



# HONGFA RELAY LIGHTING CONTROL

Focusing on providing complete & reliable relay solutions  
for lighting control market



# Company Introduction

HONGFA  
GROUP

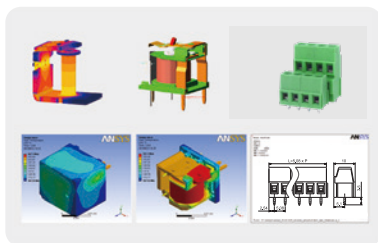
Hongfa Group (Stock Code:SH600885), ranked top in Chinese relay industry in terms of overall economic effectiveness, is the largest base for relay R&D, manufacturing & export.

Founded in 1984, with the insisting on the company spirit-Persevere for Progress, Strive for Excellence and the operational philosophy -Winning through quality, Hongfa has become the world-class R&D and manufacturing base for relay products.

With regard to R&D, Hongfa focuses on development and application, absorbing & transferring the most cutting-edge technology from international industry. Hongfa owns the National Enterprise Technical Center, the largest and most comprehensive, well-equipped testing lab in Chinese relay industry, the first Post-doctoral Research Station, Academician expert workstation etc. Meanwhile, Hongfa presides over or participates in formulating professional or national standards, implements several national key projects and promotes the industry development.

Hongfa products cover variety of categories which include relays, low-voltage devices, L/H volt. Complete equipments, precision & automatic equipments. Hongfa products are currently being exported to over 100 countries and regions and Hongfa has established local sales & services networks in several countries and regions with strong global marketing operation and technical support capability. The customers of Hongfa are well-known enterprises from variety of fields which cover industry, energy, transportation, information, home appliance, medical care and national defense etc..

## INTEGRATED MANUFACTURING CHAIN



Innovation in R&D



Mold Design and Manufacturing



Precision Components Manufacturing



Testing & Analysis



Quality Assurance



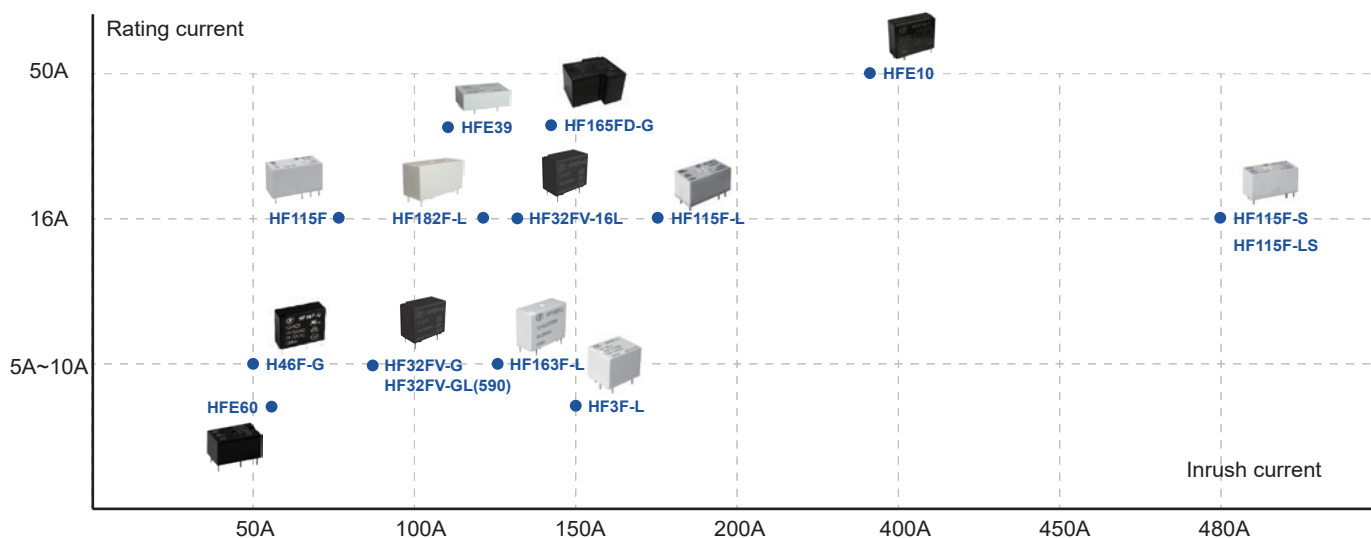
Automatic Production Lines

# PRODUCT INTRODUCTION

Hongfa focuses on providing complete & reliable relay solutions to customers in lighting control field.

