TRIO MOTION TECHNOLOGY

A MEMBER OF THE ESTUN GROUP

TRIO MOTION TECHNOLOGY
DX4 SERVO PACKAGES

THE MOTION SPECIALIST

DX4
200V Servo Solutions

TRIO MOTION TECHNOLOGY

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The DX4 Servo drive and motor system... Everything you need, nothing more!

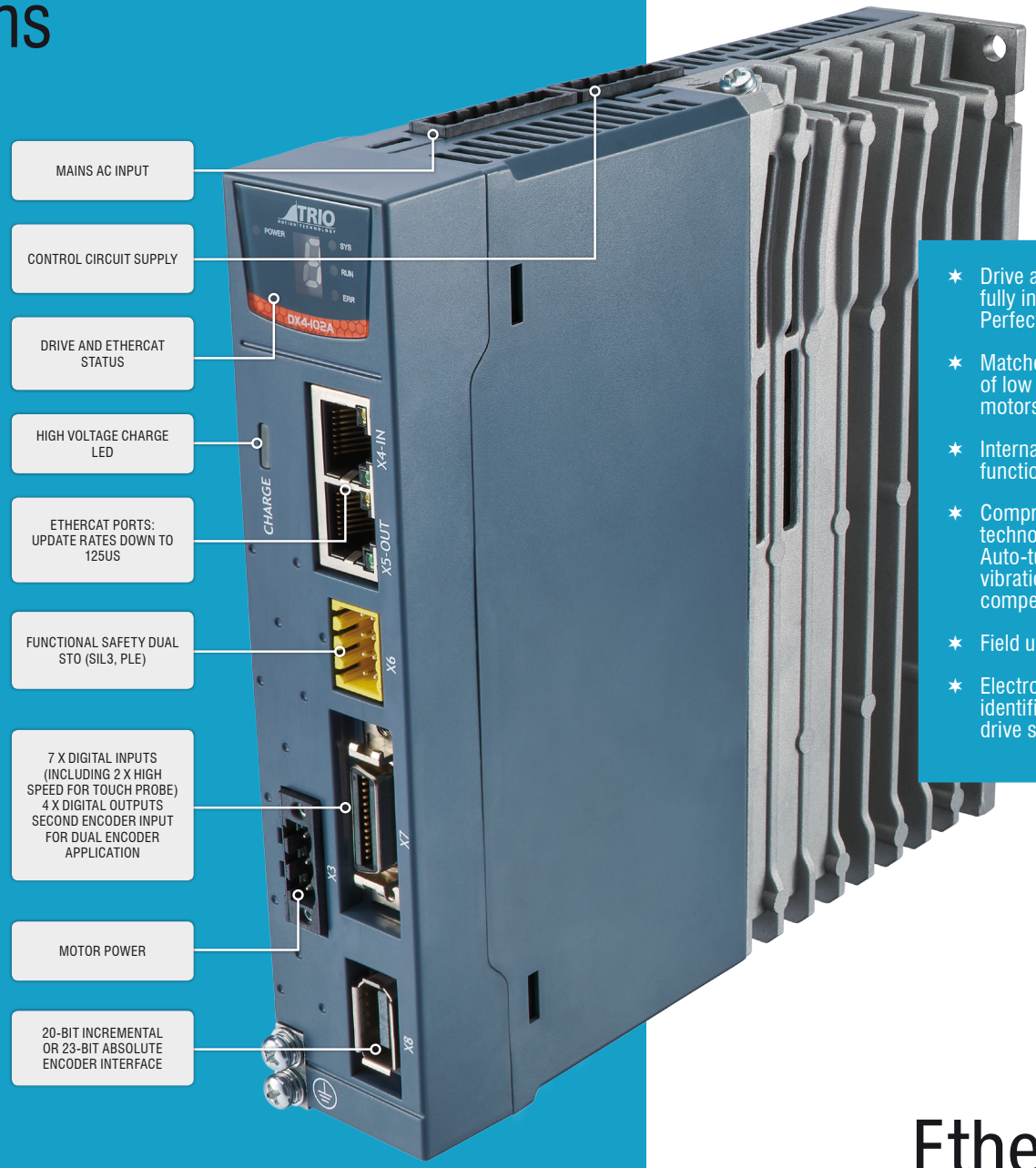
Introducing DX4, our all new servo drive and motor packages that provide performance and dependability. Optimised in every detail to do more with less and with features to deliver scalable servo-based solutions in demanding motion centric machine automation.

DX4 servo drives and matched motor packages provide performance and dependability machinery designers expect, and additionally are optimized in every detail to 'do more with less'. This philosophy is achieved by tightly integrated drive control and axis functions within the motion controller and seamless integration within the software tool *Motion* Perfect. By providing optimal functionality at drive level and system level expansion at controller level, DX4 provides an everything needed without added complexity. System level scalable servo-based solutions can be solved thanks to deterministic real-time performance of EtherCAT, adding hardware at network level as needed and combined with Trio motion expertise in demanding motion-centric machine automation.

Designed to work seamlessly with Trio's EtherCAT controllers, DX4 is fully integrated into Trio's application development tool, *Motion* Perfect, our single software environment for system planning, configuration virtualisation and machine programming.

Your system needs can easily be scaled within our Trio solution architecture, through our range of *Motion Coordinators* and high performance of EtherCAT distributed Flexslice I-O systems, adding function where it is needed, as it is needed, simplifying the drive system for optimal motion centric machine applications.

With a focus on ease of use, and electronic name plate function, the DX4 solution minimizes setup time allowing you to focus on your application.



- Drive and *Motion Coordinator* fully integrated into *Motion* Perfect
- Matched with MX motor range of low and medium inertia motors
- Internal drive protection functions
- Comprehensive tuning technology including: Auto-tuning function, adaptive vibration suppression, friction compensation
- Field upgradable firmware
- Electronic nameplate motor identification for simplified drive set-up

EtherCAT®

DX4
200V Servo Solutions

Frame sizes to suit all requirements

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50W - 400W
DX4-1A5A
DX4-101A
DX4-102A
DX4-104A

750W - 1.5kW
DX4-108A
DX4-110A
DX4-115A

2kW - 3kW
DX4-120A
DX4-130A

DX4 comes in power ratings from 50W to 3kW matched with the MX series motors it offers a high-dynamic performance, and high-precision with absolute 23-bit encoder and electronic nameplate to simplify configuration for machine solutions.

Preliminary specifications may change without notice

TRIO PRODUCTS
200V System Solutions

Motion Optimised Automation Package

EtherCAT *Motion Coordinator*

The *Motion Coordinator* system allows you to control up to 128 servo or stepper motors with Digital I/O and additional equipment such as HMI's all controlled from a single master. Our controllers can be coupled with the EtherCAT Flexslice range of fast flexible compact I/O expansion that can even be used with 3rd party masters.

DX4 200V Servo Drive Range

Drive and *Motion Coordinator* fully integrated into *Motion* Perfect .

Compact size.

Zero stacking gap installation.

200V ac from 50W up to 3kW.

350% overload capability.

Matched with MX motor range of low and medium inertia motors.

MXL Low and MXM Medium Inertia Motors

Low and medium inertia options to match the load.

23-bit absolute multi-turn (battery option required) offers tighter control and eliminates homing cycles.

Pre-made cables with in-line battery option (absolute encoder).

IP65 rated connectors.

Preliminary specifications may change without notice

Motion Perfect
200V Servo Solutions

Design, Develop, Test, Deploy and Secure

Motion Perfect 5 enhances the programming experience for the *Motion Coordinator* and DX4.

