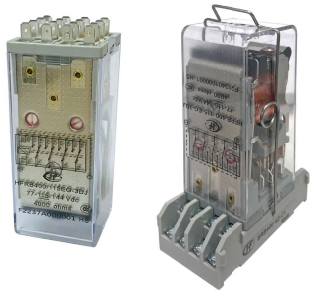
HFRB400 Plug-in Rail Transit RELAY



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Features

- Instantaneous,Safety critical relay
- 4CO double make double break contacts,Gold plated and $AgSnO_2$ type available
- Socket available,Plug-in design with secure locking feature
- Minimum switching current 10mA
- Maximum continuous current 12A
- Mechanical endurance:5 million cycles
- Integrated LED coil indicator,back EMF suppression diode
- Visible cover

RoHS compliant

CONTACT DATA

Contact arrangement	4Z
Contact resistance[1)]	100mΩ max. (0.1A 6VDC)
Contact material	Ag, Ag-Au
Contact rating	12A 220VAC 3A 72VDC 1A 72VDC L/R≤30ms
Max. Switching voltage	250VDC, 220VAC
Max. Switching current	12A
Mechanical endurance	5×10^6OPS
Electrical endurance	≥2.5×10^6OPS(80℃, 5s on 5s off, 3A 72VDC, Resistive load)

Notes: The data shown above are initial values.

CHARACTERISTICS

Insulation resistance		1000MΩ(500VDC)
Dielectric strength	Between open contacts	2000VAC 1min
	Between contact sets	2600VAC 1min
	Between coil & contacts	2600VAC 1min
Surge voltage (Between coil & contacts)		6kV(1.2/50μs)
Operate time (at rated. volt.)		55ms max.
Release time (at rated. volt.)		25ms max.
Shock resistance	Functional	Meet IEC 61373
	Destructive	Meet IEC 61373
Vibration resistance		Meet IEC 61373
Humidity		5% to 95%RH
Ambient temperature		-50℃ to 80℃
Termination		Plug-in
Unit weight		Approx. 450g
Construction		Dust protected[1)]

Notes: 1) The data shown above are initial values;
2) Dust protected relays can not be used in the environment with pollutants like H_2S, SO_2, NO_2, dust,etc.

COIL

Coil power	Approx. 3.5W

COIL DATA 23℃

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Voltage VDC[2)]	Coil Resistance Ω
12ME	8	1.25	16	40×(1±10%)
24AG	16	2.5	33	170×(1±10%)
36FL	25	3.5	45	390×(1±10%)
48DG	33	4.5	60	625×(1±10%)
72BG	48	6.5	90	1600×(1±10%)
96US	65	9	120	2400×(1±10%)
110SV	73.7	11	137.5	3457×(1±10%)
115EG	77	11.5	144	4000×(1±10%)
550FG	440	50	660	75500×(1±8%)

Notes: 1)The data shown above are initial values;
2)Max. voltage refers to the maximum voltage which relay coil could endure in a short period of time.

ORDERING INFORMATION

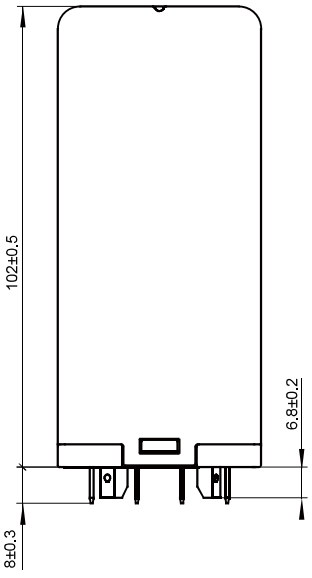
	HFRB400/	110SV	-3	G	D	J	（XXX）
Type							
Coil voltage	12ME, 24AG, 36FL, 48DG, 72BG, 96US, 110SV, 115EG, 550FG VDC						
Contact material	**3:** AgNi **T:** AgSnO						
Contact plating	**G:** Gold plated **Nil:** No Gold plated						
Coil protect	**D:** With Diode **Nil:** No Diode						
Coil indicator	**J:** With LED **Nil:** No LED						
Special code[1)]	**XXX:** Customer special requirement **Nil:** Standard type						

Notes: 1) The customer special requirement express as special code after evaluating by Hongfa.

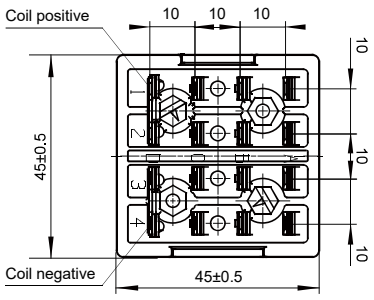
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Outline Dimensions



PCB Layout
(Bottom view)

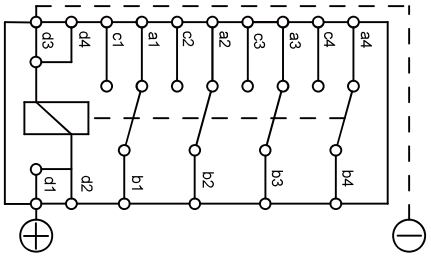


OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

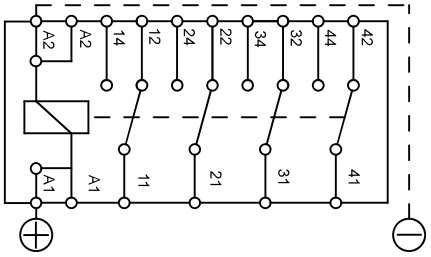
Wiring Diagram

(Bottom view)



Standardized Subway Wiring Diagram

(Bottom view)



Notes: 1) Other requirement, like meet BZDT1111-FA-G000-002 standard,please contact with our engineer;
2) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension ＞1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension ＞5mm, tolerance should be ±0.4mm;
3) The tolerance without indicating for PCB layout is always ±0.1mm.

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.