

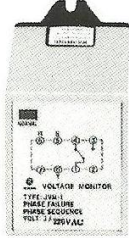

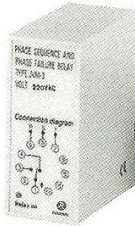



Timer,
Temperature Controller,
Socket Base

欠逆相及高低壓檢測保護繼電器

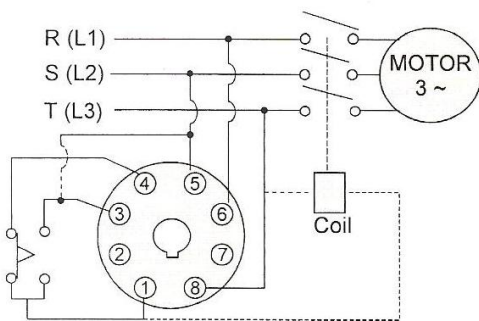
SELF-POWERED VOLTAGE DETECTING & PROTECTING RELAY



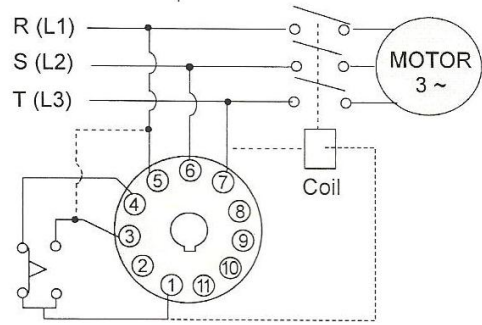
MODEL NO.	JVM-1	JVM-2	JVM-3	JVM-4
CLASSIFICATION				
APPEARANCE 外觀				
FEATURES 特性	Phase Failure 欠相檢出 Phase Sequence 逆相檢出	Phase Failure 欠相檢出 Phase Sequence 逆相檢出 Over Voltage 電壓過高 Under Voltage 電壓過低	Phase Failure 欠相檢出 Phase Sequence 逆相檢出	Phase Failure 欠相檢出 Phase Sequence 逆相檢出 Over Voltage 電壓過高 Under Voltage 電壓過低
SURFACE MOUNTING 外型安裝	Socket base 8PFA	Socket base 8PFA	Socket base P2CF11	Socket base P2CF11
OUTPUT CAPACITY 輸出接點容量 : 7A	SPDT 一組接點			
RESPONSE TIME OF RELAY 動入時間	Delay on : 0.5 Sec Delay off : 3 Sec			
FREQUENCY 使用週率	50Hz or 60Hz (Depend upon user's area)			
RATED VOLTAGE 定格電壓 (RANGE: 85%-110%)	3 Phase (三相) 220, 380, 415, 440V	3 ϕ : 220, 380, 415, 440V 1 ϕ : 110, 220, 380, 415, 440V	3 Phase (三相) 220, 380, 415, 440V	3 ϕ : 220, 380, 415, 440V 1 ϕ : 110, 220, 380, 415, 440V
L I F E 壽命	Mechanically 機械	10 \times 10 ⁶ Times		
	Electrically AC220VPF=1 電氣	5 \times 10 ⁵ Times		
A C C U R A C Y 精度	Repeat 往復誤差		\pm 2% Max	\pm 2% Max
	Setting 設定誤差		\pm 10% Max	\pm 10% Max
	Voltage 電壓誤差		\pm 2% Max	\pm 2% Max
	Temperature 溫度誤差		\pm 2% Max	\pm 2% Max
RESET TIME 復歸時間	0.2 Sec Max			
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度	-10°C ~ 55°C, 85% Max			

CONNECTION & OPERATIONAL DIAGRAMS
配線圖與動作圖

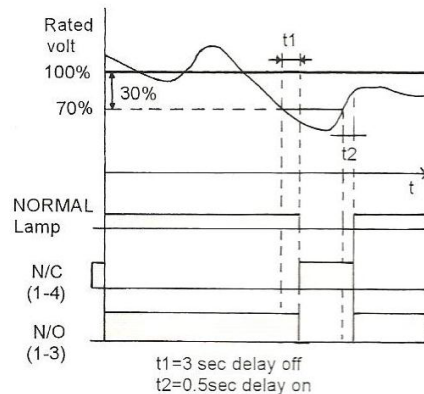
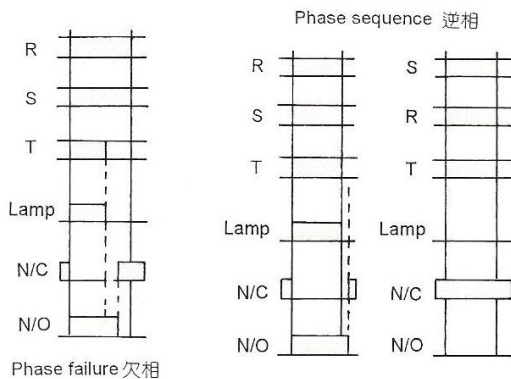
(1) TYPE: JVM-1 & JVM-3 (Phase failure/ Phase sequence monitoring relay)
欠逆相檢測保護繼電器



JVM-1



JVM-3



Output relay will be switched to ON (pin#1 & pin#3 close) immediately when power is applied to the unit with correct phase sequence and voltages.

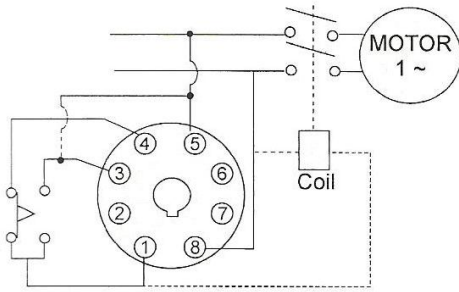
In case of any phase failure or voltage drops below 70% of the rated voltage which lasts for 3 seconds, then the output relay will return to its original position (pin#1 & pin#4 close) to cut power until 3 phase voltages and phase sequence are correct.

啟動電源後只有在3相電源的每一相位都在正確位置時，1-3腳才接通；有欠相或逆相接線時，1-3腳不接通。若在正常運作中任一線突然缺電或電壓降至額定電壓的70%以下，內部繼電器會於3秒延遲後回到原始位置，切斷電源以保護馬達不致損壞。當電源供應恢復正常時，繼電器會於0.5秒延遲後接通 1-3腳。

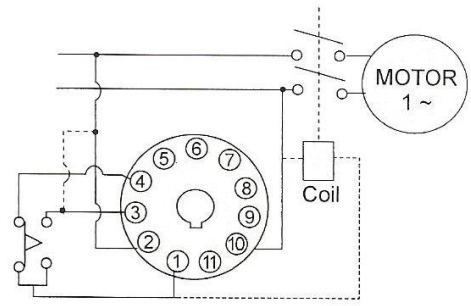
(2) TYPE: JVM-2 & JVM-4

(Phase failure/Phase sequence/Under volt. /Over volt. monitoring relay)
欠逆相及高低壓檢測保護繼電器

A. Single phase 單相檢出

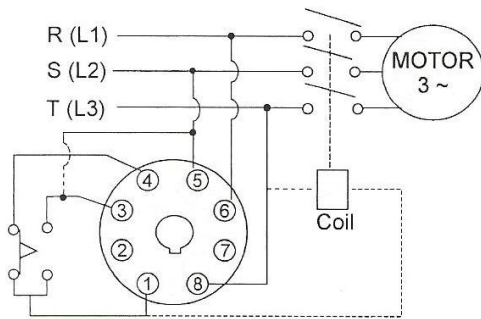


JVM-2

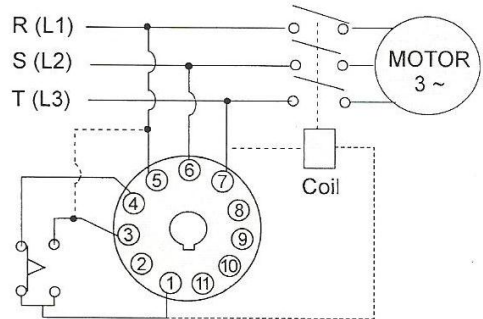


JVM-4

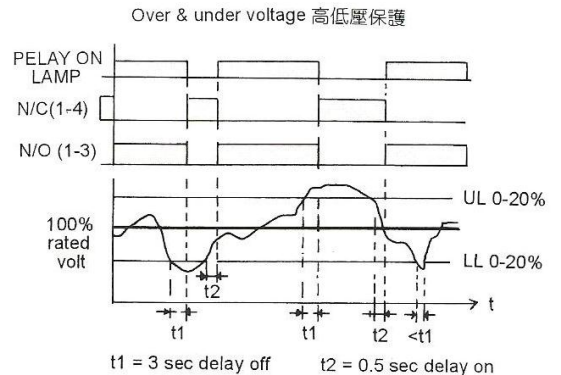
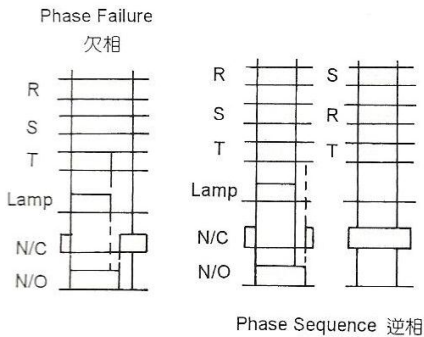
B. Three phase 三相檢出



JVM-2



JVM-4


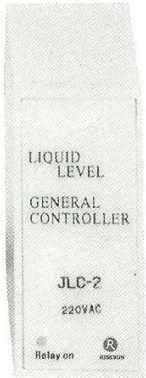
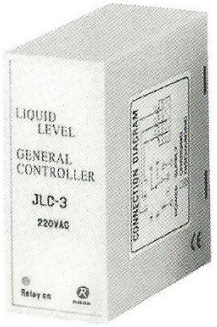


Output relay will operate to ON (pin#1 & pin#3 close) when power is applied to the unit normally, and simultaneously detect if supplied power voltages (single or three phase) are within the set voltage range, and phases in correct sequence for three phase type.

0% to 20% Knob-adjustable separately for over voltage and under voltage. If voltage is over or under than the setting voltage for over 3 second, then the output relay will be released to its original position (pin#1 & pin#4 close).

電源接通後，只有在單相或三相電源相位順序正確及供應電壓在設定範圍內時，1-3腳才會接通。正常運作中電壓過高或電壓低於設定值時，繼電器會釋回以切斷電源。電壓保護設定值從額定電壓的上下0~20%可調整。繼電器內部轉換延遲: ON為0.5秒 : OFF為3秒。

液面控制繼電器 LEVEL CONTROL RELAY

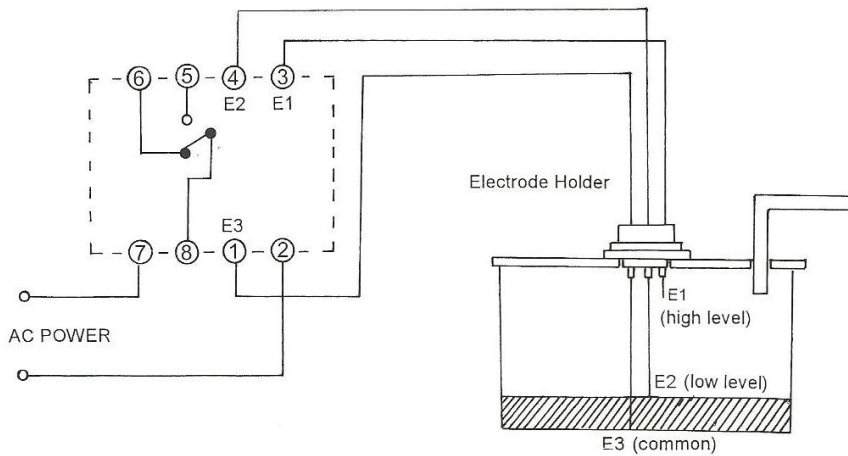
MODEL NO.	JLC-1	JLC-2	JLC-3
CLASSIFICATION			
APPEARANCE 外觀			
FEATURES 特性	Water Supply or Water Drainage for controlling conductive liquids under 40 kΩ 一般供水或排水用途	Water Supply for controlling conductive liquids under 40 kΩ 一般供水用途	Water Drainage for controlling conductive liquids under 40 kΩ 一般排水用途
SURFACE MOUNTING 露出型安裝	Socket base 8PFA	Socket base P2CF11	Socket base P2CF11
OUTPUT CAPACITY 輸出接點容量: 7A	SPDT 一組接點		
RESPONSE TIME OF RELAY 動入時間	Standard : 0.5 SEC		
RATED VOLTAGE 定格電壓 (RANGE:85%-110%)	50/60Hz 110VAC, 220VAC, 380VAC, 415VAC		
L I F E 壽命	Mechanically 機械	10 × 10 ⁶ Times	
	Electrically AC220VPF=1 電氣	5 × 10 ⁵ Times	
A C C U R A N C Y 精確度	Repeat 往復誤差	—	
	Setting 設定誤差	—	
	Voltage 電壓誤差	—	
	Temperature 溫度誤差	—	
RESET TIME 復歸時間	0.2 Sec Max		
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度	-10°C~55°C, 85% Max		

