

PKS-PRO-E-04 - Servo System



FEATURES

- **Input Voltage Range of 85-253 VAC**
- **Rated Torque of 180 oz-in**
- **400 Watt Power Rating**
- **No Load Speed of up to 4,500 RPM**
- **2,500 PPR Incremental Encoder**
- **Enclosed and Self-Cooled**
- **Oil Seal and Optional Brake**
- **MODBUS and CANopen Standard**
- **RS485 Interface**
- **Real Time Monitoring and Management**
- **Position, Speed, and Torque Control**
- **CE Certified**



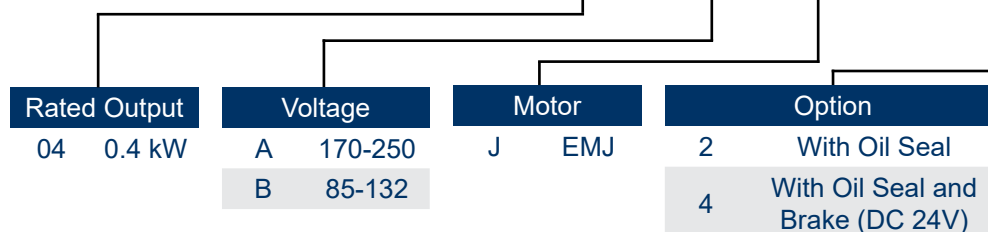
DESCRIPTION

The PKS-PRO-E-04 servo system includes a 400 Watt EMJ 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 up to 180 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 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)	Driver Digital Display	Brake (24VDC)	Motor Length (mm)	Shaft Diameter (mm)
PKS-PRO-E-04-A-JP22	170-253	3000	180	2.7	0.00439	79.9	4.7	13.3	Yes	No	131	14.0
PKS-PRO-E-04-A-JP24	170-253	3000	180	2.7	0.00496	79.9	4.7	13.3	Yes	Yes	171	14.0
PKS-PRO-E-04-B-JP22	85-132	3000	180	5.8	0.00496	43.2	1.284	3.61	Yes	No	131	14.0

