

Features

- 5000VAC insulation(I/O),8mm creepage distance,1000MΩ insulation resistance
- DIN rail , PCB mounting type available
- Extremely narrow (only15.8mm)
- Products with finger protection are available
- Ensure secure retention and easy ejection of relays, Ensure relays are securely mounted on or easily removed from sockets.

RoHS compliant

Tool hole/button

The hole to insert tool for installing/removing the wire or models with pushbuttons.

Test hole

For multimeter or other test probes.

Retainer

Prevent relay from loosening or falling out in vibration environment; Quickly remove the relay.

Relay

Maximum 16A switching capability; 5kV dielectric strength (between coil and contacts); Meeting VDE 0700 0631 reinforce insulation; DC/AC coil, LED, test button, transparent cover, 1 pole/2pole contact; Solid state relay is featured with long lifecycle.

Wiring hole

For wire connection, suit for both rigid and flexible wire compression terminals.

Module

Protect signal input devices, prevent misoperation of relays; Power indicator, fly-wheel diode, induced current absorption, overvoltage protection.

Marker

Mark or post signs.

Socket marking

Marked with main electrical performance, load range, applicable tools, matching relays.

Socket installation

DIN rail (35mm) mount or screw (Ø3.5) mount.



File No.: E253370(Socket), E134517(Relay)



File No.: 116934(Relay)



File No.: CQC17002168381(Relay)



HONGFA RELAY

ISO9001, IATF16949, ISO14001, ISO45001, IECQ QC 080000, ISO/IEC 27001 CERTIFIED

2023 Rev. 2.00

CONTACT DATA

Contact arrangement	1C	2C
Contact rating (Res. load)	16A 250VAC	8A 250VAC
Max. switching voltage	440VAC	
Max. switching current	16A	8A

CHARACTERISTICS

Insulation resistance	1000MΩ (500VAC)	
Dielectric strength (RMS)	Between coil & contacts	5000VAC 1min
	Between open contacts	1000VAC 1min
	Between contact sets	2500VAC 1min
Operate time (at nomi. volt.)	10ms max.	
Release time (at nomi. volt.)	8ms max.	
Humidity (RH)	5% to 85%RH	
Storage temperature	- 40°C to 85°C	
Overvoltage category	III	
Conductor cross-section	0.5mm ² to 2.5mm ²	

COIL DATA

23°C

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. ¹⁾ Allowable Voltage VDC	Coil voltage Ω
5	3.50	0.5	7.5	62 x (1±10%)
6	4.20	0.6	9.0	90 x (1±10%)
9	6.30	0.9	13.5	202 x (1±10%)
12	8.40	1.2	18	360 x (1±10%)
18	12.60	1.8	27	810 x (1±10%)
24	16.80	2.4	36	1440 x (1±10%)
48 ²⁾	33.60	4.8	72	5760 x (1±15%)
60 ²⁾	42.00	6.0	90	7500 x (1±15%)
110 ²⁾	77.00	11.0	165	25200 x (1±15%)

- Notes: (1) Max. voltage refers to the maximum voltage which relay coil could endure in a short period of time;
 (2) For products with rated voltage ≥ 48V, measures should be taken to prevent coil overvoltage in order to protect coil in test and application (eg. Connect diodes in parallel).

ORDERING INFORMATION

	HF115F-AS / <input type="checkbox"/> -1Z S 3 A F -- <input type="checkbox"/> - <input type="checkbox"/> (XXX)
Relay module	HF115F : Relay type AS : module
Relay coil voltage	5, 6, 9, 12, 18, 24, 48, 60, 110 VDC
Contact arrangement	1H : 1 Form A (1 pole16A) 1D : 1 Form B (1 pole16A) 1Z : 1 Form C (1 pole16A) 2H : 2 Form A 2D : 2 Form B 2Z : 2 Form C
Construction	S : Plastic sealed Nil :Fluxproofed
Structure	3 : 5.0mm 1 pole 16A 4 : 5.0mm 2 pole 8A
Contact material	A : AgSnO ₂ AG : AgSnO ₂ +Au plated B : AgNi BG : AgNi+Au plated Nil : AgCdO
UL insulation system	F : Class F
Matching socket	A1 : PCB terminal C2,C3 : Screw terminal C10 : Push in terminal
Matching retaining clip	H4 for socket C2,C3,C10 H1 for socket A1
Special code	XXX : The customer special requirement Nil : Standard type

