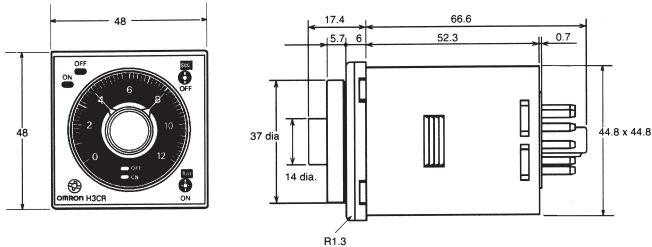
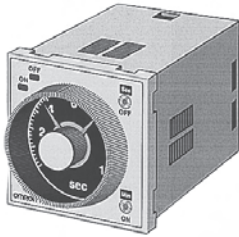


# OMRON®



## DIN 48 × 48-MM SOLID-STATE TWIN TIMERS

### FEATURES:

- Wide power supply ranges of 100 to 240 VAC and 48 to 125 VDC respectively.
- Independent ON- and OFF-time settings. Furthermore, combinations of long ON- or OFF-time and short OFF- or ON-time settings are possible.
- Fourteen time ranges from 0.05 s to 30 h or from 1.2 s to 300 h depending on the model to be used.
- Models with a flicker ON start or flicker OFF start are available.
- Easy sequence checks through instantaneous outputs for a zero set value at any time range.
- Approved by UL and CSA.
- Only 80 mm long when panel-mounted with a socket.
- 11-pin and 8-pin models are available.

### H3CR-F SOLID STATE TWIN TIMER

Cat. No.	Description	Net Price
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#### H3CR-F—FLICKER OFF START

H3CR-F AC/DC 24	Dial timer, repeat cycle, 0.05S-30H, 11 PIN	\$108.00
H3CR-F AC100/240	Dial timer, repeat cycle, 0.05S-30H, 11 PIN	108.00
H3CR-F DC12	Dial timer, repeat cycle, 0.05S-30H, 11 PIN	108.00
H3CR-F-300 AC/DC24	Dial timer, repeat cycle, 1.2S-300H, 11 PIN	108.00
H3CR-F-300 AC100/240	Dial timer, repeat cycle, 1.2S-300H, 11 PIN	108.00
H3CR-F8 AC/DC24	Dial timer, repeat cycle, 0.05S-30H, 8 PIN	108.00
H3CR-F8 AC100/240	Dial timer, repeat cycle, 0.05S-30H, 8 PIN	108.00
H3CR-F8 DC12	Dial timer, repeat cycle, 0.05S-30H, 8 PIN	108.00
H3CR-F8-300 AC100/240	Dial timer, repeat cycle, 1.2S-300H, 8 PIN	108.00

#### H3CR-F—FLICKER ON START

H3CR-FN AC100/240	Dial timer, repeat cycle, 0.05S-30H, 11 PIN	108.00
H3CR-F8N AC/DC24	Dial timer, repeat cycle, 0.05S-30H, 8 PIN	108.00
H3CR-F8N AC100/240	Dial timer, repeat cycle, 0.05S-30H, 8 PIN	108.00
H3CR-F8N DC12	Dial timer, repeat cycle, 0.05S-30H, 8 PIN	108.00
H3CR-F8N-300 AC100/240	Dial timer, repeat cycle, 1.2S-300H, 8 PIN	108.00

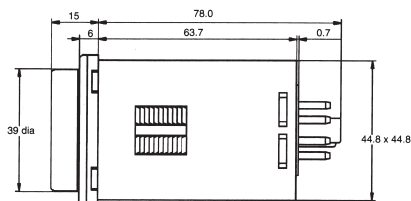
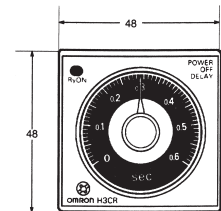
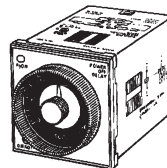
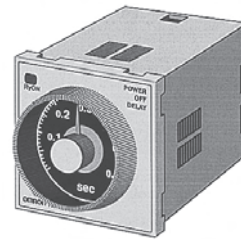


## H3CR MULTIFUNCTIONAL TIMER WITH MANY TIME RANGES AND OPERATING MODES AND A WIDE AC POWER SUPPLY RANGE

### FEATURES:

- 48 x 48-mm DIN size.
- A wide AC power supply range (100 to 240 VAC) reduces the number of timer models kept in stock.
- Handles a wide range of applications through six operating modes.
- Enables easy sequence checks through instantaneous outputs for a zero set value.
- Only 80 mm long when panel-mounted with a Socket.

Cat. No.	Description	Net Price
H3CR-A AC24-48/DC12-48	Dial Timer Multimode 24 VDC/AC, Relay Output	\$84.00
H3CR-A AC100-240/DC100-125	Dial Timer Multimode 100/240VAC, Relay Output	84.00
H3CR-A DC12	Dial Timer Multimode 12VDC, Relay Output	84.00
H3CR-A8 AC24-48/DC12-48	Dial Timer, On-Delay 24VDC/AC, Relay Output	81.00
H3CR0-A8 AC100-240/DC100-125	Dial Timer, On-Delay 100/240VAC, Relay Output	81.00
H3CR-A8 DC12	Dial Timer, On-Delay 12VDC, Relay Output	81.00



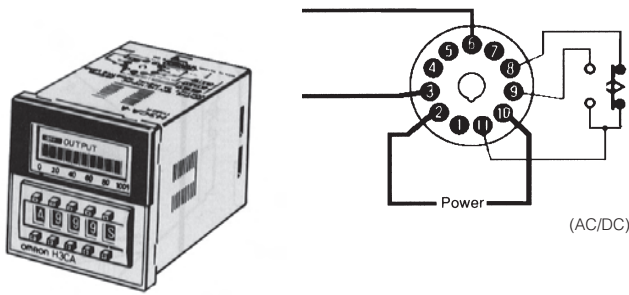
## DIN 48 × 48-MM SOLID-STATE POWER OFF-DELAY TIMER

### FEATURES:

- Long power OFF-delay times; S-series: up to 12 seconds, M-series: up to 12 minutes.
- Models with forced-reset input are available.
- 11-pin and 8-pin models are available.
- Approved by UL and CSA.

