

公司簡介

Company Profile

追求『品質、服務、效率』的碩陽電機

碩陽電機為專業直流馬達製造廠，專業從事於精密馬達、醫療用馬達等傳動系統設計及製造。行銷全球超過30個國家，並建立歐、美、澳、瑞、韓、印度等行銷據點。

有感於台灣各馬達製造技術、品質及穩定性不佳之情況，碩陽電機多年來致力於產品技術之提升、品質穩定之改善，故著手於各項傳動系統之設計與整合，也涉足齒輪及驅動器之研究開發領域，延攬高科技人才投入；經過長久之測試及運用，已深獲國際客戶之肯定，並與國外大廠合作OEM、ODM，以建立符合國際化需求之產品。

一向以『最快服務效率，達客戶最高滿意』為最高目標理念，碩陽電機也以最佳夥伴之方式，提供客戶最佳之產品及服務，讓客戶產品具競爭優勢。所以致力於各項專利及認證之申請與通過，以達客戶最高之滿意度。

碩陽電機在產品技術、服務效率、穩定品質上不遺餘力，講究『Total Solution』之系統發展，並且不斷地朝業界先鋒之使命努力。創新、研究發展以達客戶需求並增加客戶產品之競爭力之前提下，提供客戶『Total Solution』，所以想當然爾碩陽電機必然是您公司之最佳合作夥伴。

總經理

林明昌



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Company Profile

*High-efficiency service
means total customer satisfaction!*

***Motion Technology Electric & Machinery Co Ltd** is a professional manufacturer of brushed and brushless DC motors, devoted to the design and production of high-precision motors for use in medical appliances, electric wheelchairs and mobility scooters, as well as all kinds of elevators and transmission systems. The company's products are marketed in over 30 countries, and it boasts a vast network of offices in locations around the world including USA, Europe, Australia, South Korea, and India.*

Despite its inception at a time when the Taiwan motor manufacturing industry was not renowned for its levels of technology, quality or reliability, Motion Technology, has, through its dedication over the years, achieved significant advancement of product technologies and stabilization of quality levels. The company also boasts expertise in the areas of transmission system design and integration as well as research and development of gear wheel and drive mechanisms. In addition, the firm is constantly recruiting the most qualified high-tech personnel and undertaking long-term product application and testing. As a result, the firm has earned the approval and confidence of many international clients, and has provided OEM and ODM services to overseas industry leaders and developed products that comply with international requirements.

By pursuing an ongoing aim to achieve the highest possible level of customer satisfaction via superior service and efficiency, and by forming working partnerships with clients, Motion Technology is effective at helping clients create products with competitive superiority. Additionally, by securing patents and product standard certification, the company further solidifies competitive advantages and enhances customer satisfaction levels.

***Motion Technology** spares no efforts in developing product technologies, honing service efficiency, and ensuring reliable product quality. The company is also expert in the development of 'Total Solution' systems, and is devoted to the mission of maintaining a position at the forefront of its industry.*

Given its ability to provide clients with 'Total Solutions' that utilize innovation and R&D to meet product requirements and increase product competitiveness, Motion Technology makes for an ideal partner in business.

Certificates & Patents

Certificates

ISO 9001:2000



RoHS



CE certificate – Brushed Motor



CE certificate – Brushless Motor



Patents

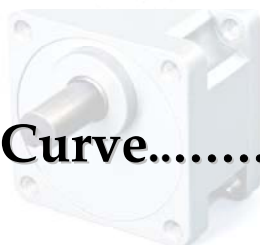
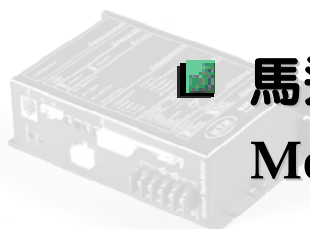


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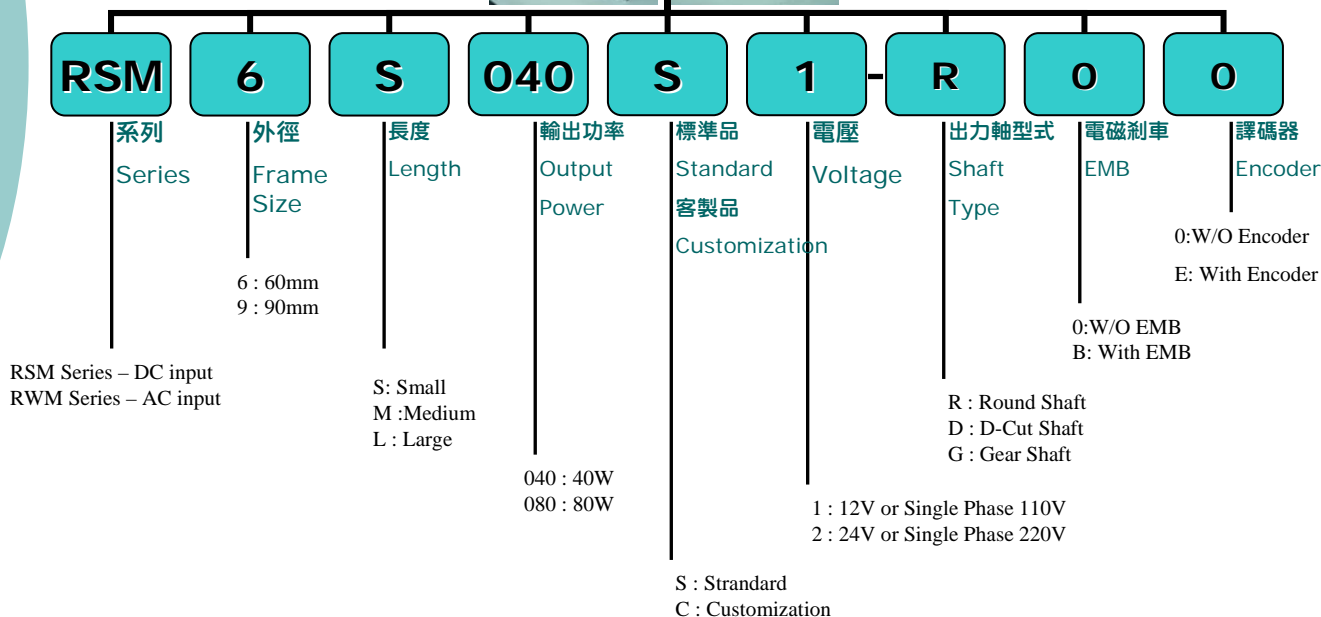
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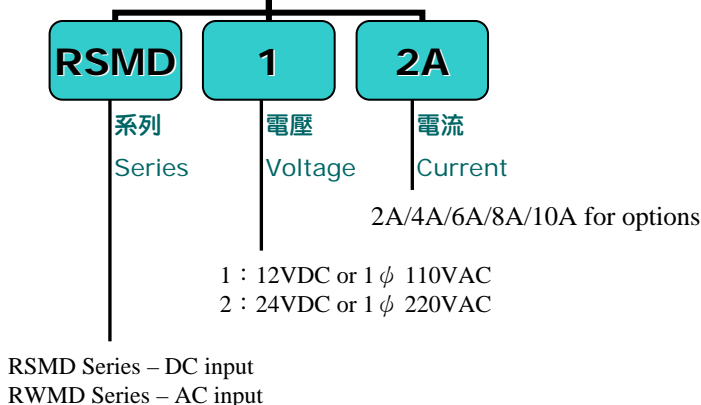
直流無刷馬達&驅動器之產品編碼

