


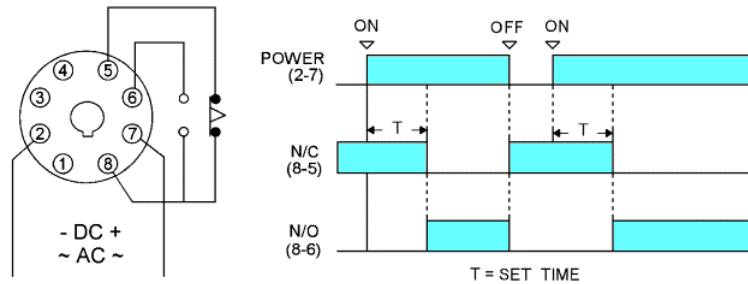
48*48mm DIN-SIZED ON DELAY ELECTRONIC TIMER

(Mono Working Voltage/ Mono Time Range)

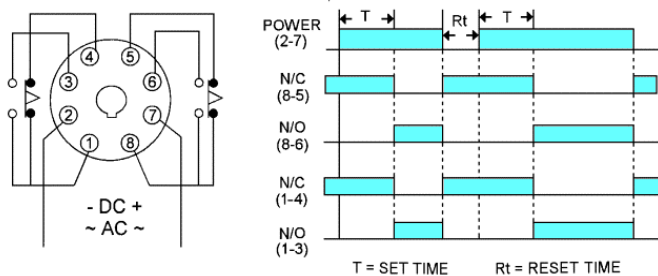
Model No.		JHB-1 , JHB-2
Classification		
Appearance & Dimensions		
Dimensions		FIG. 1
Supply	Rated frequency	50/60Hz +/- 1Hz
	Rated voltage	24VAC/DC, 48VAC, 110VAC, 220 • 240VAC
	Disengaging value of input voltage	JHB-1: 32 +/-3% JHB-2: 50 +/-3%
	Supply tolerance	85% to 110%
	Power consumption	240VAC/ 15VA, 110VAC/ 5VA, 24VAC/ 1.5VA, 24VDC/ 1VA
Output	Relay contacts	JHB-1: SPDT; JHB-2: mode A (DPDT) or mode B (instantaneous contact + SPDT) selectable by DIP switch
	Contact capacity	7A250VAC Resistive load, (AC-12)
	Rated value for limiting continuous current Ith	7A/250VAC, 7A30VDC
	Mechanical life	10,000,000 operations
	Max. permitted number of operations per hour	600 (at I max. 250VAC resistive load)
	Electrical life	100,000 operations
	Conditional short-circuit current	Shall be connected in series with the short circuit protective device like as 10A Fuse
Accuracy	Repetition accuracy	+/-0.2% Max
	Setting accuracy	+/-5% Max
	Voltage accuracy	+/- 0.5% Max
	Temperature accuracy	+/-2% Max
	Reset time	0.1 Sec Max
Time range		Wide variety of timing ranges: 1S, 3S, 6S, 10S, 30S, 60S, 3M, 6M, 10M, 30M, 60M, 3H, 6H, 10H
General spec.	Housing material	self - extinguishing
	Ambient temperature	-10 ~ +45Deg.C
	Ambient humidity	85% Max
	Storage temperature	-25 ~ +55Deg.C
	Transport temperature	-25 ~ +70Deg.C
	Degree of pollution	2
	Degree of protection	Housing : IP40, Socket: IP20
	Overvoltage category	III
	Dielectric strength	2000V 1 Min and Impulse 4800V
	Mounting position	Panel mounted by clip Base mounted on socket
Remarks	DO NOT OPERATE (OR TOUCH TO) DIP SWITCH WHEN TIMER IS CONNECTED TO POWER	

CONNECTION DIAGRAM & TIMING CHART

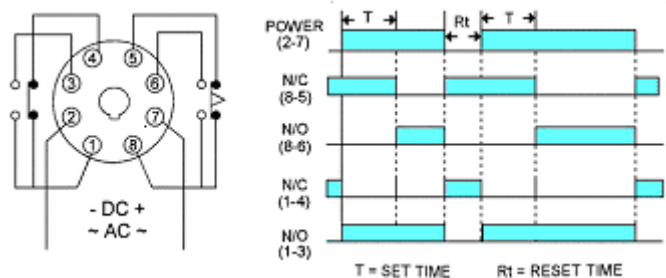
JHB-1: SPDT



JHB-2: MODE A: DPDT



JHB-2 MODE B: INSTANTANEOUS CONTACT+SPDT




ORDERING CODE

HB	1	2	05
OUTPUT MODE			
1: SPDT			
2: Mode A & B alternative by DIP switch			
RATED VOLTAGE			
1: 110VAC			
2: 220VAC			
3: 380VAC			
4: 440VAC			
5: 12VDC			
6: 24VAC/DC			
TIME RANGE			
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		

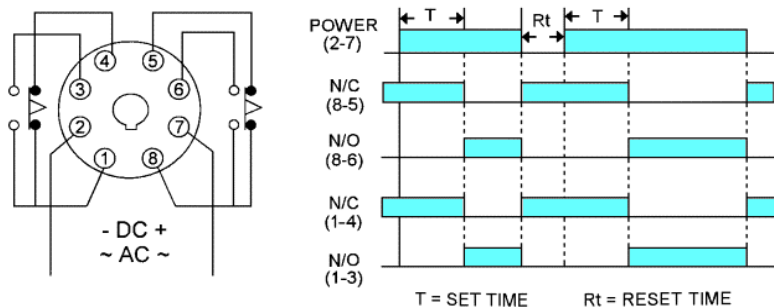
48*48mm DIN-SIZED ON DELAY ELECTRONIC TIMER

(Multi Time Range/ Mono Working Voltage)

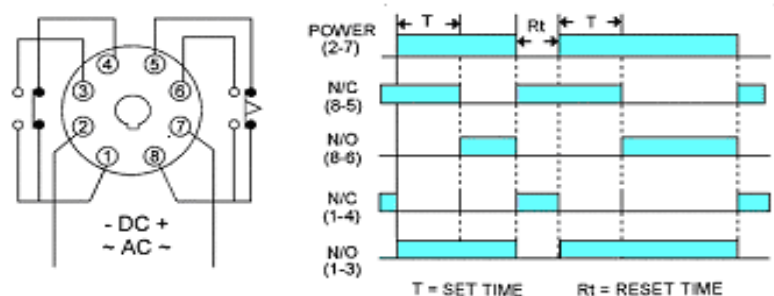
Model No.		JSB-41A , JSB-51A	
Classification			
Appearance & Dimensions			
Dimensions		FIG. 1	
Supply	Rated frequency	50/60Hz +/- 1Hz	
	Rated voltage	12VAC/DC, 24VAC/DC, 48VAC, 110VAC, 220 • 240VAC	
	Disengaging value of input voltage	40 +/-3%	
	Supply tolerance	85% to 110%	
	Power consumption	240VAC/ 15VA, 110VAC/ 5VA, 24VAC/ 1.5VA, 24VDC/ 1VA	
Output	Relay contacts	Mode A (DPDT) or mode B (instantaneous contact +SPDT)selectable by DIP switch	
	Contact capacity	7A250VAC Resistive load, (AC-12)	
	Rated value for limiting continuous current Ith	7A/250VAC, 7A30VDC	
	Mechanical life	10,000,000 operations	
	Max. permitted number of operations per hour	600 (at I max. 250VAC resistive load)	
	Electrical life	100,000 operations	
	Conditional short-circuit current	Shall be connected in series with the short circuit protective device like as 10A Fuse	
Accuracy	Repetition accuracy	+/- 0.2% Max	
	Setting accuracy	+/- 5% Max	
	Voltage accuracy	+/- 0.5% Max	
	Temperature accuracy	+/- 2% Max	
	Reset time	0.1 Sec Max	
Time range		JSB-41A: 1S-10S-1M-10M; JSB-51A: 1M-10M-1H-10H; (selectable by DIP switch "T")	
General spec.	Housing material	self - extinguishing	
	Ambient temperature	-10 ~ +45Deg.C	
	Ambient humidity	85% Max	
	Storage temperature	-25 ~ +55Deg.C	
	Transport temperature	-25 ~ +70Deg.C	
	Degree of pollution	2	
	Degree of protection	Housing : IP40, Socket: IP20	
	Overvoltage category	III	
	Dielectric strength	2000V 1 Min and Impulse 4800V	
	Mounting position	Panel mounted by clip Base mounted on socket	
Remarks	DO NOT OPERATE (OR TOUCH TO) DIP SWITCH WHEN TIMER IS CONNECTED TO POWER		

