

ProNet Series

All Digital AC Servo Systems





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.



Estun Automation Technology Co., Ltd

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ProNet Series All Digital AC Servo Systems

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EMB Series Servo Motor

Mounting Dimension of Drive

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 simplicity of 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.

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





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

Model Comparison Table

		Servo mo	tor		Servo	drive
	Series		Power	Model	200V	400V
			200W	EMJ-02A□A	PRONET-02A□A	
	all city	EMJ	400W	EMJ-04A□A	PRONET-04A□A	
	Small	3000min ⁻¹	750W	EMJ-08A□A	PRONET-08A□A	
			1000	EMJ-10A□A	PRONET-10A□A	
			1.0k	EMG-10A□A	PRONET-10A□A	
		EMG 2000min ⁻¹	1.5k	EMG-15A□A	PRONET-15A□A	
r <u>r</u>	ξ		2.0k	EMG-20A□A	PRONET-20A□A	
ine	pac		3.0k	EMG-30A□A	PRONET-30A□A	
Medium inertia	Medium capacity		5.0k	EMG-50A□A	PRONET-50A□A	
Mec	diur		1.0k	EML-10A□A	PRONET-10A□A	
	₩	EML	2.0k	EML-20A□A	PRONET-20A□A	
		1000min ⁻¹	3.0k	EML-30A□A	PRONET-30A□A	
			4.0k	EML-40A□A	PRONET-50A□A	
	e ≯	EMD	7.5k	EMB-75D□A		PRONET-75D□A
	Large capacity	EMB 1500min ⁻¹	11kW	EMB-1AD□A		PRONET-1AD□A
	g Ľ		15kW	EMB-1ED□A		PRONET-1ED□A

ProNet

Series Servo Drive

Features

- > The response performance has been improved more than three times, which realizes online real time inspecting of load inertia, the gain can be adjust at any time in order to achieve the bet control effect.
- > Can match 17 bits serial encoder, which in turn enhances the position precision and low speed stability & response performance.
- Expansion module interface, Profibus-DP bus communication module is available.

Specification Description

ProN	<u>et-10</u>	A	<u>M</u>	
ProNet Servo Drive	Rated Power	Power voltage	Control Style	

			3 - 3		-		,	
Sign	Specification	Sign	Specification	Sign	Specification	Sign	Specification	
02	200W	A	200VAC		Position,	Α	17 bits Serial	
04	400W	D	400VAC	M	speed, torque	^	Encoder	
08	750W				control	В	Resolver	
10	1KW				Speed,	В	Resolvei	
15	1.5KW			E	torque &position control (Support Extended			
20	2KW							
30	3KW				Module)			
50	5KW							
75	7.5KW							
1A	11KW							
1E	15KW							

Design Sequence

Ratings



Servo Drives	PRONET-	02A	04A	08A	10A	15A	20A	30A	50A	75D	1AD	1ED
Servo	EMJ-	02A	04A	08A	10A	-	-	-	-	-	-	-
	EMG-	-	-	-	10A	15A	20A	30A	50A	-	-	-
Motors	EML-	-	-	-	10A	-	20A	30A	40A	-	-	-
	EMB-	-	-	-	-	-	-	-	-	75D	1AD	1ED
Continuous o 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	s]	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		
_	Main Circuit	200V	Three-phase 200 to 230VAC 50/60Hz (1.0kw-5.0kW)		
Input Power	Main Circuit	400V	Three-phase 380 to 440VAC 50/60Hz (1.0kw-5.0kW)		
Supply	Control Circuit	200V	single-phase 200 to 230VAC 50/60Hz (1.0kw-5.0kW)		
	Control Circuit	400V	single-phase 380 to 440VAC 50/60Hz (1.0kw-5.0kW)		
Control Method	d		SVPWM Control		
Feedback			Serial encoder:13072P/R		
reedback			Resolver		
	Ambient/Storag	e Temperature	Ambient temperature: 0 to +55℃,Storage Temperature:-20 to +85℃		
Operating	Ambient/Storag	e Humidity	90% RH or less(no condensation)		
Conditions	Elevation		1000m or less		
	Vibration/Impac	t Resistance	Vibration Resistance: 4.9m/s2, Impact Resistance: 19.6m/s2		
Configuration			Base-mounted		
	Speed Control F	Range	1:5000		
		Load Regulation	0 to 100% load:±0.01% max		
Performance	Speed	Voltage Regulation	Rated voltage±10%: 0%(at rated speed)		
	Regulation	Temperature Regulation	25±25℃:±0.1% max. (at rated speed)		
		Reference Voltage	±10VDC at rated torque(variable setting range:±1to 10VDC)		
Torque Control	Analog Input	Telefolioc Voltage	Max. input voltage:±12V		
Control		Input Impedance	About $10M\Omega$ min.		
		Circuit Time Constant	10µs		

