

FD332S-LA-000 Servo Driver



FEATURES

- **88-126VAC Single Phase Input**
- **750-1000 Watt Power Range**
- **Position, Speed, and Torque Control**
- **Communication Ports: RS232 and RS485**
- **Communication Protocol: MODBUS**
- **2500PPR Incremental Encoder**
- **Communication Software**
 - **Configure Parameters**
 - **I/O Signal Monitoring**
 - **Speed and Position Curves**
 - **Gain Adjustments**
- **Programmable Inputs and Outputs**
 - **7 Inputs**
 - **4 Outputs**
- **2 Analog Inputs**
- **CE Certified**



DESCRIPTION

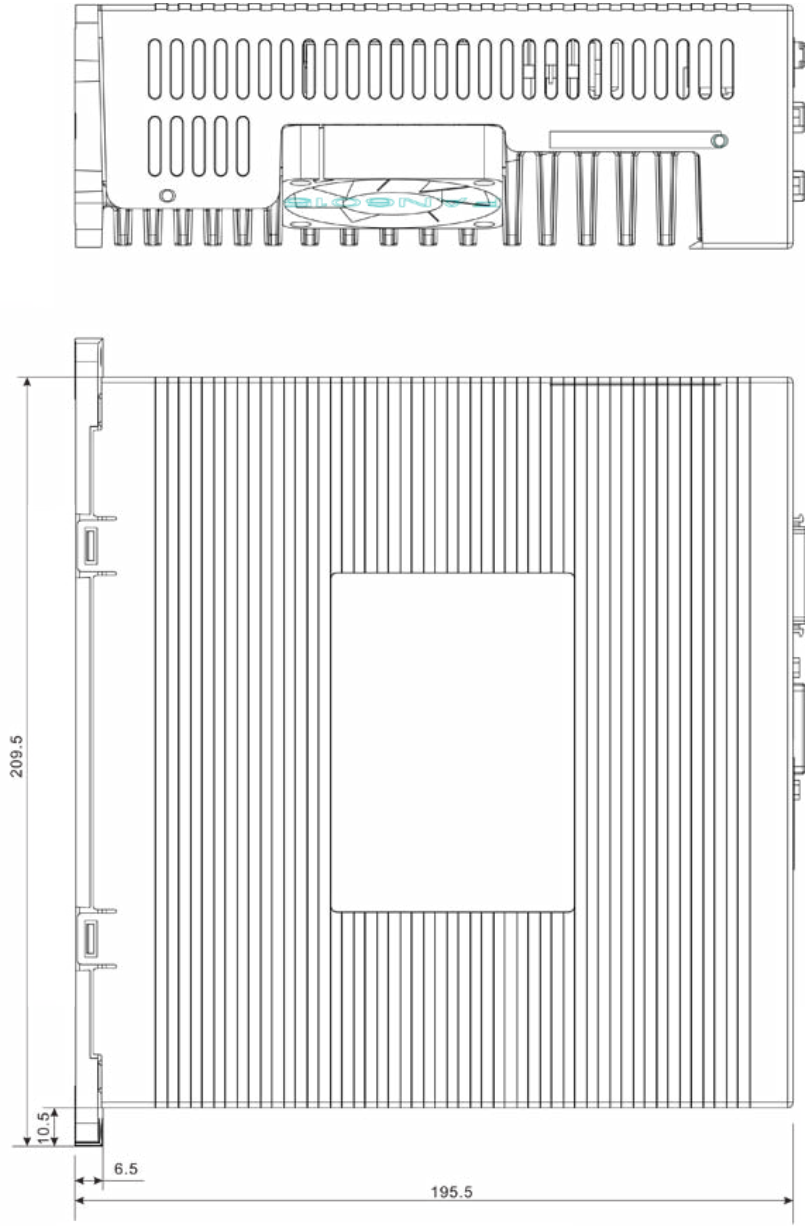
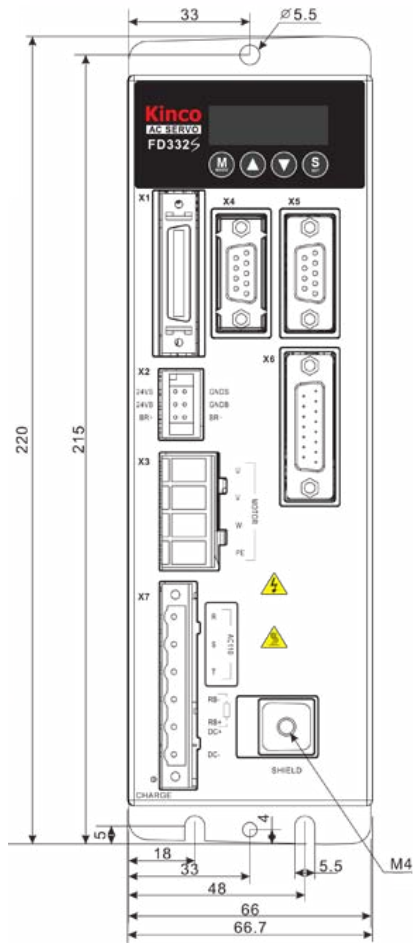
The FD332S-LA-000 Servo Drive is a great fit for applications requiring position, speed and/or torque control methods. The uniqueness of this servo drive is the flexibility of using a single servo drive that can accommodate motors with power ratings ranging from 750-1000W. Also it is designed to switch dynamically among different control methods for more flexible operation. The FD332S-LA-000 Servo Drive can operate position control mode either with pulse and direction inputs, or 8 internal position points, analog speed control or 8 internal speed points, and analog or internal torque mode. The FD332S-LA-000 Servo Drive operates with single-phase 88-126VAC input. These drives come standard with an RS232 and RS485 which can be operated using MODBUS Protocol, or using our Free, Easy-to Use Software. Please consult our Application Engineers for more information.

