

# HF13F-AS

# RELAY MODULE



File No.:  
E253370 (Socket)  
E133481 (Relay)



File No.: R 50147087



File No.:  
CQC09001030026(DCtype)  
CQC09001030027(ACtype)



### Features

- 1C:15A; 2C:10A switching capability
- Screw type and rail mounting type are available
- With 1 or 2 sets of changeover contact options
- Products with finger protection are available
- UL insulation system:Class F (2C/2A)

RoHS compliant

### CONTACT DATA

Contact arrangement	1A,1C,2A,2C
Contact rating (Res. load)	15A 250VAC/30VDC(1A/HZ) 10A 250VAC/30VDC(2A/2C)
Max. switching voltage	250VAC/30VDC
Max. switching current	15A (1A,1C), 10A (2A/2C)

### CHARACTERISTICS

Insulation resistance	500MΩ(500VAC)	
Dielectric strength (RMS)	Between coil & contacts	1500VAC 1min
	Between open contacts	1000VAC 1min
	Between contact sets	1500VAC 1min
Operate time (at nomi. volt.)	25ms (DCtype max.)	
Release time (at nomi. volt.)	25ms (DCtype max.)	
Humidity (RH)	5% to 85%RH	
Ambient temperature	-40°C to 70°C	

### COIL DATA

23°C

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min	Max. Allowable Voltage VDC
5	4.0	0.50	5.5
6	4.8	0.60	6.6
9	7.2	0.90	9.9
12	9.6	1.20	13.2
21	16.8	2.10	23.1
24	19.2	2.40	26.4
30	24.0	3.00	33.0
36	28.8	3.60	39.6
48	38.4	4.80	52.8
60	48.0	6.00	66.0
110	88.0	11.0	121.0
125	100.0	12.5	137.5
220	176.0	22.0	242.0

Nominal Voltage VAC	Pick-up Voltage VAC max.	Drop-out Voltage VAC min	Max. Allowable Voltage VAC
6	4.80	1.80	6.6
12	9.60	3.60	13.2
24	19.2	7.20	26.4
36	28.8	10.8	39.6
48	38.4	14.4	52.8
120	96.0	36.0	132.0
220	176.0	72.0	242.0
240	176.0	72.0	264.0
277	221.6	83.1	304.7



HONGFA RELAY

ISO9001,IATF16949,ISO14001,ISO45001,IECQ QC 080000 CERTIFIED

2023 Rev. 1.00

## ORDERING INFORMATION

HF13F-AS/□□□□-□□1□□(XXX)-C□-H□(XXX)

<b>Relay module</b>	<b>HF13F:</b> type without button <b>AS:</b> module
<b>Coil voltage</b>	<b>A:</b> AC (50HZ or 60HZ) <b>Nil:</b> DC
<b>Relay coil voltage</b>	<b>DC:</b> 005~220VDC <b>AC:</b> 006~277VAC
<b>Contact arrangement</b>	<b>1H:</b> 1 Form A <b>1Z:</b> 1 Form C <b>2H:</b> 2 Form A <b>2Z:</b> 2 Form C
<b>Installation method</b>	<b>1:</b> Socket mounting
<b>Contact material</b>	<b>3:</b> AgNi <b>T:</b> AgSnO <sub>2</sub> <b>3G:</b> AgNi+Au plated <b>TG:</b> AgSnO <sub>2</sub> +Au plated
<b>Luminous diode</b>	<b>D:</b> with LED <b>Nil:</b> without LED <b>J:</b> freewheeling diode <b>DJ:</b> with LED light ,freewheeling diode
<b>Relay special code<sup>2)</sup></b>	<b>XXX:</b> The customer special requirement <b>Nil:</b> Standard type
<b>Matching socket</b>	C1, C2 for 1Z C1, C2 for 2Z
<b>Matching retaining clip</b>	18FF-H2 for C1,C2
<b>Socket special code<sup>2)</sup></b>	<b>XXX:</b> The customer special requirement <b>Nil:</b> Standard type

**Notes:**1)The AS component model is for customer ordering convenience only; the actual marking shall prevail as printed on the relay and socket products.  
2) The customer special requirement express as special code after evaluating by Hongfa;

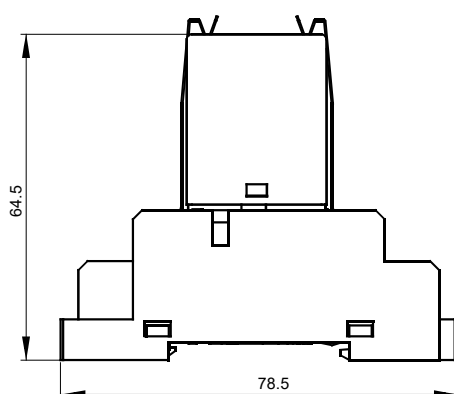
## OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

