

## Solid-State Timer

H<sub>3</sub>G

Low-Cost, Plug-In Timer with Large Switching Capacity

- Up to 7-amp switching capacity
- Choose SPDT or DPDT contact form
- 12 time ranges
- Fits standard 8-pin sockets
- Ideal replacement for time relays
- Subminature DIN size, 36 x 36 mm
- LED power-ON indicator
- Timer hold-down clips supplied
- Panel mounting adapter, sockets, and accessories may be ordered seperately











## Ordering Information\_

#### **■ TIMERS**

Add the supply voltage and time range code to the part number when you order. For example, H3G-8A AC100/110/120-60s.

Timing function		ON-delay		
Contact type	Time limit	SPDT	DPDT	
	Instanttaneous	_	-	
Terminal form		8-pin round socket		
Part number		H3G-8A	H3G-8C	
Supply	AC	24 V,100/110/120 V or 200/220/240 V; 50/60 Hz		
voltages	DC	12 V or 24 V		
Time range codes		1 s, 3 s, 5 s, 10 s, 30 s, 60 s, 3 m, 5 m, 10 m, 30 m, 60 m, or 3 h		

#### **■ TIME RANGES**

Code	Range	Code	Range	Code	Range
1s	0.1 to 1 second	30 s	3 to 30 seconds	10m	1 to 10 minutes
3 s	0.3 to 3 seconds	60 s	6 to 60 seconds	30 m	3 to 30 minutes
5 s	0.5 to 5 seconds	3 m	0.3 to 3 minutes	60 m	6 to 60 minutes
10 s	1 to 10 seconds	5 m	0.5 to 5 minutes	3 h	0.3 to 3 hours

#### **■** ACCESSORIES

Description	Part number	
Sockets	8-pin, bottom surface or track mounting, top screw terminals, molded standoff ring	PF083A-E
	8-pin, bottom surface or track mounting, top screw terminals	PF085A
	8-pin, back mounting, for use with Y92F-30 mounting adapter, bottom screw terminals	P3G-08
	8-pin, terminal cover for P3G sockets, conforms to VDE0106/P100	Y92A-48G
Panel mounting adapter	Fits behind panel, ideal for side-by-side installation. Use P3G□-□ sockets	Y92F-31
Mounting track	DIN rail, 50 cm (1.64 ft) length; 7.3 mm thick	PFP-50N
	DIN rail, 1 m (3.28 ft) length; 7.3 mm thick	PFP-100N
	DIN rail, 1 m (3.28 ft) length; 16 mm thick	PFP-100N2
End plate		PFP-M
Spacer		PFP-S

#### ■ REPLACEMENT PARTS

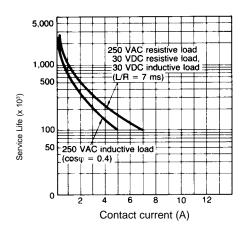
Description	Part number
Timer hold-down clips, one pair	Y92H-6

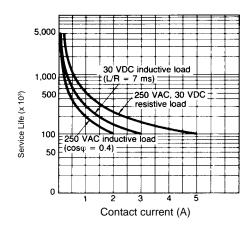
## Specifications \_\_\_\_\_

Part number			H3G-8A	H3G-8C		
Supply AC		AC	24 V, 100/110/120 V or 200/220/240 V; 50/60 Hz			
voltage DC		DC	12 V or 24 V			
Operating	voltage	)	85 to 110% of rated voltage			
Power		AC	3.4 VA at 200 VAC			
consumption		DC	-			
Timing fu	nctions		ON-delay On-delay			
Control in	puts					
Control	Туре	Time limit	SPDT	DPDT		
output		Instantaneous	_	_		
	Max. lo	ad	7 A, 125/250 VAC (resistive lead)	5 A, 125/250 VAC (resistive lead)		
	Min. loa	ad	100 mA, 5 VDC	100 mA, 5 VDC		
Repeat a	ccuracy		± 2% max.			
Setting er	ror		± 10% max.			
Resetting	system		Power-off			
Resetting	time		100 ms			
Indicators	;		Power ON (red LED)			
Materials			Plastic case, knob			
Mounting			Panel, track or surface			
Connection	ons		8-pin round socket			
Weight			55 g (2.0 oz.)			
Approvals			UL/CSA, SEV			
Operating	ambier	nt temperature	-10° to 55°C (14° to 131°F)			
Humidity			35 to 85% RH			
Vibration	n Mechanical durability		10 to 55 Hz; 0.75 mm (0.03 in) double amplitude			
	Malfunction durability		10 to 55 Hz; 0.5 mm (0.02 in) double amplitude			
Shock Mechanical durability		nical durability	100 G			
Malfunction durability		ction durability	10 G			
Variation due to voltage change		oltage change	± 2% max.			
Variation due to temperature change		emperature change	± 5% max.			
Insulation resistance		nce	100 MΩ min. at 500 VDC			
Dielectric strength		1	2,000 VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying parts, and between contact carrying and control circuit and between contacts of different poles.			
			1,000 VAC, 50/60 Hz for 1 minute between non-continuos contacts			
Service li		Mechanical	10 million operations min.			
Service III	<b>C</b>	Electrical	100,000 operations min. at maximum ratings			
		Liculicai	TOU, OUU OPERATIONS MIIN. At MAXIMUM FAUNGS			

## Engineering Data

#### **■ ELECTRICAL SERVICE LIFE**

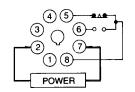




## **Timing Charts**

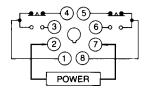
In the schematic diagrams, each thick line indicates the external wiring.

