

### Features

- Forcibly guided contacts according to IEC 61810-3
- 8A switching capability
- 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

#### Module

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

#### Relay

Force-guided relays;  
Maximum 8A switching capability;  
High insulation capability (1.2 / 50μs):  
10kV surge voltage between coil & contacts  
and 6kV between contact sets;  
DC coil, 2 poles;  
Forcibly guided contacts according to IEC 61810-3.

#### Retainer

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

#### Marker

Mark or post signs.

#### Wiring hole

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

#### 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) , E133481(Relay)



File No.:  
B0532860041(Relay)



HONGFA RELAY

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

2024 Rev. 1.00

## CONTACT DATA

Contact arrangement	HD1	HD2	2C
Contact rating (Res. load)	A type Force guided		B type Force guided
Max. switching voltage	400VAC/30VDC		
Max. switching current	8A		
Max. switching power	1500VA/180W		

## CHARACTERISTICS

Insulation resistance		1000MΩ (500VAC)
Dielectric strength (RMS)	Between coil & contacts	4000VAC 1min
	Between open contacts	1500VAC 1min
	Between contact sets	3000VAC 1min
Operate time (at nomi. volt.)		15ms max. (DC type)
Release time (at nomi. volt.)		10ms max. (DC type)
Humidity (RH)		5% to 85%RH
Storage temperature		-40°C to 85°C
Overvoltage category		III
Conductor cross-section		0.5mm <sup>2</sup> to 2.5mm <sup>2</sup>

## COIL DATA

23°C

Nominal Voltage VDC	Pick-up <sup>1)</sup> Voltage VDC max.	Drop-out <sup>1)</sup> Voltage VDC min	Max. <sup>2)</sup> Allowable Voltage VDC	Coil voltage Ω
5	3.80	0.5	7.5	35.7 x (1±10%)
6	4.50	0.6	9	51 x (1±10%)
9	6.80	0.9	13.5	116 x (1±10%)
12	9.00	1.2	18	206 x (1±10%)
15	11.3	1.5	22.5	321 x (1±10%)
18	13.5	1.8	27	483 x (1±10%)
21	15.8	2.1	31.5	630 x (1±10%)
24	18.0	2.4	36	823 x (1±10%)
36	27.0	3.6	54	1851 x (1±10%)
40	30.0	4.0	60	2286 x (1±10%)
48 <sup>(3)</sup>	36.0	4.8	72	3291 x (1±12%)
60 <sup>(3)</sup>	45.0	6.0	90	5142 x (1±12%)
80 <sup>(3)</sup>	64.0	8.0	120	9143 x (1±12%)
110 <sup>(3)</sup>	82.5	11.0	165	17285 x (1±12%)

**Notes:** (1) The data shown above are initial values;  
(2) Max. voltage refers to the maximum voltage which relay coil could endure in a short period of time;  
(3) 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

HFA2-AS		/□	-2Z	S	T	F	G	--□	-□	(XXX)
Relay module	HFA2: Relay type AS: module									
Relay coil voltage	5, 6, 9, 12, 15, 18, 21, 24, 36, 40, 48, 60, 80, 110VDC									
Contact arrangement	HD1: 1 Form A + 1 Form B (1 type) HD2: 1 Form A + 1 Form B (2 type) 2Z: 2 Form C									
Construction	S: Plastic sealed Nil: Fluxproofed									
Contact material	T: AgSnO <sub>2</sub>									
UL insulation system	F: Class F Nil: Class B									
Contact plating	G: Gold plate (Min. contact load 10mA 5VDC) Nil: No gold plated									
Matching socket	A1: PCB terminal C2, C3: Screw terminal C10: Push in terminal									
Matching retaining clip	H6 for socket C2, C10 H11 for socket A1									
Special code	XXX: The customer special requirement Nil: Standard type									