SPECIFICATIONS

Category	Servo Driver	Servo Motor	Description	Power/Brake Cable	Encoder Cable	Rated Speed/ Rated Torque/ Rated Current
Small Inertia 120V	FD332S-LA-000	SMH80S-0075-30AAK-3AKH	Cable Connector	MOT-005-05-KL	ENCCA-05-KH	3000rpm/ 2.39Nm/7.5A
		SMH80S-0075-30ABK-3AKH	Cable Connector & Brake	MOT-005-05-KL/ BRA-05-KL		
		SMH80S-0100-30AAK-3AKH	Cable Connector	MOT-005-05-KL		3000rpm/ 3.18Nm/ 10A
		SMH80S-0100-30ABK-3AKH	Cable Connector & Brake	MOT-005-05-KL/ BRA-05-KL		

L011582

DIMENSIONS



Note: All Dimensions in (mm)

FD332S-LA-000 Servo Driver



TECHNICAL SPECIFICATIONS

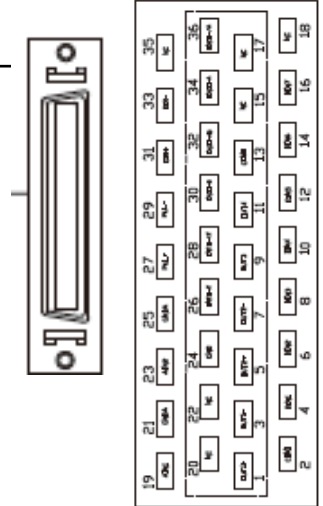
Model Parameter		FD332S-LA-000
Power	Main Supply Voltage	88-126VAC 47~63Hz
	Control Circuit Voltage	18-30VDC 1A
Current	Rated Current (RMS)	11A
	Peak Current (PEAK)	27.5A
Feedback Signal		2500PPR (Incremental Encoder with 5V Supply) 16 Bit multi-turn absolute encoder, 20 Bit single-turn absolute encoder.
Brake Chopper		Use an External Braking Resistor According to Application, Mainly in Occasion of Quick Stop.
Brake Chopper Threshold		DC190V ± 5V
Over-Voltage Alarming Threshold		DC200V ± 5V
Under-Voltage Alarming Threshold		DC100V ± 5V
Cooling Method		Natural Air Cooling
Weight		2.4 Kg
Digital Input	Input Specification	7 Digital Inputs, with COM1 Terminal for PNP (High Level Valid 12.5-30V) or NPN (Low Level Valid) Connection.
	Input Function	Define Freely According to Requirement, Supporting Following Functions: Driver Enable, Driver Fault Reset, Driver Mode Control, Proportional Control, Positive Limit, Negative Limit, Homing Signal, Reverse Command, Internal Speed Section Control, Internal Positive Section Control, Quick Stop, Start Homing Active Command, Switch Electronic Gear Ratio, Switch Gain.
Digital Output	Output Specification	5 Digital outputs, OUT1~OUT4 Current is 100mA, BR+/BR- (Brake Control Output) Current is 800mA, Can Drive Brake Device Directly.
	Output Function	Define Freely According to Requirement, Supporting Following Functions: Driver Ready, Driver Fault, Positon Reached, Motor at Zero Speed, Motor Brake, Motor Speed Reached, Z Signal, Maximum Speed Obtained in Torque Mode, Motor Brake, Position Limiting, Reference Found.