CONNECTION & OPERATIONAL DIAGRAMS
配線圖與動作圖

(1) JLC-1

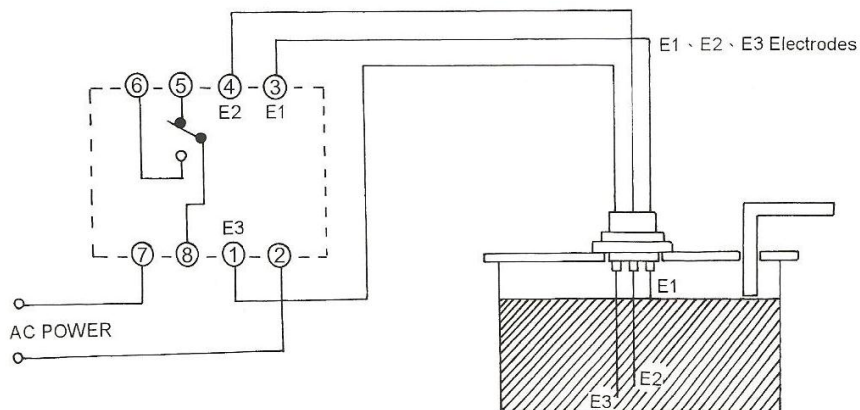
WATER SUPPLY: Output relay will be switched to ON (pin#8 & pin#6 connect) with 0.5 sec duration when liquid level is below than E2 (Low level) until level reaches E1 (High level) lasting for over 0.5 sec. And then relay OFF (pin#8-5).

當液位低於E2之位準時,繼電器第8與第6腳會於0.5秒延遲後接通,同時啓動幫浦開始供水,直到水位到達E1(高水位)超過0.5秒時,繼電器回到原來位置(第8腳與第5腳接通)並停止供水。



WATER DRAINAGE: When liquid level is higher than E1, output relay will be switched (pin#8-5 connect) after 0.5 sec duration, and simultaneously pump starts to drain until level is downward under E2 (Low level) for over 0.5 sec then relay will transfer again (pin#8-6 connect) to stop drainage.

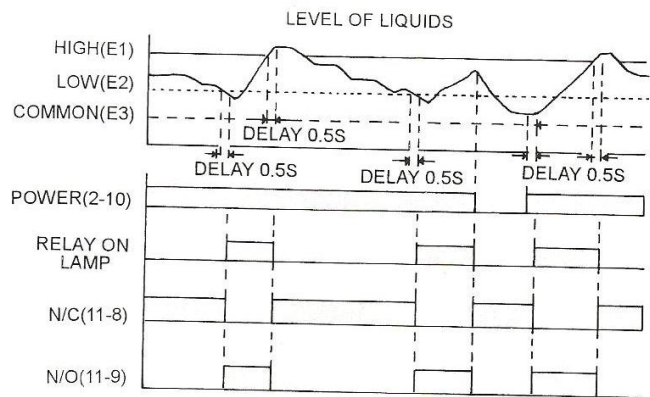
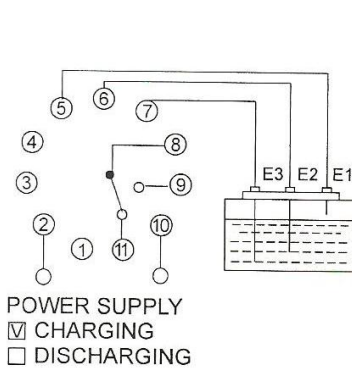
當液位高於E1之位準時,內部繼電器第8與第5腳會於0.5秒延遲後接通,同時啓動幫浦開始抽水,直到水位低於E2(低水位)時,繼電器會於0.5秒延遲後釋回(第8腳與第6腳接通)並停止排水。



(2) JLC-2 (WATER SUPPLY)

Output relay will be switched to ON (pin #11 & pin #9 connect) with 0.5 sec duration when liquid level is below than E2 (Low level) until level reaches E1 (High level) lasting for over 0.5 sec. And then relay OFF (pin#11-8).

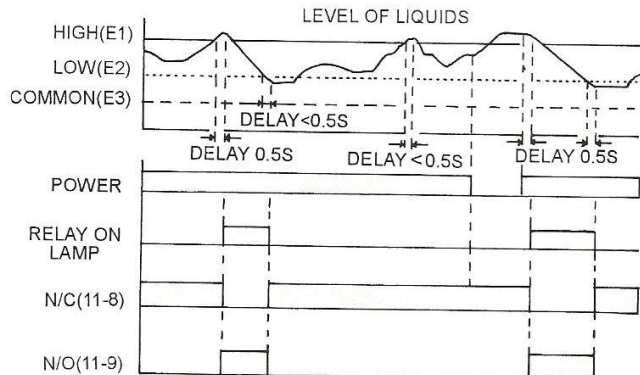
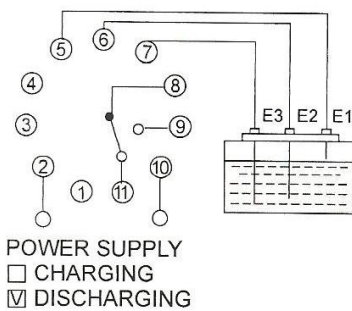
當液位低於E2之位準時，繼電器第11與第9腳會於0.5秒延遲後接通，同時啓動幫浦開始供水，直到水位到達E1(高水位)超過0.5秒時，繼電器回到原來位置(第11腳與第8腳接通)並停止供水。

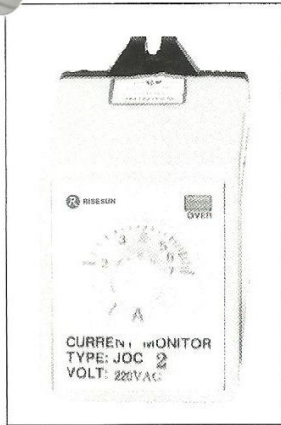


(3) JLC-3 (WATER DRAINAGE)

When liquid level is higher than E1, output relay will be switched to ON(#11-9 connect) after 0.5 sec duration, and simultaneously bump starts to drain until level is downward under E2 (Low level) for over 0.5 sec then relay turns OFF (pin#11-8 connect).

當液位高於E1之位準時，內部繼電器第11與第9腳會於0.5秒延遲後接通，同時啓動幫浦開始抽水，直到水位低於E2(低水位)時，繼電器會於0.5秒延遲後釋回(第11腳與第8腳接通)並停止排水。





FEATURES 特性

JOC-1

- Output relay will transfer to ON after time delay of 0.5 Sec while current exceeds the setting current (2~7A).
電流過負載時，接點斷開以切斷電路，保護馬達不致損壞。
- RESET: Power off reset or excluding problem
斷電或排除故障復歸

JOC-2

- When current is over than the setting current, output relay will transfer to ON after 0.5 Sec duration. Once current is less than set current, relay contacts will be switched to its original position after response time.
電流過負載時，接點斷開；當電流恢復正常時，接點釋回以維持馬達運轉。

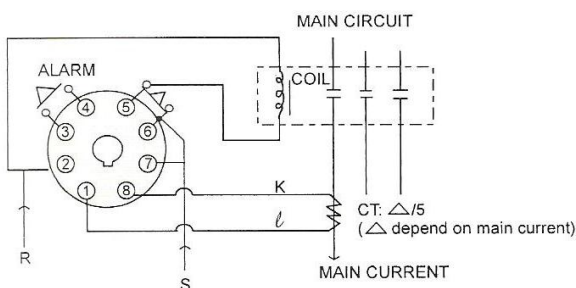
SPECIFICATION:

- **OUTPUT CAPACITY** 1N/O+1N/C Separately
輸出接點容量：7A (常開+常閉接點)
- **CURRENT RANGE** AC 2~7 Amp Adjustable
電流設定範圍
- **RESPONSE TIME OF RELAY** 0.5 SEC Fixed
動入時間
- **RATED VOLTAGE** 50/60Hz 110VAC, 220VAC
定格電壓 (Range: 85%~110%)
- **MOUNTING** Surface Mounting: Socket base 8PFA
安裝 露出型

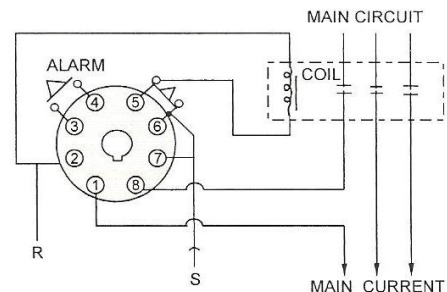
- **LIFE 壽命**
Mechanically 機械 10×10^6 Times
Electrically AC220VPF=1 電氣 5×10^5 Times
- **ACCURACY 精確度**
Repeat 往復誤差 $\pm 2\%$ Max
Setting 設定誤差 $\pm 10\%$ Max
Voltage 電壓誤差 $\pm 2\%$ Max
Temperature 溫度誤差 $\pm 2\%$ Max
- **RESET TIME** 復歸時間 0.2 Sec Max
- **AMBIENT TEMP. & HUMIDITY** $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$, 85% Max
周圍溫度 & 濕度

CONNECTION 配線圖

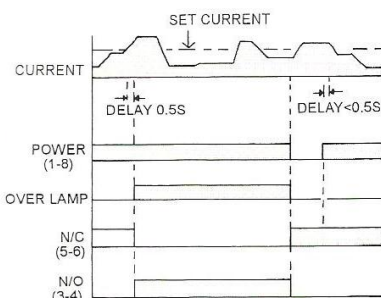
(1) Indirect connection (Main current more than 7 Amps):
Paralleled to CT k & l
負載大於7安培時與比流器並聯



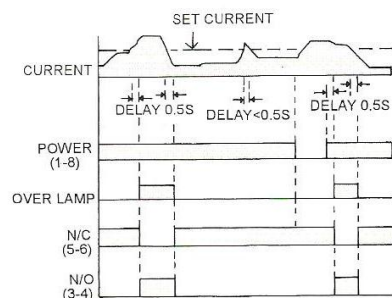
(2) Direct connection (Main current less than 7 Amps):
負載小於7安培時可直接串聯到控制器上，配線簡易。



OPERATIONAL DIAGRAM 動作圖



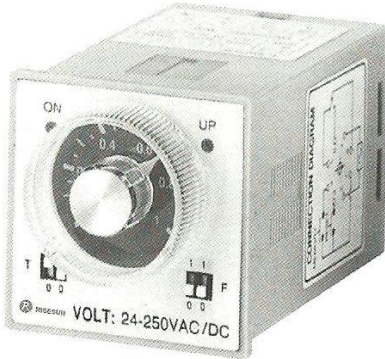
JOC-1



JOC-2

全電壓四功能四時段限時繼電器
JMB MULTI TIMER
(MULTI FUNCTION/RANGE/VOLTAGE)



MODEL NO.		JMB-41A		JMB-51A	
CLASSIFICATION					
APPEARANCE & DIMENSIONS 外觀與尺寸					
		DIP Switch "T" — Time range setting DIP Switch "F" — Function setting *Dimensions: Refer to fig. 1 (page 8)			
FUNCTION 功能		ON DELAY, INTERVAL (REVERSE ON DELAY), REPEAT CYCLE, REVERSE REPEAT CYCLE			
安裝	Surface Mounting 露出型	Socket base P2CF08 (8-PIN) or P2CF11 (11-PIN)			
	Flush Mounting 埋入型	Socket base P3G08 (8-PIN) or P3G11 (11-PIN) with 48*48 adapter D-48Y (埋入框)			
TIME RANGE 時間範圍		1S-10S-1M-10M		1M-10M-1H-10H	
OUTPUT CAPACITY: 7A 250VAC 輸出接點容量		SPDT (8-PIN) 一組限時接點	DPDT (11-PIN) 兩組限時接點	SPDT (8-PIN) 一組限時接點	DPDT (11-PIN) 兩組限時接點
RATED VOLTAGE 定格電壓		24-250VAC/DC (UNIVERSAL) 全電壓適用 Range: 85% - 100%			
L I F E 命	Mechanical 機械	10 × 10 ⁵ Times			
	Electrical AC220VPF=1 電氣	5 × 10 ⁵ Times			
A C 精 確 度 Y	Repeat 往復誤差	± 0.2% Max			
	Setting 設定誤差	± 5% Max			
	Voltage 電壓誤差	± 0.5% Max			
	Temperature 溫度誤差	± 2% Max			
RESET TIME 復歸時間		0.1 Sec Max			
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度		-10°C~55°C, 85% Max			