ORDERING INFORMATION

PKS - PRO - E - 04 - A - J P 2 2



L010954

EMJ-04 Motor Specifications

FEATURES

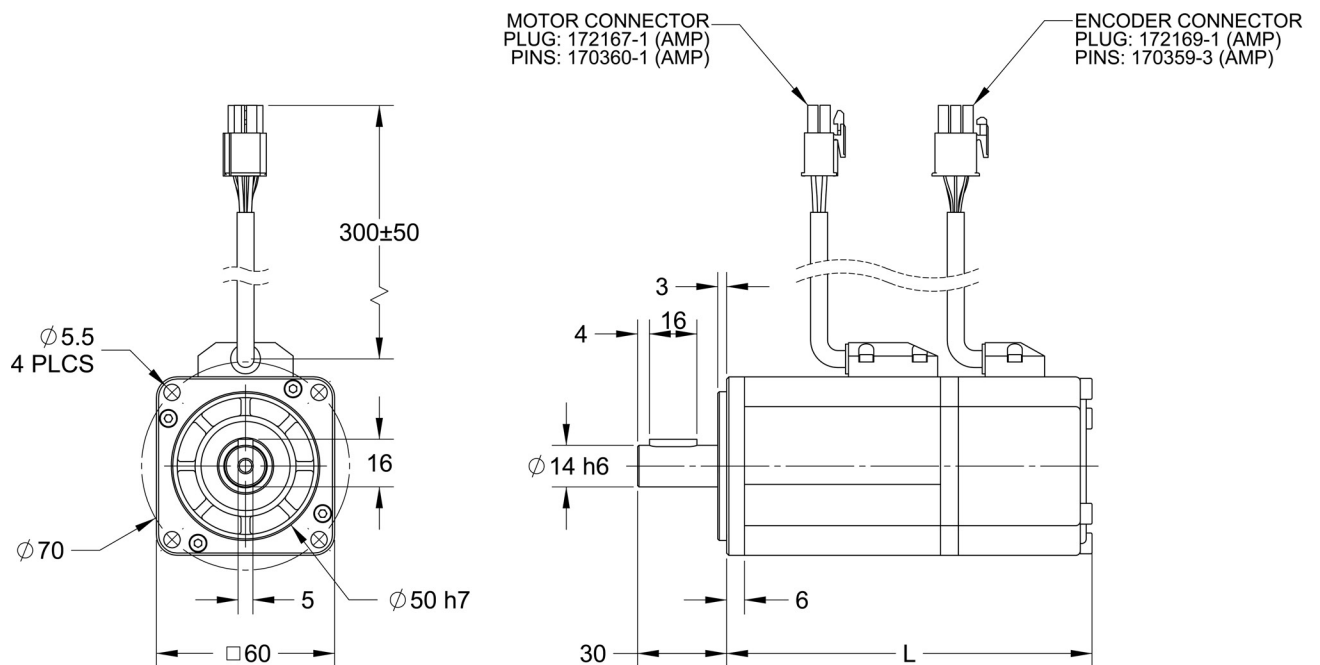
- Rated Torque of 180 oz-in
- Rated Power up to 400 Watts
- Peak Torque up to 300% of Rated Torque
- Peak Current up to 300% of Rated Current
- No Load Speed of up to 4,500 RPM
- 2,500 PPR Incremental Encoder Attached
- Fully Enclosed and Self-Closed
- Neodymium-Iron-Boron Magnets (NdFeB)
- Optional Brake Available
- CE Certified



SPECIFICATIONS

Motor Specifications	Rated Voltage (VAC)	Rated Power (Watts)	Rated Speed (RPM)	Rated Torque (oz-in)	Rated Current (A rms)	Max Current (A rms)	Brake (24VDC)	Resistance (ohms)	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)	Max Length L (mm)	Weight (lbs)
EMJ-04APB22	170-253	180	400	3000	2.7	8.1	No	4.7	0.00439	2.979	31.63	79.9	131	5.52
EMJ-04APB24	170-253	180	400	3000	2.7	8.1	Yes	4.7	0.00496	2.979	31.63	79.9	171	5.52
EMJ-04BPB22	85-132	180	400	3000	5.8	15.1	No	1.284	0.00496	2.810	15.80	43.2	131	5.52

DIMENSIONS



Note: Part Number EMJ-04APB24 is with the brake option. Brake option not shown in above dimensions.