Specifications

	Items		Specifications				
	Analog Input	Reference Voltage	±10VDC at rated torque(variable setting range:±1to 10VDC) Max. input voltage:±12V				
	Analog Input	Input Impedance	About 10MΩ min.				
Speed		Circuit Time Constant	10µs				
Control	Set Speed	Rotation Direction Selection	Switches the direction by /P-CON				
	Reference	Speed Selection	Speed 1 to 3 selection				
	Function	Soft Start Setting	0 to 10s(can be set individually for acceleration and deceleration)				
		Туре	Sign + pulse train, CCW+CW pulse train, or 90° phase difference 2-phase pulse(phase A + phase B)				
	Reference Pulse	Form	Non-insulated line driver(+5V level),open collector				
			x1 multiplier:4Mpps				
Position Control			x2 multiplier:2Mpps				
Control		Frequency	x4 multiplier:1Mpps Open collector:200kpps				
			Frequencies drop when the duty cycle have errors				
	Set Position Reference	Position Setting	Can set 16 position reference				
	Encoder Output	t Pulses	Phase A, Phase B, Phase C: line driver output The number of dividing pulse: Any setting ratio is available				
		Number of Channels	B channels				
I/O Signals	Sequence Input	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)				
		Number of Channels	4 channels				
	Sequence Output	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)				
	Dynamic Brake	(DB) Functions	Operate during main power OFF, servo alarm, servo OFF or overtravel				
	Regenerative P	rocessing Functions	750W to 5.0KW:built-in regenerative resistor;7.5kW to 15kW:External regenerative resistor(optional)				
Built-in	Protective Func	tions	Overcurrent, overvoltage, low voltage. overload, regeneration error, overspeed, etc.				
Function	Utility Functions	3	Alarm trace back, JOG operation, Inertia detections, etc.				
	Display Functio	ns	CHARGE(red),POWER(green),7-segment 5-digit LED(Built-in digital operator function)				
	Communication	s	RS485 communication port, use MODBUS protocol. CAN communication port, use CANOpen protocol.				



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

<u>A</u>

D

<u>A</u>

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⊏IVIJ	IVI	ou	eı
Serv	o I	Мo	tor

Rate	ed Power	Powe	r Voltage	Encoder		Design Sequence		Shaft End		Optional Parts	
Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.
2	200W	Α	200Vac		Incremental	A	Design Sequence	1	Flat, without	1	None
4	400W			D	Encoder: 131072P/R			•	keys	2	With Oil Seal
8	750W				1010721710				Flat, with		
10	1000W			S	Absolute Encoder: 131072P/R			2	keys, with screw thread	3	With brake (DC24V)
										4	With oil seal, with brake (DC24V)

