

泵浦馬達緩衝器SP系列



SOFT STARTER SP SERIES OF PUMP MOTOR (COMPACT SERIES)



>>> 功能特性 Characteristics

- 可調整啟動時間與扭力，使馬達平順啟動。
- 採用矽控整流體(SCR)控制：無接點、無弧光、無光端磨損，相當於半永久性的使用壽命。
- 配線簡便：三進三出的裝置，節省人工繁瑣配線的花費。
- 本控制器具有三相三線6只SCR閘流體作電力轉換控制。
- 本緩衝器為微處理機型，並具有自動輕重負載校對功能與轉矩控制。
- 冷卻風扇動作具有溫度控制，當散熱片溫度55°C時，45°C時停止，可提高風扇壽命2~3倍。
- 本控制器具馬達過載、馬達卡死、馬達低載皆可由控制器內部指撥開關設定，並提供復歸鍵，可作手動復歸。
- 本控制器提供3組輸出接點：啟動時輸出接點、運轉完成後輸出接點(BY PASS)、系統異常輸出接點。
- 本控制器提供泵浦馬達專用緩慢停止功能，以達到最佳消除水錘功能。
- 本緩衝啟動器具CE, IEC60947-4-2認證合格之規範。
- Start time and torsion can be adjusted for starting motor smoothly.
- It's controlled by SCR without access point, arc, and abrasion of light end, as semi-permanent use-life.
- Easy wiring : the equipment of 3 in and 3 out, it can save the cost of labor wiring tedious.
- This controller is 3 phases, 3 wires, 6 SCR thyristors for controlling by power.
- This starter is micro-treater with auto revising of light/heavy loading and the control of torque.
- Cooling fans has temperature control, the cooling sheet working at 55°C, and stop at 45°C, this design can extend use-life of fans 2-3 times.
- This controller can be set by dip switch in the controller for motor overload, motor block, and motor low load; and also offer return key to manual return.
- This controller offers 3 sets output connection : output connection of starting, output connection after running (BY PASS), output connection of system exception.
- This controller offers slow-stop function of pump motor to reach the best function of removing water hammer.
- This starter meets the standard of CE Certificate, IEC60947-4-2 approved.

>>> 保護功能 Protection Function

- 馬達過載
- 欠相
- 馬達卡死
- 閘流體過溫
- 馬達低載（缺水檢知）
- Motor overload
- Less phase
- Motor block
- Overheat of thyristors
- Motor low load (detector of water shortening)

>>> 啟動模式 Starting Mode

- 斜率啟動
- 定電流啟動
- 全壓啟動
- 轉矩啟動
- Gradient starting
- Constant current starting
- Total pressure starting
- Torque starting

泵浦馬達緩衝器SP系列

SOFT STARTER SP SERIES OF PUMP MOTOR (COMPACT SERIES)



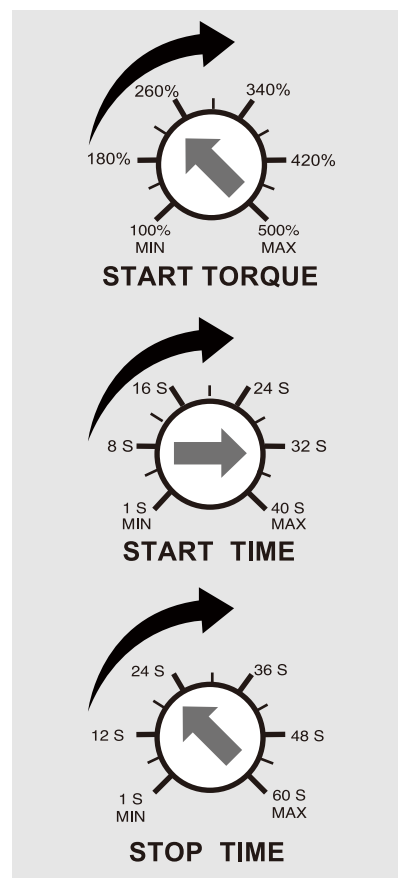
>>> 一般特性

General Characteristic

主電源電壓 main power voltage	3Ø 208~220 / 380~480 VAC ± 10%
輔助電壓 assistance voltage	220V±10% (可訂製 110V±10%) (can be ordered 110V±10%)
啟動方式 start way	乾接點 dry contact point
工作頻率 work frequency	50~60Hz ±5%
啟動時間 start time (speed time)	1~40 sec.
啟動扭力 start torque	100%~500%
停止時間(減速時間) stop time (retard time)	1~60 sec.
停止模式	慣性停止 / 轉矩停止 / 斜率停止
儲存溫度	-20°C~70°C
周圍工作溫度 ambient operating temperature rang	-10°C~45°C
最高峰值耐壓 maximum peak voltage	600VAC或1200VAC~1600VAC
最大相對溼度 relative humidity	93% RH無凝結成水滴 93% RH without dew
高度 height	標高2000公尺以下 below is under 2000 metres
振動	0.5G以下

