

PKS-PRO-E-30 - Servo System

FEATURES

- **Input Voltage Range of 170-253 VAC**
- **Rated Torque of 2,025 to 4,064 oz-in**
- **3.0 kWatt Power Rating**
- **No Load Speed of up to 3,000 RPM**
- **2,500 PPR Incremental Encoder**
- **Oil Seal and Optional Brake**
- **MODBUS and CANopen Standard**
- **RS485 Interface**
- **Real Time Monitoring and Management**
- **Position, Speed, and Torque Control**
- **CE Certified**



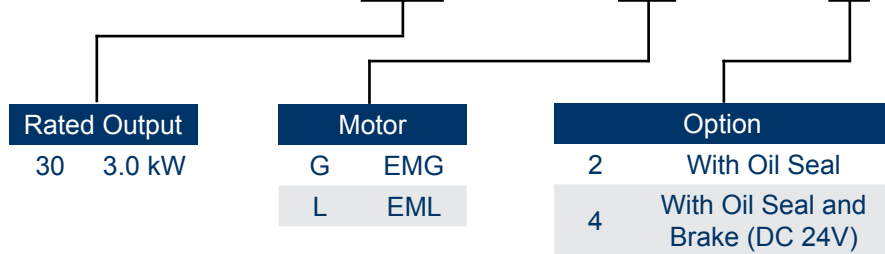
DESCRIPTION

The PKS-PRO-E-30 servo system includes a 3.0 kWatt EMG or EML AC Servo Motor operated by the PRONET-E drive. These packages are ideal for quick and easy start-ups, convenience and performance! The servo motor included in this package provides torque from 2,025 to 4,064 oz-in. The PRONET-E drives offer current forward-feedback control, acceleration forward-feedback control, speed viewer, and inertia viewer; providing for improved response performance. These drives operate standard with MODBUS and CANopen protocol. Each system includes a 5M power cable, 5M encoder cable, and a 3M communication cable.

| System Specs | 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) | Driver Digital Display | Brake (24VDC) | Motor Length (mm) | Shaft Diameter (mm) |
|---------------------|-------------------|----------------------|-----------------------|-----------------------------------|------------------------------|-------------------|-----------------|------------------------|---------------|-------------------|---------------------|
| PKS-PRO-E-30-A-GP22 | 2000 | 2025 | 18.0 | 0.5849 | 128.8 | 0.29 | 2.0 | Yes | No | 228 | 35 |
| PKS-PRO-E-30-A-GP24 | 2000 | 2025 | 18.0 | 0.6302 | 128.8 | 0.29 | 2.0 | Yes | Yes | 299 | 35 |
| PKS-PRO-E-30-A-LP22 | 1000 | 4064 | 18.0 | 1.1017 | 270.0 | 0.3 | 3.1 | Yes | No | 293 | 35 |
| PKS-PRO-E-30-A-LP24 | 1000 | 4064 | 18.0 | 1.1471 | 270.0 | 0.3 | 3.1 | Yes | Yes | 364 | 35 |

