



### Features

- 16A 250VAC switching capability with single pole contact
- 10A 250VAC switching capability with double pole contact
- The relay is equipped with manual lever, which is convenient for on-site commissioning
- Non polar wiring can avoid working faults caused by wiring errors
- With quick on and off response characteristics
- Relays are equipped with sockets for quick replacement and maintenance

### CHARACTERISTICS

#### INPUT

Nominal Voltage	24VDC(Allow 80%~110% rated change range)
Power consumption Per Channel	<670mW
Wiring polarity	No Polarity
Terminal type	Terminal block(See annex 1)
Control Channel Qty	2,4,8,12,16,20

#### OUTPUT

Relay specification	HF157F(See annex 2)
Contact arrangement	1CO/2CO
Rated voltage	250VAC/ 30VDC
Rated current	1 Pole:16A/Channel 2 Pole: 10A/Chennel
Wiring type	Terminal block(See annex 3)

#### ENVIRONMENTAL AND SAFETY REGULATIONS

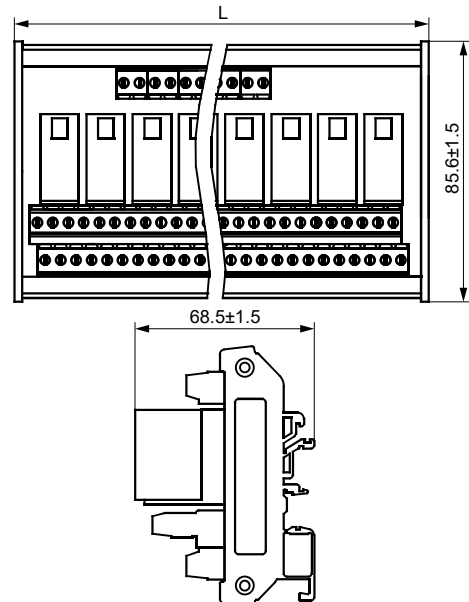
Ambient temperature	-20～55℃	
Storage temperature	-40～70℃	
Installation method	DIN35 DIN-G	
Standard compliance	IEC61010-1	
Dielectric strength (50Hz,1min)	Between output channels	1.5kV
	Between input and output	4kV
Surge voltage(1.2/50μs)	2.5kV	

Operate time	Approx. 8.0ms
Release time	Approx. 3.0ms

Note: the typical time parameter is the typical value range of the mean value tested with three samples as a group.

### OUTLINE DIMENSIONS

Unit: mm



Channels Qty compared with length:

Control Channel Qty	Length (L)
2	43.3mm ±1.5mm
4	73.3mm ±1.5mm
6	103.3mm ±1.5mm
8	134.3mm ±1.5mm
12	196mm ±1.5mm
16	257mm ±1.5mm
20	318mm ±1.5mm



HONGFA APPLICATION ELECTRONIC MODULE

ISO9001,IATF16949,ISO14001,OHSAS18001,IECQ QC 080000 CERTIFIED

2022 Rev. 1.00



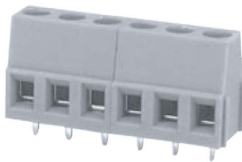
### Cross reference guide:

TYPE	Channel Qty	P/N	Outline dimensions (length×width×height)
HFGD7-5/C1Z2-RD24	2		43.3mm x 85.6mm x 72.5mm
HFGD7-5/C1Z4-RD24	4		73.3mm x 85.6mm x 72.5mm
HFGD7-5/C1Z6-RD24	6		103.3mm x 85.6mm x 72.5mm
HFGD7-5/C1Z8-RD24	8		134.3mm x 85.6mm x 72.5mm
HFGD7-5/C1Z12-RD24	12		196mm x 85.6mm x 72.5mm
HFGD7-5/C1Z16-RD24	16		257mm x 85.6mm x 72.5mm
HFGD7-5/C1Z20-RD24	20		318mm x 85.6mm x 72.5mm
HFGD7-5/C2Z2-RD24	2		43.3mm x 85.6mm x 72.5mm
HFGD7-5/C2Z4-RD24	4		73.3mm x 85.6mm x 72.5mm
HFGD7-5/C2Z6-RD24	6		103.3mm x 85.6mm x 72.5mm
HFGD7-5/C2Z8-RD24	8		134.3mm x 85.6mm x 72.5mm
HFGD7-5/C2Z12-RD24	12		196mm x 85.6mm x 72.5mm
HFGD7-5/C2Z16-RD24	16		257mm x 85.6mm x 72.5mm

Note: This table is only for common materials.