CONNECTION DIAGRAM & TIMING CHART

MODE A: DPDT



MODE B: INSTANTANEOUS CONTACT+SPDT



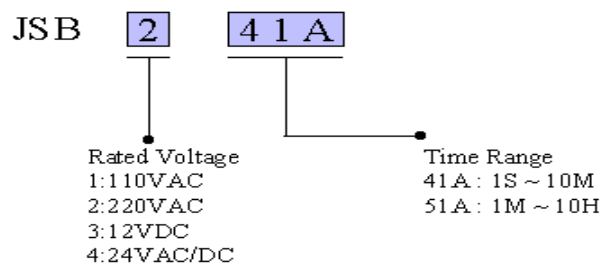
TIMING RANGE

MODEL NO.	TIMING RANGE	DIP SWITCH "T" (TIME RANGE) SETTING			
		0 0	1 0	0 1	1 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


Mode A	DPDT (2 Time - Limit Contacts)
Mode B	Instantaneous Contact + SPDT

ORDERING CODE



48*48mm DIN-SIZED ON DELAY ELECTRONIC TIMER

(Multi Function/Multi Time Range / 24-240 Universal Working Voltage)

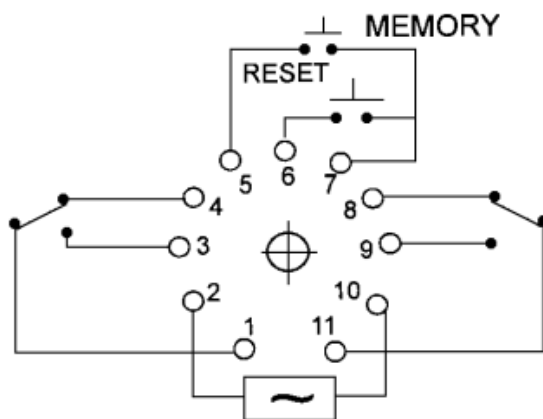
Model No.		JMB-41A , JMB-51A JMB-41A-MD , JMB-51A-MD JMB-41A-MS , JMB-51A-MS	
Classification			
Appearance & Dimensions			
Dimensions		FIG. 1	
Supply	Rated frequency	50/60Hz +/-1Hz	
	Rated voltage	24~240VAC/DC universal	
	Disengaging value of input voltage	8.5VAC/DC	
	Supply tolerance	85% to 110%	
	Power consumption	240VAC/ 10VA, 24VAC/ 1.5VA, 24VDC/ 1.5VA	
Output	Relay contacts	SPDT or DPDT (Time-limit contacts) : 7A250VAC	
	Contact capacity	7A250VAC Resistive load,(AC-12)	UL: 10A250VAC Resistive load, (AC-12)
	Rated value for limiting continuous current Ith	7A/250VAC, 7A30VDC	UL: 10A/250VAC, 10A30VDC
	Mechanical life	10,000,000 operations	
	Max. permitted number of operations per hour	600 (at I max. 250VAC resistive load)	
	Electrical life	100,000 operations	
Accuracy	Conditional short-circuit current	Shall be connected in series with the short circuit protective device like as 10A Fuse	
	Repetition accuracy	+/- 0.2% Max	
	Setting accuracy	+/- 5% Max	
	Voltage accuracy	+/-0.5% Max	
	Temperature accuracy	+/-2% Max	
	Reset time	0.1 Sec Max	
Time range		JMB-41A: 1S-10S-1M-10M; JMB-51A: 1M-10M-1H-10H; (selectable by DIP switch "T")	
General spec.	Housing material	self – extinguishing	
	Ambient temperature	-10 ~ +45Deg.C	
	Ambient humidity	85% Max	
	Storage temperature	-25 ~ +55Deg.C	
	Transport temperature	-25 ~ +70Deg.C	
	Degree of pollution	2	
	Degree of protection	Housing : IP40, Socket: IP20	
	Overvoltage category	III	
	Dielectric strength	2000V 1 Min and Impulse 4800V	
	Mounting position	Panel mounted by clip Base mounted on socket	
Remarks	DO NOT OPERATE (OR TOUCH TO) DIP SWITCH WHEN TIMER IS CONNECTED TO POWER		

CONNECTION DIAGRAM

JMB-41A / JMB-51A

DPDT

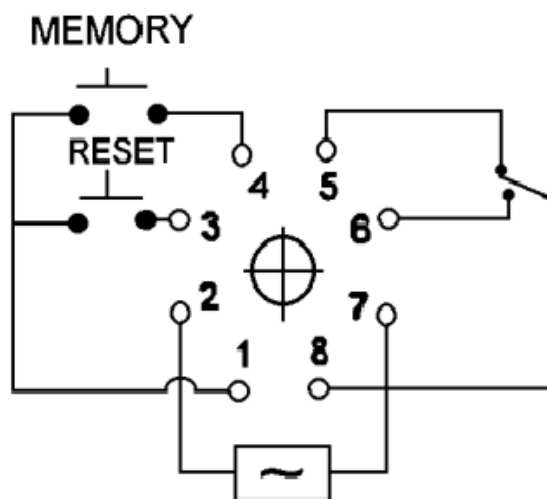
POWER : PIN# 2-10
 MEMORY : PIN# 5-7
 RESET : PIN# 6-7
 N/C : PIN# 8-11 & 1-4
 N/O : PIN# 9-11 & 1-3



Note: Do not apply any Voltage on PIN# 5,6,7

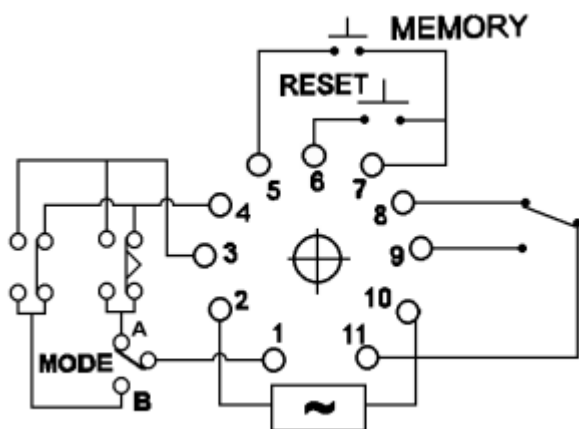
SPDT

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



Note: Do not apply any Voltage on PIN# 1,3,4

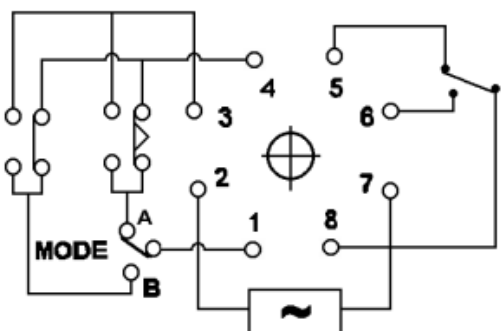
JMB-41A-MD / JMB-51A-MD



JMB-41A-MD/JMB-51A-MD(11-PIN)

POWER :PIN#2-10
 MEMORY :PIN#5-7
 RESET :PIN#6-7
 N/C :PIN#8-11&1-4
 N/O :PIN9-11&1-3

Note : Do not apply any voltage on PIN#5.6.7



*** JMB-41A-MS / JMB-51A-MS**

(8-PIN)