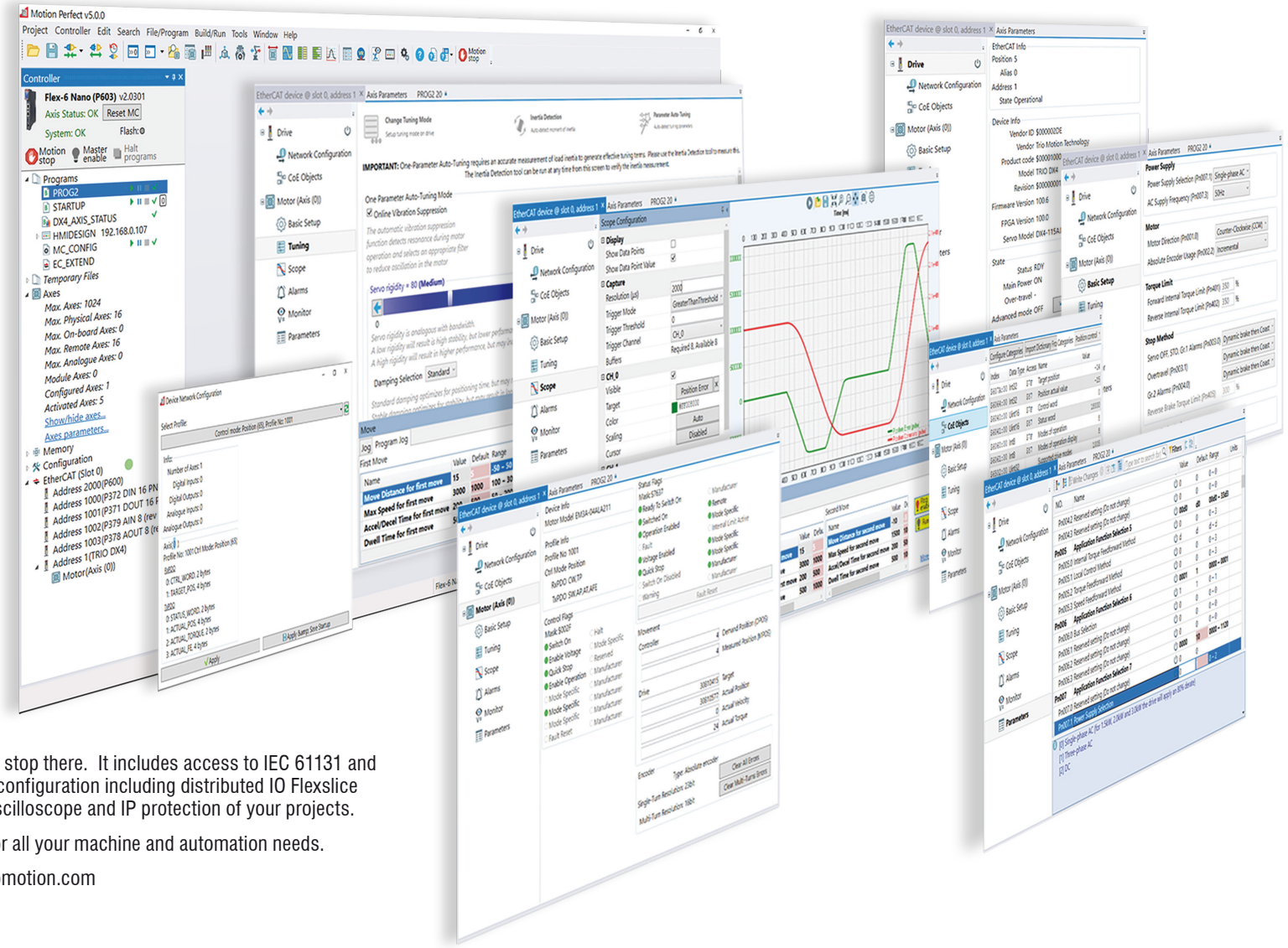
This new release has been improved to make setup, diagnostics and commissioning even more straight-forward. Built on Trio's **Motion-iX** core technology, it provides the user with a re-designed easy to understand interface for rapid application development, controller and drive configuration and monitoring of functions.

The commissioning of your drives is made simple with a series of Device Configuration Screens allowing access to status information and diagnostics at a glance. Network configuration is just as easy and includes a selection of pre-defined EtherCAT profiles or custom EtherCAT profiles can be designed using a checkbox interface.

The oscilloscope tool allows simulation and visualisation of up to 8 drive parameters.

All motor axes can be detected, setup, monitored and controlled in real-time from the easy to use dialogue windows.

Tuning is catered for using a choice of three modes: Tuningless, One Parameter Auto Tuning and Manual Tuning. Whichever mode is chosen, *Motion* Perfect adapts the Intelligent screen to allow full access to the tuning tools.



The integration of DX4 and *Motion* Perfect doesn't stop there. It includes access to IEC 61131 and PLCopen and our robotics solution; RPS, system configuration including distributed IO Flexslice systems, advanced visualisation including a 3D oscilloscope and IP protection of your projects.

All this and more makes *Motion* Perfect the tool for all your machine and automation needs.

Download and try *Motion* Perfect 5 FREE from triomotion.com

Preliminary specifications may change without notice

APPLICATION SOLUTIONS
200V Servo Solutions

Scalable System Solutions for Machinery OEMs

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Factory Automation

Communicate on all major Ethernet Technologies and Fieldbus level networks.

Automation Packages for Machine Control

Scalable Control Architectures.

Open Communications and Tools.

Safety.

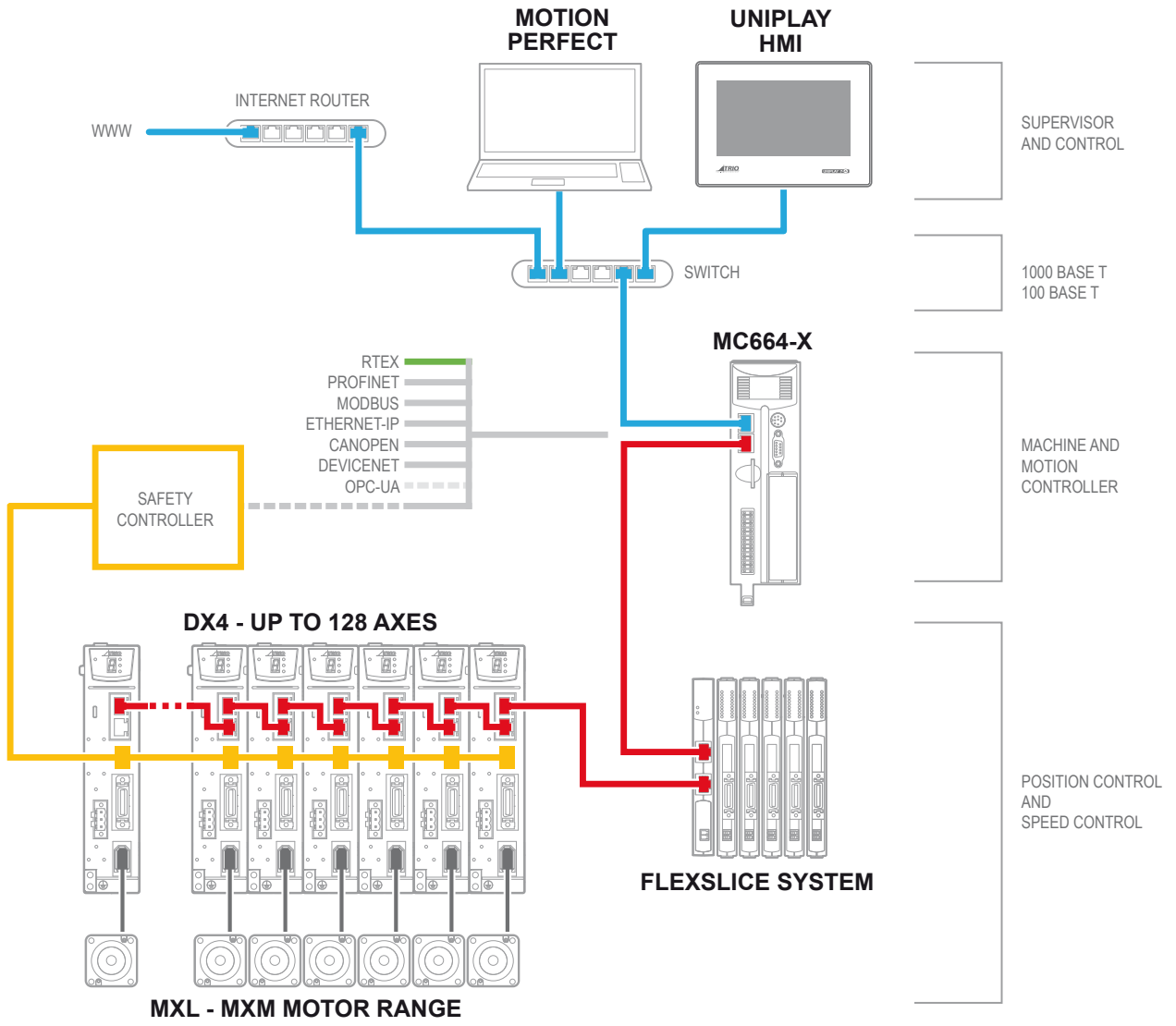
Motion Control Range

Motion Coordinator with scalable CPU performance.

Packaged Servo Offering.