BLDC MOTOR & DRIVER - PRODUCT CODE

馬達 MOTOR



驅動器 DRIVER



RSM60 系列 II

RSM60 Series II



馬達之規格與特性 Specification of Motor

馬達型號(Motor Model)		RSM6S050S2-□□□	RSM6M100S2-□□□
額定電壓(Rated Voltage)		24VDC	
額定功率(Rated Power)		50W	100W
額定轉矩(Rated Torque)		1.2kg-cm	2.4kg-cm
額定電流(Rated Current)		3.5A	7.0A
額定轉速(Rated Speed)		4000rpm	
驅動器型號(Driver Model)		RSMD2-6A	RSMD2-8A
速度控制範圍 (Speed Control Range)		100~4000rpm	
速度變動率 (Speed Regulation)	對負載 (vs Load)	±1%額定轉速(0~額定轉矩) (±1% Rated Speed at 0~rated torque)	
	對電壓 (vs Voltage)	±1%額定轉速(於無載下,輸入電壓±10%) (±1% Rated Speed at ±10% Voltage , with no load)	
	對溫度 (vs Temp.)	±1%額定轉速(於無載下,溫度0°C~50°C[32°F~122°F]) (±1% Rated Speed at 0°C~50°C[32°F~122°F] , with no load)	
速度控制方式 (Speed Control Method)		<ul style="list-style-type: none"> ◆ 內部可變電阻調速(control by the internal potentiometer) ◆ 外部可變電阻調速(control by the external potentiometer : 20kΩ , B type) ◆ 外部電壓調速(control by external DC voltage : 0~5V) 	
輸入訊號 (Input Signal)		<ul style="list-style-type: none"> ◆ 正/反轉(Clockwise/Counterclockwise) ◆ 煞車/自由停止(Brake/Free Stop) ◆ 復歸(Reset) ◆ Sink/Source ◆ 加/減速設定時間(Acceleration/Deceleration Time)0.5~15.0 sec. 	
輸出訊號 (Output Signal)		<ul style="list-style-type: none"> ◆ 警報輸出(Alarm Output , Open Collector C,10~15mA) ◆ 速度輸出(Speed Output , Open Collector C,10~15mA) 	
保護功能 (Protection Functions)		<ul style="list-style-type: none"> ◆ 過電壓/低電壓輸出關閉保護(Over-Voltage/Low-Voltage Protection) ◆ 過負載保護(Overload Protection) ◆ 馬達過熱保護(Over-Heat Protection of Motor) ◆ 驅動器過熱保護(出廠預設溫度為70°C) (Over-Heat Protection of Driver , Default Temp. is 70°C) ◆ 欠相保護(Out of Phase Protection) 	
其他功能 (Other Functions)		<ul style="list-style-type: none"> ◆ 控制面板通訊介面(面板為選購品)/Communication Panel(Accessory) ◆ 驅動器電壓監控(需加購面板)/Driver Voltage Monitor(With Panel) ◆ 驅動器即時溫度監控(需加購面板)/Driver Temp. Monitor(With Panel) ◆ 馬達轉速監控(需加購面板)/Motor Speed Monitor(With Panel) ◆ 防護等級(Degree of Protection) : 馬達(Motor)→IP54 驅動器(Driver)→IP00 	

RWM60 系列 II

RWM60 Series II



馬達之規格與特性 Specification of Motor

馬達型號(Motor Model)	RWM6S050S□-□□□□	RWM6M100S□-□□□□	RWM6L150S□-□□□□
額定電壓(Rated Voltage)	1 ψ 110VAC \pm 10% 或 1 ϕ 220VAC \pm 10%		
額定功率(Rated Power)	50W	100W	150W
額定轉矩(Rated Torque)	1.2kg-cm	2.4kg-cm	3.6kg-cm
額定電流(Rated Current)	1.2A/ 0.75A	2.4A/1.5A	3.75A/2.0A
額定轉速(Rated Speed)	4000rpm		
驅動器型號(Driver Model)	RWMD□-2A/ RWMD□-4A		
速度控制範圍 (Speed Control Range)	100~4000rpm		
速度變動率 (Speed Regulation)	對負載 (vs Load)	±1%額定轉速(0~額定轉矩) (\pm 1% Rated Speed at 0~rated torque)	
	對電壓 (vs Voltage)	±1%額定轉速(於無載下,輸入電壓 \pm 10%) (\pm 1% Rated Speed at \pm 10% Voltage , with no load)	
	對溫度 (vs Temp.)	±1%額定轉速(於無載下,溫度0°C~50°C[32°F~122°F]) (\pm 1% Rated Speed at 0°C~50°C[32°F~122°F] , with no load)	
速度控制方式 (Speed Control Method)	<ul style="list-style-type: none"> ◆ 內部可變電阻調速(control by the internal potentiometer) ◆ 外部可變電阻調速(control by the external potentiometer : 20kΩ , B type) ◆ 外部電壓調速(control by external DC voltage : 0~5V) 		
輸入訊號 (Input Signal)	<ul style="list-style-type: none"> ◆ 正/反轉(Clockwise/Counterclockwise) ◆ 煞車/自由停止(Brake/Free Stop) ◆ 復歸(Reset) ◆ Sink/Source ◆ 加/減速設定時間(Acceleration/Deceleration Time)0.5~15.0 sec. 		
輸出訊號 (Output Signal)	<ul style="list-style-type: none"> ◆ 警報輸出(Alarm Output , Open Collector C,10~15mA) ◆ 速度輸出(Speed Output , Open Collector C,10~15mA) 		
保護功能 (Protection Functions)	<ul style="list-style-type: none"> ◆ 過電壓/低電壓輸出關閉保護(Over-Voltage/Low-Voltage Protection) ◆ 過負載保護(Overload Protection) ◆ 馬達過熱保護(Over-Heat Protection of Motor) ◆ 驅動器過熱保護(出廠預設溫度為70°C) (Over-Heat Protection of Driver , Default Temp. is 70°C) ◆ 欠相保護(Out of Phase Protection) 		
其他功能 (Other Functions)	<ul style="list-style-type: none"> ◆ 控制面板通訊介面(面板為選購品)/Communication Panel(Accessory) ◆ 驅動器電壓監控(需加購面板)/Driver Voltage Monitor(With Panel) ◆ 驅動器即時溫度監控(需加購面板)/Driver Temp. Monitor(With Panel) ◆ 馬達轉速監控(需加購面板)/Motor Speed Monitor(With Panel) ◆ 防護等級(Degree of Protection) : 馬達(Motor)\rightarrowIP54 驅動器(Driver)\rightarrowIP00 		

