



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

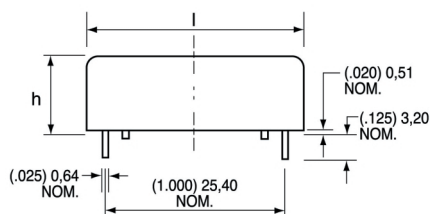


Figure 1 HE400

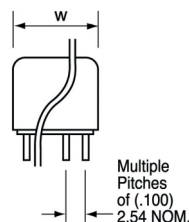
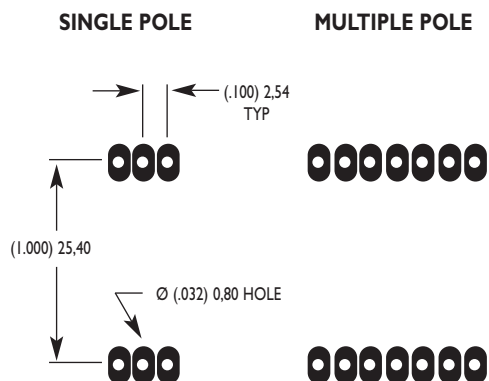


Figure 2 HE400

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**

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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.	10	5	10
		Vdc - max.	200	175	300
		A - max.	0.5	0.25	0.5
		A - max.	1.2	1.5	1.5
VOLTAGE HOLD-OFF	Across Open Contacts Contacts to Coil Between Isolated Terminals Plastic case Metal Case	Vdc - min.	250	200	450
		Vac - min.	1500	1500	1500
		Vac - min.	1500	1500	1500
		Vac - min.	1000	1000	1000
RESISTANCE	Contact, Initial Insulation: Across Open Contacts Between Isolated Terminals	Ω - max.	0.150	0.150	0.150
		Ω - min.	10 ¹⁰	10 ⁹	10 ¹⁰
		Ω - min.	10 ¹⁰	10 ¹⁰	10 ¹⁰
TIMING	Operate Time Release Time	ms - max.	1.0	3.0	1.0
		ms - max.	1.0	3.0	1.0
ENVIRONMENTAL	Temperature, Operating	°C	-40 to +85	-40 to +85	-20 to +85
		°C	-40 to +105	-40 to +105	-40 to +105
	Temperature, Storage	G - max.	20	20	20
		10-2000 Hz.			
	Vibration Resistance	G - max.	50	50	50
		11 ms, 1/2 sine			
Shock Resistance					

Table 3 HE400 Series Miniature Relay			Coil Characteristics @ 25°C.						Top View 2,54 mm, 0.1 in. Grid Dot on Case: Pin 1 Numbers not printed on case.
Contact Form & Type	Electrical & Operating Characteristics	Dimensions Case Size	Part Number Plastic Case See Note 1	Nominal Coil Voltage Vdc	Coil Resistance ±10% Ohms	Must Operate Vdc	Must Release Vdc	Maximum Coil Voltage Vdc	
1A SPST-NO	See Table 2 Column 1	See Table 1 Column 1	HE421A0550	5	240	3.75	0.4	11	
			HE421A1250	12	960	8.5	1.0	27	
			HE421A2450	24	3840	18.0	2.0	54	
2A DPST-NO	See Table 2 Column 1	See Table 1 Column 2	HE422A0550	5	145	3.75	0.4	9	
			HE422A1250	12	575	8.5	1.0	22	
			HE422A2450	24	2300	18.0	2.0	43	
1A SPST-NO High Voltage	See Table 2 Column 3	See Table 1 Column 1	HE451A0550	5	240	3.75	0.4	11	
			HE451A1250	12	960	8.5	1.0	27	
			HE451A2450	24	3840	18.0	2.0	54	
2A DPST-NO High Voltage	See Table 2 Column 3	See Table 1 Column 2	HE452A0550	5	145	3.75	0.4	9	
			HE452A1250	12	575	8.5	1.0	22	
			HE452A2450	24	2300	18.0	2.0	43	
1C SPDT-CO	See Table 2 Column 2	See Table 1 Column 1	HE421C0550	5	240	3.75	0.4	11	
			HE421C1250	12	960	8.5	1.0	27	
			HE421C2450	24	3840	18.0	2.0	54	
2C DPDT-CO	See Table 2 Column 2	See Table 1 Column 3	HE422C0550	5	105	3.75	0.4	8	
			HE422C1250	12	415	8.5	1.0	22	
			HE422C2450	24	1660	18.0	2.0	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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