

# HF9610

## 1/5 CUBIC INCH 1 FORM C HERMETICALLY SEALED LATCHING RELAY



### Features

- Latching relay
- 10A contacts switching capability
- Failure rate can be L level
- High ambient applicability
- All metal welded construction
- Hermetically welded and marked by laser

### AMBIENT ADAPTABILITY

Ambient grade		I	II	III
Ambient temperature		-55 °C to 85 °C	-55 °C to 85 °C	-65 °C to 125 °C
Humidity		98%, 40 °C		
Low air pressure		58.53 kPa	4.39 kPa	4.39 kPa
Sine vibration	Frequency	10 Hz to 1000 Hz	10 Hz to 2000 Hz	10 Hz to 3000 Hz
	Acceleration	147 m/s <sup>2</sup>	196 m/s <sup>2</sup>	294 m/s <sup>2</sup>
Shock resistance		490 m/s <sup>2</sup>	980 m/s <sup>2</sup>	1960 m/s <sup>2</sup>
Random vibration		—	20 (m/s <sup>2</sup> ) <sup>2</sup> /Hz	40 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Steady-state acceleration		147 m/s <sup>2</sup>	294 m/s <sup>2</sup>	490 m/s <sup>2</sup>

### CONTACT DATA

Ambient grade		I	II	III
Arrangement		1 C		
Contact resistance or voltage drop	Initial max.	0.05Ω		
	After life max.	0.125V		

### Contact ratings

Type	Contact load		Electrical life min.
	28Vd.c.	115Va.c. 400Hz Single phase	
Resistive	10A	10A	5 x 10 <sup>4</sup> OPS
Inductive	6A	—	1 x 10 <sup>4</sup> OPS
Inductive	—	8A	2 x 10 <sup>4</sup> OPS
Motor	4A	—	5 x 10 <sup>4</sup> OPS
Lamp load	2A	—	5 x 10 <sup>4</sup> OPS

## SPECIFICATION

Ambient grade		I	II	III
Insulation resistance min.	Initial	100 MΩ (@ 500 Vd.c.)	100 MΩ (@ 500 Vd.c.)	100 MΩ (@ 500 Vd.c.)
	After life or after testing	50 MΩ (@ 500 Vd.c.)	50 MΩ (@ 500 Vd.c.)	50 MΩ (@ 500 Vd.c.)
Dielectric strength min. (Normal condition)	Between coil & cover(initial)	500 Vr.m.s.	500 Vr.m.s.	500 Vr.m.s.
	Between coil & cover(after life testing)	350 Vr.m.s.	350 Vr.m.s.	350 Vr.m.s.
	Between other insulation parts(initial)	750 Vr.m.s.	750 Vr.m.s.	750 Vr.m.s.
	Between other insulation parts(after life testing)	500 Vr.m.s.	500 Vr.m.s.	500 Vr.m.s.
Dielectric strength min.(Low air pressure condition)		250 Vr.m.s.	250 Vr.m.s.	250 Vr.m.s.
Leakage rate max.		1 Pa·cm <sup>3</sup> /s	1 x 10 <sup>-1</sup> Pa·cm <sup>3</sup> /s	1 x 10 <sup>-3</sup> Pa·cm <sup>3</sup> /s
Operate time max.		7 ms		
Coil Impulse Width min.		25 ms		
Mounting style		See the mounting dimension		
Terminals		See the terminal styles		
Work position		Random		
Weight max.		20 g		

## COIL DATA

Norminal coil power	Approx. 1.2W
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### Coil Version

Vd.c.

Order Number	Coil voltage		at 25 °C		-65°C to 125°C		Pick-up voltage max.	
	Nominal voltage	Value max.	Coil resistance (Ω) min.	Pick-up voltage max.	Pick-up voltage max.	High temp. test	Continuous electric test	
006	6	7.3	30	3.2	4.5	5.0	5.7	
012	12	14.5	130	6.5	9.0	9.9	11.25	
028	28	29	730	15.5	20.0	21.0	25.0	

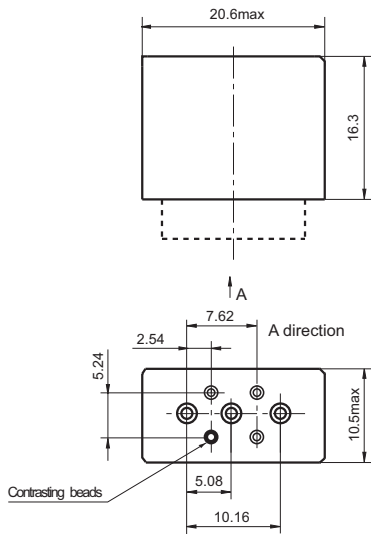
Notes: We can offer many kinds of coil voltage under the requirement of users.