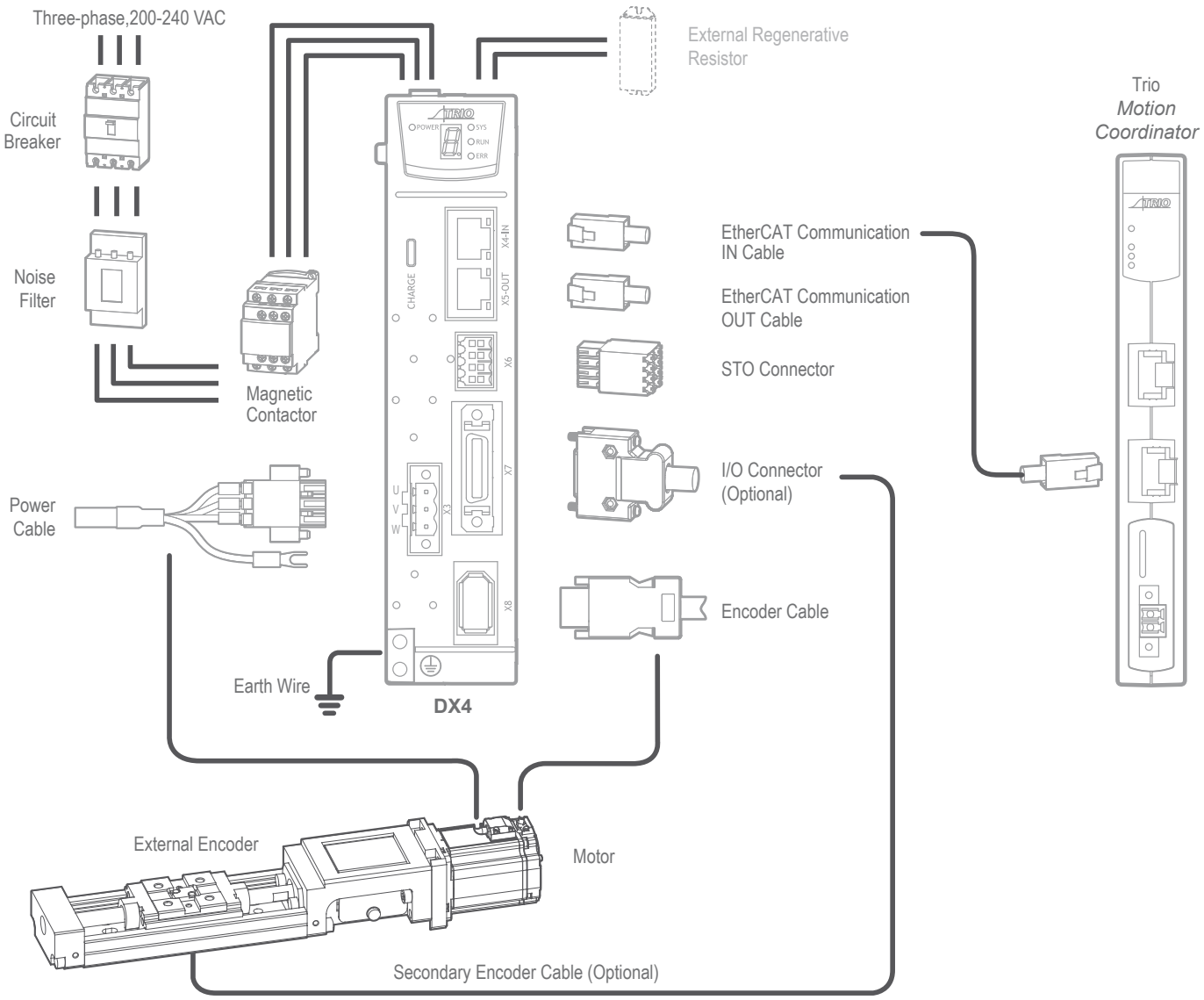
Modular Decentralised IO Systems:

Digital / Analogue IO, Stepper & Servo axes, Temperature Control and more.



Preliminary specifications may change without notice

DX4
Wiring Solution Example



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DX4
200V Servo Solutions

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Specification

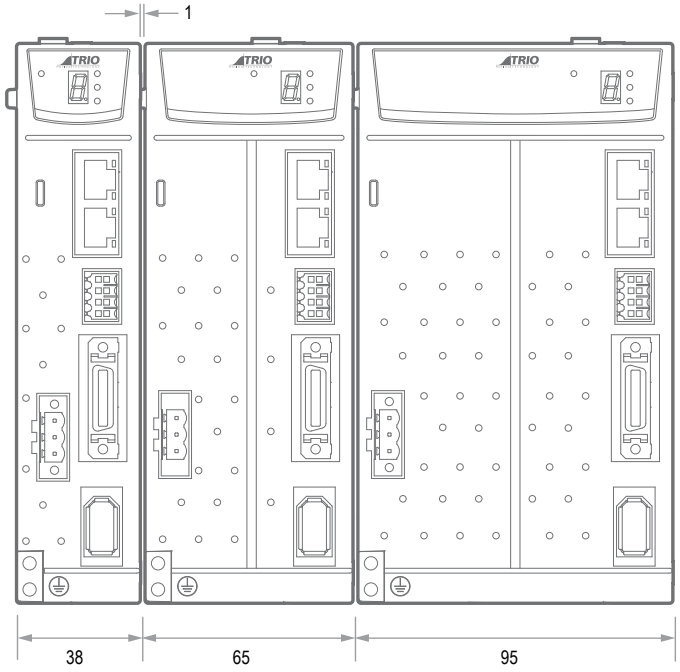
Drive Model: DX4-		1A5A	101A	102A	104A	108A	110A	115A	120A	130A
Continuous Output Current [Arms]		0.9	1.1	1.5	2.9	5.1	6.9	8.2	11.3	16
Instantaneous Max Output Current [Arms]		3.3	4	5.8	11.5	19.5	21	24.6	33.9	54
Power Supply Capacity [kVA]	Single-phase	0.2	0.3	0.6	1.2	1.9	2.6	4	-	-
	Three-phase	0.2	0.3	0.5	0.9	1.6	2	3	3.5	4.5
Power Supply	Main Circuit	Single-phase or Three-phase 200V ac to 240V ac. • -15% to +10%, 50Hz or 60Hz 270V dc to 324V dc. • -15% to +10% DX4-115* is de-rated to 1.2kW when used with a single-phase supply. DX4-120* and DX4-130* can only be used with a three-phase supply.								
	Control Circuit	Single-phase 200V ac to 240V ac • -15% to +10%, 50Hz or 60Hz 270V dc to 324V dc. • -15% to +10%								
Control Method		SVPWM								
Feedback		Serial encoder: • 20-bit single-turn incremental encoder. • 23-bit single-turn, 16-bit multi-turn absolute encoder.								
Environmental Conditions	Temperature	Ambient temperature: -5˚C to 55˚C (recommended max ambient temperature not below 40˚ for zero stacking installation).								
		Storage temperature: -20˚C to +85˚C								
	Humidity	Both operating and storage: 5% to 95% (with no condensation).								
	Protection Class	IP20								
	Altitude	1,000m or less								
	Vibration Resistance	4.9m/s2								
	Shock Resistance	19.6m/s2								
	Power System	TN System								
Mounting		Base-mounted								
Performance	Speed Control Range	1:5000								
	Coefficient of Speed Fluctuation	±0.01% of rated speed max. (For a load fluctuation of 0% to 100%)								
		0% of rated speed max. (For a rated Voltage fluctuation of ±10%)								
		±0.1% of rated speed max. (For a temperature fluctuation of 25°C ±25°C)								
I/O Signals	Second Encoder Input	Supports A, B, and Z TTL differential type sensor signal. Maximum line frequency of 500kHz.								
	Input Signals	Allowable voltage range: 24V dc ±20%								
		Number of input points: 7 (2 for high-speed optocoupler inputs, fixed as Touch Probe)								
		Touch Probe Signals: TP1 (Touch Probe 1), TP2 (Touch Probe 2).								
		All other inputs are general purpose but can be assigned specific functions during commissioning. These inputs can also be inverted so act as active-low.								
	Output Signals	Allowable Voltage range: 5V dc to 30V dc								
		Number of output points: 4								
		All outputs are general purpose but can be assigned specific functions during commissioning. These outputs can also be inverted so act as active-low.								