POWER : PIN#2-7

N/C : PIN#8-5 & 1-4

N/O : PIN#8-6 & 1-3

TIMING RANGE & FUNCTION SETING

MODEL NO.	TIMING RANGE	DIP SWITCH "T" (TIME RANGE) SETTING			
		0	0	1	1
JMB41A	SEC TO MIN	0.05SEC TO 1SEC	0.12SEC TO 10SEC	0.65SEC TO 1MIN	6SEC TO 10MIN
JMB51A	MIN TO HR	0.05MIN TO 1MIN	0.12MIN TO 10MIN	0.6MIN TO 1HOUR	1MIN TO 10HOUR

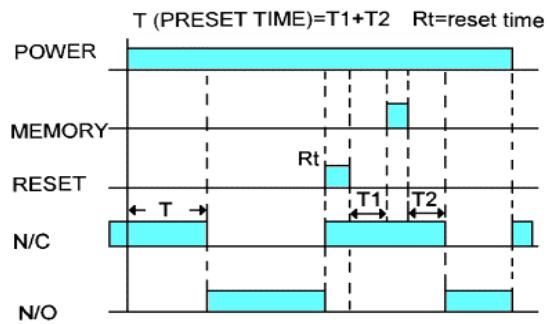
FUNCTION	DIP SWITCH "F" (FUNCTION) SETTING	DESCRIPTION
"ON"DELAY	0 0	Timing begins when power is applied to the unit. When the time delay setting is reached, the relay contact transfer. The timer is reset either by removing the input power, or by operating the optional customer supplied external "Reset" switch.
REPEAT CYCLE	1 0	Timing begins when power is applied to the unit. When the time delay setting is reached, the relay contact transfer, and remain transferred until the time delay setting is again reached. At this time, the relay contacts are then released returning to the the original state. The timer then automatically resets, and repeats the timing cycle until the input power is removed.
INTERVAL (REVERSE ON DELAY)	0 1	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.
REVERSE REPEAT CYCLE	1 1	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.

RESET switch : When operated, resets the timer to zero. Requiring a customer supplied momentary switch.

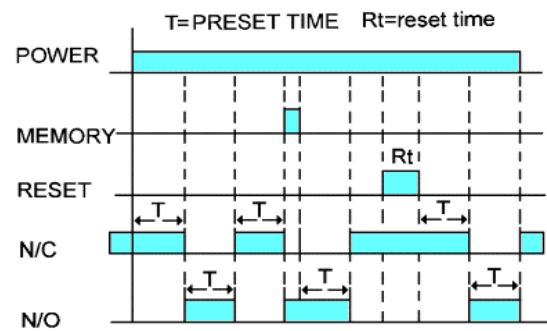
MEMORY switch : When operated, pauses the timing cycle at that point in the cycle. When released, allows the cycle to resume from the same point. Requiring a customer supplied momentary switch.

FUNCTION DESCRIPTION

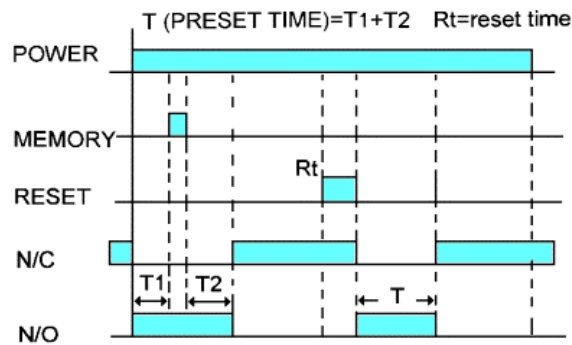
ON DELAY



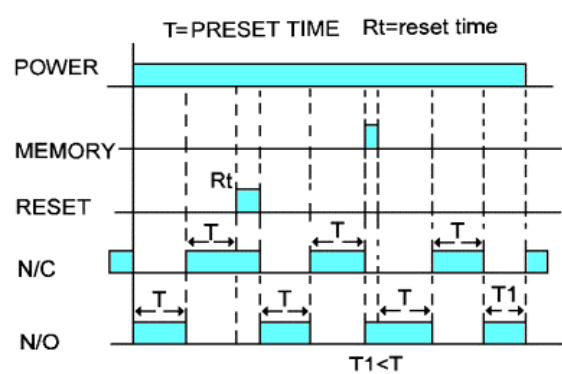
REPEAT CYCLE



INTERVAL (REVERSE ON DELAY)




REVERSE REPEAT CYCLE



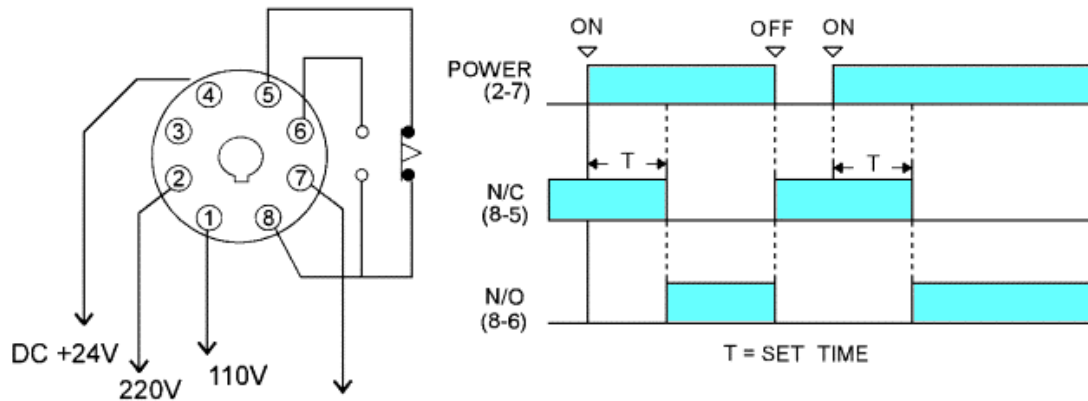
48*48mm DIN-SIZED ON DELAY ELECTRONIC TIMER

(Multi Working Voltage/ Multi Time Range)

Model No.		JME-S , JME-M
Classification		
Appearance & Dimensions		
Dimensions		FIG. 1
Supply	Rated frequency	50/60Hz +/- 1Hz
	Rated voltage	24VAC/DC, 110VAC, 220 • 240VAC contained
	Disengaging value of input voltage	32 +/-3%
	Supply tolerance	85% to 110%
	Power consumption	240VAC/ 15VA, 110VAC/ 5VA, 24VAC/ 1.5VA, 24VDC/ 1VA
Output	Relay contacts	SPDT (Time-limit contacts) : 7A250VAC
	Contact capacity	7A250VAC Resistive load, (AC-12)
	Rated value for limiting continuous current Ith	7A/250VAC, 7A30VDC
	Mechanical life	10,000,000 operations
	Max. permitted number of operations per hour	600 (at I max. 250VAC resistive load)
	Electrical life	100,000 operations
	Conditional short-circuit current	Shall be connected in series with the short circuit protective device like as 10A Fuse
Accuracy	Repetition accuracy	+/- 0.2% Max
	Setting accuracy	+/- 5% Max
	Voltage accuracy	+/- 0.5% Max
	Temperature accuracy	+/- 2% Max
	Reset time	0.1 Sec Max
Time range		JME-S: 3,12,100,780Sec; JME-M: 3,12,100,780Min; (selectable by DIP switch)
General spec.	Housing material	self - extinguishing
	Ambient temperature	-10 ~ +45Deg.C
	Ambient humidity	85% Max
	Storage temperature	-25 ~ +55Deg.C
	Transport temperature	-25 ~ +70Deg.C
	Degree of pollution	2
	Degree of protection	Housing : IP40, Socket: IP20
	Overvoltage category	III
	Dielectric strength	2000V 1 Min and Impulse 4800V
	Mounting position	Panel mounted by clip Base mounted on socket
Remarks	DO NOT OPERATE (OR TOUCH TO) DIP SWITCH WHEN TIMER IS CONNECTED TO POWER	

CONNECTION DIAGRAM & TIMING CHART

OUTPUT : SPDT (Time - limit contacts)



