# SIGMALOGIC7

# PERFORMANCE MATTERS



# SIGMALOGIC7 SERVO AMPLIFIERS



SigmaLogic7 Compact makes it possible to add the superior performance and unmatched reliability of a Yaskawa servo system to your machine, without leaving the familiar environment of an existing programmable logic controller.

Utilize Yaskawa-written, Yaskawa-tested AOI (Add On Instructions) in RSLogix5000 software, with a ControlLogix or CompactLogix PLC. No other Yaskawa programming software is required.

We've done the heavy lifting to make Integration of Yaskawa servo, robotic, and variable frequency drive components simple and effortless for your PLC programming environment.

### PLC SOLUTIONS FOR ROBOTS AND VFDS

#### Robotics

Yaskawa's versatile MLX Unified Controls™ software option:

- Enables robot programming in a standard PLC environment
- Provides control without a separate piece of hardware

#### **Variable Frequency Drives**

- Tag Generator: Easily create a tag file that can be imported into Logix Designer/RSLogix 5000
- Faceplates: Import faceplates to access commonly used parameters and monitors
- AOI: Import our library of AOI using Yaskawa EtherNet/IP option



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# MOTION SEQUENCING WITH ADD ON INSTRUCTIONS (AOI)

Utilize Yaskawa-written, Yaskawa-tested AOIs in RSLogix5000 software, with a ControlLogix or CompactLogix PLC.

- Perform functions including point-to-point and blended moves, jogging and homing
- Use direct commands or 200-point configurable sequence table
- Utilize extra 7 inputs and 3 outputs on SigmaLogic7 SERVOPACK
- Use LogicWorks software to download sequence and configuration data

# ADD-ON INSTRUCTIONS

- Yaskawa AOIs were created for full compatibility with all CompactLogix and ControlLogix PLCs using RSLogix5000 software v17 and above
- AOIs are named to be familiar to Rockwell users
- Right-click instruction help is available for all instructions when in the PLC programming environment
- Sample program available in RSLogix5000

AOI Names	AOI Descriptions	Home Types	Move Types
MCFG_Yaskawa	Motion Axis Configuration	Set Position Directly	Absolute Move
MSO_Yaskawa	Motion Axis Servo On	Home in (+) Direction to Hard Stop	Absolute Move with Registration
MSF_Yaskawa	Motion Axis Servo Off		
MAS_Yaskawa	Motion Axis Stop	Home in (-) Direction to Hard Stop Home in (+) Direction to Limit w/o C-Pulse Home in (-) Direction to Limit w/o C-Pulse	Relative Move
MAFR_Yaskawa	Motion Axis Fault Reset		Relative Move with Registration
MAM_Yaskawa	Motion Axis Move		
MAJ_Yaskawa	Motion Axis Jog		Blended Move
MAHSP_Yaskawa	Motion Axis Home Set		Jog
	Position	Home in (+) Direction to Limit w/C-Pulse	Jog with Registration
MAH_Yaskawa	Motion Axis Homing		Torque Move
MAB_Yaskawa	Motion Axis "Blend" Move	Home in (-) Direction to Limit w/C-Pulse	High Speed Index
MSQR_Yaskawa	Motion Axis Index Run		Rotary Absolute Move with Shortest Path
MSQE_Yaskawa	Sequencer Motion Axis Index	Home in (+) Direction to Input w/o C-Pulse Home in (-) Direction to	
MHSI_Yaskawa	Motion Axis High Speed Index		
MTRQ_Yaskawa	Motion Axis Torque Control	to Input w/C-Pulse	
		Home in (-) Direction to Input w/C-Pulse	
MCLK_Yaskawa	Motion Axis Set Clock		
MPLS_Yaskawa	Motion Axis Programmable Limit Switch	Home in (+) Direction to Hard Stop w/C-Pulse	
MRSE_Yaskawa	Motion Report Servo Error	Home in (-) Direction to	
		Hard Stop w/C-Pulse	



- Software utility to create individual move profiles and sequencing for the application
- Upload/download sequence table and configuration data to/from LogicWorks™
- Embedded monitoring and test functions

# **YOU GAIN**

### YASKAWA QUALITY

Highest mean time between failures in the motion control industry with typical product lifespan of over 25 years

## 25+ YEAR PRODUCT LIFE CYCLE

Sigma-7 servos are scheduled to stay in production until 2030 with 10 years of support afterward.

#### INVENTORY

The industry's largest stock of exchange inventory with \$15 million of servo products in stock, ready for delivery.

### NO SERVICE CONTRACTS

No charge for technical support to designers, machine builders and end users.



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