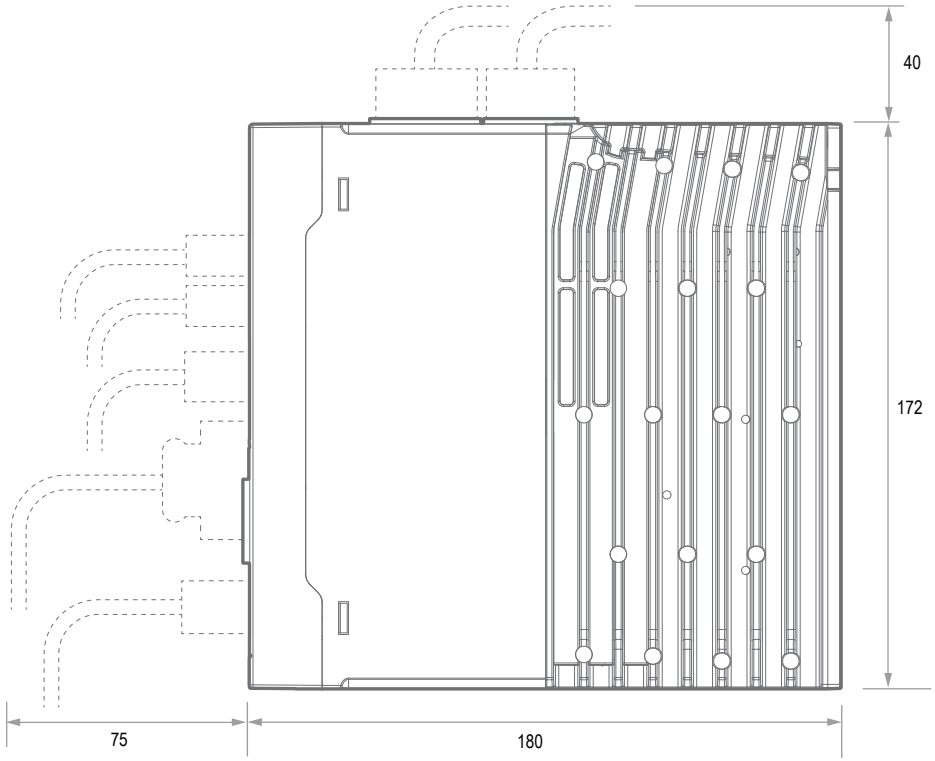
Drive Model: DX4-		1A5A	101A	102A	104A	108A	110A	115A	120A	130A
EtherCAT Communications	Applicable Communications Standards	IEC 61158 Type12, IEC 61800-7 CiA402 Drive Profile								
	Physical Layer	100BASE-TX (IEEE802.3)								
	Communications Connectors	X4-IN (RJ45): EtherCAT signal input connector X5-OUT (RJ45): EtherCAT signal output connector								
	Cable	Category 5, Shielded/Foiled Twisted Pairs (CAT5e SF/UTP)								
	Sync Manager	SM0: Mailbox output, SM1: Mailbox input, SM2: Process data output, and SM3: Process data input								
	FMMU	FMMU 0: Mapped in process data output (RxPDO) area. FMMU 1: Mapped in process data input (TxPDO) area. FMMU 2: Mapped to mailbox status.								
	EtherCAT Commands (Data Link Layer)	APRD, FPRD, BRD, LRD, APWR, FPWR, BWR, LWR, ARMW, FRMW (APRW, FPRW, BRW, and LRW commands are not supported.)								
	Process Data	Assignments can be changed with PDO mapping.								
	MailBox (CoE)	Emergency messages, SDO requests, SDO responses.								
	Distributed Clocks	Free-Run Mode and DC Mode (Can be switched). Applicable DC cycles: 125 µs to 8 ms								
	Slave Information Interface	256 bytes (read-only)								
CiA402 Drive Profile		Cyclic Synchronous Position Mode Cyclic Synchronous Velocity Mode Cyclic Synchronous Torque Mode Touch Probe Function Torque Limit Function								
Display		One 7-segment LED								
Indicator Lamps		CHARGE, POWER, RUN, SYS, ERR, L/A IN, L/A OUT								
Regenerative Processing		DX4-1A5*, DX4-101*, DX4-102* and DX4-104* must connect an external regenerative resistor. Other models are built in.								
Protective Functions		Overcurrent, Overvoltage, Undervoltage, Overload, Regeneration Error, Overspeed, etc.								
Utility Functions		Alarm history, Jogging, Load inertia identification, Auto-Tuning, etc.								
Safe Torque Off		According to IEC 61800-5-2. Cat.4, PLe according to ISO 13849-1, SIL3 according to IEC 61508, IEC 62061.								

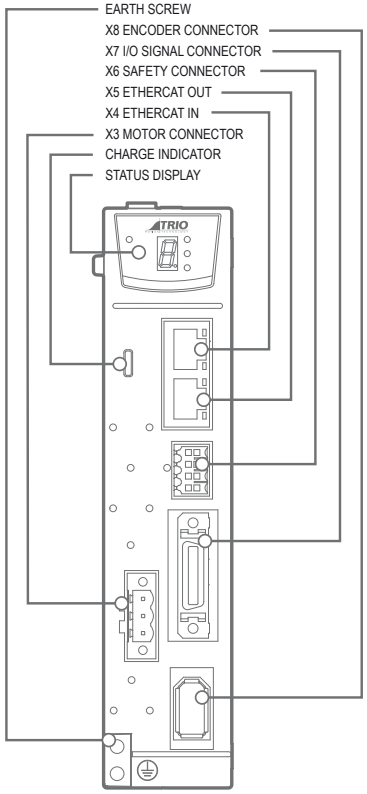
Preliminary specifications may change without notice

DX4
200V Servo Solutions

Dimensions







DX4-1A5A
DX4-101A
DX4-102A
DX4-104A

DX4-108A
DX4-110A
DX4-115A

DX4-120A
DX4-130A

Product	Output Power	Height (mm)	Width (mm)	Depth (mm)
DX4-1A5A	50W	172	38	180
DX4-101A	100W	172	38	180
DX4-102A	200W	172	38	180
DX4-104A	400W	172	38	180
DX4-108A	750W	172	65	180
DX4-110A	1kW	172	65	180
DX4-115A	1.5kW	172	65	180
DX4-120A	2kW	172	95	180
DX4-130A	3kW	172	95	180
All Models : Voltage = 200V ac				

Preliminary specifications may change without notice

MXL Motors

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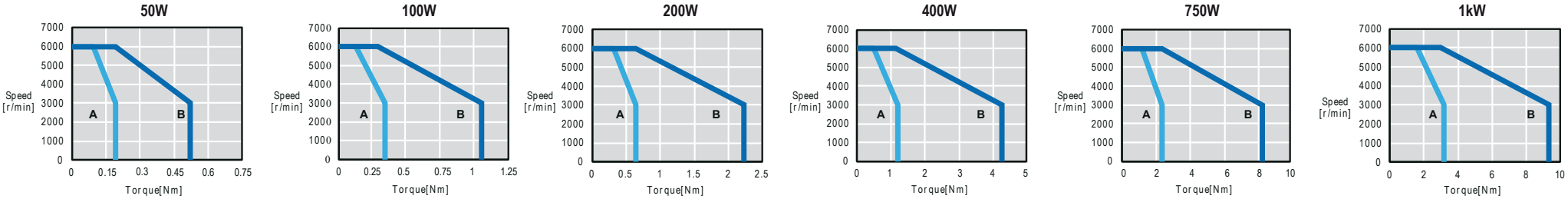
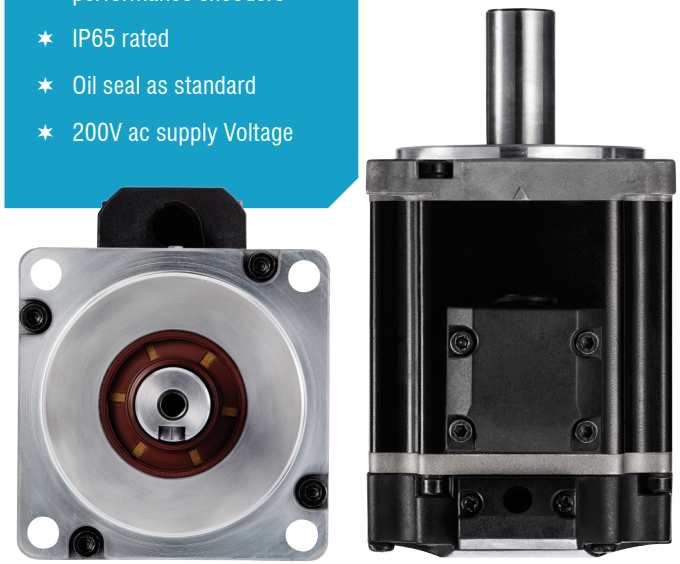
Low Inertia High Speed (MXL) Servo Motors



