

PKS-PRO-AEA-EC-20 - EtherCAT Servo System



FEATURES

- Updates 1000 Inputs/Outputs of Information
- Rated Torque of 1352 oz-in
- Power Ratings up to 2000 Watts
- Open Network Based on Ethernet
- 17-bit Absolute Encoder
- Maximum Speed of 3,000 RPM
- Supports Topologies - Line, Tree, and Star Type
- Brake Option Available
- CE Certified



DESCRIPTION

The PKS-PRO-AEA-EC-20 EtherCAT Servo System includes a 2000 Watt EMG-20 Servo Motor operated by the PRONET-20AEA-EC EtherCAT Servo Drive. These packages are ideal for easy start-ups, convenience, and performance. The Servo Motors included in these packages provide up to 1352 oz-in of Rated Torque. The PRONET-20AEA-EC Drive offers current forward-feedback control, acceleration forward-feedback control, speed viewer, Ethernet networking, and inertia viewer; providing for improved response performance. Each system includes a 5m Motor Power Cable and a 5m Encoder Cable.

Item	Rated Voltage (VAC)	Rated Speed (RPM)	Rated Torque (oz-in)	Rated Current (Arms)	Inertia (oz-in-sec ²)	Torque Constant KT (oz-in/A)	Resistance (ohms)	Inductance (mH)	Brake (24VDC)	Motor Length (mm)	Shaft Diameter (mm)
PKS-PRO-AEA-EC-20-GP22	200	2000	1352	11.3	0.33278	130	0.3	3.8	No	192	22
PKS-PRO-AEA-EC-20-GP24	200	2000	1352	11.3	0.34836	130	0.3	3.8	Yes	234.5	22

ORDERING INFORMATION

PKS-PRO-AEA-EC-20-GP22

Voltage		Rated Output		Servo Motor		Option	
A	200 VAC	02	0.2 kW	G	EMG	2	With Oil Seal
		04	0.4 kW	J	EMJ	4	With Oil Seal and Brake
		08	0.75 kW	L	EML		
		10	1.0 kW				
		15	1.5 kW				
		20	2.0 kW				
		30	3.0 kW				
		50	5.0 kW				

L011576

EMG-20 Motor Specifications



FEATURES

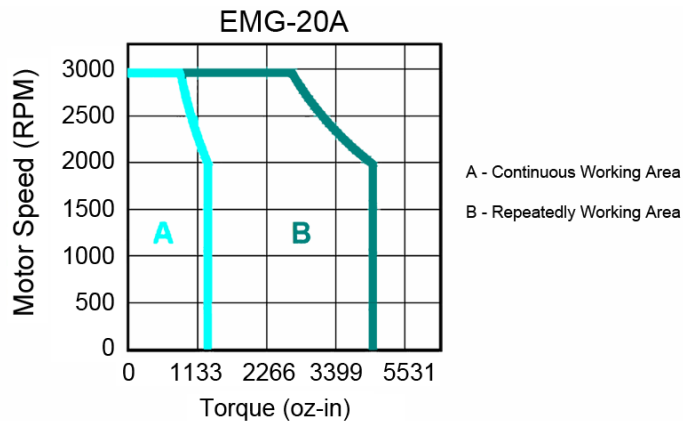
- 220 VAC
- **Rated Torque of 1352 oz-in**
- **2000 Watt Power Rating**
- **Rated Speed 2000 RPM**
- **Maximum Speed 3000 RPM**
- **Peak Torque up to 300% of Rated Torque**
- **Peak Current up to 300% of Rated Current**
- **131,072 PPR Absolute Encoder Attached**
- **Enclosed and Self-Cooled**
- **Brake Option Available**
- **CE Certified**