ORDERING INFORMATION

PKS-PRO - E - 30 - A - GP 2 2



L010959

Servo Motor Specifications

FEATURES

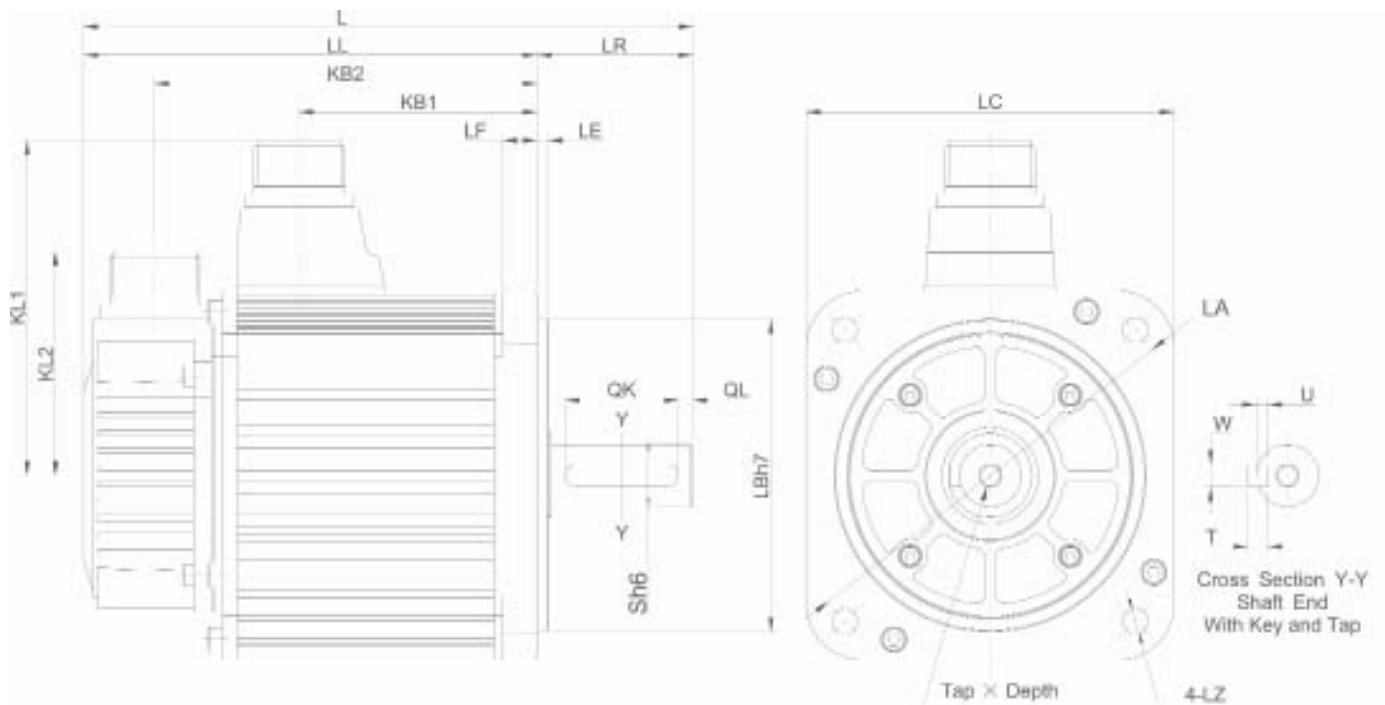
- **Rated Torque of 2,025 to 4,064 oz-in**
- **3-Phase, 200VAC**
- **Rated Power up to 3.0 kWatt**
- **Peak Torque up to 300% of Rated Torque**
- **Peak Current up to 300% of Rated Current**
- **No Load Speed of up to 3,000 RPM**
- **2,500 PPR Incremental Encoder Attached**
- **Neodymium-Iron-Boron Magnets (NdFeB)**
- **Optional Brake Available**
- **CE Certified**



SPECS

| Model # | Rated Torque (oz-in) | Rated Power (Watts) | Rated Speed (RPM) | Rated Current (A rms) | Brake (24VDC) | Inertia (oz-in-sec ²) | Electric Time Constant T _E (ms) | Back EMF Voltage K _E (V/krpm) | Torque Constant K _T (oz-in/A) | Resistance (ohms) | Weight (lbs) |
|-------------|----------------------|---------------------|-------------------|-----------------------|---------------|-----------------------------------|--|--|--|-------------------|--------------|
| EMG-30APA22 | 2025 | 3000 | 2000 | 18.0 | No | 0.5849 | 12.31 | 57.54 | 128.8 | 0.29 | 51.81 |
| EMG-30APA24 | 2025 | 3000 | 2000 | 18.0 | Yes | 0.6302 | 12.31 | 57.54 | 128.8 | 0.29 | 51.81 |
| EML-30APA22 | 4064 | 3000 | 1000 | 18.0 | No | 1.1017 | 18.87 | 116 | 270.0 | 0.3 | 70.55 |
| EML-30APA24 | 4064 | 3000 | 1000 | 18.0 | Yes | 1.1471 | 18.87 | 116 | 270.0 | 0.3 | 70.55 |

DIMENSIONS



Note: All Dimensions in (mm)

| MODEL # | L | LL | KB1 | KB2 | KL1 | KL2 | FLANGE SLIDE | | | | | | S | TapxDepth | KEY | | | | | |
|-------------|-----|-----|-----|-----|-----|-----|--------------|-----|----|-----|-----|-------|------|-----------|--------|----|----|----|---|---|
| | | | | | | | LR | LE | LF | LC | LA | LB | | | LZ | QK | QL | W | T | U |
| EMG-30APA22 | 307 | 228 | 143 | 203 | 140 | 79 | 79 | 3.2 | 18 | 180 | 200 | 114.3 | 13.5 | 35 | M8x16L | 55 | 6 | 10 | 8 | 5 |
| EMG-30APA24 | 378 | 299 | 143 | 274 | 140 | 79 | 79 | 3.2 | 18 | 180 | 200 | 114.3 | 13.5 | 35 | M8x16L | 55 | 6 | 10 | 8 | 5 |
| EML-30APA22 | 372 | 293 | 208 | 268 | 140 | 79 | 79 | 3.2 | 18 | 180 | 200 | 114.3 | 13.5 | 35 | M8x16L | 55 | 6 | 10 | 8 | 5 |
| EML-30APA24 | 443 | 364 | 168 | 287 | 140 | 79 | 79 | 3.2 | 18 | 180 | 200 | 114.3 | 13.5 | 35 | M8x16L | 55 | 6 | 10 | 8 | 5 |