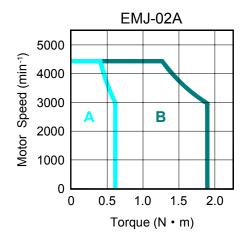


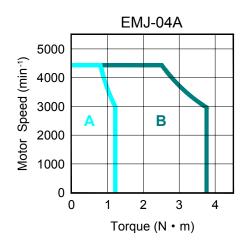
Rated Value and Specification

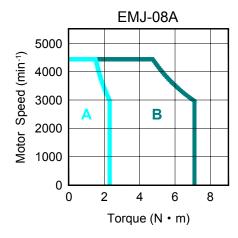
Voltage		200VAC							
Servo motor type	EMJ-	02A	04A	08A	10A				
Rated output power	W	200	400	750	1000				
Rated torque	N.m	0.64	1.27	2.40	3.18				
Instantaneous peak torque	N.m	1.92	3.82	7.16	9.55				
Rated current	Arms	1.3	2.7	4.0	5.3				
Instantaneous peak current	Arms	3.9	15.9						
Rated rotated speed	min ⁻¹	3000							
The highest rotated speed	min ⁻¹		45	00					
Rotator rotated inertia	x10 ⁻⁴ kg/m ²	0.19(0.23)	0.31(0.35)	1.35(1.47)	1.74(1.87)				
Encoder	Standard	17 bit Incremental Encoder: 131072P/R							
Lilcodei	Optional	17 bit Absolute Encoder: 131072P/R; Resolver							
Heat endurance level		F							
Environment tempera	ature	0 to +40°C (Non-	-iced)						
Environment humidity	/	20 to 80% RH (N	o dew)						
Protection method		All-closed, self-cool,IP65 (Except output shaft and connector)							
Anti-vibration perform	nance	49m/s ²							

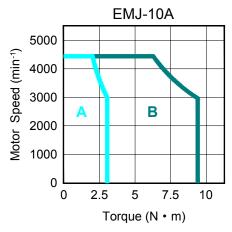
(Note): The values in parentheses are for servo motors with holding brakes.

Torque-speed Feature



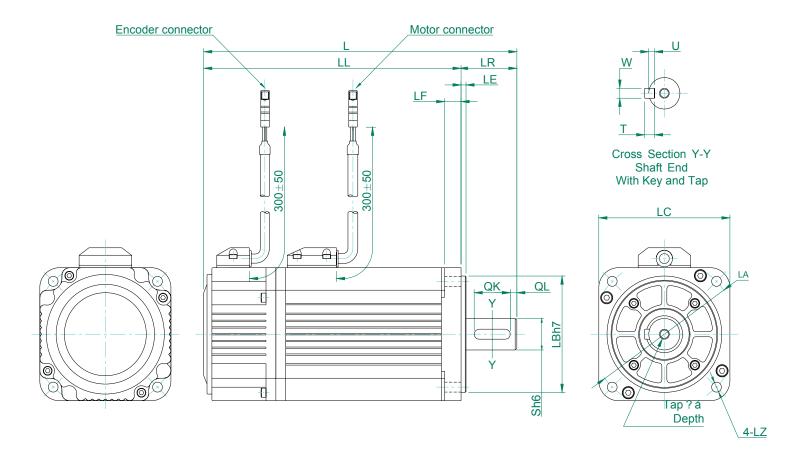




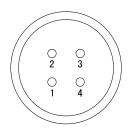


A: Continuous Working Area B: Repeatable Working Area

Dimension



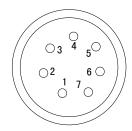
Model		LL			Fla	nge f	ace			IS	Tap×Depth	Key				
EMJ-		155	LR	LE	LF	LC	LA	LB	LZ	٦	Тарлосрит	QK	QL	W	T	U
02A	153	123	30	3	6	60	70	50	5.5	14	M5x10L	16	4	5	5	3
04A	173	143	30	3	6	60	70	50	5.5	14	M5x10L	16	4	5	5	3
A80	191	156	35	3	9	80	90	70	6	19	M6x15L	22	4	6	6	3.5
10A	211	176	35	3	9	80	90	70	6	19	M6x15L	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

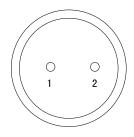


> Encoder connector specification

➤ 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

<u>EMG</u>– <u>10</u> <u>A</u> <u>D</u> <u>A</u>

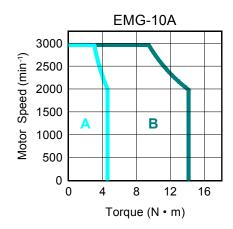
EMG Model Servo Motor	Rate	d Power	Powe	er Voltage	E	Encoder	Design Sequence		Shaft End		Opt	ional Parts
	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.
	10	1.0KW	Α	200Vac	_	Incremental	Α	Design Sequence		Flat,	1	None
	15	1.5KW			D	Encoder: 131072P/R		·	1	without keys	2	With Oil Seal
	20	2.0KW				Absolute				Flat, with keys,		With brake
	30	3.0KW			S	Encoder: 131072P/R			2	with screw thread	3	(DC24V)
	50	5.0KW			R	Resolver					4	With oil seal, with brake
												(DC24V)