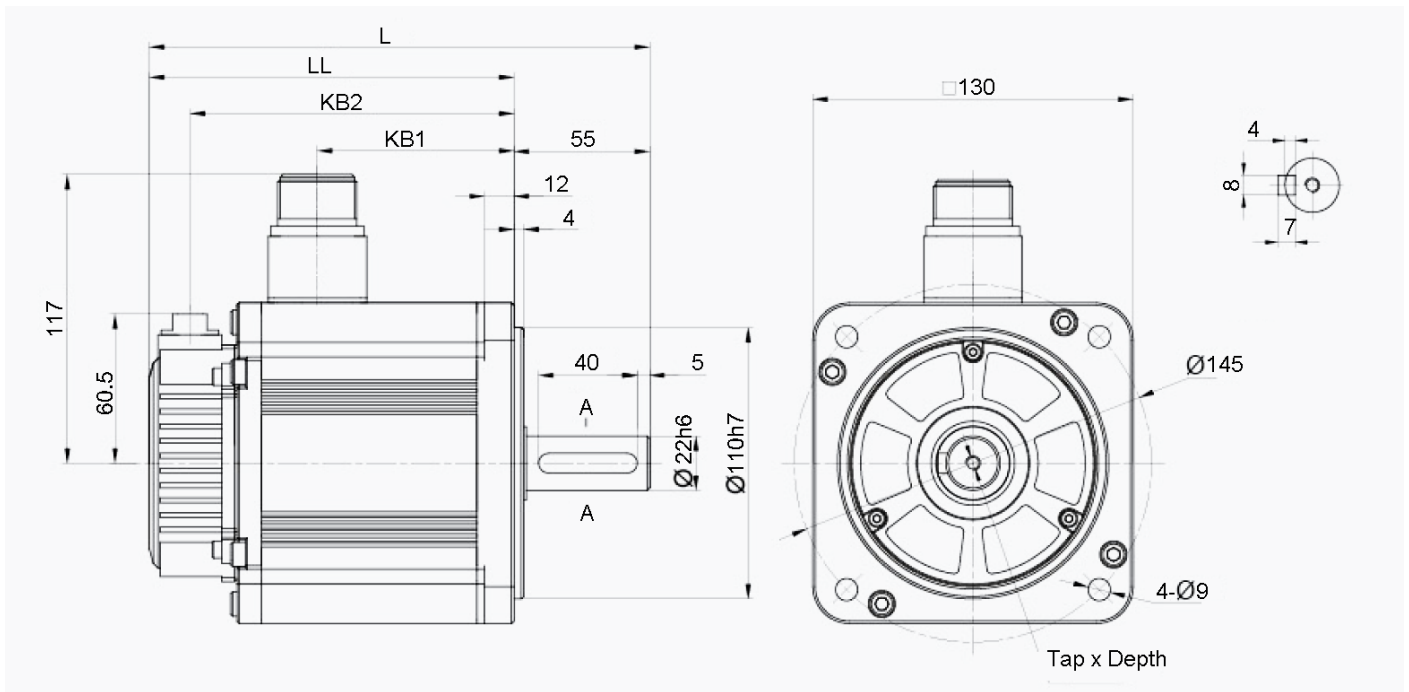


SPECIFICATIONS

Model #	Rated Torque (oz-in)	Rated Power (Watts)	Rated Speed (RPM)	Max Speed (RPM)	Rated Current (A rms)	Brake (24VDC)	Inertia (oz-in-sec ²)	Torque Constant K _T (oz-in/A)	Resistance (ohms)	Inductance (mH)	Length (mm)	Weight (lbs)
EMG-20ASB22	1352	2000	2000	3000	11.3	No	0.33278	130	0.3	3.8	192	23.8
EMG-20ASB24	1352	2000	2000	3000	11.3	Yes	0.34836	130	0.3	3.8	234.5	27.1

TORQUE CURVE





Note: All Dimensions in millimeters

Model #	L	LL	KB1	KB2
EMG-20ASB22	247	192	124	175.5
EMG-20ASB24	289.5	234.5	147.2	218

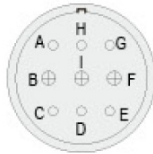
Note: the EMG-20ASB24 are Servo Motors with holding

Encoder Connector Specification:



Pin No.	Signal
1	S+
2	S-
3	BAT+
4	BAT-
7	PG0V
8	PG5V
10	FG

Motor Connector Specification:



Pin No.	Signal
A	-
B	U
C	FG
D	FG
E	-
F	W
*G	B1
*H	B2
I	V

Note: There are no B1, B2 signals in motor without brake.