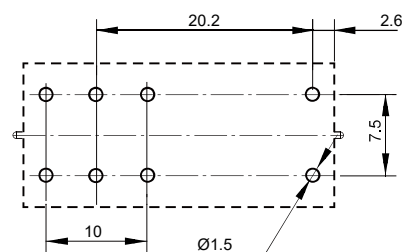
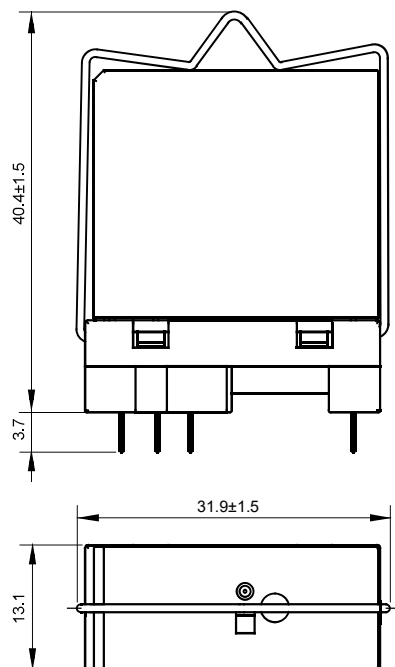
# OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

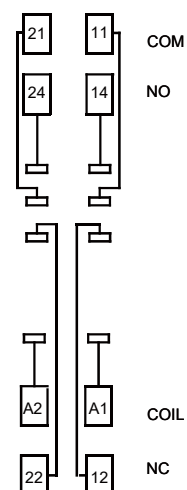
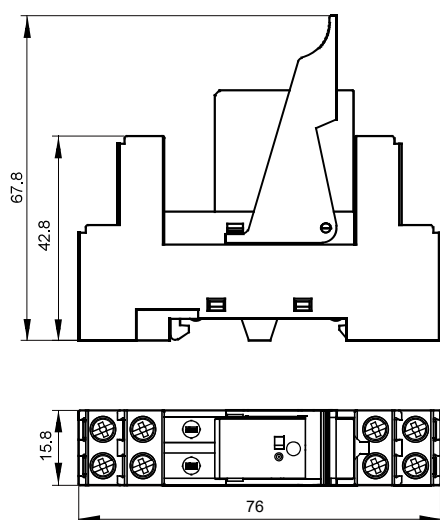
Outline Dimensions

Wiring Diagram(Bottom view)

HFA2-AS/□-□□□□□-A1-H11



HFA2-AS/□-□□□□□-C2(767)-H6



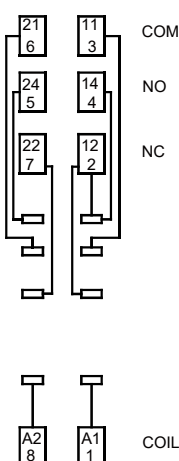
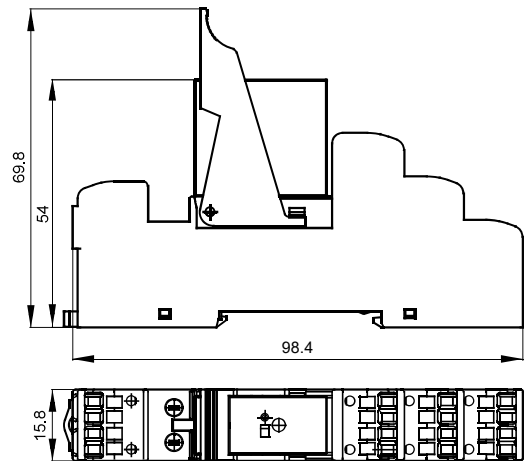
# OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

## Outline Dimensions

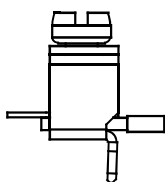
## Wiring Diagram(Top view)

HFA2-AS/□-□□□□□-C10-H6



# COMPONENT ORDERING INFORMATION

Screw terminal



P/N	module type	relay type	socket type	retainer type	Min. packing quantity	unit weight
—	HFA2-AS/24-2ZSTFG-C2(767)-H6	HFA2/24-2ZSTFG	14FF-2Z-C2(767)	14FF-H6	10pcs	Approx. 61.2g

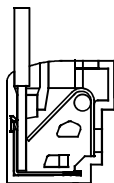
Note: Pleasecontact us for any information.

PCB terminal

P/N	module type	relay type	socket type	retainer type	Min. packing quantity	unit weight
—	HFA2-AS/24-2ZSTFG-A1-H11	HFA2/24-2ZSTFG	14FF-2Z-A1	14FF-H11	10pcs	Approx. 22.8g

Note: Pleasecontact us for any information.

