

### ACCESSORIES

# HN RELAYS

(Sockets and DIN rail terminal sockets)

## TYPES

Type	No. of poles	Item	Part No.
PC board terminal socket	1-pole	HN1 PC board terminal socket	AHNA13
	2-pole	HN2 PC board terminal socket	AHNA23
DIN rail terminal socket	1-pole	HN1 screw terminal socket	AHNA11
		HN1 screw terminal socket (Finger protect type)	AHNA11P
	2-pole	HN2 screw terminal socket	AHNA21
		HN2 screw terminal socket (Finger protect type)	AHNA21P

Standard packing: Carton: 10 pcs.; Case: 100 pcs.  
 Note: Certified by UL/C-UL

## RATING

### Specifications (PC board terminal sockets and terminal sockets)

Item	Performance					
	HN1 screw terminal socket	HN1 screw terminal socket (Finger protect type)	HN1 PC board terminal socket	HN2 screw terminal socket	HN2 screw terminal socket (Finger protect type)	HN2 PC board terminal socket
Contact arrangement	1 Form C			2 Form C		
Max. continuous current (Ambient temperature: -40 to +70°C -40 to +158°F)	16A*	10A	10A	5A	5A	5A
Breakdown voltage (Initial)	Between open contacts	1,000 Vrms for 1 min. (Detection current: 10mA)				
	Between contact sets	—		3,000 Vrms for 1 min. (Detection current: 10mA)		
	Between contact and coil	5,000 Vrms for 1 min. (Detection current: 10mA)				
Initial insulation resistance	1,000 MΩ between each terminal (500V DC)					

\* When using with current of 16 A (for HN1 screw terminal socket), the maximum ambient temperature is 50°C 122°F.

When using between 50°C and 70°C, please reduce by 0.1 A/°C.

Note: In order to prevent breakage and disfiguring, the screw tightening torque for the terminal socket should be within the range of 0.5 to 0.8 N-m.

## DIMENSIONS (mm inch)

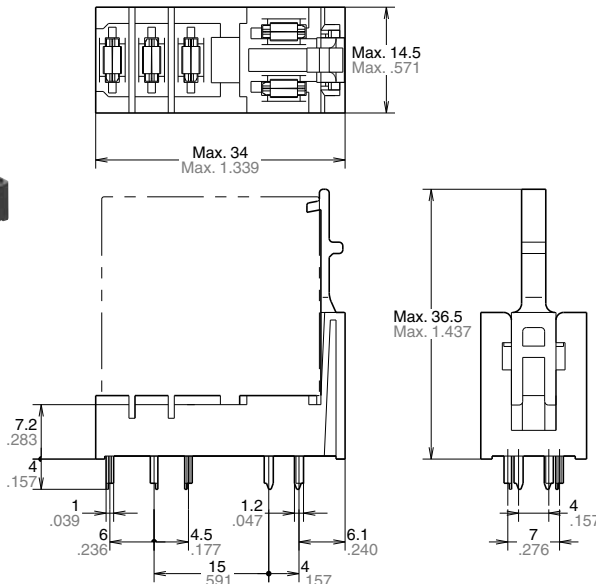
The CAD data of the products with a **CAD Data** mark can be downloaded from: <http://industrial.panasonic.com/ac/e/>

### 1. HN1 PC board terminal socket (AHNA13)

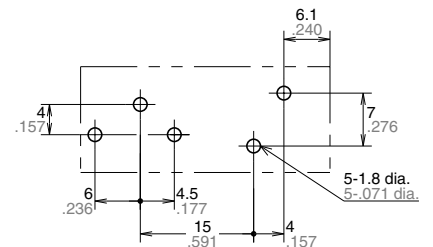
**CAD Data**



External dimensions



PC board pattern (Bottom view)



Tolerance: ±0.1 ±.004

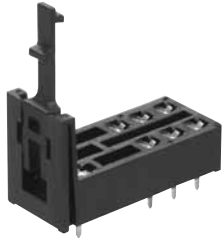
Dimension: Less than 1mm .039inch: ±0.1 ±.004  
 Min. 1mm .039inch less than 3mm .118 inch: ±0.2 ±.008  
 Min. 3mm .118 inch: ±0.3 ±.012