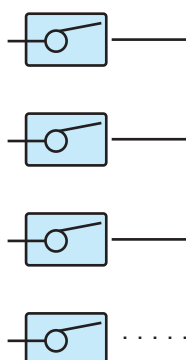
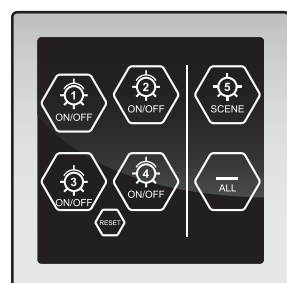
These series of relays, cover a wide load range (5A to 50A) and strong surge resistance capability (Maximum 500A), compliant with UL508/IEC60669-1/IEC60669-2-1. There are multiple options with diversified contact arrangements and latching/non-latching options, that are suitable for different types of load (Tungsten lamp, Fluorescent lamp, LED lamp, Standard ballast & Electronic ballast).

Hongfa has successfully provide lighting control relay solutions to well-known companies in intelligent building, energy-saving socket and street light fields around the world.



## Product features

- Multi-type lamp load capacity
- Zero power consumption latching product in standby mode
- Product with tungsten contact and customized specifications available
- Strong surge resistance capability (Maximum 500A)
- High safety performance, meet the UL 94V-0 flame-proof classification



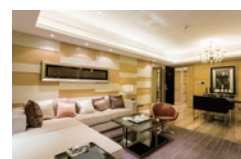
Tungsten Lamp






CFL



LED Lamp



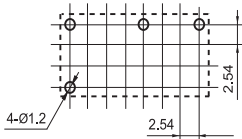
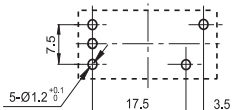
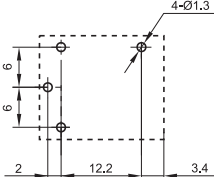
## Lighting Control Relay Selection Guide

	Latching Relays		
Type	HFE60	HF163F-L	HF3F-L
Appearance			
Dimensions(L x W x H) mm	17.6 x 10.1 x 12.3	24.0 x 10.0 x 18.8	19.0 x 15.2 x 15.5

### Contact Ratings







Contact Form		1A	2A,1A+1B	1A	1A	1C
Contact Material		AgSnO <sub>2</sub>		AgSnO <sub>2</sub> /W		AgSnO <sub>2</sub>
Electrical Endurance	Tungsten (Inrush)	1000W / 220VAC		800W / 277VAC		2200W / 230VAC
	LED Load (Inrush)	100W / 220VAC		100W / 220VAC		200W / 220VAC
	Electrical Ballast (Inrush)	3A / 220VAC		3A / 220VAC(W)		5A / 120VAC
	TV Load (Inrush)	TV-3 (51A)		TV-3 (51A)		TV-10 (141A)
	Rated resistive load	8A / 250VAC, 3 x 10 <sup>4</sup> OPS		8A / 250VAC, 5 x 10 <sup>4</sup> OPS		10A / 277VAC, 1 x 10 <sup>4</sup> OPS

