

Model No. 6-Pole cage motor 5RN 280S 45kW D400V 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			
400	D	50	45	60,32	82,2	988	435,0	IE2	94,1	92,9		0,84	0,81		7,11	2,98	2,62
690	Y				47,4												
460	D	60	54	72,39	85,4	1186	434,8	IE2	94,3	93,9		0,84	0,81		7,00	2,87	2,46

Motor type	5RN280S06E20
Enclosure	Totally Enclosed Fan Cooling
Frame Material	Cast iron
Frame size	280S
Duty	S1
Voltage	400 V
Frequency	50 Hz
Power output	45 kW
Insulation class	F
Ambient temperature	-20 till 40 °C
Temperature rise	temp.rise acc. B
Temperature rise winding	54 K
Temperature rise surface	34 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	0,1905 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	298%	710%	245%	262%	31 A
@ D 460V 60Hz	287%	699%	208%	246%	28,6 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

This is an uncontrolled copy, data can be changed anytime.

Degree of protection	IP55
Mounting type	IM3021-FF500
Cooling method	IC411
Motor weight - approx.	470 kg
Gross weight - approx.	480 kg
Motor inertia	1,3700 kgm ²
Vibration level	according IEC60034-14
Direction of rotation	cw / ccw

Schematic presentation of torque-speed curve



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Driving efficiency and sustainability

