

Automation for a Changing World

# **Delta EtherCAT Interface Servo Drive ASDA A2-E**



Delta's ASDA A2-E, an advanced AC Servo Drive with EtherCAT communication interface, complies with IEC61158 and IEC61800-7 to enable faster, real-time, and accurate performance in high-end applications. A2-E Supports CoE device profile based on CiA402, and all command types of EtherCAT.

In addition to the EtherCAT communication function, A2-E features the Safe Torque Off integrated, full-closed loop control, and vibration suppression, which makes the A2-E ideal for a wide range of machinery applications. This series covers a wide range of rated power to drive motors up to 5.5KW/400V, and is available in both 220V and 400V versions.





#### **Drive General Specifications**

ASDA A2-E 220V	100W	200W	400W	750W	1kW	1.5kW		2kW	3	kW
Permissible Input Voltage Range	Single-phase/ Three-phase 200 ~ 230 VAC, -15% ~ +10% Three-phase 200 ~ 230 VAC, -15% ~ +10%									
Continuous Output Current	0.9 A	1.55 A	2.6 A	5.1 A	7.3 A	8.3 A		13.4 A		19.4 A
ASDA A2-E 400V	400W	750	W	1kW	1.5kV	/ 2k	W	3kW	4.5kW	5.5kW
Permissible Input Voltage Range	Three-phase 380 ~ 480 VAC, -10% ~ +10%									
Continuous Output Current	2.0 A	3.3	85 A	3.52 A	5.02 A	6.6	6 A	11.9 A	20 A	22.37A

## **Communication Specifications**

Physical Layer	IEEE802.3u (100 BASE-TX)			
EtherCAT Commands (Data Link Layer)	APRD, FPRD, BRD, LRD, APWR, FPWR, BWR, LWR, ARMW, FRMW, APRW, FPRW, BRW, LRW			
Device Profile (CiA402)	Homing Mode, Profile Position Mode, Profile Velocity Mode, Profile Torque Mode, Interpolated Position Mode, Cyclic Syn. Position Mode, Cyclic Syn. Velocity Mode, Cyclic Syn. Torque Mode, Touch Probe Function, Torque Limit Function			
Process Data Size	Tx: 8 Object (32 byte, Max.); Rx: 8 Object (32 byte, Max.) Dynamic Mapping supported.			
Synchronization mode	DC synchronization (SYNC0); Non- synchronized (Free Run)			
LED Indicator	EtherCAT Link/Activity Indicator (L/A) x 2 EtherCAT RUN Indicator (RUN) x 1 EtherCAT ERROR Indicator (ERR) x 1			

### **Touch Probe Function**

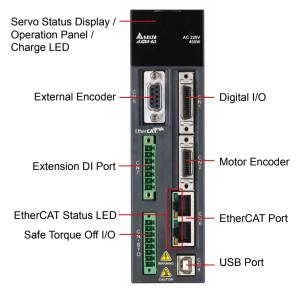
Touch Probe function can be enabled with the Digital Inputs (DI) on CN7 or the encoders; among that, the feedback position can be latched as positive or negative edge with two dedicated DI on CN7. The time to latch position is short as 5 us to execute high speed performance for measuring or packaging applications.

#### Safe Torque Off Function

With hardware add-up as CN-STO, A2-E integrates Safe Torque Off (STO) safety function according to the standards of IEC61508, SIL2; IEC62061, SILCL2; ISO13849-1, Cat. 3 PL=d.

(Note: The certification of STO has been applied, and will be issued around Q3, 2013)

### **Part Names and Functions**



## **Ordering Information**

ASD - A2 - 0	04 21 -	E			
		EtherCAT model			
Series: A2					
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	21:2	220V 1-phase/3-phase			
Product Name:	23: 220V 3-phase				
AC Servo Drive	43: 4	100V 3-phase			
	Rated Outp	out Power			
	01: 100W	15: 1.5kW			
	02: 200W	20: 2kW			
	04: 400W	30: 3kW			
	07: 750W	45: 4.5kW			

10: 1kW

55: 5.5kW



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