TIMING RANGE & FUNCTION SETTING

時間範圍與功能設定

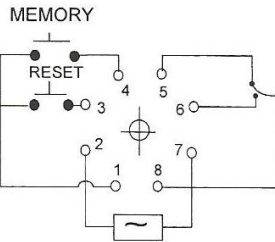
MODEL NO.	TIMING RANGE	DIP SWITCH "T" (TIME RANGE) SETTING			
		0 0	1 0	0 1	1 1
JMB41A	SEC TO MIN	0.05SEC TO 1SEC	0.12SEC TO 10SEC	0.6SEC TO 1MIN	6 SEC TO 10MIN
JMB51A	MIN TO HR	0.05MIN TO 1MIN	0.12MIN TO 10MIN	0.6MIN TO 1HOUR	1 MIN TO 10HOUR

FUNCTION	DIP SWITCH "F" (FUNCTION) SETTING	DESCRIPTION
"ON" DELAY	0 0	<p>Timing begins when power is applied to the unit. When the time delay setting is reached, the relay contacts transfer. The timer is reset either by removing the input power, or by operating the optional customer supplied external "Reset" switch.</p> <p>電源接通時 TIMER 開始計時，當預設時間 (T) 到達時 RELAY ON. 當電源中斷或是 RESET 信號接入，RELAY 才會釋回</p>
REPEAT CYCLE	1 0	<p>Timing begins when power is applied to the unit. When the time delay setting is reached, the relay contacts transfer, and remain transferred until the time delay setting is again reached. At this time, the relay contacts are then released returning to the original state. The timer then automatically resets, and repeats the timing cycle until the input power is removed.</p> <p>電源接通時 TIMER 開始計時，當預設時間 (T) 到達時 RELAY ON，並維持此接點接通模式再開始計時，直到預設時間再度到達時，RELAY 才又釋回並開始時，從事下一循環。如此自動反覆循環，當電源中斷或是 RESET 信號接入，RELAY 才會釋回</p>
INTERVAL (REVERSE ON DELAY)	0 1	<p>When power is applied, the relay contacts immediately transfer, and timing begins. When the time delay setting is reached, the relay contacts are released. The timer is reset either by removing the input power, or operating the optional customer supplied external "Reset" switch.</p> <p>電源接通時 TIMER 開始計時同時 RELAY 轉 ON，當預設時間 (T) 到達時 RELAY 切回 OFF. 當電源中斷或是 RESET 信號接入時，TIMER RESET.</p>
REVERSE REPEAT CYCLE	1 1	<p>When power is applied, the relay contacts immediately transfer, and timing begins. The contacts remain transferred until the time delay setting is reached. Then the contacts are released. When the time delay setting is again reached, the contacts again transfer, and remain transferred until the time delay setting is again reached. The timer continues to automatically repeat the cycle until the power is removed.</p> <p>電源接通時 TIMER 開始計時並同時 RELAY ON，當預設時間 (T) 到達時 RELAY OFF，並維持此接點接通模式計時，直到預設時間再度到達時，RELAY 才又 ON 並開始計時，從事下一循環。如此自動反覆循環，當電源中斷或是 RESET 信號接入，RELAY 才會釋回。</p>
<p>RESET switch : When operated, resets the timer to zero. Requiring a customer supplied momentary switch.</p> <p>MEMORY switch: When operated, pauses the timing cycle at that point in the cycle. When released, allows the cycle to resume from the same point. Requiring a customer supplied momentary switch.</p>		

CONNECTION DIAGRAM 接線圖

SPDT (一組限時接點)

POWER : PIN# 2-7
MEMORY : PIN# 1-4
RESET : PIN# 1-3
N/C : PIN# 8-5
N/O : PIN# 8-6



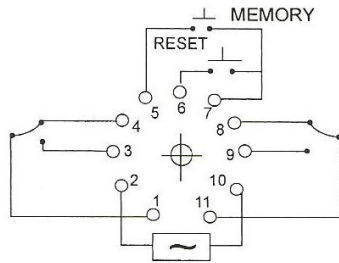
Note: No any Voltage input on PIN# 1, 3, 4

注意: 1, 3, 4腳為純接點模式
請勿輸入任何電壓

1-3腳接通時TIMER RESET
1-4腳接通時TIMER暫停計時

DPDT (兩組限時接點)

POWER : PIN# 2-10
MEMORY : PIN# 5-7
RESET : PIN# 6-7
N/C : PIN# 8-11 & 1-4
N/O : PIN# 9-11 & 1-3



Note: No any Voltage input on PIN# 5, 6, 7

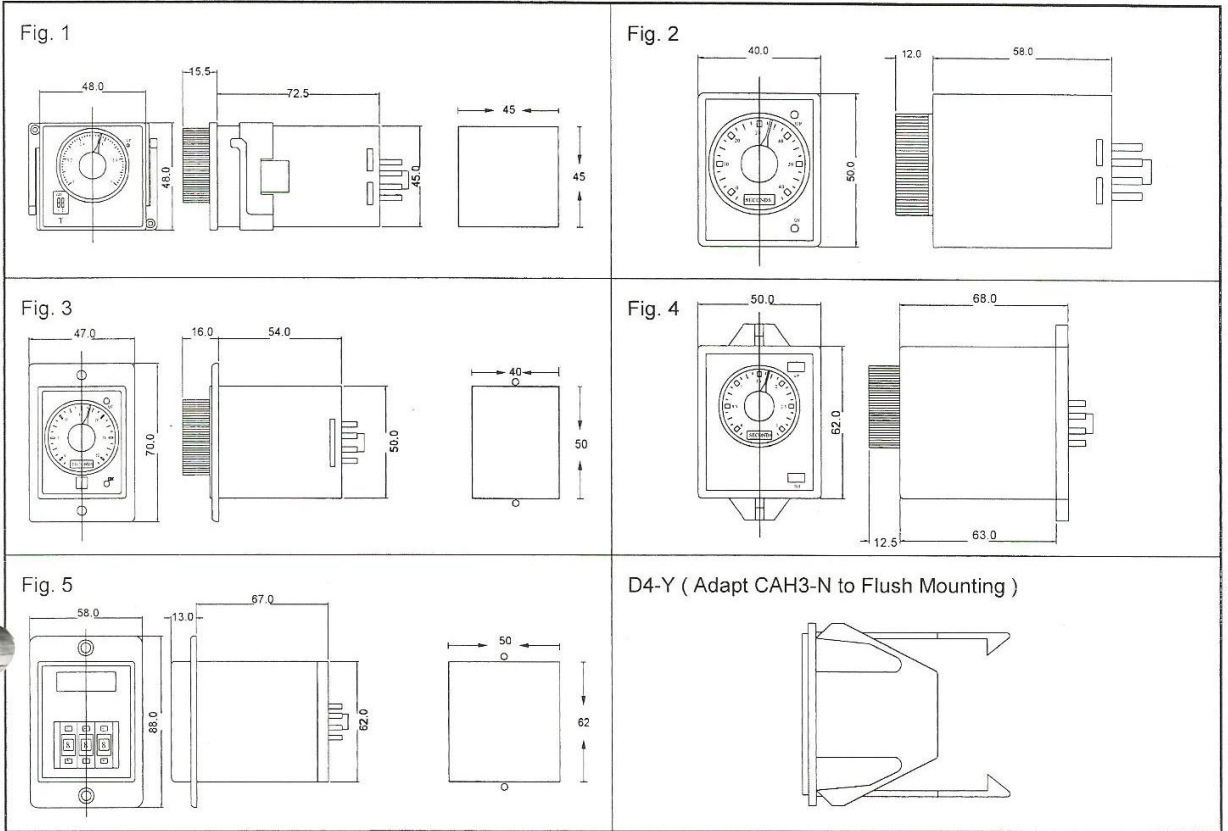
注意: 5, 6, 7腳為純接點模式,
請勿輸入任何電壓

5-7腳接通時TIMER RESET
6-7腳接通時TIMER暫停計時

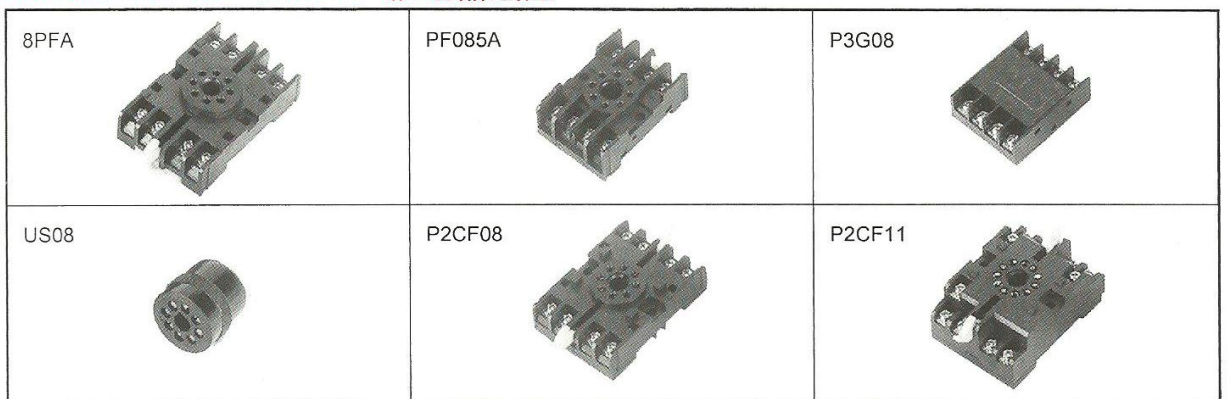
FUNCTION DESCRIPTION 功能圖示

	ON DELAY	INTERVAL (REVERSE ON DELAY)	
	<p>T (PRESET TIME)=T₁+T₂ Rt=reset time</p>	<p>T (PRESET TIME)=T₁+T₂ Rt=reset time</p>	
REPEAT CYCLE	<p>T=PRESET TIME Rt=reset time</p>	REVERSE REPEAT CYCLE	<p>T=PRESET TIME Rt=reset time T₁<T</p>

DIMENSIONS OF TIMER (m/m) 繼電器尺寸圖

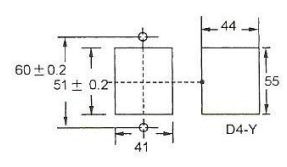
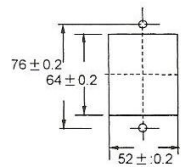
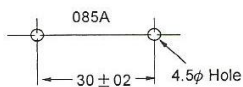
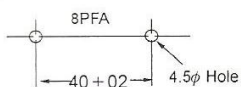


SOCKETS OF TIMER 繼電器底座



SURFACE MOUNTING
(露出型安裝)

FLUSH MOUNTING
(埋入型安裝)



CSTP-N TRD-N
CATDV-N JTF

CAH3-N
JMH-2


CSTP-Y JSY
CATDV-Y JSK

CAH3-Y

ADAPT CAH3
TO FLUSH MOUNTING

單電壓四段或全電壓四時段限時繼電器
DELAY ON MULTI-RANGE TIMER



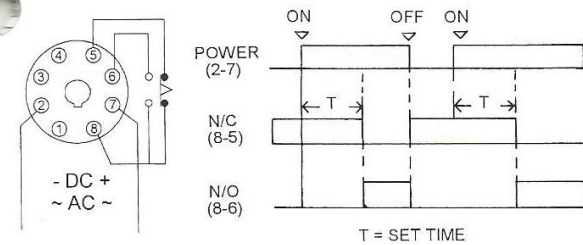
MODEL NO.		JMH-2A JMH-2B JMH-2C JMH-2D JMH-2E				JMH-2MA JMH-2MB JMH-2MC JMH-2MD JMH-2ME	
CLASSIFICATION							
FEATURES 特性		Mono working voltage, Multi time range 單電壓 四時段		Multi time range, Universal power source 多電源共用 四時段			
DIMENSIONS 尺寸		fig. 2 (page 8)					
MOUNTING 安裝		Surface mounting 露出型: SOCKET BASE PF085A					
OUTPUT CAPACITY: 7A 250VAC 輸出接點容量		Alternative by DIP switch : Mode A: DPDT (Time-limit contacts) ; Mode B: Instantaneous contact + Time-limit contacts 可於切換開關自行選擇兩組限時或一瞬一延 為輸出接點		SPDT 1 組限時接點		DPDT 2 組限時接點	
RATED VOLTAGE 定格電壓 RANGE : 85%-110%		12VDC, 24VAC/DC, 110VAC, 220VAC		Universal 24-48VDC, 24-250VAC			
TIME RANGE (FULL TIME RANGE INDICATED) 時間範圍		A: 1S/10S/1M/10M B: 3S/30S/3M/30M C: 6S/60S/6M/60M		D: 1M/10M/1H/10H E: 3M/30M/3H/30H			
L I F E 命	Mechanical 機械	10×10^6 Times					
	Electrical AC220VVPF=1 電氣	5×10^5 Times					
A C C U R A N C Y	Repeat 往復誤差	$\pm 0.2\%$ Max					
	Setting 設定誤差	$\pm 5\%$ Max					
	Voltage 電壓誤差	$\pm 0.5\%$ Max					
	Temperature 溫度誤差	$\pm 2\%$ Max					
RESET TIME 復歸時間		0.1 Sec Max					
AMBIENT TEMP & HUMIDITY 周圍溫度 & 濕度		-10°C~55°C, 85% Max					

