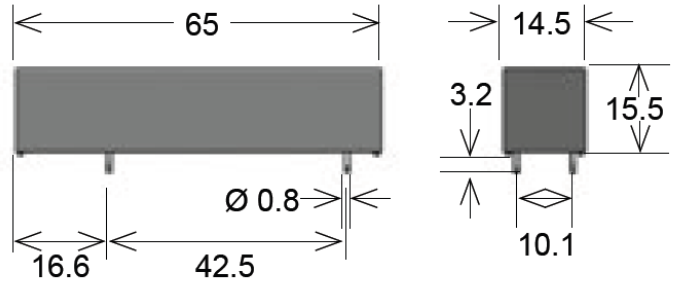


# HE Series Reed Relays



- Features: High Voltage Relay, Through-Hole / Axial Wire Option, Compact Design, Special Pin-Outs
- Applications: High Voltage Test Sets, Cable Testers, Medical Equipment & Others
- Markets: Medical, Test and Measurement & Others

Part Description: **HE 00-0X-00-00**

Nominal Voltage	Contact QTY	Contact Form	Switch Model	Pin Out
05, 06, 12, 24, 48	1, 2	A, B	69, 83	02, 03, 150, 300

Customer Options	Switch Model		Unit
	69	83	
<b>Contact Data</b>	69	83	
<b>Rated Power (max.)</b> Any DC combination of V&A not to exceed their individual max.'s	50	50	W
<b>Switching Voltage (max.)</b> DC or peak AC	10,000	7,500	V
<b>Switching Current (max.)</b> DC or peak AC	3.0	3.0	A
<b>Carry Current (max.)</b> DC or peak AC	5.0	5.0	A
<b>Contact Resistance (max.)</b> @ 0.5V & 50mA	150	150	mOhm
<b>Breakdown Voltage (min.)</b> According to EN60255-5	15	10	kVDC
<b>Operating Time (max.)</b> Incl. Bounce; Measured with w/ Nominal Voltage	3.0	3.0	ms
<b>Release Time (max.)</b> Measured with no Coil Excitation	1.5	1.5	ms
<b>Insulation Resistance (typ.)</b> Rh<45%, 100V Test Voltage	10 <sup>12</sup>	10 <sup>12</sup>	Ohm
<b>Capacitance (typ.)</b> @ 10kHz across open Switch	0.2	0.2	pF

Coil Data		Coil Voltage (nom.)	Coil Resistance (typ.)	Pull-In Voltage (max.)	Drop-Out Voltage (min.)	Nominal Coil Power (typ.)
Contact Form	Switch Model					
Unit		VDC	Ohm	VDC	VDC	mW
1A	69	12	110	9	1	1,310
		24	465	18	2	1,240
	83	12	260	9	1	554
		24	1050	18	2	554
1B*	69	12	260	9	1	554
		24	1,050	18	2	548
	83	12	410	9	1	351
		24	1,520	18	2	378
2A	83	12	140	9	1	1,000

The Pull-In / Drop-Out Voltage and Coil Resistance will change at rate of 0.4% per °C.

\* Re-closure of Form B may occur if the max. coil voltage is exceeded. Coil polarity on Form B must be observed. Pin 2 is positive.

Environmental Data		Unit
<b>Shock Resistance (max.)</b> 1/2 sine wave duration 11ms	50	g
<b>Vibration Resistance (max.)</b>	20	g
<b>Operating Temperature</b>	-20 to 70	°C
<b>Storage Temperature</b>	-35 to 105	°C
<b>Soldering Temperature (max.)</b> 5 sec. max.	260	°C

#### HE Reed Relay

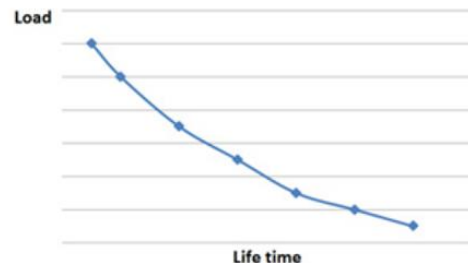


#### Handling & Assembly Instructions

- Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used.
- External magnetic fields needs to be taken into consideration, including a too high packing density. This may influence the relays' electrical characteristics.
- Mechanical shock impacts e.g. dropping the relays may cause immediate or post-installation failure.
- Wave soldering: maximum 260°/5 seconds.
- Reflow soldering: Recommendations given by the soldering paste manufacturer need to be considered as well as the temperature limits of other components/processes.

#### Life Test Data

\*Load increase reduces life expectancy of Reed Switches

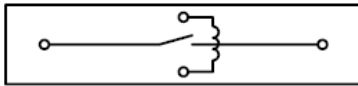


Glossary Contact Form		
Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw	
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw	
Form C	Changeover SPDT = Single Pole Double Throw	

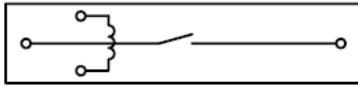


### Pin Outs

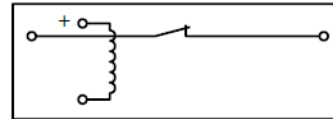
Dimensions available in Product Datasheets.



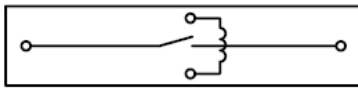
HExx - 1A83 - 02  
HExx - 1A69 - 02



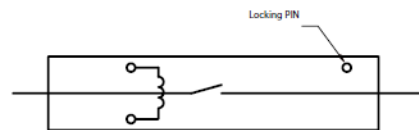
HExx - 1A83  
HExx - 1A69



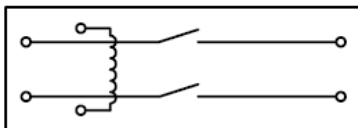
HExx - 1B



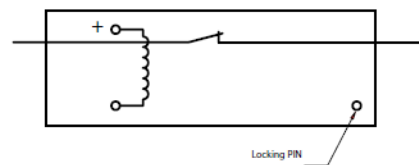
HExx - 1A83 - 03  
HExx - 1A69 - 03



HExx - 1A83 - 150  
HExx - 1A69 - 150



HExx - 2A



HExx - 1B83 - 150  
HExx - 1B69 - 150