

# HF18FF-G-AS/HF18FH-G-AS

# RELAY MODULE



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



File No.: R50147087



File No.:  
CQC09002030026(DCtype)  
CQC09002030027(ACtype)



## Features

- 2000VAC insulation, 1000MΩ insulation resistance
- DIN rail or Screw mounting type available
- With 2 or 3 sets of changeover contact options
- Products with finger protection are available
- Gold plated contact product selection

RoHS compliant

## CONTACT DATA

Contact arrangement	2C,3C
Contact rating (Res. load)	12A 250VAC/30VDC(2C) 10A 250VAC/30VDC(3C)
Max. switching voltage	250VAC/30VDC
Max. switching current	12A (2C), 10A (3C)

## CHARACTERISTICS

Insulation resistance	1000MΩ (500VAC)	
Dielectric strength(RMS)	Between coil & contacts	1500VAC 1min
	Between open contacts	1000VAC 1min
	Between contact sets	1500VAC 1min
Operate time (at nomi. volt.)	20ms max.	
Release time (at nomi. volt.)	15ms (DCtype max.) 25ms(DC with freewheeling diode type max.) 25ms (ACtype 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	80.0	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
60	48.0	18.0	66.0
110	80.0	33.0	121.0
120	88.0	36.0	132.0
220	160.0	66.0	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, ISO/IEC 27001 CERTIFIED

2024 Rev. 1.00

## ORDERING INFORMATION

HF18FF-G-AS/□□□□-□□□1□□□(XXX)-C□(XXX)-AA-H□	
<b>Relay module</b>	<b>HF18FF:</b> Without button type <b>HF18FH:</b> With button type <b>G:</b> High load type <b>AS:</b> Module
<b>Coil Power</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>2Z:</b> 2 Form C <b>3Z:</b> 3 Form C
<b>Installation method</b>	<b>1:</b> Plug-in
<b>Contact material</b>	<b>3:</b> AgNi <b>T:</b> AgSnO <sub>2</sub>
<b>Contact plating</b>	<b>Nil:</b> No gold plated <b>G:</b> Au plated
<b>Component code</b>	<b>Nil:</b> Without component <b>D:</b> With LED <b>J:</b> Freewheeling diode <b>DJ:</b> With LED, 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>	C2(734), C4(734), C5(734) for 2Z C5(734) for 3Z
<b>Socket special code<sup>2)</sup></b>	<b>XXX:</b> The customer special requirement <b>Nil:</b> Standard type
<b>Auxiliary module</b>	C4 and C5 series available; see HFAA-HFHU Instruction Manual for details.
<b>Matching retaining clip</b>	H2 for C2(HF18FF-G)    H3 for C2(HF18FH-G)    H5 for C4,C5

**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;  
 3) Only the relays with DC coil voltage form are available with freewheeling diode.

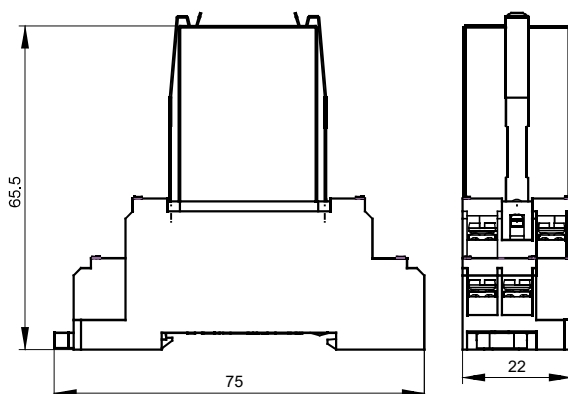
## OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

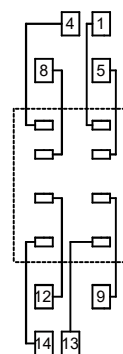
Outline Dimensions

Wiring Diagram(Bottom view)

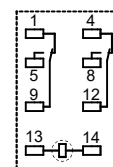
HF18FF-G-AS/□□□□-2Z1□□□-C2(734)-H2



Socket (Top View)