### H3CR-H SOLID STATE OFF DELAY TIMER

Cat. No.	Description	Output	Net Price
H3CR-HRL-AC120-S	Dial timer 0.5S-12S, 11 pin	DPDT	\$108.00
H3CR-H8LAC/DC24-M	Dial timer 0.5M-12M, 8 pin	DPDT	108.00
H3CR-H8LAC/DC24-S	Dial timer 0.5S-12S, 8 pin	DPDT	108.00
H3CR-H8L-AC120-M	Dial timer 0.5M-12M, 8 pin	DPDT	108.00
H3CR-H8L-AC120-S	Dial timer 0.5S-12S, 8 pin	DPDT	108.00
H3CR-H8L-AC240-M	Dial timer 0.5M-12M, 8 pin	DPDT	108.00
H3CR-H8L-AC240-S	Dial timer 0.5S-12S, 8 pin	DPDT	108.00
H3CR-H8RL-AC120-M	Dial timer 0.5M-12M, 8 pin	SPDT	108.00
H3CR-H8RL-AC120-S	Dial timer 0.5S-12S, 8 pin	SPDT	108.00



## SOLID-STATE TIMERS H3CA MULTI-FUNCTION DIGITAL-SET TIMER WITH 0.1 SECOND TO 9,990 HOUR TIME RANGE

### FEATURES:

- Eight field-selectable operation modes
- Universal AC/DC supply voltage timers available
- Operations include ON-delay, repeat cycle, signal interval/OFF-delay, signal-OFF delay, interval, cycle and signal ON-delay/Off-delay
- Selectable dry contact start, reset, gate and check inputs expand capabilities
- Time remaining LCD bar graph and LCD output status indicator

### MULTI-FUNCTION, DIGITAL-SET TIMERS

Cat. No.	Operating Voltage	Time Range	Contact Type	Net Price
<b>H3CA-8H-AC100-110-120</b>	100, 110, 120 VAC	0.1S to 9990 HR	3A-SPDT	<b>\$133.00</b>
<b>H3CA-8H-AC24</b>	AC24	0.1S to 9990 HR	3A-SPDT	<b>133.00</b>
<b>H3CA-8H-DC24</b>	DC24	0.1S to 9990 HR	3A-SPDT	<b>133.00</b>
<b>H3CA-8-AC100-110-120</b>	100, 110, 120 VAC	0.1S to 9990HR	3A-DPDT	<b>133.00</b>
<b>H3CA-8-AC24</b>	AC24	0.1S to 9990HR	3A-DPDT	<b>133.00</b>
<b>H3CA-8-DC24</b>	DC24	0.1S to 9990HR	3A-DPDT	<b>133.00</b>
<b>H3CA-A</b>	24 to 240 VAC 12 to 240 VDC	0.1S to 9990 HR	3A-DPDT	<b>158.00</b>

### TIMER ACCESSORIES

Cat. No.	Description	Net Price
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#### PANEL MOUNTING ADAPTERS

<b>Y92F-30</b>	Fits behind panel, ideal for side by side installation. Use P3G sockets	<b>\$8.30</b>
<b>Y92F-70</b>	Installs through panel front: timer face fits bezel, rear of timer clips to adapter. Use P3G sockets. Fits 65-66 mm (2.56-2.59 in) x 52-53 mm (2.04-2.09 in) panel cutout. Charcoal gray face plate measures 88H x 58 W mm (3.46 x 2.28 in).	<b>9.90</b>
<b>Y92F-71</b>	Installs through panel front; timer face fits bezel, rear of timer clips to adapter. Use P3G sockets. Fits 55 x 45 mm (2.17 x 1.77 in) panel cutout. Charcoal gray face plate measures 58 H x 50 W mm (2.28 x 1.97 in). For use with H38 timers only.	<b>8.30</b>

#### TIME SETTING RING

<b>Y92A-Y1</b>	Use one or two lock-in settings	<b>2.90</b>
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#### PROTECTIVE COVER

<b>PFP-50N</b>	DIN Rail, 50cm (1.64 ft) length	<b>9.30</b>
<b>PFP-100N</b>	DIN Rail, 1m (3.28 ft) length	<b>15.60</b>
<b>PFP-M</b>	End Plate	<b>2.00</b>
<b>PFP-S</b>	Spacer	<b>.84</b>

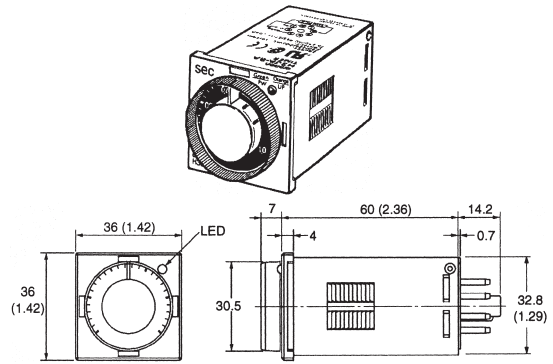
Cat. No.	Description	Net Price
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#### 8-PIN SOCKETS FOR H3BA-8, H3BA-8H, H3BBF-8, H3BH-8, H3BH-8R, 83CA-8, H3CA-8H TIMERS

<b>P2CF-08</b>	Bottom surface or track mounting, top screw terminals	<b>\$9.80</b>
<b>P3G-08</b>	Back mounting, for use with Y92F-30 mounting adapter, bottom screw terminals	<b>14.90</b>

#### 11-PIN SOCKETS FOR H3BA AND H3CA-A TIMERS

<b>P2CF-11</b>	Bottom surface or track mounting, top screw terminals	<b>11.70</b>
<b>P3GA-11</b>	Back mounting, for use with Y92F-30 mounting adapter, bottom screw terminals.	<b>17.10</b>



## H3JA SOLID STATE TIMER

### FEATURES:

- Replacement timer for the H3G series
- Economical, compact, plug-in timer
- Time limit, ON-delay, operation with automatic resetting
- DIN size (36mm x 36mm), fits standard 8-pin sockets
- Wide choice of supply voltages: 24, 100 to 120, 200 to 240VAC, 12 24, VDC
- Dual LED indication for power and output status
- Large transparent setting knob