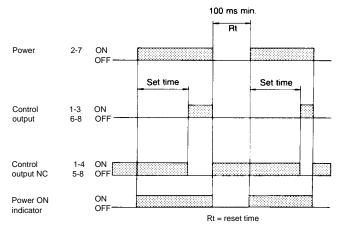
H3G-8A



100 ms min 2-7 ON OFF Set time Set time Control 6-8 ON output NO OFF -8 5-8 ON Control Power ON ON OFF indicator Rt = reset time

H3G-8C



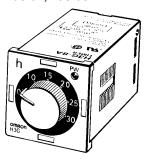


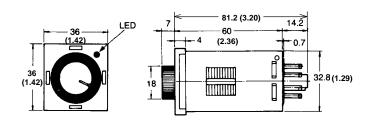
## Dimensions \_\_\_\_

Unit: mm (inch)

#### **■ TIMERS**

#### H3G-8A, H3G-8C

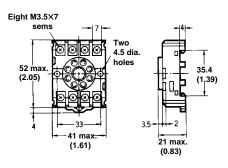




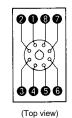
#### **■** ACCESSORIES

#### PF083A-E Bottom Surface or Track Mounting Socket with Molded Standoff Ring





Terminal arrangement

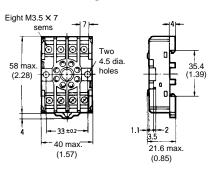


**Mounting holes** 

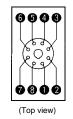


PF085A Bottom Surface on Track Mounting Socket





Terminal arrangement

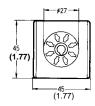


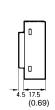
Mounting holes

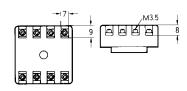


**P3G-08 Back Mounting Socket** 









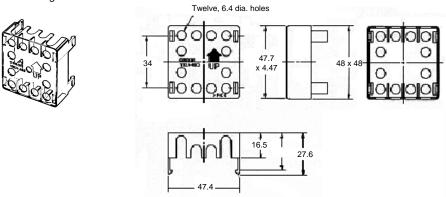
Terminal arrangement



(Bottom view)

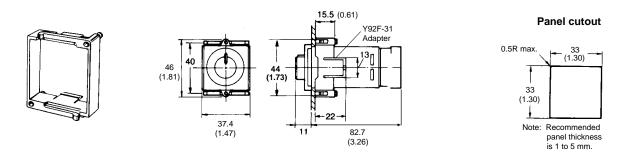
#### Y92A-48G Finger Safe Terminal for P3G(A)

Conforming to VDE0106/P100

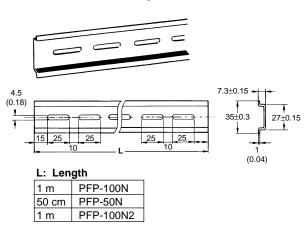


#### Y92F-31 Mounting Adapter

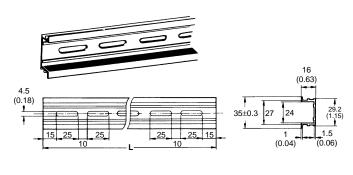
Adapter installs behind the panel. It is ideal for side by side installation. Use P3G-08 socket.

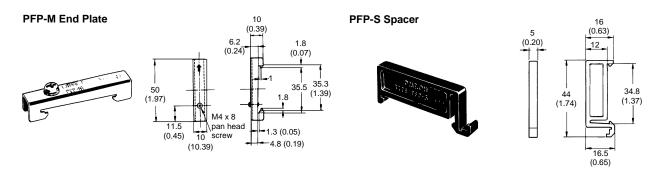


#### PFP-100N, PFP-50N Mounting Track



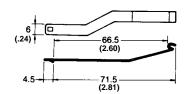
#### **PFP-100N2 Mounting Track**





#### Y92H-6 Hold-Down Clips

One pair of clips are packed with the H3G timer.





### Connections \_

Part	Power supply terminal nu	Power supply terminal numbers		Output terminal numbers		
number	AC (common), DC-	AC (hot), DC+	COM	NC	NO	
H3G-8A	2	7	8	5	6	
H3G-8C	2	7	1	4	3	

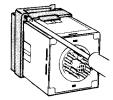
### Mounting

#### **■ PANEL MOUNTING**

Insert the timer through the panel cutout. Push the Y92F-31 adapter from the rear of the timer as far forward toward the panel as possible.

#### Using Y92F-31 Adapter

Push the P3G-08 onto the rear of the timer, then wire the socket. Tighten the two retaining screws on the adapter. To release the adapter, lift the tab at the rear of the adapter.



# ■ TRACK MOUNTING PF083A-E and PF085A

#### Mounting

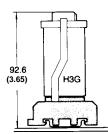
Insert the timer into the socket then clip the rear of the socket onto the track. Push the bottom onto the track until the latch fastens securely.

#### Removal

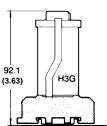
Pull the latch on the socket with a flat-blade screwdriver and remove the timer and socket as one unit.

3/02

PF083A-E



PF085A



NOTE: DIMENSIONS ARE SHOWN IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

## OMRON

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Specifications subject to change without notice.

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