

TECHNICAL DATA

Mains Connection	Input voltage U_{in}	208...240 V; 380...500 V; 525...690 V; (-10%...+10%)
	Input frequency	50...60 Hz ($\pm 10\%$)
	Connection to mains	Once per minute or less (normal case)
Motor Connection	Output voltage	0-V _{in}
	Continuous output current	High overloadability Amps
		Low overloadability Amps
	Overload Capacity	High: 150% Nominal Amps; 1 min, Low: 110% Nominal Amps; 1 min
	Output frequency	0...320 Hz
	Frequency resolution	0.01 Hz
Control Characteristics	Control method	Frequency control V/f; Open Loop Vector Control (speed, torque) Closed Loop Control, Permanent Magnet Synchronous Motor Control (NXP Only)
	Switching frequency	208..240V/380..500V: FR4-6: 1...16 kHz; Factory default: 10 kHz FR7-9: 1...10 kHz; Factory default: 3.6 kHz FR10-11: 1...6 kHz; Factory default: 3.6 kHz 525..690V: FR4-11: 1...6 kHz, Factory default: 1.5 kHz
	Field weakening point	8...320 Hz
	Acceleration time	0...3000 sec
	Deceleration time	0...3000 sec
	Braking	DC brake: 30% * T_N (without brake resistor), flux braking
Ambient Conditions	Ambient operating temperature	14 F (no frost)...122 F: High OL (FR10-FR11: max 104 F) 14 F (no frost)...104 F: Low OL (NXS 0416 6 and NXS 0590 6: max 95 F)
	Storage temperature	-40F...158 F
	Relative humidity	0 to 95% RH, non-condensing, non-corrosive, no dripping water
	Air quality: - chemical vapours - mechanical particles	IEC 60721-3-3, unit in operation, class 3C2 IEC 60721-3-3, unit in operation, class 3S2
	Altitude	100% load capacity (no derating) up to 3280 feet 1%-derating for each 328 feet above 3280 feet; max. 9840 feet
	Vibration EN50178/ EN60068-2-6	5...150 Hz: Displacement amplitude 1 mm (peak) at 5...15.8 Hz (FR10-FR11: 0,25 mm (peak) at 5...31 Hz) Max acceleration amplitude 1 G at 15.8...150 Hz (FR10 and up: 1 G at 31...150 Hz)
	Shock EN50178, EN60068-2-27	UPS Drop Test (for applicable UPS weights) Storage and shipping: max 15 G, 11 ms (in package)
	Enclosure class	UL Type 1/IP21 and UL Type 12/IP54
EMC	Immunity	Fulfil all EMC immunity requirements
	Emissions	EMC level C1: IEC/EN61800-3 (2004), category C1 EMC level C2: IEC/EN61800-3 (2004), category C2 EMC level C3: IEC/EN61800-3 (2004), category C3 EMC level C4: Low earth-current solution suitable for IT networks, IEC/EN61800-3 (2004), category C4
Safety		EN 50178 (1997), EN 60204-1 (2006), IEC 61800-5, CE, UL, CUL; (see unit nameplate for more detailed approvals)
Control Connections (OPT-A1, -A2 or OPT-A1, -A3)	Analogue input voltage	0...+10 V (-10 V...+10 V joystick control), $R_i = 200 \text{ k}\Omega$, resolution 0.1%, accuracy $\pm 1\%$
	Analogue input current	0(4)...20 mA, $R_i = 250 \Omega$ differential, resolution 0.1%, accuracy $\pm 1\%$
	Digital inputs	6, positive or negative logic; 18...30 VDC
	Auxiliary voltage	+24 V, $\pm 15\%$, max. 250 mA
	Output reference voltage	+10 V, +3%, max. load 10 mA
	Analogue output	0(4)...20 mA; R_L max. 500 Ω , resolution 10 bit, accuracy $\pm 2\%$
	Digital output	Open collector output, 50 mA/48 V
	Relay outputs	2 programmable change-over (NO/NC) relay outputs (OPT-A3: NO/NC+NO) Switching capacity: 24 VDC/8 A, 250 VAC/8 A, 125 VDC/0.4 A. Min. switching load: 5 V/10 mA
	Thermistor input (OPT-A3)	Galvanically isolated, $R_{trip} = 4.7 \text{ k}\Omega$
Protections		Overvoltage, undervoltage, earth fault, mains supervision, motor phase supervision, overcurrent, unit overtemperature, motor overload, motor stall, motor underload, short-circuit of +24 V and +10 V reference voltages