TIME RANGE

Position of Time Range selector	1 1	1 1	1 1	1 1
Model No.	0 0	0 0	0 0	0 0
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)

ORDERING CODE

J M E -

S

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Time Range

S : 3, 12, 100, 780 Sec

M : 3, 12, 100, 780 Min

DELAY ON MULTI-RANGE TIMER

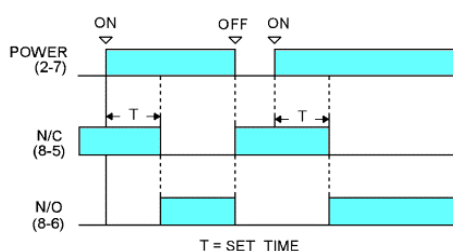
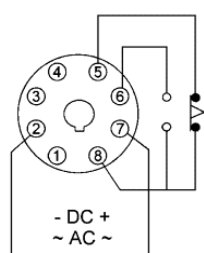
Model No.		JMH-2A JMH-2B	JMH-2MA JMH-2MB
Classification		JMH-2C JMH-2D JMH-2E	JMH-2MC JMH-2MD JMH-2ME
Appearance			
Features		Mono working voltage, Multi time range	Multi time range, Universal power source
Dimensions		FIG. 2	
Mounting		Surface mounting : SOCKET BASE PF085A	
Output Capacity 7A 250VAC		Alternative by DIP switch : Mode A: DPDT(Time-limit contacts) ; Mode B: Instantaneous contact + Time-limit contacts	
Rated Voltage Range : 85% - 110%		12VDC, 24VAC/DC, 110VAC, 220VAC	Universal 24-48VDC, 24-240VAC
Time Range		A: 1S/10S/1M/10M C: 6S/60S/6M/60M E: 3M/30M/3H/30H	B: 3S/30S/3M/30M D: 1M/10M/1H/10H F: 6M/60M/6H/60H
L I F E	Mechanical	10,000,000 Times	
	Electrical AC220VPF=1	500,000 Times	
A C C U R A N C Y	Repeat	+/- 0.2% Max	
	Setting	+/- 5% Max	
	Voltage	+/- 0.5% Max	
	Temperature	+/- 2% Max	
Reset time		0.1 Sec Max	
Ambient temp. & Humidity		-10~55Deg.C , 85% Max	

TIMING RANGE SETTING

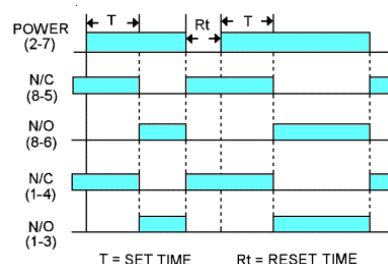
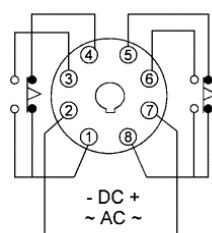
Position of Time Range Selector				
Time Range Series				
A	1S 0.05S ~ 1S	10S 0.1S ~ 10S	1M 0.5S ~ 1M	10M 10S ~ 10M
B	3S 0.1S ~ 3S	30S 0.5S ~ 30S	3M 1S ~ 3M	30M 30S ~ 30M
C	6S 0.1S ~ 6S	60S 0.5S ~ 60S	6M 1S ~ 6M	60M 30S ~ 60M
Position of Time Range Selector				
Time Range Series				
D	1M 0.5S ~ 1M	10M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

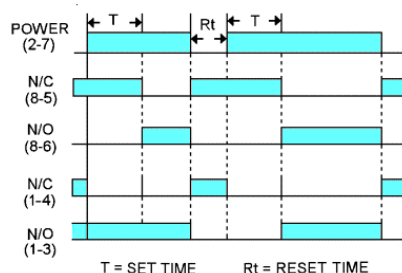
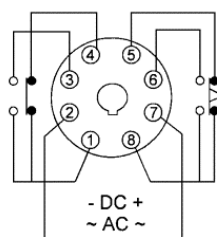
SPDT



DPDT (Mode A)



Instantaneous contact + SPDT (Mode B)



ORDERING CODE

J M H 2

M

A

Rated Voltage

1 : 110VAC

2 : 220VAC

3 : 12VAC/DC

4 : 24VAC/DC

5 : 48VAC/DC

M: Universal Power Source 24 250VAC/DC

Time range

A : 1S ~ 10M

B : 3S ~ 30M

C : 6S ~ 60M




D : 1M ~ 10H

E : 3M ~ 30H



HIGH PERFORMANCE DELAY ON TIMER

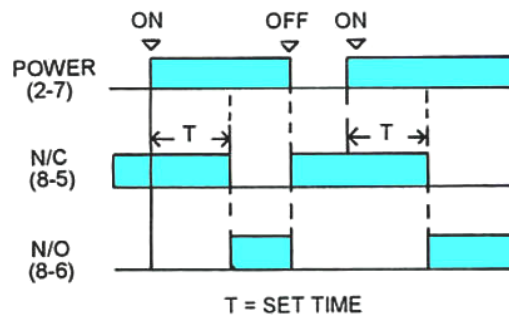
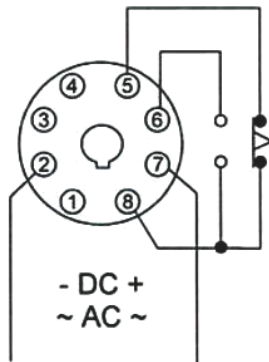
(Mono-Function/Time Range/Working Voltage)

Classification	Model No.	CAH3C 	CSTP
Appearance	 		
Dimensions	Surface mounting type : FIG. 2 Flush mounting type : FIG. 3		Surface mounting type : FIG. 4 Flush mounting type : FIG. 5
Surface mounting	Socket base PF085A		Socket base 8PFA
Flush mounting	Socket base P3G08 or US08		Socket base P3G08 or US08
Rated time range	Wide variety of timing ranges From 0.1S TO 10Hr		Wide variety of timing ranges From 0.1S TO 24Hr
Output Capacity 7A 250VAC	CAH3-N1/Y1 SPDT(Time-limit contacts) CAH3-N2/Y2 Mode A: DPDT Mode B: Instantaneous contact + SPDT(selectable)		CSTP-N1/Y1 SPDT(Time-limit contacts) CSTP-N2/Y2 DPDT CSTP-N3/Y3 Instantaneous contact + SPDT
Rated Voltage	50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC (Range : 85% - 110%)		
LIFE	Mechanical	10,000,000 Times	
	Electrical AC220VPF=1	500,000 Times	
ACCURACY	Repeat	+/- 0.2% Max	
	Setting	+/- 5% Max	
	Voltage	+/- 0.5% Max	
	Temperature	+/- 2% Max	
Reset time		0.1 Sec Max	
Ambient temp. & Humidity		-10~55Deg.C , 85% Max	

CONNECTION DIAGRAM & TIMING CHART

SPDT:

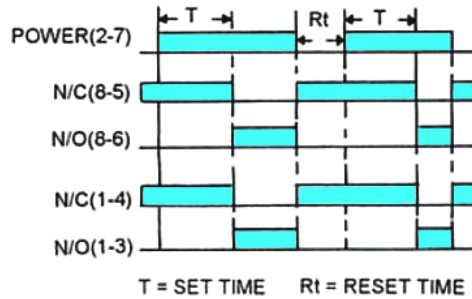
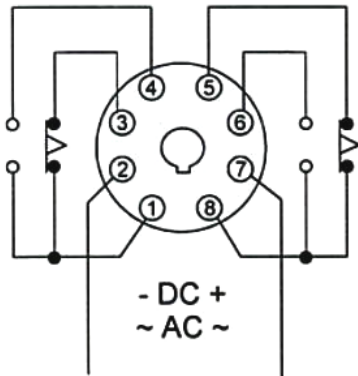
CAH3-N1 CAH3-Y1 CSTP-N1 CSTP-Y1





