



ProNet Series

All Digital AC Servo Systems



ESTUN
Drive your success

Company Profile

As China No.1 Servo brand, Estun Automation is devoted to R&D, manufacturing and sales of high-end products in the realm of motion control. Estun Automation has a completely self-owned IPR technology of AC servo systems which are widely applied in CNC machines, textile machines, packaging machines, printing machines, wood processing machines and other automatization production lines. Till now, Estun Automation has an established long-term strategic partnership with many prestigious and professional sales agents and has become the first cooperation option for many machine manufacturers at home and abroad.

Servo Drive Workshop, fulfilling 6-sigma field management.



04

ProNet Series All Digital AC Servo Systems

06

ProNet Series Servo Drive

10

EMJ Series Servo Motor

14

EMG Series Servo Motor

18

EML Series Servo Motor

22

EMB Series Servo Motor

27

Mounting Dimension of Drive

29

Typical Connection Example

Small golf land in office building



ProNet

Series All Digital AC Servo System

Excellent Performance

- The ProNet series servo drives added functions of current forward-feedback control, acceleration forward-feedback control, speed viewer and inertia viewer which, in turn, enable the ProNet series servo drive to improve response performance more than three times than previous products. What is more, it is available to on-line real time workload inertia check and adjustment of gain at any time to achieve the best control effect.
- The ProNet series servo drive is able to match 17 bits serial encoder which in turn enhances position precision and low speed stability & responsiveness performance.



Simple & Convenient Setting

The ProNet series servo drive completely pursues the utilization to automatically determine mechanical characteristic and set needed servo gain. Besides, it achieves ‘on-line automatically adjustment function’. Automatic adjustment of servo system to meet mechanical characteristic enables less debugging time and simpler operation. Even for the first time to use it, it can finish the best optimized setting in a short time.

simplicity of

Expansibility

- The ProNet series servo drive is designed with expansion module interface. At present, Profibus-DP bus communication module is available. In future, it will also support single axis control and assistant PLC expansion module etc.
- In order to make the servo system flexible to use for users, the ProNet series servo drive take the lead in providing expansibility, soft and open design. It can be expanded with various communication and feedback interface through selective modules.

Abundant Communication Functions



CANopen

EtherCAT®



The ProNet series servo drives provide RS485 and CAN communication interface. Besides, it is able to support MODBUS, CANopen, Ethercat and PROFIBUS communication protocol.

Model Comparison Table

Servo motor			Servo drive	
Series		Power	Model	200V
Medium inertia	Small capacity	EMJ 3000min ⁻¹	200W	EMJ-02A□A PRONET-02A□A
			400W	EMJ-04A□A PRONET-04A□A
			750W	EMJ-08A□A PRONET-08A□A
			1000	EMJ-10A□A PRONET-10A□A
	Medium capacity	EMG 2000min ⁻¹	1.0k	EMG-10A□A PRONET-10A□A
			1.5k	EMG-15A□A PRONET-15A□A
			2.0k	EMG-20A□A PRONET-20A□A
			3.0k	EMG-30A□A PRONET-30A□A
			5.0k	EMG-50A□A PRONET-50A□A
	Large capacity	EML 1000min ⁻¹	1.0k	EML-10A□A PRONET-10A□A
			2.0k	EML-20A□A PRONET-20A□A
			3.0k	EML-30A□A PRONET-30A□A
			4.0k	EML-40A□A PRONET-50A□A
			7.5k	EMB-75D□A PRONET-75D□A
			11kW	EMB-1AD□A PRONET-1AD□A
			15kW	EMB-1ED□A PRONET-1ED□A

ProNet

Series Servo Drive

Features

- The response performance has been improved more than three times than EDB series, which realizes online real time inspecting of load inertia, the gain can be adjusted at any time in order to achieve the best control effect.
- FFT Analysis to control the vibration
- Expansibility: DP-100, AE100 module

Specification Description

ProNet Servo Drive	Rated Power		Power voltage		Control Style		Design Sequence	
	Sign	Specification	Sign	Specification	Sign	Specification	Sign	Specification
	02	200W	A	200VAC	M	Position, speed, torque control	A	17 bits Serial Encoder
	04	400W	D	400VAC		E	B	Resolver
	08	750W						
	10	1KW						
	15	1.5KW						
	20	2KW				E	C	Encoder
	30	3KW						
	50	5KW						
	75	7.5KW						
	1A	11KW						
	1E	15KW						

Note: 400Vac power supply is only available for power range from 7.5kw to 15kw at present.

Ratings

ESTUN

Servo Drives	PRONET-	02A	04A	08A	10A	15A	20A	30A	50A	75D	1AD	1ED
Servo Motors	EMJ-	02A	04A	08A	10A	-	-	-	-	-	-	-
	EMG-	-	-	-	10A	15A	20A	30A	50A	-	-	-
	EML-	-	-	-	10A	-	20A	30A	40A	-	-	-
	EMB-	-	-	-	-	-	-	-	-	75D	1AD	1ED
Continuous output current [Arms]		1.3	2.7	4.0	6.0	9.0	12.0	18.0	28.0	18.0	28.0	38.0
Max. output current [Arms]		3.9	8.1	12.0	18.0	28.0	42.0	56.0	84.0	56.0	70.0	84.0
Input Power Supply Capacity		0.5	0.9	1.3	1.8	2.5	3.5	4.5	7.5	12.0	18.0	22.0

Specifications

Items			Specifications	
Input Power Supply	Main Circuit	200V	Three-phase 200 to 230VAC 50/60Hz (1.0kw-5.0kW)	
		400V	Three-phase 380 to 440VAC 50/60Hz (7.5kw-15kW)	
	Control Circuit	200V	single-phase 200 to 230VAC 50/60Hz (1.0kw-5.0kW)	
		400V	single-phase 380 to 440VAC 50/60Hz (7.5kw-15kW)	
Control Method			SVPWM Control	
Feedback			Serial encoder:13072P/R Resolver	
Operating Conditions	Ambient/Storage Temperature		Ambient temperature: 0 to +55°C ,Storage Temperature:-20 to +85°C	
	Ambient/Storage Humidity		90% RH or less(no condensation)	
	Elevation		1000m or less	
	Vibration/Impact Resistance		Vibration Resistance:4.9m/s ² , Impact Resistance: 19.6m/s ²	
Configuration			Base-mounted	
Performance	Speed Control Range		1:5000	
	Speed Regulation	Load Regulation	0 to 100% load: $\pm 0.01\%$ max	
		Voltage Regulation	Rated voltage $\pm 10\%$: 0%(at rated speed)	
		Temperature Regulation	25 $\pm 25^\circ\text{C}$: $\pm 0.1\%$ max. (at rated speed)	
Torque Control	Analog Input	Reference Voltage		
		$\pm 10\text{VDC}$ at rated torque(variable setting range: ± 1 to 10VDC)		
		Input Impedance		
		Circuit Time Constant		
		About 10MΩ min.		
Circuit Time Constant			10μs	

Specifications

Items		Specifications
Speed Control	Analog Input	Reference Voltage ±10VDC at rated torque(variable setting range:±10VDC)
		Max. input voltage:±12V
		Input Impedance About 10MΩ min.
	Set Speed Reference	Circuit Time Constant 10μs
		Rotation Direction Selection Switches the direction by /P-CON
	Function	Speed Selection Speed 1 to 3 selection
		Soft Start Setting 0 to 10s(can be set individually for acceleration and deceleration)
Position Control	Reference Pulse	Type Sign + pulse train, CCW+CW pulse train, or 90°phase difference 2-phase pulse(phase A + phase B)
		Form Non-insulated line driver(+5V level),open collector
		Frequency x1 multiplier:4Mpps
		x2 multiplier:2Mpps
		x4 multiplier:1Mpps Open collector:200kpps
		Frequencies drop when the duty cycle have errors
	Set Position Reference	Position Setting Can set 16 position reference
I/O Signals	Encoder Output Pulses	
	Phase A, Phase B, Phase C: line driver output The number of dividing pulse: Any setting ratio is available	
	Sequence Input	Number of Channels B channels
		Function Signal allocations and positive/negative logics can be modified: Servo On(/S-ON),P control(/P-CON),alarm reset(/ALM-RST),clear error pulse(/CLR),forward run prohibited (P-OT),reverse run prohibited(N-OT),forward torque limit(/P-CL),reverse torque limit(/N-CL)
	Sequence Output	Number of Channels 4 channels
		Function Servo alarm(ALM)Signal allocations and positive/negative logics can be modified: Positioning completion(/COIN),speed agree detection(/V-CMP),motor rotation detection(/TGON),servo ready(/S-RDY),torque limit detection(/CLT),brake interlock(/BK),encoder C pulse(/PGC)
Built-in Function	Dynamic Brake(DB) Functions	
	Regenerative Processing Functions	
	Protective Functions	
	Utility Functions	
	Display Functions	
	Communications	

DP100 Module



There are many applications based on profibus communication in industrial automation market. The DP100 module is a PROFIBUS DP module, which can connect the other PROFIBUS products with ESTUN ProNet servo drive and provide profibus project at low cost.