Dimensions are in mm

PRO-E-04A Driver Specifications

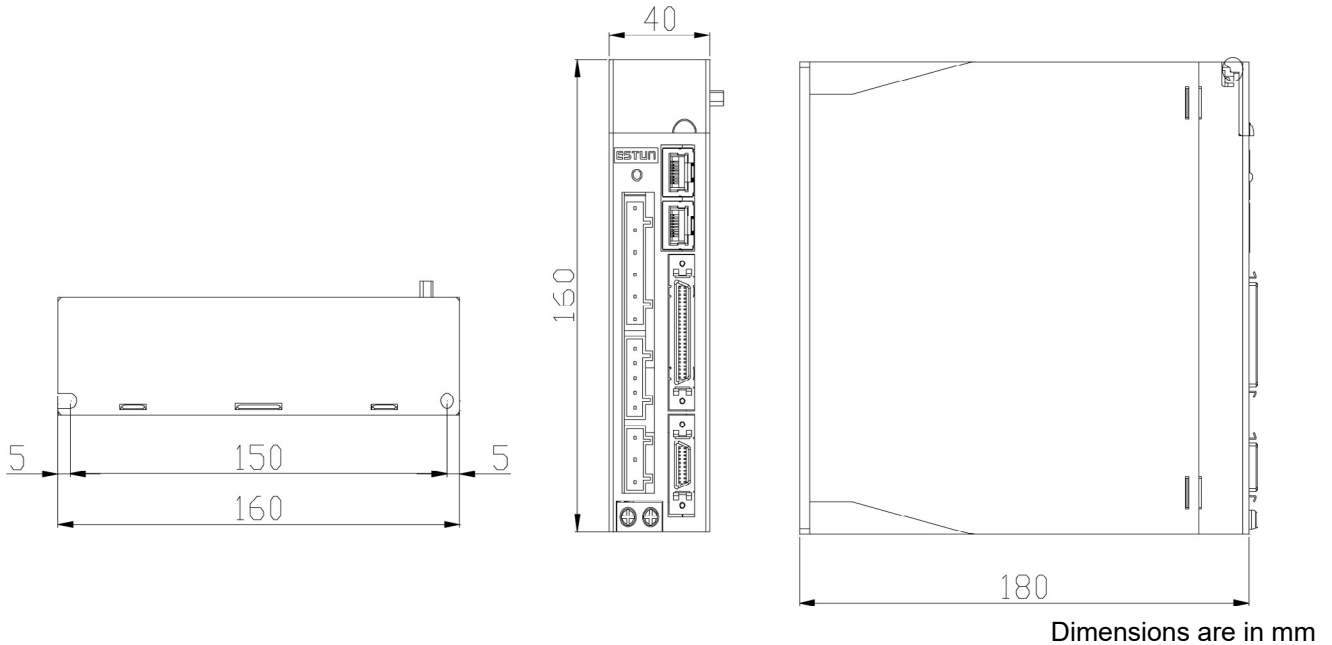
FEATURES

- Input Voltage Range of 170-253 VAC
- Rated Power up to 400 Watts
- 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
- CE Certified