TIMING RANGE SETTING 時間範圍設定

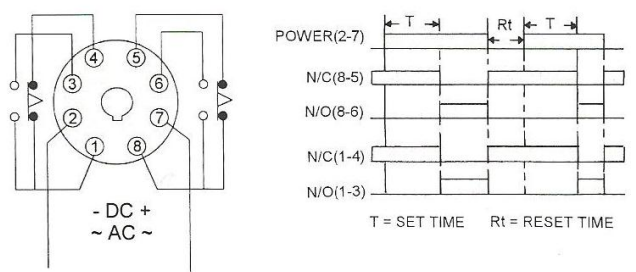
Position of Time Range Selector	1	10	1	10
	⊖	⊖	⊖	⊖
Time Range Series	S	S	M	M
	⊖	⊖	⊖	⊖
A	1S 0.05S ~ 1S	10S 0.1S ~ 10S	1M 0.5S ~ 1M	10M 10S ~ 10M
B	3S 0.1S ~ 3S	30S 0.5S ~ 30S	3M 1S ~ 3M	30M 30S ~ 30M
C	6S 0.1S ~ 6S	60S 0.5S ~ 60S	6M 1S ~ 6M	60M 30S ~ 60M
Position of Time Range Selector	1	10	1	10
	⊖	⊖	⊖	⊖
Time Range Series	M	M	H	H
	⊖	⊖	⊖	⊖
D	1M 0.5S ~ 1M	10M 10S ~ 10M	1H 30S ~ 1H	10H 10M ~ 10H
E	3M 1S ~ 3M	30M 30S ~ 30M	3H 3M ~ 3H	30H 1H ~ 30H

CONNECTION DIAGRAM & TIMING CHART 接線與時間動作圖

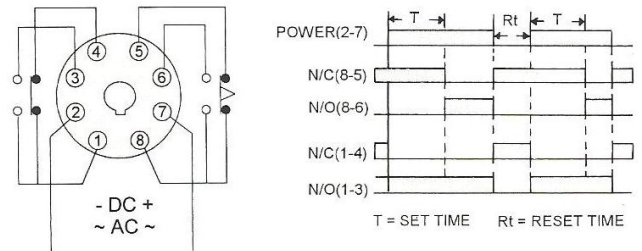
SPDT 一組限時接點



DPDT 兩組限時接點



Instantaneous contact + SPDT 一瞬一延



ORDERING CODE 訂購碼

J M H 2 M A

Rated Voltage 額定電壓

- 1 : 110VAC
- 2 : 220VAC
- 5 : 12VDC
- 6 : 24VAC/DC
- M : Universal Power Source 24 250VAC/DC

Time range 時間範圍

- A : 1S ~ 10M
- B : 3S ~ 30M
- C : 6S ~ 60M
- D : 1M ~ 10H
- E : 3M ~ 30H

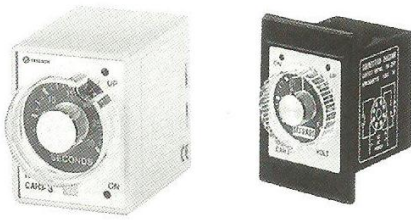

When placing your order for universal power source Timer, please specify the output (SPDT or DPDT) in addition to the ordering code.

訂購全電壓限時繼電器時，請一併註明輸出接點模式

高性能單電壓單刻度限時繼電器

HIGH PERFORMANCE DELAY ON TIMER

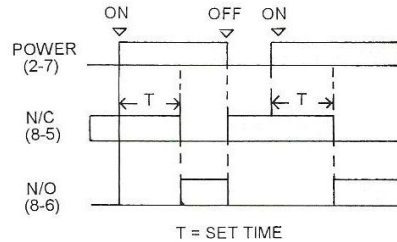
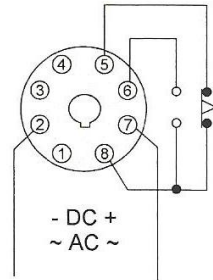
(Mono-Function/Time Range/Working Voltage) CE

MODEL NO.	CAH3	CSTP
CLASSIFICATION		
APPEARANCE 外觀		
DIMENSIONS 尺寸	Surface mounting type: fig. 2 (page 8) 露出型請參考附圖二 Flush mounting type: fig. 3 (page 8) 埋入型請參考附圖三	Surface mounting type: fig. 4 (page 8) 露出型請參考附圖四 Flush mounting type: fig. 5 (page 8) 埋入型請參考附圖五
SURFACE MOUNTING 露出型安裝	Socket base PF085A	Socket base 8PFA
FLUSH MOUNTING 埋入型安裝	Socket base P3G08 or US08	Socket base P3G08 or US08
RATED TIME RANGE 時間範圍	Wide variety of timing ranges From 0.1S TO 10Hr	Wide variety of timing ranges From 0.1S TO 24Hr
OUTPUT CAPACITY 輸出接點容量： 7A 250VAC	CAH3-N1/Y1 SPDT (Time-limit contacts) — 組限時接點 CAH3-N2/Y2 Mode A: DPDT 兩組限時接點 Mode B: Instantaneous contact + SPDT 一瞬一延	CSTP-N1/Y1 SPDT (Time-limit contacts) — 組限時接點 CSTP-N2/Y2 DPDT 兩組限時接點 CSTP-N3/Y3 Instantaneous contact + SPDT 一瞬一延
RATED VOLTAGE 定格電壓	50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC, 380VAC, 415VAC, 440VAC (Range : 85% - 110%)	
L I F E 壽命	Mechanical 機械	10 × 10 ⁶ Times
	Electrical AC220VPF=1 電氣	5 × 10 ⁵ Times
A C C U R A N C Y 精度	Repeat 往復誤差	± 0.2% Max
	Setting 設定誤差	± 5% Max
	Voltage 電壓誤差	± 0.5% Max
	Temperature 溫度誤差	± 2% Max
RESET TIME 復歸時間	0.1 Sec Max	
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度	-10°C ~ 55°C, 85% Max	

CONNECTION DIAGRAM & TIMING CHART 接線與時間動作圖

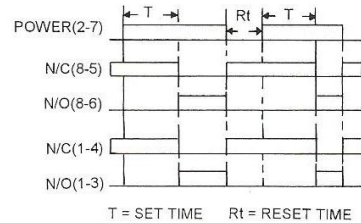
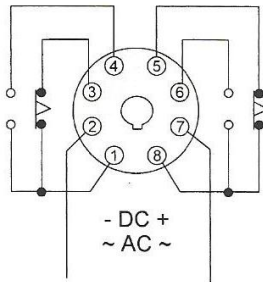
SPDT:
一組限時接點

- CAH3-N1
- CAH3-Y1
- CSTP-N1
- CSTP-Y1



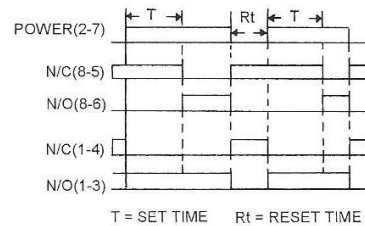
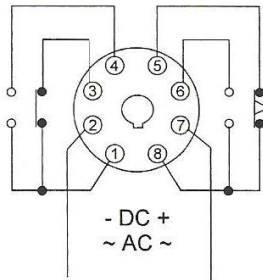
DPDT
兩組限時接點

- CAH3-N2 (MODE A)
- CAH3-Y2 (MODE A)
- CSTP-N2
- CSTP-Y2



INSTANTANEOUS CONTACT + SPDT
一瞬一延

- CAH3-N2 (MODE B)
- CAH3-Y2 (MODE B)
- CSTP-N2
- CSTP-Y2



ORDERING CODE 訂購碼

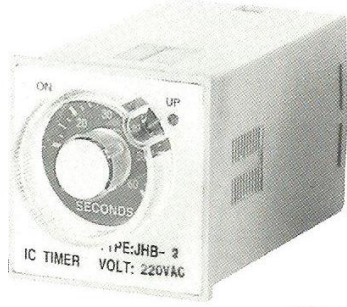
H	N	2	2	05
MOUNTING TYPE 安裝型式 N: Surface type 露出型 Y: Flush type 埋入型	Output mode 輸出 1: SPDT 一組限時接點 2: Mode A & B alternative by DIP switch 可選兩組限時接 點或一瞬時一延 為輸出	Time Range 時間刻度 01: 1S 08: 6M 02: 3S 09: 10M 03: 6S 10: 30M 04: 10S 11: 60M 05: 30S 12: 180M 06: 60S 13: 6H 07: 180S 14: 10H		RATED VOLTAGE (額定電壓) 1: 110VAC 2: 220 VAC 3: 380VAC 4: 440VAC 5: 12VDC 6: 24 VAC/DC
		CAH3 TYPE		

ORDERING CODE 訂購碼

P	N	3	1	05
MOUNTING TYPE 安裝型式 N: Surface type 露出型 Y: Flush type 埋入型	Output mode 輸出 1: SPDT 一組限時接點 2: DPDT 兩組限時接點 3: Instantaneous contact + SPDT 一瞬一延	Timer Range 時間刻度 01: 1S 09: 10M 02: 3S 10: 30M 03: 6S 11: 60M 04: 10S 12: 180M 05: 30S 13: 6H 06: 60S 14: 10H 07: 180S 15: 24H 08: 6M		RATED VOLTAGE (額定電壓) 1: 110VAC 2: 220 VAC 3: 380VAC 4: 440VAC 5: 12VDC 6: 24 VAC/DC
		CSTP TYPE		

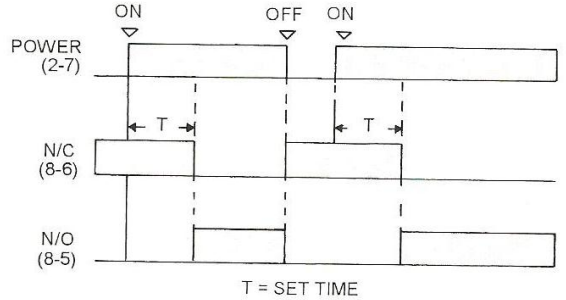
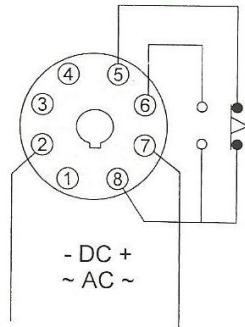
單電壓單刻度限時繼電器

48*48mm DIN-SIZED DELAY ON OPERATING TIMER (Mono-Function/Time Range/Working Voltage) CE