Main Features

- Bus transmitting baud rate automatic identification (9.6 Kbps~12Mbps)
- The on-card power and isolator can match demand of different net regulations
- Distribute module address freely, make data transmitted to any servo drives
- Periodic data (PZD) exchange is available by DPV0 channel
- Reading and writing no-periodic data are available by DPV1 channel
- Support DPV2, isochronous, each servo drive can sampling control isochronously, the isochronous precision can reach 1us.
- The module support motion control-oriented PROFIBUS PROFIDRIVE regulation
- Pass the coherence test and authentication of PROFIBUS

EMJ

Series Servo Motor

Features

- Medium inertia
- Peak torque up to 300% of rated torque
- Various models (200w~1000w, with brake, etc.,)
- Run at speed of up to 4500r/min
- Equipped with 17-bit incremental/absolute encoder



Applications

- SMM(surface mounting machine)
- PCB puncher machine
- Robot arm
- Handing machine
- Foodstuff processing machine
- Textile machine

Model Specification Description

EMJ- 08

A

D

A

1

1

EMJ Model
Servo Motor

Rated Power

Power Voltage

Encoder

Design
Sequence

Shaft End

Optional Parts

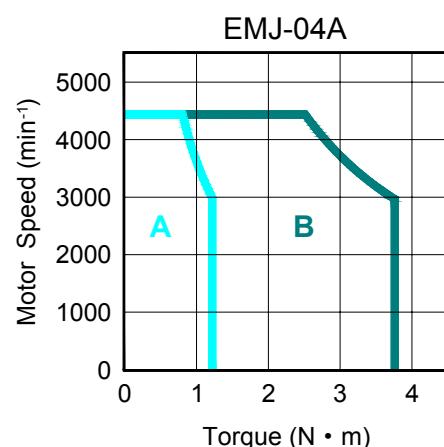
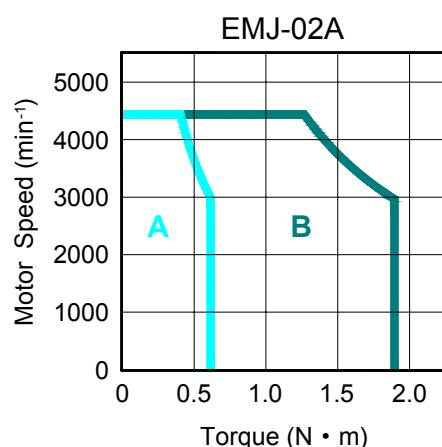
Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.
2	200W	A	200Vac	D	Incremental Encoder: 131072P/R	A	Design Sequence	1	Flat, without keys	1	None
4	400W			S	Absolute Encoder: 131072P/R			2	Flat, with keys, with screw thread	2	With Oil Seal
8	750W							3		3	With brake (DC24V)
10	1000W							4		4	With oil seal, with brake (DC24V)

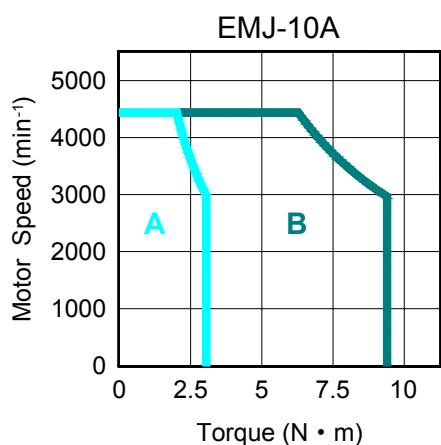
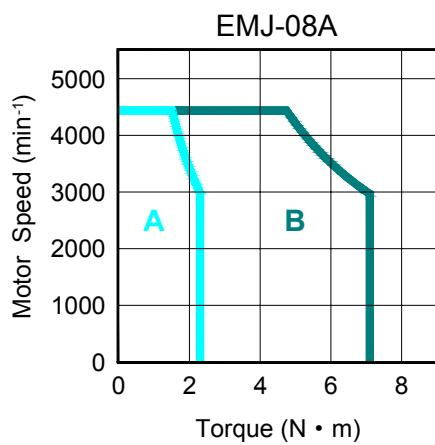
Rated Value and Specification

Voltage		200VAC					
Servo motor type	EMJ-	02A	04A	08A	10A		
Rated output power	W	200	400	750	1000		
Rated torque	N.m	0.64	1.27	2.40	3.18		
Instantaneous peak torque	N.m	1.92	3.82	7.16	9.55		
Rated current	Arms	1.3	2.7	4.0	5.3		
Instantaneous peak current	Arms	3.9	8.1	12.0	15.9		
Rated speed	min ⁻¹	3000					
Max. speed	min ⁻¹	4500					
Rotator rotated inertia	x10 ⁻⁴ kg/m ²	0.19(0.23)	0.31(0.35)	1.35(1.47)	1.74(1.87)		
Brake rated voltage		DC24V±10%					
Brake rated power	W	7.2		11.5			
Brake holding torque	N.M	1.3		3.2			
Encoder	Standard	17 bit Incremental Encoder: 131072P/R					
	Optional	17 bit Absolute Encoder: 131072P/R; Resolver					
Heat endurance level		F					
Environment temperature		0 to +40°C (Non-iced)					
Environment humidity		20 to 80% RH (No dew)					
Protection method		All-closed, self-cool,IP65 (Except output shaft and connector)					
Anti-vibration performance		49m/s ²					

(Note): The values in parentheses are for servo motors with holding brakes.

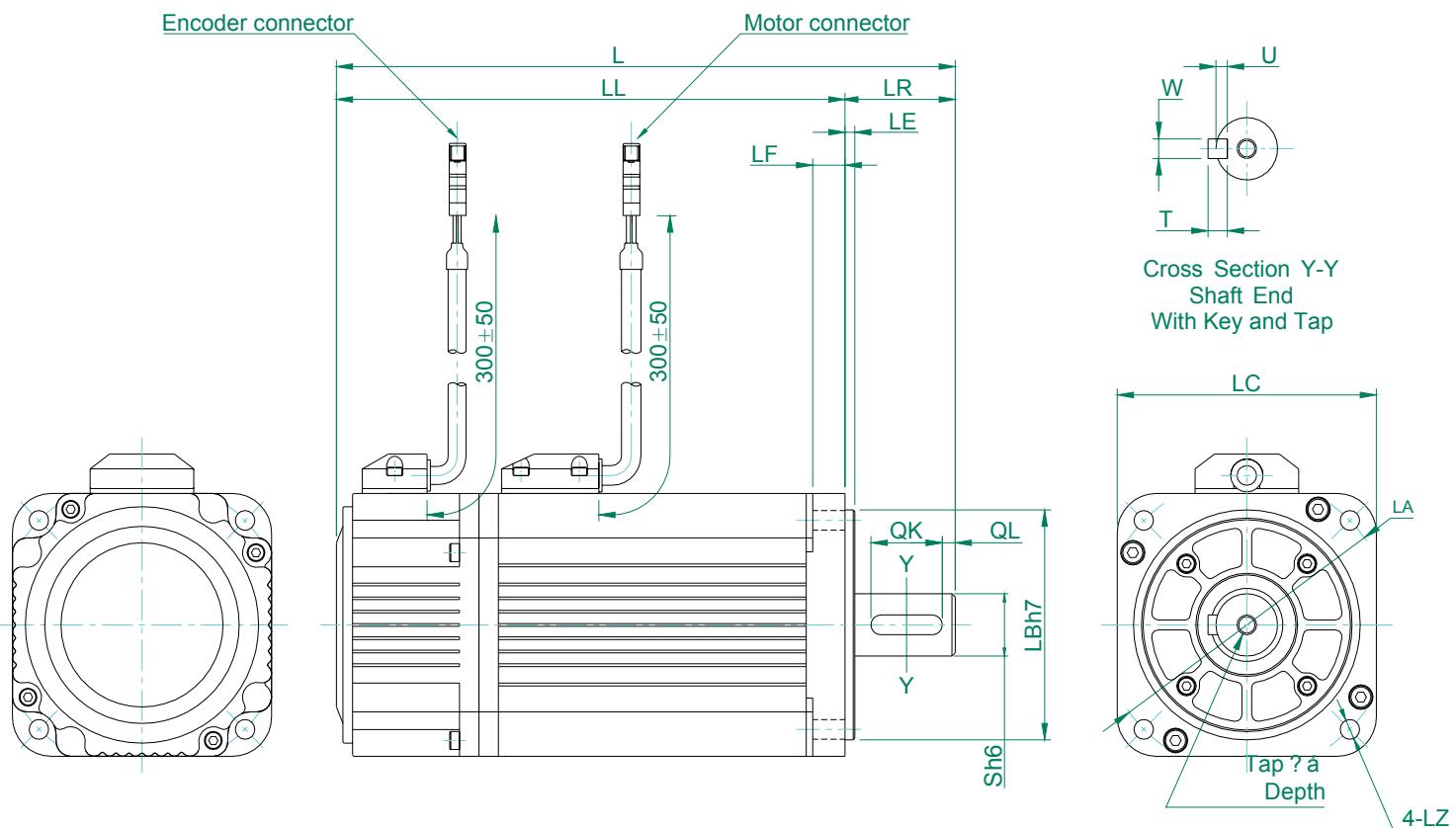
Torque-speed Feature



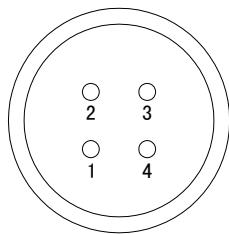


A: Continuous Working Area B: Repeatable Working Area

Dimension



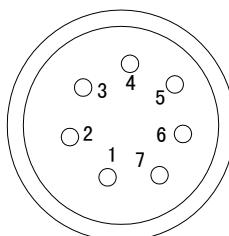
Model EMJ-	L	LL	Flange face						S	Tap×Depth	Key					
			LR	LE	LF	LC	LA	LB			QK	QL	W	T	U	
02A	153	123	30	3	6	60	70	50	5.5	14	M5x10L	16	4	5	5	3
04A	173	143	30	3	6	60	70	50	5.5	14	M5x10L	16	4	5	5	3
08A	191	156	35	3	9	80	90	70	6	19	M6x15L	22	4	6	6	3.5
10A	211	176	35	3	9	80	90	70	6	19	M6x15L	22	4	6	6	3.5