Cat. No.	Rated Time*	Time-Limit Contact	Operation Resetting System	Net Price
<b>SURFACE, FLUSH, AND DIN TRACK MOUNTING</b>				
<b>H3JA-8A AC100-120</b>	1s, 3s, 5s, 10s, 30s, 60s, 5 min, 10 min, 30 min, 60 min, 3 hrs	SPDT	Time-limit operation/self-resetting	<b>\$38.60</b>
<b>H3JA-8A AC200-240</b>	1s, 3s, 5s, 10s, 30s, 60s, 5 min, 10 min, 30 min, 60 min, 3 hrs	SPDT	Time-limit operation/self-resetting	<b>38.60</b>
<b>H3JA-8A AC24</b>	1s, 3s, 5s, 10s, 30s, 60s, 5 min, 10 min, 30 min, 60 min, 3 hrs	SPDT	Time-limit operation/self-resetting	<b>38.60</b>
<b>H3JA-8A DC12</b>	1s, 3s, 5s, 10s, 30s, 60s, 5 min, 10 min, 30 min, 60 min, 3 hrs	SPDT	Time-limit operation/self-resetting	<b>38.60</b>
<b>H3JA-8A DC24</b>	1s, 3s, 5s, 10s, 30s, 60s, 5 min, 10 min, 30 min, 60 min, 3 hrs	SPDT	Time-limit operation/self-resetting	<b>38.60</b>
<b>H3JA-8C AC100-120</b>	1s, 3s, 5s, 10s, 30s, 60s, 5 min, 10 min, 30 min, 60 min, 3 hrs	DPDT	Time-limit operation/self-resetting	<b>42.60</b>
<b>H3JA-8C AC200-240</b>	1s, 3s, 5s, 10s, 30s, 60s, 5 min, 10 min, 30 min, 60 min, 3 hrs	DPDT	Time-limit operation/self-resetting	<b>42.60</b>
<b>H3JA-8C AC24</b>	1s, 3s, 5s, 10s, 30s, 60s, 5 min, 10 min, 30 min, 60 min, 3 hrs	DPDT	Time-limit operation/self-resetting	<b>42.60</b>
<b>H3JA-8C DC24</b>	1s, 3s, 5s, 10s, 30s, 60s, 5 min, 10 min, 30 min, 60 min, 3 hrs	DPDT	Time-limit operation/self-resetting	<b>42.60</b>

\*Add rated time to the end of the Cat. No., ex = **H3JA-8A AC100-12030S**.

### RECOMMENDED EQUIVALENTS

From H3BA	To	H3CR
H3BA-	USE	H3CR-A-
H3BA-8-	USE	H3CR-A8
H3BA-8H-	USE	H3CR-A8EL

### RECOMMENDED EQUIVALENTS

From H3BF	To	H3CR
H3BF-8-	USE	H3CR-F8

### RECOMMENDED EQUIVALENTS

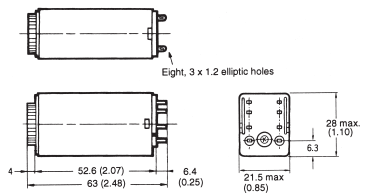
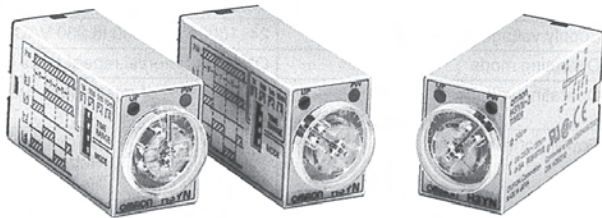
From H3BH	To	H3CR
H3BH-8-	USE	H3CR-H8L
H3BH-8R-	USE	H3CR-H8RL

## ACCESSORIES

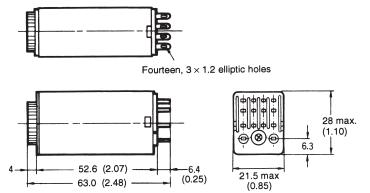
Cat. No.	Description		Net Price
PF083A-E	Sockets	Bottom surface or track mounting, top screw terminals, molded standoff ring	\$7.10
PF085A		Bottom surface or track mounting, top screw terminals	10.10
P3G-08		Back mounting for use with Y92F-31 mounting adapter, bottom screw terminals	14.90
Y92F-31	Panel Mounting Adapter	Fits behind panel. Use P3G-08 socket.	5.50
PFP-50N	Mounting Track	DIN rail, 50 cm (1.64 ft) length	9.30
PFP-100N		DIN rail, 1 m (3.28 ft) length	15.60
PFP-M		End plate	2.00
PFP-S		Spacer	.84

## REPLACEMENT PARTS

Cat. No.	Description	Net Price
Y92H-6	Timer hold-down clips, one pair	\$1.50



H3YN-2/-21 FRONT MOUNTING



H3YN-4/-41 FRONT MOUNTING

### H3YN SOLID-STATE TIMERS MINIATURE TIMER WITH MULTIPLE TIME RANGES AND MULTIPLE OPERATING MODES

**FEATURES:** Minimize inventory. Standard multiple operating models and multiple time ranges. 4PDT or DPDT control output. LED power-ON and time-UP indicators. Sockets, hold-down clips and mounting accessories may be ordered separately.

Cat. No.	Supply Voltage	Time Range	Contact Type	Net Price
H3YN-2-AC120	120VAC	Short (0.1 s to 10 min)	DPDT 5A	\$66.00
H3YN-2-AC24	24VAC			66.00
H3YN-2-DC110	110VDC	Long (0.1 min to 10 hr)	DPDT 5A	66.00
H3YN-2-DC12	12VDC			66.00
H3YN-2-DC24	24VDC	Short (0.1 s to 10 min)	4PDT 3A	66.00
H3YN-21-AC120	120VAC			66.00
H3YN-21-AC24	24VAC			66.00
H3YN-21-DC110	110VDC			66.00
H3YN-21-DC12	12VDC			66.00
H3YN-21-DC24	24VDC			66.00
H3YN-4-AC120	120VAC	Long (0.1 min to 10 hr)	4PDT 3A	72.00
H3YN-4-AC24	24VAC			72.00
H3YN-4-DC110	110VDC			72.00
H3YN-4-DC12	12VDC			72.00
H3YN-4-DC24	24VDC			72.00
H3YN-41-AC120	120VAC			Long (0.1 min to 10 hr)
H3YN-41-AC24	24VAC	72.00		
H3YN-41-DC12	12VDC	72.00		
H3YN-41-DC24	24VDC	72.00		

## ACCESSORIES

### CONNECTING SOCKET FOR H3YN TIMERS

Cat. No.	Use With Solid State Timer	Net Price
<b>TRACK MOUNTING/FRONT CONNECTING SOCKET</b>		
PYF08A	H3YN-2/-21	\$8.01
PYF14A	H3YN-4/-41	12.40