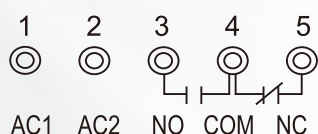
>>> 扭力、時間參考下圖解

Reference drawing of torque and time



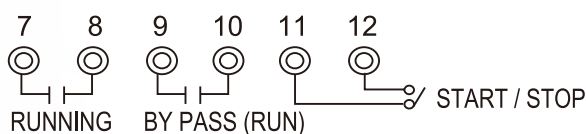
>>> 控制方式

The Control



AC1, AC2 : 輔助電壓 220V±10%
(可訂製 110V±10%)

NO, COM, NC : 異常訊號輸出接點 240V / 5A



RUNNING : 運轉中輸出接點 240V / 5A

BY PASS (RUN) : 運轉完成後輸出接點

START/STOP : 啟動/停止控制接點

泵浦型馬達緩衝器SP系列 Soft Starter SP Series of Pump Motor (Compact Series)

產品規格選擇 Choice of Specification & Models

額定電流 Rated current	額定電壓 Rated voltage				長 L mm	寬 W mm	高 H mm	圖
	208-220VAC	HP	380-480VAC	HP				
4A	SMC930020-SP 2				145	83	120	圖 (一) 圖 (二)
7A	SMC920020-SP	2	SMC930030-SP	3				
10A	SMC920030-SP	3	SMC930050-SP	5				
15A	SMC920050-SP	5	SMC930075-SP	7.5				
22A	SMC920075-SP	7.5	SMC930100-SP	10				
28A	SMC920100-SP	10	SMC930150-SP	15				



(圖一)



(圖二)

上述資料若有變更，恕不另行通知，敬請見諒！All specifications can be modified.

泵浦馬達專用緩衝器



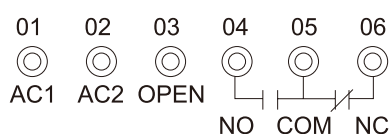
SOFT START PUMP MOTOR CONTROLLER



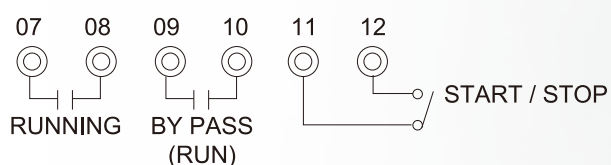
>>> 功能簡介 Function Introduction

- 啟動時可依不同負載來調整啟動扭力與時間，使啟動平順圓滑。
- 同一機台可選擇**5**種啟動模式：直接啟動、斜率啟動、限電流啟動、踢動啟動《**KICK START**》加限電流、踢動加斜率啟動。
- 採用矽控整流體(**SCR**)控制：無接點、無弧光、無光端磨損，相當於半永久性的使用壽命。
- 配線簡便：三進三出的裝置，節省人工繁瑣配線的花費。
- 本控制器具有三相三線**6**只**SCR**矽控閘流體作電力轉換控制。
- 本緩衝器為微處理機型，並具有自動輕重負載校對功能與轉矩控制。
- 冷卻風扇動作具有溫度控制，當散熱片溫度**55°C**時工作，**45°C**時停止，可提高風扇壽命**2~3**倍。
- 本控制器內含**CT**電子式檢知保護器：具過載、欠相、馬達卡死、閘流體過溫、馬達低載(缺水)的保護，超靈敏度，無積熱效應，不受週溫影響。
- 本控制器提供**3**組輸出接點：具啟動時輸出接點、運轉完成後輸出接點(**BY PASS**)、系統異常輸出接點，可供遠端監控使用。
- 本控制器提供泵浦馬達專用緩慢停止功能，以達到最佳消除水錘功能。
- 本緩衝啟動器具**CE,EN60947-4-2,IEC60947-4-1,EN61000-4,EN50082-2,EN50081**之認證。
- Starting torque and time can be adjusted according to the different load when starting, and make starting smoothly and stably.
- The soft start can choose 5 starting models: direct start, slope start, current limit start, kick start and current limit, kick start and slope start.
- Use SCR control: without connecting points, arc light, smooth face wearing, or use-life forever similarly.
- Wiring easy: installation of 3 in 3 out, save the coast of hand wiring.
- This controller has phases and 3 wires' SCR to transform control of power.
- This controller is micro-controller with the function of automatic ligh/heavy loading revision and turning moment control.
- Cooling fans has temperature control, the cooling sheet working at 55°C, and stop at 45°C, this design can extend use-life of fans 2-3 times.
- This controller has CT electronic inspection protector: the standard series have the protection of overload, loss phase, motor block, over heating, motor running idling(Low load), high sensitivity, without heating effect, not influenced by the temperature around.
- The machine has 3 sets' output connection points: the standard series have the output point when starting, by pass, and output point for system abnormal, for distant end supervising and controlling.
- This machine has slow stop function for pump motor to create best water hammer removing function.
- The starter starting tool has passed CE,EN60947-4-2,IEC60947-4-1,EN61000-4,EN50082-2,EN50081 accreditation.