➤ **Motor connector specification**

➤ Plug: CGRSB-4BFMA-SL8001

Pin No.	Signal	Color
1	U	Red
2	V	Blue
3	W	White
4	FG	Green/yellow

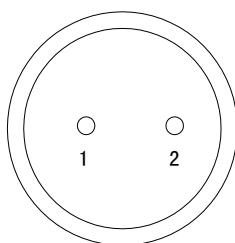


➤ **Encoder connector specification**

➤ Plug: CGRSD-7BFMA-SL8001

Pin No.	Signal	Color
1	S+	Blue
2	S-	Blue/Black
*3	BAT+	Brown
*4	BAT-	Brown/Black
5	PG5V	Red
6	PG0V	Black
7	FG	Shield

*Note: There are no BAT+,BAT- signal in incremental encoder



➤ **Brake Connector Specifications**

➤ Plug: CGRSB-2BFMA-SL8001

Pin No.	Signal	Color
1	B1	Blue
2	B2	White

EMG

Series Servo Motor

Features

- Be used to drive the feed shaft of various machine
 - Various products (1.0KW ~5.0KW, with brake etc.)
 - Equipped with 17-bit incremental/absolute encoder. Optional mounted resolver.
 - Standard configuration is IP65

Applications

- Machine tools
 - Handling machine
 - Foodstuff processing machine
 - Textile machine



Model Specification Description

EMG- 10 A D A 1 1

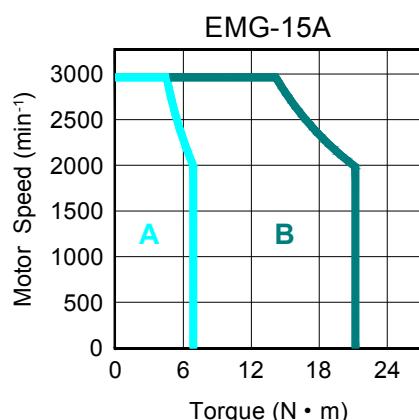
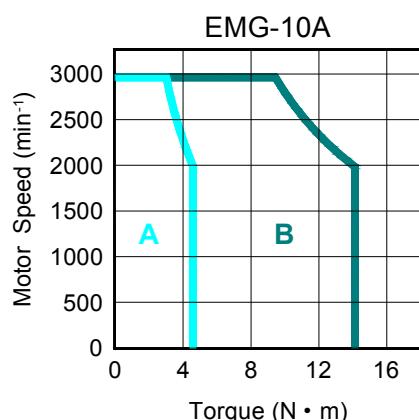
EMG Model Servo Motor	Rated Power		Power Voltage		Encoder		Design Sequence	Shaft End		Optional Parts	
	Sign	Spec.	Sign	Spec.	Sign	Spec.		Sign	Spec.	Sign	Spec.
10	1.0KW	A	200Vac	D	Incremental Encoder: 131072P/R	A	Flat, without keys	1	Flat, without keys	1	None
	1.5KW							2	Flat, with keys, with screw thread	2	With Oil Seal
	2.0KW							3		3	With brake (DC24V)
	3.0KW										
	5.0KW				R					4	With oil seal, with brake (DC24V)

Rated Value and Specification

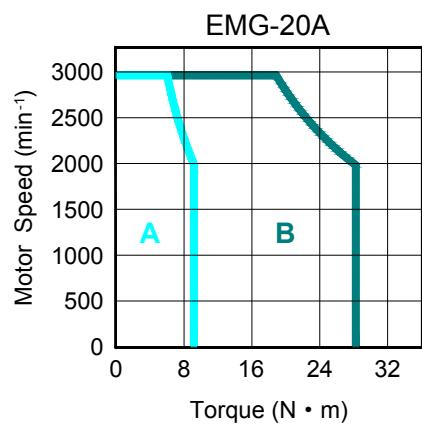
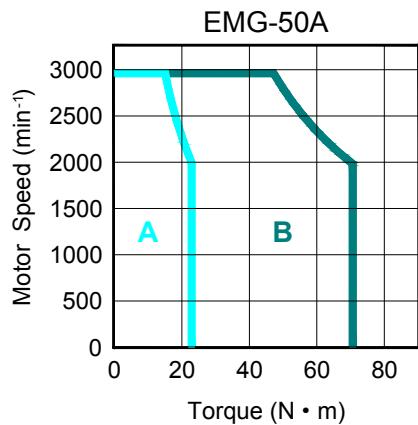
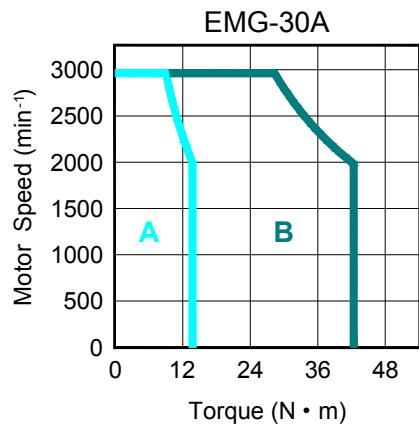
Voltage		200VAC							
Motor type	EMG-	10A	15A	20A	30A	50A			
Rated output power	kW	1.0	1.5	2.0	3.0	5.0			
Rated torque	N.m	4.78	7.16	9.55	14.3	23.9			
Instantaneous peak torque	N.m	14.3	21.5	28.7	43	71.6			
Rated current	Arms	6.0	9.0	12.0	18.0	28			
Instantaneous peak current	Arms	18.0	27.0	36.0	54.0	84			
Rated speed	min ⁻¹	2000							
Max. speed	min ⁻¹	3000							
Rotator rotated inertia	x10 ⁻⁴ kg/m ²	10(10.6)	14.5(15.1)	19.0(19.6)	41.3(44.5)	65.7(68.9)			
Brake rated voltage		DC24V±10%							
Brake rated power	W	19		35					
Brake holding torque	N.M	10		40					
Feedback unit	Standard	17 bit Incremental Encoder: 131072P/R							
	Optional	17 bit Absolute Encoder: 131072P/R; Resolver							
Heat-endurance level		F							
Environment humidity temperature		0 to +40°C (Non-iced)							
Environment humidity		20 to 80% RH (No dew)							
Protection method		All-closed, Self-cool, IP65 (Except output shaft and connector)							
Anti-vibration performance		24.5m/s ²							

(Note): The values in parentheses are for servo motors with holding brakes.