### Characteristics

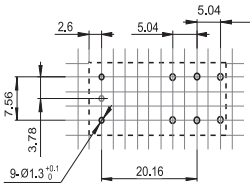
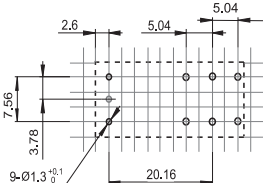
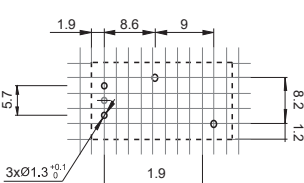
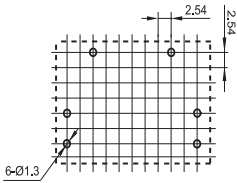
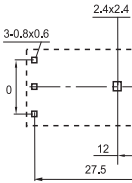
Rated Voltage	3VDC to 24VDC	3VDC to 24VDC	3VDC to 24VDC
Nominal Operating Power	0.15W, 0.3W	0.2W, 0.4W	0.4W, 0.8W
Surge Voltage	1000MΩ	1000MΩ	100MΩ
Dielectric Strength (Between coil and contacts)	3000VAC	5000VAC	2000VAC
Ambient Temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Operate / Release Time max.	10ms / 10ms	15ms / 15ms	8ms / 5ms
Construction	RTII,RTIII	RTII,RTIII	RTII,RTIII
Layout (Bottom view)			
Approved Standards	UL/CUL TÜV	UL/CUL VDE	UL/CUL VDE CQC

**Note:** Specification and dimensions in this catalog are subject to change without notice.






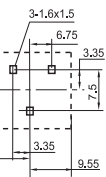
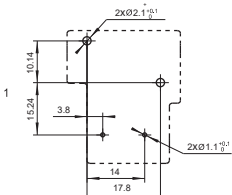
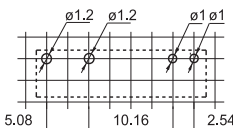
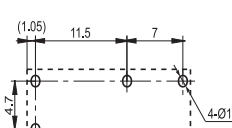
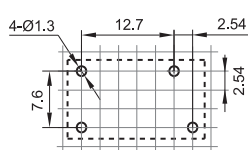



HF115F-L	HF115F-LS	HF182F-L	HFE39	HFE
		 		
29.0 x 12.7 x 15.7	29.0 x 12.7 x 15.7	22×10×14	20.0 x 30.0 x 10.2	39.0x 15.0







1A	2A	1A	1A	2A,2B,1A+1B	1A
AgSnO <sub>2</sub>		W+AgSnO <sub>2</sub>	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
2800W/ 230VAC    800W / 277VAC		3500W / 220VAC	2200W / AC230V	10A / 220VAC	5000W /
350W/ 220VAC    -		500W / 230VAC	250W / AC230V	400W / 220VAC	2500W / 2
5A120VAC    -		16A / 277VAC	16A / 277VAC	10A / 220VAC	16A / 27
TV-12 (163A)    TV-3 (51A)		TV-15 (191A)	TV-8 (117A)	TV-10 (191A)	TV-2 (226A)
16A / 250VAC,5 x 10 <sup>4</sup> OPS		16A / 250VAC,1 x 10 <sup>4</sup> OPS	16A / 277VAC, 5×10 <sup>4</sup> OPS	20A 250VAC, 5 x 10 <sup>4</sup> ops	50A 277VAC,

3VDC to 24VDC	3VDC to 24VDC	3VDC to 24VDC	3VDC to 48VDC	6VDC to
0.4W, 0.6W	0.4W, 0.6W	0.4W, 0.8W	1W, 2W	1.5W, 3
1000MΩ	1000MΩ	1000MΩ	1000MΩ	1000
5000VAC	5000VAC	4000VAC	4000VAC	4000V
-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to
10ms / 10ms	10ms / 10ms	10ms/10ms	15ms / 15ms	15ms /
RTII,RTIII	RTII,RTIII	RT II , RT III	RTII,RTIII	RTII,RTIII
				
