



GACIA



P Product Information

GACIA

GACIA ELECTRICAL APPLIANCE CO., LTD.

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Model	PB8N	PB8H	PB8NN
IEC/EN 60898-1			
Poles	1P,1P+N,2P,3P,3P+N,4P	1P,1P+N,2P,3P,3P+N,4P	1P,1P+N,2P,3P,3P+N,4P
Certification			
Electrical Specification			
Rated current(A)	In	1-63	1-63
Rated frequency(Hz)		50/60	50/60
Rated working voltage(V)	Ue	1P:230/400~,2/3/4P:400~	1P:230/400~,2/3/4P:400~
Rate insulated voltage(V)	Ui	500	500
Impulse withstand voltage(kV)	Uimp	6	6
Rated short-circuit breaking capacity(kA)	Icn	6	10
Instantaneous tripping type		B,C,D	B,C,D
Maximum working voltage		440	440
Dielectric test voltage(kV)		2	2
Service life (O-C)	Mechanical	Standard value	10000
	Electrical	Standard value	4000
Control And Indication			
Shunt release(SHT)		<input type="checkbox"/>	
Undervoltage release(UVT)		<input type="checkbox"/>	
Auxiliary contact(AUX)		<input type="checkbox"/>	
Alarm contact(ALT)		<input type="checkbox"/>	
Contact position indicator		<input checked="" type="checkbox"/>	
Fault indication		-	
Connection And Installation			
Ambient temperature(with daily average≤35℃)		-5℃ ~+40℃	
Protection degree	ALL sides	IP40	
	Connection terminal	IP20	
Wire(mm ²)	1-16	1-16	1-16
busbar(mm ²)	25	25	25
Mounting	Cable/Busbar	Cable/Busbar	Cable/Busbar
Pollution degree		2	
Reference temperature for setting of thermal element(℃)		30	
Storage temperature(℃)		-25℃ ~+70℃	
Tightening torque		3.0	
Connection		Top and Bottom	
Dimensions(mm) (WxHxL)	a(1P/2P/3P/4P)	17.5/35/52.5/70	
	b(1P/2P/3P/4P)	87/87/87/87	
	c(1P/2P/3P/4P)	77.5/77.5/77.5/77.5	
Weight(kg)	1P	0.11	
	2P	0.22	
	3P	0.33	
	4P	0.44	