>>> 控制方式 The Control



AC1,AC2：控制電壓 220VAC±10%
OPEN：空腳備用
NO,COM,NC：異常訊號輸出接點 240V/5A



RUNNING：運轉中輸出接點 240V / 5A
BY PASS(RUN)：運轉完成後輸出接點
START/STOP：啟動/停止控制接點
輸入/輸出接點均為乾接點信號

泵浦馬達專用緩衝器

SOFT START PUMP MOTOR CONTROLLER



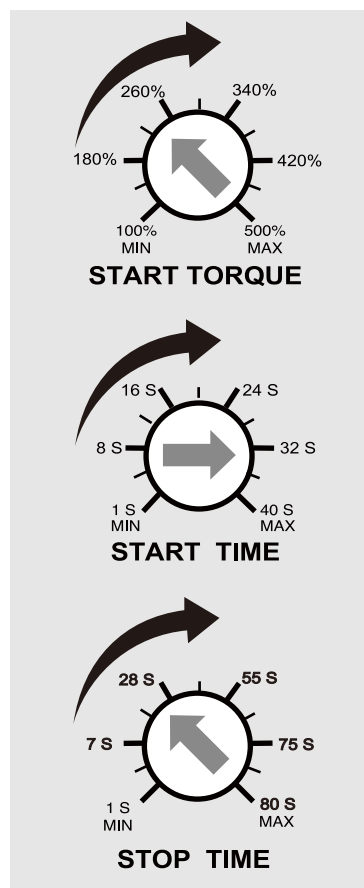
>>> 一般特性

General Characteristic

主電源電壓 main power voltage	208~220V/380~440V/460~480V±10%
輔助電壓 assistance voltage	220V±10% (可訂製110V±10%) (can be ordered 110V±10%)
啟動方式 start way	乾接點 dry contact point
工作頻率 work frequency	50~60Hz ±5%
最高峰值耐壓 maximum peak voltage	600VAC或1200VAC~1600VAC
啟動時間(加速時間) start time (speed time)	1~40sec.
啟動扭力 start torque	100%~500%
停止時間(減速時間) stop time (retard time)	1~80 sec.
周圍工作溫度 ambient operating temperature rang	-10°C~45°C
最大相對溼度 relative humidity	93%無凝結成水滴 93% RH without dew
高度 height	標高2000公尺以下 below is under 2000 metres
絕緣阻抗 insulation resistance	20MΩ以上 (電源與外殼間) Over 20MΩ (power & external cover) 20MΩ以上 (輸入信號與外殼間) Over 20MΩ (input signal & external cover)
耐壓強度 strength of press-resisted	電源與外殼間 2500VAC/1分鐘 2500VAC/1min between power & external cover 電源與輸入信號 1000VAC/1分鐘 1000VAC/1min between input signal & external cover

