

# PKS-PRO-E-02 - Servo System



FEATURES

- **Input Voltage Range of 85-253VAC**
- **Rated Torque of 91 oz-in**
- **200 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**



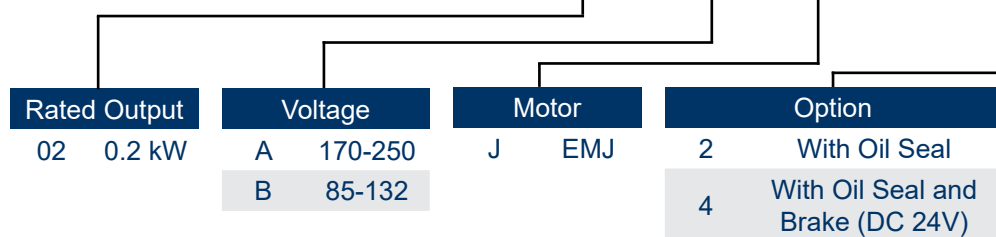
DESCRIPTION

The PKS-PRO-E-02 servo system includes a 200 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 from 91 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 2m communication cable.

System Specs	Rated Voltage (VAC)	Rated Speed (RPM)	Rated Torque (oz-in)	Rated Current (A rms)	Inertia (oz-in-sec <sup>2</sup> )	Torque Constant KT (oz-in/A)	Resistance (ohms)	Inductance (mH)	Driver Digital Display	Brake (24VDC)	Motor Length (mm)	Shaft Diameter (mm)
PRO-E-02-A-JP22	170-250	3000	91	1.3	0.00269	79.9	11.0	24.7	Yes	No	123	14.0
PRO-E-02-A-JP24	170-250	3000	91	1.3	0.00326	79.9	11.0	24.7	Yes	Yes	163	14.0
PRO-E-02-B-JP24	85-132	3000	91	2.7	0.00326	40.9	2.689	8.01	Yes	No	123	14.0

ORDERING INFORMATION

## PKS - PRO - E - 02 - A - J P 2 2



L010953

# EMJ-02 Motor Specifications

## FEATURES

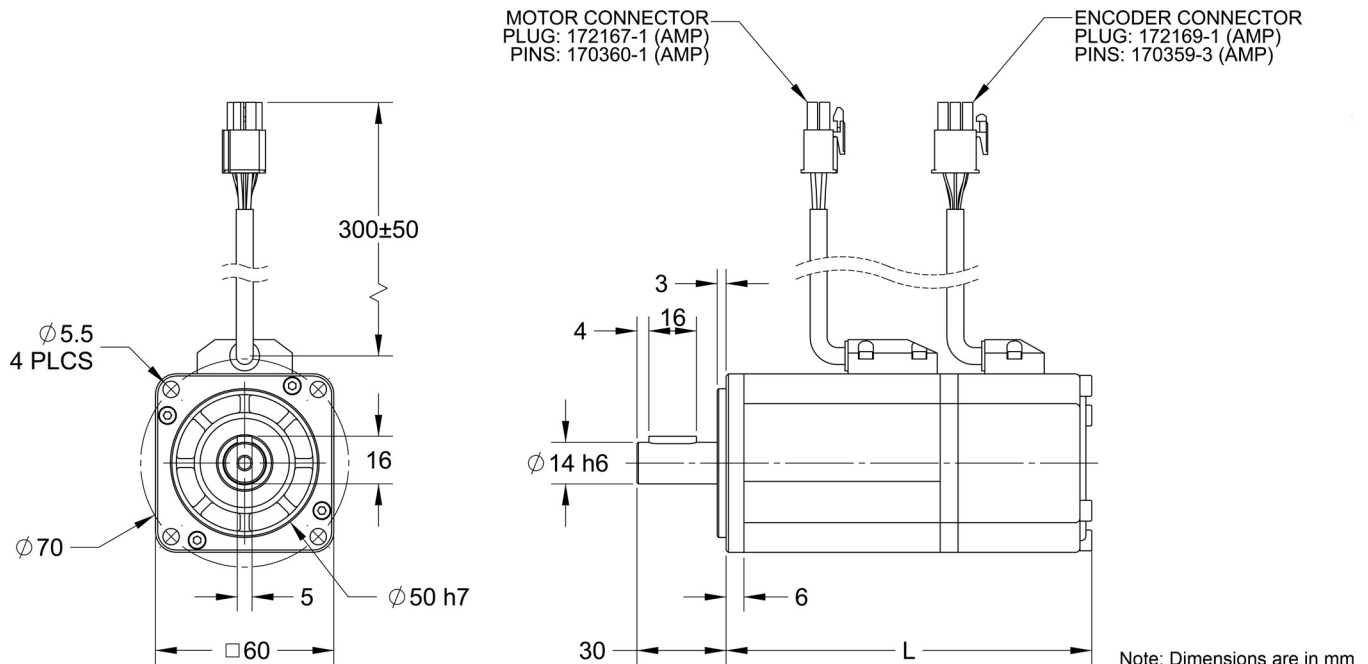
- Rated Torque of 91 oz-in
- Rated Power up to 200 Watts
- Peak Torque up to 300% of Rated Torque
- Peak Current up to 300% of Rated Current
- No Load Speed of up to 4,500 RPM
- 2,500 PPR Incremental Encoder Attached
- Fully Enclosed and Self-Cooled
- Neodymium-Iron-Boron Magnets (NdFeB)
- Optional Brake 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 <sup>2</sup> )	Electric Time Constant T <sub>E</sub> (ms)	Back EMF Voltage K <sub>E</sub> (V/kRPM)	Torque Constant K <sub>T</sub> (oz-in/A)	Max Length L (mm)	Weight (lbs)
EMJ-02APA22	170-253	200	3000	91	1.3	3.9	No	11.0	0.00269	2.391	31.91	79.9	123	4.41
EMJ-02APA24	170-253	200	3000	91	1.3	3.9	Yes	11.0	0.00326	2.391	31.91	79.9	163	4.41
EMJ-02BPA22	85-132	200	3000	91	2.7	8.1	No	2.689	0.00326	2.980	17.60	40.9	123	4.41

