

# HF7-7

## MOTOR FORWARD AND REVERSE RELAY MODULE



### Features

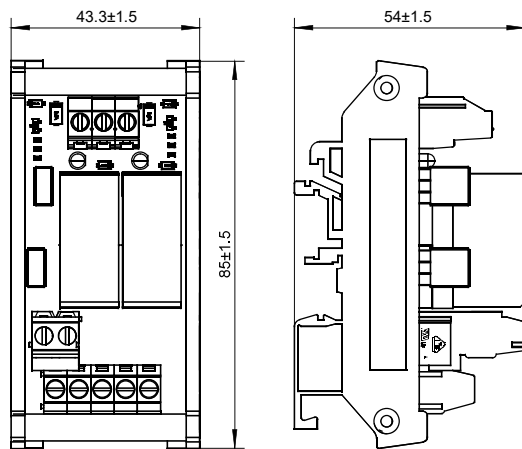
- 8A 250VAC/30VDC switching capability with double pole contact
- Both input and output circuits are protected by fuses
- The forward circuit and reverse circuit have interlocking function, which can avoid working faults caused by wiring errors

### CHARACTERISTICS

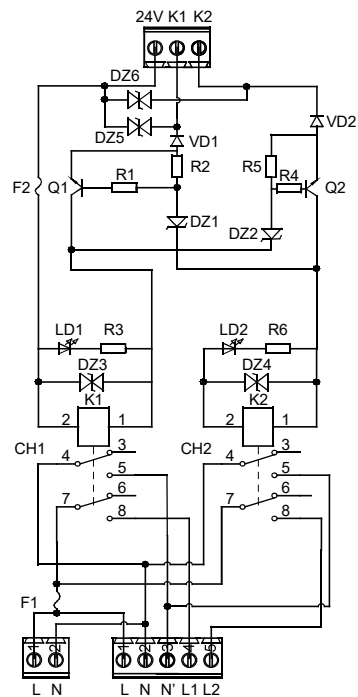
INPUT		
Nominal Voltage	24VDC (Allow 80%~110% rated change range)	
Power consumption Per Channel	<600mW	
Wiring polarity	Polar(pay attention to wiring polarity)	
Terminal type	Terminal block(See Annex 1)	
OUTPUT		
Relay specification	HF115FK(See Annex 2)	
Contact arrangement	2 form A	
Rated voltage	250VAC/ 30VDC	
Rated current	8A/Channel	
Terminal type	Terminal block(See Annex 3)	
ENVIRONMENTAL AND SAFETY REGULATIONS		
Ambient temperature	-20~55℃	
Storage temperature	-40~70℃	
Installation method	DIN35 DIN-G	
Standard compliance	IEC61010-1	
Dielectric strength (50Hz,1min)	Between output channels	1.5kV
	Between input and output	2.5kV
Surge voltage(1.2/50μs)	2.5kV	

### OUTLINE DIMENSIONS

Unit: mm



### SCHEMATIC DIAGRAM



HONGFA APPLICATION ELECTRONIC MODULE

ISO9001、IATF16949、ISO14001、OHSAS18001、IECQ QC 080000 CERTIFIED

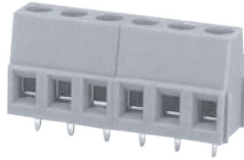
2022 Rev. 1.00

## ORDERING INFORMATION

Type	HFGD7-7 / C2H 2- R D24 (XXX)
Output Channel Type	C2H:2 form A
Control Channel Qty	2
Installation method	R: Rail
Input rated voltage	D24: 24VDC
Special code	XXX: Customer special requirement ; Nil: Standard

Notes: The customer special requirement express as special code after evaluating by Hongfa.