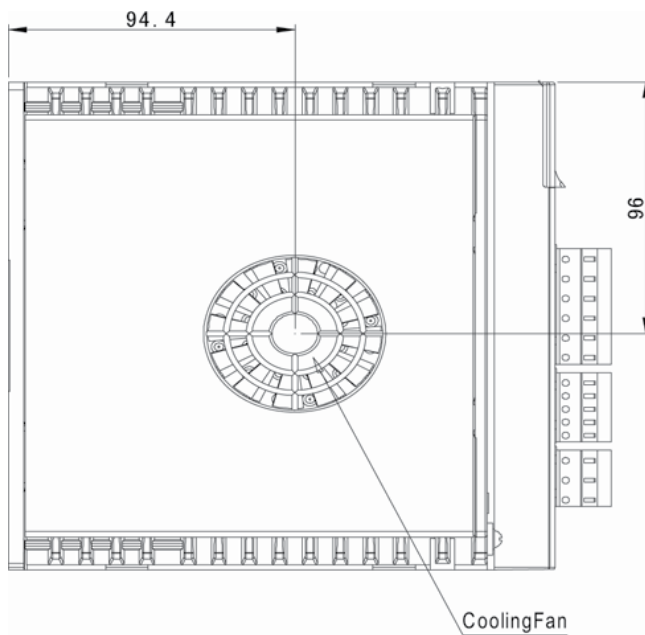
PRO-E-30 - Driver Specifications

FEATURES

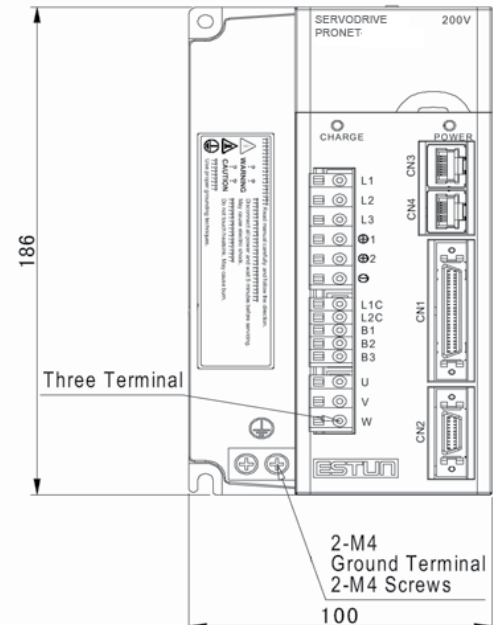
- Input Voltage Range of 170-253 VAC
- Rated Power up to 3.0 kWatts
- Improved Responsiveness Performance
- Enhanced Position Precision
- Low Speed Stability
- Enables Less Debugging
- MODBUS and CANopen Standard
- RS485 Interface
- Position, Speed, and Torque Control
- Homing Function



ProNet DIMENSIONS

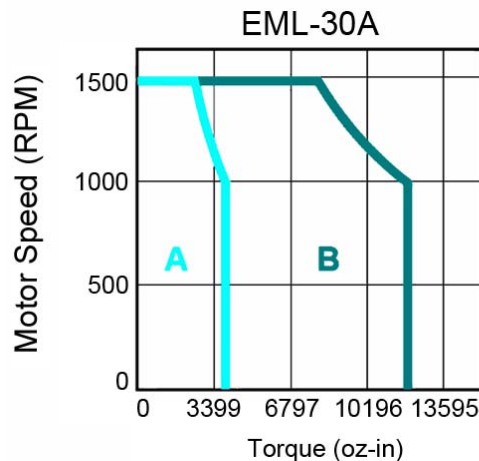
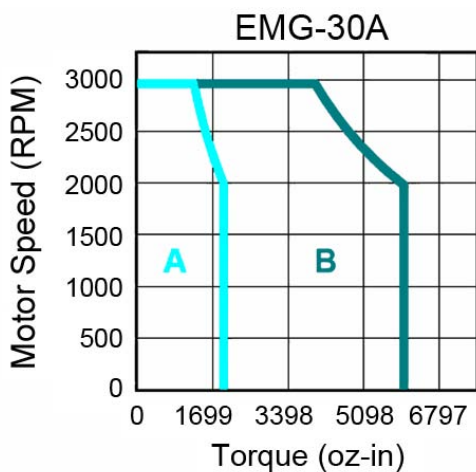


