

Protection of distribution systems

Compact NS circuit breakers from 630b up to 3200 A

A



PB104842_aps

Compact NS800L.



PB104831_MIE_aps

Compact NS1600H.



PB104843_aps

Compact NS2000H.

[1] 65 °C with vertical connections. See the temperature derating tables for other types of connections.

Compact circuit breakers

Number of poles

Control	manual	toggle
		direct or extended rotary handle
	electric	

Type of circuit breaker

Connections	fixed	front connection
		rear connection
		front connection with bare cables
	withdrawable (on chassis)	front connection
		rear connection

Electrical characteristics as per IEC 60947-2 and EN 60947-2

Rated current (A)	In	50 °C
		65 °C [1]
Rated insulation voltage (V)	Ui	
Rated impulse withstand voltage (kV)	Uimp	
Rated operational voltage (V)	Ue	AC 50/60 Hz

Type of circuit breaker

Ultimate breaking capacity (kA rms)	Manual	Icu	AC 50/60 Hz	220/240 V
				380/415 V
				440 V
				500/525 V
				660/690 V
		Ics	AC 50/60 Hz	220/240 V
				380/415 V
				440 V
				500/525 V
				660/690 V
	Electrical	Icu	AC 50/60 Hz	220/240 V
				380/415 V
				440 V
				500/525 V
				660/690 V
		Ics	AC 50/60 Hz	220/240 V
				380/415 V
				440 V
				500/525 V
				660/690 V

Short-time withstand current (kA rms)	Icw	AC 50/60 Hz	1 s
			3 s

Integrated instantaneous protection kA peak ± 10 %

Suitability for isolation

Utilisation category

Durability (C-O cycles)	mechanical		
	electrical	440 V	In/2
			In
		690 V	In/2
			In

Pollution degree

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NS630b				NS800			NS1000			NS1250		NS1600		NS1600b		NS2000		NS2500		NS3200	
3, 4				3, 4			3, 4			3, 4		3, 4		3, 4		3, 4		3, 4		3, 4	
●				●			●			●		●		●		●		●		●	
●				●			●			●		●		●		●		●		●	
● (except LB)				●			●			●		●		●		●		●		●	
N	H	L	LB	N	H	L	N	H	L	N	H	N	H	N	H	N	H	N	H	N	H
●	●	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	-	-	-	-	-
●	●	-	-	●	●	-	●	●	-	●	●	-	-	-	-	-	-	-	-	-	-
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	-	-	-	-	-
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	-	-	-	-	-
630				800			1000			1250		1600		1600		2000		2500		3200	
630				800			1000			1250		1510		1550		1900		2500		2970	
800				800			800			800		800		800							
8				8			8			8		8		8							
690				690			690			690		690		690							
N	H	L	LB	N	H	L	N	H	L	N	H	N	H	N	H	N	H	N	H	N	H
85	85	150	200	85	85	150	85	85	150	85	85	85	85	85	85	85	85	85	125	85	85
50	70	150	200	50	70	150	50	70	150	50	70	50	70	50	70	50	70	50	70	50	70
50	65	130	200	50	65	130	50	65	130	50	65	50	65	50	65	50	65	50	65	50	65
40	50	100	100	40	50	100	40	50	100	40	50	40	50	40	50	40	50	40	50	40	50
30	42	-	75	30	42	-	30	42	-	30	42	30	42	30	42	30	42	30	42	30	42
50	50	150	200	50	52	150	50	52	150	50	52	37	37	37	37	37	37	37	37	37	37
50	50	150	200	50	52	150	50	52	150	50	52	37	37	37	37	37	37	37	37	37	37
50	50	130	200	50	48	130	50	48	130	50	48	37	37	37	37	37	37	37	37	37	37
40	40	100	100	40	37	100	40	37	100	40	37	30	30	30	30	30	30	30	30	30	30
30	30	-	75	30	31	-	30	31	-	30	31	22	22	22	22	22	22	22	22	22	22
50	70	150	-	50	70	150	50	70	150	50	70	50	70	50	70	50	70	50	70	50	70
50	70	150	-	50	70	150	50	70	150	50	70	50	70	50	70	50	70	50	70	50	70
50	65	130	-	50	65	130	50	65	130	50	65	50	65	50	65	50	65	50	65	50	65
40	50	100	-	40	50	100	40	50	100	40	50	40	50	40	50	40	50	40	50	40	50
30	42	-	-	30	42	-	30	42	-	30	42	30	42	30	42	30	42	30	42	30	42
37	37	150	-	37	37	150	37	37	150	37	37	37	37	37	37	37	37	37	37	37	37
37	37	150	-	37	37	150	37	37	150	37	37	37	37	37	37	37	37	37	37	37	37
37	37	130	-	37	37	130	37	37	130	37	37	37	37	37	37	37	37	37	37	37	37
30	30	100	-	30	30	100	30	30	100	30	30	30	30	30	30	30	30	30	30	30	30
22	22	-	-	22	22	-	22	22	-	22	22	22	22	22	22	22	22	22	22	22	22
19.2	19.2	-	-	19.2	19.2	-	19.2	19.2	-	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	40	-	-	40	40	-	40	40	-	40	40	40	40	40	40	40	40	40	40	40	40
●				●			●			●		●		●		●		●		●	
B	B	A	A	B	B	A	B	B	A	B	B	B	B	B	B	B	B	B	B	B	B
10000				10000			10000			10000		10000		10000		5000					
6000	6000	4000	4000	6000	6000	4000	5000			5000		5000		5000		3000					
5000	5000	3000	3000	5000	5000	3000	4000			4000		2000		2000		2000					
4000	4000	3000	3000	4000	4000	3000	3000			3000		2000		2000		2000					
2000	2000	2000	2000	2000	2000	2000	2000			2000		1000		1000		1000					
3				3			3			3		3		3		3					