■ Default □ Optional - None

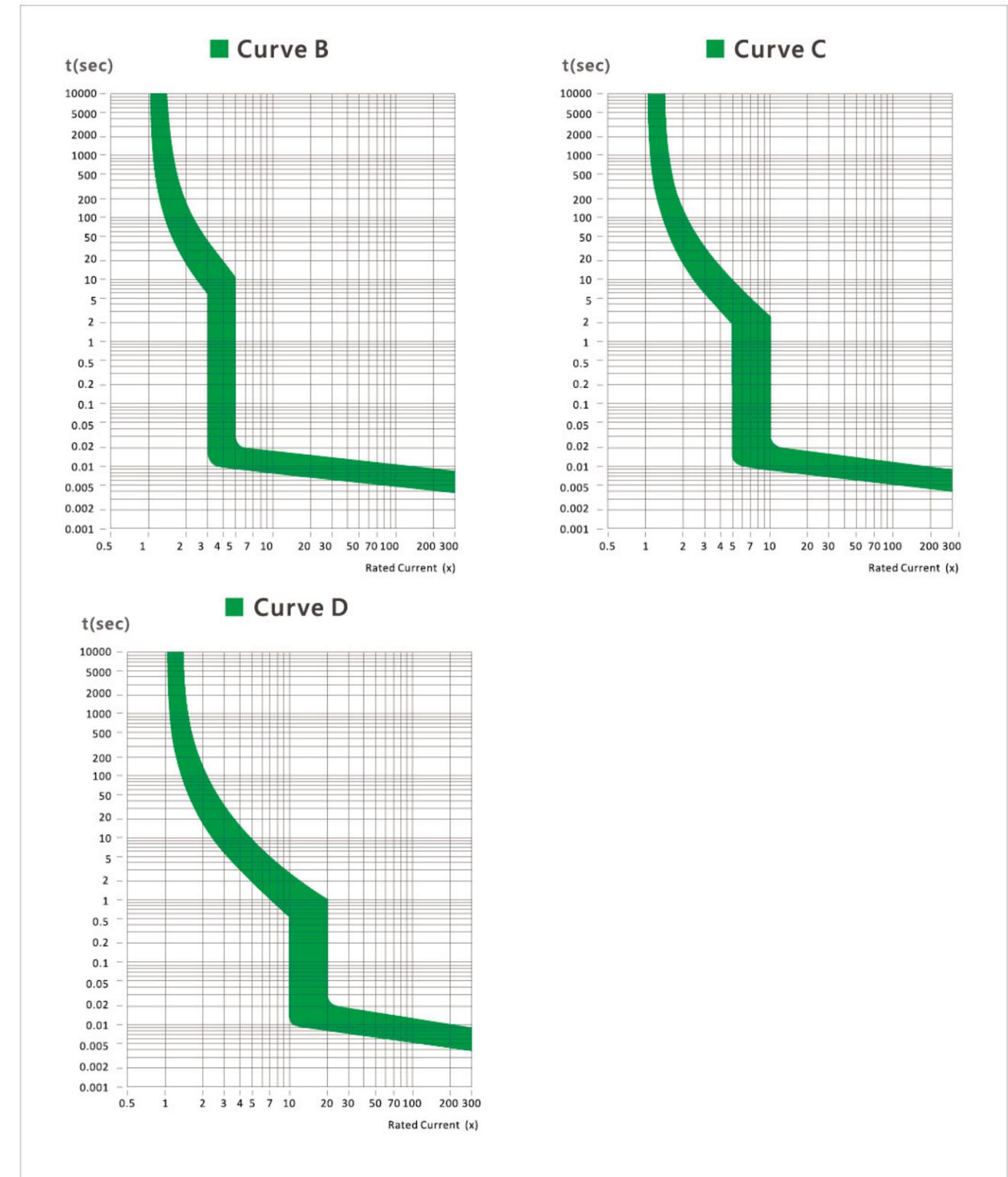
PB8HH	PN8N	PN8H
		
1P,1P+N,2P,3P,3P+N,4P	1P+N	1P+N
		
Electrical Specification		
1-63A	1-40	6-40
50/60	50/60	50/60
1P:230/400~,2/3/4P:400~	230~	230~
500	400	400
6	4	4
10	4.5	6
B,C,D	B,C,D	B,C,D
440	240	240
2	2	2
10000	10000	10000
4000	4000	4000
	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	
	-	
Connection And Installation		
	-5℃ ~+40℃	
Protection degree	ALL sides	IP40
	Connection terminal	IP20
1-16	1-10	1-10
25	-	
Cable/Busbar	Cable	Cable
	2	
	30	
	-25℃ ~+70℃	
3.0	2.5	
	Top and Bottom	
17.5/35/52.5/70	17.5(1P+N)	17.5(1P+N)
87/87/87/87	87(1P+N)	87(1P+N)
77.5/77.5/77.5/77.5	77.5(1P+N)	77.5(1P+N)
0.11	0.12(1P+N)	0.13(1P+N)
0.22	-	-
0.33	-	-
0.44	-	-



Normal Working Conditions and Installation Conditions

- ◆ Ambient Temperature: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$, it's average over a period of 24 hours does not exceed $+35^{\circ}\text{C}$.
- ◆ Height above Sea Level: $\leq 2000\text{m}$
- ◆ Atmospheric Condition:
 - When the maximum temperature is $+40^{\circ}\text{C}$, the relative humidity of the air is not exceed 50%, and it has higher humidity at lower temperature. The maximum monthly relative humidity is 90%, and the lowest temperature is $+20^{\circ}\text{C}$. Additionally, a frost might be present, with the temperature change.
 - Pollution Degree: 2
 - Installation Conditions:
- ◆ Installation Category and Type: Installation category is II or III, and the installation type adopts standard steel guide rail installation (TH35-7.5).
 - The circuit breaker shall be installed vertically, and the upward position of the handle shall be connected to the power.
 - The installation should be free from obvious impact and vibration, corrosive and explosive gases.