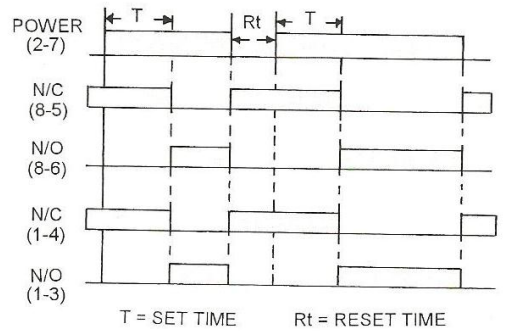
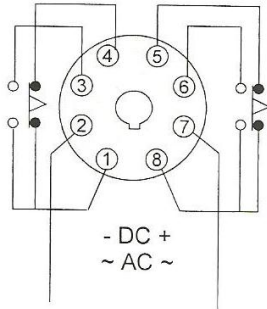
MODEL NO.	JHB-1	JHB-2
CLASSIFICATION		
APPEARANCE & DIMENSIONS 外觀與尺寸	 <p style="text-align: right; font-size: small;">*Dimensions: Refer to fig. 1 (page 8)</p>	
FEATURES 特性	High performance and stability 高性能及穩定度	
安 裝	Surface Mounting 露出型	Socket base P2CF08
	Flush Mounting 埋入型	Socket base P3G08 or US08 with 48*48 adapter D-48Y (埋入框)
RATED TIME ANGE 時間範圍	Wide variety of timing ranges : 1S, 3S, 6S, 10S, 30S, 60S, 180S, 6M, 10M, 30M, 60M, 180M, 6H, 10H	
OUTPUT CAPACITY: 7A 250VAC 輸出接點容量	SPDT (Time-limit contacts)—組限時接點	Alternative by DIP switch on face plate : Mode A: DPDT (Time-limit contacts) Mode B: Instantaneous contact + SPDT 可於面板開關自行選擇兩組限時或一瞬一延為輸出接點
RATED VOLTAGE 定格電壓 RANGE : 85%-110%	50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC, 380VAC, 415VAC, 440VAC	
L I F E 壽命	Mechanical 機械	10 × 10 ⁶ Times
	Electrical AC220VPF=1 電氣	5 × 10 ⁵ Times
A C C U R A C Y 精度	Repeat 往復誤差	± 0.2% Max
	Setting 設定誤差	± 5% Max
	Voltage 電壓誤差	± 0.5% Max
	Temperature 溫度誤差	± 2% Max
RESET TIME 復歸時間	0.1 Sec Max	
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度	-10°C~55°C, 85% Max	

CONNECTION DIAGRAM & TIMING CHART
接線與時間動作圖

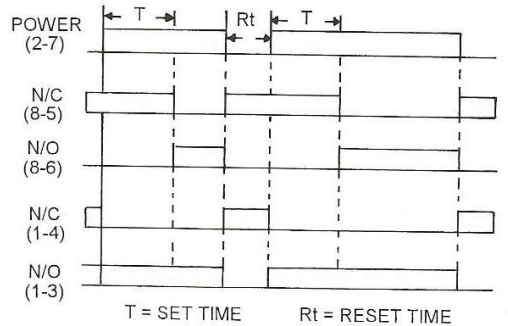
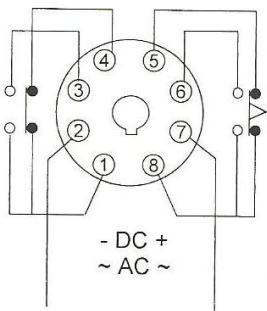
JHB-1:
SPDT



JHB-2
MODE A: DPDT



JHB-2
MODE B:
INSTANTANEOUS
CONTACT+SPDT



ORDERING CODE 訂購碼

HB 1 2 05

OUTPUT MODE輸出
1: SPDT一組限時接點
2: Mode A & B alternative by
DIP switch
可選擇兩組限時接點或一瞬
一延為輸出接點

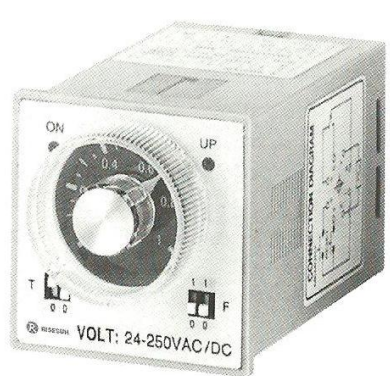
RATED VOLTAGE
額定電壓
1: 110VAC
2: 220VAC
3: 380VAC
4: 440VAC
5: 12VDC
6: 24VAC/DC

TIME RANGE
時間刻度
01: 1S 08: 6M
02: 3S 09: 10M
03: 6S 10: 30M
04: 10S 11: 60M
05: 30S 12: 180M
06: 60S 13: 6H
07: 180S 14: 10H

48*48mm單電壓四時段限時繼電器

48*48mm **DIN-SIZED DELAY ON MULTI TIMER**

(Multi-Range, Mono Function/Working Voltage) CE

MODEL NO.	JSB-41A	JSB-51A
CLASSIFICATION		
APPEARANCE 外觀		
DIMENSIONS 尺寸	Refer to fig. 1 (page 8) 參閱附圖一	
MOUNTING 安裝	Surface mounting 露出型: Socket base P2CF08	
	Flush mounting 埋入型: Socket P3G08 with 48*48 adapter D-48Y (附埋入框)	
OUTPUT CAPACITY: 7A 250VAC 輸出接點容量	Alternative by DIP switch : Mode A: DPDT (Time-limit contacts) ; Mode B: Instantaneous contact + Time-limit contacts 可於切換開關自行選擇兩組限時或一瞬一延為輸出接點	
RATED VOLTAGE 定格電壓	50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC (Range: 85% - 110%)	
TIME RANGE 時間範圍	1S/10S/1M/10M	1M/10M/1H/10H
L I F E 壽命	Mechanical 機械	10×10^6 Times
	Electrical AC220VPF=1 電氣	5×10^5 Times
A C C U R A C Y 精度	Repeat 往復誤差	$\pm 0.2\%$ Max
	Setting 設定誤差	$\pm 5\%$ Max
	Voltage 電壓誤差	$\pm 0.5\%$ Max
	Temperature 溫度誤差	$\pm 2\%$ Max
RESET TIME 復歸時間	0.1 Sec Max	
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度	-10°C~55°C, 85% Max	

TIMING RANGE SETTING 時間範圍設定

MODEL NO.	TIMING RANGE	DIP SWITCH "T" (TIME RANGE) SETTING					
		0	0	1	0	0	1
JSB-41A	SEC TO MIN	0.05SEC TO 1SEC	0.12SEC TO 10SEC	0.65SEC TO 1MIN	6SEC TO 10MIN		
JSB-51A	MIN TO HR	0.05MIN TO 1MIN	0.12MIN TO 10MIN	0.6MIN TO 1HOUR	1MIN TO 10HOUR		

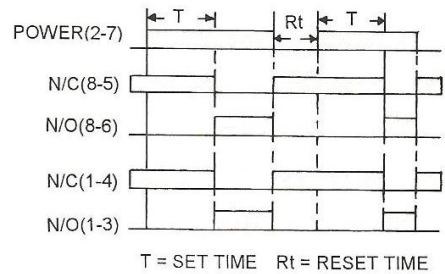
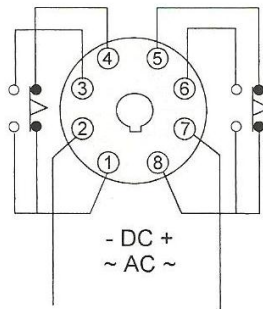
OUTPUT MODE SETTING 輸出接點模式

Mode A	DPDT (2 Time - Limit Contacts) 兩組限時接點
Mode B	Instantaneous Contact + SPDT 一瞬一延

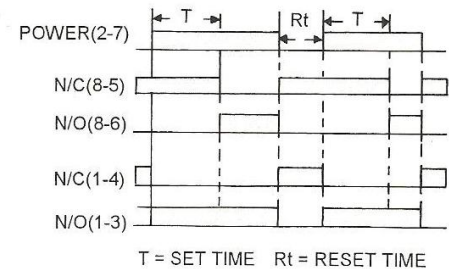
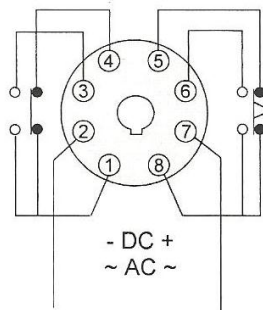
CONNECTION DIAGRAM & TIMING CHART 接線與時間動作圖

接線與時間動作圖

MODE A:
DPDT
兩組限時接點



MODE B:
INSTANTANEOUS
CONTACT + SPDT
一瞬一延



ORDERING CODE 訂購碼

JSB

2

41A

Rated Voltage
額定電壓
1: 110VAC
2: 220VAC
5: 12VDC
6: 24VAC/DC





Time Range
時間範圍
41A: 1S ~ 10M
51A: 1M ~ 10H

多電壓四時段限時繼電器
JME MULTI TIMER
(MULTI WORKING VOLTAGE/TIME RANGE)



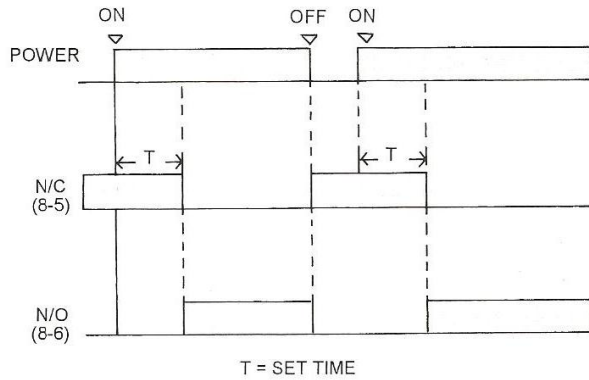
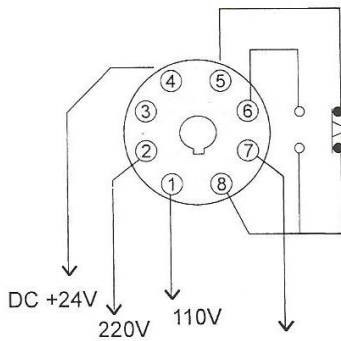
MODEL NO.		JME-S	JME-M
CLASSIFICATION			
APPEARANCE & DIMENSIONS 外觀與尺寸		 <p>DIP Switch "T" — Time range setting</p> <p>48*48MM DIN-SIZED * Dimensions: refer to fig. 1 (page 8)</p>	
FEATURES 特性		<ul style="list-style-type: none"> 4 time ranges are selectable per timer unit by changing the positions of "T" (Time Range) DIP switch. 可由面板開關改變 4 種時間刻度 Supply voltage covered 24V, 110V, and 220V 多電壓選擇 	
安 裝	Surface mounting 露出型	Socket base P2CF08	
	Flush mounting 埋入型	Socket base P3G08 with 48*48 adapter D-48Y(埋入框)	
TIME RANGE 時間範圍		S: 3, 12, 100, 780 Sec (selectable)	M: 3, 12, 100, 780 Min (selectable)
OUTPUT CAPACITY 輸出接點容量		SPDT (Time-limit contacts) 一組限時接點 Contact output : 7A 250VAC	
RATED VOLTAGE 定格電壓		Supply voltage: 24VAC/DC, 110VAC, 220VAC contained (24/110/220 電壓通用) (Operating voltage range 85% - 100%)	
L I F E 命	Mechanical 機械	10 × 10 ⁶ Times	
	Electrical AC220V/PF=1 電氣	5 × 10 ⁵ Times	
A C C U R A N C Y	Repeat 往復誤差	± 0.2% Max	
	Setting 設定誤差	± 5% Max	
	Voltage 電壓誤差	± 0.5% Max	
	Temperature 溫度誤差	± 2% Max	
RESET TIME 復歸時間		0.1 Sec Max	
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度		-10°C~55°C, 85% Max	

TIME RANGE 時間範圍

Position of Time Range Selector	1 1 A  B 0 0	1 1 A  B 0 0	1 1 A  B 0 0	1 1 A  B 0 0
Model No.				
JME-S	3S (0.3S ~ 3S)	12S (1.2S ~ 12S)	100S (10S ~ 100S)	780S (78S ~ 780S)
JME-M	3M (18S ~ 180S)	12M (72S ~ 12M)	100M (10M ~ 100M)	780M (78M ~ 780M)

CONNECTION DIAGRAM & TIMING CHART 接線圖與時間動作圖

OUTPUT: SPDT (Time-limit contacts)
一組限時接點



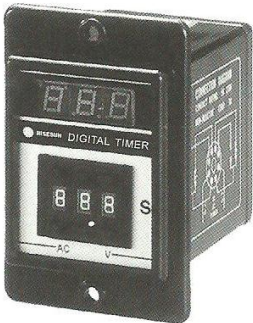
ORDERING CODE 訂購碼

JME - S

Time Range
時間範圍
S : 3, 12, 100, 780 Sec
M : 3, 12, 100, 780 Min

高精確度數字型限時繼電器 HIGH PRECISION DIGITAL TIMER

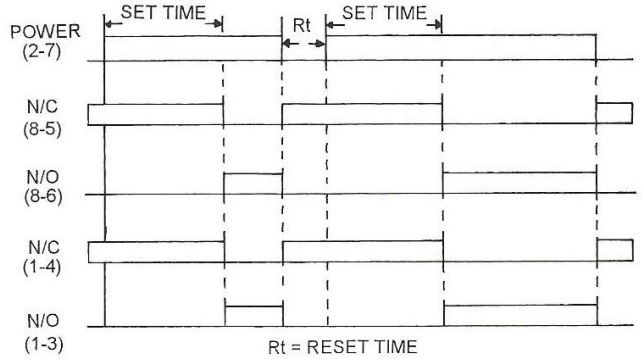
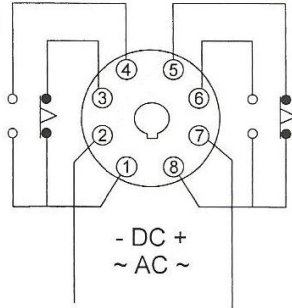