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PB104831_ME.eps



Electrically operated device.

Compact circuit breakers

Protection and measurements

Interchangeable control units

Overload protection long time **I_r** (I_n x ...)Short-circuit protection short time **I_{sd}** (I_r x ...)instantaneous **I_i** (I_n x ...)Earth-fault protection **I_g** (I_n x ...)Residual earth-leakage protection **I_{Δn}**Zone selective interlocking **ZSI**

Protection of the fourth pole

Current measurements

Power measurements

Advanced protection

Quick view

Remote communication by bus

Device-status indication

Device remote operation ^[2]

Transmission of settings

Indication and identification of protection devices and alarms

Transmission of measured current values

Compact circuit breakers

Additional indication and control auxiliaries

Indication contacts

Voltage releases MX shunt release/MN undervoltage release

Installation

Accessories

- terminal extensions and spreaders
- terminal shields and interphase barriers
- escutcheons

Dimensions fixed devices, front connections (mm) 3P

H x W x D 4P

Weight fixed devices, front connections (kg) 3P

4P

Source changeover system (see section on "source changeover systems")

Manual, remote-operated and automatic source changeover systems

^[1] Except 1600b-3200.

^[2] With NS630b...NS1600, remote operation is possible with electrically operated device.
With NS1600...NS3200, remote operation is not possible.

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NS630b NS800 NS1000 NS1250 NS1600 NS1600b NS2000 NS2500 NS3200													
Micrologic													
	2.0	5.0	6.0	2.0 A	5.0 A	6.0 A	7.0 A	2.0 E	5.0 E	6.0 E	5.0 P ^[1]	6.0 P ^[1]	7.0 P ^[1]
	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	⊙	⊙	-	⊙	⊙	⊙	-	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	⊙	-	-	⊙	-	-	-	⊙	-	⊙	-
	-	-	-	-	-	-	⊙	-	-	-	-	-	⊙
	-	-	-	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	-	-	-	-	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	-	-	-	-	-	-	-	⊙	⊙	⊙
	-	-	-	-	-	-	-	⊙	⊙	⊙	-	-	-
	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
	-	-	-	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
NS630b NS800 NS1000 NS1250 NS1600 NS1600b NS2000 NS2500 NS3200													
	⊙							⊙					
	⊙							⊙					
	⊙							-					
	⊙							⊙					
	⊙							⊙					
	327 x 210 x 147							350 x 420 x 160					
	327 x 280 x 147							350 x 535 x 160					
	14							24					
	18							36					
	⊙							-					