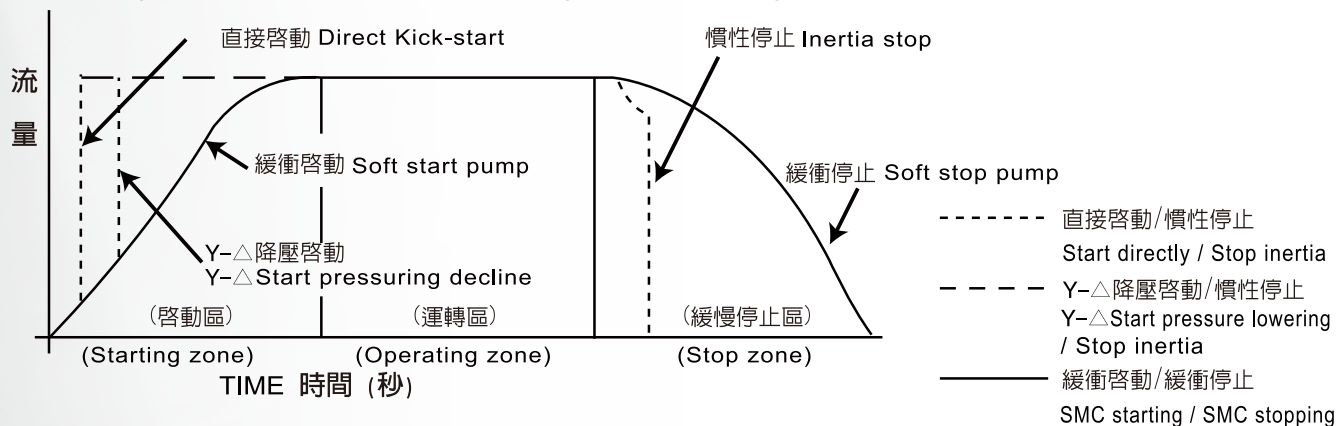
>>> 扭力、時間參考下圖解

Reference drawing of torque and time



>>> SOFT PUMP 與各式啟動、停止流量比較圖

Diagram of SOFT PUMP Starting and Stopping



泵浦馬達專用緩衝器

SOFT START PUMP MOTOR CONTROLLER

Quality, Service, Speed



SMC-P標準型系列 SMC-P STANDARD SERIES

>>> 型號規格選擇 Choice of Specification & Models

額定電流 rated current	額定電壓 rated voltage				額定電流 rated current	額定電壓 rated voltage		長 L (mm)	寬 W (mm)	高 H (mm)	圖 P
	208-220VAC	HP	380-440VAC	HP		460-480VAC	HP				
7A			SMC930030-P	3HP	7A	SMC940050-P	5HP	210	142	154	1
10A	SMC920030-P	3HP	SMC930050-P	5HP	10A	SMC940075-P	7.5HP	210	142	154	1
15A	SMC920050-P	5HP	SMC930075-P	7.5HP	15A	SMC940100-P	10HP	210	142	154	1
22A	SMC920075-P	7.5HP	SMC930100-P	10HP	22A	SMC940150-P	15HP	210	142	154	1
28A	SMC920100-P	10HP	SMC930150-P	15HP				210	142	154	1
35A			SMC930200-P	20HP	28A	SMC940200-P	20HP	233	142	154	2
42A	SMC920150-P	15HP	SMC930250-P	25HP	35A	SMC940250-P	25HP	233	142	154	2
55A	SMC920200-P	20HP	SMC930300-P	30HP	42A	SMC940300-P	30HP	233	142	154	2
70A	SMC920250-P	25HP	SMC930400-P	40HP	55A	SMC940400-P	40HP	285	142	154	3
82A	SMC920300-P	30HP	SMC930500-P	50HP	70A	SMC940500-P	50HP	285	142	154	3
105A	SMC920400-P	40HP	SMC930600-P	60HP	82A	SMC940600-P	60HP	285	142	154	3
135A	SMC920500-P	50HP	SMC930750-P	75HP	105A	SMC940750-P	75HP	320	142	200	4
155A	SMC920600-P	60HP	SMC931000-P	100HP	135A	SMC941000-P	100HP	320	142	200	4
185A	SMC920750-P	75HP	SMC931250-P	125HP	155A	SMC941250-P	125HP	400	263	210	5
250A	SMC921000-P	100HP	SMC931500-P	150HP	185A	SMC941500-P	150HP	400	263	210	5
280A			SMC931750-P	175HP	250A	SMC941750-P	175HP	400	263	210	5
300A	SMC921250-P	125HP	SMC932000-P	200HP	280A	SMC942000-P	200HP	530	306	247	6
360A	SMC921500-P	150HP	SMC932500-P	250HP	300A	SMC942500-P	250HP	530	306	247	6
420A	SMC921750-P	175HP	SMC933000-P	300HP	360A	SMC943000-P	300HP	530	306	247	6
					420A	SMC943500-P	350HP	530	306	247	6
560A	SMC920560A-P		SMC930560A-P		560A	SMC940560A-P		660	573	308	8
620A	SMC920620A-P		SMC930620A-P		620A	SMC940620A-P		660	573	308	8
750A	SMC920750A-P		SMC930750A-P		750A	SMC940750A-P		660	573	308	8
930A	SMC920930A-P		SMC930930A-P		930A	SMC940930A-P		675	573	308	8
1100A	SMC921100A-P		SMC931100A-P		1100A	SMC941100A-P		675	573	308	8

上述資料若有變更，恕不另行通知，敬請見諒！All specifications can be modified.

※ 本公司緩衝器之額定電流值以東元馬達之4極馬達之電流值做為依據，若超載使用，屬非保固範圍。

The rated current value of our soft starter is as the basis of the current value of TECO Motor's 4-pole motor.

And we are so sorry that it is non-warranty coverage for the overload use.



(圖一)



(圖二)



(圖三)



(圖四)



(圖五)



(圖六)



(圖七)



(圖八)

智慧型馬達緩衝器OL系列



SOFT STARTER OL SERIES OF SMART MOTOR

(WITH OVERLOAD PROTECTION SERIES)



>>> 功能特性 Characteristics

- 可調整啟動時間與扭力，使馬達平順啟動。
- 採用矽控整流體(SCR)控制：無接點、無弧光、無光端磨損，相當於半永久性的使用壽命。
- 配線簡便：三進三出的裝置，節省人工繁瑣配線的花費。
- 本控制器具有三相三線6只SCR閘流體作電力轉換控制。
- 本緩衝器為微處理機型，並具有自動輕重負載校對功能與轉矩控制。
- 本控制器具馬達過載、馬達卡死皆可由控制器內部指撥開關設定，並提供復歸鍵，可作手動復歸。
- 本控制器提供3組輸出接點：啟動時輸出接點、運轉完成後輸出接點(BY PASS)、系統異常輸出接點。
- 本緩衝啟動器具CE, IEC60947-4-2認證合格之規範。
- Start time and torsion can be adjusted for starting motor smoothly.
- It's controlled by SCR without access point, arc, and abrasion of light end, as semi-permanent use-life.
- Easy wiring : the equipment of 3 in and 3 out, it can save the cost of labor wiring tedious.
- This controller is 3 phases, 3 wires, 6 SCR thyristors for controlling by power.
- This starter is micro-treater with auto revising of light/heavy loading and the control of torque.
- This controller can be set by dip switch in the controller for motor overload, motor block; and also offer return key to manual return.
- This controller offers 3 sets output connection : output connection of starting, output connection after running (BY PASS), output connection of system exception.
- This starter meets the standard of CE Certificate, IEC60947-4-2 approved.

