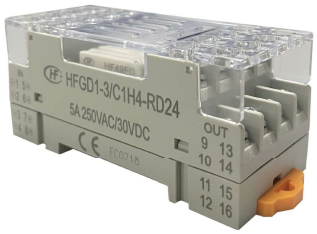
HFGD1-3 HF49FD RELAY MODULE

File No.:E133481



File No.: AN 50520710 0001

Features

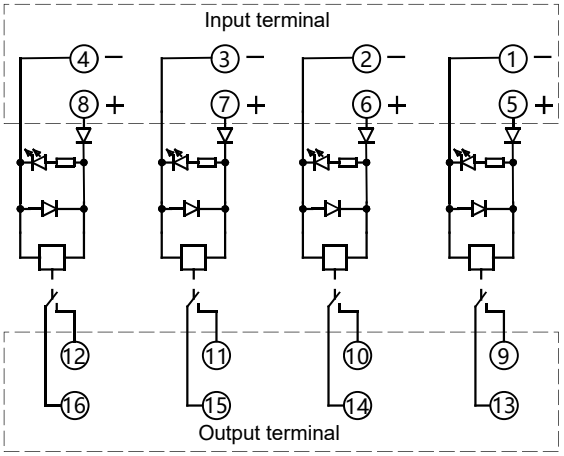
- 4-channel NO relay module, with a thickness of only 32.1mm, suitable for compact installation
- Installation method:DIN35
- Load capacity of single set of contacts 5A 250VAC/30VDC
- Using shorting tabs, common positive or common negative wiring can be easily performed
- Relays are equipped with sockets for quick replacement and maintenance
- Protective cover for preventing electric shock
- 0.2-1.5mm²/24-16AWG wide range wiring capacity

CHARACTERISTICS

INPUT		
Nominal voltage	12VDC,24VDC (Allow 85%~110% rated change range)	
Power consumption Per Channel	＜250mW	
Wiring polarity	Polar(pay attention to wiring polarity)	
Terminal type	Fense screw terminal	
Control channel Qty	4	
OUTPUT		
Relay specification	HF49FD(See annex 1)	
Contact arrangement	1NO	
Rated voltage	250VAC/ 30VDC	
Rated current	5A/Channel	
Terminal type	Fense screw terminal	
Minimum load(1)	50mW	
Maximum switching frequency	30 ops/minute(@1A-5A) 60 ops/minute(@0.5A-1A) 300 ops/minute(@＜0.5A)	
OTHER PARAMETER		
Ambient temperature	-20℃～70℃	
Storage temperature	-20℃～70℃	
Vibaration resistance	10Hz～60Hz,0.3mm DA	
	60Hz～150Hz,19.6m/s²	
Shock resistance	98m/s²	
Standard compliance	IEC61010-1	
Creepage distance	Between output channels	⩾1.8mm
	Between input and output	⩾3mm
Clearance distance	Between output channels	⩾1.8mm
	Between input and output	⩾3mm
Surge voltage (1.2/50μs)	Between output channels	2.5kV
	Between input and output	4kV
PRODUCT INSTALLATION A ND MAINTENANCE		
Installation	DIN35(Thickness 1.0mm)	
Relay replacement	Replaceable	
shorting tabs	Sold separately(PN No. : 44255920001)	

Note: 1) on the premise of meeting the minimum load, the load voltage is ⩾ 5V and the load current is ⩾ 1mA;
2) Suitable for overvoltage category II, and shall provide protection for a rated impulse withstand voltage peak of 2.5 kv

SCHEMATIC DIAGRAM

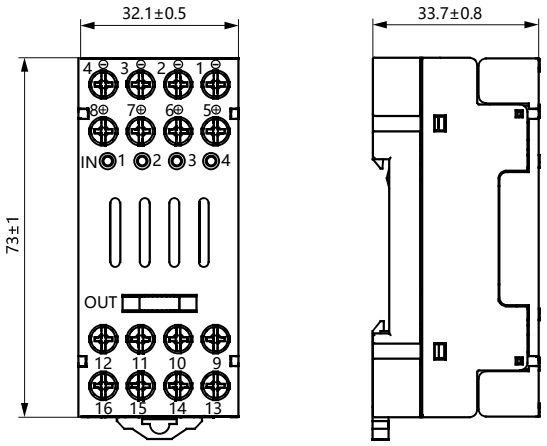


Wiring Instructions

1. Input: 1, 2, 3, 4 are the negative connection points of each input, 5, 6, 7, 8 are the positive connection points of each input;
2. Output: 9, 10, 11, 12 are the normally open points of each output, 13, 14, 15, 16 are the moving contacts of each output.

OUTLINE DIMENSIONS

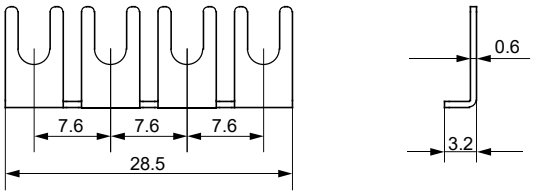
Unit：mm



OUTLINE DIMENSIONS

Unit : mm

Dimensions of Shorting Tabs :



ORDERING INFORMATION

	HFGD1-3 /	C1H	4	-R	D24	(XXX)
Type						
Output channel type	**C1H**: 1 form A					
Control channel Qty	**4**: 4					
Installation method	**R**: Din-rail					
Input rated voltage	**D24**: 24VDC	**D12**: 12VDC				
Special code	**Nil**: Standard	**XXX**: Customer special requirement				

Notes: Special requiements of customers will be expressed as special code after being evaluated by Hongfa.
For example: (019) means low cost type, the relay has no socket.

Annex 1：Relay parameter table(HF49FD)

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File No.:E133481

VDE
File No.:40033644

File No.: R50149334

CQC
File No.: CQC17002175722

Features

- 5A switching capability
- 3kV dielectric strength (between coil and contact)
- Ultra-thin and ultra-small (only 5mm wide and 12.5mm high)
- Meet IEC61131-2 reinforced insulation requirement
- Creepage/clearance distance: Min. 3.5mm
- Sockets are available
- UL insulation system: Class F available

RoHS compliant

CONTACT DATA

Contact arrangement	1H
Contact resistance	≤100mΩ(1A 6VDC)
Congtact material	$AgSnO_2$,AgNi
Contact rating	5A 250VAC/30VDC
Max.switching voltage	250VAC/30VDC
Max.switching current	5A
Max.switcching power	1250VA/150W
Mechanical endurance	2×10^7OPS
Electrical endurance	1×10^5OPS(NO:3A 250VAC, Res.load,85℃,1s on 9s off)
	5×10^4OPS(NO:5A 250VAC, Res.load,25℃,1s on 9s off)

CHARACTERISTICS

Coil power	Approx.180mW or 120mW
Insulation	1000MΩ(500VDC)
Dielectric strength	between coil＆contact：3kVAC 1min
	between open contacts：1kVAC 1min
Surge voltage	6kV(1.2 x 50μs)

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.