A: Continuous Working Area B: Repeatedly Working Area

AT A GLANCE

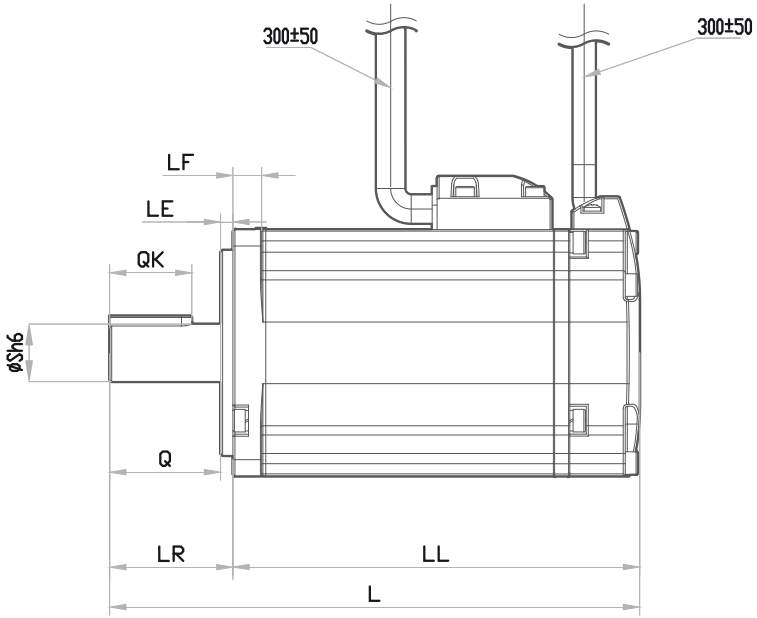
- Choose motor to match the load and dynamics, inertia, brake / no brake
- 23-bit Absolute high performance encoders
- IP65 rated
- Oil seal as standard
- 200V ac supply Voltage

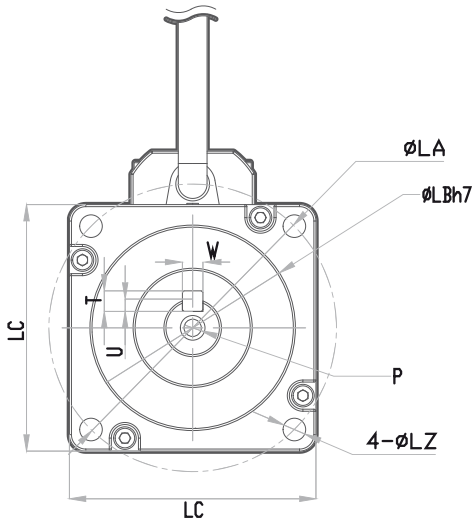


Servo Motor Detail		50W	100W	200W	400W	750W	1kW
Rated Output	kW	0.05	0.1	0.2	0.4	0.75	1
Rated Torque	N·m	0.159	0.318	0.63	1.27	2.39	3.18
Instantaneous Peak Torque	N·m	0.557	1.11	2.21	4.45	8.37	9.55
Rated Current	Arms	0.9	1.1	1.5	2.9	5.1	6.9
Instantaneous Max current	Arms	3.3	4.0	5.8	11.5	19.5	21.0
Rated Speed	r/min	3000					
Max. Speed	r/min	6000					
Rotor Moment of Interia	$\times 10^{-4}$kg·m²	0.023 (0.0268)	0.0428 (0.0465)	0.147 (0.179)	0.244 (0.276)	0.909 (1.07)	1.14 (1.30)
Weight	kg	0.368 (0.588)	0.491 (0.696)	0.9 (1.3)	1.3 (1.7)	2.6 (3.2)	3.1 (3.8)
Brake Rated Voltage		DC24V±10%					
Brake Rated Power	W	4.0		7.4		9.6	
Brake Rated Torque	Nm	0.32		1.5		3.2	
Encoder		20-bit Incremental Encoder 1048576 P/R; 23-bit Absolute Encoder 8388608P/R					
Insulation Class		F					
Ambient Temperature		0 ~ +40°C (No freezing)					
Ambient Humidity		20%~80% RH (No condensing)					
Vibration		Vibration: Dynamic ≤49m/s² 5G; Static ≤24.5m/s²; Shock:≤98m/s²(10G)					
Enclosure		Totally Enclosed, Self-cooled, IP65					

Note:The data inside parenthesis represents the values with brake.

MXL
Motors





The MXL family of servo motors include solutions with absolute or incremental encoders, are suitable for application speeds up to 6000 rpm, include variants with an integrated brake.

Low inertia allows very fast response times and these motors develop a very high torque despite their small size. In combination with our servo drives, they are ideal for applications with high dynamic responses and fast and precise positioning.

POWER	MXL-	L	LL	Flange Side							S	Threaded hole x Depth	Key				
				LR	LE	LF	LC	LA	LB	LZ			QK	W	T	U	Q
50W	A5A0430L	87.5 (121)	62.5 (96)	25	2.5	5	40	46	30	4.3	8	M3X6	14	3	3	1.8	22.5
100W	01A0430L	103.5 (137)	78.5 (112)	25	2.5	5	40	46	30	4.3	8	M3X6	14	3	3	1.8	22.5
200W	02A0630L	108 (137)	78 (107)	30	3	7	60	70	50	5.5	14	M5X12	20	5	5	3	27
400W	04A0630L	129 (158)	99 (128)	30	3	7	60	70	50	5.5	14	M5X12	20	5	5	3	27
750W	08A0830L	141 (184)	111 (144)	40	3	8	80	90	70	6.6	19	M6X12	25	6	6	3.5	37
1kW	10A0830L	155 (198)	125 (158)	40	3	8	80	90	70	6.6	19	M6X12	25	6	6	3.5	37
200W	02A0630F	126.5 (155.5)	96.5 (125.5)	30	3	7	60	70	50	5.5	14	M5X12	20	5	5	3	27
400W	04A0630F	147.5 (176.5)	117.5 (146.5)	30	3	7	60	70	50	5.5	14	M5X12	20	5	5	3	27
750W	08A0830F	169.5 (202.5)	129.5 (162.5)	40	3	8	80	90	70	6.6	19	M6X12	25	6	6	3.5	37
1kW	10A0830F	183.5 (216.5)	143.5 (176.5)	40	3	8	80	90	70	6.6	19	M6X12	25	6	6	3.5	37

Note: Numbers inside parentheses represents the values with brake.

MXL -

Rated Power	
A5	50W
01	100W
02	200W
04	400W
08	750W
10	1kW

Suppy Voltage	
A	200VAC

Flange	
04	40mm
06	60mm
08	80mm

Rated Speed	
30	3000 RPM

Encoder	
F	20-bit inc
L	23-bit abs

Revision	
A	-

Shaft End	
2	With key

Option Parts	
2	With oil seal
4	With oil seal With brake

Connector Type	
2	Water proof

Preliminary specifications may change without notice

MXM Motors

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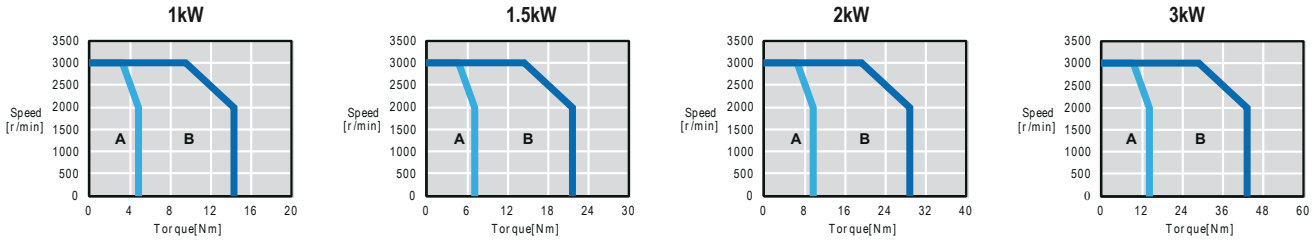
Medium Inertia Medium Speed (MXM) Servo Motors

The MXM family of servo motors include solutions with absolute or incremental encoders, are suitable for application speeds up to 3000 rpm, include variants with an integrated brake.

Medium inertia allows fast response times and these motors develop a very high torque despite their small size. In combination with our servo drives, they are ideal for applications with high dynamic responses and fast and precise positioning.