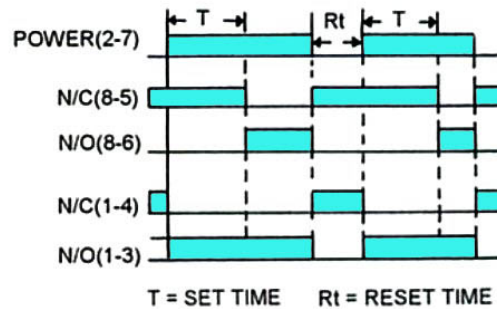
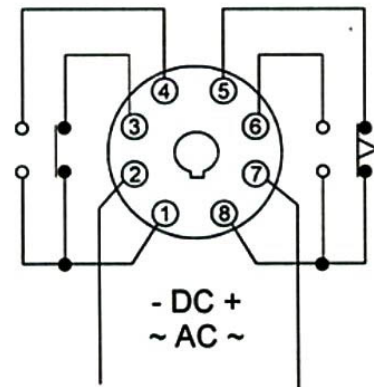
DPDT:

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

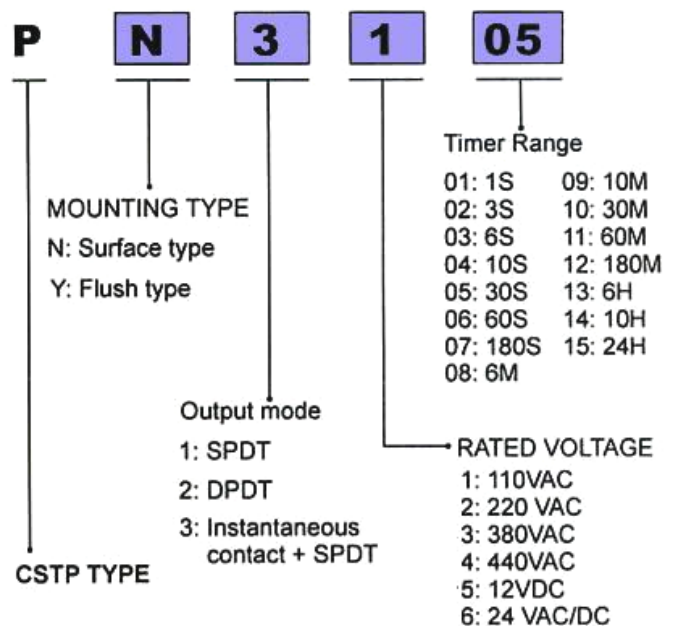
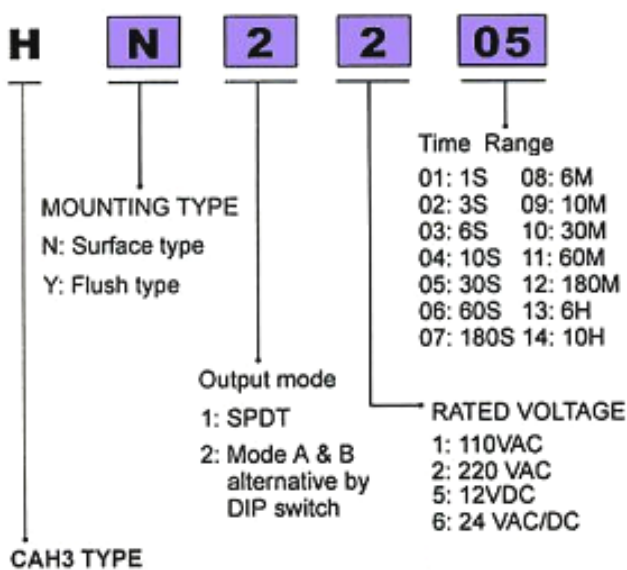


INSTANTANEOUS CONTACT + SPDT:


CAH3-N2 (MODE B) CAH3-Y2 (MODE B) CSTP-N3 CSTP-Y3



ORDERING CODE



HIGH PRECISION DIGITAL TIMER

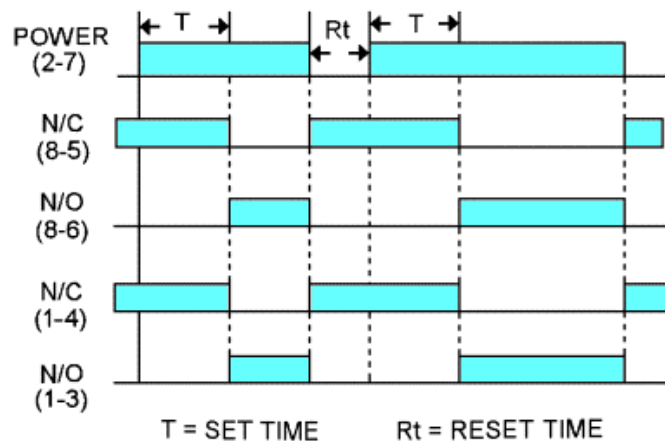
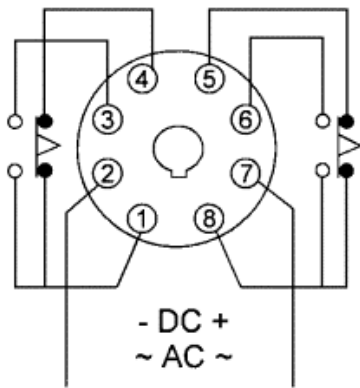
Model No.		JSY-2D	JSY-3D
Classification			
Appearance			
Dimensions		FIG. 5	
Mounting		Flush mounting: Socket base P3G08 or US08	
Features		Error-free digital setting and LED display Wide rated time range: 2-digit Timer-from 0.99 sec to 99 hour 3-digit Timer-from 9.99 sec to 999 hour Time range selectable by dip switch	
Output Capacity 7A		Alternative by DIP switch: Mode A: DPDT (2 Timer-limit contacts) Mode B: Instantaneous contact + Timer-limit contact	
Rated time range		JSY-2D: 0.99 Sec, 9.9 Sec, 99 Sec, 9.9Min, 99 Min, 9.9 Hr, 99 Hr JSY-3D: 9.99 Sec, 99.9 Sec, 999 Sec, 99.9 Min, 999MIN, 99.9 Hr,999Hr	
Rated Voltage		50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC (Range: 85% - 110%)	
LIFE	Mechanical	10,000,000 Times	
	Electrical AC220VPF=1	500,000 Times	
ACCURACY	Repeat	+/- 0.2% Max	
	Setting	+/- 5% Max	
	Voltage	+/- 0.5% Max	
	Temperature	+/- 2% Max	
Reset time		0.1 Sec Max	
Ambient temp. & Humidity		-10~55Deg.C , 85% Max	

CONNECTION DIAGRAM & TIMING CHART

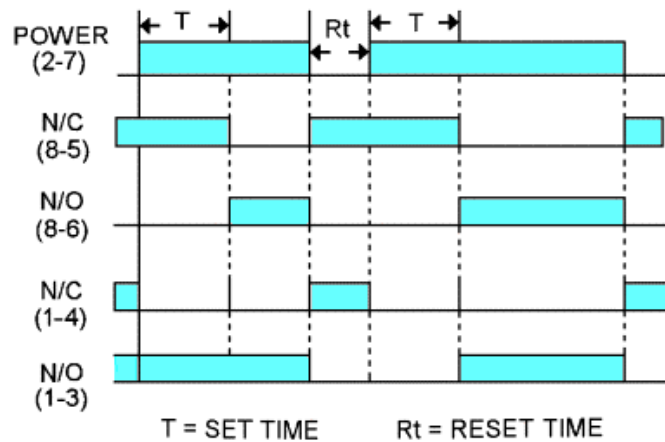
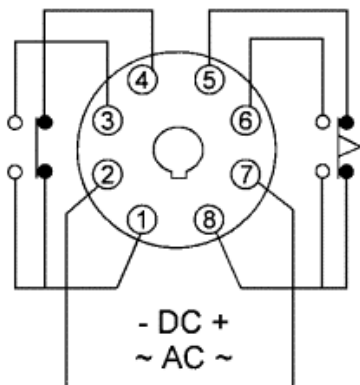
OUTPUT:

