

HM Series Reed Relays

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



Part Description: **HM00-0X00-000**

Nominal Voltage	Contact Quantity & Contact Form	Switch Model	Pin Out
05, 12, 24	1A, 1B	69, 83	02, 03, 06, 08, 26, 20-6,150, 300

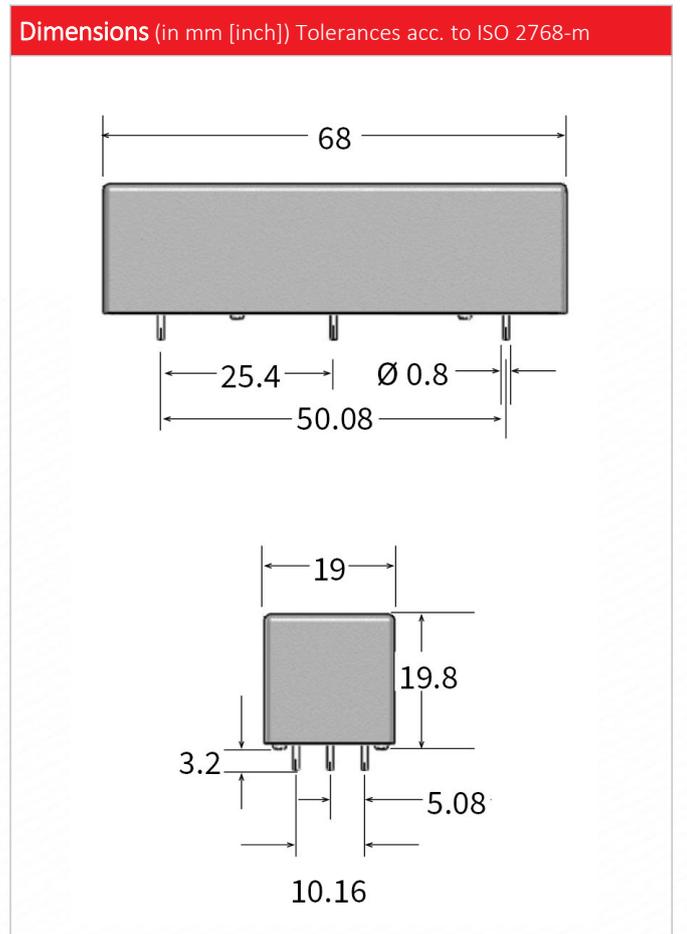
Customer Options	Switch Model		Unit
	69 (A-Dry)	83 (A-Dry)	
Contact Data (@ 20°C)			
Contact Material	Rhodium	Rhodium	
Rated Power (max.) Any DC combination of V&A not to exceed max. rated power	50	50	W
Switching Voltage (max.) DC or peak AC	10,000	7,500	V
Switching Current (max.) DC or peak AC	3.0	3.0	A
Carry Current (max.) DC or peak AC	5.0	5.0	A
Contact Resistance (max.) @ 0.5V & 10mA, Measured with 40% Pull-In Overdrive	150	150	mOhm
Breakdown Voltage (min.) (upon request)* According to EN60255-27	15	15	kVDC
Operating Time (max.) Including Bounce, Measured w/40% Pull-In Overdrive	3.0	3.0	ms
Release Time (max.) Measured without Coil Suppression	1.5	1.5	ms
Insulation Resistance (min./typ.) Rh<45%, 100V Test Voltage	10 ¹²	10 ¹²	Ohm
Capacitance (typ.) @ 10kHz across open Switch	1	1	pF

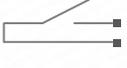
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Coil Data (at 20°C)		Coil Voltage (VDC)		Coil Resistance (Ohm)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Coil Power (mW)	Coil Inductance (mH)
Contact Form	Switch Model	Nominal	Max.	Typical (± 10 %)	Max.	Min.	Nominal	Nominal
1A	69	05		30	3.8	0.5	833	
		12		150	9.0	1.0	960	
		24		600	18.0	2.0	960	
	83	05		45	3.8	0.5	556	
		12		250	9.0	1.0	576	
		24		1	18.0	2.0	576	
1B	69	05		60	3.8	0.5	556	
		12		150	9.0	1.0	960	
		24		1	18.0	2.0	576	
	83	05		45	3.8	0.5	556	
		12		250	9.0	1.0	576	
		24		1	18.0	2.0	576	