Torque-Speed Feature

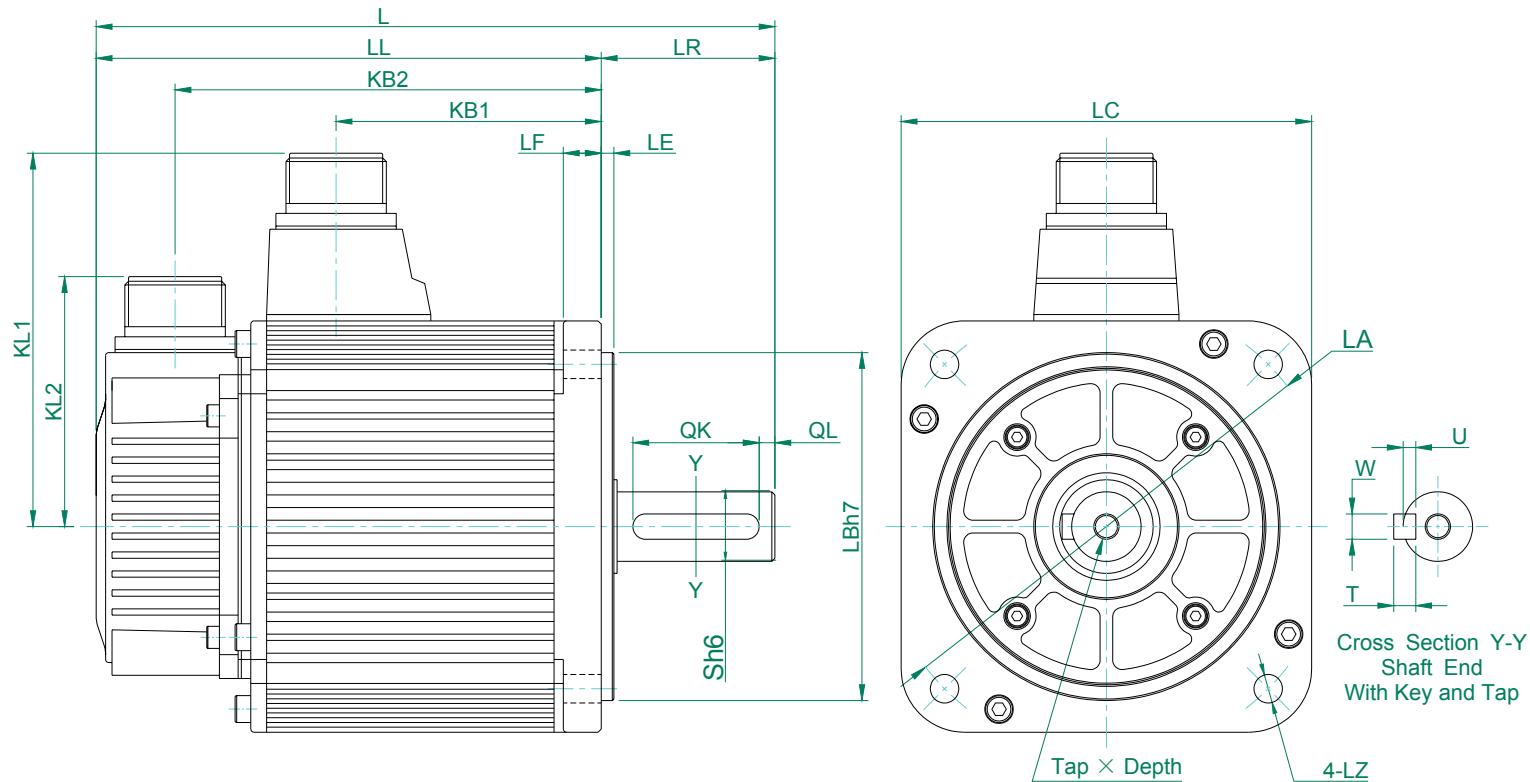


A : Condition
C : Condition
n : Condition
i : Condition



uous Working Area B:
Repeatable Working Area

Dimension



Model EMG-	L	LL	KB1	KB2	KL1	KL2	Flange face							S	Tap×Depth	Key				
							LR	LE	LF	LC	LA	LB	LZ			QK	QL	W	T	U
10A	215	160	84	135	118	79	55	4	12	130	145	110	9	22	M6x20L	40	5	8	7	4
15A	240	185	109	160	118	79	55	4	12	130	145	110	9	22	M6x20L	40	5	8	7	4
20A	265	210	134	185	118	79	55	4	12	130	145	110	9	22	M6x20L	40	5	8	7	4
30A	307	228	143	203	140	79	79	3.2	18	180	200	114.3	13.5	35	M8x16L	55	6	10	8	5
50A	347	268	183	243	140	79	79	3.2	18	180	200	114.3	13.5	35	M8x16L	55	6	10	8	5



- **Motor connector specification**
- Plug: MS3108B20-4S(LC=130), MS3108B22-22S(LC=180)
- Receptacle: MS3102A20-4P(LC=130), MS3102A22-22P(LC=180)
- Cable Clamp: MS3057-12A

Pin No.	Signal
A	U
B	V
C	W
D	FG



- **Encoder connector specification**
- Plug: MS3108B20-29S
- Receptacle: MS3102A20-29P
- Cable Clamp: MS3057-12A

Incremental/Absolute encoder

Pin No.	Signal	Color
K	S+	Blue
L	S -	Blue/Black
*T	BAT+	Brown
*S	B AT-	Brown/Black
H	PG5V	Red
G	PG0V	Black
J	FG	Shield

Resolver

Pin No.	Signal	Color
K	SIN+	Yellow
L	SIN-	Blue
T	COS+	Red
S	COS-	Black
H	R1	Red/White
G	R2	Yellow/White
J	FG	Shield

*Note: There are no BAT+,BAT- signal in incremental encoder



- **Brake Connector Specifications**
- Plug: MS3106A10SL-3S
- Receptacle: MS3102A10SL-3P
- Cable Clamp: MS3057-4A

Pin No.	Signal
A	B1
B	B2
C	-

EML

Series Servo Motor

Features

- Be used to drive the feed shaft of various machine
 - Various products(1.0KW ~4.0KW, with brake etc.)
 - Equipped with 17-bit incremental/absolute encoder
 - Standard configuration is IP65

Applications

- Machine tools
 - Handling machine
 - Foodstuff processing machine
 - Textile machine



Model Specification Description

EML- 10

A

D

A

1

1

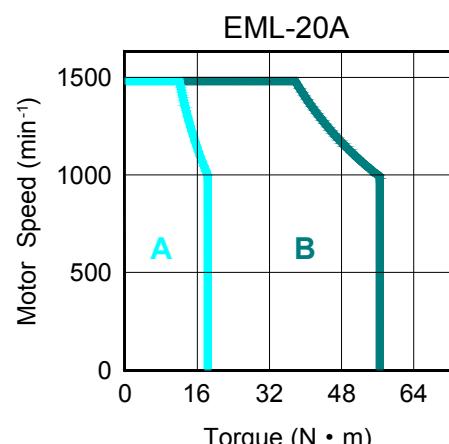
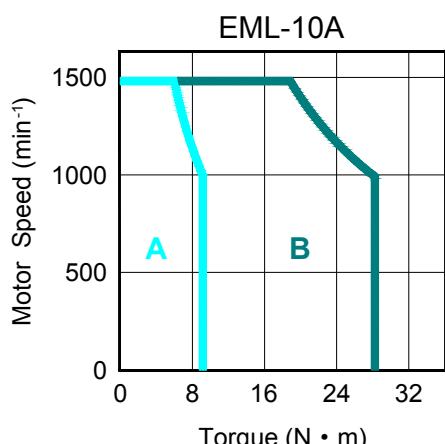
EML Model Servo Motor	Rated Power		Power Voltage		Encoder		Design Sequence		Shaft End		Optional Parts	
	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.
10	1.0KW	A	200Vac	D	Incremental Encoder: 131072P/R	A	Design Sequence	1	Flat, without keys	1	None	2
	1.5KW										With Oil Seal	
	2.0KW											3
	3.0KW			S	Absolute Encoder: 131072P/R			2	Flat, with keys, with screw thread		With brake (DC24V)	
	4.0KW				Resolver						With oil seal, with brake (DC24V)	4

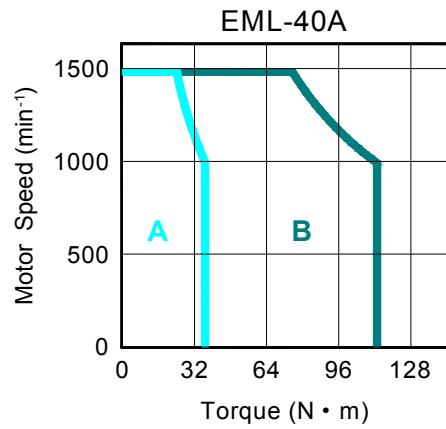
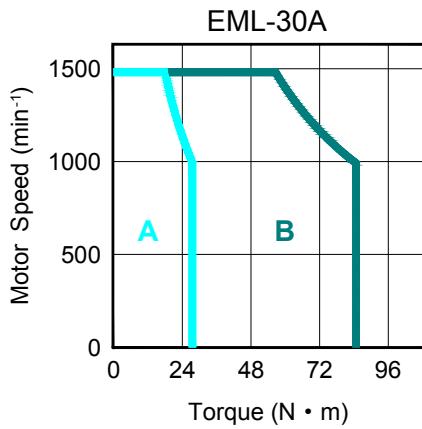
Rated Value and Specification

Voltage		200VAC					
Servo motor type	EML -	10A	20A	30A	40A		
Rated output power	kW	1.0	2.0	3.0	4.0		
Rated torque	N.m	9.55	19.1	28.7	38.2		
Instantaneous peak torque	N.m	28.7	57.3	86.0	114.6		
Rated current	Arms	6.0	12.0	18.0	24.0		
Instantaneous peak current	Arms	18.0	36.0	54.0	72.0		
Rated rotated speed	min -1	1000					
The highest rotated speed	min -1	1500					
Rotator rotated inertia	x10 -4 kg /m 2	19(19.6)	53.5(56.7)	77.8(81.0)	102.2(105.4)		
Brake rated voltage		DC24V $\pm 10\%$					
Brake rated power	W	7.2		11.5			
Brake holding torque	N.M	1.3		3.2			
Feedback unit	Standard	17 bit Incremental Encoder: 131072P/R					
	Optional	17 bit Absolute Encoder: 131072P/R; Resolver					
Heat endurance level		F					
Environment temperature		0 to + 40 C (Non-iced)					
Environment humidity		20 to 80% RH (No dew)					
Protection method		All-closed , self-cool , IP65 (Except output shaft and connector)					
Anti-vibration performance		24.5m /s 2					

(Note): The values in parentheses are for servo motors with holding brakes.