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



**Notes:** 1) For the relay wiring diagram, please refer to the instruction manual of Relay HF18FF-G/HF18FH-G.

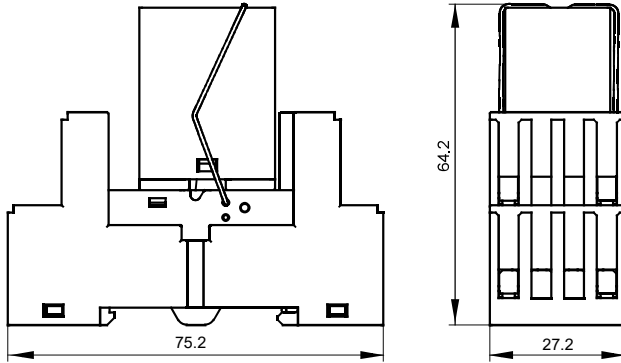
# OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

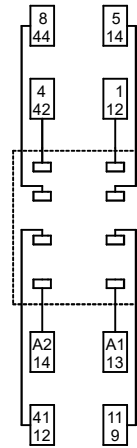
## Outline Dimensions

## Wiring Diagram(Bottom view)

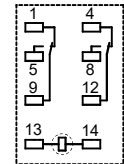
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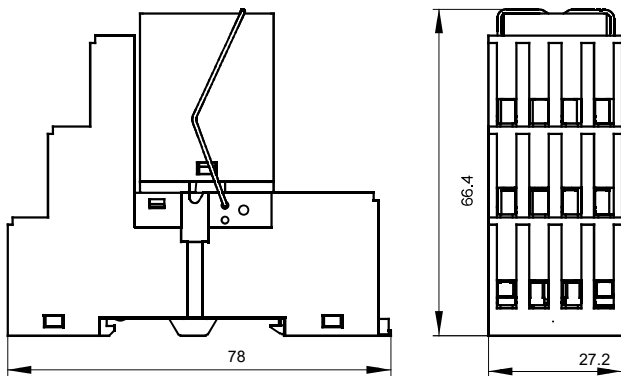
Socket (Top View)



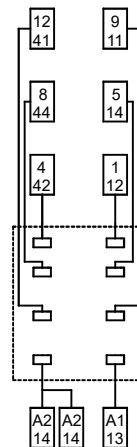
Relay(Bottom view)<sup>1)</sup>



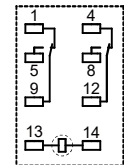
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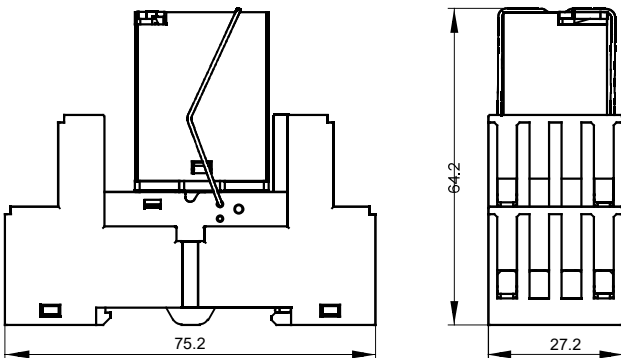
Socket (Top View)



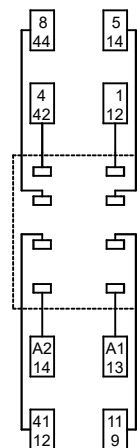
Relay(Bottom view)<sup>1)</sup>



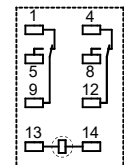
HF18FH-G-AS/□□-2Z1□□□-C4(734)-H5



Socket (Top View)



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



Notes: 1) For the relay wiring diagram, please refer to the instruction manual of Relay HF18FF-G/HF18FH-G.