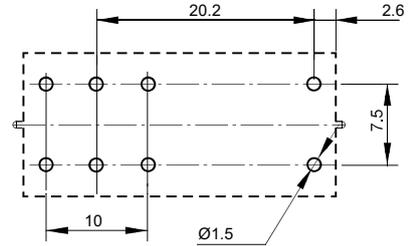
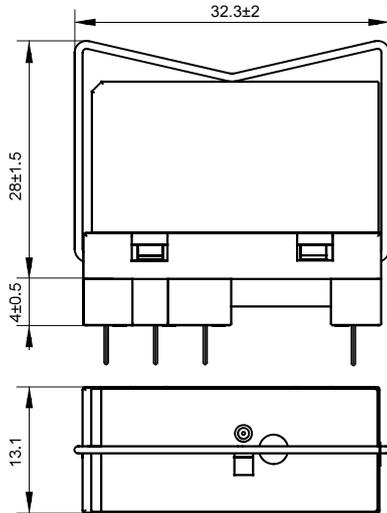
OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

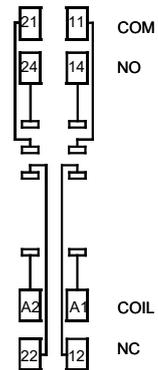
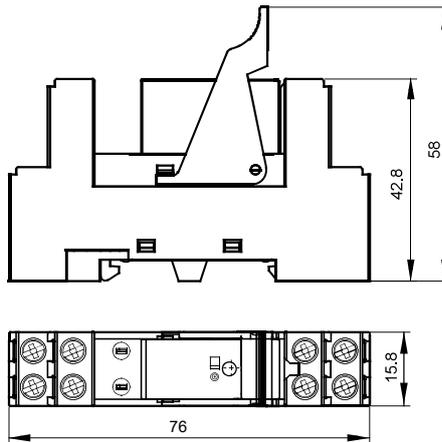
Outline Dimensions

Wiring Diagram(Bottom view)

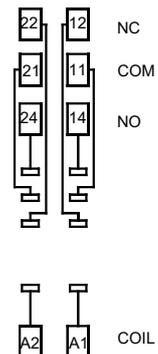
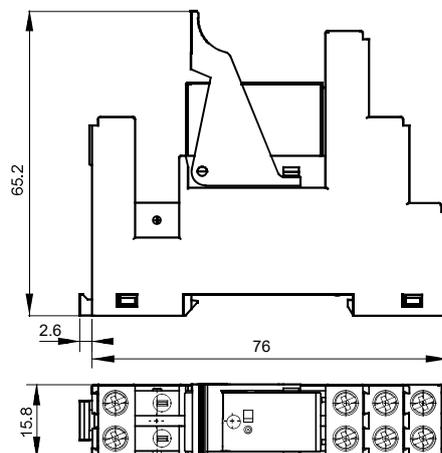
HF115F-AS/□-□□4□□-A1-H1



HF115F-AS/□-□□4□□-C2-H4



HF115F-AS/□-□□4□□-C3-H4



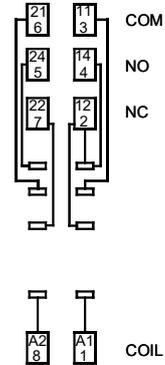
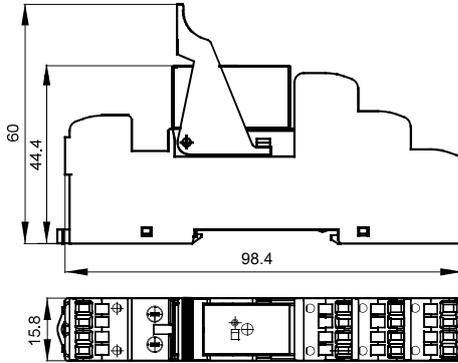
OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

Outline Dimensions

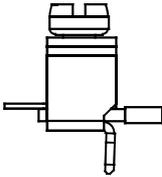
Wiring Diagram(Top view)

HF115F-AS/□-□□4□□-C10-H4



COMPONENT ORDERING INFORMATION

Screw terminal



P/N	module type	relay type	socket type	retainer type	Min. packing quantity	unit weight
—	HF115F-AS/024-2Z4BF-C2-H4	HF115F/024-2Z4BF	14FF-2Z-C2	14FF-H4	10pcs	Approx. 54.7g
—	HF115F-AS/024-2Z4BF-C3-H4	HF115F/024-2Z4BF	14FF-2Z-C3	14FF-H4		Approx. 60.5g

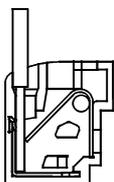
Note: Pleasecontact us for any information.

PCB terminal

P/N	module type	relay type	socket type	retainer type	Min. packing quantity	unit weight
—	HF115F-AS/024-2Z4BF-A1-H1	HF115F/024-2Z4BF	14FF-2Z-A1	14FF-H1	10pcs	Approx. 16.4g

Note: Pleasecontact us for any information.