MODEL NO.		JSY-2D 二位數	JSY-3D 三位數
CLASSIFICATION			
APPEARANCE 外觀			
DIMENSIONS 尺寸		fig. 5 (page 8)	
MOUNTING 安裝		埋入安裝型 Flush mounting: Socket base P3G08 or US08	
FEATURES 特性		<ul style="list-style-type: none"> •Error-free digital setting and LED display 數字設定及顯示 •Wide rated time range: 時間範圍廣泛 <ul style="list-style-type: none"> 2-digit Timer — from 0.99 sec to 99 hour (2 位數) 3-digit Timer — from 99.9 sec to 999 hour (3 位數) 	
OUTPUT CAPACITY 輸出接點容量 : 7A		Alternative by DIP switch: 使用者可由切換開關自行選擇輸出接點模式 Mode A: DPDT (2 Time-limit contacts) 兩組限時接點 Mode B: Instantaneous contact +Time-limit contact 瞬時接點+限時接點	
RATED TIME RANGE 時間範圍		JSY-2D: .99 Sec, 9.9 Sec, 99 Sec, 9.9 Min, 99 Min, 9.9 Hr, 99 Hr JSY-3D: 9.99 Sec, 99.9 Sec, 999 Sec, 99.9 Min, 999 Min, 99.9 Hr, 9M59S, 9H59M *Also available for special request scale of 9M59S and 9H59M	
RATED VOLTAGE 定格電壓		50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC (Range: 85% - 110%)	
L I F E 壽 命	Mechanical 機 械	10×10^6 Times	
	Electrical AC220VPF=1 電 氣	5×10^5 Times	
A C C U R A C Y 精 確 度	Repeat 往復誤差	$\pm 0.2\%$ Max	
	Setting 設定誤差	$\pm 5\%$ Max	
	Voltage 電壓誤差	$\pm 0.5\%$ Max	
	Temperature 溫度誤差	$\pm 2\%$ Max	
RESET TIME 復歸時間		0.1 Sec Max	
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度		-10°C~55°C, 85% Max	

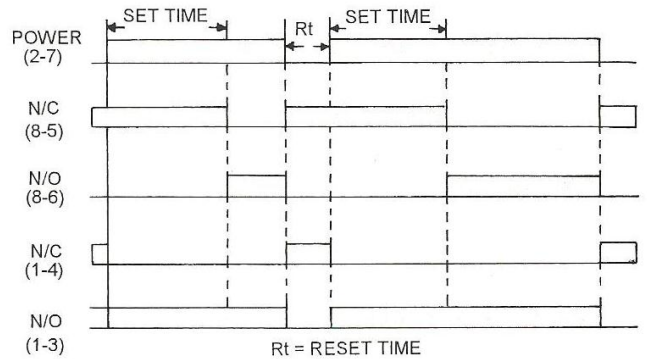
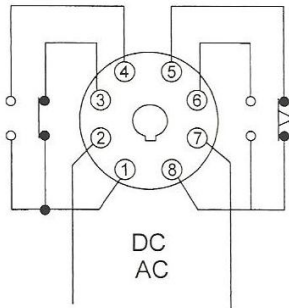
CONNECTION DIAGRAM & TIMING CHART
接線圖與時間動作圖

Output(輸出):

(1) DPDT
(Time-limit contacts 2C)



(2) Instantaneous Contact + Time-limit Contact 一瞬一延



ORDERING CODE 訂購碼

S Y


2

08

Rated Voltage
額定電壓
1 : 110VAC
2 : 220VAC
5 : 12VDC
6 : 24VAC/DC

Time Range 時間範圍

2-digit(二位數)	3-digit(三位數)
01 : .99 Sec	08: 9.99 Sec
02 : 9.9 Sec	09: 99.9 Sec
03 : 99 Sec	10: 999 Sec
04 : 9.9 Min	11: 99.9 Min
05 : 99 Min	12: 999 Min
06 : 9.9 Hr	13: 99.9 Hr
07 : 99 Hr	14: 9M59S
	15: 9H59M

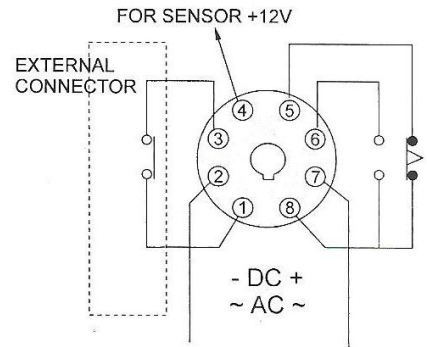
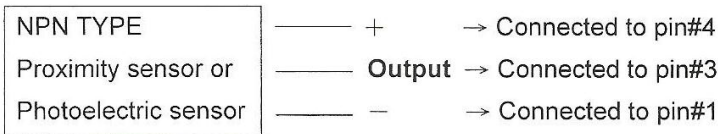
MODEL NO.		JSK-2D 二位數計數器 2 DIGITAL COUNTER	JSK-3D 三位數計數器 3 DIGITAL COUNTER
CLASSIFICATION			
APPEARANCE 外觀			
DIMENSIONS 尺寸		fig. 5 (page 8)	
MOUNTING 安裝		埋入安裝型 Flush mounting: Socket base P3G08 or US08	
FEATURES 特性		<ul style="list-style-type: none"> ● Error-free digital setting and LED display 數字設定及顯示 ● Power off reset (斷電復歸) or Auto reset 0.5S (upon customer's request) 自動復歸(依客戶需求訂作做) ● External connector: Could be proximity sensor or photoelectric sensor 可外接近接開關或光電開關控制輸入 	
INPUT 輸入		Counting speed: 30 cps max 計數速度最快為 30 次/秒 Counting input: By short-circuiting 計數輸入方式為接點短路 Counting input is effective 0.2S after power on. 電源接通後 0.2 秒, 訊號輸入開始生效	
OUTPUT CAPACITY 輸出接點容量: 7A		SPDT 一組接點	
RATED VOLTAGE 定格電壓		50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC, (Range: 85% - 110%)	
L I F E 命	Mechanical 機械	10×10^6 Times	
	Electrical AC220V/PF=1 電氣	5×10^5 Times	
A C C U R A N C Y	Repeat 往復誤差	0	
	Setting 設定誤差	0	
	Voltage 電壓誤差	0	
	Temperature 溫度誤差	0	
RESET TIME 復歸時間		0.1 Sec Max	
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度		-10°C~55°C, 85% Max	

CONNECTION DIAGRAM & TIMING CHART 接線與時間動作圖

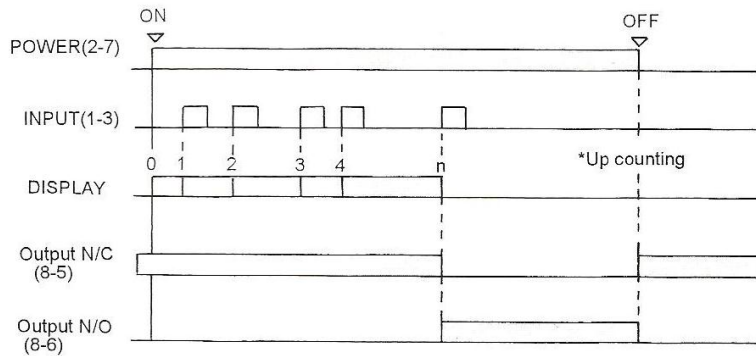
OUTPUT: SPDT (Delay contact 1C)

INPUT:

- 1) Contact pin#1 & pin#3
- 2) Connected with proximity sensor or photoelectric sensor:



接近接開關或光電開關時，請將正端接至第4腳，負端接至第1腳，輸出端接至第3腳。



ORDERING CODE 訂購碼

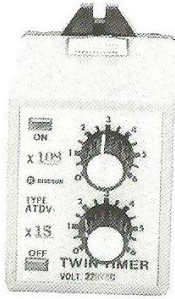
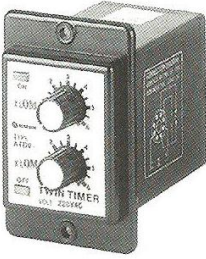
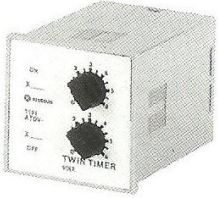
S K **3** **2**

Digit 數位
2: 2 digits (0-99) 二位數
3: 3 digits (0-999) 三位數

Rated Voltage 定格電壓
1: 110VAC
2: 220VAC
5: 12VDC
6: 24VAC/DC

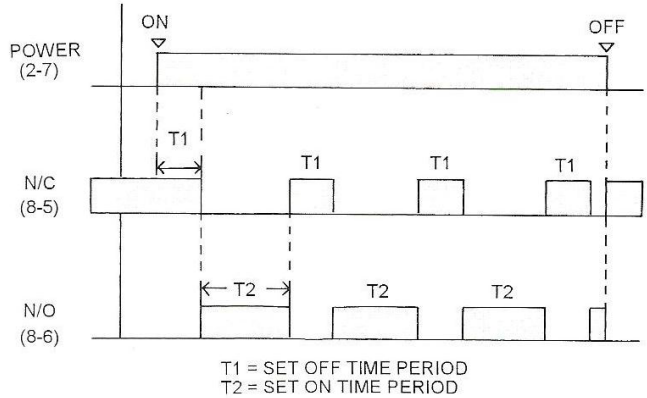
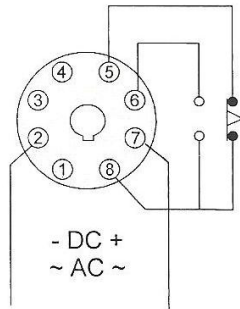
雙計時循環限時繼電器 TWIN RECYCLING TIMER



MODEL NO.		CATDV			
CLASSIFICATION		CATDV-N	CATDV-Y		CATDV-E
APPEARANCE 外觀					
DIMENSIONS 尺寸		fig. 4 (page 8)	fig. 5 (page 8)		Din size 48*48mm fig. 1 (page 8)
SURFACE MOUNTING 露出型安裝		Socket base 8PFA	—		Socket base P2CF08
FLUSH MOUNTING 埋入型安裝		—	Socket base P3G08 or US08		Socket base P3G08 (With 48*48 adapter)
FEATURES 特性		OFF-ON time period adjustable separately and recycling operation Off-on 循環動作, 操作時間可個別設定			
OUTPUT CAPACITY 輸出接點容量 : 7A		SPDT: TIME-LIMIT CONTACTS (1組限時接點)			
TIME RANGE 時間範圍		OFF × ON	6S × 6S 6M × 6M 6M × 6S	6S × 60S 6M × 60M 6S × 6M	60S × 6S 30M × 30M 60M × 60M
RATED VOLTAGE 定格電壓 RANGE : 85%-110%		50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC, 380VAC, 415VAC, 440VAC			
L I F E 命	Mechanical 機械	10 × 10 ⁶ Times			
	Electrical AC220VPF=1 電氣	5 × 10 ⁵ Times			
A C C U R A N C Y 精 確 度	Repeat 往復誤差	±0.2% Max			
	Setting 設定誤差	±5% Max			
	Voltage 電壓誤差	±0.5% Max			
	Temperature 溫度誤差	±2% Max			
RESET TIME 復歸時間		0.1 Sec Max			
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度		-10°C~55°C, 85% Max			

CONNECTION DIAGRAM & TIMING CHART
接線與時間動作圖

OUTPUT: SPDT (Time-limit contact 1C)





