

FEATURES

- 88-126VAC Single-Phase Input Voltage
- Rated Torque of 180 oz-in
- Power Ratings up to 400 Watts
- 2,500 PPR Incremental Encoder
- Maximum Speed of 3000 RPM
- IP65 for Body, IP54 Shaft Seal
- Brake Option Available
- Position, Speed, and Torque Control
- RS232 and RS485 Port



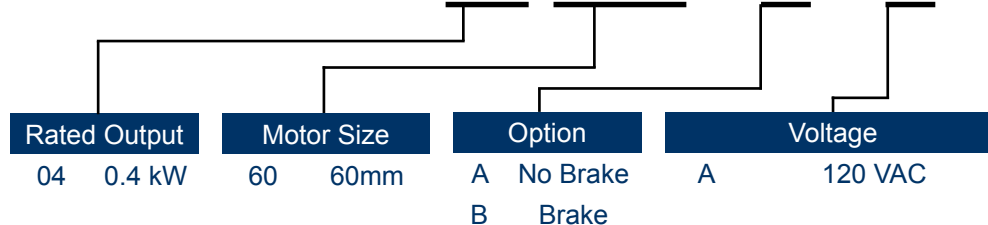
DESCRIPTION

The KNC-PKS-FD322S-04-60S-AAK-AKH Servo System includes a 400 Watt SMH60S-0040 AC Servo Motor operated by the FD322S-LA-000 Drive. These packages are ideal and easy start-ups, convenience, and performance. The Servo Motors included in these packages provide torque up to 180 oz-in. The FD322S-LA-000 Drive offers current forward-feedback control, acceleration forward-feedback control, speed viewer, and inertia viewer; providing for improved response performance. Each system includes a 5m Motor Power Cable and a 5m Encoder Cable. If purchasing the option with a Brake then a 5m Brake Cable will be included as well.

| Item | Rated Voltage (VAC) | Rated Speed (RPM) | Rated Torque (oz-in) | Rated Current (A rms) | Inertia (oz-in-sec ²) | Torque Constant KT (oz-in/A) | Resistance (ohms) | Inductance (mH) | Brake (24VDC) | Motor Length (mm) | Shaft Diameter (mm) |
|-------------------------------|---------------------|-------------------|----------------------|-----------------------|-----------------------------------|------------------------------|-------------------|-----------------|---------------|-------------------|---------------------|
| KNC-PKS-FD322S-04-60S-AAK-AKH | 88-126 | 3000 | 180 | 4 | 0.0067 | 46.87 | 1.7 | 3.5 | No | 150 | 14 |
| KNC-PKS-FD322S-04-60S-ABK-AKH | 88-126 | 3000 | 180 | 4 | 0.0067 | 46.87 | 1.7 | 3.5 | Yes | 190 | 14 |