DPDT

(Time - limit contact 2C)



Instantaneous Contact + Time-limit Contact



ORDERING CODE

S Y **2** **08**

Rated Voltage

- 1 : 110VAC
- 2 : 220VAC
- 3 : 12VDC
- 4 : 23VAC/DC

Time Range


2-digit

- 01 : 0.99 Sec
- 02 : 9.9 Sec
- 03 : 99 Sec
- 04 : 9.9 Min
- 05 : 99 Min
- 06 : 9.9 Hr
- 07 : 99 Hr

3-digit

- 08 : 9.99 Sec
- 09 : 99.9 Sec
- 10 : 999 Sec
- 11 : 99.9 Min
- 12 : 999 Min
- 13 : 99.9 Hr
- 14 : 9M59S
- 15 : 9H59M

HIGH PRECISION DIGITAL COUNTER

Model No.		JSK-2D 2 DIGITAL COUNTER	JSK-3D 3 DIGITAL COUNTER
Classification			
Appearance			
Dimensions		FIG. 5	
Mounting		Flush mounting: Socket base P3G08 or US08	
Features		Error-free digital setting and LED display power off reset or Auto reset 0.5S (upon customer's request) External connector: Could be proximity sensor or photoelectric sensor	
Input		Counting speed: 30 cps max Counting input: By short-circuiting Counting input is effective 0.2S after power on	
Output Capacity 7A		SPDT	
Rated Voltage		50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC, (Range: 85% - 110%)	
LIFE	Mechanical	10,000,000 Times	
	Electrical AC220VPF=1	500,000 Times	
ACCURACY	Repeat	0	
	Setting	0	
	Voltage	0	
	Temperature	0	
Reset time		0.1 Sec Max	
Ambient temp. & Humidity		-10~55Deg.C, 85% Max	

CONNECTION DIAGRAM & TIMING CHART

ORDERING CODE

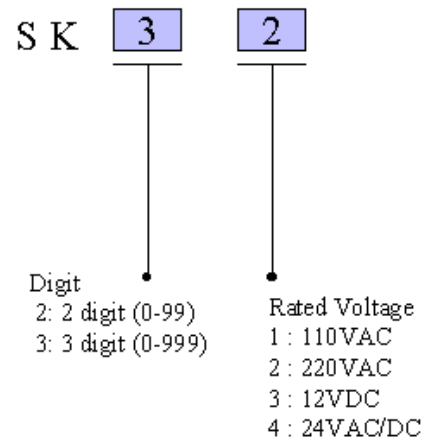
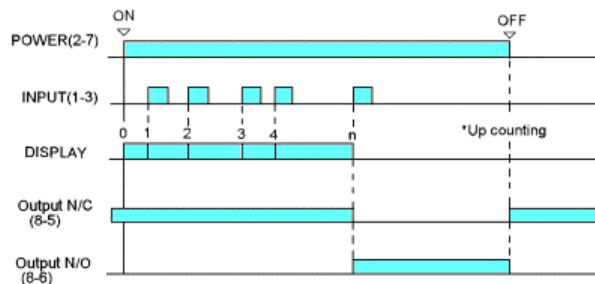
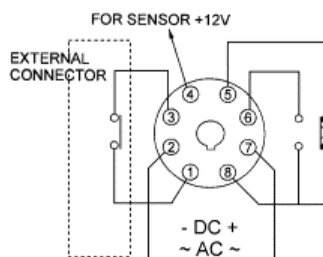
OUTPUT : SPDT (Delay contact 1C)

INPUT :




1) Contact pin#1 & pin#3

2) Connected with proximity sensor or photoelectric sensor :

NPN TYPE ----- + --> Connected to pin#4
Proximity sensor or ----- OUTPUT --> Connected to pin#3
Photoelectric sensor ----- - --> Connected to pin#1

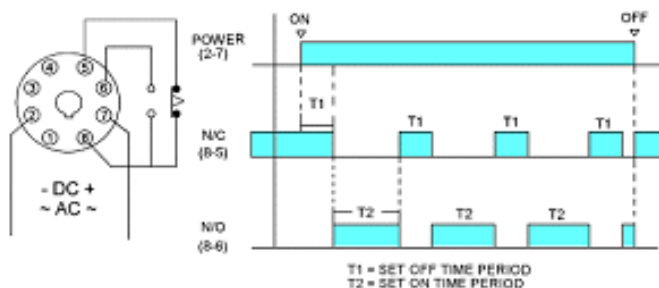


TWIN RECYCLING TIMER

Model No.		CATDV		
Classification		CATDV-N	CATDV-Y	CATDV-E
Appearance				
Dimensions		FIG. 4	FIG. 5	Din size 48*48mm FIG. 1
Surface mounting		Socket base 8PFA	-	Socket base P2CF08
Flush mounting		-	Socket base P3G08 or US08	Socket base P3G08 (with 48*48 adapter)
Features		OFF-ON time period adjustable separately and recycling operation		
Output Capacity 7A		SPDT : TIME-LIMIT CONTACTS		
Time Range		OFFxON 6Sx6S 6Sx60S 60Sx6S 60Sx60S 6Mx6M 6Mx60M 30Mx30M 60Mx60M 6Mx6S 6Sx6M Longest time : 24Hour (upon customers' request)		
Rated Voltage		50/60HZ 12VAC/DC, 24VAC/DC, 48VAC/DC, 110VAC, 220VAC (Range : 85% - 110%) CATDE-E : Multi range selectable by dip switch		
LIFE	Mechanical	10,000,000 Times		
	Electrical AC220VPF=1	500,000 Times		
ACCURACY	Repeat	+/- 0.2% Max		
	Setting	+/- 5% Max		
	Voltage	+/- 0.5% Max		
	Temperature	+/- 2% Max		
Reset time		Reset time		
Ambient temp. & Humidity		-10~55Deg.C , 85% Max		

CONNECTION DIAGRAM & TIMING CHART

OUTPUT: SPDT (Time-limit contact 1C)





ORDERING CODE

T	N	1	02	06
N: Surface mounting				
Y: Flush mounting				
E: Din size 48*48mm				
Rated Voltage				
1: 110VAC				
2: 220VAC				
5: 12VDC				
6: 24VAC/DC				
Time Range (OFF) X (ON)				
01: 1.2Sec	01: 1.2Sec	08: 6Min	08: 6Min	
02: 3Sec	02: 3Sec	09: 12Min	09: 12Min	
03: 6Sec	03: 6Sec	10: 30Min	10: 30Min	
04: 12Sec	04: 12Sec	11: 60Min	11: 60Min	
05: 30Sec	05: 30Sec	12: 3Hr	12: 3Hr	
06: 60Sec	06: 60Sec	13: 6Hr	13: 6Hr	
07: 180Sec	07: 180Sec	14: 12Hr	14: 12Hr	
		15: 24Hr	15: 24Hr	