### BACK CONNECTING SOCKET, SOLDER TERMINAL

PY08	H3YN-2/-21	2.50
PY14	H3YN-4/-41	2.90

### BACK CONNECTING SOCKET, WIRE-WRAP TERMINAL

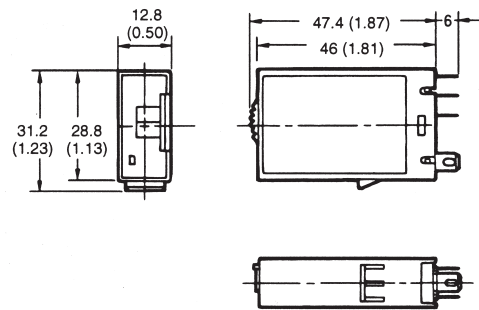
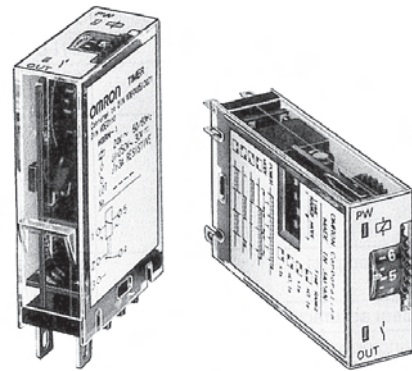
PY08-QN	H3YN-2/-21	7.60
PY14-QN	H3YN-4/-41	9.80

### BACK CONNECTING SOCKET, PC TERMINAL

PY08-02	H3YN-2/-21	2.50
PY14-02	H3YN-4/-41	2.90

### HOLD-DOWNCLIPS FOR CONNECTING SOCKETS ABOVE

Cat. No.	Applicable Socket	Net Price
Y92H-3	PYF08A-E, PYF08A-N, PYF14A-E, PYF14A-N (Pair)	\$1.50
Y92H-4	PY08, PY08QN(2), PY08-02, PY14, PY14QN(2), PY14-02	1.50



### H3RN SOLID-STATE TIMERS ULTRA-SLIM TIMER FOR G2R RELAY SOCKET

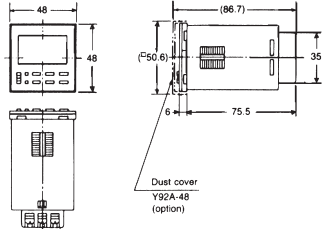
**FEATURES:** Multiple operating modes, DIP switch selectable, ON-delay, interval. Repeat cycle ON-start/OFF-start. Standard multiple time ranges: Short range (0.15 to 10 min.), Long range (0.1 min to 10 hrs.). Pin configuration compatible with G2R Relay and mounts to the P2R/P2RF Sockets.

Cat. No.	Supply Voltage	Time Range	Contact Type	Net Price
H3RN-1-AC24	24VAC	Short (0.1 s to 10 min.)	SPDT 3A	\$66.00
H3RN-1-DC24	24VDC			66.00
H3RN-1-DC12	12VDC			66.00
H3RN-11-AC24	24VAC	Long (0.1 min to 10 hr.)	SPDT 3A	66.00
H3RN-11-DC12	12VDC			66.00
H3RN-11-DC24	24VDC			66.00
H3RN-2-AC24	24VAC	Short (0.1 s to 10 min.)	DPST-NO 3A	66.00
H3RN-2-DC12	12VDC			66.00
H3RN-2-DC24	24VDC			66.00
H3RN-21-AC24	24VAC	Long (0.1 min to 10 hr)	DPST-NO 3A	66.00
H3RN-21-DC12	12VDC			66.00
H3RN-21-DC24	24VDC			66.00

## ACCESSORIES

### CONNECTING SOCKET FOR H3RN TIMERS

Cat. No.	Use With Solid State Timer	Net Price
<b>TRACK MOUNTING/FRONT CONNECTING SOCKET</b>		
P2RF-05-E	H3RN-1/-11	\$6.10
P2RF-08-E	H3RN-2/-21	10.50



DIMENSION  
(ALL UNITS IN MM)  
H5F-B  
(FLUSH MOUNTING TYPE)

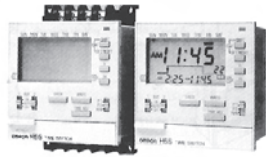
### H5F DAILY TIMER FOR PRECISE TIMER CONTROL

#### FEATURES:

- Precise control of both regular and special (e.g., half-day operation) ON/OFF times.
- Can be set for timed or pulsed operation and for multiple-day operation
- Two mounting types available: flush or track mounting.
- Timing chart displayed for at-a-glance confirmation.
- DIN-sized 48 x 48 mm.
- Pulse duration from 1 s to 59 m.

### DIGITAL DAILY TIME CLOCK

Cat. No.	Timing Function	Contact Type	Supply Voltage	Net Price
H5F-B	On/Off Daily Operation	15A-SPST-NO	100 to 240 VAC	\$185.00
H5F-KB	On/Off Daily Operation	15A-SPST-NO	100 to 240 VAC	185.00



### H5S TIMER PROVIDES PROMPTED PROGRAMMING, FLEXIBILITY IN PROGRAMS WITHIN THE WEEK

#### FEATURES:

- AM/PM display
- 24 program steps with quartz accuracy.
- A different program possible each day. Backup battery protects memory for 5 years.
- Field-adjustable ON/OFF cycle and pulse output.
- Easy to use prompted programming
- Pulse duration from 1 s to 59 m
- Protective cover and other accessories may be ordered separately

### DIGITAL WEEKLY TIME CLOCKS

Cat. No.	Timing Function	Contact Type	Supply Voltage	Net Price
H5S-B	On/Off, Cycle	15A-SPST-N.O.X2	100 to 240 VAC	\$287.00
H5S-FB	Operations up to one week	15A-SPST-N.O.X2	100 to 240 VAC	287.00

### ACCESSORIES

Cat. No.	Description	Net Price
Y92A-72C	Hard Plastic Cover	\$9.90
Y92F-90	Track Mounting Adapter for H5S-FB	9.90
PFP-50N	Mounting Track 50 cm (1.64 ft) length	9.30
PFP-100N	1 m (3.28 ft) length	15.60
PFP-M	End plate	2.00



### H5CN 1/16 DIN, QUARTZ TIMER WITH FOUR-DIGIT LED DISPLAY

#### FEATURES:

- Five wide ranges to choose from
- Wide-range AC or DC supply voltages
- Elapsed time (UP) or time remaining (DOWN) display available
- Selectable no-voltage reset and gate inputs expand capabilities
- Memory protection circuit available on AC models; order back-up battery separately from accessories
- Easy-to-read 8 mm-high LED display
- Panel mounting adapter, sockets, and accessories may be ordered separately

Cat. No.	Timing Function	Display Type	Net Price
H5CN-XAN-AC100/240	ON-Delay	Elapsed time (up)	\$231.00
H5CN-XBN-AC100/240	ON-Delay	Elapsed time (up)	231.00
H5CN-XCN-AC100/240	ON-Delay	Elapsed time (up)	231.00
H5CN-YAN-AC100/240	ON-Delay	Time Remaining (down)	231.00
H5CN-YBN-AC100/240	ON-Delay	Time Remaining (down)	231.00
H5CN-YCN-AC100/240	ON-Delay	Time Remaining (down)	231.00
H5CN-YDN-AC100/240	ON-Delay	Time Remaining (down)	231.00