# HN (AHN) RELAY ACCESSORIES

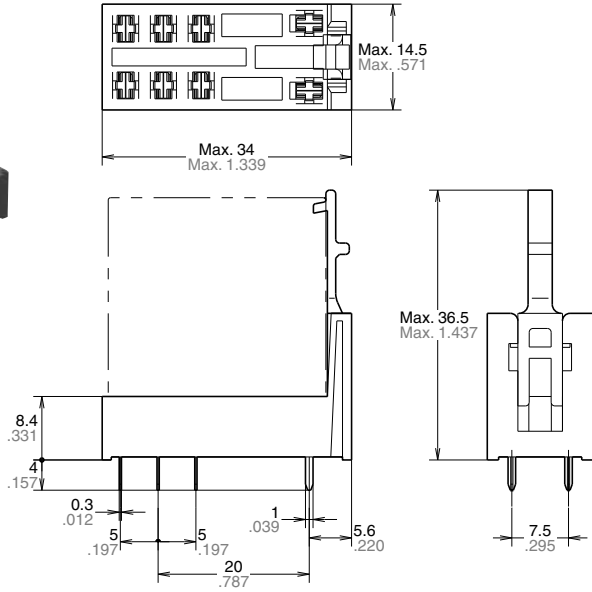
## 2. HN2 PC board terminal socket

(AHNA23)

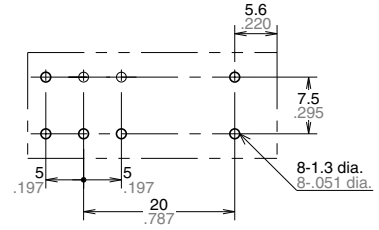
**CAD Data**



External dimensions



PC board pattern (Bottom view)



Tolerance:  $\pm 0.1 \pm 0.04$

**Dimension:**

Less than 1mm .039inch:

Min. 1mm .039inch less than 3mm .118 inch:  $\pm 0.2 \pm 0.08$

Min. 3mm .118 inch:  $\pm 0.3 \pm 0.12$

**Tolerance**

$\pm 0.1 \pm 0.04$

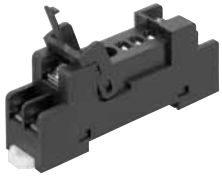
$\pm 0.2 \pm 0.08$

$\pm 0.3 \pm 0.12$

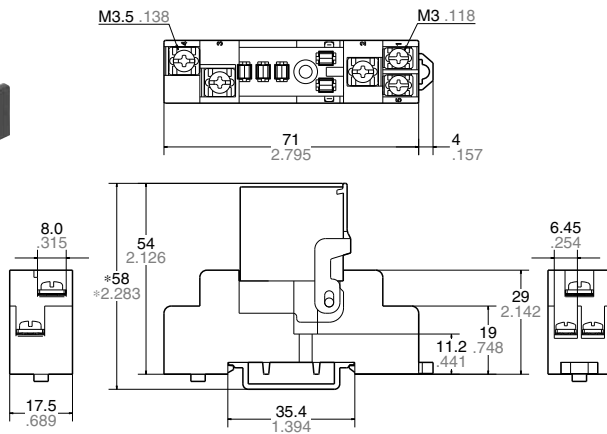
## 3. HN1 Screw terminal socket

(AHNA11)

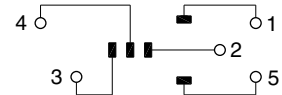
**CAD Data**



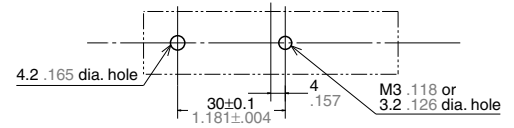
External dimensions



Schematic (Top view)



Mounting hole dimensions



Tolerance:  $\pm 0.5 \pm 0.020$

\* Reference in case of using DIN rail (ATA48011)

Notes: 1. In order to prevent breakage and disfiguring, the screw tightening torque for the terminal socket should be within the range of 0.5 to 0.8 N-m.