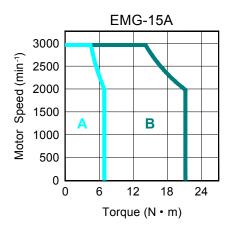
Rated Value and Specification

Voltage				200VAC							
Motor type	EMG-	10A	15A	20A	30A	50A					
Rated output power	kW	1.0	1.5	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 rotated speed	min ⁻¹	2000									
Peak rotated speed	min ⁻¹	3000									
Rotator rotated inertia	x10 ⁻⁴ kg/m ²	10(10.6)	10(10.6) 14.5(15.1) 19.0(19.6) 41.3(
Feedback unit	Standard	17 bit Incremental Encoder: 131072P/R									
i eeuback unit	Optional	17 bit Absolute Encoder: 131072P/R; Resolver									
Heat-endurance level		F									
Environment humidity t	emperature	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 performa	nce	24.5m/s ²									

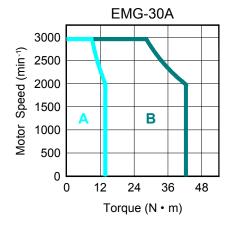
(Note): The values in parentheses are for servo motors with holding brakes.

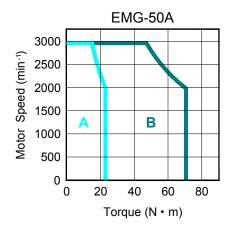
Torque-Speed Feature

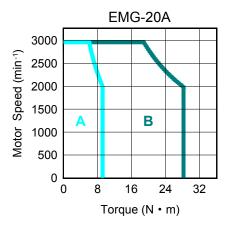






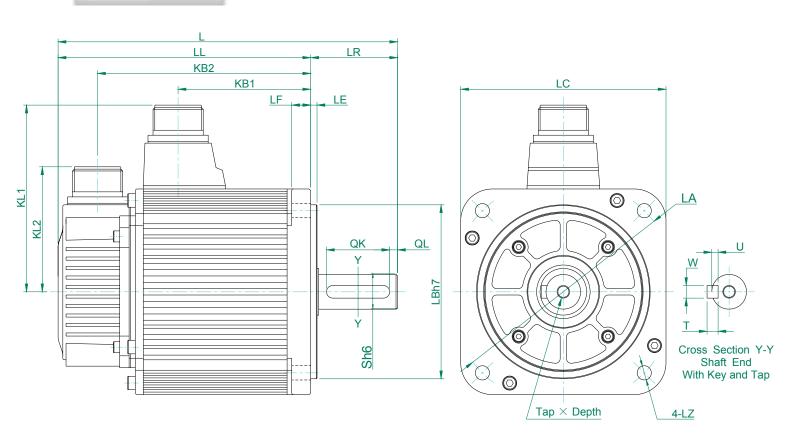






Working Area B: Repeatable Working Area

Dimension



Model	1	11	KB1	KB2	KL1	KL2				Flange	face			s	Tap×Depth	Key						
EMG-	-	<u> </u>	KDI	NDZ	KLI	<u>NLZ</u>	LR	LE	LF	LC	LA	LB	LZ	2	тар^Дерит	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
Α	U
В	V
С	W
D	FG



> Encoder connector specification

> Plug: MS3108B20-29S

Receptacle: MS3102A20-29PCable 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	Т	COS+	Red
*S	B AT-	Brown/Black	S	COS-	Black
Н	PG5V	Red	Н	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
Α	B1
В	B2
С	-



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

40

4.0KW



With oil

seal, with brake (DC24V)

Model Specification Description

<u> </u>			4					1				
EML Model Servo Motor	Rate	d Power	Powe	er Voltage	I	Encoder		Design equence	Sha	aft End	Opt	ional Parts
	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.
	10	1.0KW	Α	200Vac	D	Incremental	Α	Design Sequence	1	Flat, without	1	None
	15	1.5KW			U	Encoder: 131072P/R			1	keys	2	With Oil Seal
	20	2.0KW				Absolute				Flat, with keys,		With brake
	30	3.0KW			S	Encoder: 131072P/R			2	with screw thread	3	(DC24V)