Push in terminal



P/N	module type	relay type	socket type	retainer type	Min. packing quantity	unit weight
—	HFA2-AS/24-2ZSTFG-C10-H6	HFA2/24-2ZSTFG	14FF-2Z-C10	14FF-H6	10pcs	Approx. 56.4g

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  $\leq 50\text{mm}$ , 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.

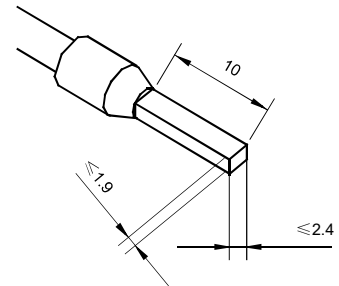
### Relay module of screw terminal

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

### Relay module of push interterminal

Conductor cross-section

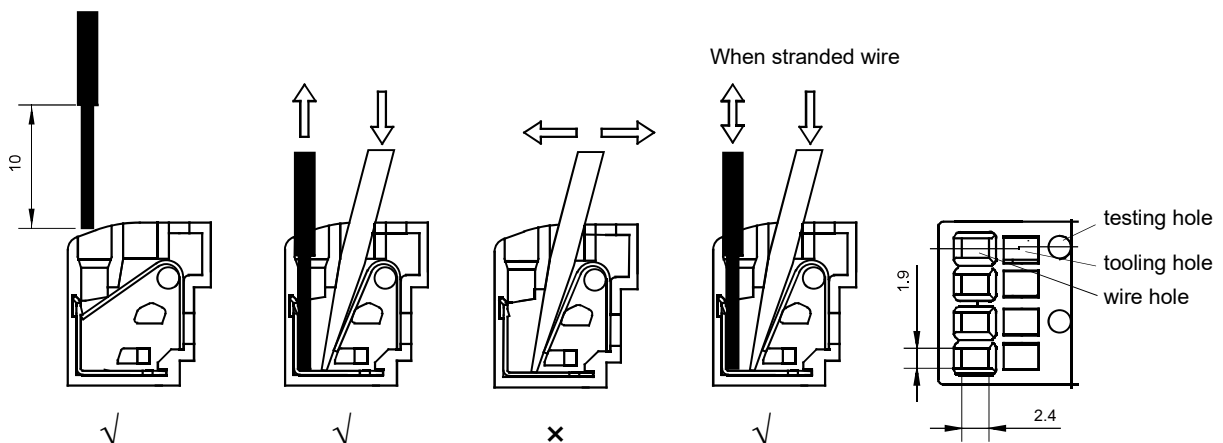
Solid wire	$1 \times 0.5/0.75/1.0/1.5/2.5 \text{ mm}^2$	
	$2 \times 0.5/0.75/1.0/1.5 \text{ mm}^2$	
Stranded wire	Stranded wires without ferrule	$1 \times 0.5/0.75/1.0/1.5/2.5 \text{ mm}^2$
		$2 \times 0.5/0.75/1.0/1.5 \text{ mm}^2$
	Stranded wires with ferrule	$1 \times 0.5/0.75/1.0/1.5 \text{ mm}^2$
		$2 \times 0.5/0.75/1.0 \text{ mm}^2$



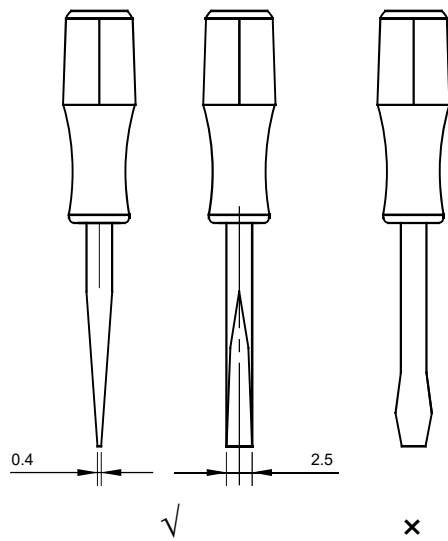
About push in socket

- Do not insert wires into the 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 a 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
$0.5 \text{ to } 2.5 \text{ mm}^2$ / 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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