A: Continuous Working Area B: Repeatedly Working Area

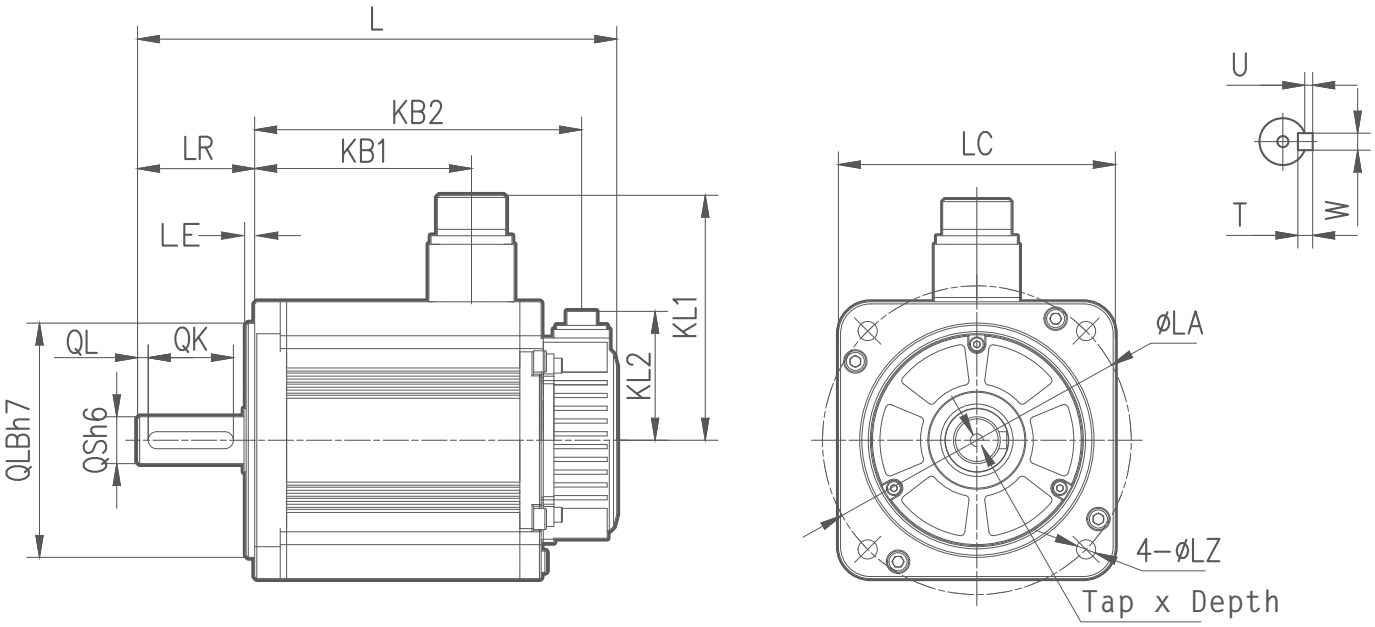
AT A GLANCE

- Choose motor to match the load and dynamics, inertia, brake / no brake
- 20-bit Incremental or 23-bit Absolute high performance encoders
- IP65 rated
- Oil seal as standard
- 200V ac supply Voltage

Servo Motor Detail		1kW	1.5kW	2kW	3kW
Rated Output	kW	1.0	1.5	2.0	3.0
Rated Torque	N·m	4.78	7.16	9.55	14.3
Instantaneous Peak Torque	N·m	14.3	21.5	28.7	40
Rated Current	Arms	5.8	8.2	11.3	18.0
Instantaneous Max current	Arms	17.4	24.6	33.9	54.0
Rated Speed	r/min	2000			
Max. Speed	r/min	3000			
Rotor Moment of Interia	$\times 10^{-4}$kg·m²	13.2 (14.3)	18.4 (19.5)	23.5 (24.6)	41.3 (44.5)
Weight	kg	7 (8.5)	8.9 (10.4)	10.8 (12.3)	16.63 (20.23)
Brake Rated Voltage		DC24V±10%			
Brake Rated Power	W	19.5			35
Brake Rated Torque	N·m	12			40
Encoder		20-bit Incremental Encoder 1048576 P/R; 23-bit Absolute Encoder 8388608P/R			
Insulation Class		F			
Ambient Temperature		0 ~ +40°C (No freezing)			
Ambient Humidity		20%~80% RH (No condensing)			
Vibration		24.5m/s²			
Enclosure		Self-cooled,IP65 (excluding Connecting Joint With Cable)			

Note:The data inside parenthesis represents the values with brake.

MXM
Motors



POWER	MXM-	L	LL	KB1	KB2	KL1	KL2	Flange Side							S	Threaded hole x Depth	Key				
								LR	LE	LF	LC	LA	LB	LZ			QK	QL	W	T	U
1KW	10A1320F	203 (245.5)	148 (190.5)	80 (103.2)	131.5 (174)	117	60.5	55	4	12	130	145	110	9	22	M6×20	40	5	8	7	4
1.5KW	15A1320	225 (267.5)	170 (212.5)	102 (125.2)	153.5 (196)																
2KW	20A1320	247 (289.5)	192 (234.5)	124 (147.2)	175.5 (218)																
3KW	30A1820	307 (378)	228 (299)	143	203 (274)	140	79	79	3.2	18	180	200	114.3	13.5	35	M8×16	55	6	10	8	5

Note: Numbers inside parentheses represents the values with brake.

MXM -

Rated Power	
10	1kW
15	1.5kW
20	2kW
30	3kW

Suppy Voltage	
A	200VAC

Flange	
13	130mm
18	180mm

Rated Speed	
20	2000 RPM

Encoder	
F	20-bit inc
L	23-bit abs

Revision	
A	-
B	-
D	-

Shaft End	
2	With key

Option Parts	
2	With oil seal
4	With oil seal With brake

Connector Type	
3	On motor

Preliminary specifications may change without notice

CABLES
Encoder Cables

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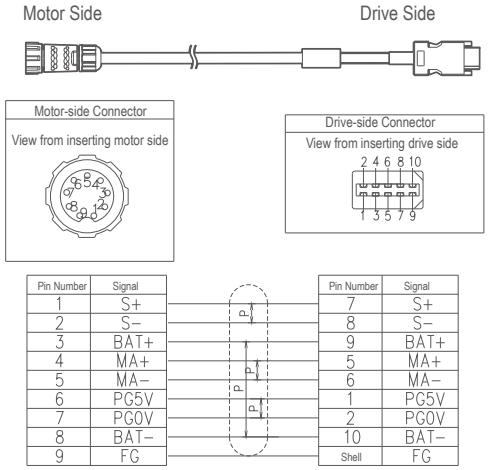
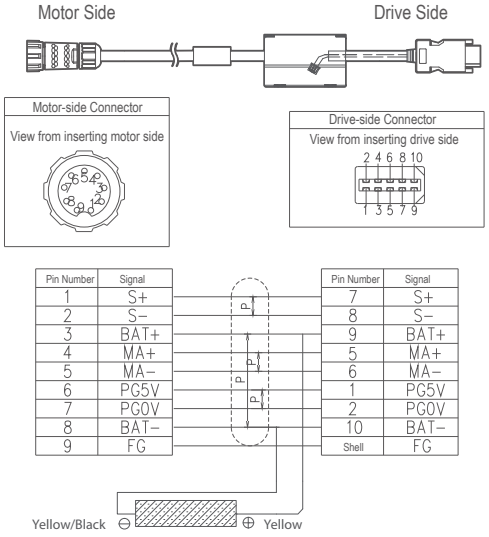
MXL Motors (50W - 1kW)

EC3S-I1724-XX (Inc Encoder)



Pin Number	Signal	Pin Number	Signal
1	S+	7	S+
2	S−	8	S−
3	BAT+	9	BAT+
4	MA+	5	MA+
5	MA−	6	MA−
6	PG5V	1	PG5V
7	PG0V	2	PG0V
8	BAT−	10	BAT−
9	FG	Shell	FG

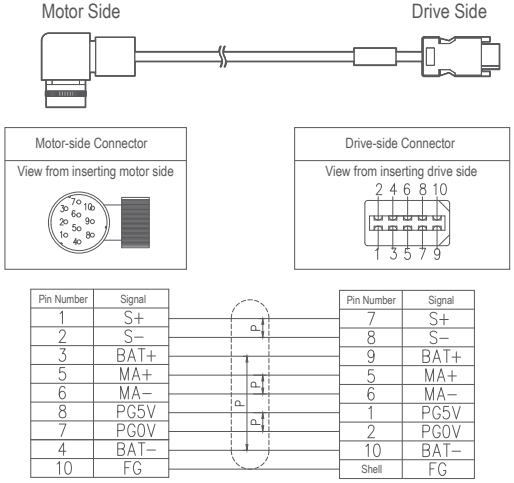
EC3S-A1724-XX (Abs Encoder)



Pin Number	Signal	Pin Number	Signal
1	S+	7	S+
2	S−	8	S−
3	BAT+	9	BAT+
4	MA+	5	MA+
5	MA−	6	MA−
6	PG5V	1	PG5V
7	PG0V	2	PG0V
8	BAT−	10	BAT−
9	FG	Shell	FG