RWM90 系列 I

RWM90 Series I



馬達之規格與特性 Specification of Motor

馬達型號(Motor Model)	RWM9S175S□-□□□	RWM9M350S□-□□□	RWM9L500S□-□□□
額定電壓(Rated Voltage)	1 ψ 110VAC \pm 10% 或220VAC \pm 10%	1 ψ 220VAC \pm 10%	
額定功率(Rated Power)	175W	350W	500W
額定轉矩(Rated Torque)	5.6kg-cm	11.2kg-cm	16kg-cm
額定電流(Rated Current)	3.7A/1.9A	3.5A	5.2A
額定轉速(Rated Speed)	3000rpm		
驅動器型號(Driver Model)	RWMD□-4A/ RWMD□-6A		
速度控制範圍 (Speed Control Range)	100~3000rpm		
速度變動率 (Speed Regulation)	對負載 (vs Load)	\pm 1%額定轉速(0~額定轉矩) (\pm 1% Rated Speed at 0~rated torque)	
	對電壓 (vs Voltage)	\pm 1%額定轉速(於無載下,輸入電壓 \pm 10%) (\pm 1% Rated Speed at \pm 10% Voltage , with no load)	
	對溫度 (vs Temp.)	\pm 1%額定轉速(於無載下,溫度0°C~50°C[32°F~122°F]) (\pm 1% Rated Speed at 0°C~50°C[32°F~122°F] , with no load)	
速度控制方式 (Speed Control Method)	<ul style="list-style-type: none"> ◆ 內部可變電阻調速(control by the internal potentiometer) ◆ 外部可變電阻調速(control by the external potentiometer : 20kΩ , B type) ◆ 外部電壓調速(control by external DC voltage : 0~5V) 		
輸入訊號 (Input Signal)	<ul style="list-style-type: none"> ◆ 正/反轉(Clockwise/Counterclockwise) ◆ 煞車/自由停止(Brake/Free Stop) ◆ 復歸(Reset) ◆ Sink/Source ◆ 加/減速設定時間(Acceleration/Deceleration Time)0.5~15.0 sec. 		
輸出訊號 (Output Signal)	<ul style="list-style-type: none"> ◆ 警報輸出(Alarm Output , Open Collector C,10~15mA) ◆ 速度輸出(Speed Output , Open Collector C,10~15mA) 		
保護功能 (Protection Functions)	<ul style="list-style-type: none"> ◆ 過電壓/低電壓輸出關閉保護(Over-Voltage/Low-Voltage Protection) ◆ 過負載保護(Overload Protection) ◆ 馬達過熱保護(Over-Heat Protection of Motor) ◆ 驅動器過熱保護(出廠預設溫度為70°C) (Over-Heat Protection of Driver , Default Temp. is 70°C) ◆ 欠相保護(Out of Phase Protection) 		
其他功能 (Other Functions)	<ul style="list-style-type: none"> ◆ 控制面板通訊介面(面板為選購品)/Communication Panel(Accessory) ◆ 驅動器電壓監控(需加購面板)/Driver Voltage Monitor(With Panel) ◆ 驅動器即時溫度監控(需加購面板)/Driver Temp. Monitor(With Panel) ◆ 馬達轉速監控(需加購面板)/Motor Speed Monitor(With Panel) ◆ 防護等級(Degree of Protection) : 馬達(Motor)→IP54 驅動器(Driver)→IP00 		

RWM90 系列 II

RWM90 Series II



馬達之規格與特性 Specification of Motor

馬達型號(Motor Model)		RWM9S220S□-□□□	RWM9M450S2-□□□	RWM9L600S2-□□□
額定電壓(Rated Voltage)		1 ψ 110VAC \pm 10% 或220VAC \pm 10%	1 ψ 220VAC \pm 10%	
額定功率(Rated Power)		220W	450W	600W
額定轉矩(Rated Torque)		5.3kg-cm	11kg-cm	14.5kg-cm
額定電流(Rated Current)		4.8A/2.3A	4.6A	6.0A
額定轉速(Rated Speed)		4000rpm		
驅動器型號(Driver Model)		RWMD□-4A/ RWMD□-6A		
速度控制範圍 (Speed Control Range)		100~4000rpm		
速度變動率 (Speed Regulation)	對負載 (vs Load)	\pm 1%額定轉速(0~額定轉矩) (\pm 1% Rated Speed at 0~rated torque)		
	對電壓 (vs Voltage)	\pm 1%額定轉速(於無載下,輸入電壓 \pm 10%) (\pm 1% Rated Speed at \pm 10% Voltage, with no load)		
	對溫度 (vs Temp.)	\pm 1%額定轉速(於無載下,溫度0°C~50°C[32°F~122°F]) (\pm 1% Rated Speed at 0°C~50°C[32°F~122°F], with no load)		
速度控制方式 (Speed Control Method)		<ul style="list-style-type: none"> ◆ 內部可變電阻調速(control by the internal potentiometer) ◆ 外部可變電阻調速(control by the external potentiometer : 20kΩ , B type) ◆ 外部電壓調速(control by external DC voltage : 0~5V) 		
輸入訊號 (Input Signal)		<ul style="list-style-type: none"> ◆ 正/反轉(Clockwise/Counterclockwise) ◆ 煞車/自由停止(Brake/Free Stop) ◆ 復歸(Reset) ◆ Sink/Source ◆ 加/減速設定時間(Acceleration/Deceleration Time)0.5~15.0 sec. 		
輸出訊號 (Output Signal)		<ul style="list-style-type: none"> ◆ 警報輸出(Alarm Output , Open Collector C,10~15mA) ◆ 速度輸出(Speed Output , Open Collector C,10~15mA) 		
保護功能 (Protection Functions)		<ul style="list-style-type: none"> ◆ 過電壓/低電壓輸出關閉保護(Over-Voltage/Low-Voltage Protection) ◆ 過負載保護(Overload Protection) ◆ 馬達過熱保護(Over-Heat Protection of Motor) ◆ 驅動器過熱保護(出廠預設溫度為70°C) (Over-Heat Protection of Driver , Default Temp. is 70°C) ◆ 欠相保護(Out of Phase Protection) 		
其他功能 (Other Functions)		<ul style="list-style-type: none"> ◆ 控制面板通訊介面(面板為選購品)/Communication Panel(Accessory) ◆ 驅動器電壓監控(需加購面板)/Driver Voltage Monitor(With Panel) ◆ 驅動器即時溫度監控(需加購面板)/Driver Temp. Monitor(With Panel) ◆ 馬達轉速監控(需加購面板)/Motor Speed Monitor(With Panel) ◆ 防護等級(Degree of Protection) : 馬達(Motor)\rightarrowIP54 驅動器(Driver)\rightarrowIP00 		

