

# HF9310

## HALF-SIZE CRYSTAL CAN HERMETICALLY SEALED ELECTRO MAGNETIC RELAY WITH ESTABLISHED RELIABILITY



### Features

- Failure rate can be level M
- Qualified by China military standard
- High ambient applicability
- 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 3000 Hz
	Acceleration	147 m/s <sup>2</sup>	196 m/s <sup>2</sup>
Shock resistance	490 m/s <sup>2</sup>	735 m/s <sup>2</sup>	980 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	490 m/s <sup>2</sup>		

### CONTACT DATA

Ambient grade	I	II	III
Arrangement	2 C		
Contact resistance	Initial max.	50 mΩ	
	After life max.	100 mΩ	

### Contact ratings

Ambient grade	Contact load	Type	Electrical life min.
I	2 A 28 Vd.c.	Resistive	1 x 10 <sup>5</sup> OPS
	2 A 28 Vd.c.	Resistive	1 x 10 <sup>5</sup> OPS
II	0.1 A 115 Va.c.	Resistive	1 x 10 <sup>5</sup> OPS
	0.5 A 28 Vd.c. 200 mH	Inductive	1 x 10 <sup>5</sup> OPS
III	2 A 28 Vd.c.	Resistive	1 x 10 <sup>5</sup> OPS
	0.3 A 115 Va.c.	Resistive	1 x 10 <sup>5</sup> OPS
	0.75 A 28 Vd.c. 200 mH	Inductive	1 x 10 <sup>5</sup> OPS
	0.16 A 28 Vd.c.	Lamp load	1 x 10 <sup>5</sup> OPS
	50 μA 50 mVd.c.	Low level	1 x 10 <sup>5</sup> OPS



HONGFA HERMETICALLY SEALED RELAY

## SPECIFICATION

Ambient grade		I	II	III
Insulation resistance min.		1000 MΩ (@ 500 Vd.c.)	10000 MΩ (@ 500 Vd.c.)	10000 MΩ (@ 500 Vd.c.)
Dielectric strength min. (Normal condition)	Between open contacts	500 Vr.m.s.	500 Vr.m.s.	500 Vr.m.s.
	Between contact & coil	750 Vr.m.s.	1000 Vr.m.s.	1000 Vr.m.s.
	Between contact & cover	750 Vr.m.s.	1000 Vr.m.s.	1000 Vr.m.s.
	Between contact group	750 Vr.m.s.	1000 Vr.m.s.	1000 Vr.m.s.
	Between coil & cover	500 Vr.m.s.	500 Vr.m.s.	500 Vr.m.s.
Dielectric strength min. (Low air pressure condition)		350 Vr.m.s.	350 Vr.m.s.	350 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.		6 ms	4 ms	4 ms
Release time max.				4 ms
Mounting style		See the mounting dimension		
Terminals		See the terminal styles		
Work position		Random		
Weight max.		13 g		

## COIL DATA

Norminal coil power	Approx.0.9W
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### Coil Version

Order Number	Coil voltage		at 25 °C					-65°C to 125°C			
	Nominal voltage	Value max.	Coil resistance (1±10%) Ω	Pick-up voltage max.		Hold voltage max.	Drop-out voltage min.	Pick-up voltage max.		Hold voltage max.	Drop-out voltage min.
				I	II, III			I	II, III		
005	5	6.0	27	3.0	2.7	1.65	0.29	4.0	3.8	2.4	0.21
006	6	7.5	40	3.6	3.2	2.00	0.35	4.8	4.5	2.9	0.25
009	9	10.8	90	5.4	4.8	3.00	0.52	7.2	6.75	4.4	0.38
012	12	15.0	160	7.2	6.4	4.00	0.70	9.6	9.0	5.8	0.50
024	24	30.0	600	14.4	12.8	7.00	1.20	19.2	17.0	10.2	0.90
027	27	32.0	700	16.2	13.5	8.00	1.20	21.6	18.0	14.0	1.00