Resolver

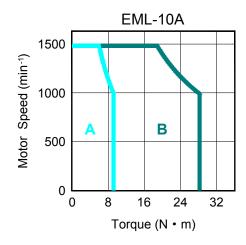
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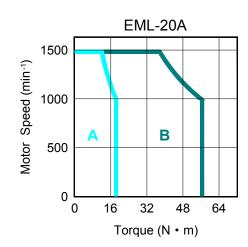
Rated Value and Specification

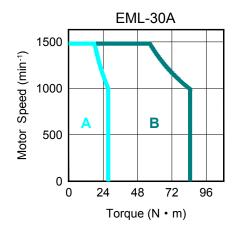
Voltage			200	VAC					
Servo motor type	EML -	10A	20A	30A	40A				
Rated output power	kW	1.0	4.0						
Rated torque	N.m	9.55	19.1	28.7	38.2				
Instantaneous peak torque	N.m	28.7	57.3	86.0	114.6				
Rated current	Arms	6.0	12.0	18.0	24.0				
Instantaneous peak current	Arms	Arms 18.0 36.0 54.0							
Rated rotated speed	min -1		10	00					
The highest rotated speed	min -1		15	00					
Rotator rotated inertia	x10 -4 kg /m 2	19(19.6)	53.5(56.7)	77.8(81.0)	102.2(105.4)				
Feedback unit	Standard	17 bit Incremental Encoder: 131072P/R							
I Geuback utilit	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							

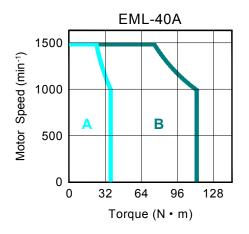
(Note): The values in parentheses are for servo motors with holding brakes.

Torque-Speed Feature



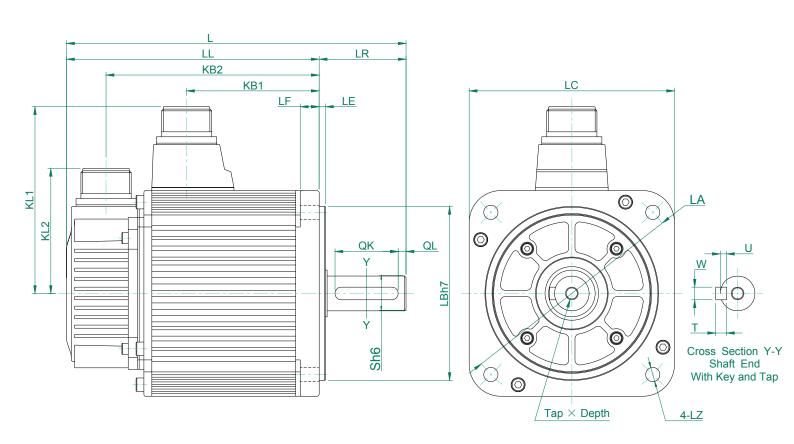






Dimension

A: Continuous Working Area B: Repeatable Working Area



Model	1.1	LL	KB1	KB2	KL1	KL2			F	lange f	ace			s	Tap×De	key						
EML-	- 1		KDI	ND2	IXL I	NLZ	LR	LE	LF	LC	LA	LB	LZ	3	pth	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	8	5		
30A	372	293	208	268	140	79	79	3.2	18	180	200	114	13.5	35	M8x16 L	55	6	1	8	5		
40A	412	333	248	308	140	79	79	3.2	18	180	200	114	13.5	35	M8x16 L	55	6	1	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
Α	U phase
В	V phase
С	W phase
D	FG



> Encoder connector specification

> Plug: MS3108B20-29S

Receptacle: MS3102A20-29PCable 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	Т	COS+	Red
*S	B AT-	Brown/Black	S	COS-	Black
Н	PG5V	Red	Н	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
Α	B1
В	B2
С	-



EMB

Series Servo Motor

Features

- Power supply voltage: 400V
- Driving of feed shafts for various machinery
- ➤ 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

