HF84F

HIGH POWER RELAY

Features

16A switching capability 2.5kV dielectric strength

(RoHS compliant)

(between coil and contacts) Panel mount types available Environmental friendly product

• Outline Dimensions: (47.0 x 32.0 x 28.5)mm



c **91** us

File No.:E134517 (AC type)

CONTACT DATA

Contact arrangement	1A, 1B, 1C		
Contact resistance	50mΩ max.(at 1A 24VDC)		
Contact material	AgCe		
	1A, 1C	1B	
Contact rating (Res.load)	16A 250VAC,	8A 250VAC,	
	Resistive load	General load	
Max. switching voltage		250VAC	
Max. switching current	16A		
Max. switching power	4000VAC		
Mechanical endurance	1 x 10 ⁶ OPS		
	7 type: 3 x 10 ⁴ 0Ps (8A 250VAC,		
Electrical endurance	General use, at 40°C, 1s on 9s off)		
	1, 4 type: 1 x 10 ⁵ OPS (16A 250VAC,		
	Resistive load, at 65°C, 1s on 9s off)		

CHARACTERISTICS

Insulation	resistance	500MΩ (at 500VDC)	
Dielectric	Between coil & contacts	2500VAC 1min	
strength	Between open contacts	1000VAC 1m	
Operate t	ime (at nomi. volt.)	DC type: 25ms max.	
Release t	ime (at nomi. volt.)	DC type: 25ms max.	
Temperat	ure rise (at nomi. volt.)	90K max.	
Shock res	sistance (Functional)	147m/s² 11ms	
Vibration	resistance	10Hz to 55Hz 2.54mm DA	
Ambient t	emperature	-40°C to 65°C	
Humidity		5% to 85% RH	
Terminati	on	QC	
Unit weig	ht	Approx. 75g	
Construct	ion	Dust protected	

Notes: 1) The data shown above are initial values. 2) UL insulation system: Class A

COIL	
Coil power	DC type: 2.1W ;
	AC type: 3.5VA

COIL DATA at 23°C				
Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Voltage VDC *	Coil Resistance Ω
6	4.50	0.6	6.6	17.5 x (1±10%)
9	6.75	0.9	9.9	40 x (1±10%)
12	9.00	1.2	13.2	70 x (1±10%)
24	18.0	2.4	26.4	280 x (1±10%)
48	36.0	4.8	52.8	1120 x (1±10%)
120	90.0	12.0	132	7000 x (1±10%)
Nominal	Pick-up	Drop-out	Max.	Coil
Voltage VAC	Voltage VAC max.	Voltage VAC min.	Voltage VAC *	Resistance Ω
0	VAC	VAČ		
VAČ	VAC max.	VAČ min.	VAC [*]	Ω
VAC 6	VAC max. 5.1	VAČ min. 1.2	VAC * 6.6	Ω 4.8 x (1±10%)
VAC 6 12	VAC max. 5.1 10.2	VAC min. 1.2 2.4	VAC* 6.6 13.2	Ω 4.8 x (1±10%) 19 x (1±10%)
VAC 6 12 24	VAC max. 5.1 10.2 20.4	VAC min. 1.2 2.4 4.8	VAC* 6.6 13.2 26.4	Ω 4.8 x (1±10%) 19 x (1±10%) 90 x (1±10%)
VAC 6 12 24 48	VAC max. 5.1 10.2 20.4 40.6	VAC min. 1.2 2.4 4.8 9.6	VAC [*] 6.6 13.2 26.4 52.8	Ω 4.8 x (1±10%) 19 x (1±10%) 90 x (1±10%) 300 x (1±10%)

Notes: *Maximum voltage refers to the maximum voltage which relay coil could endure in a short period of time.

SAFETY APPROVAL RATINGS

UL/CUL (AC type)	HF84F-1	8FLA, 25LRA 250VAC at 40°C
		16A 250VAC Resistive at 65°C
		8A 250VAC General use at 40°C
	HF84F-4	8FLA, 25LRA 250VAC at 40°C
		16A 250VAC Resistive at 65°C
		8A 250VAC General use at 40°C
	HF84F-7	8FLA, 25LRA 250VAC at 40°C
		8A 250VAC General use at 40°C

Notes: 1) All values unspecified are at room temperature.2) Only typical loads are listed above. Other load specifications can be available upon request.

HONGFA RELAY

ISO9001, ISO/TS16949 , ISO14001, OHSAS18001, IECQ QC 080000 CERTIFIED

2015 Rev. 1.00

ORDERING INFORMATION					
	HF84F	-1	Α	24	(XXX)
Туре					
Contact arrangement 1: 1 Form C 4: 1 Form A 7: 1 Form B					
Coil voltage form	D: DC A: AC				
Coil voltage AC: 6VAC to 277VAC DC: 6VDC to 120VDC (No UL approved)					
Special code ¹) XXX: Customer special requirement Nil: Standard Notes: 1) The customer special requirement express as special code after evaluating by Hangfa					

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OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm



Outline Dimensions



(Top view)

Wiring Diagram (Top view)

Terminals type



Remark: In case of no tolerance shown in outline dimension: outline dimension \leq 1mm, tolerance should be ±0.2mm; outline dimension >1mm and \leq 5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

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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