

HF94F (9400)

HIGH POWER RELAY



File No.:E134517



File No.:CQC03001008649



Features

- 25A switching capability
- 2kV dielectric strength (between coil and contacts)
- Panel mount, various terminal types
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (47.0 x 32.0 x 28.5) mm

CONTACT DATA

Contact arrangement	1A, 1B, 1C, 1A + 1B
Contact resistance	200mΩ (at 1A 24VDC)
Contact material	AgCe
Contact rating (Res.load)	18A 277VAC
Max. switching voltage	277VAC
Max. switching current	25A
Max. switching power	6925VA
Mechanical endurance	1 x 10 ⁶ OPS
Electrical endurance	1 x 10 ⁵ OPS

COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable 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%)

CHARACTERISTICS

Insulation resistance	500MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	2000VAC 1min
	Between open contacts	1000VAC 1min
Operate time (at nomi. volt.)	DC type: 25ms max.	
Release time (at nomi. volt.)	DC type: 25ms max.	
Temperature rise (at nomi. volt.)	60K max.	
Shock resistance (Functional)	100m/s ² (10g)	
Vibration resistance	10Hz to 55Hz 1.0mm DA	
Ambient temperature	-20°C to 40°C	
Humidity	98% RH, 40°C	
Termination	QC	
Unit weight	Approx. 85g	
Construction	Dust protected	

Notes: The data shown above are initial values.

Nominal Voltage VAC	Pick-up Voltage VAC	Drop-out Voltage VAC	Max. Allowable Voltage VAC	Coil Resistance Ω
6	5.1	1.2	6.6	4.8 x (1±10%)
12	10.2	2.4	13.2	19 x (1±10%)
24	20.4	4.8	26.4	77 x (1±10%)
48	40.8	9.6	52.8	280 x (1±10%)
120	102	24	132	2000 x (1±10%)
240	204	48	264	7250 x (1±10%)
277	204	48	304.7	11000 x (1±10%)

SAFETY APPROVAL RATINGS

UL&CUR	Model	Rating
UL&CUR	HF94F-10	12FLA,60LRA 8FLA,48LRA 250VAC 7FLA,42LRA 277VAC 25A 277VAC
	HF94F-12	14FLA,84LRA 125VAC 8FLA,48LRA 250VAC 7FLA,42LRA 277VAC 25A 277VAC
	HF94F-13	12FLA,60LRA 120VAC 8FLA,48LRA 250VAC 7FLA,42LRA 277VAC 25A 277VAC

Notes: Only some typical ratings are listed above. If more details are required, please contact us.

COIL

Coil power	DC type: 2.4W; AC type: 4.0VA
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HONGFA RELAY

ISO9001、ISO/TS16949、ISO14001、OHSAS18001 CERTIFIED

2007 Rev. 2.00

ORDERING INFORMATION

HF94F		-10	A	24	1	(XXX)
Type ¹⁾	HF94F 9400 (Old type)					
Contact arrangement	10: 1 Form A 11: 1 Form B 12: 1 Form C 13: 1A+1B					
Coil voltage form	A: AC D: DC					
Coil voltage	AC: 6 to 277VAC DC: 6 to 120 VDC					
Mounting	1: Flang, Mounting Distance 54.8mm. diameter Ø3.8mm 2: Flang, Mounting Distance 66.7mm. diameter Ø4.8mm Nil: Metal Bracket					
Customer special code ²⁾	Only for special requirements, e.g. (555) stands for RoHS compliant					

Notes: 1) We have now gradually updated our ordering information. We suggest new type should be selected. If necessary, old type can be kept for some period for the old customers.

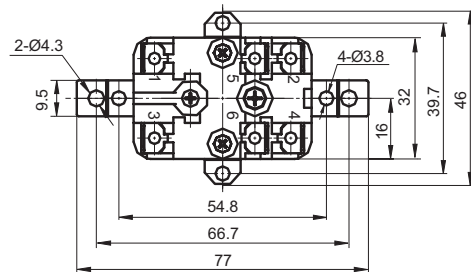
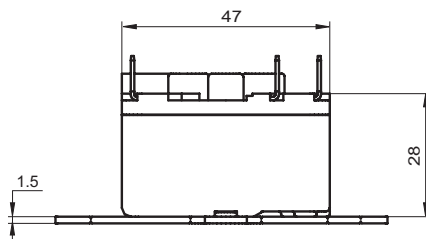
2) HF94F is an environmental friendly product. Please mark a special code (555) when ordering.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

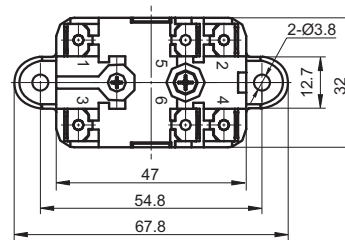
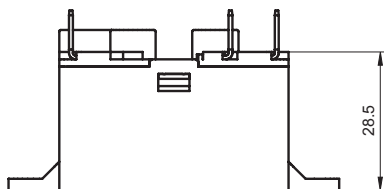
Outline Dimensions

Metal Bracket



(Top view)

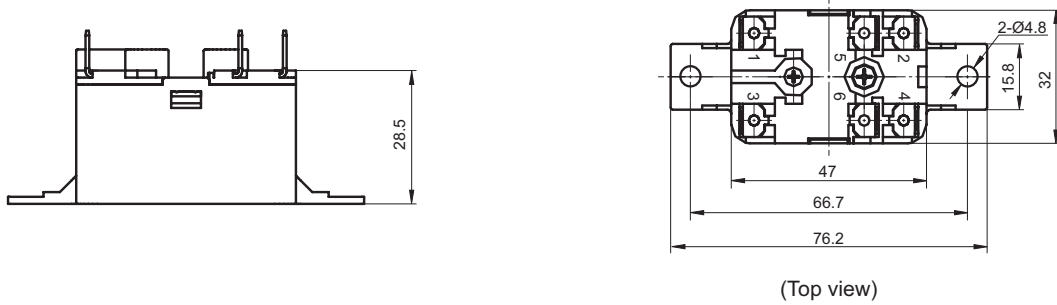
Flang, Mounting Distance 54.8mm



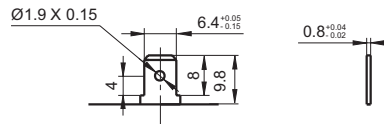
(Top view)

Outline Dimensions

Flang, Mounting Distance 66.7mm



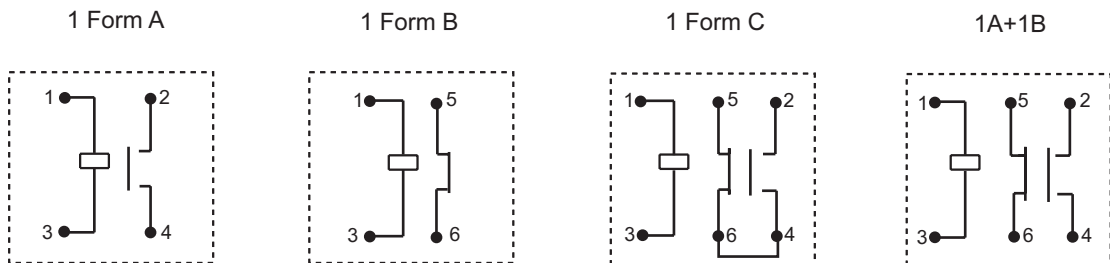
Terminals type



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

Wiring Diagram

(Top view)



Disclaimer

This datasheet is for the customers' reference. All the specifications are 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.