減速機規格表

Specification of Gearbox



For RSM60/RWM60 Series

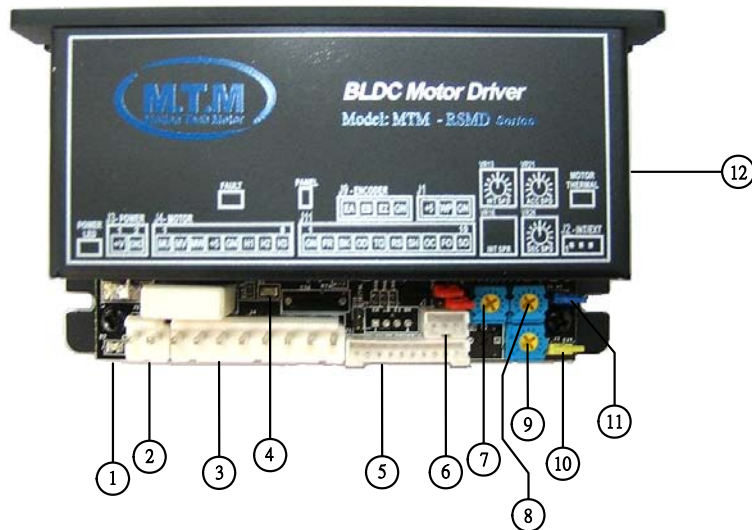
2GB23M							
減速比(Gear Ratio)	1:5	1:10	1:15	1:20	1:30	1:50	1:100
容許轉矩 N-m(kg-cm) (Permissible Torque)	3(30)			4.5(45)			6(60)
容許推力載重 N(kg) (Permissible Thrust Load)	50(5)						
容許懸吊載重 N(kg) (Permissible Overhung Load)	100(10)						

For RWM90 Series

5GB34M							
減速比(Gear Ratio)	1:5	1:10	1:15	1:20	1:30	1:50	1:100
容許轉矩 N-m(kg-cm) (Permissible Torque)	15(150)			20(200)			35(350)
容許推力載重 N(kg) (Permissible Thrust Load)	100(10)						
容許懸吊載重 N(kg) (Permissible Overhung Load)	300(30)						

DC驅動器功能

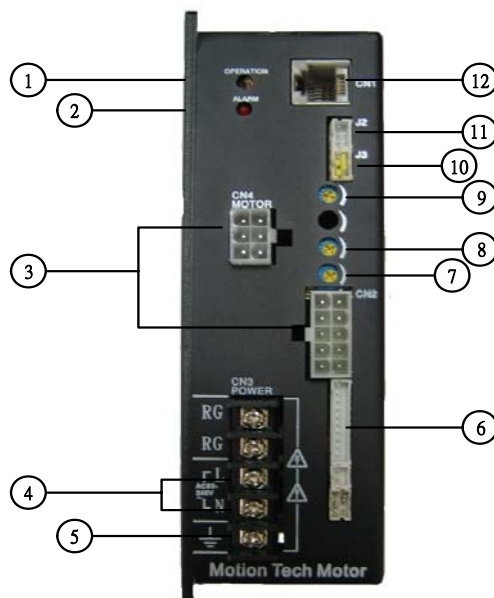
The Function of DC Driver



編號	功能名稱	功能
1	電源指示燈	輸入電源,指示燈會亮
2	DC電源入力端	電源電壓輸入接點(DC12~35V)
3	馬達連接器	馬達與驅動器的連接
4	異常指示燈	過負荷、過壓/低壓、過熱、欠相等保護作動時；或馬達輸出致能關閉(自由停止)，異常指示燈會亮
5	輸入/輸出訊號	正/反轉 煞車/運轉 輸出致能關閉(自由停止) 復歸 警告輸出 轉速輸出
6	外部調速	0~3000rpm或0~4000rpm(訂製品) (可變電阻20kΩ,B Type 或直流電壓0~5V)
7	內部調速	0~3000rpm或0~4000rpm(訂製品)
8	加速時間	0.5~15秒
9	減速時間	0.5~15秒
10	速度設定選擇	內部/外部速度設定選擇
11	馬達溫度開關	馬達過熱保護
12	面板通訊接點	與面板(選配)做通訊連接

AC驅動器功能

The Function of AC Driver



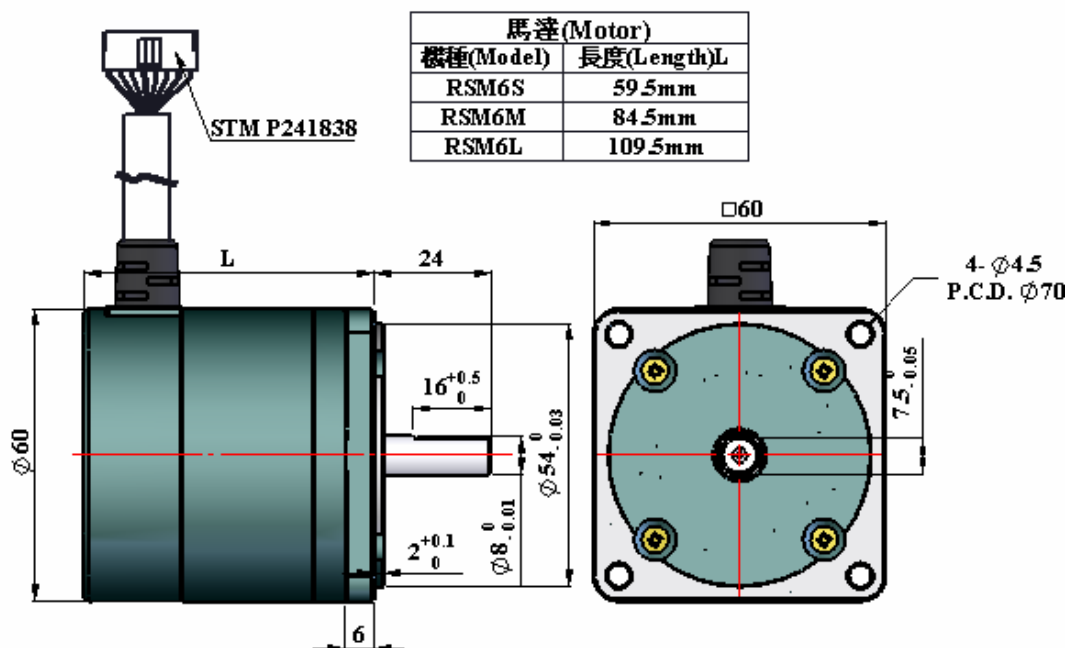
編號	功能名稱	功能
1	電源指示燈	輸入電源,指示燈會亮
2	異常指示燈	過負荷、過壓/低壓、過熱、欠相等保護作動時；或馬達輸出致能關閉(自由停止)，異常指示燈會亮
3	馬達連接器	馬達與驅動器的連接
4	電源入力端	電源電壓輸入接點(AC85~240V)
5	電源接地端	電源地線連接
6	輸入/輸出訊號	正/反轉 煞車/運轉 輸出致能關閉(自由停止) 復歸 警告輸出 轉速輸出
7	減速時間	0.5~15秒
8	加速時間	0.5~15秒
9	內部調速	0~3000rpm或0~4000rpm(訂製品)
10	速度設定選擇	內部/外部速度設定選擇
11	外部調速	0~3000rpm或0~4000rpm (可變電阻20kΩ, B Type 或直流電壓0~5V)
12	面板通訊接點	與面板(選配)做通訊連接