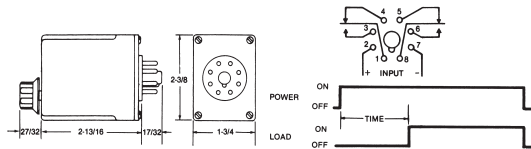
Terminal Form = 8-pin Round Socket, Contact Type = SPDT Relay

## TIMER SOCKETS

### OMRON TIMER SOCKET SELECTION GUIDE

Cat. No.	Description	Net Price
<b>SOCKETS FOR H3G-8A, H3G-8C</b>		
PF083A-E	Track Mounting, Top Screw terminals (Molded stand-off ring)	\$7.10
PF085A	Track Mounting, Top Screw terminals	10.10
<b>SOCKETS FOR H3Y2</b>		
PYF08A-E	Track Mounting, Top Screw terminals	6.10
PY08	Back Mounting, Solder Terminals	2.50
PY08-0	Back Mounting, PCB Terminals	2.50
<b>SOCKETS FOR H3Y-4</b>		
PYF14A-E	Track Mounting, Top Screw terminals	9.80
PY14	Back Mounting, Solder Terminals	2.90
PY14-0	Back Mounting, PCB Terminals	2.90
<b>8-PIN SOCKETS FOR H3BF-8, H3BH-8, H3BH-8R, H3CA-8, H3CA-8H, H3C4-A8, H3CR-H8RL, H3CR-H8L, H3CR-F8, H3CR-F8N, H3CR-F8300, H3CR-</b>		
P2CF-08	Bottom surface or track mounting, top screw terminals	9.80
P3G-08	Back mounting, for use with Y92F-30 mounting adapter, bottom screw terminals	14.90
<b>11-PIN SOCKETS FOR H3CA-A, 83CR-A, H3CR-F, H3CR-FN TIMERS</b>		
P2CF-11	Bottom surface or track mounting, top screw terminals	11.70
P3GA-11	Back mounting, for use with Y92F-30 mounting adapter, bottom screw terminals	17.10

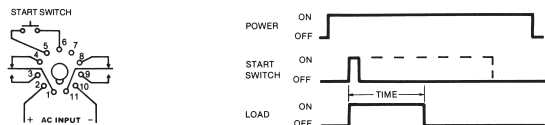
# NCC



### NCC SOLID STATE TIMERS SERIES T1

These units are designed for "ON" delay operation. Upon application of power to the input terminals, the time delay cycle starts. At the end of the preset time delay, the output contacts transfer either connecting or disconnecting the load. Reset is accomplished by the removal of the input power. Various time ranges are available from .05 to 7200 seconds. Time delay is adjustable by means of the graduated knob on top of the unit. Repeat accuracy is  $\pm 2\%$  with constant voltage, temperature and recycle time. Reset time is a fast 60 milliseconds. Power consumption is 3 watts. Operating temperature range is from  $-10^{\circ}\text{F}$  to  $+130^{\circ}\text{F}$ . Superior transient protection, plug in construction and on false operation are a few of the other features of these low cost reliable solid state timers. **Input voltage:** 12, 24 VDC and 24, 120 VAC. **Output:** DPDT Relay, 10 amp. contacts. Plug type: 8 Pin Octal.

Cat. No.	Time Range Seconds	Net Price
<b>T1 SERIES "ON" DELAY, 120 VAC</b>		
T1K-00002-461	.05 to 2	\$63.41
T1K-00010-461	.1 to 10	63.41
T1K-00030-461	.3 to 30	63.41
T1K-00060-461	.6 to 60	63.41
T1K-00120-461	1.2 to 120	63.14
T1K-00180-461	1.8 to 180	63.41
T1K-00300-461	3 to 300	63.41
T1K-00600-461	6 to 600	63.41
<b>T1 SERIES "ON" DELAY, 12 VDC</b>		
T1K-00010-466	.1 to 10	63.41
T1K-00120-466	1.2 to 120	63.41
<b>T1 SERIES "ON" DELAY, 24 VDC</b>		
T1K-00030-462	.3 to 30	63.41
T1K-00300-462	3 to 300	63.41
<b>T1 SERIES "ON" DELAY, 24 VAC</b>		
T1K-00010-467	.1 to 10	63.41



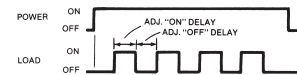
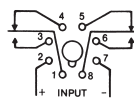
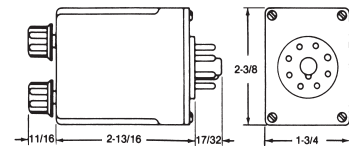
### NCC SOLID STATE TIMERS SERIES T2

These units are designed for "One-shot" operation. Power is applied to the timer at all times. Upon a momentary or maintained closure of a normally open control switch the output contacts transfer and the time delay starts. At the end of the preset time delay, the output contacts transfer back to their original position and the unit is ready for a new cycle. Note: Turning power on and off should not be

used to initiate timing. Various time ranges are available from .05 to 3600 seconds. Time delay adjustment is by means of a graduated knob on the top of the unit. Repeat accuracy is  $\pm 2\%$  with constant voltage, temperature and recycle time. Power consumption 5 watts. Operating temperature range  $-10^{\circ}\text{F}$  to  $+130^{\circ}\text{F}$ . As with the T1 these units feature superior transient protection, plug-in construction and will not false operate. **Input voltage:** 120 VAC. **Output:** DPDT Relay, 10 amp contacts. Plug type: 11 Pin Octal.