ORDERING CODE 訂購碼

	T	N	1	02	06
N: Surface mounting 露出型					
Y: Flush mounting 埋入型					
E: Din size 48*48mm					
				Time Range 時間範圍	
				(OFF) × (ON)	
Rated Voltage 定格電壓				01: 1.2Sec	01: 1.2Sec
1: 110VAC				02: 3Sec	02: 3Sec
2: 220VAC				03: 6Sec	03: 6Sec
3: 380VAC				04: 12Sec	04: 12Sec
4: 440VAC				05: 30Sec	05: 30Sec
5: 12VDC				06: 60Sec	06: 60Sec
6: 24VAC/DC				07: 180Sec	07: 180Sec
				08: 6Min	08: 6Min
				09: 12Min	09: 12Min
				10: 30Min	10: 30Min
				11: 60Min	11: 60Min
				12: 3Hr	12: 3Hr
				13: 6Hr	13: 6Hr
				14: 12Hr	14: 12Hr
				15: 24Hr	15: 24Hr

閃爍電驛

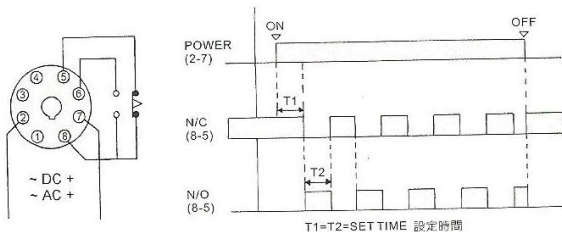
SYMMETRICAL RECYCLING TIMER



MODEL NO.		JFK	JHK	JMK
CLASSIFICATION				
APPEARANCE 外觀				Under construction
DIMENSIONS 尺寸		fig. 4 (page 8)	fig. 2 (page 8)	Din size 48*48mm fig. 1 (page 8)
SURFACE MOUNTING 露出型		Socket base 8PFA	Socket base PF085A	Socket base P2CF08
FLUSH MOUNTING 埋入型		—	—	Socket base P3G08 with 48*48 adapter
FEATURES 特性		OFF-ON equally recycling operation (OFF time period first) Recycling time is adjustable OFF-ON 等時間往復切換, 往復動作時間可調整		
OUTPUT CAPACITY 輸出接點容量: 7A		SPDT (1 delay contact) 一組限時接點		
TIME RANGE 時間範圍		Standard : 2S, 6S		
RATED VOLTAGE 定格電壓 RANGE : 85%-110%		50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC, 380VAC, 415VAC, 440VAC		
L I F E 壽 命	Mechanical 機 械	10 × 10 ⁶ Times		
	Electrical AC220VPF=1 電 氣	5 × 10 ⁵ Times		
A C C U R A C Y 精 度	Repeat 往復誤差	± 0.2% Max		
	Setting 設定誤差	± 5% Max		
	Voltage 電壓誤差	± 0.5% Max		
	Temperature 溫度誤差	± 2% Max		
RESET TIME 復歸時間		0.1 Sec Max		
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度		-10°C~55°C, 85% Max		

CONNECTION DIAGRAM & TIMING CHART
接線與時間動作圖

OUTPUT:
SPDT (Delay contact 1 C)



ORDERING CODE 訂購碼

FK N 2 0 1

FK: Size as CSTP 大型
HK: Miniature size 小型
as CAH3
MK: Din size 48*48m/m

Mounting 安裝
N: Surface 露出型
Y: Flush 埋入型


Rated Voltage 定格電壓
1: 110VAC
2: 220VAC
3: 380VAC
4: 440VAC
5: 12VDC
6: 24VAC/DC

Time Range 時間範圍
01: 2 Sec
03: 6 Sec

*48*48 adapter D-48Y should be ordered separately. 埋入框請另訂

斷電延遲限時繼電器 POWER OFF-DELAY TIMER

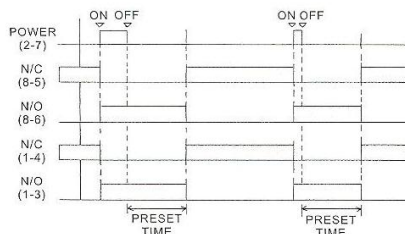
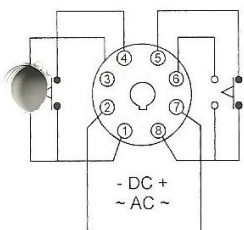


MODEL NO.	JTF-N	JTF-E
CLASSIFICATION		
APPEARANCE 外觀		Under construction
DIMENSIONS 尺寸	fig. 4 (page 8)	Din size 48*48mm, Refer to fig. 1 (page 8)
SURFACE MOUNTING 露出型安裝	Socket base 8PFA	Socket base P2CF08
FLUSH MOUNTING 埋入型安裝	—	Socket base P3G08 with 48*48 adapter 埋入框
FEATURES 特性	Selectable time ranges from 0.6sec to 6min can be adjusted. 控制時間可調整, 最長範圍可達 6min	
OUTPUT CAPACITY 輸出接點容量 : 7A	DPDT (2 組限時接點)	
TIME RANGE 時間範圍	6 SEC, 12 SEC, 30 SEC, 60SEC, 6MIN	
RATED VOLTAGE 定格電壓 RANGE : 85%-110%	50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC, 380VAC, 415VAC, 440VAC	
L I F E 壽 命	Mechanical 機械	10×10^5 Times
	Electrical AC220VPF=1 電氣	5×10^5 Times
A C C U R A C Y 精 確 度	Repeat 往復誤差	$\pm 0.2\%$ Max
	Setting 設定誤差	$\pm 5\%$ Max
	Voltage 電壓誤差	$\pm 0.5\%$ Max
	Temperature 溫度誤差	$\pm 2\%$ Max
RESET TIME 復歸時間	0.1 Sec Max	
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度	-10°C~55°C, 85% Max	

CONNECTION DIAGRAM & TIMING CHART

接線與時間動作圖

OUTPUT 輸出:
CONTACT 2C 兩組接點



ORDERING CODE 訂購碼

T F N 1 0 5


N: 62*50 size
E: Din size 48*48m/m

Rated Voltage
定格電壓
1: 110VAC
2: 220VAC
3: 380VAC
4: 440VAC
5: 12VDC
6: 24VAC/DC

Time Range
時間範圍
03: 6 Sec
04: 12 Sec
05: 30 Sec
06: 60 Sec
08: 6 Min

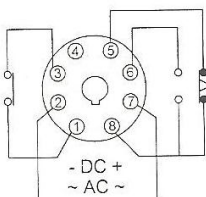
馬達啟動限時繼電器 START-DELTA TIMER



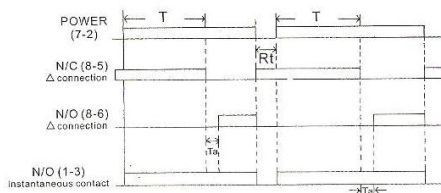
MODEL NO.	TRD-N	
CLASSIFICATION		
APPEARANCE 外觀		
DIMENSIONS 尺寸	fig. 4 (page 8)	
SURFACE MOUNTING 露出型安裝	Socket base 8PFA	
FEATURES 特性	Special for Star-Delta motor starting circuit. Time interval (standard: 0.2 sec) when star connection transfers to delta connection. Y-△馬達啟動電路專用限時繼電器於Y接線轉換到△接線時有0.2秒間隔之緩衝時間，以避免電磁接觸器損傷。	
OUTPUT CAPACITY 輸出接點容量：7A	1A1C (1 instantaneous contact + 1 delay contact) 1組瞬時接點+1組限時接點 Time-limit contact : SPST-N/O (delta circuit), SPST-N/C (star circuit) Instantaneous contact : SPST-N/O (Maintenance circuit)	
STAR-DELTA CHANGE TIME Y-△切換間隔時間	Standard : 0.2SEC 0.1~0.6 SEC (UPON CUSTOMER'S REQUEST)	
TIME RANGE 時間範圍	standard : 30 SEC, 60 SEC	
RATED VOLTAGE 定格電壓 RANGE : 85%-110%	50/60HZ 24VAC/DC, 110VAC, 220VAC, 380VAC, 415VAC, 440VAC	
L I F E 壽 命	Mechanically 機 械	10 × 10 ⁶ Times
	Electrically AC220VPF=1 電 氣	5 × 10 ⁵ Times
A C C U R A C Y 精 確 度	Repeat 往復誤差	±0.2% Max
	Setting 設定誤差	±5% Max
	Voltage 電壓誤差	±0.5% Max
	Temperature 溫度誤差	±2% Max
RESET TIME 復歸時間	0.1 Sec Max	
AMBIENT TEMP. & HUMIDITY 周圍溫度 & 濕度	-10°C~55°C , 85% Max	

CONNECTION DIAGRAM & TIMING CHART

OUTPUT:
INSTANTANEOUS CONTACT
+ DELAY CONTACT 1C



T = Setting time of star connection
Rt = Reset time
Ta: Star-delta transfer time (standard interval : 0.2S)
0.1S ~ 0.6S (customer's request)
Y接線切換至△接線之緩衝時間(標準為0.2S)



ORDERING CODE 訂購碼

R D N 1 0 5

N: 62*50mm size
E: Din size 48*48mm/m

Rated Voltage
定格電壓
1 : 110VAC
2 : 220VAC
3 : 380VAC
4 : 440VAC
6 : 24VAC/DC

Time range
時間範圍
05:30Sec
06:60Sec

自動溫度控制器 Automatic Temperature Controller

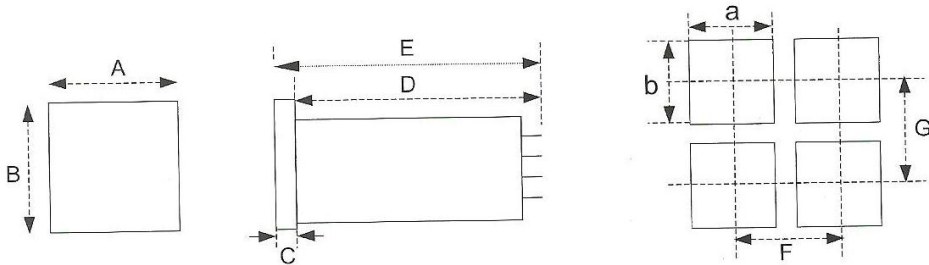
Size Classification		72mm*72mm		96mm*96mm	
Appearance 外觀					
Model	72 × 72	K721	K722	K723	K726
型號	96 × 96	K961	K962	K963	K966
Features 特性		Analogy Setting, Non-indicating 類比設定, 無指示	Analogy Setting, Indicating 類比設定, 全指示	Analogy Setting Deviation Indicating 類比設定, 偏差指示	Pushwheel Digital Setting, LED Digital Indicating 數位設定, 數位顯示
Temperature Range 溫度範圍		0-100°C, 0-200°C, 0-400°C, 0-600°C, 0-800°C, 0-1000°C	0-100°C, 0-200°C, 0-400°C, 0-600°C, 0-800°C, 0-1000°C	0-100°C, 0-200°C, 0-400°C, 0-600°C, 0-800°C, 0-1000°C	0-199°C, 0-399°C, 0-999°C,

Size Classification		48mm × 48mm		48mm × 96mm	
Appearance 外觀					
Model	型號	K481	K482	MC-48	DC-48
Features 特性		Analogy setting, Non-indicating 類比設定, 無指示	Pushwheel digital Setting, LED Digital indicating 數位設定, 數位顯示	Pushwheel digital setting, Deviation indicating 數位設定, 偏差指示	Pushwheel digital Setting, LED Digital indicating 數位設定, 數位顯示
Temperature Range 溫度範圍		0-100°C, 0-200°C, 0-400°C, 0-600°C, 0-800°C, 0-1000°C	0-199°C, 0-399°C, 0-999°C,	0-199°C, 0-399°C, 0-999°C,	0-199°C, 0-399°C, 0-999°C,

Specifications 規格

Rated Voltage & Frequency	額定電壓及週率	AC 110/220V (85~110%), 50/60Hz
Input	輸入信號	K(CA), J(IC), PT100Ω
Output	輸出信號	Relay 5A 250VAC, SSR Drive
Control Mode	控制模式	ON/OFF, PD (for digital type)
Alarm Control	警報控制	Upon customer's demand
Setting Accuracy	設定精度	±0.5 ~ 1% of full scale
Ambient Temperature & Humidity	環境溫度及溼度	0 ~ 55°C, 85% Max

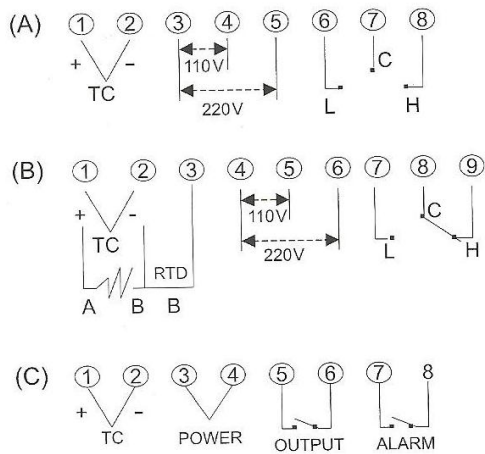
Dimensions & Panel Cut-out 外型與開口尺寸



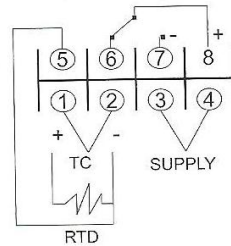
Unit: mm

Series	A	B	C	D	E	F	G	a	b
48x48	48	48	6	86	92	62	65	45±0.5	45±0.5
72x72	72	72	7	118	125	90	95	68±0.5	68±0.5
96x96	96	96	13	107	120	110	115	90±0.5	90±0.5
48x96	48	96	11	100	111	62	115	45±0.5	90±0.5

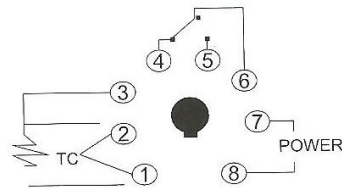
Wiring Diagram 配線圖



(D) For 48 x 48 series (Terminal type)



(E) For 48 x 48 series (Socket type)



Thermocouples 感溫棒 (Special and Variety of specifications upon customers request.)