外觀尺寸圖

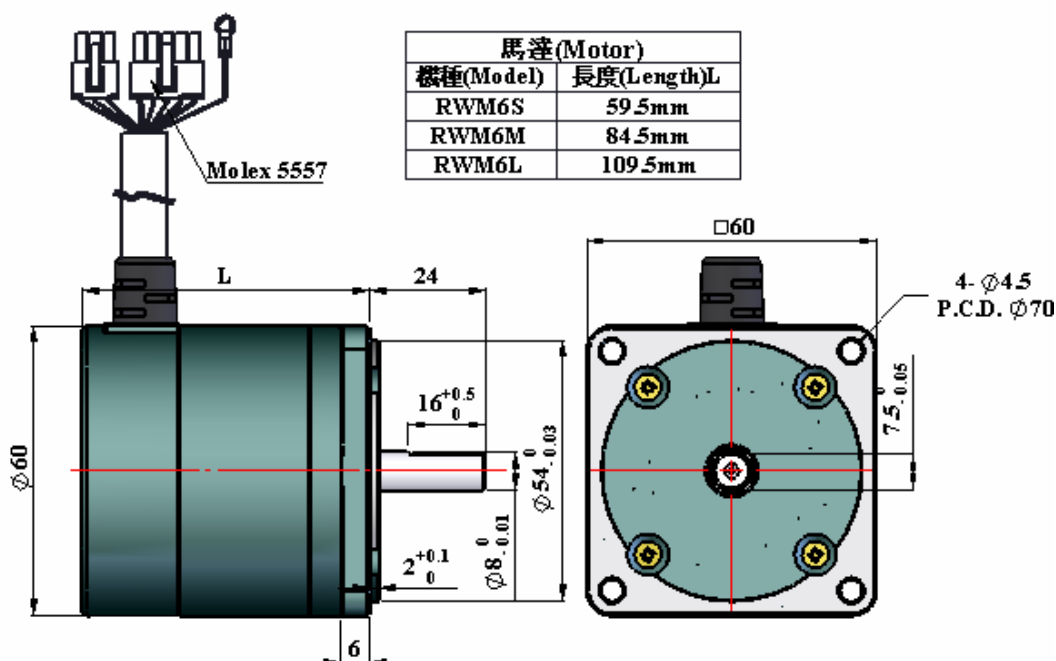
Outline Dimension Drawing

馬達 Motor I

RSM60 SERIES



RWM60 SERIES

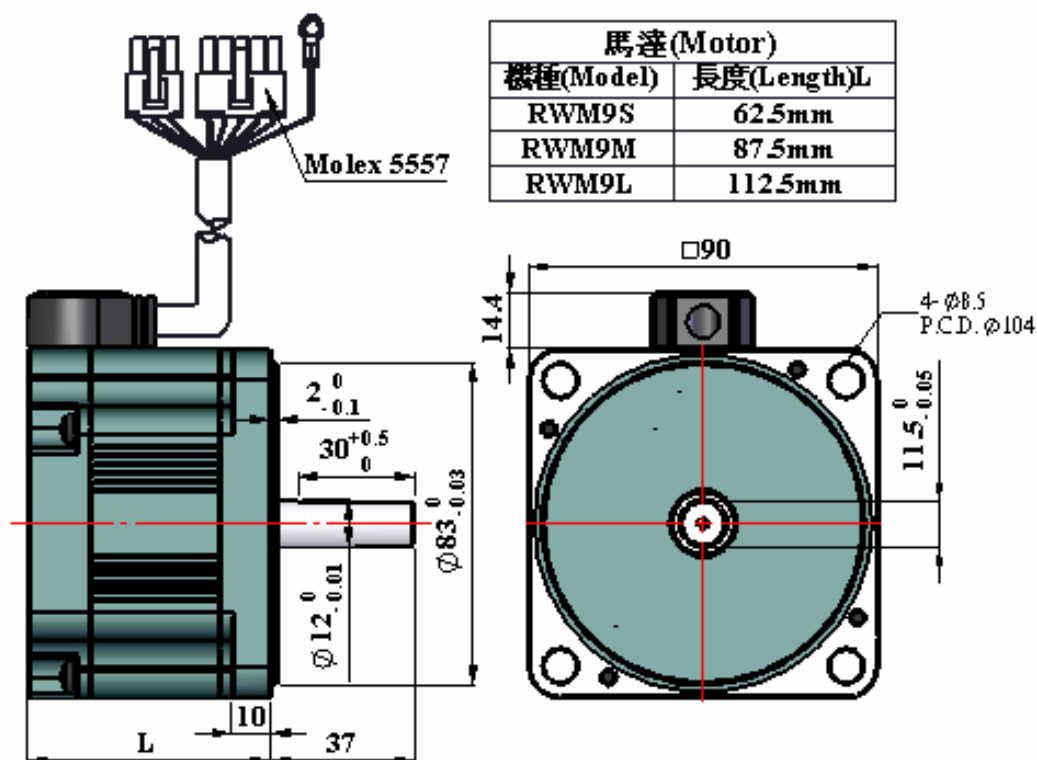


外觀尺寸圖

Outline Dimension Drawing

馬達 Motor II

RWM90 SERIES



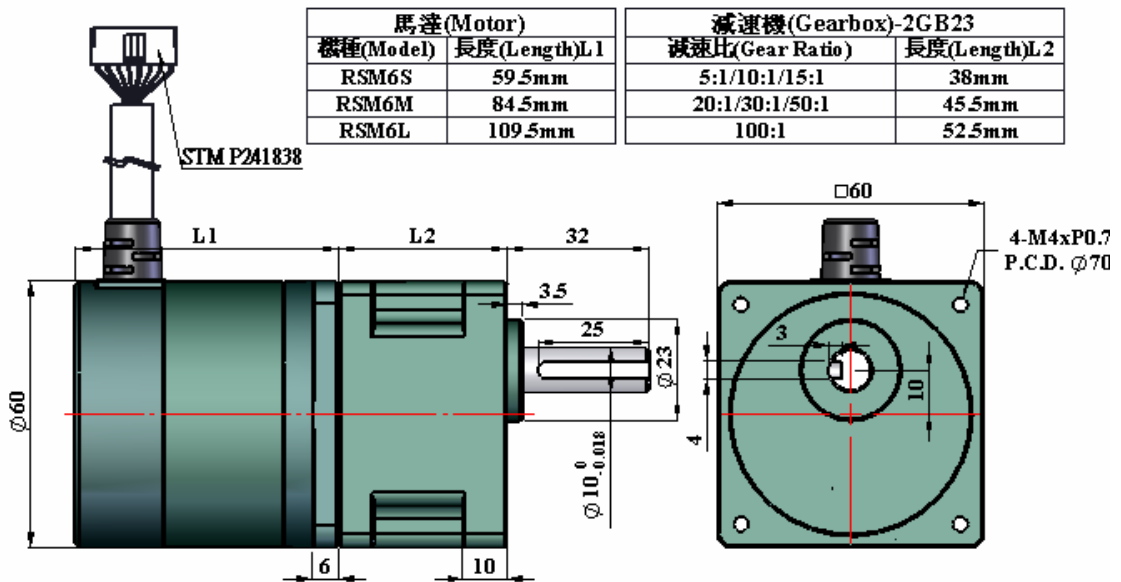
外觀尺寸圖

Outline Dimension Drawing

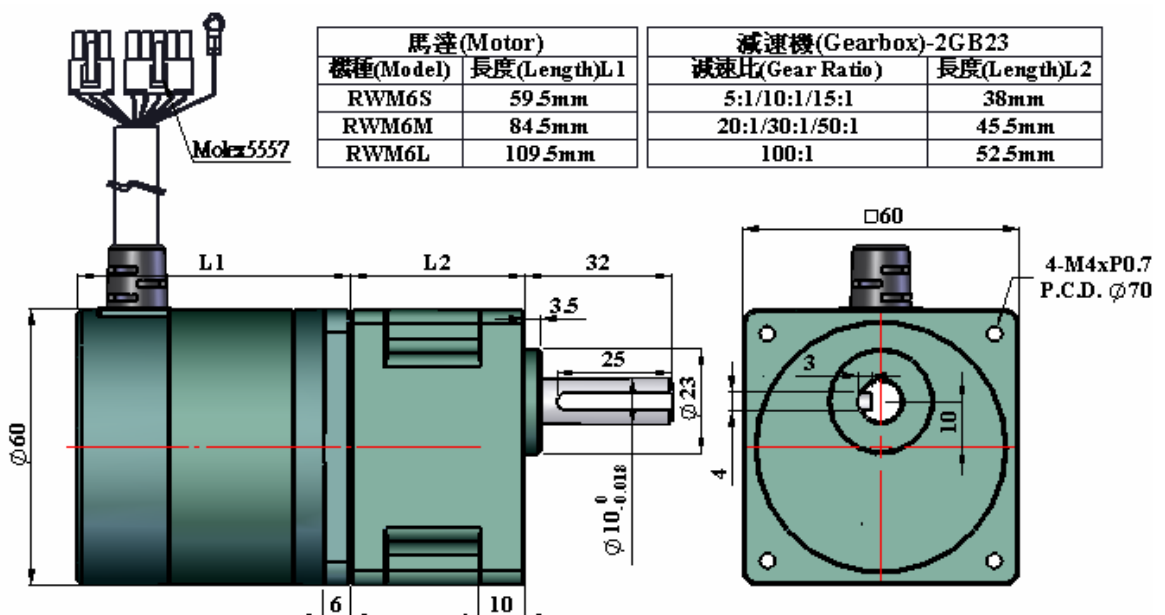
減速機馬達 Gearbox-Motor I



RSM60 SERIES



RWM60 SERIES



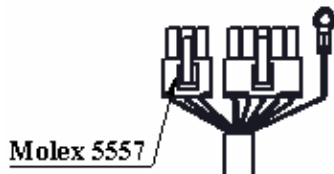
外觀尺寸圖

Outline Dimension Drawing