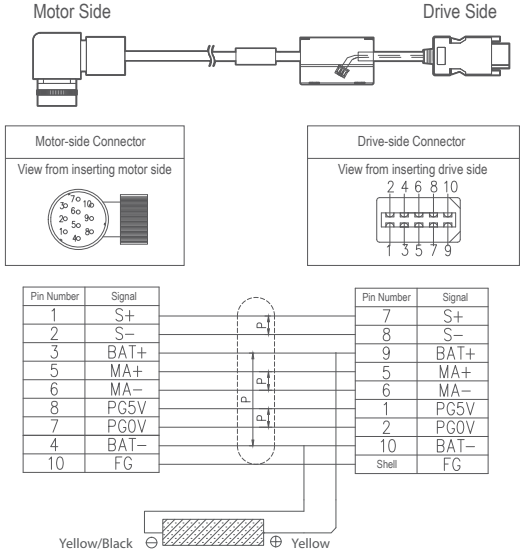
MXM Motors (1kW - 2kW)

EC3S-I1324-XX (Inc Encoder)



Pin Number	Signal	Pin Number	Signal
1	S+	7	S+
2	S−	8	S−
3	BAT+	9	BAT+
5	MA+	5	MA+
6	MA−	6	MA−
8	PG5V	1	PG5V
7	PG0V	2	PG0V
4	BAT−	10	BAT−
10	FG	Shell	FG

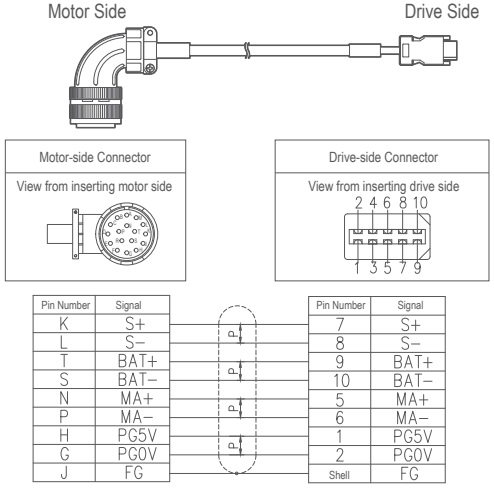
EC3S-A1324-XX (Abs Encoder)



Pin Number	Signal	Pin Number	Signal
1	S+	7	S+
2	S−	8	S−
3	BAT+	9	BAT+
5	MA+	5	MA+
6	MA−	6	MA−
8	PG5V	1	PG5V
7	PG0V	2	PG0V
4	BAT−	10	BAT−
10	FG	Shell	FG

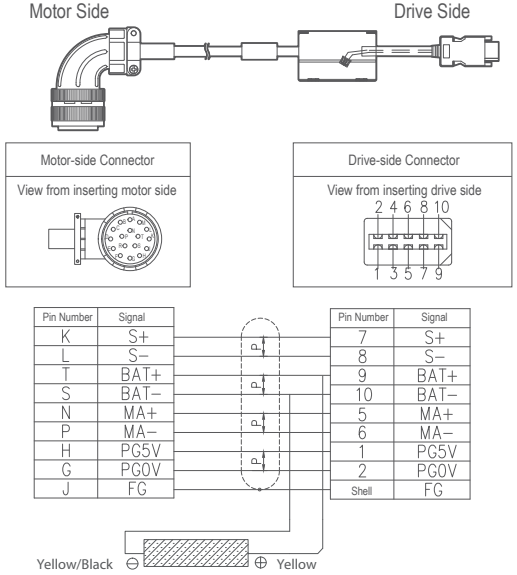
MXM Motors (3kW)

EC3S-I1424-XX (Inc Encoder)



Pin Number	Signal	Pin Number	Signal
K	S+	7	S+
L	S−	8	S−
T	BAT+	9	BAT+
S	BAT−	10	BAT−
N	MA+	5	MA+
P	MA−	6	MA−
H	PG5V	1	PG5V
G	PG0V	2	PG0V
J	FG	Shell	FG

EC3S-A1424-XX (Abs Encoder)



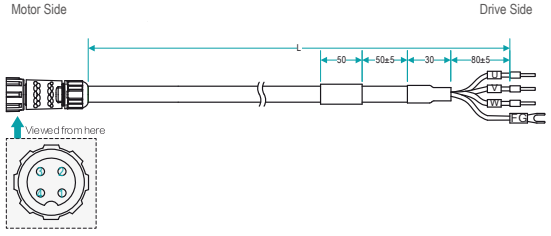
Pin Number	Signal	Pin Number	Signal
K	S+	7	S+
L	S−	8	S−
T	BAT+	9	BAT+
S	BAT−	10	BAT−
N	MA+	5	MA+
P	MA−	6	MA−
H	PG5V	1	PG5V
G	PG0V	2	PG0V
J	FG	Shell	FG

Preliminary specifications may change without notice

CABLES
Power Cables

MXL Motors (50W - 1kW)

EC3P-N8718-XX (No Brake)

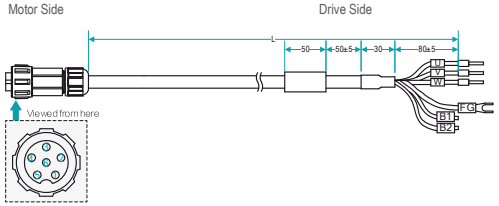


Pin	Name	Color
1	U	Brown
2	V	Gray
3	W	Black
4	FG	Yellow / Green

Recommended wire diameter: 1mm²

Pin	Name	Color
1	U	Brown
2	V	Gray
3	W	Black
4	FG	Yellow / Green

EC3P-B8718-XX (Brake)



Pin	Name	Color
1	U	Brown
2	V	Gray
3	W	Black
4	FG	Yellow / Green
5	B1	White
6	B2	Green

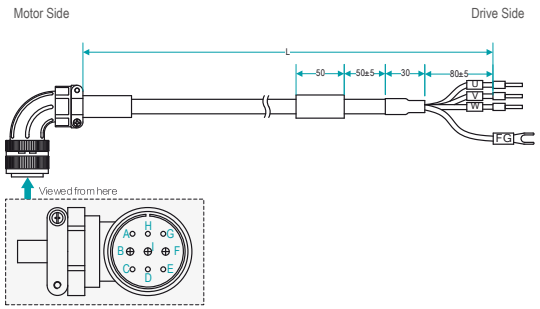
Recommended wire diameter: 1mm²

Recommended wire diameter: 0.5mm²

Pin	Name	Color
1	U	Brown
2	V	Gray
3	W	Black
4	FG	Yellow / Green
5	B1	White
6	B2	Green

MXM Motors (1kW - 2kW)

EC3P-N9314-XX (No Brake)



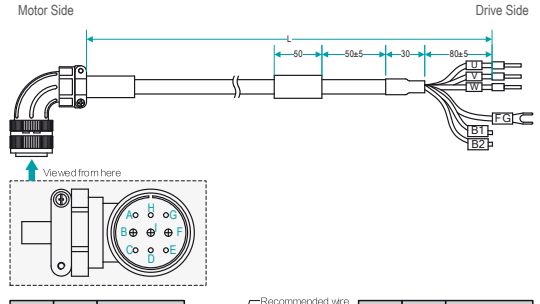
Pin	Name	Color
B	U	Brown
I	V	Gray
F	W	Black
C	FG	Yellow / Green
D	FG	

Recommended wire diameter: 2mm²

Short circuit: BVR 1.5mm²

Pin	Name	Color
1	U	Brown
2	V	Gray
3	W	Black
Crimping terminal	FG	Yellow / Green

EC3P-B9314-XX (Brake)



Pin	Name	Color
B	U	Brown
I	V	Gray
F	W	Black
C	FG	Yellow / Green
D	FG	
G	B1	White
H	B2	Green

Recommended wire diameter: 2mm²

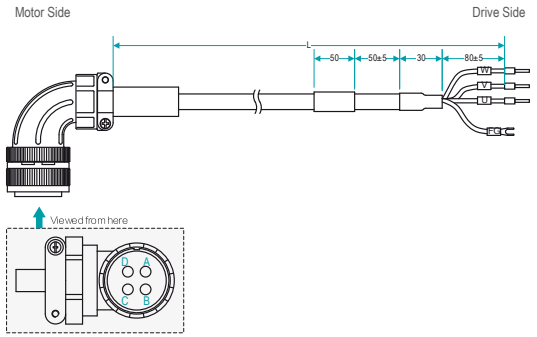
Short circuit: BVR 1.5mm²

Recommended wire diameter: 0.5mm²

Pin	Name	Color
1	U	Brown
2	V	Gray
3	W	Black
Crimping terminal	FG	Yellow / Green
	B1	White
	B2	Green

MXM Motors (3kW)

EC3P-N9413-XX (No Brake)



Pin	Name	Color
A	U	Brown
B	V	Gray
C	W	Black
D	FG	Yellow / Green

Recommended wire diameter: 2.5mm²

Pin	Name	Color
1	U	Brown
2	V	Gray
3	W	Black
Crimping terminal	FG	Yellow / Green

Power Cable With Brake

Brake cable for the 3kW MXM motor is separate to the motor power cable, the brake cable connector is available as part number **MC10-SP2S-S**.