>>> 保護功能 Protection Function

- 馬達過載
- 欠相
- 馬達卡死
- 閘流體過溫
- Motor overload
- Less phase
- Motor block
- Overheat of thyristors

>>> 啟動模式 Starting Mode

- 斜率啟動
- 定電流啟動
- 全壓啟動
- 轉矩啟動
- Gradient starting
- Constant current starting
- Total pressure starting
- Torque starting

智慧型馬達緩衝器OL系列

SOFT STARTER OL SERIES OF SMART MOTOR (WITH OVERLOAD PROTECTION SERIES)



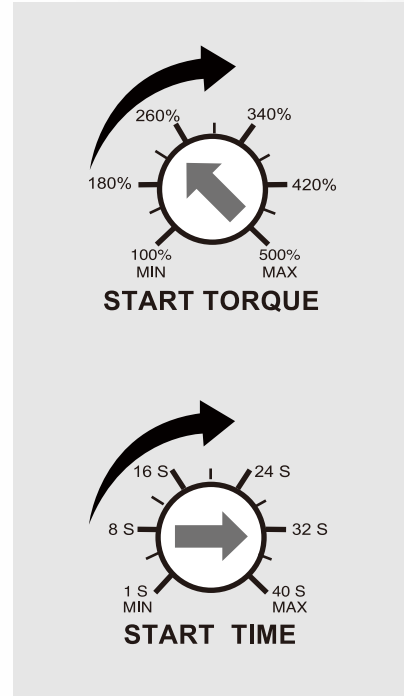
>>> 一般特性

General Characteristic

主電源電壓 main power voltage	3Ø 208~220 / 380~480VAC±10%
輔助電壓 assistance voltage	220V±10% (可訂製 110V±10%) (can be ordered 110V±10%)
啟動方式 start way	乾接點 dry contact point
工作頻率 work frequency	50~60Hz ±5%
啟動時間 start time (speed time)	1~40 sec.
啟動扭力 start torque	100%~500%
停止模式	慣性停止 / 轉矩停止 / 斜率停止
儲存溫度	-20°C~70°C
周圍工作溫度 ambient operating temperature rang	-10°C~45°C
最大相對溼度 relative humidity	93% RH無凝結成水滴 93% RH without dew
高度 height	標高2000公尺以下 below is under 2000 metres
振動	0.5G以下

>>> 扭力、時間參考下圖解

Reference drawing of torque and time



>>> 控制方式

The Control



AC1, AC2 : 輔助電壓 220V±10%
(可訂製 110V±10%)

RUNNING : 運轉中輸出接點 240V / 5A

BY PASS (RUN) : 運轉完成後輸出接點

NO, COM, NC : 異常訊號輸出接點 240V / 5A

START/STOP : 啟動/停止控制接點

智慧型馬達緩衝器OL系列 Soft Starter OL Series of Smart Motor (With Overload Protection Series)
產品規格選擇 Choice of Specification & Models (無STOP TIME功能)

額定電流 Rated current	額定電壓 Rated voltage				長 L mm	寬 W mm	高 H mm	圖
	208-220VAC	HP	380-480VAC	HP				
4A			SMC930020-OL	2	145	83	120	圖 (一)
7A	SMC920020-OL	2	SMC930030-OL	3				
10A	SMC920030-OL	3	SMC930050-OL	5				
15A	SMC920050-OL	5	SMC930075-OL	7.5				
22A	SMC920075-OL	7.5	SMC930100-OL	10				
28A	SMC920100-OL	10	SMC930150-OL	15				



(圖一)



(圖二)

上述資料若有變更，恕不另行通知，敬請見諒！All specifications can be modified.

