

HF2150/HF2151

MINIATURE HIGH POWER RELAY



File No.:E134517



File No.:CQC02001001951



Features

- 30A switching capability
- PCB coil terminals, ideal for heavyduty load
- Heavy load up to 7,200VA
- Sealed IP67 and flux proof type available
- Class F insulation available
- Environmental friendly product available (RoHS compliant)
- Outline Dimensions: 31.8 x 26.9 x 19.1 mm

CONTACT DATA

Contact arrangement	1A	1B	1C(NO)	1C(NC)
Initial contact resistance	20mΩ (at rated Load)			
Contact material	AgSnO ₂ , AgCdO			
Contact rating (Res. Load)	30A 240VAC 20A 30VDC	15A 240VAC 10A 30VDC	20A 240VAC 20A 30VDC	10A 240VAC 10A 30VDC
Max. switching capacity	7200VA 600W	3600VA 300W	4800VA 600W	2400VA 300W
Max. switching voltage	277VAC / 30VDC			
Max. switching current	30A	15A	20A	10A
Mechanical life	1 x 10 ⁷ OPS			
Electrical life	1 x 10 ⁶ OPS			

COIL

Coil power	900mW
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COIL DATA

Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Coil Resistance (Ω)
5	3.75	0.5	27 ± 10%
6	4.50	0.6	40 ± 10%
9	6.75	0.9	97 ± 10%
12	9.00	1.2	155 ± 10%
15	11.25	1.5	256 ± 10%
18	13.50	1.8	380 ± 10%
24	18.00	2.4	660 ± 10%
48	36.00	4.8	2560 ± 10%
70	52.50	7.0	5500 ± 10%
110	82.50	11.0	13450 ± 10%

Notes: When requiring pull-in voltage <75% of nominal voltage, special order allowed.

CHARACTERISTICS

Initial insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	2500VAC 1min.
	Between open contacts	1500VAC 1min.
Operate time (at nomi. volt.)	Max. 15ms	
Release time (at nomi. volt.)	Max. 10ms	
Ambient temperature	Class B	-55°C to +100°C
	Class F	-55°C to +125°C
Shock resistance	Functional	98m/s ²
	Destructive	980m/s ²
Vibration resistance	10 to 55Hz 1.5mm DA	
Humidity	98% RH, +40°C	
Termination	PCB	
Unit weight	Approx. 35g	
Construction	Sealed IP67, Flux proof	



HONGFA RELAY

ISO9001、ISO/TS16949、ISO14001、OHSAS18001 CERTIFIED

2006 Rev. 1.10

SAFETY APPROVAL RATINGS

UL&CUR

Load type	Volts	1 Form A	1 Form B	1 Form C (NO)	1 Form C (NO)
General purpose	125/240VAC	30A	15A	--	15A
	277VAC	30A	30A	30A	30A
Resistive	125/240VAC	30A	15A	--	--
	30VDC	20A	10A	20A	10A
	277VAC	20A	--	--	--
	240VAC	15A	--	--	--
Ballast	125/240/277VAC	6A	3A	6A	3A
Pilot duty	125VAC	800VA	290VA	800VA	290VA
	125VAC	690VA	--	690VA	--
	125VAC	800VA	--	800VA	--
	240VAC	1152VA	768VA	1152VA	768VA
	277VAC	764VA	--	764VA	--
Motor load	125VAC	1HP	1/4HP	1HP	1/4HP
	240VAC	2HP	1HP	2HP	1HP
	125VAC	1HP	--	1HP	--
	125/277VAC	3/4HP	--	3/4HP	--
Definite purpose (LRA-loaded rotor) (FLA-full load)	120VAC	82.8LRA, 13.8FLA	--	82.8LRA, 13.8FLA	--
	125VAC	96LRA, 30FLA	33LRA, 10FLA	60LRA, 20FLA	33LRA, 10FLA
	125VAC	60LRA, 20FLA	30LRA, 12FLA	60LRA, 20FLA	30LRA, 12FLA
	125VAC	82.8LRA, 27FLA	--	82.8LRA, 27FLA	--
	240VAC	80LRA, 30FLA	33LRA, 10FLA	80LRA, 20FLA	33LRA, 10FLA
	240VAC	41.4LRA, 6.9FLA	--	41.48LRA, 6.9FLA	--
	277VAC	60LRA, 20FLA	--	60LRA, 20FLA	--
Tungsten	125VAC	15A	--	15A	--
	240VAC	5A	--	5A	3A
	120VAC	--	3A	--	--
	240VAC	--	3A	--	--