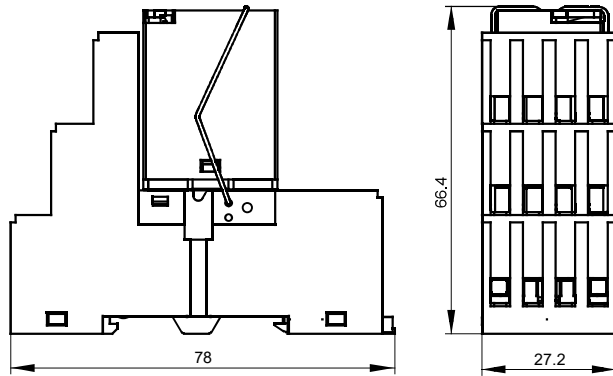
# OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

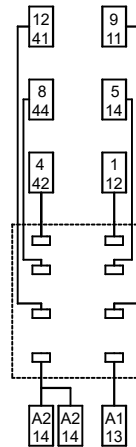
## Outline Dimensions

## Wiring Diagram(Bottom view)

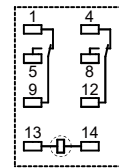
HF18FH-G-AS/□□-2Z1□□□-C5(734)-H5



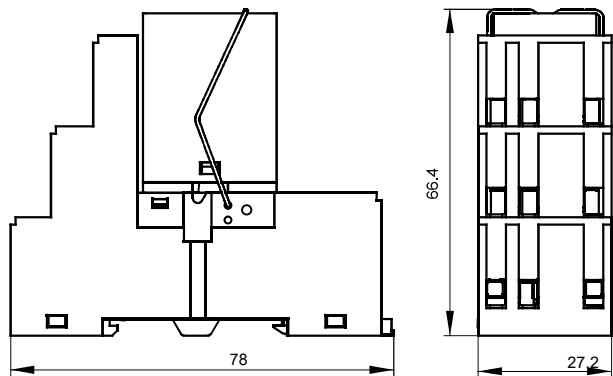
Socket (Top View)



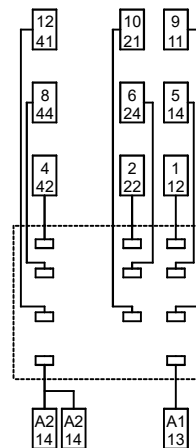
Relay(Bottom view)<sup>1)</sup>



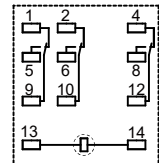
HF18FF-G-AS/□□-3Z1□□□-C5(734)-H5



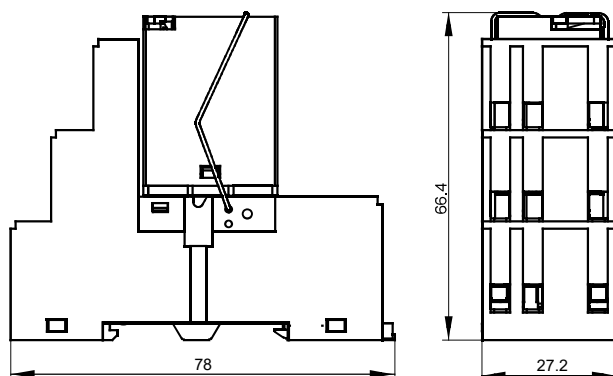
Socket (Top View)



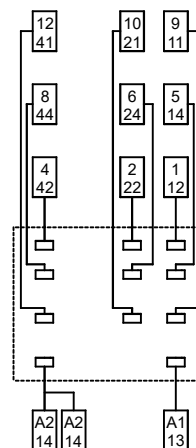
Relay(Bottom view)<sup>1)</sup>



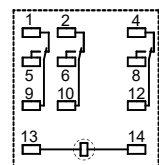
HF18FH-G-AS/□□-3Z1□□□-C5(734)-H5



Socket (Top View)



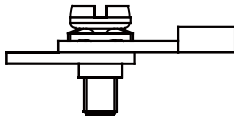
Relay(Bottom view)<sup>1)</sup>



**Notes:** 1) For the relay wiring diagram, please refer to the instruction manual of Relay HF18FF-G/HF18FH-G.

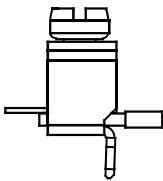
## COMPONENT ORDERING INFORMATION

### Gasket screw Relay



P/N	Module type	Relay type	Socket type	Retainer type
—	HF18FF-G-AS/012-2Z13D-C2(734)-H2	HF18FF-G/012-2Z13D	18FF-2Z-C2 (734)	18FF-H2
—	HF18FF-G-AS/024-2Z13D-C2(734)-H2	HF18FF-G/024-2Z13D		
—	HF18FF-G-AS/A110-2Z13D-C2(734)-H2	HF18FF-G/A110-2Z13D		
—	HF18FF-G-AS/A220-2Z13D-C2(734)-H2	HF18FF-G/A220-2Z13D		

