

# HF9520

2/5 CUBIC INCH 3 FORM C  
HERMETICALLY SEALED ELECTRO MAGNETIC RELAY



## Features

- Force balanced
- 10A contacts switching capability
- Failure rate level can be level L
- 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
	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>
Random vibration		—	20 (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			3 C
Contact resistance	Initial max.		0.1V
or voltage drop	After life max.		0.125V

## Contact and life ratings

Type	Contact load		Electrical life min.
	28Vdc.	115/200Vac. 400Hz Three phase	
Resistive	10A	10A	5 × 10 <sup>4</sup> OPS
Inductive	6A	—	1 × 10 <sup>4</sup> OPS
Inductive	—	8A	2 × 10 <sup>4</sup> OPS
Motor	4A	—	5 × 10 <sup>4</sup> OPS
Lamp load	2A	—	5 × 10 <sup>4</sup> OPS



HONGFA HERMETICALLY SEALED RELAY

## 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)	1000 Vr.m.s.	1000 Vr.m.s.	1000 Vr.m.s.
	Between coil & cover(after life testing)	750 Vr.m.s.	750 Vr.m.s.	750 Vr.m.s.
	Between other insulation parts(initial)	1250 Vr.m.s.	1250 Vr.m.s.	1250 Vr.m.s.
	Between other insulation parts(after life testing)	1000 Vr.m.s.	1000 Vr.m.s.	1000 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 × 10 <sup>-1</sup> Pa·cm <sup>3</sup> /s	1 × 10 <sup>-3</sup> Pa·cm <sup>3</sup> /s
Operate time max.				7 ms
Release time max.				7 ms
Mounting style			See the mounting dimension	
Terminals			See the terminal styles	
Work position				Random
Weight max.				28.2 g

## COIL DATA

Norminal coil power	Approx.2.4W
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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.	Hold voltage max.	Drop-out voltage min.	Pick-up voltage max.	Hold voltage max.	Drop-out voltage min.	High temp. test	Continuous electric test
006	6	7.3	15	3.3	1.6	0.40	4.5	2.3	0.25	5.5	5.70
012	12	14.5	70	6.6	3.3	0.75	9.0	4.5	0.50	9.9	11.25
028	28	29.0	360	15.5	5.5	2.30	20.0	7.0	1.50	21.0	25.0

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

## ORDERING INFORMATION

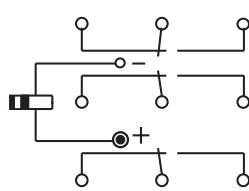
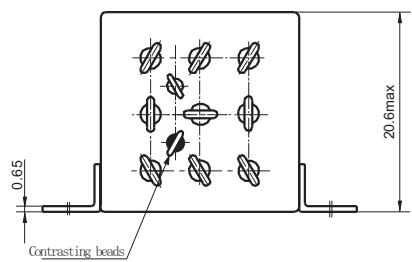
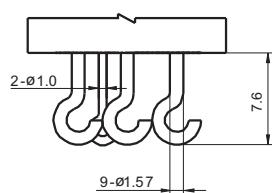
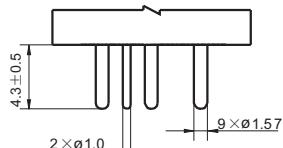
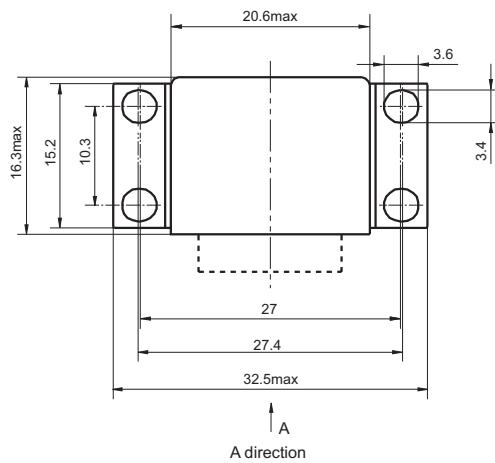
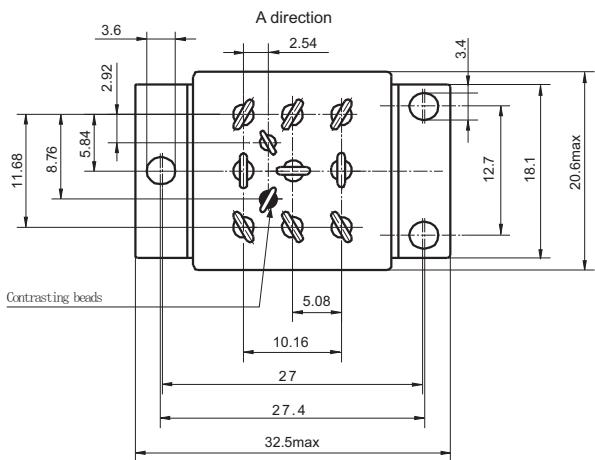
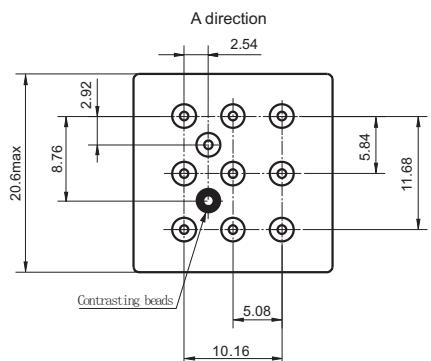
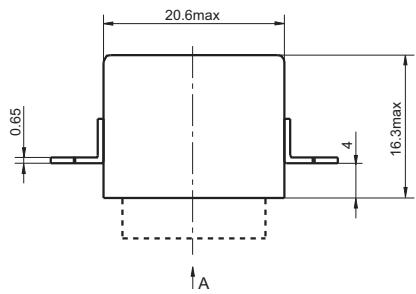
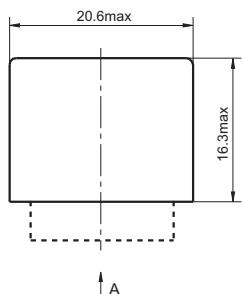
Type	HF9520	-012	L	-0	1	- II
Order Number	006、012、028					
Failure Rate	L: Failure rate level L (level III products available) <sup>1)</sup> Nil: Without failure rate requirement(level I ,II ,III products available)					
Mounting Style	0, 2, 3 (See the mounting dimension)					
Terminals Style	1, 4 (See " 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 DIMENSIONS AND WIRING DIAGRAM

Unit:mm

### Outline Dimension



### Disclaimer

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

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