PRODUCT INFORMATION PACKET



Model No: 6RN280S04E30U46B2021
Catalog No: 6RN280S04E30U46B@2021

75.00 kW General Purpose Low Voltage IEC Motor IE3, 3 phase, 1500 rpm, D400/Y690V 50Hz,

280S Frame B35, IC411





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Nameplate Specifications

Output HP	100.00 Hp	Output KW	75.0 kW	
Frequency	50 Hz	Voltage	D400/Y690 V	
Current	132.80 A	Speed	1485 rpm	
Service Factor	1	Phase	3	
Efficiency	95 %	Power Factor	0.86	
Duty	S 1	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	4	Rotation	Clockwise Shaft End		
Mounting	B35	Motor Orientation	Any		
Frame Material	Cast iron	Shaft Type	Keyed		
Shaft Diameter	75 mm	Shaft Extension	140 mm		
Outline Drawing	6RN280S04E30_2021				

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Datasheet





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cw/ccw

Model No.

4-Pole cage motor 6RN 280S 75kW D400V 50Hz IM2021-FF500

U	Δ/Υ	f	Р	Р	I	n	T	IE	% EF	F at	load	PF	atlo	ad	I _A /I _N	T _A /T _N	T _K /T _N
(V)	Conn	[Hz]	[kW]	[hp]	[A]	[RPM]	[Nm]	Class	FL	3/4FL	1/2FL	FL	3/4FL	1/2FL	[pu]	[pu]	[pu]
400	D	50	75	100	132	1485	482	IE3	94,9	95,2	94,9	0,86	0,83	0,74	7,18	2,32	2,92
690	Υ				77												
460	D	60	75	100	115	1788	400	IE3	95,4	95,3	94,4	0,85	0,82	0,72	8,12	2,69	3,21

Motor type	6RN280S04E30
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	280S
Duty	S1
Voltage	400 V
Frequency	50 Hz
Power output	75 kW
Insulation class	F
Ambient temperature	- 20 till 40 °C
Temperature rise	temp.rise acc. B (80K)
Temperature rise winding	59 K
Temperature rise surface	29 K
Altitude above sea level	1000 mtr
Hazardous area classification	Safe area

Degree of protection	IP55
Mounting type	IM2021-FF500
Cooling method	IC411
Motor weight - approx.	560 kg
Gross weight - approx.	580 kg
Motor inertia	1,4000 kgm²
Vibration level	according IEC60034-14
Noise level (pressure) acc 60034-9	65 dB(A)

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

Schematic presentation of torque-speed curve Breakdown (peak) Torque Locked Rotor (breakaway) Torque Pull-up Torque Torque

Direction of rotation

100%

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	232%	721%	200%	292%	42,7 A
@ D 460V 60Hz	269%	816%	220%	321%	40 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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Synchronous

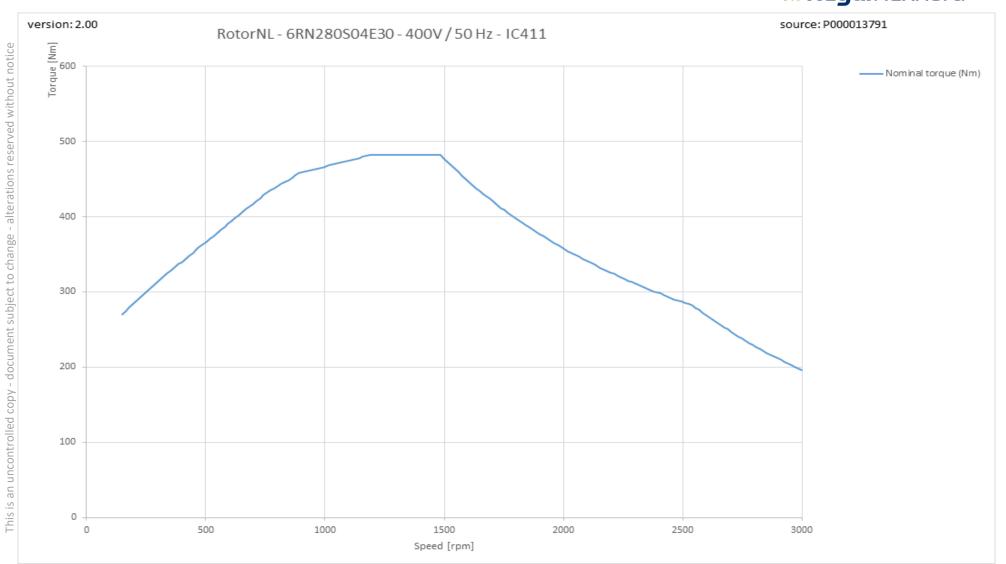
Speed

6RN280S04E30 4-pole 75,00kW D/Y 400/690V 50Hz S1 IC411 IE3



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Torque versus Speed curve with variable frequency drive



Therm_VSD graph