Dimensions are in millimeters (mm)

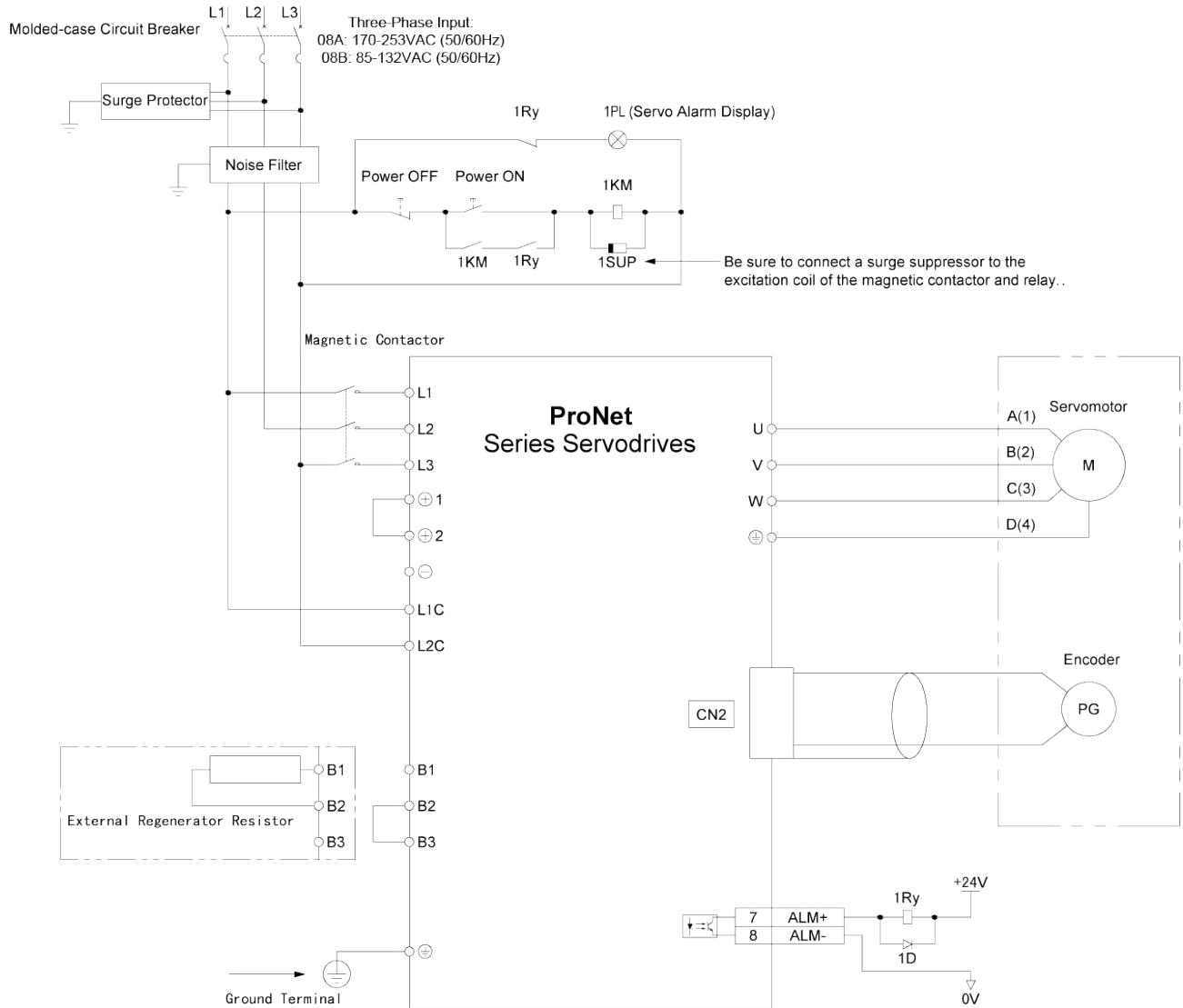


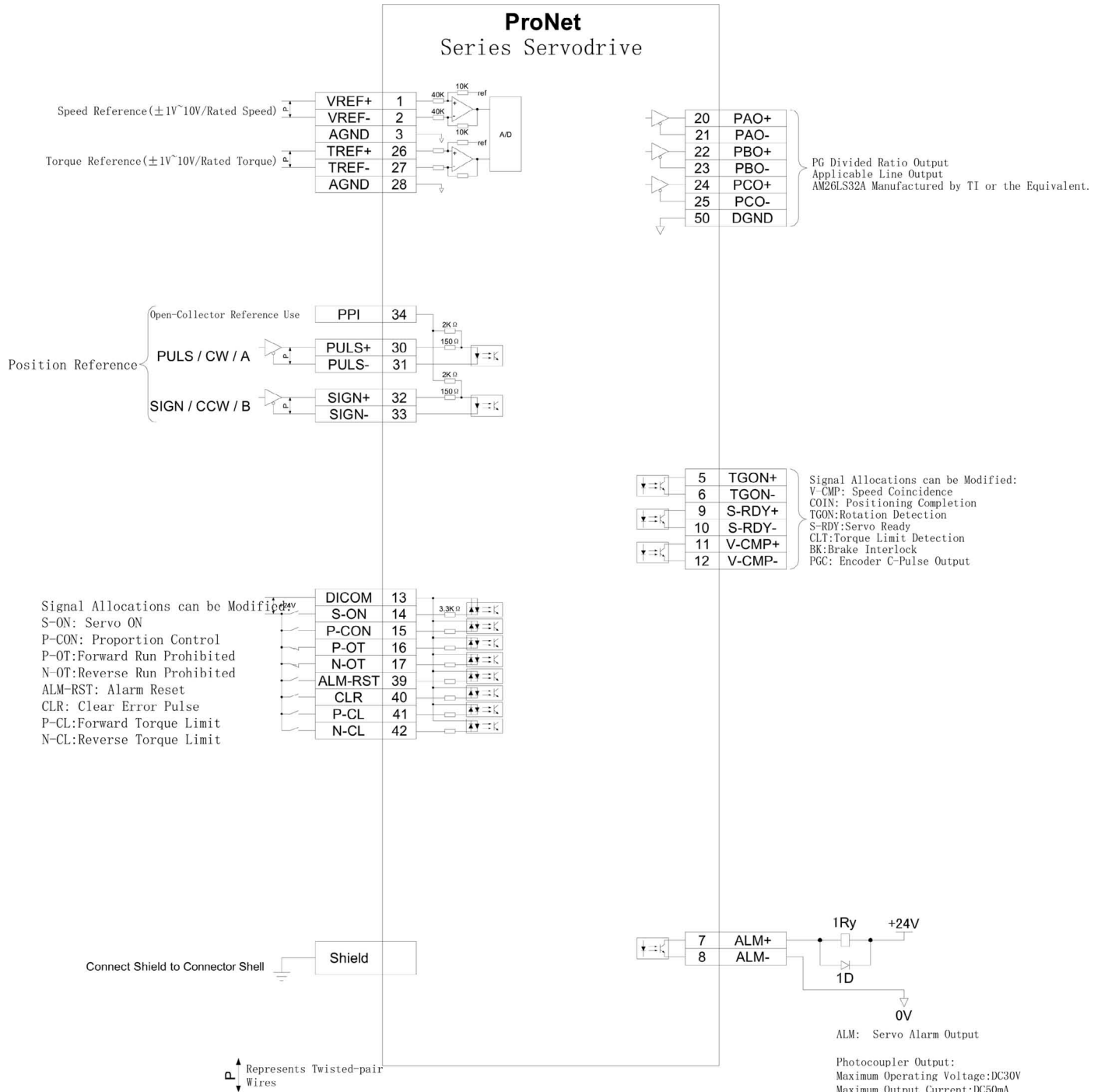
Dimensions are in millimeters (mm)

TORQUE CURVE



A - Continuous Working Area
B - Repeatedly Working Area





Compatible Drivers

| Part Number | Description |
|--------------|--------------|
| PRONET-E-30A | Servo Driver |



Compatible Motors

| Part Number | Description |
|-------------|-------------|
| EMG-30APA22 | Servo Motor |
| EMG-30APA24 | Servo Motor |
| EML-30APA22 | Servo Motor |
| EML-30APA24 | Servo Motor |



Compatible Cables

| Part Number | Description |
|--------------------|---------------|
| PDM-GD12-05 | Power Cable |
| BMP-GA24-05 | Encoder Cable |
| PRONET-PSC-CC24-02 | Comm. Cable |