Characteristics Curve



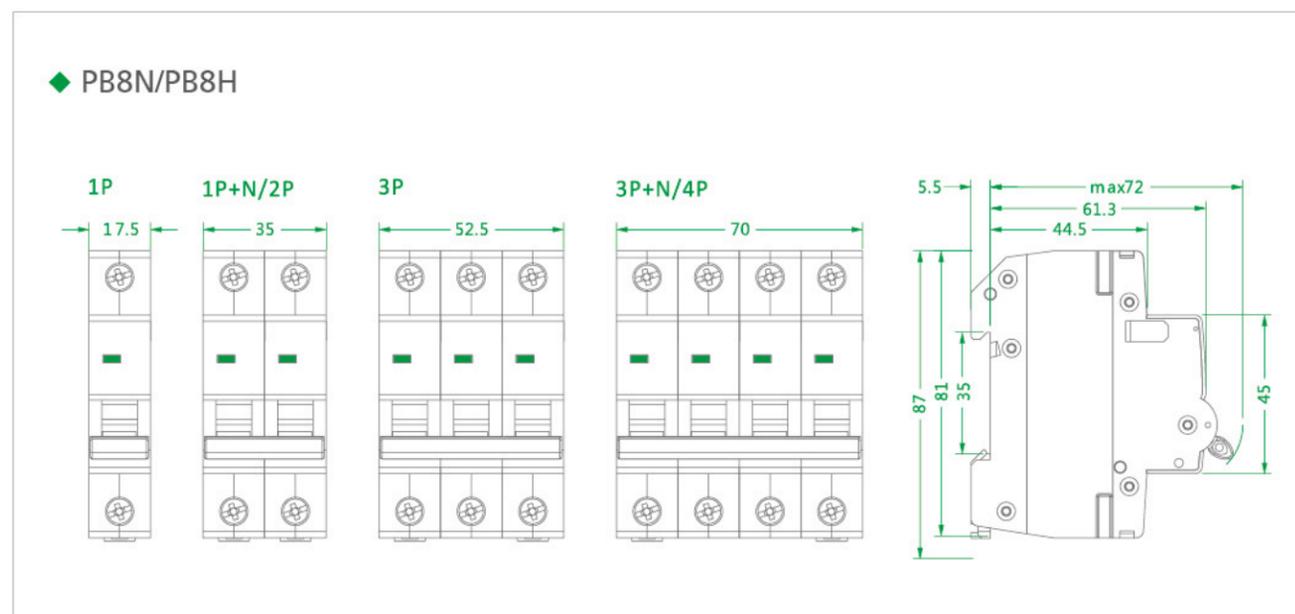
Time-current operating characteristics

Test	Type	Test current	Initial condition	Limits of tripping or non-tripping time	Result to be obtained	Remarks
a	B, C, D	$1,13 I_n$	Cold ^a	$t \leq 1h$ (for $I_n \leq 63A$) $t \leq 2h$ (for $I_n > 63A$)	No tripping	
b	B, C, D	$1,45 I_n$	Immediately following test a	$t < 1h$ (for $I_n \leq 63A$) $t < 2h$ (for $I_n > 63A$)	Tripping	Current steadily increased within 5 s
c	B, C, D	$2,55 I_n$	Cold ^a	$1s < t < 60s$ (for $I_n \leq 32A$) $1s < t < 120s$ (for $I_n > 32A$)	Tripping	
d	B C D	$3 I_n$ $5 I_n$ $10 I_n$	Cold ^a	$t \leq 0,1s$	No Tripping	Current established by closing an auxiliary switch
e	B C D	$5 I_n$ $10 I_n$ $20 I_n$ ^b	Cold ^a	$t < 0,1s$	Tripping	Current established by closing an auxiliary switch

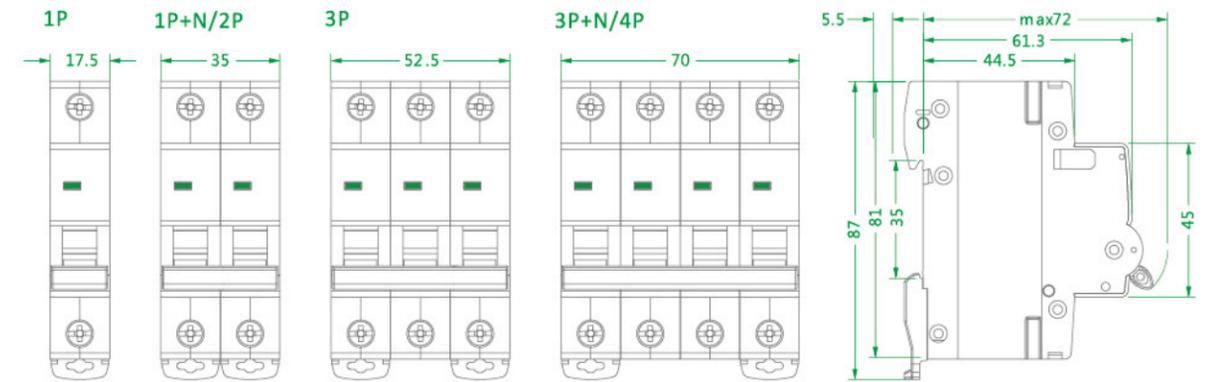
NOTE An additional test, intermediate between c and d, is under consideration for circuit-breakers of type D.

^a The term "cold" means without previous loading, at the reference calibration temperature.
^b $50 I_n$ for special cases.

Dimensions



◆ PB8NN/PB8HN



◆ PN8N/PN8H

