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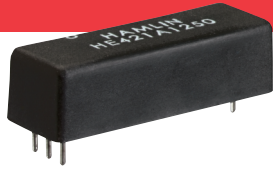
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## HE400 P.C.B. Mount Features and Benefits



### Features

- Multi-pole configuration (up to 6 normally open contacts)
- Combination normally open/normally closed option
- Available with 5V, 12V or 24V coil options as standard
- Magnetic shield option
- Lengthways coil option
- In line pins
- Fully encapsulated

### Benefits

- One relay, many contacts reducing space and cost without compromising
- Lower power coil consumption than competing electromechanical
- Hermetically sealed switching contact is immune to the effects of its environment

### Applications

- Security
- Telecoms
- Instrumentation
- Process
- Industrial

## DIMENSIONS (in) mm

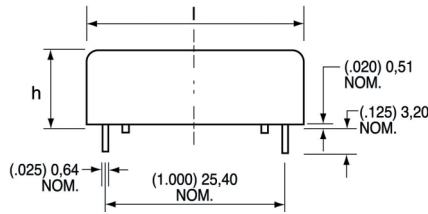


Figure 1 HE400

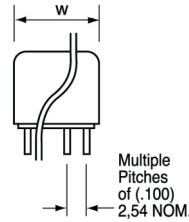
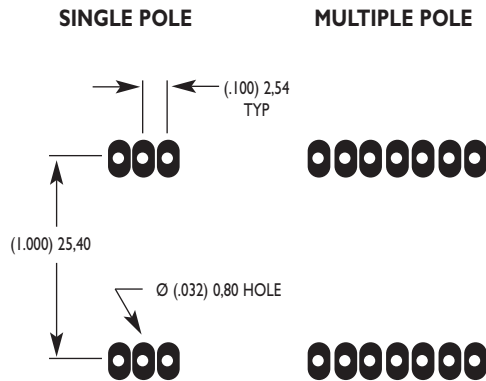


Figure 2 HE400

Table 1

Relay Type	Case Size, Max.	All h	All l	l w	2 w	3 w
HE400	Plastic or Metal Case	(.354) 9	(1.182) 30	(.394) 10	(.493) 12,5	(.591) 15

## HE400 PCB LAYOUT (Bottom View) ORDERING INFORMATION



**PART NUMBER** HE4X X X XX X X

**Model Number**  
 HE42 - Standard  
 HE45 - High Voltage

**Number of Contacts**  
 1,2,3,4,5,6 (5,6 Form A only)

**Contact Type**  
 A - Form A (SPST-NO)  
 C - Form C (SPDT-CO)

**Coil Termination**  
 0 - End Coil  
 3 - Lengthwise

**Case Option**  
 5 - Plastic case  
 9 - Metal case

**Standard Coil**  
 05 - 5 Volt  
 12 - 12 Volt  
 24 - 24 Volt

**EXAMPLE:** The HE421A0550 is a 1 Form A relay with a 5 Volt coil, plastic case and end coil termination.

See next page for: **Electrical and Operating Characteristics Description and Coil Characteristics**

**Table 2 HE400 Series Electrical and Operating Characteristics @ 25°C.**

Column Number		1	2	3	
Contact Type		Form A Standard	Form C Standard	Form A High Voltage	
Relay Types		HE400	HE400	HE400	
CONTACT RATINGS Contact Hamlin for specific load/life details.	Power, Switching Voltage, Switching Current, Switching Current, Carry	Watt - max. Vdc - max. A - max. A - max.	10 200 0.5 1.2	5 175 0.25 1.5	10 300 0.5 1.5
VOLTAGE HOLD-OFF	Across Open Contacts Contacts to Coil Between Isolated Terminals Plastic case Metal Case	Vdc - min. Vac - min.  Vac - min. Vac - min.	250 1500  1500 1000	200 1500  1500 1000	450 1500  1500 1000
RESISTANCE	Contact, Initial Insulation: Across Open Contacts Between Isolated Terminals	$\Omega$ - max. $\Omega$ - min. $\Omega$ - min.	0.150 10 <sup>10</sup> 10 <sup>10</sup>	0.150 10 <sup>9</sup> 10 <sup>10</sup>	0.150 10 <sup>10</sup> 10 <sup>10</sup>
TIMING	Operate Time Release Time	ms - max. ms - max.	1.0 1.0	3.0 3.0	1.0 1.0
ENVIRONMENTAL	Temperature, Operating Temperature, Storage Vibration Resistance  Shock Resistance	°C °C G - max. 10-2000 Hz. G - max. 11 ms, 1/2 sine	-40 to +85 -40 to +105 20 50	-40 to +85 -40 to +105 20 50	-20 to +85 -40 to +105 20 50

**Table 3 HE400 Series Miniature Relay Coil Characteristics @ 25°C.**

Contact Form & Type	Electrical & Operating Characteristics	Dimensions Case Size	Part Number Plastic Case See Note 1	Nominal Coil Voltage Vdc	Coil Resistance $\pm 10\%$ Ohms	Must Operate Vdc	Must Release Vdc	Maximum Coil Voltage Vdc	Top View 2,54 mm, 0.1 in. Grid Dot on Case: Pin 1 Numbers not printed on case.
1A SPST-NO	See Table 2 Column 1	See Table 1 Column 1	HE421A0550 HE421A1250 HE421A2450	5 12 24	240 960 3840	3.75 8.5 18.0	0.4 1.0 2.0	11 27 54	
2A DPST-NO	See Table 2 Column 1	See Table 1 Column 2	HE422A0550 HE422A1250 HE422A2450	5 12 24	145 575 2300	3.75 8.5 18.0	0.4 1.0 2.0	9 22 43	
1A SPST-NO High Voltage	See Table 2 Column 3	See Table 1 Column 1	HE451A0550 HE451A1250 HE451A2450	5 12 24	240 960 3840	3.75 8.5 18.0	0.4 1.0 2.0	11 27 54	
2A DPST-NO High Voltage	See Table 2 Column 3	See Table 1 Column 2	HE452A0550 HE452A1250 HE452A2450	5 12 24	145 575 2300	3.75 8.5 18.0	0.4 1.0 2.0	9 22 43	
1C SPDT-CO	See Table 2 Column 2	See Table 1 Column 1	HE421C0550 HE421C1250 HE421C2450	5 12 24	240 960 3840	3.75 8.5 18.0	0.4 1.0 2.0	11 27 54	
2C DPDT-CO	See Table 2 Column 2	See Table 1 Column 3	HE422C0550 HE422C1250 HE422C2450	5 12 24	105 415 1660	3.75 8.5 18.0	0.4 1.0 2.0	8 22 43	

- Notes: 1) Part numbers shown are for plastic case. For metal case option, replace last two digits 50 with 90.  
2) The relays shown to the right are available on a build to order basis. Contact Hamlin for details.  
3) Special requirements such as side coil termination, coil resistance and contact configuration are available. Contact Hamlin for details.

Type	3A	4A	5A	6A	3C	4C
HE42	+	+	+	+	+	+
HE45	+	+	+	+	-	-

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