智慧型馬達啟動控制器



SOFT START MOTOR CONTROLLER



>>> 功能簡介 Function Introduction

- 啟動時可依不同負載來調整啟動扭力與時間，使啟動平順圓滑。
- 降壓啟動方式的最佳選擇：效果優於Y-△啟動，電抗啟動及自藕變壓啟動。
- 同一機台可選擇3種啟動模式：標準型系列具斜率式啟動、限電流式啟動、限電流加踢動啟動《KICK START》。
- 本控制器提供3組輸出接點：標準型系列具啟動時輸出接點、運轉完成後輸出接點(BY PASS)、系統異常輸出接點，可供遠端監控使用。
- 採降壓啟動方式，可降低馬達啟動瞬間電流，減少工廠內部電壓降低，避免工廠系統當機。
- 本控制器內含CT電子式檢知保護器：標準型系列具過載、欠相、馬達卡死、控制器過溫保護，超靈敏感度，且無積熱效應，不受過溫影響。
- 配線簡便：三進三出的裝置，節省人工繁瑣配線的花費。
- 冷卻風扇動作具有溫度控制，當散熱片溫度55°C時工作，45°C時停止，可提高風扇壽命2~3倍。
- 採用矽控整流體(SCR)控制：無接點、無弧光、無光端磨損，相當於半永久性的使用壽命。
- 耐粉塵、耐潮，可適用於ON-OFF頻繁及怕火花產生的場所，工安有保障。
- 本控制器為微處理機型具CE,IEC60947-4-1,EN61000-4,EN50082-2,EN50081之認證。
- Starting torque and time can be adjusted according to the different load when starting, and make starting smoothly and stably.
- Best choice of pressure down's starting: the effect is better than Y-△starting, reactance starting and self-coupling transforming starting.
- 3 starting ways can be choice in one machine: the standard series have the slope starting, current-limiting starting, current-limiting & kick starting.
- The machine has 3 sets' output connection points: the standard series have the output point when starting, by pass, and output point for system abnormal, for distant end supervising and controlling.
- Current-limiting starting can lower the momentary current of motor starting, to reduce the internal voltage of factory, and this can avoid factory system short down.
- This controller has CT electronic inspection protector: the standard series have the protection of overload, loss phase, motor block, over heating high sensitivity, without heating effect, not influenced by the temperature around.
- Wiring easy: installation of 3 in 3 out, save the cost of hand wiring.
- Cooling fans has temperature control, the cooling sheet working at 55°C, and stop at 45°C, this design can extend use-life of fans 2-3 times.
- Use SCR control: without connecting points, arc light, smooth face wearing, or use-life forever similarly.
- Powder-dust proof, moisture proof, suitable to ON-OFF frequently and the place can't have spark, the factory security can be ensured.
- This controller is micro-treating model, and it has passed CE,IEC60947-4-1,EN61000-4,EN50082-2,EN50081 accreditation.

智慧型馬達啟動控制器

SOFT START MOTOR CONTROLLER



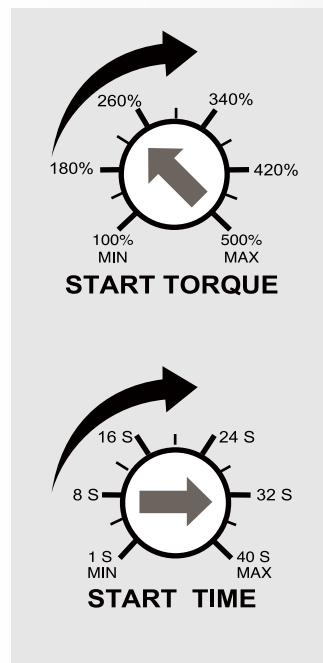
>>> 一般特性

General Characteristic

主電源電壓 main power voltage	208~220V/380~440V/460~480V±10%
輔助電壓 assistance voltage	220V±10% (可訂製 110V±10%) (can be ordered 110V±10%)
啟動方式 start way	乾接點 dry contact point
工作頻率 work frequency	50~60Hz ±5%
最高峰值耐壓 maximum peak voltage	600V或1200V~1600V
啟動時間 start time (speed time)	1~40sec.
啟動扭力 start torque	100%~500%
周圍工作溫度 ambient operating temperature rang	-10°C~45°C
最大相對溼度 relative humidity	93%無凝結成水滴 93% RH without dew
高度 height	標高2000公尺以下 below is under 2000 metres
絕緣阻抗 insulation resistance	20MΩ以上 (電源與外殼間) Over 20MΩ (power & external cover) 20MΩ以上 (輸入信號與外殼間) Over 20MΩ (input signal & external cover)
耐壓強度 strength of press-resisted	電源與外殼間 2500VAC /1分鐘 2500VAC/1min between power & external cover 電源與輸入信號 1000VAC /1分鐘 1000VAC/1min between input signal & external cover

>>> 扭力、時間參考下圖解

Reference drawing of torque and time



>>> 適用範圍

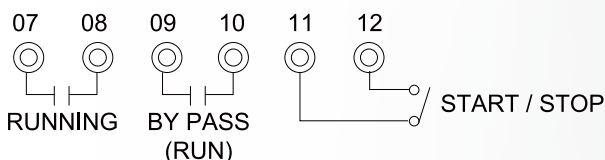
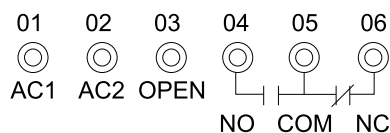
Suitable range

需要平滑啟動機能，但不需作速度控制的產業機械。諸如天車、壓縮機、風車、鼓風機...等等。

The machine need starting smoothly, but no need speed control, e.g.: hoist, compressor, windmill, blower, etc.