減速機馬達 Gearbox-Motor II

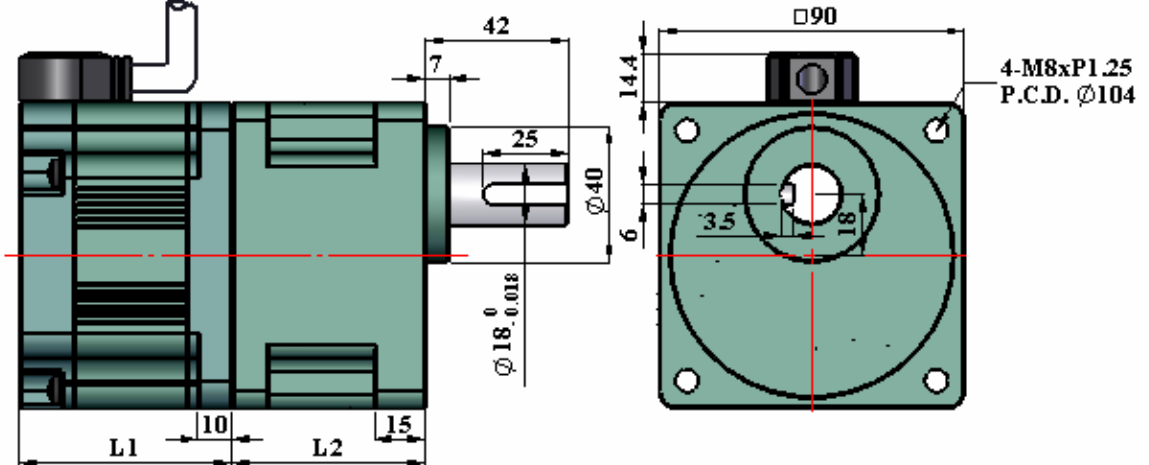


RWM90 SERIES



馬達 (Motor)	
機種 (Model)	長度 (Length) L1
RWM9S	62.5mm
RWM9M	87.5mm
RWM9L	112.5mm

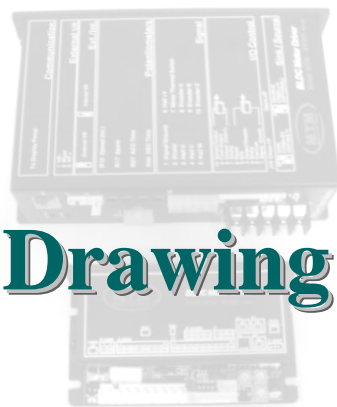
減速機 (Gearbox)-5GB34	
減速比 (Gear Ratio)	長度 (Length) L2
5:1/10:1/15:1	57mm
20:1/30:1/50:1	69.5mm
100:1	80mm



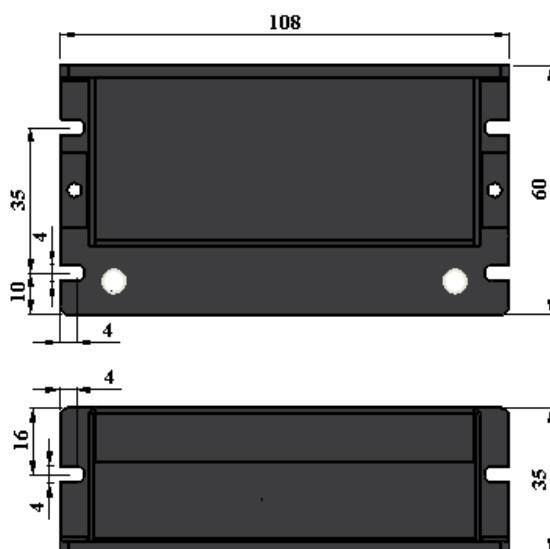
外觀尺寸圖

Outline Dimension Drawing

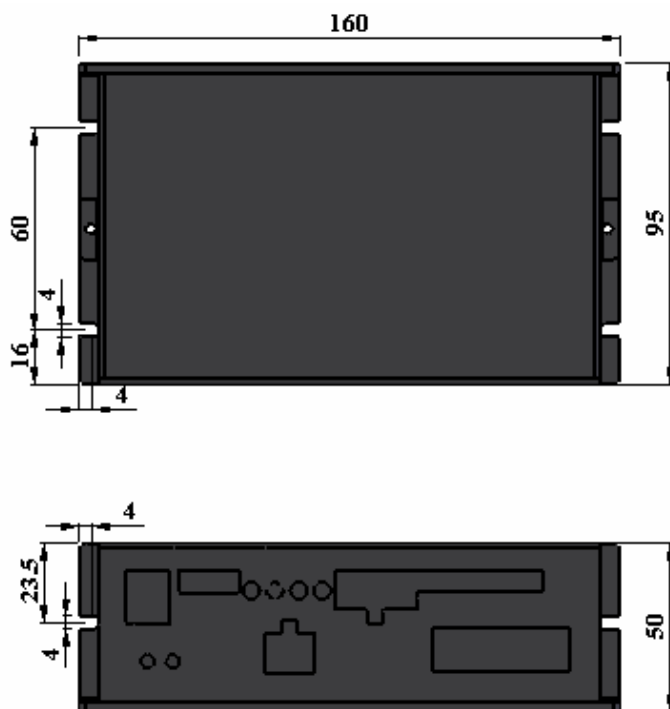
驅動器 Driver



DC 驅動器 (DC Driver)