### Screw terminal



P/N	Module type	Relay type	Socket type	Retainer type
—	HF18FF-G-AS/012-2Z13D-C4(734)-H5	HF18FF-G/012-2Z13D	18FF-2Z-C4 (734)	18FF-H5
—	HF18FF-G-AS/024-2Z13D-C4(734)-H5	HF18FF-G/024-2Z13D		
—	HF18FF-G-AS/A110-2Z13D-C4(734)-H5	HF18FF-G/A110-2Z13D		
—	HF18FF-G-AS/A220-2Z13D-C4(734)-H5	HF18FF-G/A220-2Z13D	18FF-2Z-C5 (734)	
—	HF18FF-G-AS/012-2Z13D-C5(734)-H5	HF18FF-G/012-2Z13D		
—	HF18FF-G-AS/024-2Z13D-C5(734)-H5	HF18FF-G/024-2Z13D		
—	HF18FF-G-AS/A110-2Z13D-C5(734)-H5	HF18FF-G/A110-2Z13D	18FF-3Z-C5 (734)	
—	HF18FF-G-AS/A220-2Z13D-C5(734)-H5	HF18FF-G/A220-2Z13D		
—	HF18FF-G-AS/012-3Z13D-C5(734)-H5	HF18FF-G/012-3Z13D		
—	HF18FF-G-AS/024-3Z13D-C5(734)-H5	HF18FF-G/024-3Z13D	18FF-2Z-C4 (734)	
—	HF18FF-G-AS/A110-3Z13D-C5(734)-H5	HF18FF-G/A110-3Z13D		
—	HF18FF-G-AS/A220-3Z13D-C5(734)-H5	HF18FF-G/A220-3Z13D		
—	HF18FH-G-AS/012-2Z13D-C4(734)-H5	HF18FH-G/012-2Z13D	18FF-2Z-C5 (734)	
—	HF18FH-G-AS/024-2Z13D-C4(734)-H5	HF18FH-G/024-2Z13D		
—	HF18FH-G-AS/A110-2Z13D-C4(734)-H5	HF18FH-G/A110-2Z13D		
—	HF18FH-G-AS/A220-2Z13D-C4(734)-H5	HF18FH-G/A220-2Z13D	18FF-3Z-C5 (734)	
—	HF18FH-G-AS/012-2Z13D-C5(734)-H5	HF18FH-G/012-2Z13D		
—	HF18FH-G-AS/024-2Z13D-C5(734)-H5	HF18FH-G/024-2Z13D		
—	HF18FH-G-AS/A110-2Z13D-C5(734)-H5	HF18FH-G/A110-2Z13D	18FF-2Z-C5 (734)	
—	HF18FH-G-AS/A220-2Z13D-C5(734)-H5	HF18FH-G/A220-2Z13D		
—	HF18FH-G-AS/012-3Z13D-C5(734)-H5	HF18FH-G/012-3Z13D		
—	HF18FH-G-AS/024-3Z13D-C5(734)-H5	HF18FH-G/024-3Z13D	18FF-3Z-C5 (734)	
—	HF18FH-G-AS/A110-3Z13D-C5(734)-H5	HF18FH-G/A110-3Z13D		
—	HF18FH-G-AS/A220-3Z13D-C5(734)-H5	HF18FH-G/A220-3Z13D		

Note: Please contact us for any information.

### Precautions when choosing components:

1. The main external dimension, when the external dimension > 50mm, the tolerance is ±1mm; When the 20mm dimensions are between 50mm, the tolerance is ±0.5mm; When the 5mm < dimensions are between ≤ 20mm, The tolerance is ±0.4mm, and when the overall dimension is ≤ 5mm, the tolerance is ±0.3mm;
2. For rail installation, it is recommended to use DIN standard 35×7.5×1, 35×15×1 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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