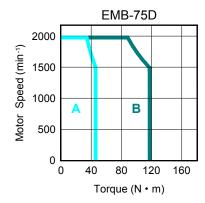
EMB-1	ΙE	D	S	Α	1	1

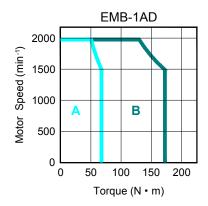
EML Model Servo Motor	Rate	d Power	Powe	er Voltage	E	Encoder		Design equence	Sha	aft End	Opt	ional Parts				
	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.	Sign	Spec.				
	75	7.5KW	D	400Vac		•	•	•	•	Absolute	Α	Design Sequence		Flat,	1	None
	1A	11KW			S	Encoder: 131072P/R		·	1	without keys	2	With Oil Seal				
	1E	15KW			R	Resolver			2	Flat, with keys, with screw thread	3	With brake (DC24V)				
											4	With oil seal, with brake (DC24V)				

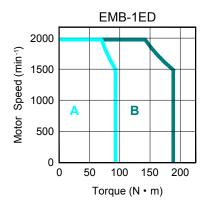
Rated Value and Specification

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	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)			
Feedback unit	standard	17-bit absolute encoder: 131072P/R					
i eedback driit	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



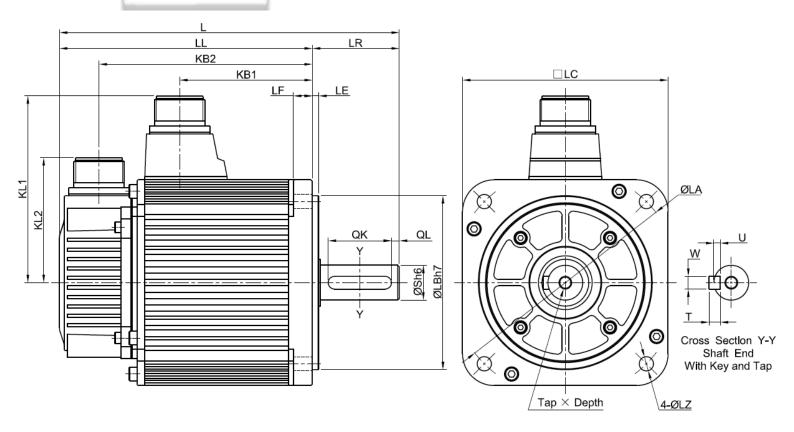




A: Continuous Working Area B: Repeatable Working Area



Dimension



Model EMB-	100	LL KB1 KB2 KL1		KI 1	Flange side							او	Tap×Depth		key				
EMB-	<u> </u>			NDZ NL I		LE	LF	LC	LA	LB	LZ	S	iap^Deptil	QK	QL	W	T	U	
75D	530	414	366	302	184	116	4	18	220	235	200	13.5	42	M16×32L	90	6	12	8	5
1AD	580	464	416	352	184	116	4	18	220	235	200	13.5	42	M16×32L	90	6	12	8	5
1ED	615	499	451	387	184	116	4	18	220	235	200	13.5	55	M20×40L	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
Α	U phase
В	V phase
С	W phase
D	FG



> Brake Connector Specifications

➤ Plug: MS3106A10SL-3S

➤ Receptacle: MS3102A10SL-3P
➤ Cable Clamp: MS3057-4A

Pin No.	Signal
Α	B1
В	B2
С	-



> Encoder connector specification

Plug: MS3108B20-29S

Receptacle: MS3102A20-29P
Cable Clamp: MS3057-12A

Incremental/Absolute encoder

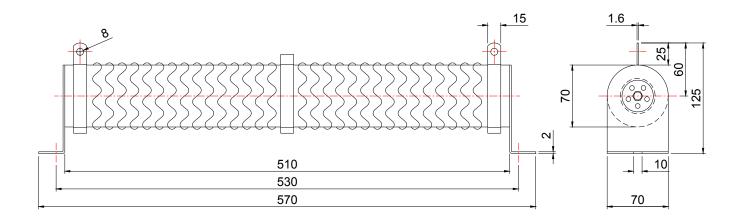
Signal	Color
S+	Blue
S -	Blue/Black
BAT+	Brown
B AT-	Brown/Black
PG5V	Red
PG0V	Black
FG	Shield
	S+ S - BAT+ B AT- PG5V PG0V