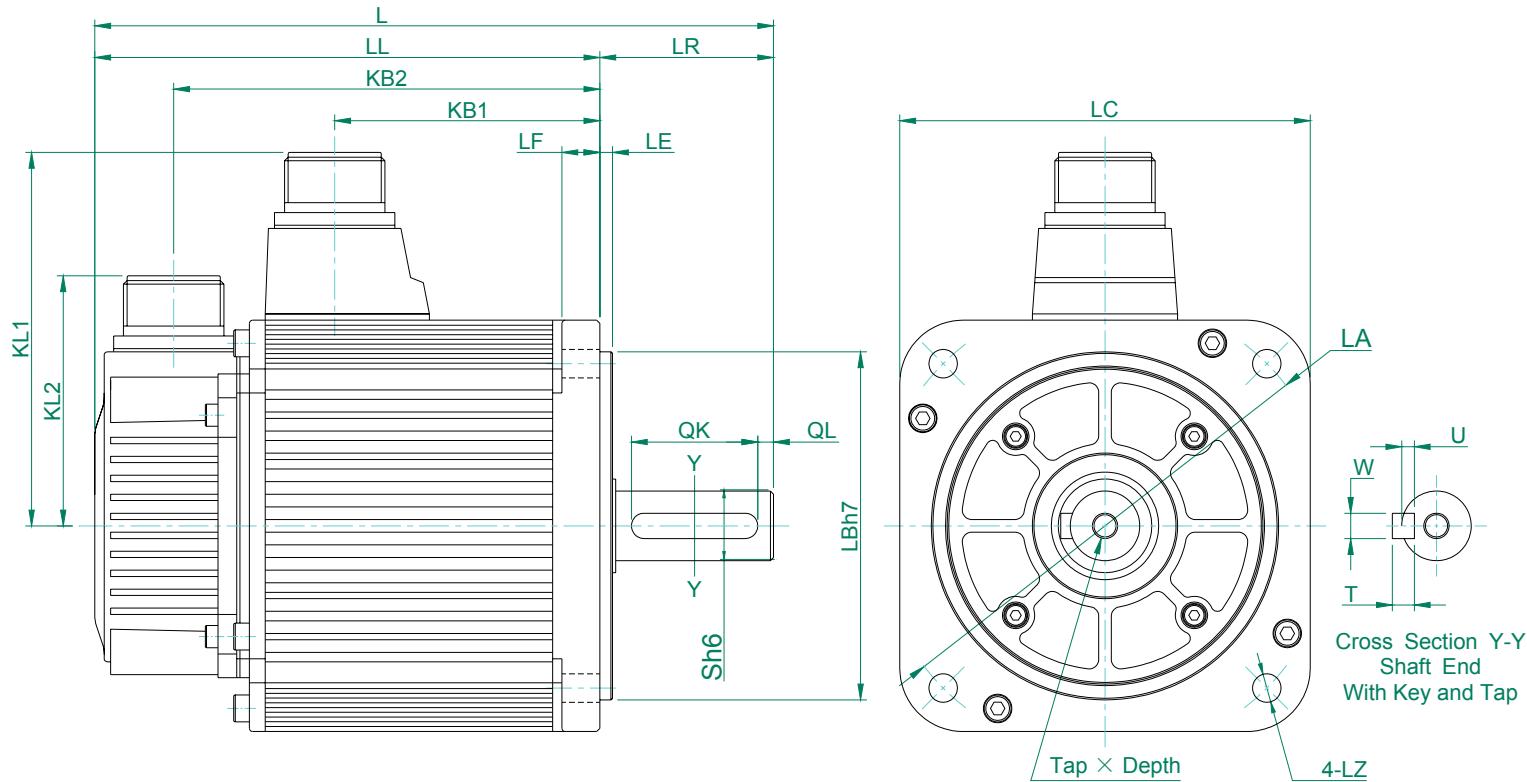
Torque-Speed Feature





Dimension

A: Continuous Working Area B: Repeatable Working Area



Model EML-	L	LL	KB1	KB2	KL1	KL2	Flange face						S	Tap×De pth	key					
							LR	LE	LF	LC	LA	LB	LZ		QK	QL	W	T	U	
10A	265	210	134	185	118	79	55	4	12	130	145	110	9	22	M6x20 L	40	5	8	7	4
20A	332	253	168	228	140	79	79	3.2	18	180	200	114	13.5	35	M8x16 L	55	6	1 0	8	5
30A	372	293	208	268	140	79	79	3.2	18	180	200	114	13.5	35	M8x16 L	55	6	1 0	8	5
40A	412	333	248	308	140	79	79	3.2	18	180	200	114	13.5	35	M8x16 L	55	6	1 0	8	5



➤ Motor connector specification

- Plug: MS3108B20-4S(LC=130), MS3108B22-22S(LC=180)
- Receptacle: MS3102A20-4P (LC=130), MS3102A22-22P(LC=180)
- Cable Clamp: MS3057-12A

Pin No.	Signal
A	U phase
B	V phase
C	W phase
D	FG



➤ Encoder connector specification

- Plug: MS3108B20-29S
- Receptacle: MS3102A20-29P
- Cable Clamp: MS3057-12A

Incremental/Absolute encoder

Resolver

Pin No.	Signal	Color	Pin No.	Signal	Color
K	S+	Blue	K	SIN+	Yellow
L	S -	Blue/Black	L	SIN-	Blue
*T	BAT+	Brown	T	COS+	Red
*S	BAT-	Brown/Black	S	COS-	Black
H	PG5V	Red	H	R1	Red/White
G	PG0V	Black	G	R2	Yellow/White
J	FG	Shield	J	FG	Shield

*Note: There are no BAT+,BAT- signal in incremental encoder



➤ Brake Connector Specifications

- Plug: MS3106A10SL-3S
- Receptacle: MS3102A10SL-3P
- Cable Clamp: MS3057-4A

Pin No.	Signal
A	B1
B	B2
C	-

EMB

Series Servo Motor

Features

- Power supply voltage: 400V
- Driving of feed shafts for various machine
- Various products (7.5KW~15KW, with brake etc.)
- Mounted 17 bits absolute encoder, optional mounted resolver

Applications

- Machine tools
- Handling machine
- Foodstuff processing machine
- Textile machine



Model Specification Description

EMB- 1E**D****S****A****1****1**EML Model
Servo Motor

Rated Power

Power Voltage

Encoder

Design
Sequence

Shaft End

Optional Parts

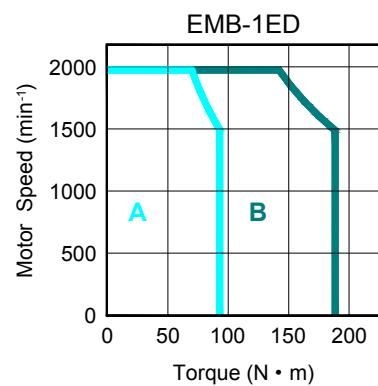
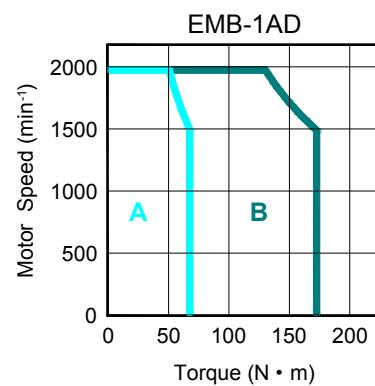
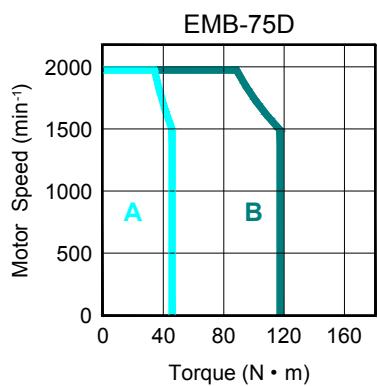
Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.
75	7.5KW	D	400Vac	S	Absolute Encoder: 131072P/R	A	Design Sequence	1	Flat, without keys	1	None
1A	11KW							2	Flat, with keys, with screw thread	2	With Oil Seal
1E	15KW			R	Resolver			3		3	With brake (DC24V)
								4		4	With oil seal, with brake (DC24V)

Rated Value and Specification

voltage		400VAC		
Servo motor Model	EMB-	75D□A	1AD□A	1ED□A
Rated output power	kW	7.5	11.0	15.0
Rated torque	Nm	47.8	70.0	95.5
Instantaneous Peak Torque	Nm	119.4	175	191
Rated Current	Arms	18.0	28.0	38.0
Instantaneous Max. Current	Arms	56.0	70.0	84.0
Rated Speed	min ⁻¹	1500		
Max. Speed	min ⁻¹	2000		
Rotor Moment of Inertia	x10 ⁻⁴ kgm ²	186.2(193.6)	217.6(278.9)	338.8(346.1)
Brake voltage		DC24V±10%		
Brake power	W	90		
Brake holding torque	N.M	100		
Feedback unit	standard	17-bit absolute encoder: 131072P/R		
	option	Resolver		
Brake rated voltage		DC24V±10%		
Brake rated power	W	90		
Brake holding torque	N.m	100		
Insulation Class		F		
Ambient Temperature		0 to +40°C (non freezing)		
Ambient Humidity		20 to 80% RH (non condensing)		
Enclosure		Totally enclosed, self-cooled, IP55 (except for shaft opening and connectors)		
Vibration		24.5m/s ²		