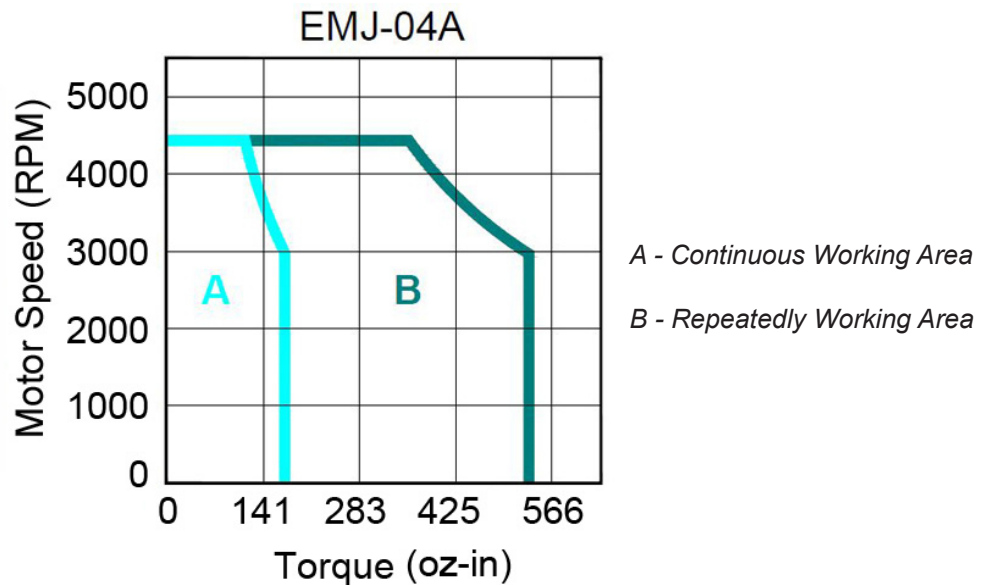


PRONET-E-04A

EDC DIMENSIONS



TORQUE CURVE



PRO-E-04B Driver Specifications

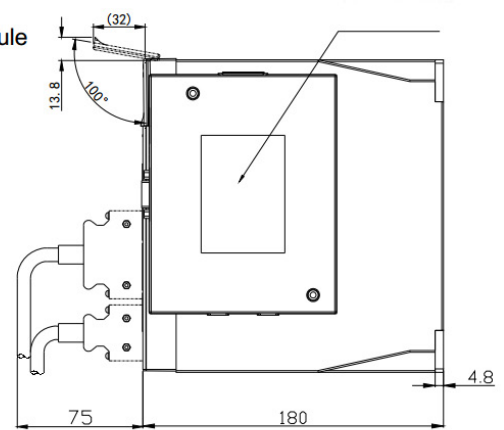
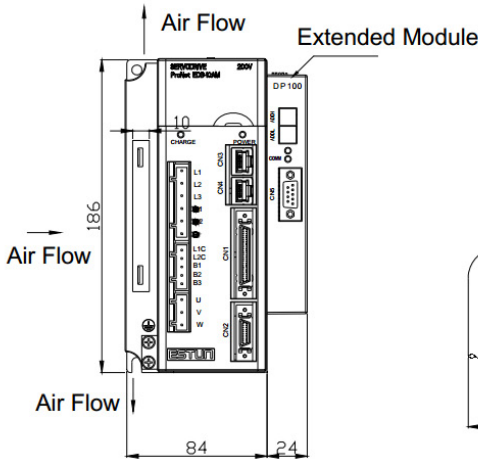
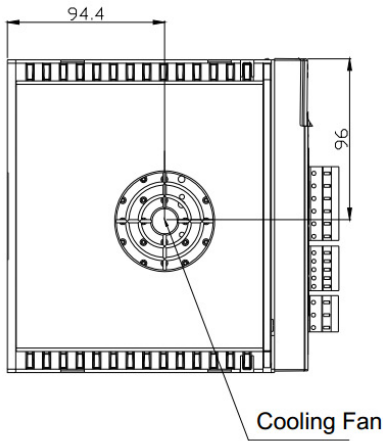
FEATURES

- Input Voltage Range of 85 - 132 VAC
- Rated Power up to 400 Watts
- 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
- CE Certified



