

AxN Size 5

AxN 90.150.4; AxN 110.200.4



Technical specifications ⁽¹⁾	Symbol	AxN 90.150.4	AxN 110.200.4	Units
Power Supply Voltage	V_{in}	150 ~ 500		Vac 3 phase
		0 ~ 800		Vdc
Auxiliary supply voltage	V_{aux}	24V ± 15% / 8A		Vdc
Output frequency	f	0 ~ 1200		Hz
Current output, S1 ⁽²⁾	I_n	90	110	Arms
Peak current ⁽²⁾	I_p	150	200	Arms
Power Losses total ⁽³⁾	P_t	1050	1280	W
Maximum output voltage	V_{out}	$V_{in} \times 0.95$		Vac
PWM frequency ⁽⁴⁾	f_{pwm}	4 / 8 / 16		kHz
Efficiency at nominal power ⁽²⁾	--	98.2	98.2	%
Input form factor (Full load)	--	0.9		Vac 3 phase
Maximum braking current	--	100% of I_p (peak current)		--
Cooling	--	3 PWM fan 80x80x38		--
Flow rate	--	110x3		m ³ / hour
Dimensions (HxDxW)	--	725x249x286		mm

⁽¹⁾ Test performed with full option control card and firmware 1.8.197

⁽²⁾ $V_{in} = 380$ Vac, $V_{out} = V_{in} \times 0.95$, $T_{amb} = 40^\circ\text{C}$, Comm.Freq.8kHz

⁽³⁾ $V_{in} = 380$ Vac, $I_{out} = I_n$, $T_{amb} = 40^\circ\text{C}$, Comm.Freq.8kHz, Including input rectifier losses

⁽⁴⁾ PWM frequency will automatically decrease at Zero speed, in order to keep Nominal current output

Motor Feedback Options

Main Encoder (500kHz)	Sincos encoder 5 channels (2 absolute analog tracks/2 incremental analog tracks/index)
	Incremental encoder (1 Vpp or Different Line Driver)
	Sensorless algorithm (w/o feedback)
	Endat serial encoder 1.0 to 2.2 (default)
	Resolver
Secondary Encoder (500kHz)	Hiperface encoder
	Incremental digital encoder without commutation tracks (500kHz)
	Endat serial encoder

Programmable Input Signals

2 Differential / 4 single ended analog inputs	± 10V (1mV) / Rin = 10kΩ
8 digital inputs	20-30V / Rin = 6.6kΩ to GND
2 Insulated analog inputs (optional)	± 10V (1mV)
8 Insulated digital inputs (optional)	5mA, 24 Vdc max

Programmable Output Signals

2 analog outputs	0-10V (1mV) FS (30mA)
4 digital outputs	PNP open collector 24V (100mA)
1 watch dog relay	2A/30Vdc, 0.25A/250Vac, NO/NC contacts
2 insulated analog output (optional)	± 10V (1mV) FS (30mA)
2 insulated digital output (optional)	On.off switch, 9-28V/2A

Hardware Configuration

Processor speed: 80 MIPS μC + FPGA / 120 MIPS μC + FPGA Extreme Version (Optional)

Task frequency:

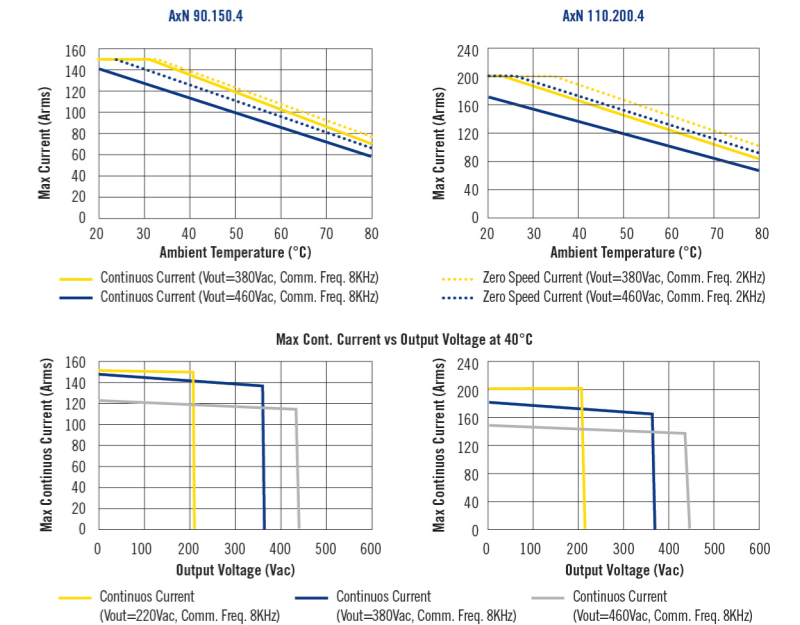
- » Current /drive monitoring: 1 MHz
- » Position/speed loop: 8 kHz
- » PLC fast task: 8 kHz
- » PLC slow task: 15.625 Hz to 1 kHz user-programmable

Position loop mode available

Target position register: 32 or 64 bits

Full digital control Id/Iq, updated 16 kHz

Drive Operational Area of AxN Size 5



Overall Dimensions