UL/CUL VDE	UL/CUL TÜV CQC	UL/CUL TÜV CQC	UL/CUL	UL/CUL

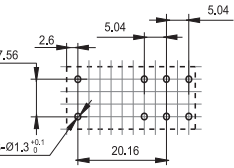
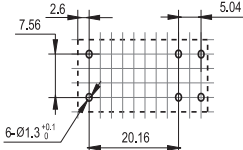
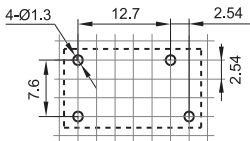
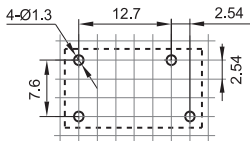
# Non-Latching Relays

10	HF165FD-G(740)	HF49FD	HF46F-G	HF32FV-G	
					
0 x 30.2	32.2×27.5×20.4	20.0 x 5.0 x 12.5	20.0 x 7.2 x 12.5	18.4 x 10.2 x 15.3	
	1A	1A	1A	1A	
O <sub>2</sub>	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>	AgSnO <sub>2</sub> , AgCdO	
240VAC	2500W / AC230V	400W / 230VAC	800W / 230VAC	1000W / 230VAC	
220VAC	250W / AC230V	—	100W / 220VAC	150W / 230VAC	
277VAC	40A / 277VAC	—	—	—	
0 (A)	TV-8 (117A)	—	TV-3 (51A)	TV-5 (78A)	
1 x 10 <sup>5</sup> OPS	40A / 277VAC, 1×10 <sup>4</sup> OPS	5A 250VAC, 5 x 10 <sup>4</sup> OPS	10A 250VAC, 1 x 10 <sup>4</sup> OPS	10A 250VAC,1 x 10 <sup>5</sup> OPS	
48VDC	5VDC to 24VDC	5VDC to 24VDC	3VDC to 24VDC	3VDC to 48VDC	
0.0W	0.9W	0.12W to 0.18W	0.2W	0.2W, 0.45W	
0MΩ	1000MΩ	1000MΩ	1000MΩ	1000MΩ	
0VAC	2500VAC / 4000VAC	3000VAC	4000VAC	4000VAC	
0 70°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	
15ms	15ms/10ms	10ms / 5ms	10ms / 10ms	8ms / 5ms	
RTIII	RT II , RT III	RTII,RTIII	RTII,RTIII	RTII,RTIII	
					
CUL	UL/CUL VDE	UL/CUL TÜV CQC	UL/CUL VDE	UL/CUL VDE CQC	



HF115F	HF115F-S	HF32FV-GL(590)	HF32FV-16L(590)
		 	 
29.0 x 12.7 x 15.7	29.0 x 12.7 x 15.7	18.4×10.2×15.3	18.4×10.2×15.3

1A	1A	1A	1A
AgSnO <sub>2</sub>	W+AgSnO <sub>2</sub>	AgSnO <sub>2</sub>	AgSnO <sub>2</sub>
2000W / 230VAC	3000W / 220VAC	1100W / AC230V	2200W / AC230V
200W/230VAC	350W/220VAC	150W / AC230V	250W / AC230V
5A / 120VAC	16A / 277VAC	—	—
—	TV-8 (117A)	TV-5 (78A)	TV-8 (117A)
8A 250VAC, 1 x 10 <sup>5</sup> OPS	16A 250VAC, 1.2 x 10 <sup>4</sup> OPS	10A / 250VAC, 5×10 <sup>4</sup> OPS	16A / 250VAC, 5×10 <sup>4</sup> OPS

5VDC to 110VDC	5VDC to 110VDC	5VDC to 24VDC	5VDC to 24VDC
0.4W	0.4W	0.2W	0.4W
1000MΩ	1000MΩ	1000MΩ	1000MΩ
5000VAC	5000VAC	4000VAC	4000VAC
-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
15ms / 8ms	15ms / 8ms	8ms/5ms	8ms/5ms
RTII,RTIII	RTII,RTIII	RT II , RT III	RT II , RT III
			
UL/CUL VDE CQC	UL/CUL VDE CQC	UL/CUL TÜV	UL/CUL VDE