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

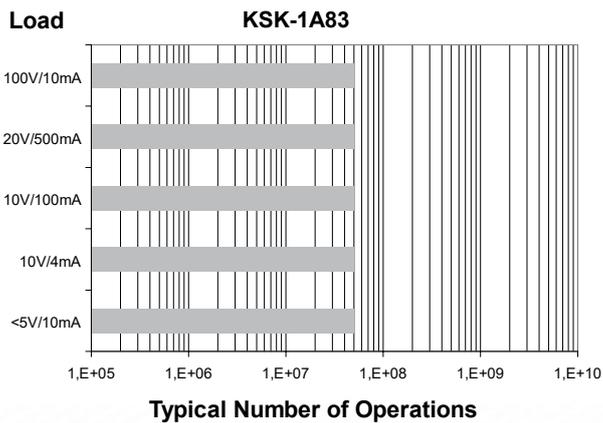
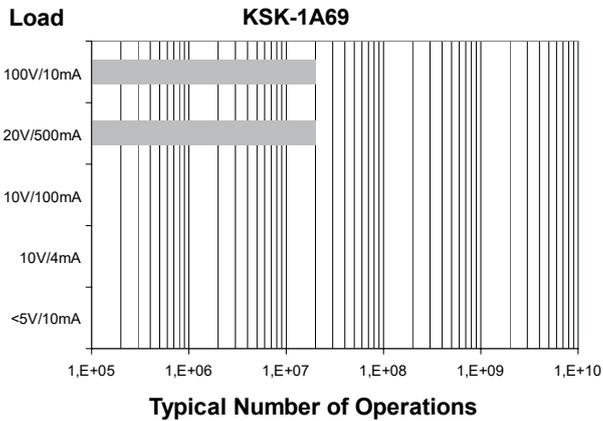
Relay Data (@ 20°C)		Unit
Dielectric Strength Coil/Contact (min.) According to EN60255-27	15	kVDC
Insulation Resistance Coil/Contact (min.) Rh<45%, 200V Test Voltage	10 ¹²	Ohm
Capacitance Coil/Contact (typ.) @10 kHz	1.2	pF
Shock Resistance (max.) 1/2 sine wave, 6md, 3-axis	50	g
Vibration Resistance (max.) 10 – 2,000 Hz	20	g
Operating Temperature (max.) Surrounding of the relay's housing	-20 to 70	°C
Storage Temperature (max.) Surrounding of the relay's housing	-35 to 95	°C
Soldering Temperature (max.) 5 sec. max.	260	°C
Washability Aqueous rinse suitable. Proper drying necessary.	Fully Sealed	



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	

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Life Test Data (*Load increase reduces life expectancy of Reed Switches)



Please note: All technical specifications on this series datasheet refer to the standard product range. Modifications in the sense of technical progress are reserved. For general information only. For more specific information, please consult the product datasheet, available upon request.

This series datasheet could contain technical inaccuracies or typographical errors. Changes are periodically made to the information herein. These change will be incorporated in future revisions.

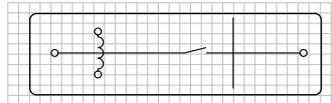
For deviating values, most current specifications and products please contact your nearest sales office.

Pin-Out (Top View)

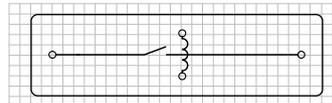
Form A

View from top of component
2,5 mm [0,098"] pitch grid

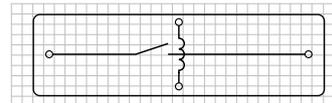
HMxx-1Axx



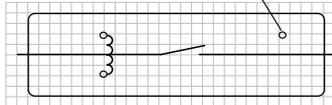
HMxx-1Axx-03



HMxx-1Axx-06

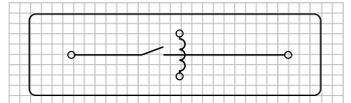


HMxx-1Axx-150

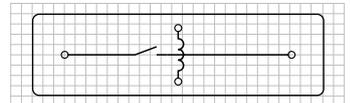


View from top of component
2,54 mm [0,100"] pitch grid

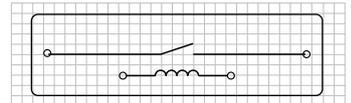
HMxx-1Axx-02



HMxx-1Axx-04



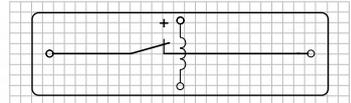
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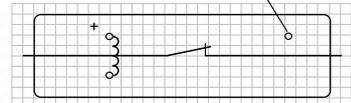
Form B

View from top of component
2,5 mm [0,098"] pitch grid

HMxx-1Bxx-06



HMxx-1Bxx-150



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 need 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.