Power Requirement: 220VAC	Vibration: 49 m/s ²	Running Air Pressure: 86 to 106 kPa
Insulation Class: F	Ambient Temperature: 20% to 80% RH	Insulation Voltage Endurance: AC 1800C, 50Hz, 1 min
Ambient Temperature: 0°C to 40°C	Running Humidity: Not More Than 90%, Under 25°C	Insulation Impedance: Not Less Than 50M Under Normal Conditions
Running Temperature: -25°C to 40°C		

Compatible Driver:

Part Number	Description
PRONET-20AEA-EC	Servo Driver



Compatible Cables

Part Number	Description
PDMB-GA14-05-II	Power / Brake Cable
PDM-GA14-05-II	Power Cable
PAP-GA24-05-II	Encoder Cable



PRONET-20AEA-EC EtherCAT Driver Specifications

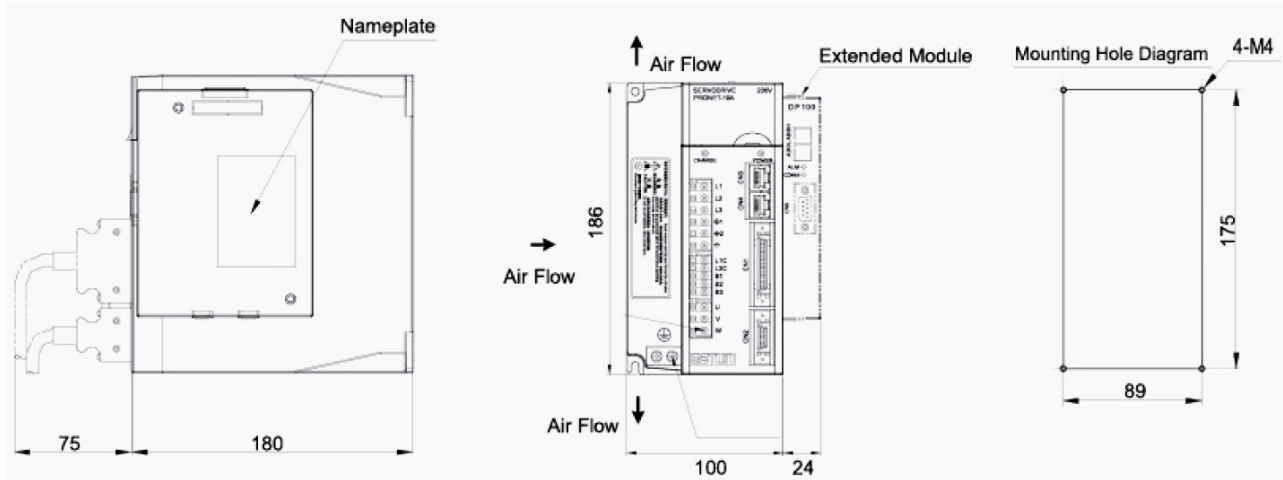


FEATURES

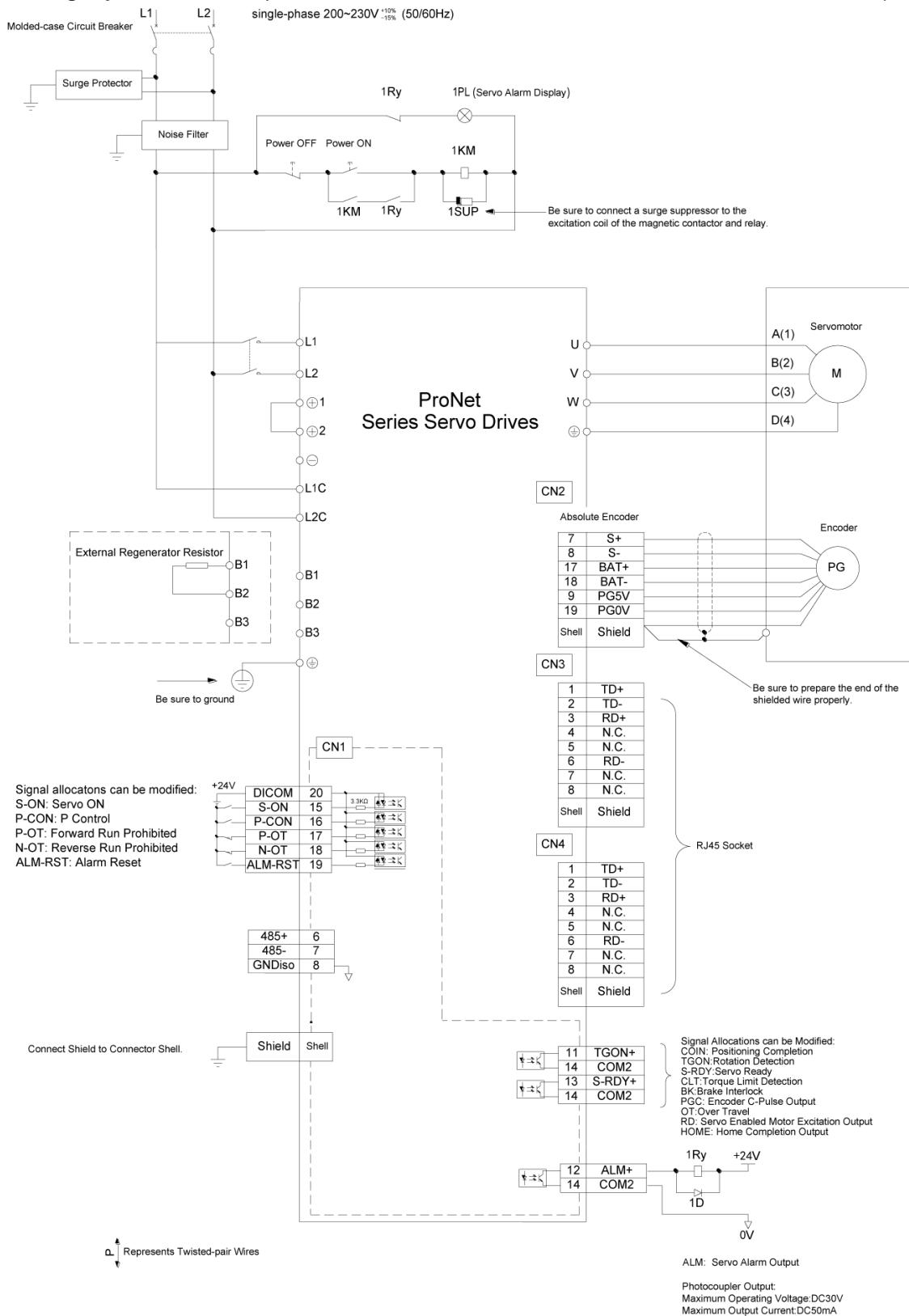
- Power Rating of 2000 Watts
- 100 BASE-TXI Twisted-Pair Wire, 100 BASE-FX Fiber, or LVDS (Low Voltage Differential Signaling)
- Supports Topologies - Line Type, Tree Type and Star Type
- Open Network Based on Ethernet
- Capable of Updating the Information of 1000 I/O
- Exchange of Frame as Big as 1486 Bytes



DIMENSIONS



Item	Rated Power (Watts)	Rated Voltage	Drive Control Capabilities	COMM	I/O Signals
PRONET-20AEA-EC	2000	200VAC	Position, Speed, Torque	EtherCAT	5 Inputs 3 Outputs



Compatible Drivers

Part Number	Description
PRONET-20AEA-EC	Servo Driver



Compatible Motors

Part Number	Description
EMG-20ASB22	Servo Motor
EMG-20ASB24	Servo Motor



Compatible Cables

Part Number	Description
PDMB-GA14-05-II	Power / Brake Cable
PDM-GA14-05-II	Power Cable
PAP-GA24-05-II	Encoder Cable