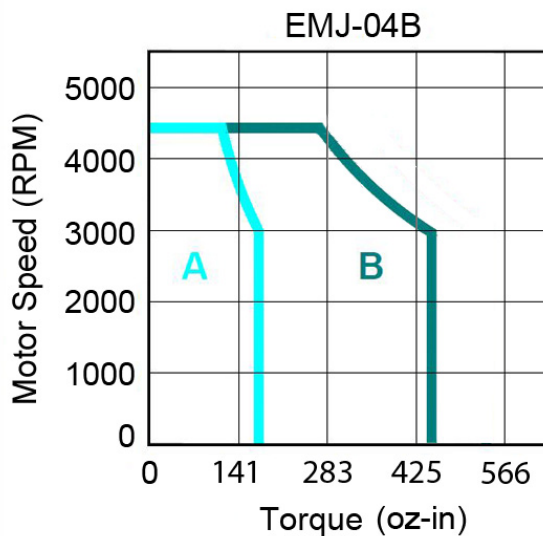
PRONET-E-04A

EDC DIMENSIONS



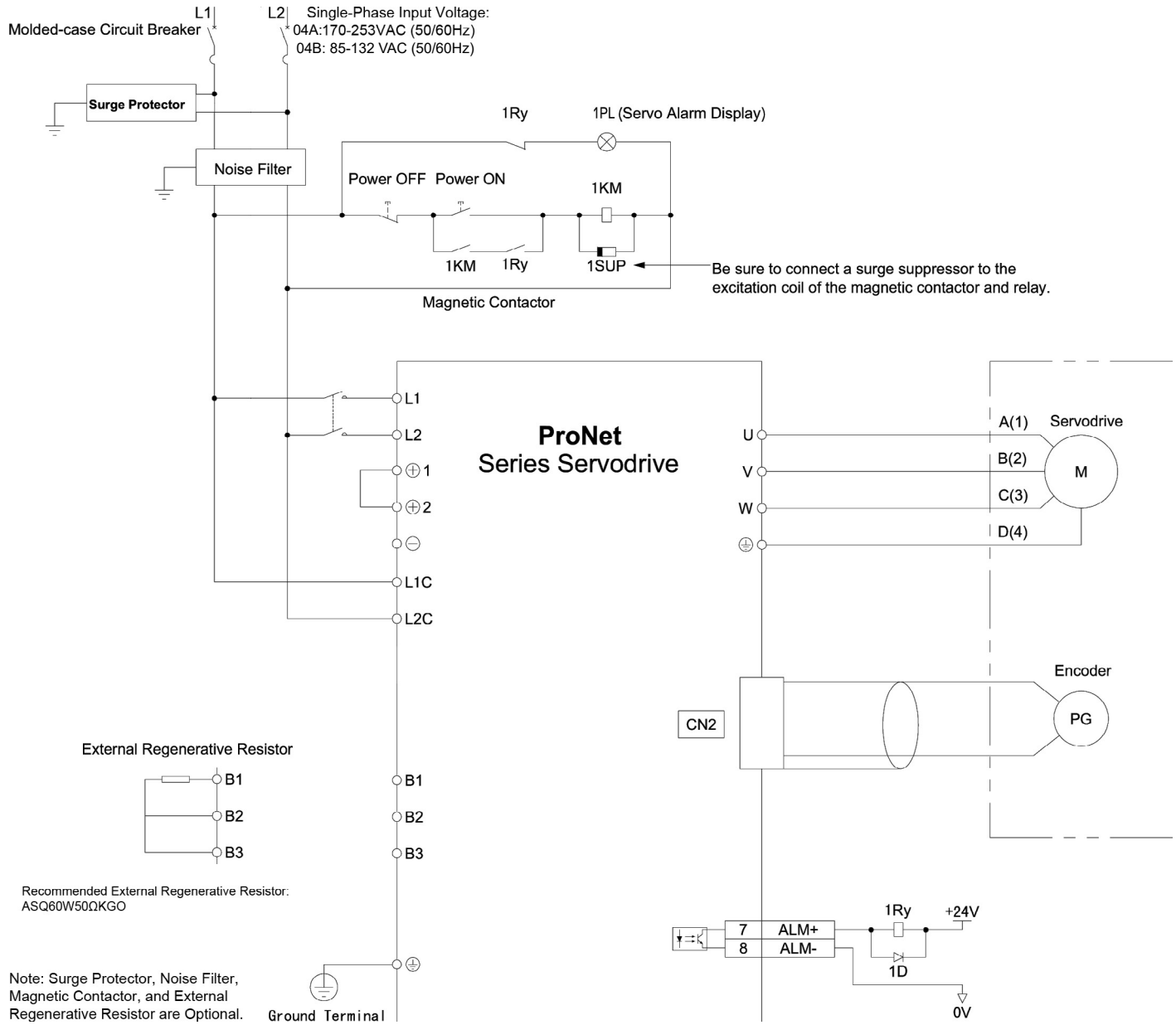
Dimensions are in mm

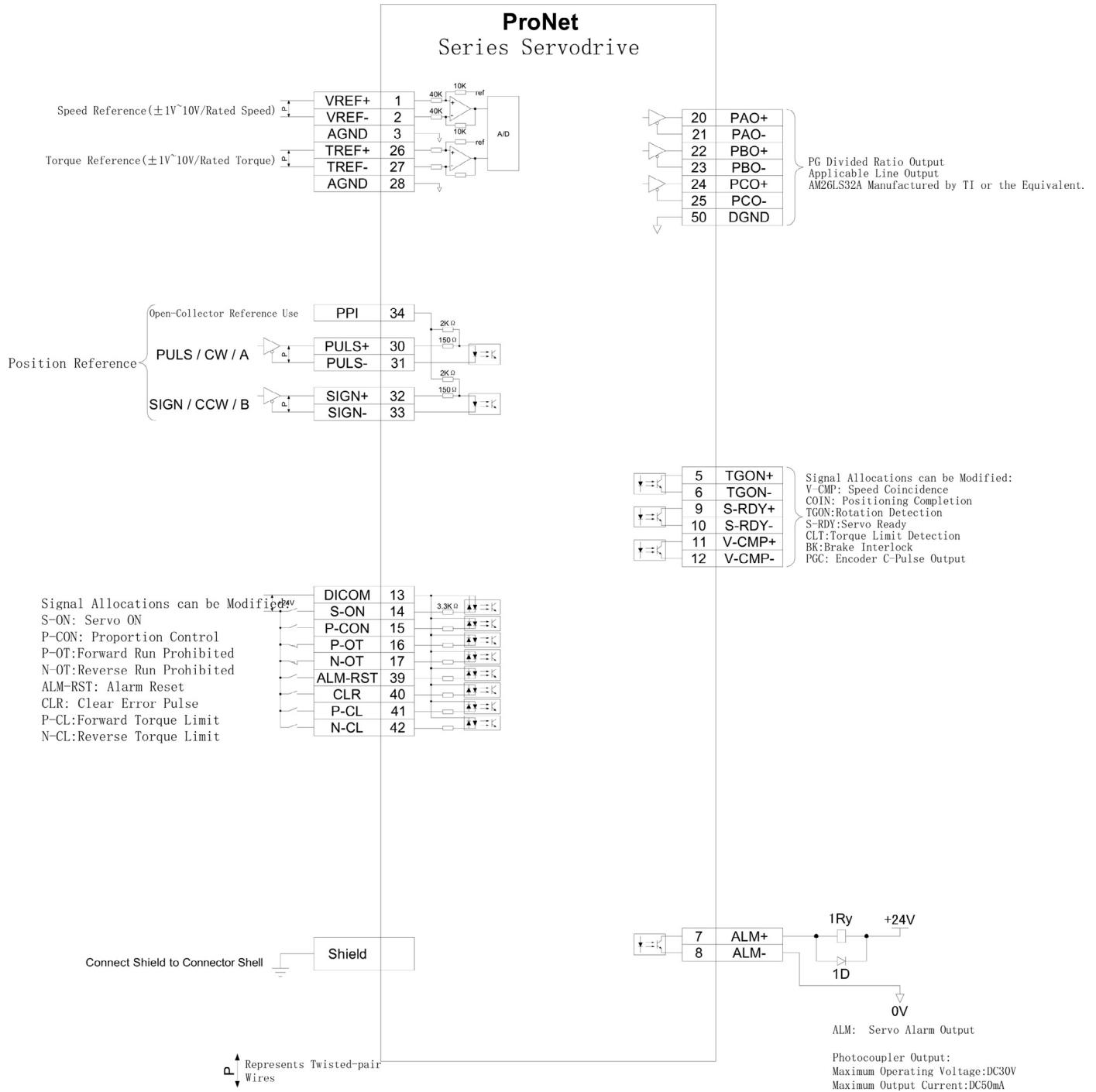
TORQUE CURVE



A - Continuous Working Area

B - Repeatedly Working Area





Compatible Drivers

Part Number	Description
PRONET-E-04A	Servo Driver



Compatible Motors

Part Number	Description
EMJ-04APB22	Servo Motor
EMJ-04APB24	Servo Motor
EMJ-04BPB22	Servo Motor



Compatible Cables

Part Number	Description
PDM-JB18-05	Power Cable
BMP-JB24-05	Encoder Cable
PRONET-PSC-CC24-02	Comm. Cable

