

# HFGD4

# DC SOLID STATE RELAY MODULE



### Features

- 4-channel DC solid state relay module, width 41mm
- Installation method: DIN35
- 30kHz high frequency switching capability
- Optocoupler isolation between input and output, withstand voltage 2.5kV
- 3A 30VDC load capacity per channel
- 0.2-1.5mm<sup>2</sup>/24-16AWG wide range wiring capacity

### CHARACTERISTIC

#### INPUT

Nominal voltage	24VDC(Allow 85%~110% rated change range)
Power consumption Per Channel	< 220mW(@24VDC)
Wiring polarity	Polar(pay attention to wiring polarity)
Terminal type	Terminal block(See Annex 1)
Control channel Qty	4

#### OUTPUT

Load voltage	5~30VDC
Rated current	3A/Channel
Wiring polarity	Polar(pay attention to wiring polarity)
Max. switching voltage	30VDC
Max. switching current	3A/Channel
Max. continuous current	3A/Channel
Terminal type	Terminal block(See Annex 1)
Conductor cross section	0.2-1.5mm <sup>2</sup> /24-16AWG
Leakge current	≤ 10nA(@30VDC)
Max. switching frequency	30kHz

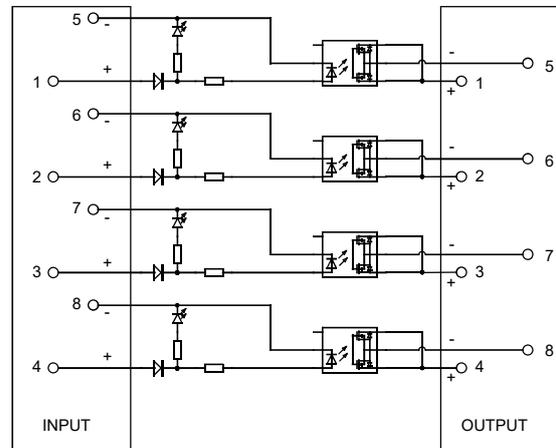
#### OTHER PARAMETER

Ambient temperature	-20°C ~ 70°C
Storage temperature	-20°C ~ 70°C
Vibration resistance	10Hz ~ 60Hz, 0.3mm DA
	60Hz ~ 150Hz, 19.6m/s <sup>2</sup>
Shock resistance	98m/s <sup>2</sup>
Standard compliance	IEC61010-1
Creepage distance (Between input and output)	≥ 1.5mm
Clearance distance (Between input and output)	≥ 1.5mm
Surge voltage (1.2/50μs)	2.5kV

#### PRODUCT INSTALLATION AND MAINTENANCE

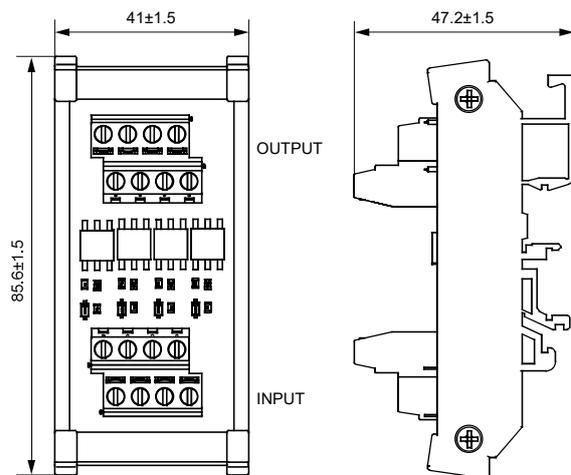
Installation	DIN35 guide rail installation(Compatible with 1.0mm and 1.2mm thickness)
Relay replacement	/

### CIRCUIT DIAGRAM



### OUTLINE DIMENSIONS

Unit: mm



HONGFA INDUSTRIAL ELECTRONIC MODULE

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

2022 Rev. 1.00

## ORDERING INFORMATION

Type	HFGD4 /	C4-	D24	(XXX)
Control channel Qty	C4: 4			
Load voltage	D24: 24VDC			
Special code	Nil: Standard	XXX: Customer special requirement		

Notes: Special requirements of customers will be expressed as special code after being evaluated by Hongfa.



### Annex 1: Wiring terminal parameter table(HFLS 1A-508/MABXX)



#### Features

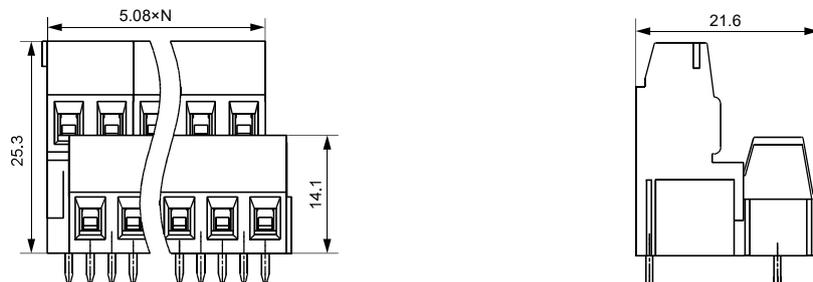
- PCB terminal block, lifting screw connector with pressing frame
- Use screwdriver for disassembly and assembly, with the torque of 0.4N·m

## TECHNICAL SPECIFICATION

Rated load	10A 300V(UL Standard)/17.5A 250V(IEC Standard)
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°C~105°C
striping 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  $< 5\text{mm}$ , 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  $\pm 0.1\text{mm}$ .

#### 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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