ORDERING INFORMATION

PKS-FD322S-04-60S-AAK-AKH



L011523

SMH60S-0040 Motor Specifications



FEATURES

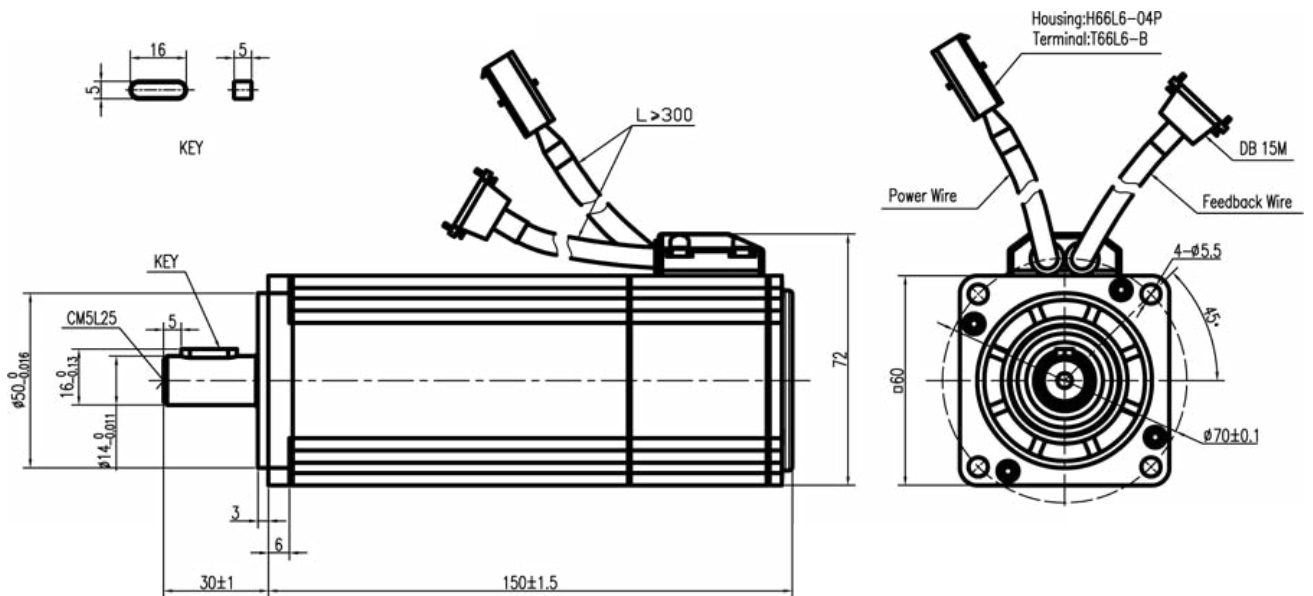
- 220 VAC
- 400 W Power Rating
- Rated Torque of 180 oz-in
- Maximum Speed of 3000 rpm
- 2500 PPR Incremental Encoder Attached
- IP65 for Body, IP54 Shaft Seal
- Brake Option Available
- CE Certified



SPECIFICATIONS

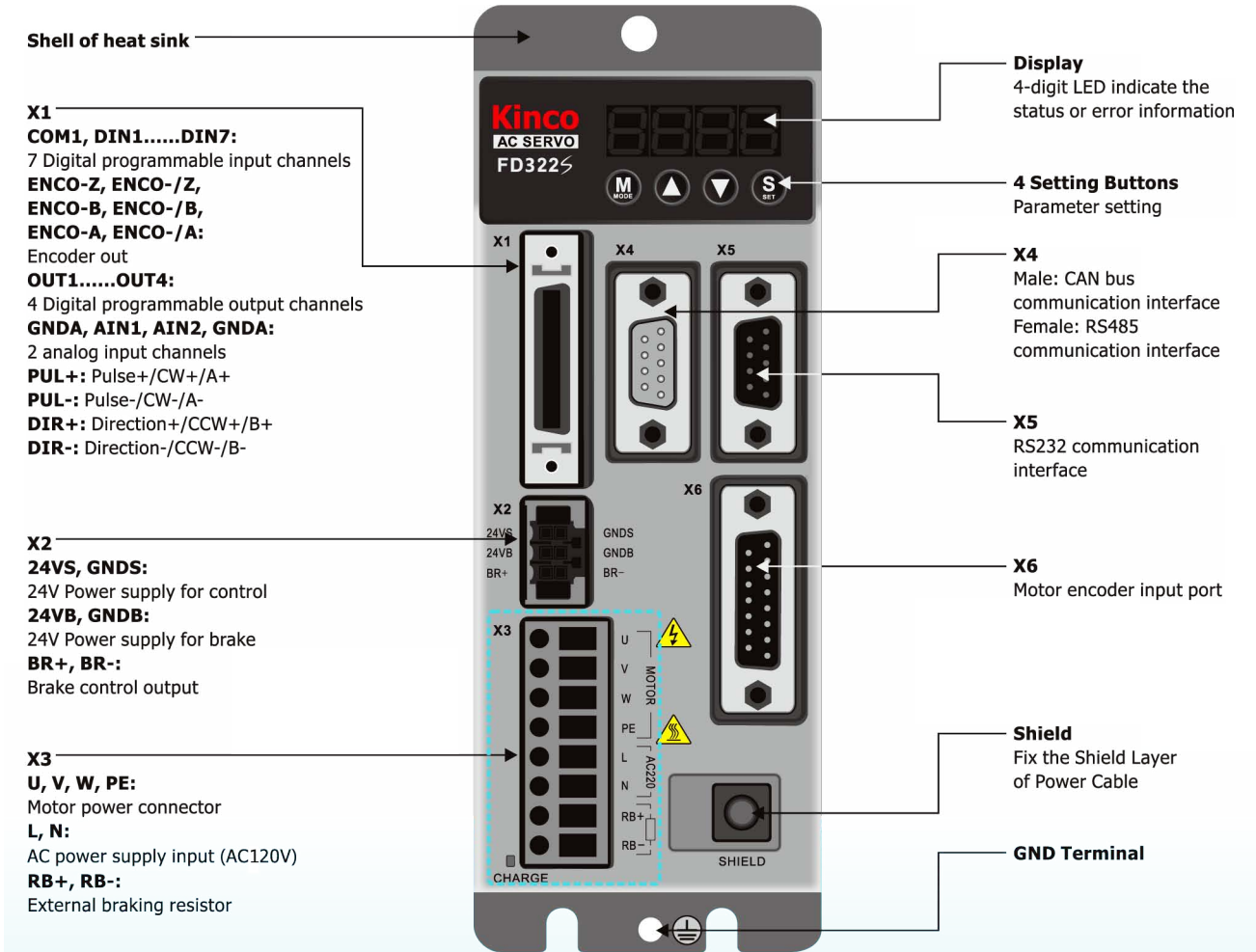
| Item | Rated Torque (oz-in) | Rated Power (Watts) | Rated Speed (rpm) | Rated Current (Arms) | Inertia (oz-in-sec ²) | Torque Constant KT (oz-in/A) | Resistance (ohms) | Inductance (mH) | Length (mm) | Weight (lbs) |
|------------------------|----------------------|---------------------|-------------------|----------------------|-----------------------------------|------------------------------|-------------------|-----------------|-------------|--------------|
| SMH60S-0040-30AAK-3AKH | 180 | 400 | 3000 | 4 | 0.0067 | 46.87 | 1.7 | 3.5 | 150 | 3.97 |
| SMH60S-0040-30ABK-3AKH | 180 | 400 | 3000 | 4 | 0.0067 | 46.87 | 1.7 | 3.5 | 190 | 5.07 |