>>> 控制方式

The Control



AC1,AC2：控制電壓 220VAC±10%

OPEN：空腳備用

NO,COM,NC：異常訊號輸出接點 240V/5A

RUNNING：運轉中輸出接點 240V / 5A

BY PASS(RUN)：運轉完成後輸出接點

START/STOP：啟動/停止控制接點

輸入/輸出接點均為乾接點信號

智慧型馬達啟動控制器

SOFT START MOTOR CONTROLLER

Quality, Service, Speed



SMC標準型系列 SMC STANDARD SERIES

>>> 型號規格選擇 Choice of Specification & Models

額定電流 rated current	額定電壓 rated voltage				額定電流 rated current	額定電壓 rated voltage		長 L (mm)	寬 W (mm)	高 H (mm)	圖 P
	208-220VAC	HP	380-440VAC	HP		460-480VAC	HP				
28A	SMC920100	10HP	SMC930150	15HP				210	142	154	1
35A			SMC930200	20HP	28A	SMC940200	20HP	233	142	154	2
42A	SMC920150	15HP	SMC930250	25HP	35A	SMC940250	25HP	233	142	154	2
55A	SMC920200	20HP	SMC930300	30HP	42A	SMC940300	30HP	233	142	154	2
70A	SMC920250	25HP	SMC930400	40HP	55A	SMC940400	40HP	285	142	154	3
82A	SMC920300	30HP	SMC930500	50HP	70A	SMC940500	50HP	285	142	154	3
105A	SMC920400	40HP	SMC930600	60HP	82A	SMC940600	60HP	285	142	154	3
135A	SMC920500	50HP	SMC930750	75HP	105A	SMC940750	75HP	320	142	200	4
155A	SMC920600	60HP	SMC931000	100HP	135A	SMC941000	100HP	320	142	200	4
185A	SMC920750	75HP	SMC931250	125HP	155A	SMC941250	125HP	400	263	210	5
250A	SMC921000	100HP	SMC931500	150HP	185A	SMC941500	150HP	400	263	210	5
280A			SMC931750	175HP	250A	SMC941750	175HP	400	263	210	5
300A	SMC921250	125HP	SMC932000	200HP	280A	SMC942000	200HP	530	306	247	6
360A	SMC921500	150HP	SMC932500	250HP	300A	SMC942500	250HP	530	306	247	6
420A	SMC921750	175HP	SMC933000	300HP	360A	SMC943000	300HP	530	306	247	6
					420A	SMC943500	350HP	530	306	247	6
560A	SMC920560A		SMC930560A		560A	SMC940560A		660	573	308	8
620A	SMC920620A		SMC930620A		620A	SMC940620A		660	573	308	8
750A	SMC920750A		SMC930750A		750A	SMC940750A		660	573	308	8
930A	SMC920930A		SMC930930A		930A	SMC940930A		675	573	308	8
1100A	SMC921100A		SMC931100A		1100A	SMC941100A		675	573	308	8

上述資料若有變更，恕不另行通知，敬請見諒！All specifications can be modified.



(圖一)



(圖二)



(圖三)



(圖四)



(圖五)



(圖六)



(圖七)



(圖八)

智慧型馬達啟動控制器

SOFT START MOTOR CONTROLLER



SMC 經濟型系列 SMC ECONMIC SERIES

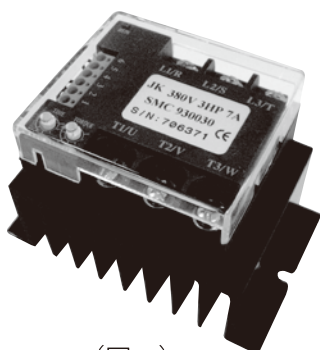


>>> 型號規格選擇 Choice of Specification & Models

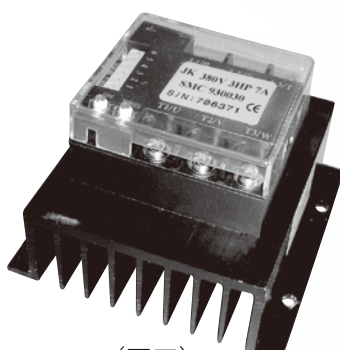
《無保護系統》 Without protection system

額定電流 rated current	額定電壓 rated voltage						長 L (mm)	寬 W (mm)	高 H (mm)	圖 (P)
	208-220VAC	HP	380-440VAC	HP	460-480VAC	HP				
7A	SMC920020	2HP	SMC930030	3HP	SMC940050	5HP	75	127	86	1
10A	SMC920030	3HP	SMC930050	5HP	SMC940075	7.5HP	75	127	86	1
15A	SMC920050	5HP	SMC930075	7.5HP	SMC940100	10HP	120	127	86	2
22A	SMC920075	7.5HP	SMC930100	10HP	SMC940150	15HP	180	127	86	3

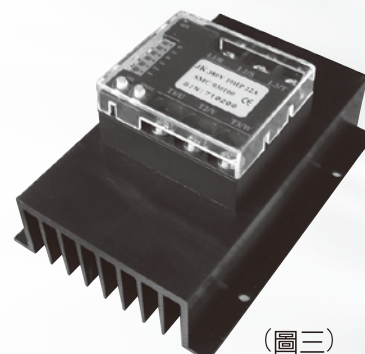
上述資料若有變更，恕不另行通知，敬請見諒！All specifications can be modified.