2. When attaching the terminal socket directly to a chassis, please use the metric coarse thread screw M3 × 16.

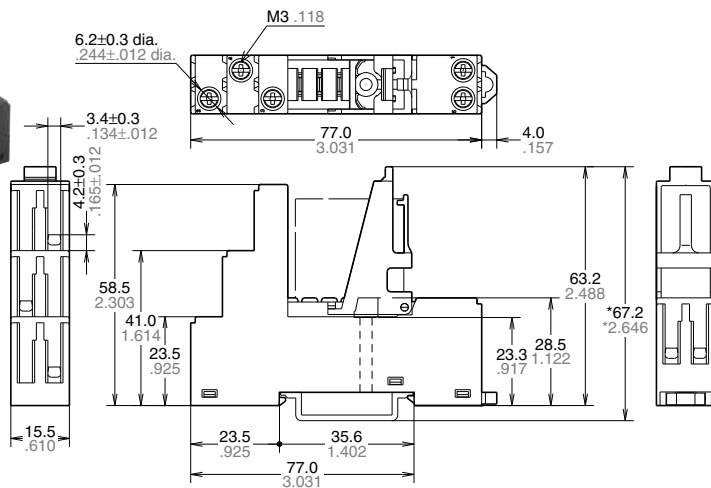
## 4. HN1 Screw terminal socket (Finger protect type)

(AHNA11P)

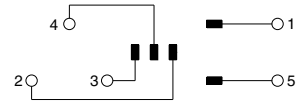
**CAD Data**



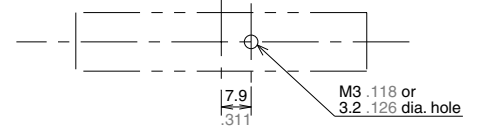
External dimensions



Schematic (Top view)



Mounting hole dimensions



Tolerance:  $\pm 0.5 \pm .020$

\* Reference in case of using DIN rail (ATA48011)

- Notes: 1. In order to prevent breakage and disfiguring, the screw tightening torque for the terminal socket should be within the range of 0.5 to 0.8 N·m.  
 2. When attaching the terminal socket directly to a chassis, please use the metric coarse thread screw M3 × 30.  
 3. Use rod or plate terminals, etc. (You cannot use Y-shape or round terminals.)

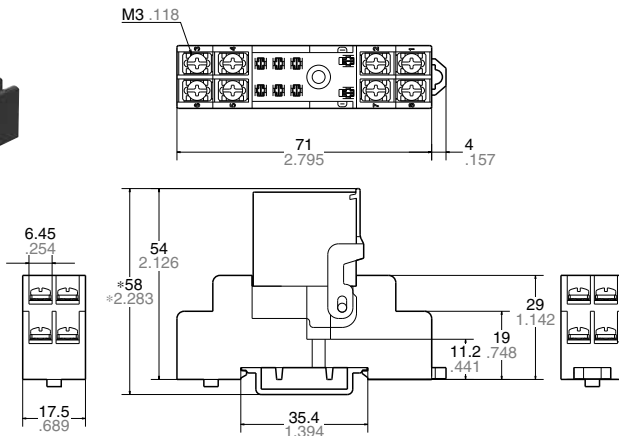
## 5. HN2 Screw terminal socket

(AHNA21)

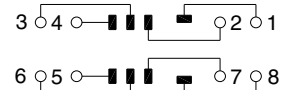
**CAD Data**



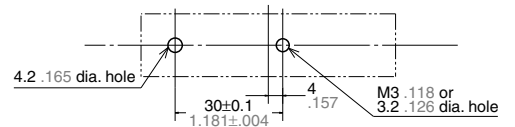
External dimensions



Schematic (Top view)



Mounting hole dimensions



Tolerance:  $\pm 0.5 \pm .020$

\* Reference in case of using DIN rail (ATA48011)

- Notes: 1. In order to prevent breakage and disfiguring, the screw tightening torque for the terminal socket should be within the range of 0.5 to 0.8 N·m.  
 2. When attaching the terminal socket directly to a chassis, please use the metric coarse thread screw M3 × 16.