Cat. No.	Time Range Seconds	Net Price
<b>T2 SERIES "ONE SHOT" OPERATION, 120 VAC</b>		
T2K-00002-461	.05 to 2	\$70.09
T2K-00005-461	.05 to 5	70.09
T2K-00010-461	.1 to 10	70.09
T2K-00030-461	.3 to 30	70.09
T2K-00060-461	.6 to 60	70.09
T2K-00300-461	3 to 300	70.09
T2K-00600-461	6 to 600	70.09
T2K-01800-461	18 to 1800	70.09
T2K-03600-461	36 to 3600	70.09

**NOTE:** Other voltages and time ranges are available on special order.

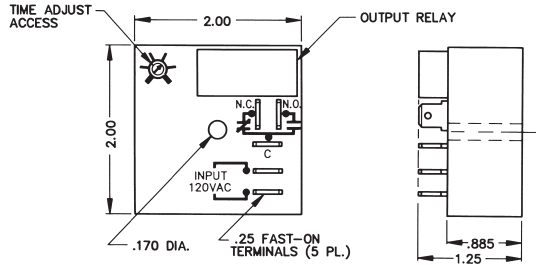
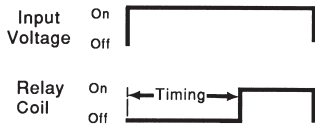


### NCC SOLID STATE TIMER SERIES C

These units are designed for "Repeat cycle" operation. Upon application of power to the input terminals, the "OFF" delay is initiated. At the end of the "OFF" preset time, contacts transfer from the "OFF" to the "ON" position and the "ON" delay starts. At the end of the "ON" preset time the contacts transfer from the "ON" to the "OFF" position and a new cycle begins. The "ON" to the "OFF" cycles will continue to alternate until power is removed. Time delay ranges from .05 to 7200 seconds. Time delay adjustment is by means of a knob on top of the unit. Repeat accuracy  $\pm 2\%$ . Operating temperature ranges  $-10^{\circ}\text{F}$  to  $+130^{\circ}\text{F}$ . These units also have standard features such as superior transient protection, plug-in construction and low cost. **Input voltage:** 12, 24 VDC and 24, 120 VAC. **Output:** DPDT Relay, 10 amp contacts. Plug type: 8 Pin Octal.

Cat. No.	Time Range Seconds	Net Price
<b>C SERIES "REPEAT CYCLE" OPERATION, 120 VAC</b>		
CKK-00002-461	.05 to 2 off .05 to 2 on	\$96.79
CKK-00005-461	.05 to 5 off .05 to 5 on	96.79
CKK-00010-461	.1 to 10 off .1 to 10 on	96.79
CKK-00030-461	.3 to 30 off .3 to 30 on	96.79
CKK-00060-461	.6 to 60 off .6 to 60 on	96.79
CKK-00120-461	1.2 to 120 off 1.2 to 120 on	96.79
CKK-00180-461	1.8 to 180 off 1.8 to 180 on	96.79
CKK-00300-461	3 to 300 off 3 to 300 on	96.79
CKK-00600-461	6 to 600 off 6 to 600 on	96.79
CKK-01800-461	18 to 1800 off 18 to 1800 on	96.79
CKK-03600-461	36 to 3600 off 36 to 3600 on	96.79
CKK-07200-461	72 to 7200 off 72 to 7200 on	103.47

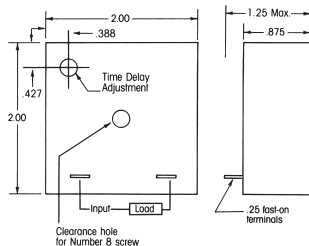
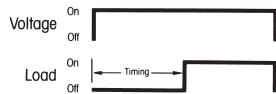
**NOTE:** Other time ranges are available on special order.  
**Replace**—461 with 466 for 12 VDC, 462 for 24 VDC, 467 for 24 VAC.



## NCC SOLID STATE TIMERS SERIES Q1T DELAY ON MAKE (8 AMP OUTPUT RELAY)

These units are designed for "ON" delay operation. Upon application of voltage to the input terminals, the time delay is initiated. At the end of the preset time delay, the relay coil is energized and the contacts transfer. Reset is accomplished by removing voltage from the input terminals. **FEATURES:** 8 amp load handling capability. Time delays to 10 hours. Solid-state digital timing. 20:1 maximum to minimum timing ratio. Sealed SPDT output contacts. Trimpot on-board with sealed cermet element. Epoxy encapsulated. Compact size. Transient protected. Flame-retardant and solvent-resistant polyester thermoplastic housing. Life: 10,000,000 cycles. Reset time: .25 sec. max. by removal of the input voltage. Repeatability: 10.5% max. (0.25% typical) under constant conditions. Power consumption: 3.5 VA max. **Input voltage:** 120 VAC  $\pm 10\%$ . **Output:** Relay, SPDT (1 form C). Plug type: Terminal. Mounting: Surface mount with one #8 screw. Operating temperature:  $-40^{\circ}\text{F}$  to  $70^{\circ}\text{F}$ .

Cat. No.	Time Range	Net Price
<b>Q1T SERIES "ON" DELAY 120 VAC</b>		
Q1T-00005-341	25 to 5 sec.	\$41.72
Q1T-00010-341	5 to 10 sec.	41.72
Q1T-00060-341	3 to 60 sec.	41.72
Q1T-00300-341	15 to 300 sec.	41.72
Q1T-00600-341	30 to 600 sec.	41.72
Q1T-03600-341	3 to 60 min.	41.72

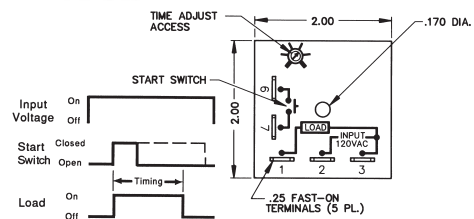
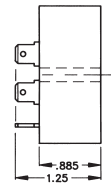


## NCC SOLID STATE TIMERS SERIES Q1T DELAY ON MAKE (1 AMP MAX. SERIES LOAD)

These units are designed for "ON" delay operation. Upon application of input voltage, the time delay starts. At the end of the time delay the load is energized. Reset is accomplished by removing input power. **FEATURES:** Time delays to 300 seconds. 20:1 max. to min. timing ratio. Flame-retardant and solvent resistant filled polyester thermoplastic housing. Superior transient protection. Compact size. Low cost. Adjustment: Potentiometer. Reset time: 125 milliseconds max. before time out, 10 milliseconds after time out. Repeatability:  $\pm 5\%$  +8 ms max. with constant time. Power consumption: During timing 0.25 watts, after time out 3 watts max. 1 amp. **Input voltage:** 120 VAC/DC  $\pm 10\%$ . **Output:** Solid-state, normally open series load, 1 amp. AC/DC (Resistive or Inductive). Plug type: Terminals. Mounting: Surface mount with one #8 screw. Life: 100,000,000 operations. Operating temperatures:  $-40^{\circ}\text{F}$  to  $150^{\circ}\text{F}$ .

