

# Introduction

## Characteristics and performance of Compact NSX circuit breakers from 400 to 630 A up to 690 V

PB108106.eps



Compact NSX400/630.

PB11001.eps



Compact NSX630 R.

PB11013.eps



Compact NSX630 HB2.

- (1) OSN: Over Sized Neutral protection for neutrals carrying high currents (e.g. 3rd harmonics).  
 (2) ZSI: Zone Selective Interlocking using pilot wires.  
 (3) Vigi module is not available for breaking capacity levels HB1/HB2.

### Common characteristics

#### Rated voltages

Insulation voltage (V)	<b>Ui</b>	800
Impulse withstand voltage (kV)	<b>Uimp</b>	8
Operational voltage (V)	<b>Ue</b>	AC 50/60 Hz 690
Suitability for isolation	IEC/EN 60947-2	yes
Utilisation category		A
Pollution degree	IEC 60664-1	3

### Circuit breakers

#### Breaking capacity levels

#### Electrical characteristics as per IEC 60947-2

Rated current (A)	<b>In</b>	40 °C
Number of poles		
<b>Breaking capacity (kA rms)</b>		
	<b>Icu</b>	AC 50/60 Hz 220/240 V 380/415 V 440 V 500 V 525 V 660/690 V

#### Service breaking capacity (kA rms)

	<b>Ics</b>	AC 50/60 Hz 220/240 V 380/415 V 440 V 500 V 525 V 660/690 V
Durability (C-O cycles)	Mechanical	
	Electrical	440 V In/2 690 V In/2 In

#### Characteristics as per Nema AB1

Breaking capacity (kA rms)	AC 50/60 Hz 240 V 480 V 600 V
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#### Characteristics as per UL 508

Breaking capacity (kA rms)	AC 50/60 Hz 240 V 480 V 600 V
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### Protection and measurements

Short-circuit protection	Magnetic only
Overload / short-circuit protection	Thermal magnetic
	Electronic
	with neutral protection (Off-0.5-1-OSN) <sup>(1)</sup>
	with ground-fault protection
	with zone selective interlocking (ZSI) <sup>(2)</sup>
Display / I, U, f, P, E, THD measurements / interrupted-current measurement	
Options	Power Meter display on door
	Operating assistance
	Counters
	Histories and alarms
	Metering Com
	Device status/control Com
Earth-leakage protection	By Vigi module <sup>(3)</sup>
	By Vigirex relay

### Installation / connections

#### Dimensions and weights

Dimensions (mm)	Fixed, front connections	2/3P 4P
Weight (kg)	Fixed, front connections	2/3P 4P

#### Connections

Connection terminals	Pitch	With/without spreaders
Large Cu or Al cables	Cross-section	mm <sup>2</sup>

