

COMPAX Multi-Axis Specifications

Parameter	Value	
Performance	Resolver Accuracy Resolution	±10 arc min 2,048 or 4,096 post quadrature counts per rev
	Output Power	COMPAX200M COMPAX500M COMPAX1500M
Voltage		650VDC from power supply module; see module specs for additional info
Frequency Current		10 kHz 10 kHz 5 kHz
Continuous (max rms per phase)		6.5A 11.5A 25A
Peak (max rms per phase)		8.5A 17A 50A
Power Dissipation	120 W 250 W 250 W	
Power Supply Module	Voltage	NMD10 NMD20
	Input—AC Supply	100-460VAC 3 Phase +10%, -15%
	Input—Control	+24VDC ±10%, ripple <1V p-p; 1 amp max per drive, 1 amp max per brake
	Output	160-650VDC
	Frequency	50/60 Hz 50/60 Hz
	Power (max continuous)	10 kW 20 kW
	Power (peak <3 seconds)	20 kW 40 kW
	Fuses	
	Input—AC Supply	16 amp 35 amp
	Output	30 amp 50 amp
Protection	Short Circuit	Phase to phase, Phase to earth
	Brownout	Below 80VDC
	Overvoltage	700VDC (Power dump capability)
	Overtemperature	Motor 170°C (330°F); Drive 85°C (185°F)
	I ² t	Error generated if peak current >3 seconds
Safety Isolation	VDE0160	
Inputs	Programmable	(NPN type, sinking only) 24V nom. @ 10 mA high = 14-32V, low <7.5V
	Enable, Brake, Auto Offset, Mode Select, Limit	Internal clamp w/ zener diode @ 6.8V, fully optically isolated, sink or source
	±15V Reference	8 mA available
Outputs Digital	Encoder	5V line driver (RS485) output, TTL compatible, source 60 mA max, requires external +5VDC supply @ 100 mA User selectable 2,048 or 4,096 ppr
	Programmable: Fault, Error	PNP type, sourcing only, rated for 24V @ 100 mA fully optically isolated, short circuit protected
	Ready Contact Output	125V, 500 mA, 30W maximums
Outputs Analog	Velocity (X8, pin 10) (X8, pin 11)	Absolute: 8V = 6,000 rpm Normalized: +10V = max speed
	Motor Voltage (X8, pin 12)	0.7-10V = 70-1000VDC
	Current Monitor	1V = 1.2 A for COMPAX200M; 1V = 2.4 A for COMPAX500M; 1V = 7.0 A for COMPAX1500M
	Physical	Connections
Inputs/Outputs		16-pin screw terminal, removable
Resolver		15-pin D connector
Encoder Output		15-pin D connector
RS-232, RS-485		9-pin D connector
Motor and brake		7-pin screw terminal
AC supply		3-pin screw terminal
Control voltage		2-pin screw terminal
HEDA, Absolute encoder		9-pin D connector
Environment		Drive temperature ambient
	Maximum heat sink temp	85° C (185° F)
	Motor temperature ambient	0-40° C (32-104° F)
	Maximum motor case temp	125° C (257° F)
	Humidity	0-95% non-condensing
Storage	-30-85° C (-22-185° F)	
Tuning	Position Mode	Stiffness, damping, speed feedforward, accel feedforward, current feedforward
Diagnostics	LEDs	Ready and error LEDs 3 digit, 7 segment LED display will indicate 23 error conditions and 31 status messages

Drives & Drive/Controllers

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