AC 驅動器 (AC Driver)

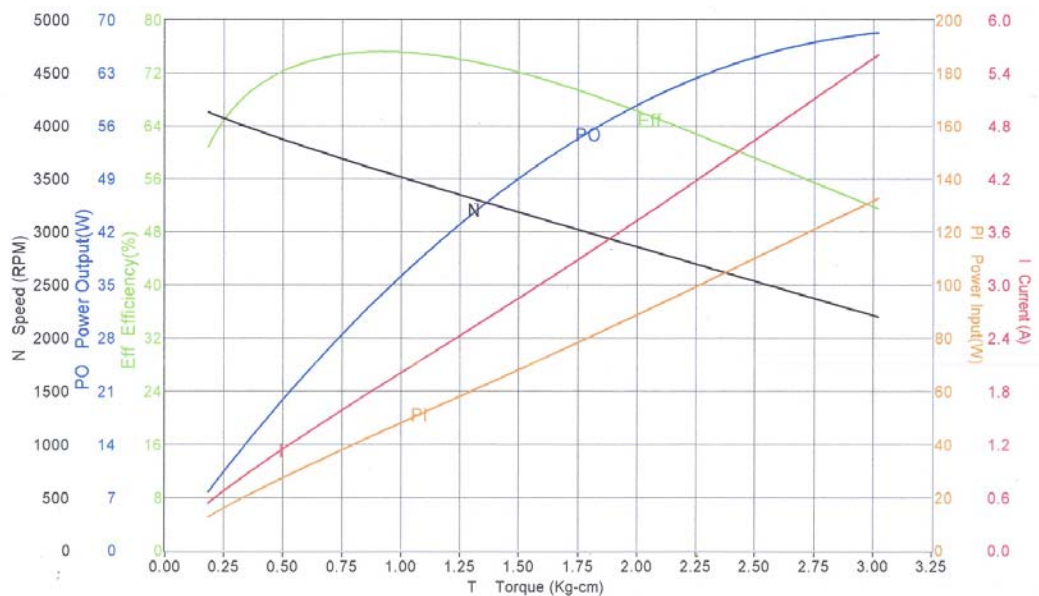


馬達特性曲線

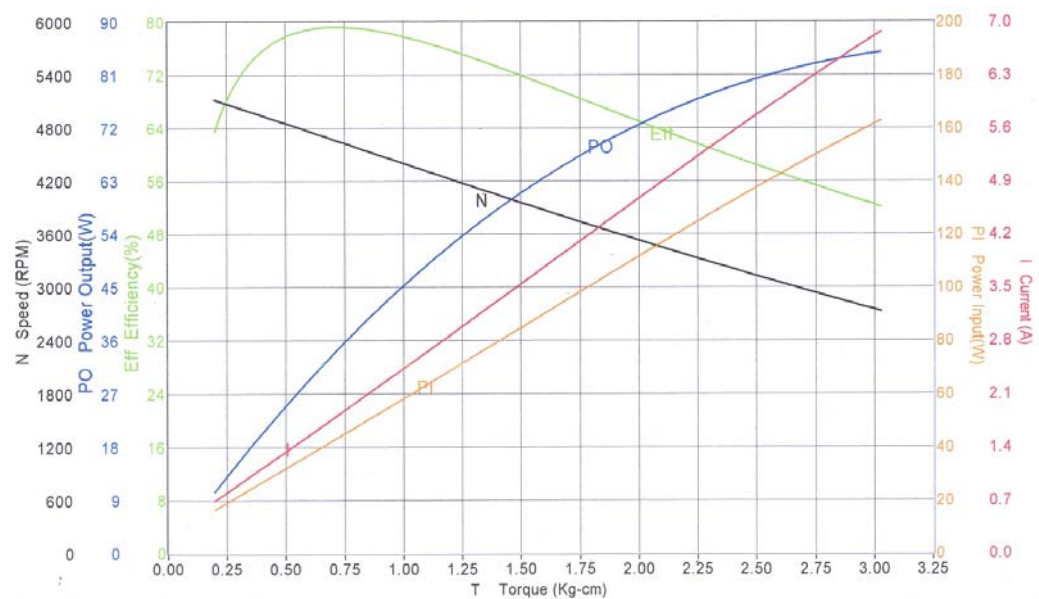
Motor Characteristic Curve

RSM60 SERIES

RSM60 I, 24V/3000RPM



RSM60 II, 24V/4000RPM

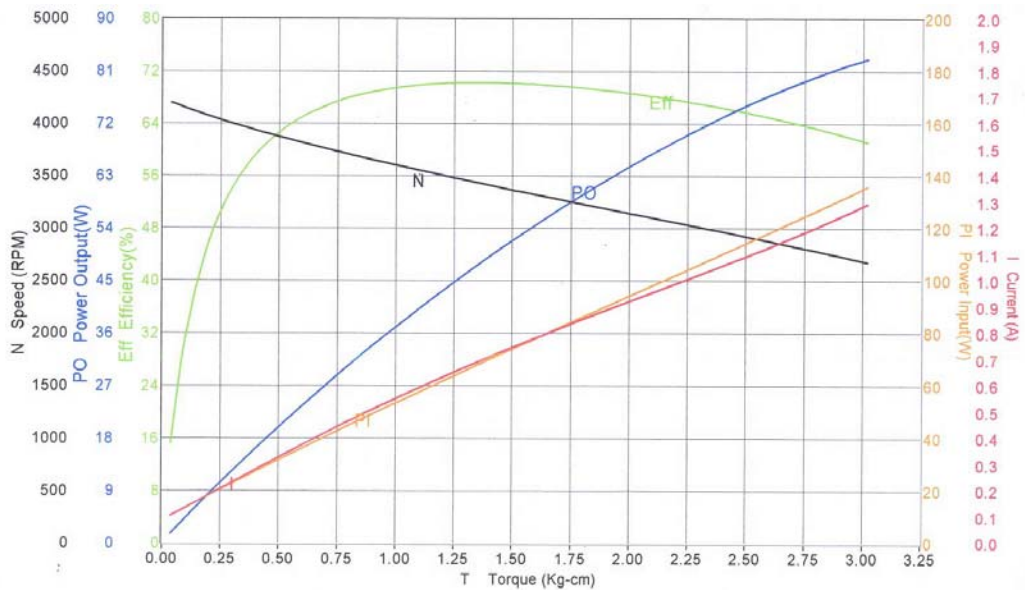


馬達特性曲線

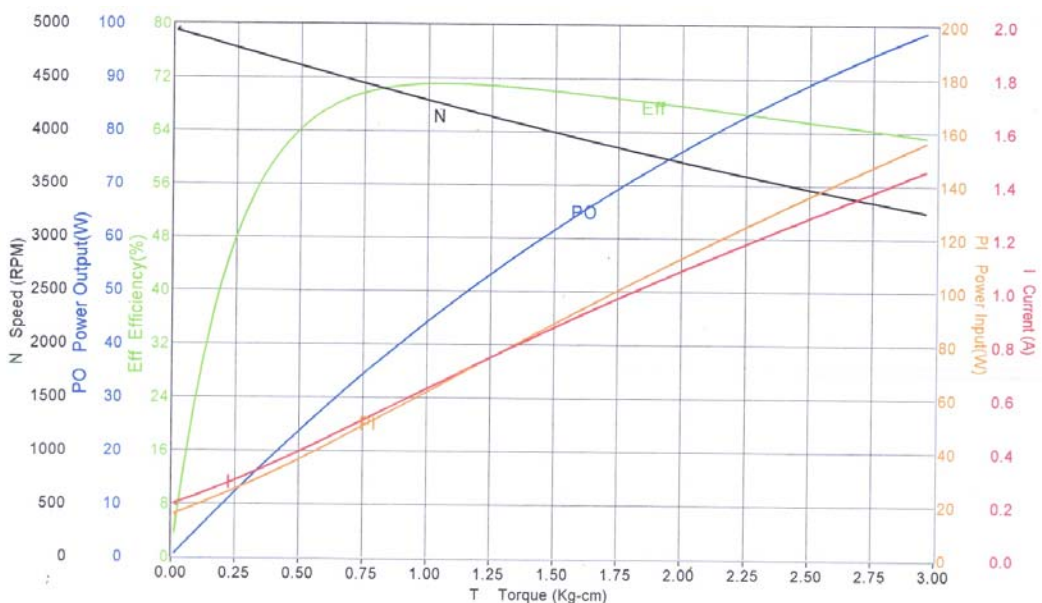
Motor Characteristic Curve