DIMENSIONS



Dimensions are in mm

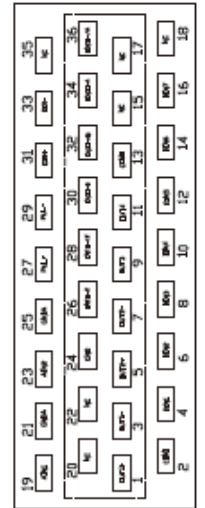
Note: Part Number SMH60S-0020-30ABK is with the brake option. Brake option not shown in above dimensions.



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



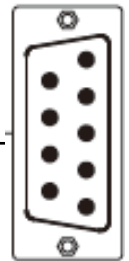
CAN

| PIN Number | Signal |
|------------|--------|
| 1 | NC |
| 2 | CAN_L |
| 3 | GND |
| 4 | NC |
| 5 | NC |
| 6 | NC |
| 7 | CAN_H |
| 8 | NC |
| 9 | NC |

RS485

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

X4

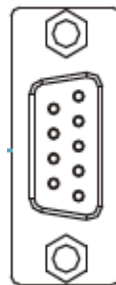


9 Pin DB

RS232

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

*Note: The CAN option is available only for the AA and the CA versions



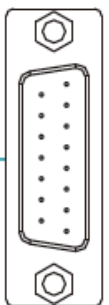
9 Pin DB Female

X5

ENCODER IN

| 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

Compatible Drivers

| Part Number | Description |
|---------------|--------------|
| FD322S-LA-000 | Servo Driver |



Compatible Motors

| Part Number | Description |
|------------------------|-------------|
| SMH60S-0040-30AAK-3AKH | Servo Motor |
| SMH60S-0040-30ABK-3AKH | Servo Motor |



Compatible Cables

| Part Number | Description |
|-----------------------|---------------|
| KNC-SRV-ENCCA-05-KH | Encoder Cable |
| KNC-SRV-MOT-005-05-KL | Power Cable |
| KNC-SRV-BRA-05-KL | Brake Cable |