## DIMENSIONS



Note: Part Number EMJ-02APA24 is with the brake option. Brake option not shown in above dimensions.

Dimensions are in mm

# PRO-E-02A Driver Specifications



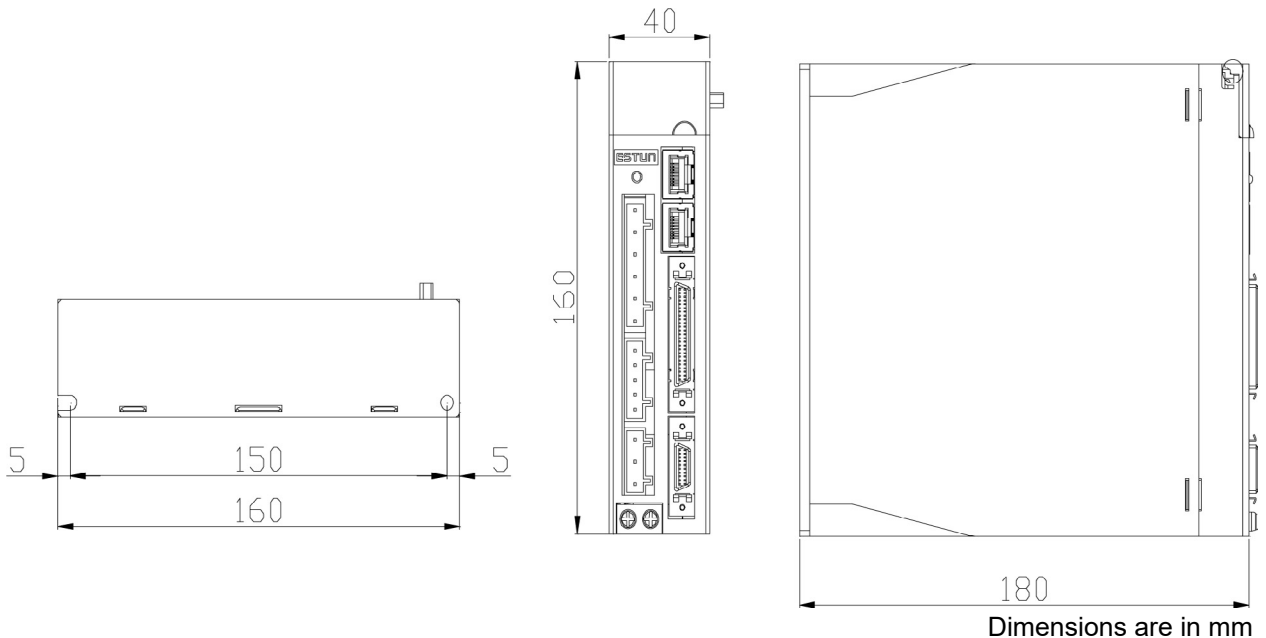
## FEATURES

- Input Voltage Range of 170-253VAC
- Rated Power up to 200 Watts
- Improved Responsiveness Performance
- Enhanced Position Precision
- Low Speed Stability
- Enables Less Debugging
- MODBUS and CANopen Standard
- RS485 Communication Interface
- Position, Speed, and Torque Control
- Homing Function
- CE Certified