Preliminary specifications may change without notice

Selection Table
200V Servo Solutions

TRIO MOTION TECHNOLOGY
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Cable Part Numbers - MXL Motors

Description	Drive		Motor		Encoder Cable		Motor Cable	
	Part No	Model	Part No	Model	Part No	Model	Part No	Model
50W, No Brake, Abs Encoder, High Speed, Low Inertia	D0108	DX4-1A5AJA	M0758	MXL-A5A0430LA222	X0400-X0404 (inc) X0405-X0409 (abs)	EC3S-I1724-RX-xx (inc) EC3S-A1724-RX-xx (abs)	X0500-X0504	EC3P-N8718-RX-xx
50W, With Brake, Abs Encoder, High Speed, Low Inertia			M0759	MXL-A5A0430LA242			X0505-X0509	EC3P-B8718-RX-xx
100W, No Brake, Abs Encoder, High Speed, Low Inertia	D0107	DX4-101AJA	M0756	MXL-01A0430LA222	X0400-X0404 (inc) X0405-X0409 (abs)	EC3S-I1724-RX-xx (inc) EC3S-A1724-RX-xx (abs)	X0500-X0504	EC3P-N8718-RX-xx
100W, With Brake, Abs Encoder, High Speed, Low Inertia			M0757	MXL-01A0430LA242			X0505-X0509	EC3P-B8718-RX-xx
200W, No Brake, Inc Encoder, High Speed, Low Inertia	D0106	DX4-102AJA	M0652	MXL-02A0630FA222	X0400-X0404	EC3S-I1724-RX-xx	X0500-X0504	EC3P-N8718-RX-xx
200W, With Brake, Inc Encoder, High Speed, Low Inertia			M0653	MXL-02A0630FA242			X0505-X0509	EC3P-B8718-RX-xx
200W, No Brake, Abs Encoder, High Speed, Low Inertia			M0654	MXL-02A0630LA222	X0405-X0409	EC3S-A1724-RX-xx	X0500-X0504	EC3P-N8718-RX-xx
200W, With Brake, Abs Encoder, High Speed, Low Inertia			M0655	MXL-02A0630LA242			X0505-X0509	EC3P-B8718-RX-xx
400W, No Brake, Inc Encoder, High Speed, Low Inertia	D0105	DX4-104AJA	M0644	MXL-04A0630FA222	X0400-X0404	EC3S-I1724-RX-xx	X0500-X0504	EC3P-N8718-RX-xx
400W, With Brake, Inc Encoder, High Speed, Low Inertia			M0645	MXL-04A0630FA242			X0505-X0509	EC3P-B8718-RX-xx
400W, No Brake, Abs Encoder, High Speed, Low Inertia			M0646	MXL-04A0630LA222	X0405-X0409	EC3S-A1724-RX-xx	X0500-X0504	EC3P-N8718-RX-xx
400W, With Brake, Abs Encoder, High Speed, Low Inertia			M0647	MXL-04A0630LA242			X0505-X0509	EC3P-B8718-RX-xx
750W, No Brake, Inc Encoder, High Speed, Low Inertia	D0104	DX4-108AJA	M0636	MXL-08A0830FA222	X0400-X0404	EC3S-I1724-RX-xx	X0500-X0504	EC3P-N8718-RX-xx
750W, With Brake, Inc Encoder, High Speed, Low Inertia			M0637	MXL-08A0830FA242			X0505-X0509	EC3P-B8718-RX-xx
750W, No Brake, Abs Encoder, High Speed, Low Inertia			M0638	MXL-08A0830LA222	X0405-X0409	EC3S-A1724-RX-xx	X0500-X0504	EC3P-N8718-RX-xx
750W, With Brake, Abs Encoder, High Speed, Low Inertia			M0639	MXL-08A0830LA242			X0505-X0509	EC3P-B8718-RX-xx
1000W, No Brake, Inc Encoder, High Speed, Low Inertia	D0103	DX4-110AJA	M0628	MXL-10A0830FA222	X0400-X0404	EC3S-I1724-RX-xx	X0500-X0504	EC3P-N8718-RX-xx
1000W, With Brake, Inc Encoder, High Speed, Low Inertia			M0629	MXL-10A0830FA242			X0505-X0509	EC3P-B8718-RX-xx
1000W, No Brake, Abs Encoder, High Speed, Low Inertia			M0630	MXL-10A0830LA222	X0405-X0409	EC3S-A1724-RX-xx	X0500-X0504	EC3P-N8718-RX-xx
1000W, With Brake, Abs Encoder, High Speed, Low Inertia			M0631	MXL-10A0830LA242			X0505-X0509	EC3P-B8718-RX-xx
						RX:shielded, flexible		RX:unshielded, flexible

Selection Table
200V Servo Solutions

TRIO MOTION TECHNOLOGY
A MEMBER OF THE ESTUN GROUP

Cable Part Numbers - MXM Motors

Description	Drive		Motor		Encoder Cable		Motor Cable	
	Part No	Model	Part No	Model	Part No	Model	Part No	Model
1000W, No Brake, Inc Encoder, Medium Speed, Medium Inertia	D0103	DX4-110AJA	M0620	MXM-10A1320FD223	X0410-X0414	EC3S-I1324-RX-xx	X0510-X0514	EC3P-N9314-RX-xx
1000W, With Brake, Inc Encoder, Medium Speed, Medium Inertia			M0621	MXM-10A1320FD243			X0515-X0519	EC3P-B9314-RX-xx
1000W, No Brake, Abs Encoder, Medium Speed, Medium Inertia			M0622	MXM-10A1320LB223	X0415-X0419	EC3S-A1324-RX-xx	X0510-X0514	EC3P-N9314-RX-xx
1000W, With Brake, Abs Encoder, Medium Speed, Medium Inertia			M0623	MXM-10A1320LB243			X0515-X0519	EC3P-B9314-RX-xx
1500W, No Brake, Inc Encoder, Medium Speed, Medium Inertia	D0102	DX4-115AJA	M0612	MXM-15A1320FD223	X0410-X0414	EC3S-I1324-RX-xx	X0500-X0504	EC3P-N9314-RX-xx
1500W, With Brake, Inc Encoder, Medium Speed, Medium Inertia			M0613	MXM-15A1320FD243			X0505-X0509	EC3P-B9314-RX-xx
1500W, No Brake, Abs Encoder, Medium Speed, Medium Inertia			M0614	MXM-15A1320LB223	X0415-X0419	EC3S-A1324-RX-xx	X0500-X0504	EC3P-N9314-RX-xx
1500W, With Brake, Abs Encoder, Medium Speed, Medium Inertia			M0615	MXM-15A1320LB243			X0505-X0509	EC3P-B9314-RX-xx
2000W, No Brake, Inc Encoder, Medium Speed, Medium Inertia	D0101	DX4-120AJA	M0604	MXM-20A1320FD223	X0410-X0414	EC3S-I1324-RX-xx	X0500-X0504	EC3P-N9314-RX-xx
2000W, With Brake, Inc Encoder, Medium Speed, Medium Inertia			M0605	MXM-20A1320FD243			X0505-X0509	EC3P-B9314-RX-xx
2000W, No Brake, Abs Encoder, Medium Speed, Medium Inertia			M0606	MXM-20A1320LB223	X0415-X0419	EC3S-A1324-RX-xx	X0500-X0504	EC3P-N9314-RX-xx
2000W, With Brake, Abs Encoder, Medium Speed, Medium Inertia			M0607	MXM-20A1320LB243			X0505-X0509	EC3P-B9314-RX-xx
3000W, No Brake, Inc Encoder, Medium Speed, Medium Inertia	D0100	DX4-130AJA	M0600	MXM-30A1820FD223	X0420-X0424	EC3S-I1424-RX-xx	X0530-X0534	EC3P-N9413-RX-xx
3000W, With Brake, Inc Encoder, Medium Speed, Medium Inertia			M0601	MXM-30A1820FD243			X0530-X0534 X0707	EC3P-N9413-RX-xx MC10-SP2S-S
3000W, No Brake, Abs Encoder, Medium Speed, Medium Inertia			M0602	MXM-30A1820LA223	X0425-X0429	EC3S-A1424-RX-xx	X0530-X0534	EC3P-N9413-RX-xx
3000W, With Brake, Abs Encoder, Medium Speed, Medium Inertia			M0603	MXM-30A1820LA243			X0530-X0534 X0707	EC3P-N9413-RX-xx MC10-SP2S-S
						RX:shielded, flexible		RX:unshielded, flexible

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TRIO MOTION TECHNOLOGY

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