rpm
Service Factor	1	Phase	3
Efficiency	94.8 %	Power Factor	0.85
Duty	S1	Insulation Class	F
Frame	280S	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	6	Rotation	Clockwise Shaft End
Mounting	B3	Motor Orientation	Any
Frame Material	Cast iron	Shaft Type	Keyed

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Model No. 6-Pole cage motor 6RN 280S 45kW D400V 50Hz IM1041

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 <sub>A</sub> /I <sub>N</sub> [pu]	T <sub>A</sub> /T <sub>N</sub> [pu]	T <sub>K</sub> /T <sub>N</sub> [pu]
400	D	50	45	60,32	81	990	434	IE4	94,8	0,85	8,80	2,50	3,20
690	Y				46,7								
460	D	60	45	60,32				IE3					

Motor type	6RN280S06E40	Degree of protection	IP55
Enclosure	Totally Enclosed Fan Cooling	Mounting type	IM1041
Frame Material	Cast iron	Cooling method	IC411
Frame size	280S	Motor weight - approx.	510 kg
Duty	S1	Gross weight - approx.	530 kg
Voltage	400 V		
Frequency	50 Hz		
Power output	45 kW		
		Vibration level	according IEC60034-14
Insulation class	F		
Ambient temperature	-20 till 40 °C		
Temperature rise	temp.rise acc. B (80K)		
Temperature rise surface		Direction of rotation	cw / ccw
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

Country of origin	CZ
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Voltage/Freq	Locked rotor Torque [% nom]	Starting current [% nom]	Pull-up Torque [% nom]	Breakdown Torque [% nom]	No-load Current [A]
@ D 400V 50Hz	250%	879%		320%	
@ D 460V 60Hz					

**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

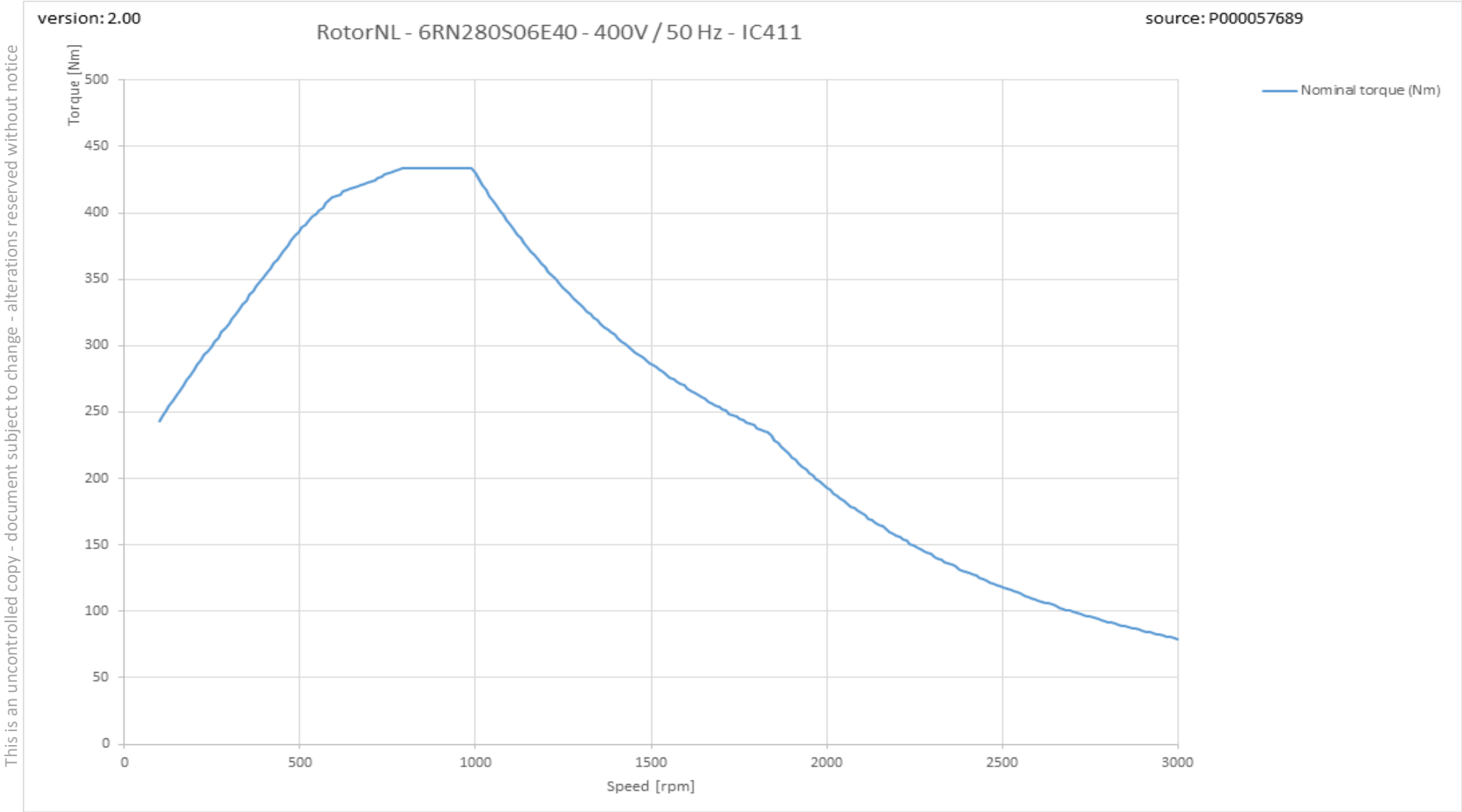
Schematic presentation of torque-speed curve

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6RN280S06E40 6-pole 45,00kW D/Y 400/690V 50Hz S1 IC411 IE4



Torque versus Speed curve with variable frequency drive



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