Cat. No.	Time Range (seconds)	Net Price
<b>Q1T SERIES "ON" DELAY, 120 VAC/DC</b>		
Q1T-00001-311	.05 to 1	\$35.04
Q1T-00005-311	.25 to 5	35.04
Q1T-00010-311	.5 to 10	35.04
Q1T-00060-311	3 to 60	35.04
Q1T-00300-311	15 to 300	35.04
<b>Q1T SERIES "ON" DELAY, 12 VAC/DC</b>		
Q1T-00001-316	.05 to 1	35.04
Q1T-00005-316	.25 to 5	35.04
Q1T-00010-316	.5 to 10	35.04
Q1T-00060-316	3 to 60	35.04
Q1T-00300-316	15 to 300	35.04
Q1T-00600-316	30 to 600	35.04

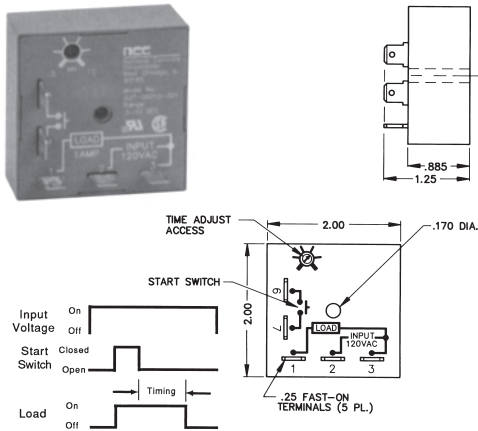
**NOTE:** Other voltages and time ranges are available on special order.



## NCC SOLID STATE TIMERS SERIES Q2T

These units are designed for "One-shot" operation. Power is applied to the timer at all times. Upon a momentary or maintained closure of a normally open isolated start switch, the output is energized and the time delay starts. At the end of the preset time delay, the output is de-energized and the unit is ready for a new cycle. **FEATURES:** Totally solid-state digital timing circuit. Time delays to 10 hours. 20:1 max. to min. timing ratio. Cost efficient. Trimpot on-board with sealed cermet element. Epoxy encapsulated. Compact size: Flame-retardant and solvent-resistant polyester thermoplastic housing. Adjustment: On-board potentiometer. Repeatability:  $\pm 0.5\%$  +8 millisecond max. (0.25% typical) under constant conditions. Reset Time: .5 sec. max. by removal of the input voltage. Power consumption: During standby 1 VA, under full load 4.3 VA max. Operating temperature:  $-40^{\circ}\text{C}$  to  $65^{\circ}\text{C}$ . **Input voltage:** 120 VAC  $\pm 10\%$ . **Output:** Solid-state, normally open, 1 amp. resistive or inductive. Life: 100,000,000 operations. Plug type: Terminals. Mounting: Surface mount with one #8 screw.

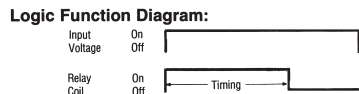
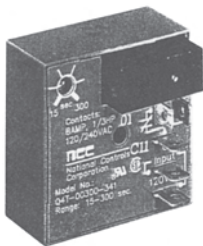
Cat. No.	Time Range	Net Price
<b>Q2T SERIES "ONE-SHOT" OPERATION, 120 VAC</b>		
Q2T-00001-321	.05 to 1 sec.	\$40.89
Q2T-00005-321	.25 to 5 sec.	40.89
Q2T-00060-321	3 to 60 sec.	40.89
Q2T-03600-321	3 to 60 min.	40.89



## NCC SOLID STATE TIMERS SERIES Q3T

These units are designed for "OFF" operation. Power is applied to the timer at all times. Upon closure of a normally open isolated start switch, the load is energized and remains in this state as long as the switch is kept closed. When the control switch is opened, timing starts. At the end of the preset time delay, the output de-energizes and the unit is ready for a new cycle. **FEATURES:** Totally solid-state digital timing circuit. Time delays to 10 hours. 20:1 max. to min. timing ratio. Cost efficient. Trimpot on-board with sealed cermet element. Epoxy encapsulated. Compact size. Superior transient protection. Flame-retardant and solvent-resistant polyester thermoplastic housing. Adjustment: On-board potentiometer. Repeatability:  $\pm 0.5\%$  +8 milliseconds max. (0.25% typical) under constant conditions. Reset time: .5 sec. max. by removal of the input voltage. Power consumption: During standby 1 VA, under full load 4.3 VA max. Operating temperature:  $-40^{\circ}\text{C}$  to  $65^{\circ}\text{C}$ . **Input voltage:** 120 VAC  $\pm 10\%$ . **Output:** Solid-state, normally open, 1 amp resistive or inductive. Life: 100,000,000 operations. Plug type: Terminals. Mounting: Surface mount with one #8 screw.

Cat. No.	Time Range	Net Price
<b>Q3T SERIES "OFF" DELAY, 120 VAC</b>		
Q3T-00005-321	.25 to 5 sec.	\$40.89
Q3T-00010-321	.5 to 10 sec.	40.89
Q3T-00060-321	3 to 60 sec.	40.89
Q3T-00600-321	30 to 600 sec.	40.89
Q3T-03600-321	3 to 60 min.	40.89

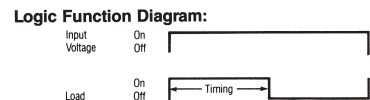
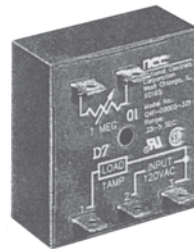


## INTERVAL (RELAY OUTPUT) Q4T SERIES

**Operating Logic:** Upon application of voltage to the input terminals L1, L2, the relay is energized and the contacts transfer and the timing cycle starts. At the end of the present time delay, the relay coil is de-energized and the contacts return to their original state. Reset is accomplished by removing voltage from the input terminals. **TIME DELAY: Adjustment:** On-board trimpot. **Range:** .05 seconds to 10 hours in 9 ranges. **Repeatability:**  $\pm 0.5\%$  maximum (0.25% typical) at constant temperature. **Accuracy:** Maximum time +10%, -0%, Minimum time -30%, +0%. **Reset Time:** .25 seconds maximum, by removal of the input voltage. **INPUT: Operating Voltage:** 120 volts A.C.  $\pm 10\%$ . **Power Consumption:** 3.5 VA maximum. **Frequency:** 50/60 Hz. **OUTPUT: Type:** Relay contacts, S.P.D.T. (1 form C) Silver Cad. Oxide material. **Rating:** 8 amp. max. resistive at 250 VAC & 30 VDC; 100 mA at 5 VDC minimum load current. **Life:** Mechanical - 10,000,000 cycles, Electrical - 100,000 minimum at full load. **PROTECTION: Transient Voltage:** 1000V P.I.V. components used. **Isolation Resistance:** 100 megohms minimum between terminals and case. **Dielectric Breakdown:** 3000 VAC, RMS, terminals to mounting; 1500 VAC, RMS, input to output. **MECHANICAL: Termination:** .25" x .032" male fast-on terminals. **Mounting:** Surface mount with one #8 screw. **ENVIRONMENTAL: Storage Temperature:**  $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ . **Operating Temperature:**  $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ . **Humidity:** 95% relative.