# HN (AHN) RELAY ACCESSORIES

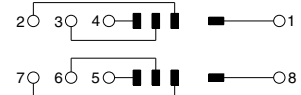
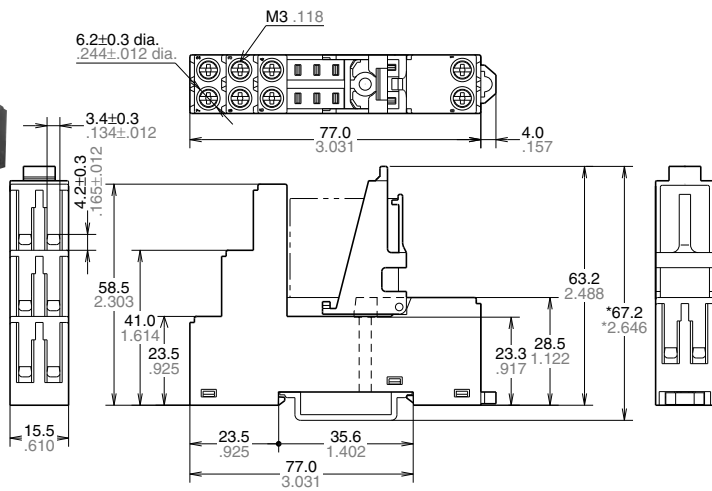
## 6. HN2 Screw terminal socket (Finger protect type)

(AHNA21P)

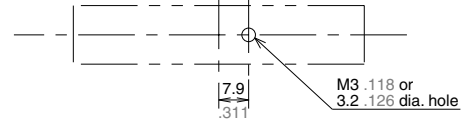
CAD Data

External dimensions

Schematic (Top view)



Mounting hole dimensions



Tolerance:  $\pm 0.5 \pm 0.020$

\* Reference in case of using DIN rail (ATA48011)

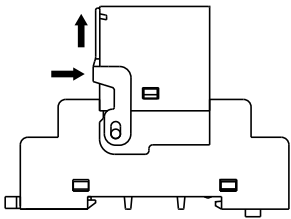
- Notes: 1. In order to prevent breakage and disfiguring, the screw tightening torque for the terminal socket should be within the range of 0.5 to 0.8 N-m.  
 2. When attaching the terminal socket directly to a chassis, please use the metric coarse thread screw M3 × 30.  
 3. Use rod or plate terminals, etc. (You cannot use Y-shape or round terminals.)

## NOTES

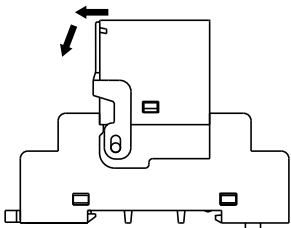
### About the relay-securing hook

#### • Screw terminal socket

1) Installation of the securing hook is easily performed by pressing upward in the direction of the arrows.

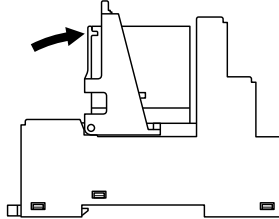


2) Removal of the securing hook is easily performed by releasing the hook and pressing down, as shown in the figure.

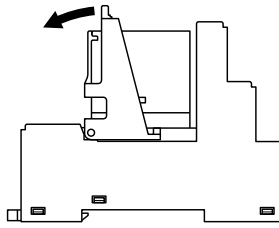


#### • Screw terminal socket (Finger protect type)

1) Install the securing hook by pressing the parts with arrows after inserting the relay.

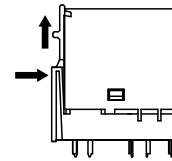


2) Removal of the relay is easily performed by pressing the parts with arrows.

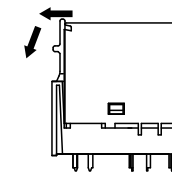


#### • PC board terminal socket

1) Installation of the securing hook is easily performed by pressing upward in the direction of the arrows.



2) Removal of the securing hook is easily performed by releasing the hook and pressing down, as shown in the figure.



\* To prevent damage and deformity, please use the relay-securing hook at 10 N or less.