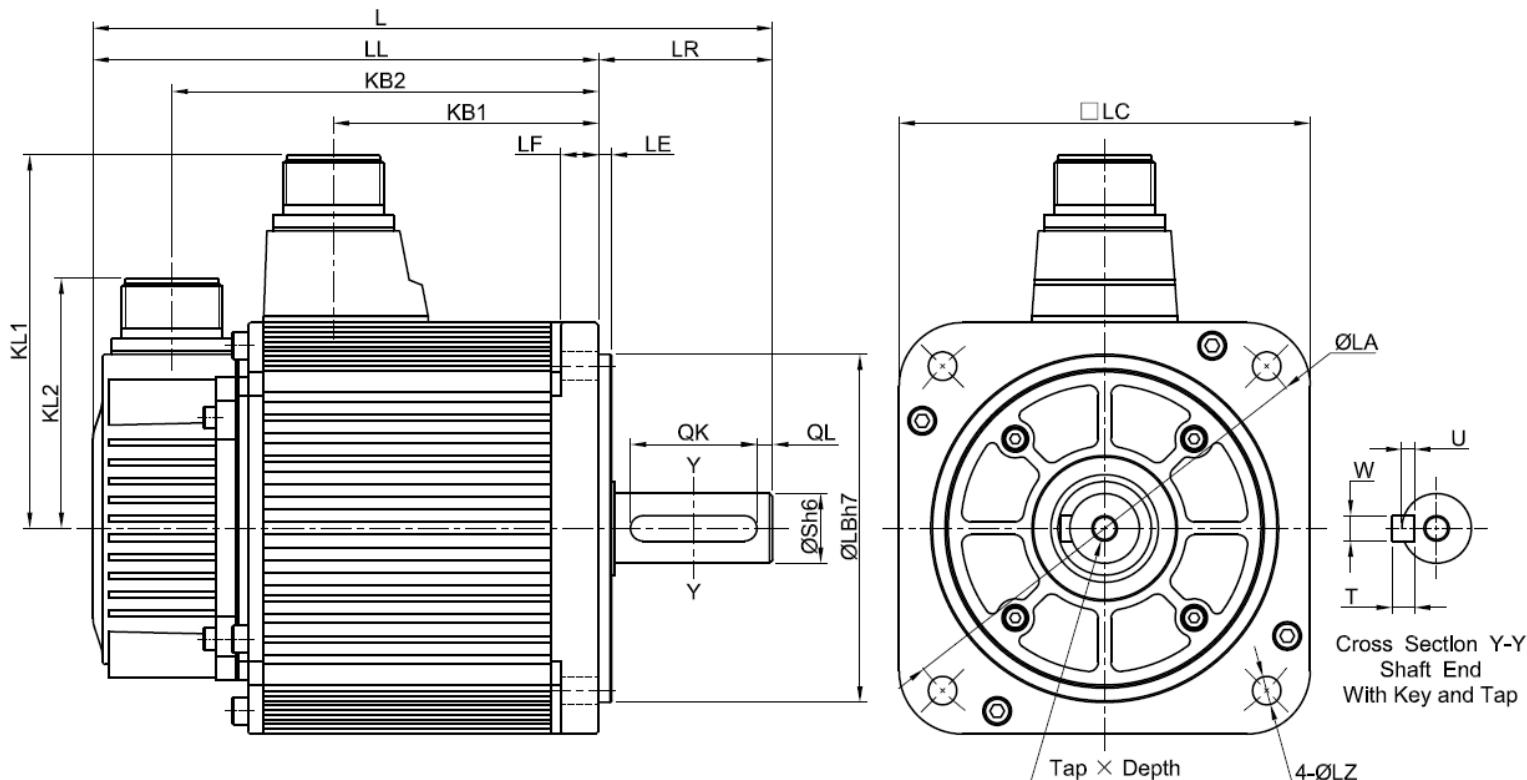
Note: The value in parentheses is for servo motors with holding brakes.

Torque-Speed Feature



A: Continuous Working Area B: Repeatable Working Area

Dimension



Model EMB-	L	LL	KB1	KB2	KL1	Flange side						S	Tap x Depth	key					
						LR	LE	LF	LC	LA	LB			QK	QL	W	T	U	
75D	530	414	366	302	184	116	4	18	220	235	200	13.5	42	M16x32L	90	6	12	8	5
1AD	580	464	416	352	184	116	4	18	220	235	200	13.5	42	M16x32L	90	6	12	8	5
1ED	615	499	451	387	184	116	4	18	220	235	200	13.5	55	M20x40L	90	6	12	10	6



➤ Motor connector specification

- Plug: MS3108B20-4S(LC=130), MS3108B22-22S(LC=180)
- Receptacle: MS3102A20-4P (LC=130), MS3102A22-22P(LC=180)
- Cable Clamp: MS3057-12A

Pin No.	Signal
A	U phase
B	V phase
C	W phase
D	FG



➤ Brake Connector Specifications

- Plug: MS3106A10SL-3S
- Receptacle: MS3102A10SL-3P
- Cable Clamp: MS3057-4A

Pin No.	Signal
A	B1
B	B2
C	-



➤ Encoder connector specification

- Plug: MS3108B20-29S
- Receptacle: MS3102A20-29P
- Cable Clamp: MS3057-12A

Incremental/Absolute encoder

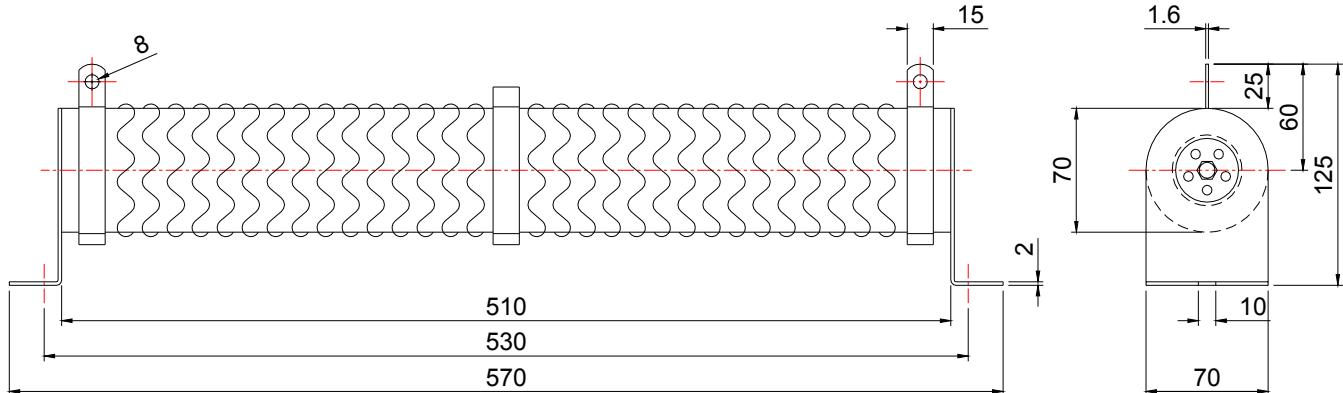
Pin No.	Signal	Color
K	S+	Blue
L	S -	Blue/Black
T	BAT+	Brown
S	BAT-	Brown/Black
H	PG5V	Red
G	PG0V	Black
J	FG	Shield

Resolver

Pin No.	Signal	Color
K	SIN+	Yellow
L	SIN-	Blue
T	COS+	Red
S	COS-	Black
H	R1	Red/White
G	R2	Yellow/White
J	FG	Shield

Regenerative Resistor

Externally mount the regenerative resistor for 7.5KW to 15KW Servo Drives.