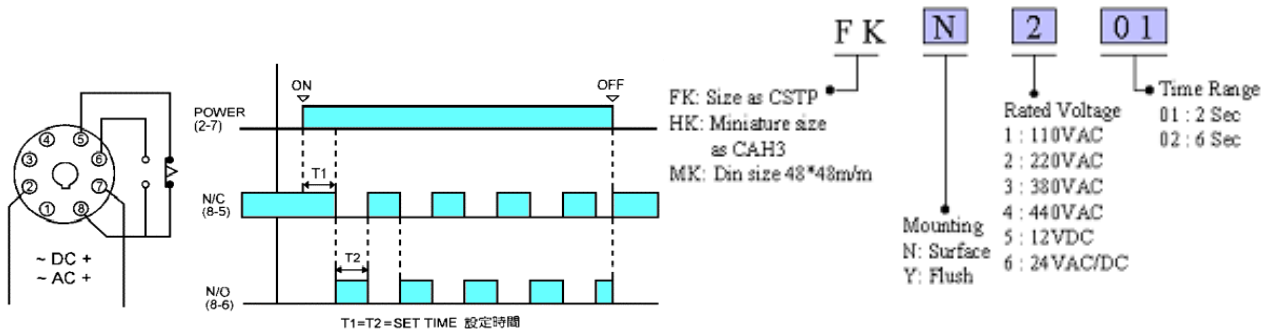
SYMMETRICAL RECYCLING TIMER

Model No.		JFK	JHK
Classification			
Appearance			
Dimensions		FIG. 4	FIG. 2
Surface mounting		Socket base 8PFA	Socket base PF085A
Features		OFF-ON equally recycling operation (OFF time period first) Recycling time is adjustable	
Output Capacity 7A		SPDT(1 delay contact)	
Time range		Standard : 2S, 6S	
Rated Voltage Range : 85% ~110%		50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC, 380VAC, 415VAC, 440VAC	
LIFE	Mechanical	10,000,000 Times	
	Electrical AC220VPF=1	500,000 Times	
ACCURACY	Repeat	+/- 0.2% Max	
	Setting	+/- 5% Max	
	Voltage	+/- 0.5% Max	
	Temperature	+/- 2% Max	
Reset time		0.1 Sec Max	
Ambient temp. & Humidity		-10~55Deg.C , 85% Max	

CONNECTION DIAGRAM & TIMING CHART


ORDERING

OUTPUT : SPDT (Delay contact 1C)



*48*48 adapter D-48Y should be ordered separately

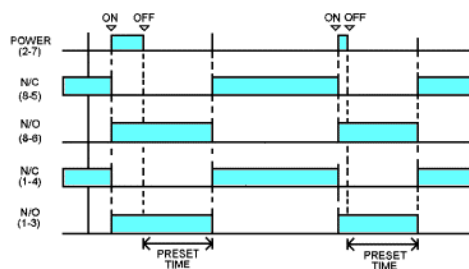
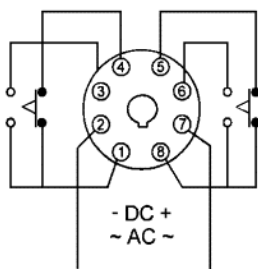
POWER OFF-DELAY TIMER

Model No.		JTF-N	JTF-E
Classification			
Appearance			
Dimensions		FIG. 4	Din size 48*48mm. Refer to FIG. 1
Surface mounting		Socket base 8PFA	Socket base P2CF08
Flush mounting		-	Socket base P3G08 with 48*48 adapter
Features		Selectable time ranges from 0.6sec to 6min can be adjusted.	
Output Capacity 7A		DPDT	
Time range		6 SEC, 12 SEC, 30 SEC, 60SEC, 6MIN	
Rated Voltage		50/60HZ 12VDC, 24VAC/DC, 110VAC, 220VAC, 380VAC, 415VAC, 440VAC (Range : 85~110%)	
LIFE	Mechanical	10,000,000 Times	
	Electrical AC220VPF=1	500,000 Times	
ACCURACY	Repeat	+/- 0.2% Max	
	Setting	+/- 5% Max	
	Voltage	+/- 0.5% Max	
	Temperature	+/- 2% Max	
Reset time		0.1 Sec Max	
Ambient temp. & Humidity		-10~55Deg.C , 85% Max	

CONNECTION DIAGRAM & TIMING CHART

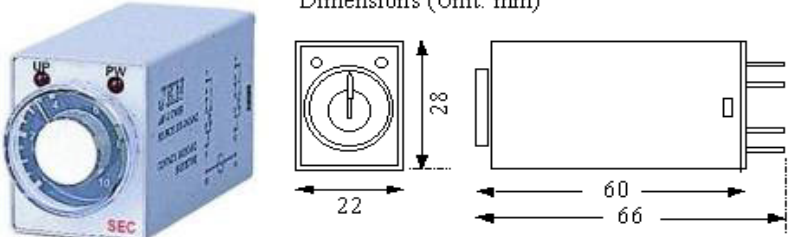
ORDERING CODE

OUTPUT : CONTACT 2C

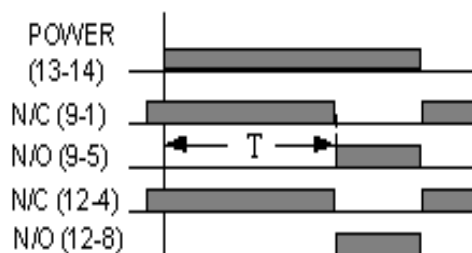


T F **N** **1** **05**
 *50 size
 1 size 48*48mm/m
 Rated Voltage
 1 : 110VAC
 2 : 220VAC
 3 : 380VAC
 4 : 440VAC
 5 : 12VDC
 6 : 24VAC/DC
 Time Range
 03: 6 Sec
 04: 12 Sec
 05: 30 Sec
 06: 60 Sec
 07: 6 Min

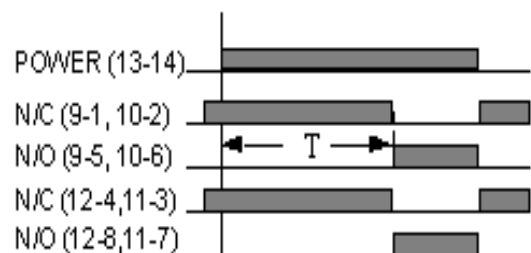
SUBMINIATURE ON DELAY TIMER

Model No.		JMY-2	JMY-4
Classification			
Appearance			
Output contacts		2 FORM C	4 FORM C
Contacts capacity		5A /250VAC	
Rated frequency & Voltage		50/60HZ, DC 12V, DC 24V, DC 48V, AC 110V, AC 220~240V (OPERATING VOLTAGE RANGE: 85~110%)	
Rated time range		1S, 3S, 6S, 10S, 30S, 60S, 3M, 6M, 10M, 30M, 60M, 10HR	
Mounting (Surface type)		WITH SOCKET PYF-08A	WITH SOCKET PYF-14A
LIFE	Mechanical	10,000,000 Times	
	Electrical AC220VPF=1	500,000 Times	
ACCURACY	Repeat	+/- 0.2% Max	
	Setting	+/- 5% Max	
	Voltage	+/- 0.5% Max	
	Temperature	+/- 2% Max	
Reset time		0.1 Sec Max	
Ambient temp. & Humidity		-10~55Deg.C , 85% Max	

CONNECTION DIAGRAM & TIMING CHART




JMY-2



JMY-4

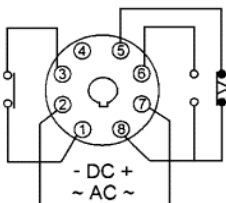
START-DELAY TIMER

Classification		Model No.	TRD-N
Appearance			
Dimensions		FIG. 4	
Surface mounting		SOCKET BASE 8PFA	
Features		Special for Star-Delta motor starting circuit. Time interval (standard: 0.2 sec) when star connection transfers to delta connection.	
Output Capacity 7A		1A1C (1 instantaneous contact + 1 delay contact) Time-limit contact : SPST-N/O (delta circuit), SPST-N/C (star circuit) Instantaneous contact : SPST-N/O (Maintenance circuit)	
Star-delta change time		Standard : 0.2SEC 0.1~0.6SEC(UPON CUSTOMER'S REQUEST)	
Time range		standard : 30 SEC, 60 SEC	
Rated Voltage		50/60HZ 24VAC/DC, 110VAC, 220VAC, 380VAC, 415VAC, 440VAC (Range : 85% ~110%)	
LIFE	Mechanical	10,000,000 Times	
	Electrical AC220VPF=1	500,000 Times	
ACCURACY	Repeat	+/- 0.2% Max	
	Setting	+/- 5% Max	
	Voltage	+/- 0.5% Max	
	Temperature	+/- 2% Max	
Reset time		0.1 Sec Max	
Ambient temp. & Humidity		-10~55Deg.C , 85% Max	