## Annex 1:Wiring terminal parameter table(HFLS1A-508/MAXX)



### Features

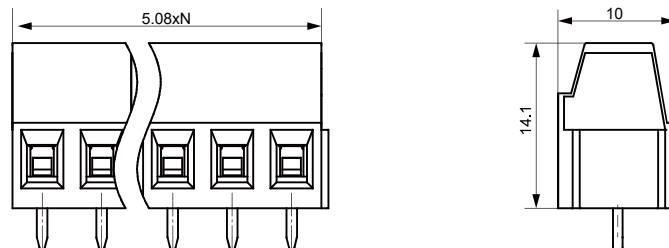
- PCB terminal block,lifting screw connector with pressing frame
- Use screwdriver for disassembly and assembly,with the torque of 0.4 N·m

## TECHNICAL SPECIFICATION

Rated load	10A 300V(ULstandard)/17.5A 250V(IECstandard)
Poles	2~24
Pitch	5.08mm
Conductor Cross Section	0.2~2.5mm <sup>2</sup> (solid wire)/0.25~1.5mm <sup>2</sup> (strand wire)
Rated Dielectric Strength	2200VAC/min
Rated Withstand Pulse Voltage	4kV
Ambient Temperature	-40℃~105℃
Stripping Length	7mm
Tightening Torque	0.4N·m
Insulation Material Type/Insulation Material Group	PA/I

## OUTLINE DIMENSIONS

Unit: mm



Remark:

- 1) Some outline dimensions of the product have no dimensional tolerance noted: outline dimension  $\leq 1\text{mm}$ , tolerance should be  $\pm 0.2\text{mm}$ ; outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , tolerance should be  $\pm 0.3\text{mm}$ ; outline dimension  $> 5\text{mm}$ , tolerance should be  $\pm 0.4\text{mm}$ .
- 2) In the layout of PCB mounting holes, if no dimensional tolerance is noted, it shall be calculated as  $\pm 0.1\text{mm}$ .

## Annex 2: Relay parameter table(HF115FK)



File No.: E134517



File No.: 116934



File No.: CQC17002176308



### Features

- 16A switching capability
- Low height(15.7mm)
- 5kV dielectric strength(between coil and congtacts)
- Creepage distance:10mm
- Meeting VDE 0700/0631 reinforce insulation
- Product in accordance to IEC60335-1 available
- Multiple contact arrangement are available
- Sockets are available
- UL insulation system: class F available

RoHS compliant

### CONTACT DATA

Contact arrangement	1H、1Z	2H、2Z
Contact Resistance	$\leq 100\text{m}\Omega$ (1A 6VDC)	
Contact material	AgSnO <sub>2</sub>	
Contact rating	10A/12A/16A 250VAC	8A 250VAC
Max.switching voltage	400VAC	
Max.switching current	10A/12A/16A	10A
Max.switching power	2500VA/3000VA/4000VA	2000VA
Mechanical endurance	1×10 <sup>7</sup> OPS	
Electrical endurance	H3PT type: 1×10 <sup>5</sup> OPS (NO:16A 277VAC,Res. load, 40°C, 1s on,9s off) Z3PT type: 5×10 <sup>4</sup> OPS (NO:16A 277VAC,Res. load, 85°C, 1s on,9s off) 2Z4PT type: 5×10 <sup>4</sup> OPS (NO:8A 277VAC,Res. load, 85°C, 1s on,9s off)	

### CHARACTETISTIC

Coil power	Approx.400mW or Approx.530mW
Insulation resistance	1000M $\Omega$ (500VDC)
Dielectric strength	between coil & contacts: 5kVAC 1min
	between open contacts: 1kVAC 1min
	between contact sets: 2.5kVAC 1min
Surge voltage	10kV (1.2 x 50 $\mu$ s)

Annex 3:Wiring terminal parameter table(HFLS1A-508/MABXX)



Features

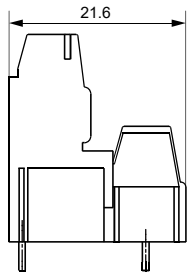
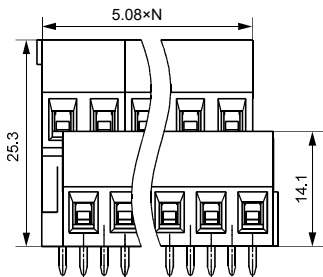
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Disclaimer:  
The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice.  
We could not evaluate all the performance and all the parameters for every possible 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.