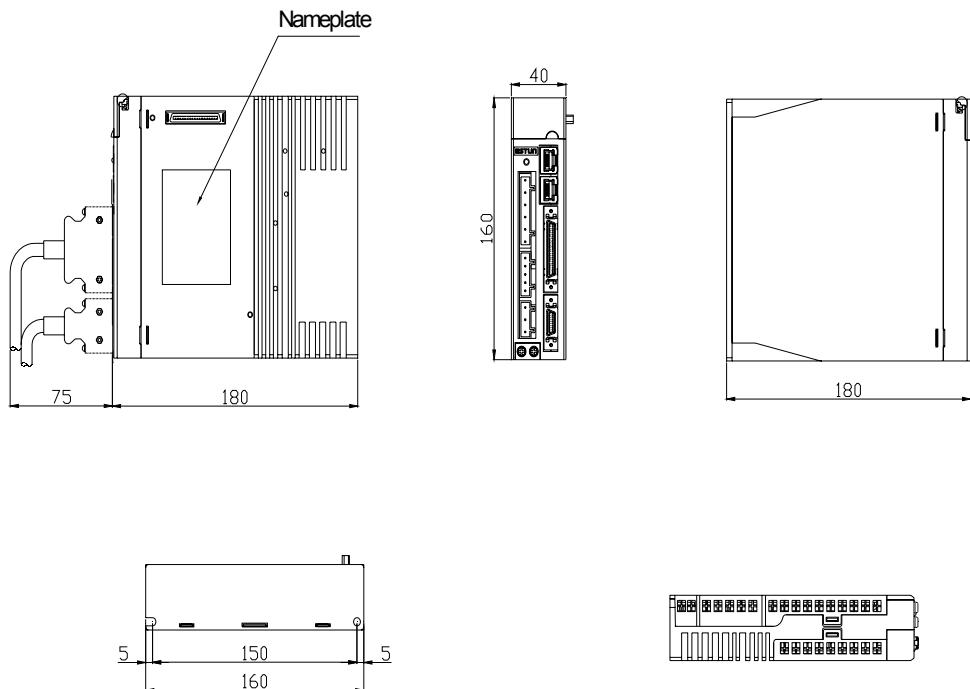


ProNet

Servo Drives External Dimensions

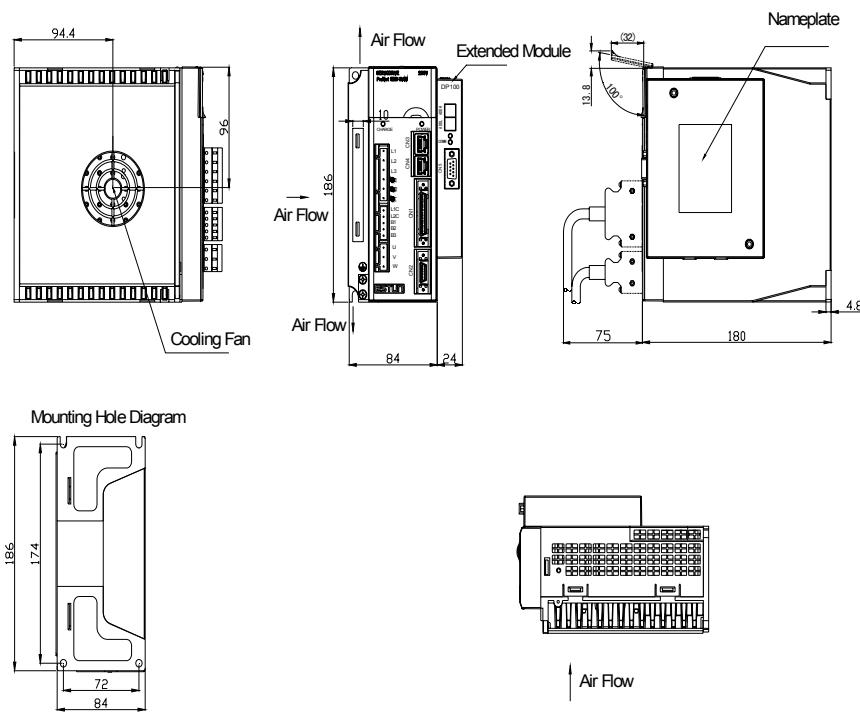
ProNet-02/04A

Unit: mm

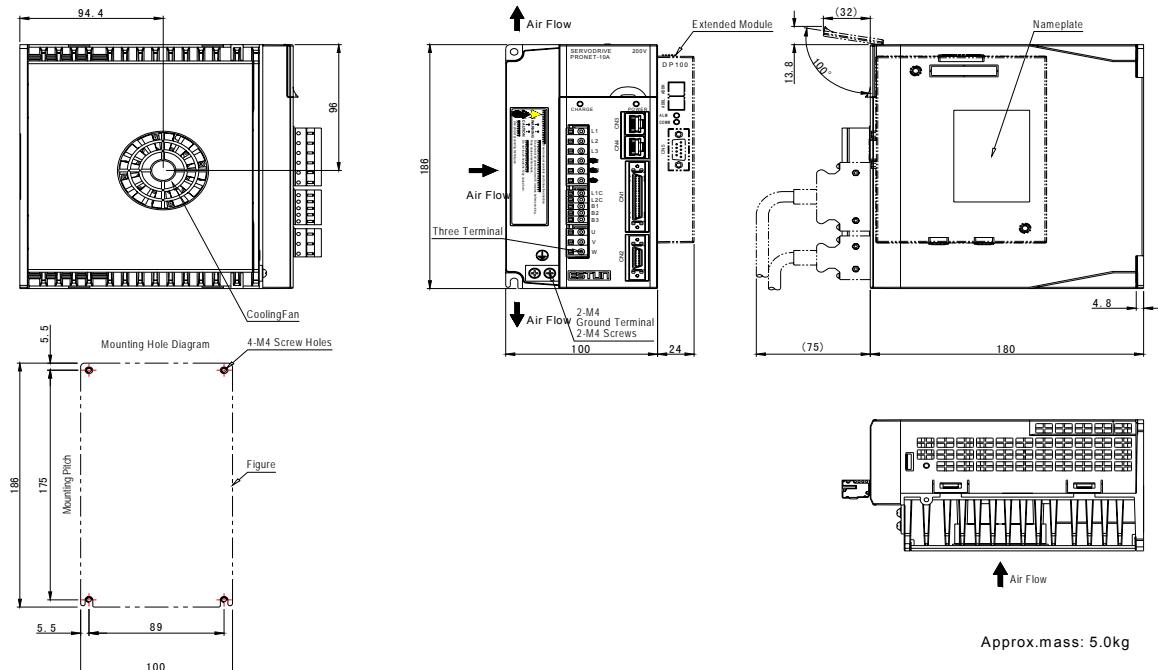


ProNet-08/10A

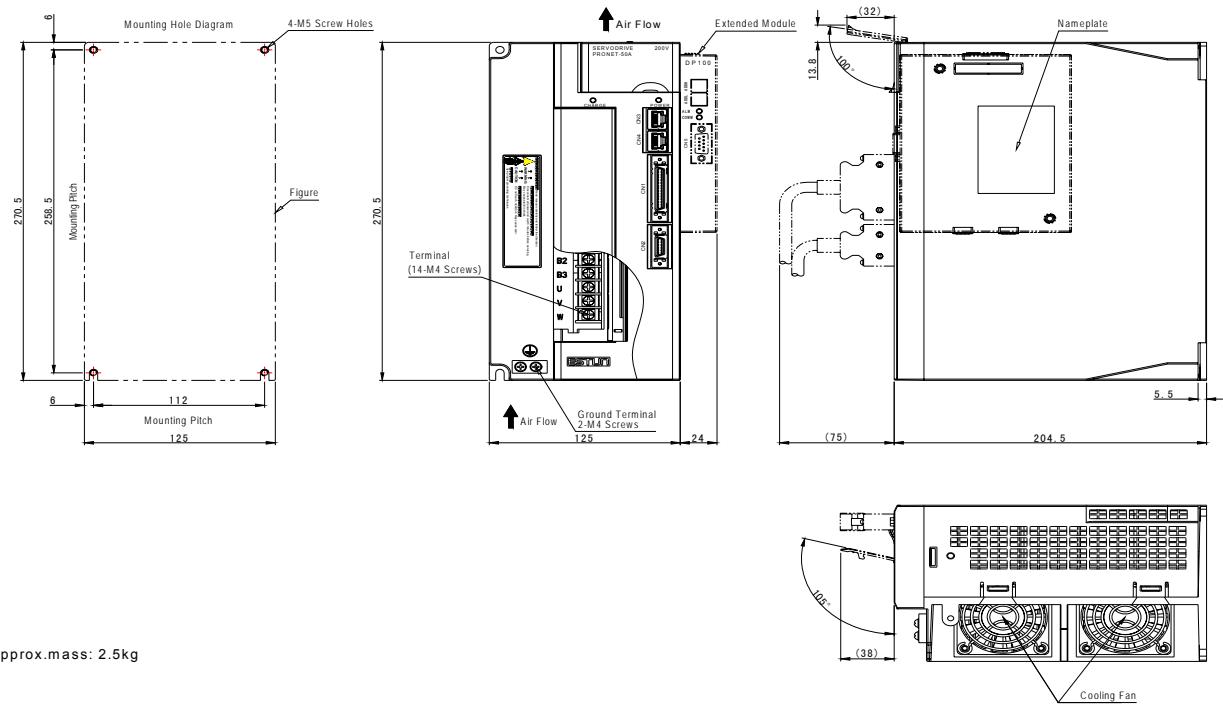
Unit: mm



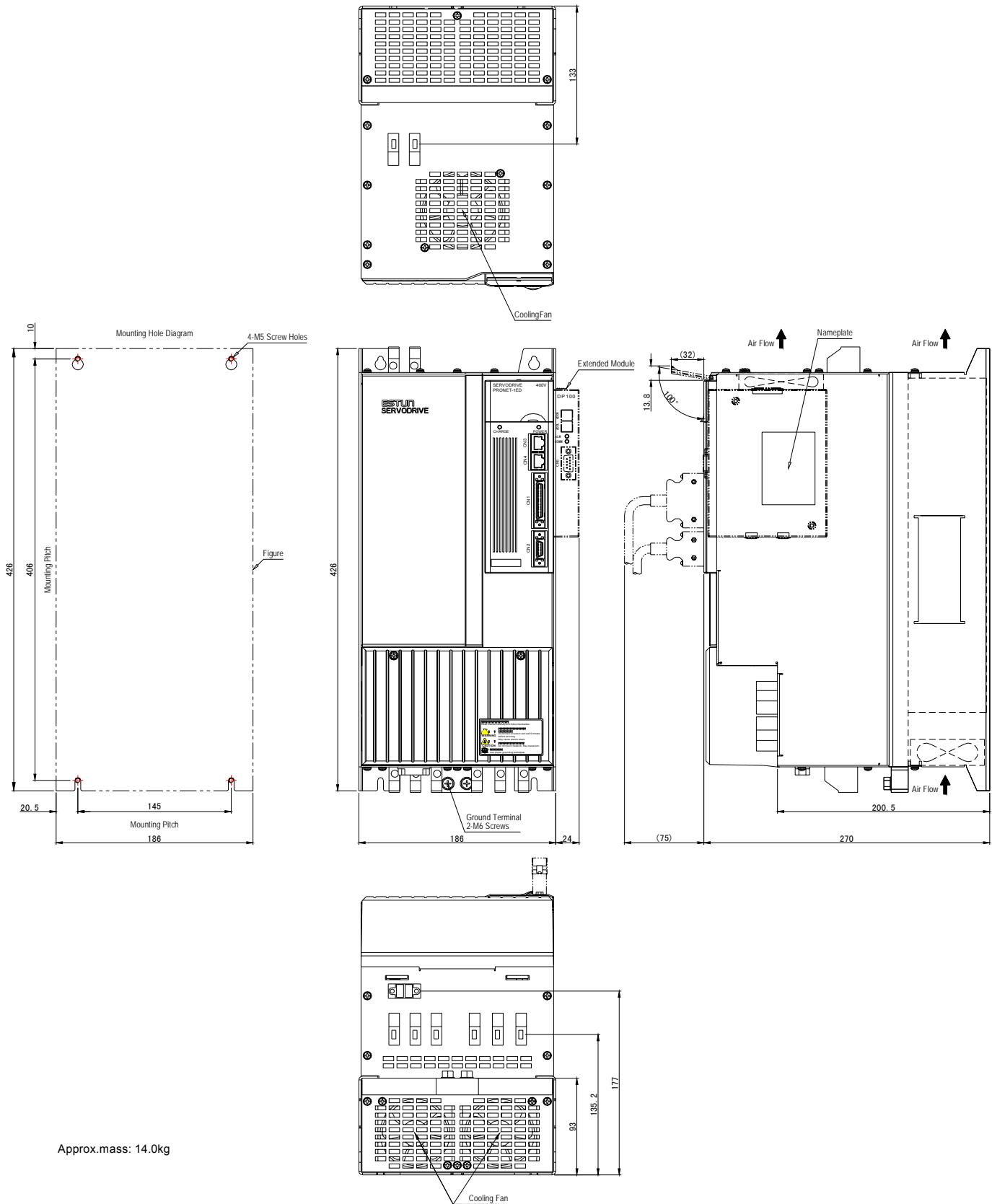
ProNet-15A



ProNet-20A/30A/50A



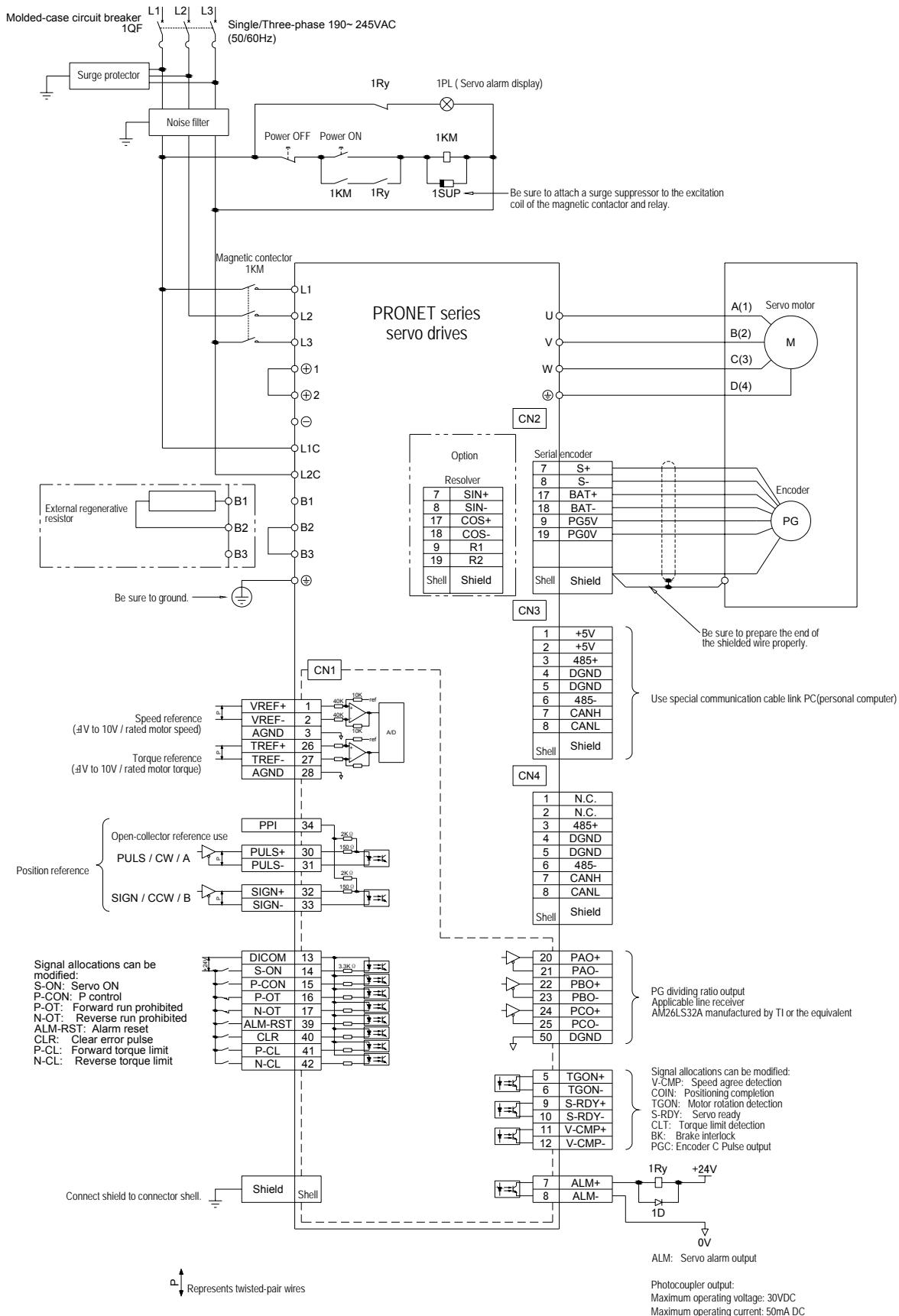
ProNet-75D/1AD/1ED



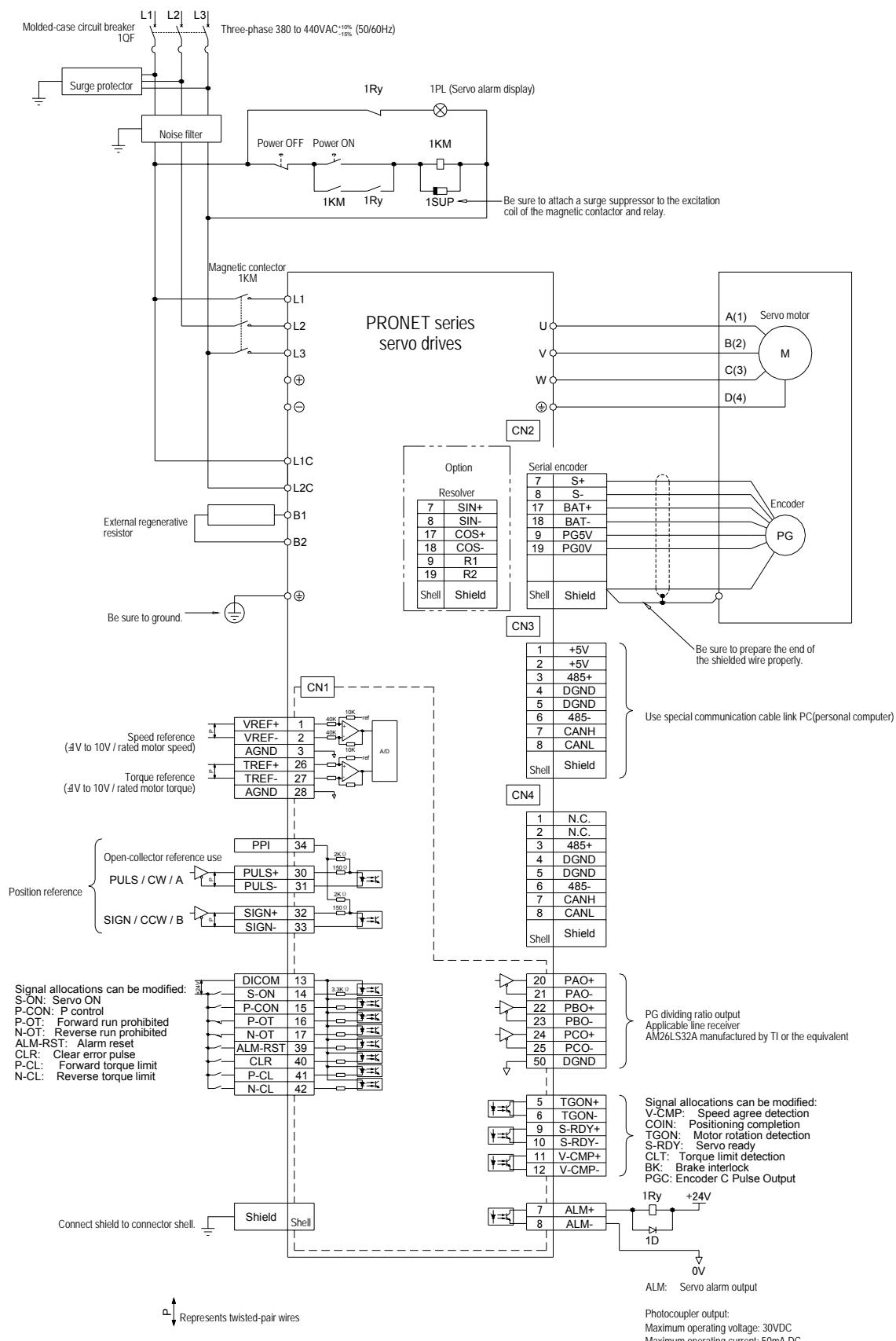
ProNet

Typical Connection Example

Three-phase 200VAC (ProNet-10A to 50A)



Three-phase 400VAC (ProNet-75D to 1ED)



Vision

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- ES2009-F Speed Forward-Feedback Function
- ES2010-C Estun Servo Motor Selection Principle
- ES2011-A Estun Outline
- ES2011-B Motor Outline
- ES2011-A EDB/EDC Series Product Brochure
- ES2011-B ProNet Series Product Brochure**



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