## ORDERING INFORMATION

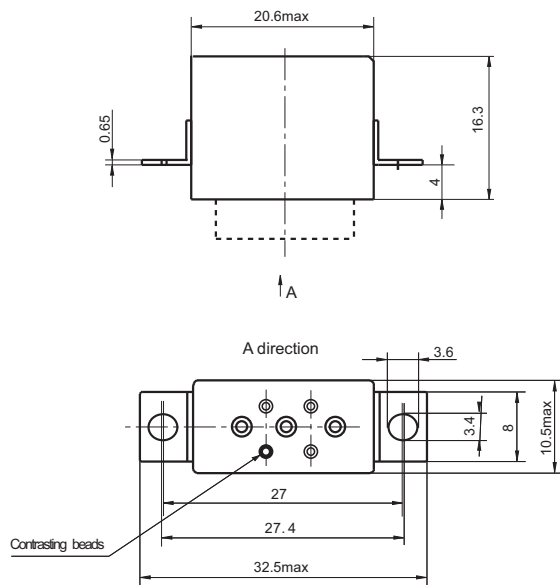
Type	HF9610	-012	L	-0	1	- II
Order Number	006、012、028					
Failure Rate	L: Failure rate level L (level III products available) <sup>1)</sup> Nil: Without failure rate requirement(level I ,II ,IIIproducts available)					
Mounting Style	0、2、3 (See the mounting dimension)					
Terminals Style	1, 4 (See " Terminal styles " below)					
Ambient Grade	I : level I II : level II III: level III					

Notes: 1) For the failure rate of L ,the letter "III" of ambient grade level will not appear on relay cover.

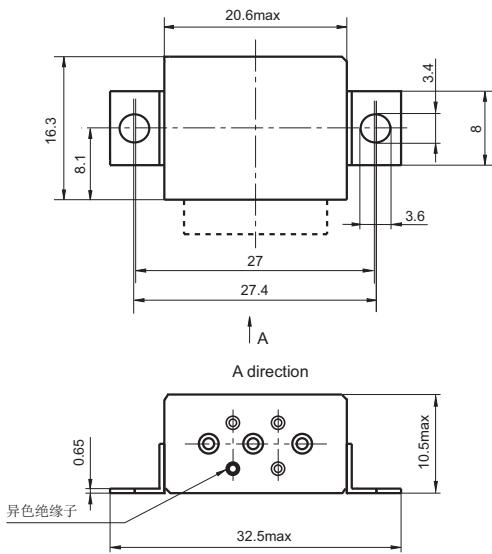
Outline Dimension



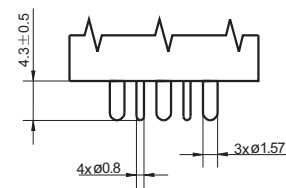
Mouting style 0



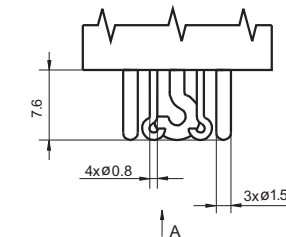
Mouting style 2



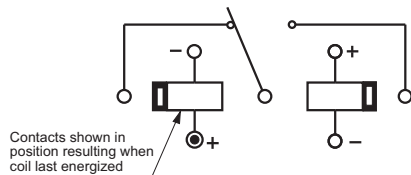
Mouting style 3



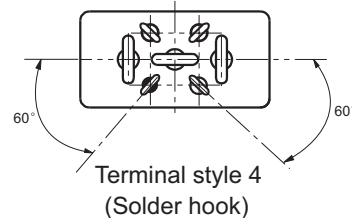
Terminal style 1  
(Solder pin)



Terminal style 4  
(Solder hook)



Wiring Diagram  
(Bottom View)



**Disclaimer**

This datasheet is for the customers' reference. All the specifications are subject to change without notice.

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