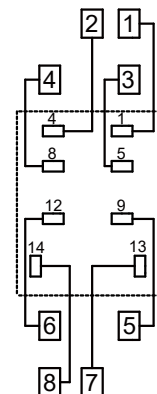
### Outline Dimensions

### Wiring Diagram

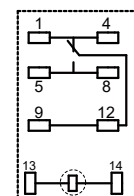
HF13F-AS/□□□□-1□1□□-C1-H2



Socket (Top View)



Relay(Bottom view)<sup>1)</sup>



**Notes:** 1) For the relay wiring diagram, please refer to the instruction manual of Relay HF13F.

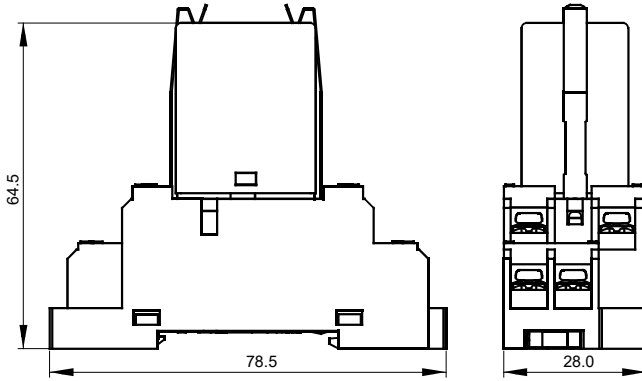
# OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

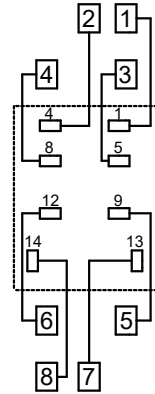
## Outline Dimensions

## Wiring Diagram(Bottom view)

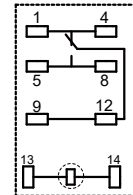
HF13F-AS/□□□□-1□1□□-C2-H2



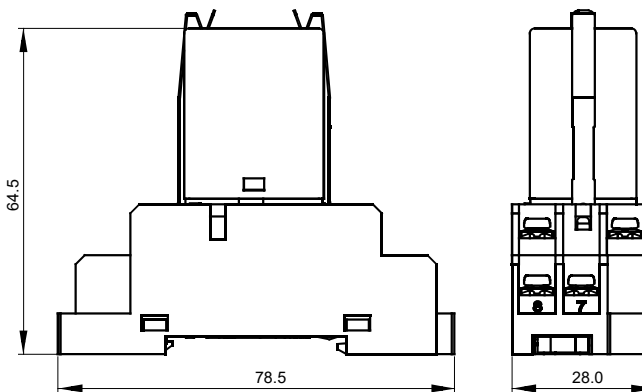
Socket (Top View)



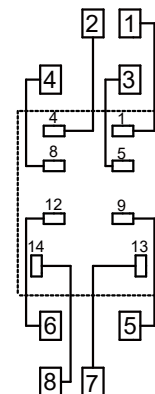
Relay(Bottom view)<sup>1)</sup>



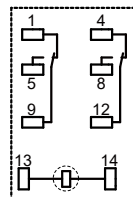
HF13F-AS/□□□□-2□1□□-C1-H2



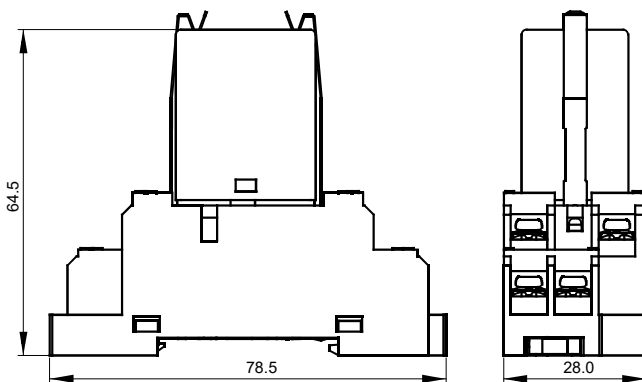
Socket (Top View)



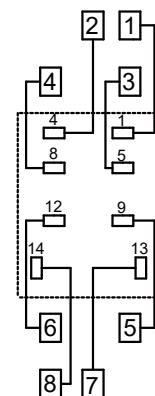
Relay(Bottom view)<sup>1)</sup>



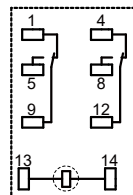
HF13F-AS/□□□□-2□1□□-C2-H2



Socket (Top View)