If customer's demand is not listed here, please select the type according to "Ordering information"

### Annex 1:Wiring terminal parameter table(HFLS1A-508/MAXX)



#### Features

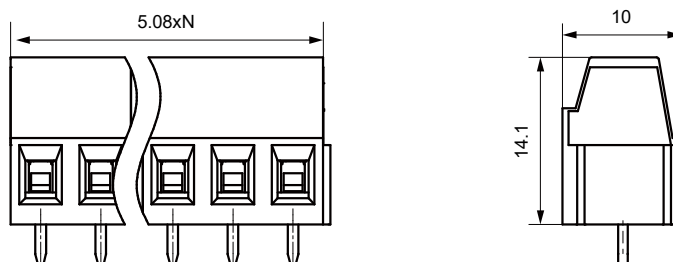
- PCB terminal block, lifting screw connector with pressing frame
- Use a screwdriver for disassembly and assembly, with the torque of 0.4 N·m

### TECHNICAL SPECIFICATION

Rated load	10A 300V(ULstandard)/17.5A 250V(IECstandard)
Poles	2~24
Pitch	5.08mm
Conductor Cross Section	0.2~2.5mm <sup>2</sup> (solid wire)/0.25~1.5mm <sup>2</sup> (strand wire)
Rated Dielectric Strength	2200VAC/min
Rated Withstand Pulse Voltage	4kV
Ambient Temperature	-40°C~105°C
Striping Length	7mm
Tightening Torque	0.4N·m
Insulation Material Type/Insulation Material Group	PA/I

## OUTLINE DIMENSIONS

Unit: mm



Remark:

- 1) Some outline dimensions of the product have no dimensional tolerance noted: outline dimension  $\leq 1\text{mm}$ , tolerance should be  $\pm 0.2\text{mm}$ ; outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , tolerance should be  $\pm 0.3\text{mm}$ ; outline dimension  $> 5\text{mm}$ , tolerance should be  $\pm 0.4\text{mm}$ .
- 2) In the layout of PCB mounting holes, if no dimensional tolerance is noted, it shall be calculated as  $\pm 0.1\text{mm}$ .



## Annex 2: Relay parameter table(HF157F)

**c us**

File No.:E133481



File No.:50403813



File No.:CQC18002189443



### Features

- High load current: 1Z(16A),2Z(10A)
- With LED, continuous diode, RC, indicator board, button
- 5kV dielectric strength (between coil and contacts)
- Have single or double poles of conversion contact forms
- Sockets available

RoHS compliant

### CONTACT DATA

Contact arrangement	1Z/2Z
Contact Resistance	100mΩ
Contact material	AgSnO <sub>2</sub>
Contact rating	1Z:10A/12A/16A 250VAC;2Z:8A 250VAC
Max.switching voltage	400VAC
Max.switching current	1Z:10A/12A/16A;2Z:10A
Max.switching power	1Z:2500VA/3000VA/4000VA;2Z:2000VA
Mechanical endurance	AC:3×10 <sup>7</sup> OPS; DC: 5×10 <sup>7</sup> OPS
Electrical endurance	1×10 <sup>6</sup> OPS (1Z:12A 250VAC/30VDC,Res.load,room temperature,1s on,9s off, NO or NC) (2Z:8A 250VAC/30VDC,Res.load,room temperature,1s on 9s off, NO or NC)

### CHARACTERISTICS

Coil power	Approx. 530mW
Insulation resistance	1000MΩ (500VDC)
Dielectric strength	Between coil and contacts: 5kVAC 1min
	Between open contacts: 1kVAC 1min
	Between contact sets: 3kVAC 1min

Annex 3:Wiring terminal parameter table(HFLS1A-508/MABXX)



Features

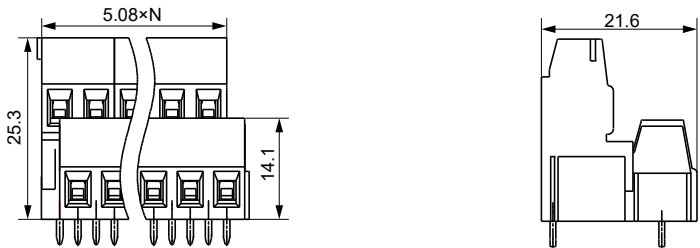
- PCB terminal block,lifting screw connector with pressing frame
- Use a screwdriver for disassembly and assembly,with the torque of 0.4 N·m

TECHNICAL SPECIFICATION

Rated load	10A 300V(ULstandard)/17.5A 250V(IECstandard)
Poles	2~24
Pitch	5.08mm
Conductor Cross Section	0.2~2.5mm²(solid wire)/0.25~1.5mm²(strand wire)
Rated Dielectric Strength	2200VAC/min
Rated Withstand Pulse Voltage	4kV
Ambient Temperature	-40℃~105℃
Striping Length	7mm
Tightening Torque	0.4N·m
Insulation Material Type/Insulation Material Group	PA/I

OUTLINE DIMENSIONS

Unit: mm



- Remark:
- 1) Some outline dimensions of the product have no dimensional tolerance noted: outline dimension  $\leq 1\text{mm}$ , tolerance should be  $\pm 0.2\text{mm}$ ; outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , tolerance,should be  $\pm 0.3\text{mm}$ ;outline dimension  $> 5\text{mm}$ , tolerance should be  $\pm 0.4\text{mm}$ .
  - 2) In the layout of PCB mounting holes, if no dimensional tolerance is noted, it shall be calculated as  $\pm 0.1\text{mm}$ .

**Disclaimer:**  
The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.