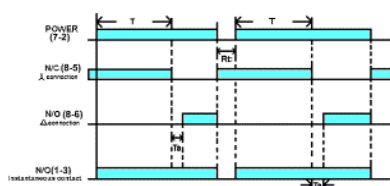
CONNECTOR DIAGRAM & TIMING CHART

ORDERING CODE

OUTPUT:
INSTANTANEOUS CONTACT
+ DELAY CONTACT 1C



T = Setting time of star connection
Rt = Reset time
Ta: Star-delta transfer time (standard interval : 0.2 S)
0.1S ~ 0.6S (customer's request)



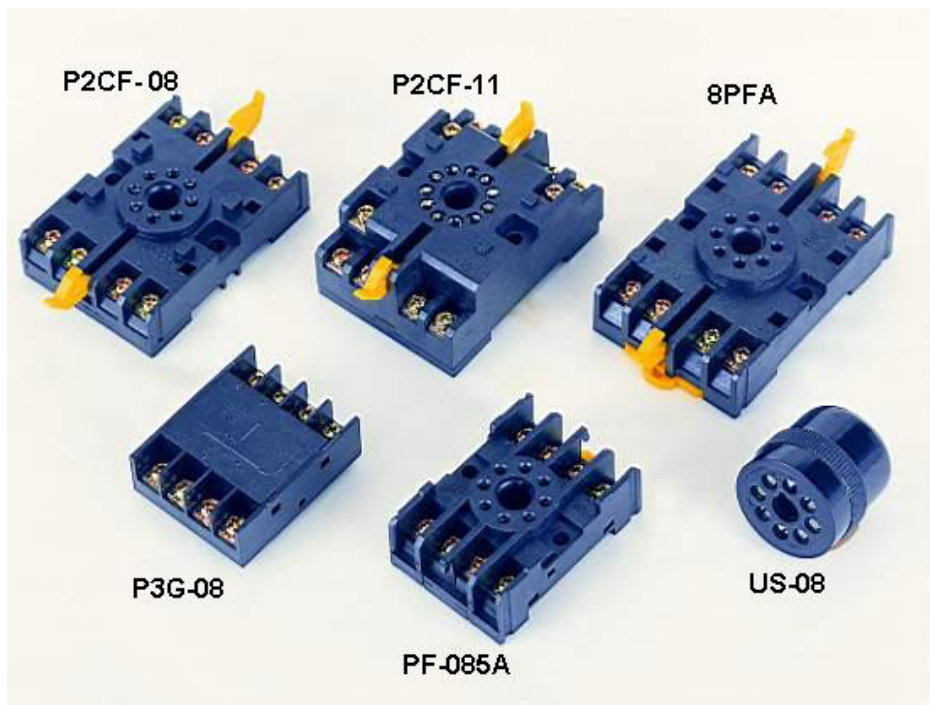
R D **N** **1** **05**

N: 62*50mm size

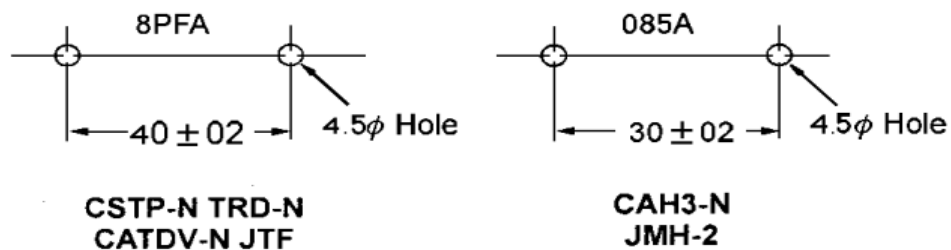
Rated Voltage
1: 110VAC
2: 220VAC
3: 380VAC
4: 440VAC
5: 24VAC/DC

Time range
05:30Sec
06:60Sec

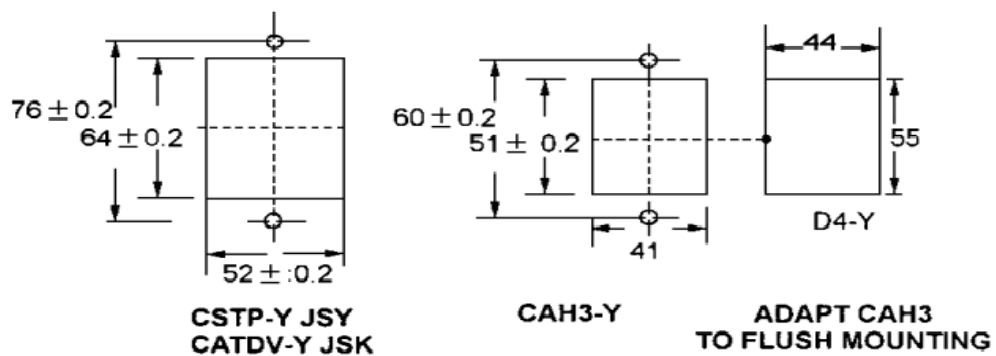
SOCKETS OF TIMER



SURFACE MOUNTING



FLUSH MOUNTING



DIMENSIONS OF TIMER

FIG.1

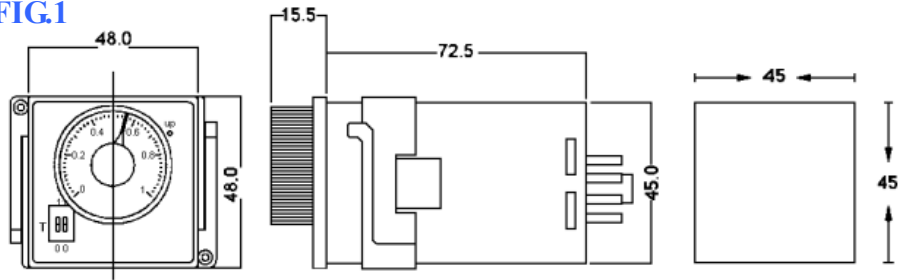


FIG.2

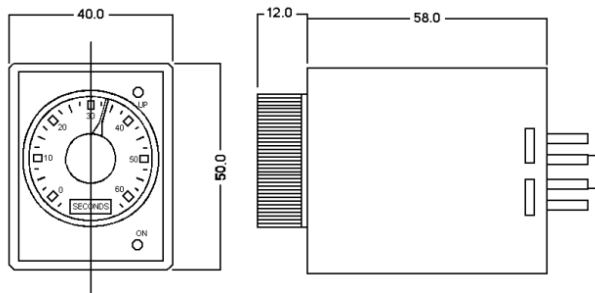


FIG.3

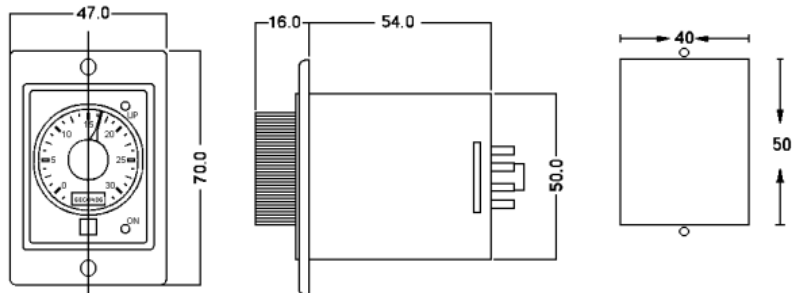


FIG.4

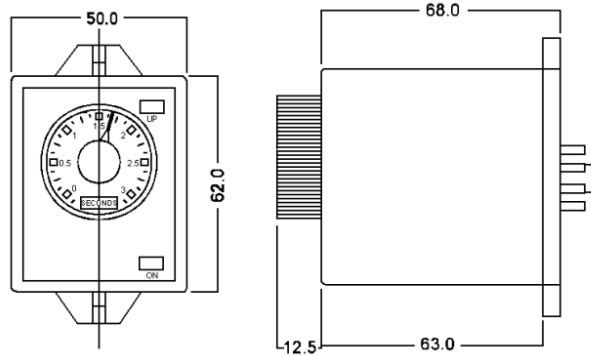


FIG.5