## Q4T-341 SERIES

Cat. No.	Time Range	Net Price
<b>120 VAC <math>\pm 10\%</math></b>		
Q4T-00001-341	.05-1 Seconds	\$41.72
Q4T-00005-341	.25-5 Seconds	41.72
Q4T-00010-341	.5-10 Seconds	41.72
Q4T-00060-341	3-60 Seconds	41.72
Q4T-00300-341	15-300 Seconds	41.72
Q4T-00600-341	30-600 Seconds	41.72
Q4T-03600-341	180-3600 Seconds	41.72
Q4T-18000-341	.25-5 Hours	43.39
Q4T-36000-341	.5-10 Hours	43.39



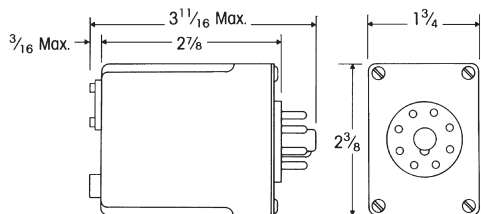
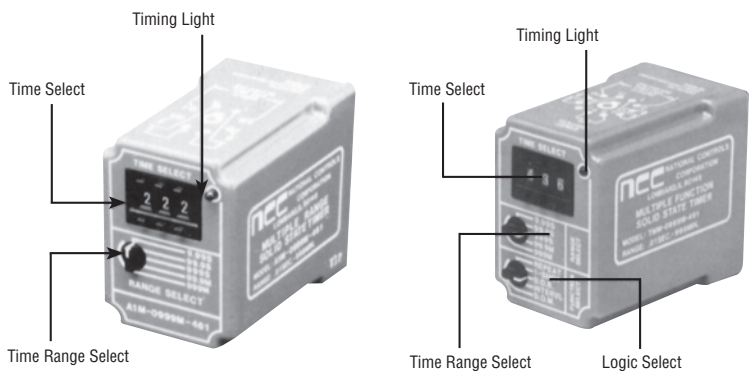
## INTERVAL Q4F SERIES

**Operating Logic:** Upon application of voltage, the load energizes and the timing cycle starts. At the completion of the preset time delay, the load is de-energized. Reset is accomplished by removal of input voltage. *Note: 1) Rt and terminals 4 and 5 are used for external time adjustment; 2) suggest 1/2 watt resistor.* **TIME DELAY: Adjustment:** External resistor, factory fixed on special order (Minimum order requirement). **Range:** 50 mS to 10 hours in 9 ranges. **Repeatability:**  $\pm 0.5\%$  +8 mS maximum (0.25% typ) at constant temperature. **Accuracy:** Maximum time +2% at  $R_t = 1$  megohm; Minimum time +0%-30% at  $R_t = 0$  ohm. **INPUT: Operating Voltage:** 120, 240 VAC; 12 VDC; 24 VAC/DC  $\pm 10\%$  (D.C. models have reverse polarity protection. Unfiltered input voltage to them must be full-wave rectified). **Frequency:** 50/60 Hz. **OUTPUT: Type:** Solid-state, normally open. **Rating:** 1 amp. steady state. **Life:** 100,000,000 operations. **PROTECTION: Transient Voltage:** Metal oxide varistor, see ratings below. **Dielectric Breakdown:** 3000 VAC, RMS, terminals to mounting. **Isolation Resistance:** 100 megohms minimum between terminals and case. **MECHANICAL: Termination:** .25" x .032" male fast-on terminals. **Mounting:** Surface mount with one #8 screw. **ENVIRONMENTAL: Storage Temperature:**  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ . **Operating Temperature:**  $-40^{\circ}\text{C}$  to  $65^{\circ}\text{C}$ . **Humidity:** 95% relative.

## Q4F SERIES

Cat. No.	Time Range	Net Price
<b>120VAC <math>\pm 10\%</math></b>		
Q4F-00001-321	.05-1 Second	\$31.71
Q4F-00005-321	.25-5 Seconds	31.71
Q4F-00010-321	.5-10 Seconds	31.71
Q4F-00060-321	3-60 Seconds	31.71
Q4F-00300-321	15-300 Seconds	31.71
Q4F-00600-321	30-600 Seconds	31.71
Q4F-03600-321	180-3600 Seconds	31.71
Q4F-18000-321	.25-5 Hours	33.38
Q4F-36000-321	.5-10 Hours	33.38
<b>12VDC <math>\pm 10\%</math></b>		
Q4F-00001-326	.05-1 Second	31.71
Q4F-00005-326	.25-5 Seconds	31.71
Q4F-00010-326	.5-10 Seconds	31.71
Q4F-00060-326	3-60 Seconds	31.71
Q4F-00300-326	15-300 Seconds	31.71
Q4F-00600-326	30-600 Seconds	31.71
Q4F-03600-326	180-3600 Seconds	31.71
Q4F-18000-326	.25-5 Hours	33.38
Q4F-36000-326	.5-10 Hours	33.38

NOTE: Other voltages available on special order.



## NCC SOLID STATE TIMERS SERIES A1M

These units are designed for "ON" delay operations. User programmable Multi-time Range Time Delay Relay. Programming is accomplished by a 5-position rotary switch and a 3-digit push-button switch. The rotary switch is used to select one of five timing ranges. The 3-digit switch selects the amount of time to each timing cycle. **FEATURES:** Microprocessor controlled timing circuit. User programmable multi-time range. Time delays from 50ms to over 16 hours.  $\pm 1\%$  repeatability. Timing light. Digital time set. 8-pin plug-in base. Superior transient protection. No false contact transfer when reset during timing. Fiberglass reinforced circuit board supported by heavy duty chassis. Reinforced base locator pin. Polycarbonate flame retardant housing. Repeat accuracy is  $\pm 1\%$  of set time,  $\pm 0.01$  seconds. Reset time: 50 milliseconds max. by power interrupt. Power consumption: 1.2 VA max. Operating temperature:  $-10^{\circ}\text{F}$  to  $130^{\circ}\text{F}$ . **Input voltage:** 12, 24 VDC and 120 VAC. **Output:** DPDT Relay, 10 amp. contacts. Plug type: 8 Pin Plug.

Cat. No.	Time Range Field Programmable	Net Price
<b>A1M SERIES "ON" DELAY, 120 VAC</b>		
<b>A1M-0999M-461</b>	50 ms to 999 min.	<b>\$91.78</b>
<b>A1M SERIES "ON" DELAY, 12 VDC</b>		
<b>A1M-0999M-466</b>	50 ms to 999 min.	<b>91.78</b>

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