	Analog Input	2 Analog input, can be used to control speed and Torque, the input range is -10V~10V
	Encoder Signal Output	Output Encoder Signal is Optional, Can be Used in Multiple Axis Synchronization,the Max. Output Frequency is 2MHz. Motor A/B/Z signal, Plus Signal, (PLS+DIR, CW/CCW, A+B). Motors Integrated with 20 Bit Single-Turn encoder do not support this function.
	RS232	The Max. Baudrate is 115.2KHz, Use Kinco Servo Software to Communicate with PC, or Via Free Protocol to Communicate with Controller.
	Protection Functions	Over-Voltage Protection, Under-Voltage Protection, Motor Over-Heat Protection (I ² T), Short-Circuit Protection, Drive Over-Heat Protection, Etc.
RS485		The Max. Baudrate is 115.2KHz, use Modbus RTU Protocol to Communicate with Controller.
Operation Environment	Operating Temperature	0 ~ 40°C
	Storage Temperature	-10°C~70°C
	Humidity (Non-Condensing)	5~95%
	Protection Class	IP20
	Installation Environment	Installed in a Dust-Free, Dry and Lockable Environment (Such as in a Electrical Cabinet)
	Installation Mode	Vertical Installation
	Altitude	No Power Limitation Below 1000m
	Atmospheric Pressure	86kpa-106kpa

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Digital Input/Output Port

PIN No.	Signal	PIN No.	Signal	PIN No.	Signal	PIN No.	Signal
2	COM1	1	OUT1+	20	NC	19	AIN1
4	DIN1	3	OUT1-	22	NC	21	GNDA
6	DIN2	5	OUT2+	24	GND	23	AIN2
8	DIN3	7	OUT2-	26	ENCO-Z	25	GNDA
10	DIN4	9	OUT3	28	ENCO-/Z	27	PUL+
12	DIN5	11	OUT4	30	ENCO-B	29	PUL-
14	DIN6	13	COM0	32	ENCO-/B	31	DIR+
16	DIN7	15	NC	34	ENCO-A	33	DIR-
18	NC	17	NC	36	ENCO-/A	35	NC

X1



Female: RS485

PIN Number	Signal
1	NC
2	RX+
3	TX+
4	NC
5	GND
6	+5V
7	RX-
8	TX-
9	NC

X4

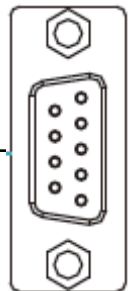


9 Pin DB

Female: RS232

PIN Number	Signal
1	NC
2	TX
3	RX
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

X5

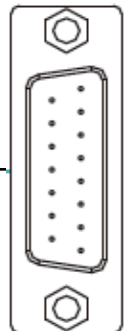


9 Pin DB Female

Female: Encoder Input

PIN No.	Incremental Encoder Signal	PIN No.	Incremental Encoder Signal	PIN No.	Communication Encoder Signal	PIN No.	Communication Encoder Signal
1	+5V	9	GND	1	+5V	9	GND
2	A	10	/A	2	NC	10	NC
3	B	11	/B	3	NC	11	NC
4	Z	12	/Z	4	NC	12	NC
5	U	13	/U	5	NC	13	NC
6	V	14	/V	6	NC	14	NC
7	W	15	/W	7	SD	15	/SD
8	PTC_IN			8	NC		

X6



15 Pin DB Female
Motor Encoder
Input
Port