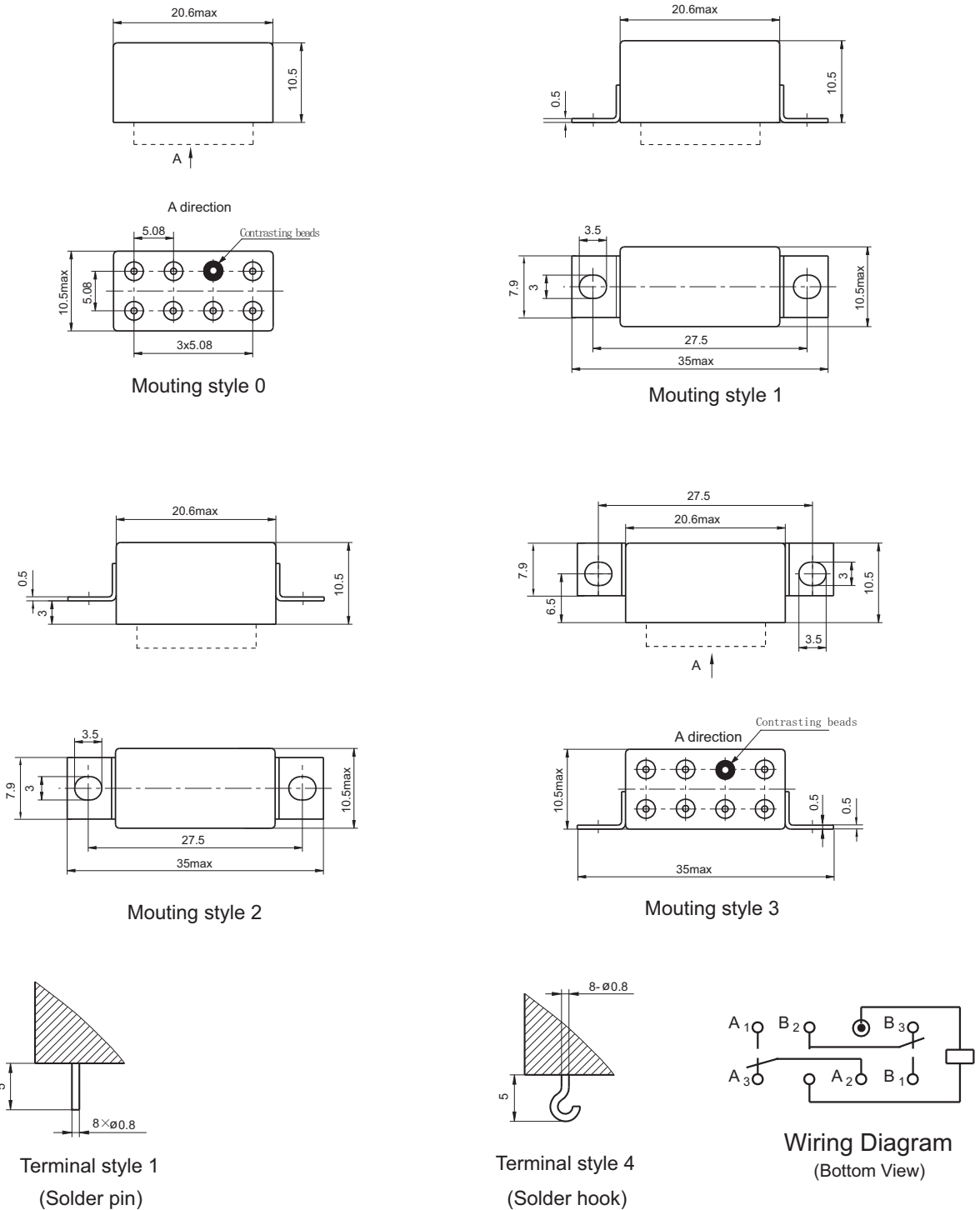
Notes: We can offer many kinds of of coil voltage under the requirement of users.

## ORDERING INFORMATION

Type	HF9310	-012	M	-0	1	- I
Order Number	005、006、009、012、018、027					
Failure Rate	L: Failure rate level L (level III products available) <sup>1)</sup> M: Failure rate level M (level III products available) <sup>1)</sup> Nil: Without failure rate requirement(level I ,II ,IIIproducts available)					
Mounting Style	0, 1, 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 or M ,the letter "III" of ambient grade level will not appear on relay cover.

**Outline Dimension**



**Disclaimer**

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

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