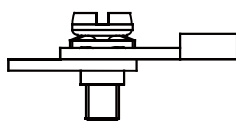
Relay(Bottom view)<sup>1)</sup>



**Notes:** 1) For the relay wiring diagram, please refer to the instruction manual of Relay HF13F.

## COMPONENT ORDERING INFORMATION

Gasket screw Relay



P/N	module type	relay type	socket type	retainer type	
—	HF13F-AS/A012-1Z13-C2-H2	HF13F/A012-1Z13	13F-2Z-C2	18FF-H2	
—	HF13F-AS/A024-1Z13-C2-H2	HF13F/A024-1Z13			
—	HF13F-AS/A060-1Z13-C2-H2	HF13F/A060-1Z13			
—	HF13F-AS/A220-1Z13-C2-H2	HF13F/A220-1Z13			
—	HF13F-AS/A012-2Z13-C2-H2	HF13F/A012-2Z13			
—	HF13F-AS/A024-2Z13-C2-H2	HF13F/A024-2Z13			
—	HF13F-AS/A060-2Z13-C2-H2	HF13F/A060-2Z13			
—	HF13F-AS/A220-2Z13-C2-H2	HF13F/A220-2Z13			
—	HF13F-AS/012-1Z13-C2-H2	HF13F/012-1Z13			
—	HF13F-AS/024-1Z13-C2-H2	HF13F/024-1Z13			
—	HF13F-AS/060-1Z13-C2-H2	HF13F/060-1Z13			
—	HF13F-AS/220-1Z13-C2-H2	HF13F/220-1Z13			
—	HF13F-AS/012-2Z13-C2-H2	HF13F/012-2Z13			
—	HF13F-AS/024-2Z13-C2-H2	HF13F/024-2Z13			
—	HF13F-AS/060-2Z13-C2-H2	HF13F/060-2Z13			
—	HF13F-AS/220-2Z13-C2-H2	HF13F/220-2Z13			
—	HF13F-AS/A012-1Z13-C1-H2	HF13F/A012-1Z13			13F-2Z-C1
—	HF13F-AS/A024-1Z13-C1-H2	HF13F/A024-1Z13			
—	HF13F-AS/A060-1Z13-C1-H2	HF13F/A060-1Z13			
—	HF13F-AS/A220-1Z13-C1-H2	HF13F/A220-1Z13			
—	HF13F-AS/A012-2Z13-C1-H2	HF13F/A012-2Z13			
—	HF13F-AS/A024-2Z13-C1-H2	HF13F/A024-2Z13			
—	HF13F-AS/A060-2Z13-C1-H2	HF13F/A060-2Z13			
—	HF13F-AS/A220-2Z13-C1-H2	HF13F/A220-2Z13			
—	HF13F-AS/012-1Z13-C1-H2	HF13F/012-1Z13			
—	HF13F-AS/024-1Z13-C1-H2	HF13F/024-1Z13			
—	HF13F-AS/060-1Z13-C1-H2	HF13F/060-1Z13			
—	HF13F-AS/220-1Z13-C1-H2	HF13F/220-1Z13			
—	HF13F-AS/012-2Z13-C1-H2	HF13F/012-2Z13			
—	HF13F-AS/024-2Z13-C1-H2	HF13F/024-2Z13			
—	HF13F-AS/060-2Z13-C1-H2	HF13F/060-2Z13			
—	HF13F-AS/220-2Z13-C1-H2	HF13F/220-2Z13			

Note: Please contact us for any information.

## PRECAUTIONS FOR USE

For your personal safety and the normal operation of the equipment, as well as to prevent fire, please note the following issues :

1. The rated current of the socket should be no less than the rated current of the relay.
2. Sockets are required to be firmly fixed to prevent the wiring from loosening and affecting the quality of wiring.
3. Be sure to disconnect power to the outlet before installation, disassembly, wiring, maintenance and inspection.
4. Prevent foreign objects such as wire shavings from falling inside this product when wiring.
5. Be sure to install the relay in place, and use accessories such as retainer if necessary to improve contact reliability.  
Do not use with incomplete connections.
6. Be sure to observe the relay ratings and do not overload the relay.
7. Before selecting a relay, make sure that the drive voltage matches the relay excitation voltage.
8. The main external dimension, when the external dimension > 50mm, the tolerance is  $\pm 1\text{mm}$ ; When the  $20\text{mm} < \text{dimensions}$  are between  $50\text{mm} \leq$ , the tolerance is  $\pm 0.5\text{mm}$ ; When the overall dimension of  $5\text{mm} < \text{between} \leq 20\text{mm}$ , the tolerance is  $\pm 0.4\text{mm}$ , and when the external dimension is  $\leq 5\text{mm}$ , the tolerance is  $\pm 0.3\text{mm}$ ;
9. For rail installation, it is recommended to use DIN standard  $35 \times 7.5 \times 1$ ,  $35 \times 15 \times 1$  standard rails.

### 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.

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