Push in terminal



P/N	module type	relay type	socket type	retainer type	Min. packing quantity	unit weight
—	HF115F-AS/024-2Z4BF-C10-H4	HF115F/024-2Z4BF	14FF-2Z-C10	14FF-H4	10pcs	Approx. 50g

Note: Pleasecontact 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.

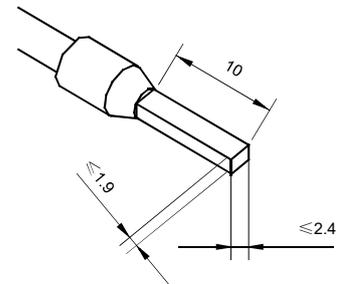
Relay module of screw terminal

Maximum torque 0.8N.m, The type of the screwdriver head is PH1.

Relay module of push interterminal

Conductor cross-section

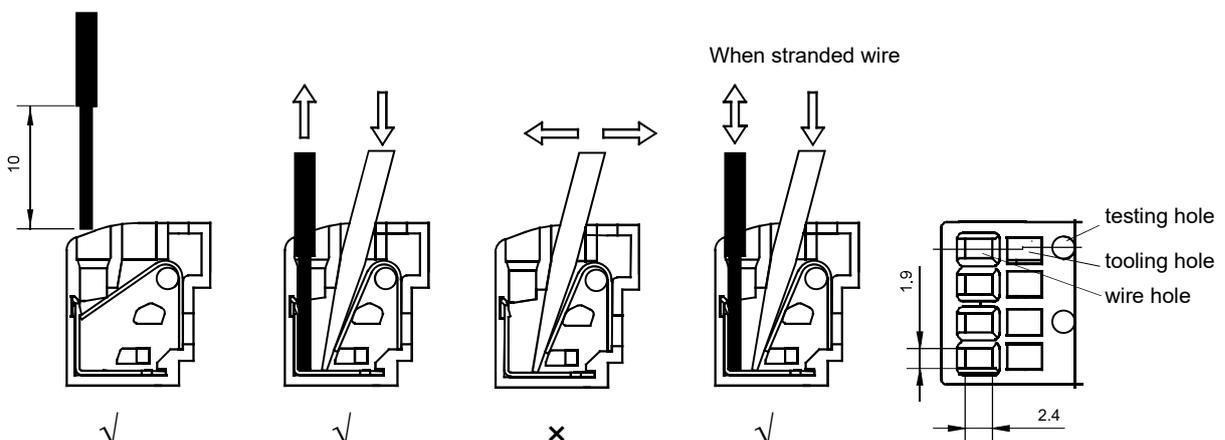
Solid wire	1×0.5/0.75/1.0/1.5/2.5 mm ²	
	2×0.5/0.75/1.0/1.5 mm ²	
Stranded wire	Stranded wires without ferrule	1×0.5/0.75/1.0/1.5/2.5 mm ²
		2×0.5/0.75/1.0/1.5 mm ²
	Stranded wires with ferrule	1×0.5/0.75/1.0/1.5 mm ²
		2×0.5/0.75/1.0 mm ²



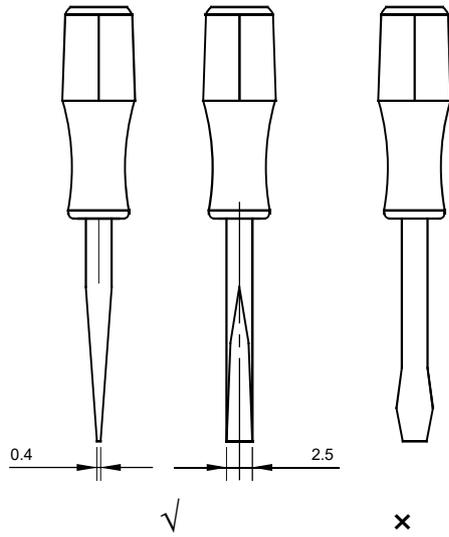
About push in socket

- Do not insert wires into tooling hole.
- When inserting the screwdriver into the hole, please insert it at an angle.
- Do not twist or wiggle the screwdriver when it is in the hole, as this may cause damage to the socket.
- Do not forcibly bend or pull on the wire. Otherwise it may result in broken wire.
- Do not insert more than one wire into one wiring hole.
- To prevent smoke and fire from the wiring material, check the power supply rating and that the wire sleeves used are in accordance with DIN 46228-4, The conductors used comply with GB/T 5023.3-2008 (IEC 60227-3) standard.

Range of wire	Stripped length min
0.5 to 2.5mm ² / AWG20 to 14	10mm



PRECAUTIONS FOR USE



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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