星期六時段定時器

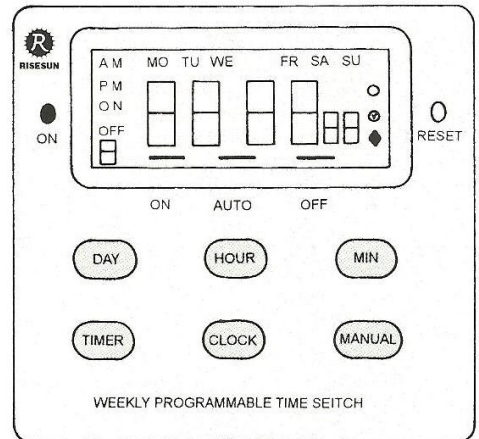
WEEKLY PROGRAMMABLE TIME SWITCH

- OFFERING 6 ON/OFF PROGRAMMABLE SETTING AVAILABLE TO SWITCH INSIDE CONTACTS TO BE CLOSED OR OPENED WHENEVER ON EACH DAY OR WEEK DAY OR WEEKEND SEPARATELY.

本產品提供六組時間設定，每一組可設定於一星期中某一天或週一至週五，週末或每一天的幾時幾分 ON，至星期幾的幾時幾分 OFF。

- ON, OFF SETTING SHOULD BE IN SEQUENCE OF ON 1, OFF 1, ON 2, OFF 2, ON 3, OFF 3, ON 4, OFF 4, ON 5, OFF 5, ON 6, OFF 6, CLOCKWISE AND LOGICALITY.

可隨時進入任一組設定，將其資料歸零，使該組失去作用。



按 鍵	MODE	
	COLCK MODE(計時模式)	6 SETTING TIMER MODE (6 時段定時)
COLCK	INEFFECTIVE 無效	INTO CLOCK MODE 進入計時狀態
TIMER	INTO TIMER 1 ON 進入第一組 ON 的時間設定	INTO TIMING CYCLE 每按一次進入下組時間設定 TIMER 1 ON→1 OFF→2 ON→2 OFF 3 ON→3 OFF→4 ON→4 OFF 5 ON→5 OFF→6 ON→6 OFF
DAY	PRESS "DAY" —INEFFECTIVE 只按 "DAY" 無效 PRESS<CLOCK+DAY>TO ADJUST DAY OF A WEEK 同時按 "CLOCK" 及 "DAY" 可調整日期	ADJUSTABLE FOR ACTION DAY 可調整該組 TIMER 之動作日期 (1) MO (2) TU (3) WE (4) TH (5) FR (6) SA (7) SU (8) MO+TU+WE+TH+FR (9) SA+SU (10) MO+TU+WE+TH+FR+SA+SU
HOUR	PRESS "HOUR" —INEFFECTIVE 只按 "HOUR" 無效 PRESS<CLOCK+HOUR>TO ADJUST HOURS 同時按 CLOCK 及 HOUR 可調整時	PRESS "HOUR" TO ADJUST HOURS 按 "HOUR" 調整時
MIN	PRESS "MIN" —INEFFECTIVE 只按 "MIN" 無效 PRESS<CLOCK+MIN>TO ADJUST MINUTES 同時按 CLOCK 及 MIN 可調整分	PRESS "MIN" TO ADJUST MINUTES 按 "MIN" 調整分
RESET	RESTART THIS TIME SWITCH 重新啓用本定時器	
MANUAL	TO CHANGE THE OUTPUT OF RELAY 每按一次改變 RELAY 的輸出	<div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 5px;">LOCK ON</div> <div style="margin: 0 5px;">↔</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 5px;">AUTO</div> <div style="margin: 0 5px;">↔</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 5px;">LOCK OFF</div> </div>

多功能定時器說明書

功 能：

商業、工廠、工作日程、課程安排、電器定時、6個時段定時。

使用方法：

一. 預先設定：

- (1) 先按RESET使內部設定歸零。
- (2) 現在時間調整。
同時壓住"CLOCK"鈕(不要鬆開)再按"DAY"可選擇星期日、一、二、三、四、五、六，按HOUR可調整"時"，按MIN可調"分"，每次調整"分"後秒數會從00開始。
- (3) 時間設定
按一次TIMER即進入時間設定，螢幕顯示 1:ON此時即可設定第一個ON的時間，按DAY有十個選擇：
① MO，② TU，③ WE，④ TH，⑤ FR，⑥ SA，⑦ SU，⑧ SA+SU，⑨ MO+TU+WE+TH+FR，⑩ MO TO SU
可設定一週內每一天或是任一天。
按HOUR選擇"時"，按MIN選擇"分"
做完日、時、分選擇後，再按一次TIMER，螢幕顯示1:OFF可設定第一個OFF的時間。
重復上述動作可設定第二個到第六個ON OFF，所設定的時間必須符合時鐘邏輯，時間設定完成後按CLOCK即可回到現在時間。
- (4) 如發現設定錯誤，可按RESET釋放所有定時記憶，重新設定。
- (5) ON AUTO OFF模式選擇，按MANUAL選擇，有一條"一"棒在ON，AUTO，OFF上移動。
ON: 輸出接點處於ON狀態
OFF: 輸出接點處於OFF狀態
AUTO: 輸出接點受定時控制
- (6) 如果要臨時更改部份時間設定，可以不須按RESET全部重新設定以節省時間，但是必須特別注意當時間設定完成切回現在時間後，先查看現在時間是在所設定的時間內或外，例如現在是星期三中午12:35，而您的設定中有一次(不論那一次)從星期三中午12:00 OFF到13:00再ON，則現在時間是在OFF時段內，請按MANUAL，之從OFF到AUTO停在AUTO，反之若在ON時段內，請按MANUAL使之從ON到AUTO，停在AUTO。使之反應於正確的ON或OFF設定狀態下，才能完全達到預設目標。

二. 使用中設定關機時間。

例如現在是上午10:00，電器用品正開著，希望10:40關掉而本產品還沒有設定10:40分OFF，此時小紅燈應亮著，可以按MANUAL使之從ON回AUTO停在AUTO，不論原來是選擇在ON或AUTO都做一次這個動作以確保其功能，再按TIMER二次，調整1:OFF到10:40再按一次CLOCK即可。

三. 注意事項：

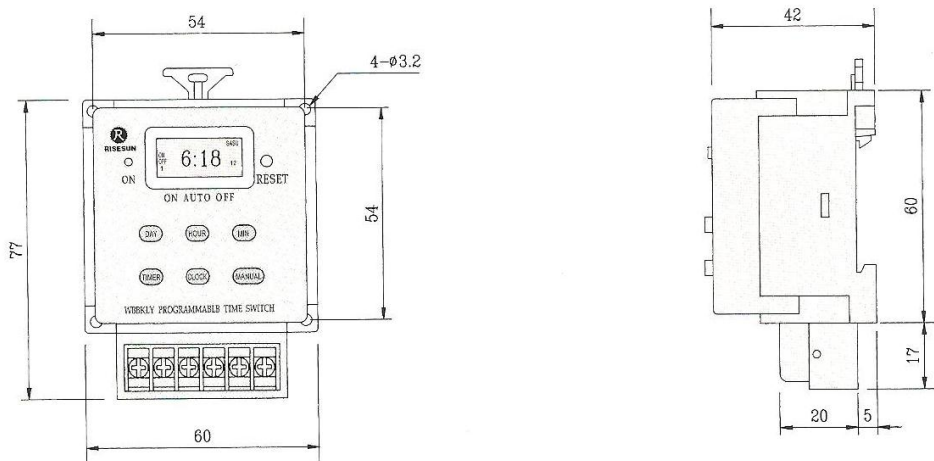
初始設定應先確認無誤後才可接上負載。

輸出接點最大容量7 AMP 250V

使用電源100-250VAC

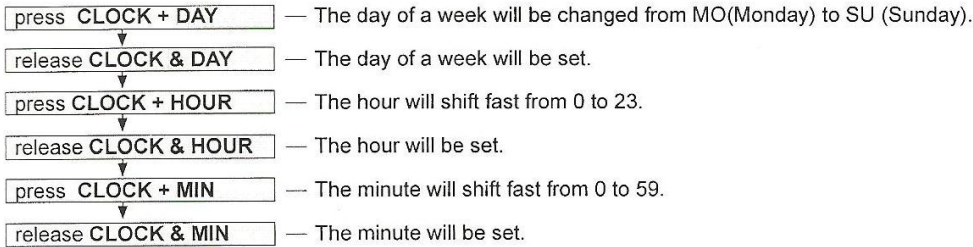
內裝電池經充電後可維持計時2年，停電時能繼續計時及記憶原先的設定，但無法控制輸出接點。

四. 本機精確度：年誤差±70秒以內。

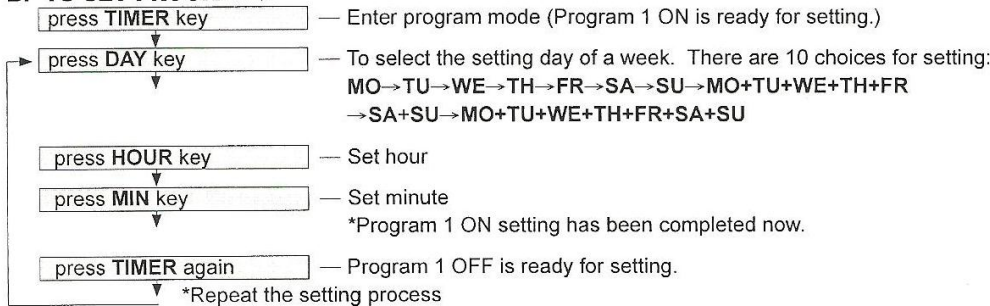


WEEKLY PROGRAMMABLE TIME SWITCH MANUAL

A. SETTING PRESENT DAY AND TIME



B. TO SET PROGRAMS



After program 1 OFF is set completely, press **TIMER** again to enter program 2 ON setting, and so on, program 2 OFF→ 3 ON→ 3 OFF→4 ON→4 OFF→5 ON→5 OFF→6 ON→6 OFF.

There are 6 ON/OFF programs for setting. But if you need only 2 or 3 programs, just ignore the rest programs.

C. After programs setting, press **CLOCK** key then return to present time (CLOCK MODE).

D. TO RESET TIMER

Press **RESET** key, the previous setting time and programs will be cleared to initial state.

E. TO SELECT ON/AUTO/OFF MODE

1. Press **MANUAL** key to select ON, AUTO, or OFF MODE.
2. "ON" mode set output at ON state
3. "OFF" mode set output at OFF state
4. "AUTO" mode set output to program mode. Relay contact will turn ON/OFF according to the program time.
5. After program setting is confirmed, it is necessary to press **MANUAL** key and change the mode to ensure the Timer working in correct program. Please check the present time. If it is in the duration of program ON setting time, then press **MANUAL** to make it from ON to AUTO mode. In case of the present time is now within program OFF setting time, then make it from OFF to AUTO mode. Because from ON to AUTO, relay contact will be turned to ON state until next OFF setting time coming. Contrary, from OFF to AUTO, relay contact will be switched to OFF state and lasting until next ON setting time is coming.

F. WIRE CONNECTION (Please see the diagram shown below)

Max. Load: 2000VA

Applied Voltage Range: 100-250VAC

Inside Battery: NI-CAD*1 PC (Just for clock running, not for output ON/OFF switching.)