RWM60 SERIES

RWM60 I, 220V/3000RPM



RWM60 II, 220V/4000RPM

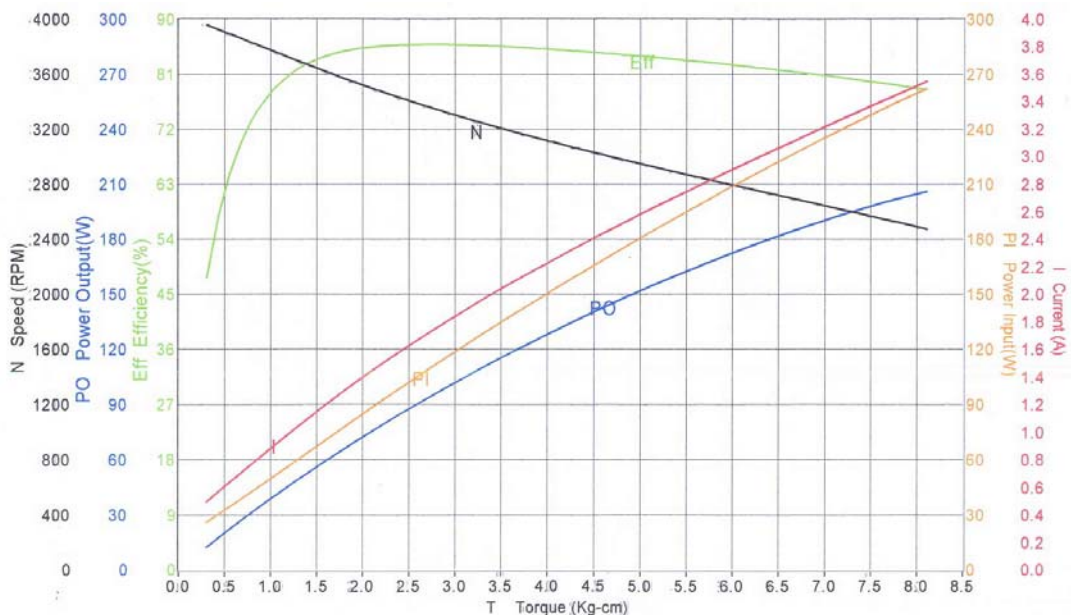


馬達特性曲線

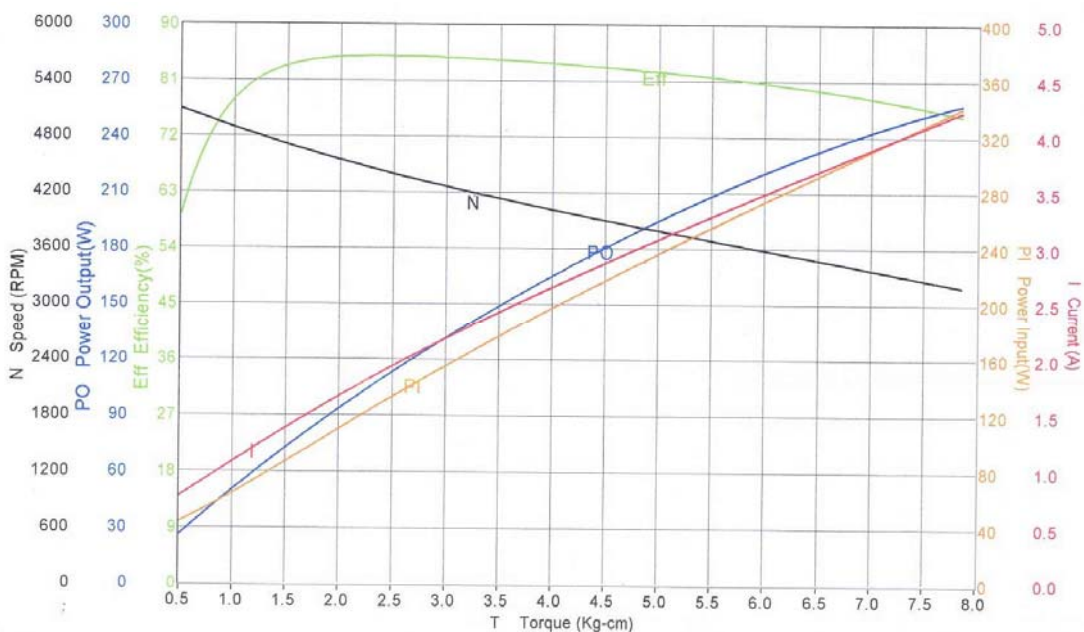
Motor Characteristic Curve

RSM90 SERIES

RSM90 I, 110V/3000RPM



RSM90 II, 110V/4000RPM



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