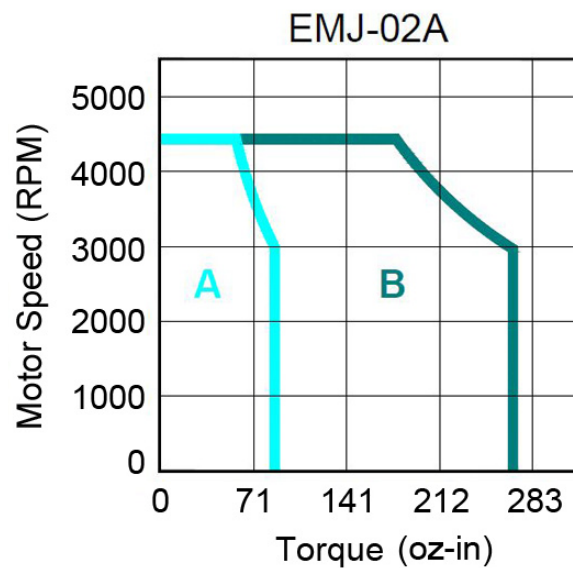


PRONET-E-02A

## EDC DIMENSIONS



## TORQUE CURVE



A - Continuous Working Area  
B - Repeatedly Working Area

# PRO-E-02B Driver Specifications



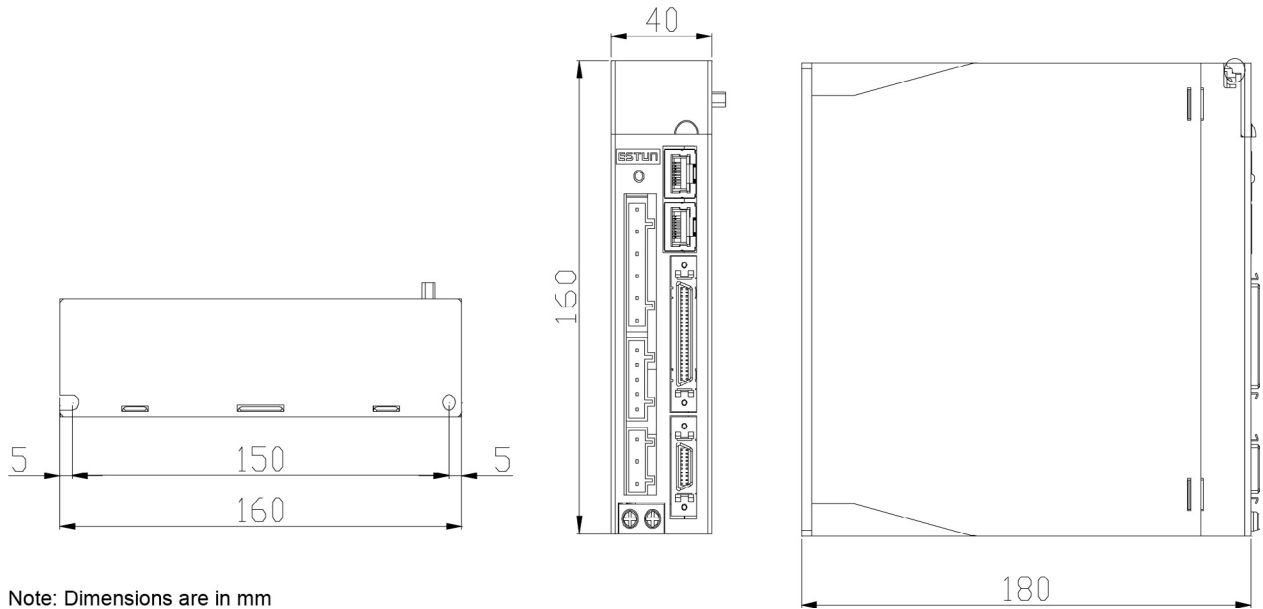
## FEATURES

- Input Voltage Range of 85-132VAC
- Rated Power up to 200 Watts
- Improved Responsiveness Performance
- Enhanced Position Precision
- Low Speed Stability
- Enables Less Debugging
- MODBUS and CANopen Standard
- RS485 Communication Interface
- Position, Speed, and Torque Control
- Homing Function
- CE Certified