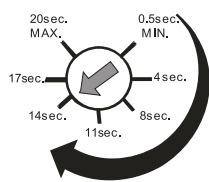
(圖一)



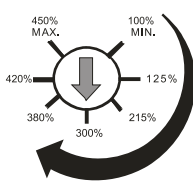
(圖二)



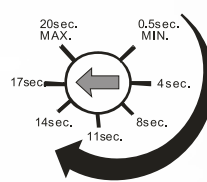
(圖三)



圖(一)

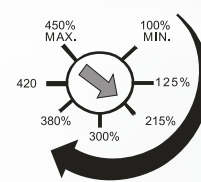


START TORQUE



START TIME

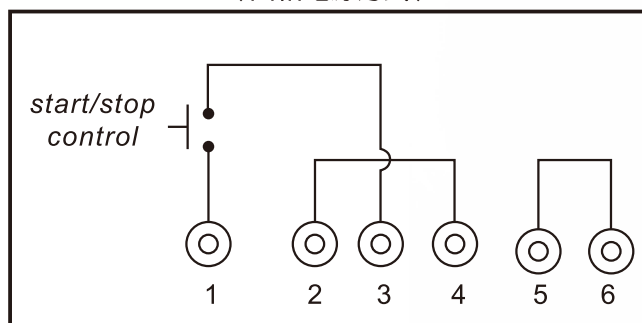
圖(二)



START TORQUE

>>> 控制方式 The Control

(自給電源方式)



使用機種：

220/380 VAC 3HP、5HP、7.5HP

(本機出廠時已將1,3腳直接短路)

規格選擇注意事項：

※智慧型緩衝器搭配方式：負載之馬力數及額定電流須在緩衝器涵蓋範圍內。

※風車、攪拌機、空壓機、鼓風機、粉碎機、輸送機、油壓式工業貨梯、複捲機、萬馬力機、斗升機等產業機械或一小時內啟動次數超過十二次者需升一級使用。

※球磨機需升二級使用。

The choice of Specification：

※Coordination with smart softer：the horsepower and rated current loaded must be in the coverage of softer.

※The level must be upgraded one level to industrial machinery as windmill, mixer, air compressor, blower, grinder, conveyor, hydraulic industrial freight elevator, rewinder, million horsepower machine, bucket elevator, or the machine need to start over 12 times every hour.

※To ball mill, must upgrade 2 levels.

單相馬達緩衝器

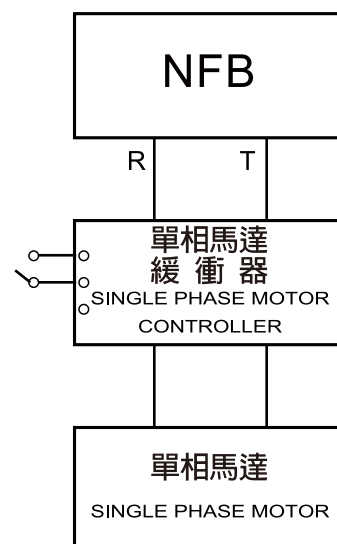


SINGLE PHASE SOFT START CONTROLLER

>>> 產品特性

Product Characteristic

- 本產品具CE國際安全之認證。
- 啟動時可依不同負載來調整啟動扭力與時間，使啟動平順圓滑。
- 採用矽控整流體(SCR)控制：無接點、無弧光、無光端磨損，相當於半永久性的使用壽命。
- 耐粉塵、耐潮，可適用於ON-OFF頻繁及怕火花產生的場所，工安有保障。
- 應用於單相泵浦馬達及單相感應式馬達，可以有效消除水錘問題。
- This controller is passed CE international quality accreditation.
- Starting torque and time can be adjusted according to the different load when starting, and make starting smoothly and stably.
- Use SCR control: without connecting points, arc light smooth face wearingm, or sue-life forever similarly.
- Powder-dust proof, moisture proof, suitable to ON-OFF frequently and the place can't have spark, thg factory security can be ensured.
- Single phase pump motor and single phase motor can best water hammer removing function.



>>> 適用負載

Loading Suitable

應用於單相泵浦馬達可以有效消除水錘問題。

Applied to single phase to resolve the problem effectively of water hammer.

適用於單相感應式馬達須啟動平順之場所，如電動鐵門.....。

Suitable to the place need to start smoothly with single phase induction motor, eg. : electric iron gate.....

>>> 一般特性

General Characteristic

主電源 main voltage	AC110V, 220V
工作頻率 work frequency	47-63 Hz
輸入控制訊號 input control signal	乾接點輸入 dry contact point
使用環境 environment	周溫-10~50°C 溼度90RH %以下 Around temperature -10°C~50°C, humidity under 90% RH.
高度 height	標高2000公尺以下 below is under 2000 metres

>>> 型號規格選擇 Choice of Specification & Models

額定電壓 Rated voltage			長 L (mm)	寬 W (mm)	高 H (mm)	圖 P
110V	220V	HP				
JK1110HP	JK2210HP	1HP	75	102	103	1
JK1120HP	JK2220HP	2HP	75	102	103	1
JK1130HP	JK2230HP	3HP	75	102	103	1

上述資料若有變更，恕不另行通知，敬請見諒！All specifications can be modified.



(圖一)