Resolver

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

Regenerative Resistor

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

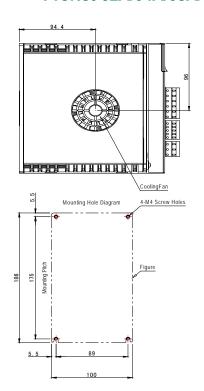


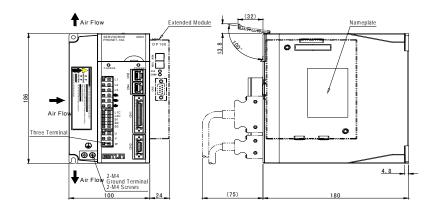


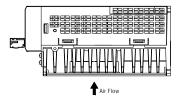
ProNet

Servo Drives External Dimensions

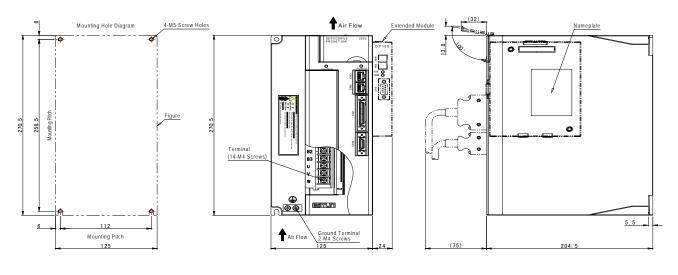
ProNet-02A/04A/08A/10A/15A

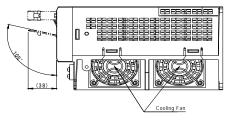






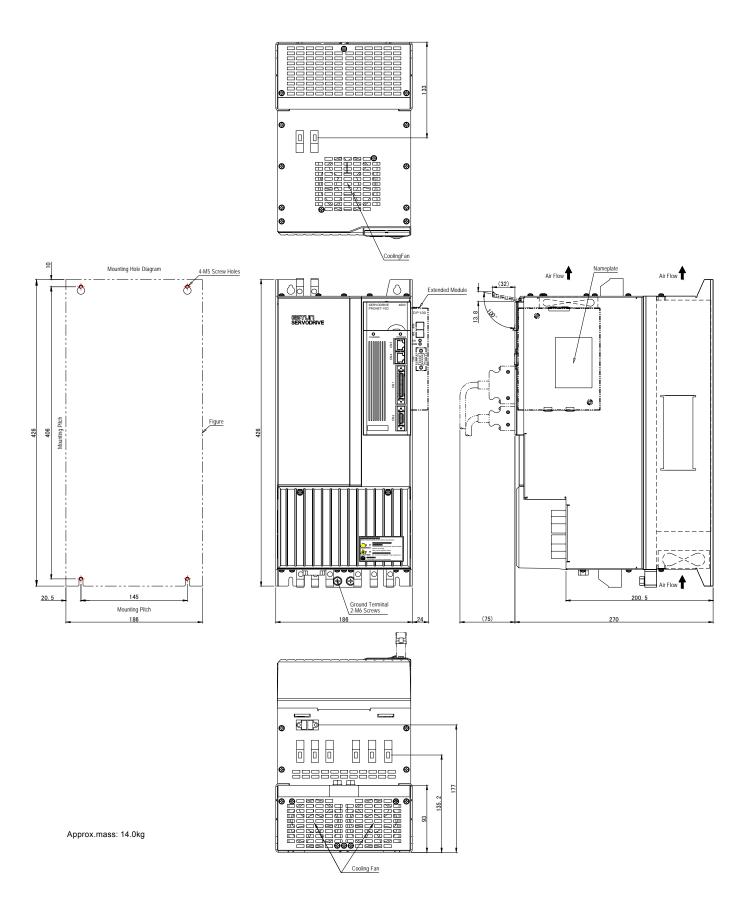
ProNet-20A/30A/50A







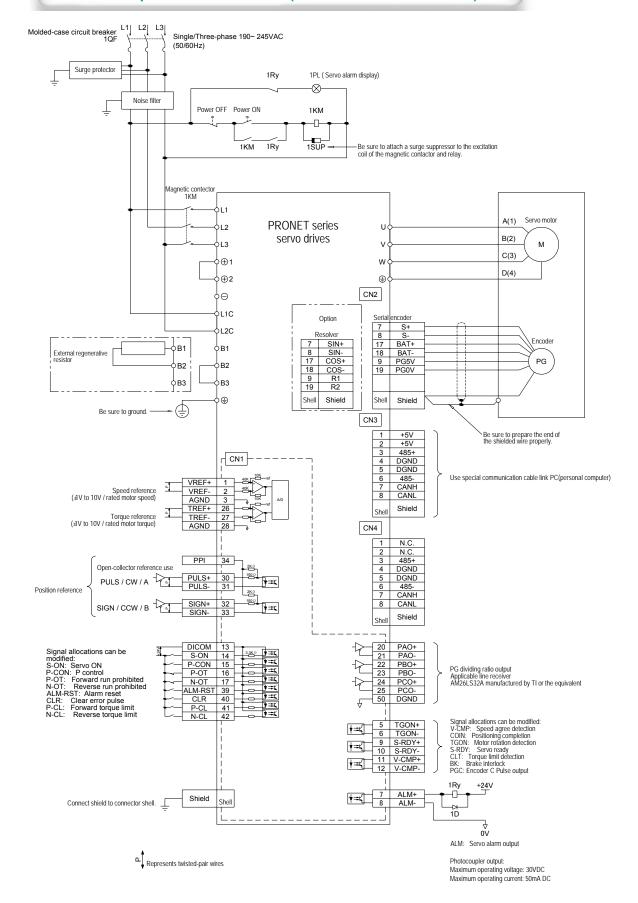
ProNet-75D/1AD/1ED



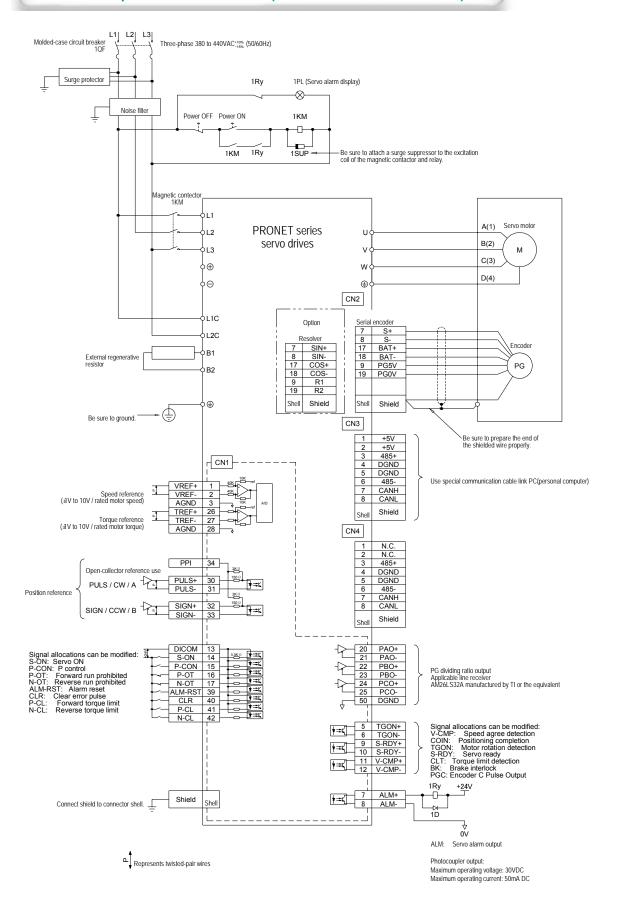


Typical Connection Example

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



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



Mission & Vision

Be Backbone Of Industry!

Estun's Brochures and Technical Guidance

FS2009-A	Estun Outline
	Motor Outline
ES2009-C	Estun Sales Agent Training Course
ES2009-D	Estun Servo Parameter Adjustment Guidance
ES2009-E	Second Electronic Gear
ES2009-F	Speed Forward-Feedback Function
ES2010-A	EDB/EDC Series Product Brochure
ES2010-B	ProNet Series Product Brochure



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