PRONET-E-02B

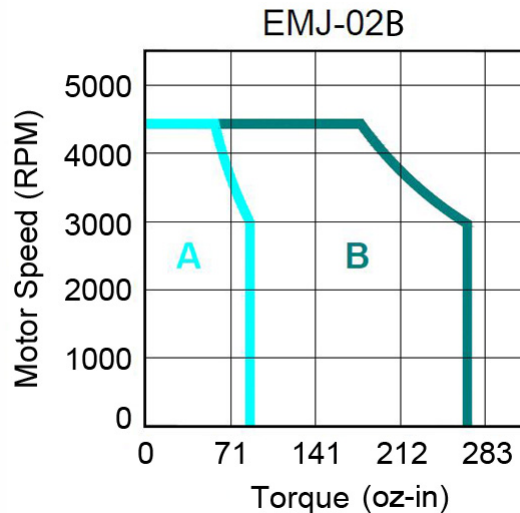
## EDC DIMENSIONS



Note: Dimensions are in mm

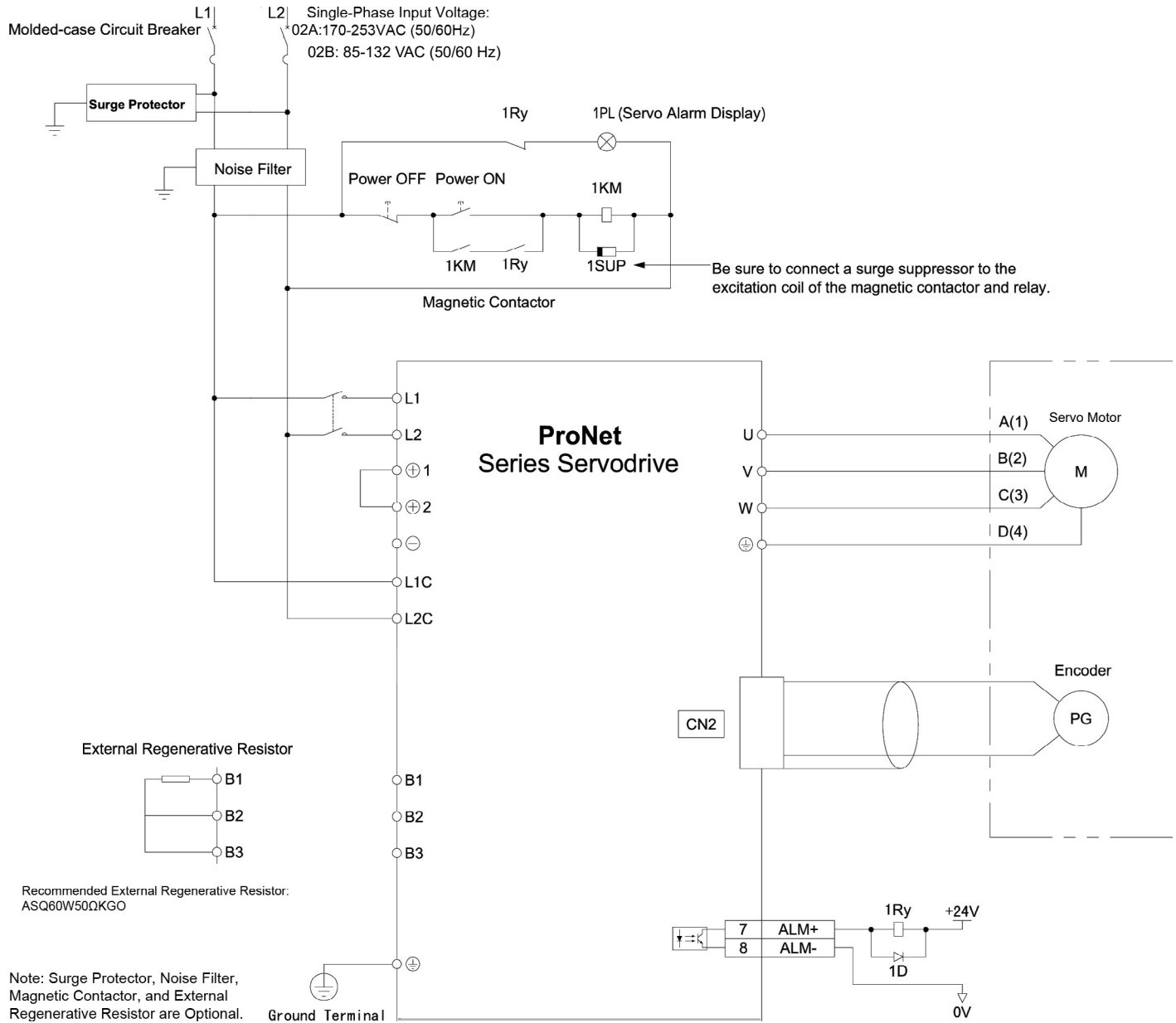
Dimensions are in mm

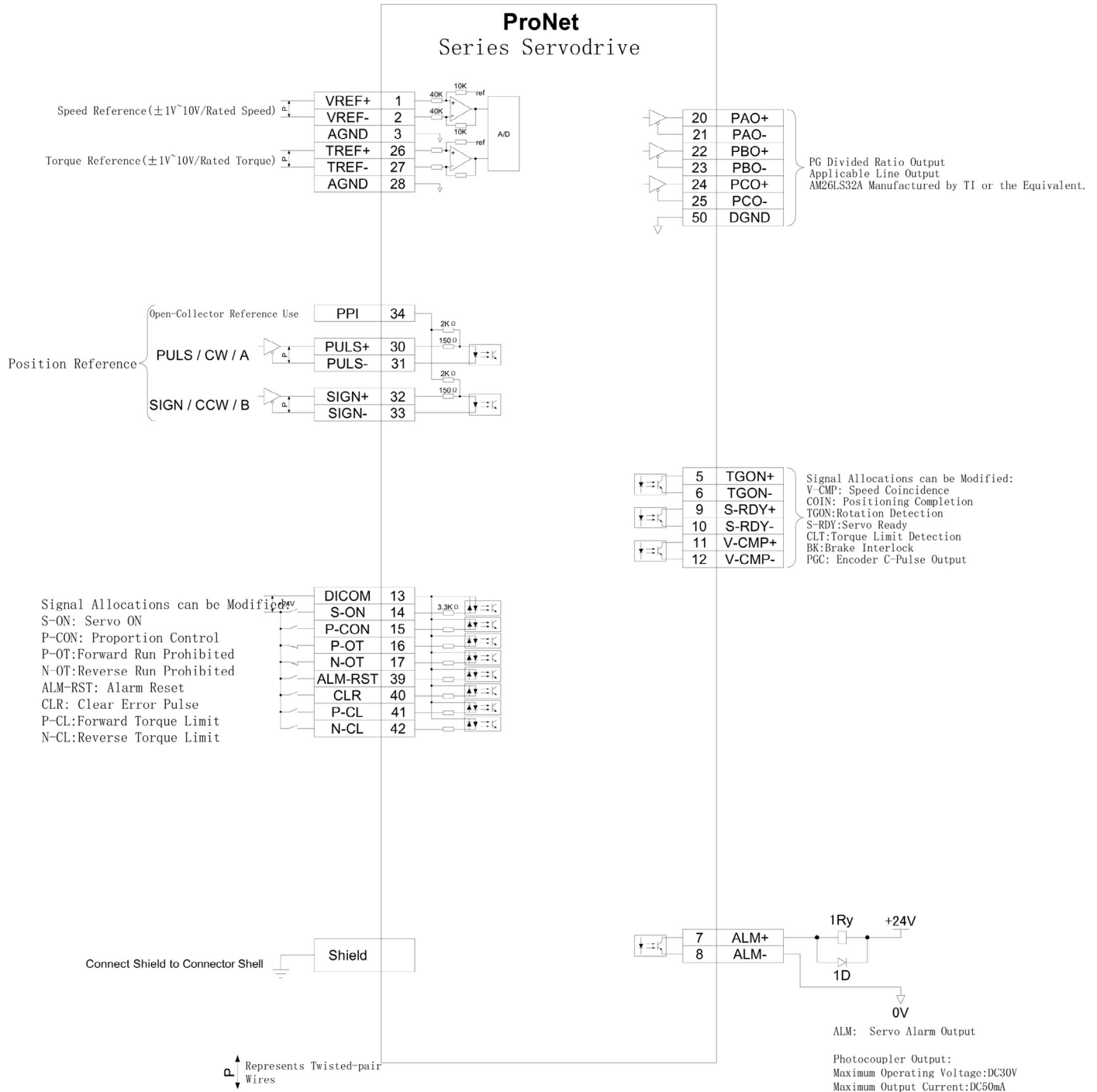
## TORQUE CURVE



A - Continuous Working Area  
B - Repeatedly Working Area

MAIN CIRCUIT DIAGRAM





### Compatible Drivers

Part Number	Description
PRONET-E-02A	Servo Driver



### Compatible Motors

Part Number	Description
EMJ-02APA22	Servo Motor
EMJ-02APA24	Servo Motor
EMJ-02BPA22	Servo Motor



### Compatible Cables

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