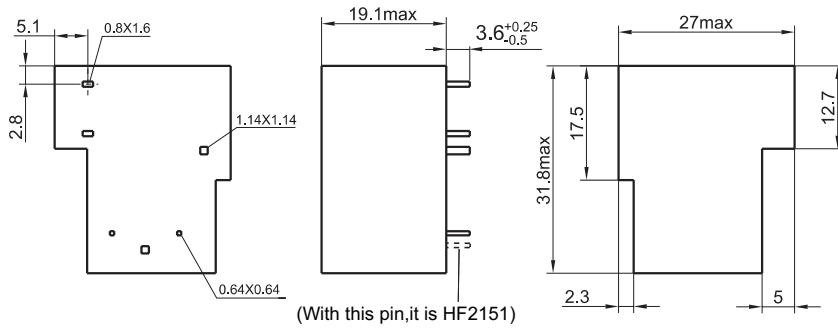
ORDERING INFORMATION

Type	HF2150 / HF2151 /	1A	12D	E	T	F	XXX
Contact arrangement	1A: 1 Form A 1B: 1 Form B 1C: 1 Form C						
Coil voltage	5, 6, 9, 12, 15, 18, 24, 48, 70, 110VDC						
Construction	E: Sealed IP67 Nil: Flux proof						
Contact material	T: AgSnO ₂ Nil: AgCdO						
Insulation standard	F: Class F Nil: Class B						
Customer special code (Only for special requirements)	e.g. 551 stands for RoHS compliant (Cadmium containing contacts) 555 stands for RoHS compliant (Cadmium-free contacts)						

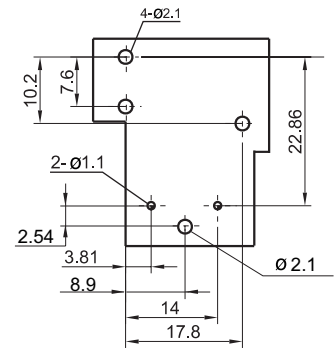
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Outline Dimensions

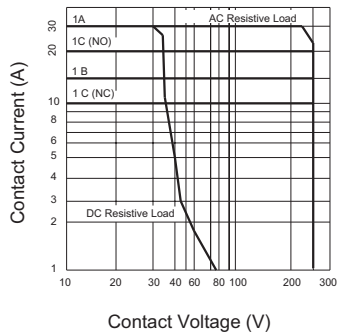


PCB Layout

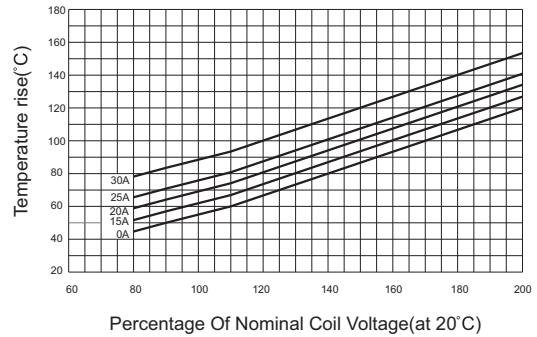


CHARACTERISTIC CURVES

MAXIMUM SWITCHING POWER



COIL TEMPERATURE RISE



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.

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