

Characteristics and Performance

ComPacT NSXm Circuit Breakers from 16 to 160 A up to 690 V

ComPacT New Generation Overview



A

C120-8TM160L-eps



ComPacT NSXm

Common Characteristics

Rated voltages	Insulation voltage (V)	Ui	800
	Insulation voltage for ELCB [1] (V)	Ui	500
	Impulse withstand voltage (kV)	Uimp	8
	Operational voltage (V)	Ue AC 50/60 Hz	690
	Operational voltage for ELCB [1] (V)	Ue AC 50/60 Hz	440
Suitability for isolation	IEC/EN 60947-2		yes
Utilization category			A
Pollution degree	IEC 60664-1		3

Circuit Breakers

Breaking Capacity Levels

Electrical characteristics as per IEC/EN 60947-2

Rated current (A) **In** 40 °C

Number of poles

Breaking capacity (kA rms)

Icu	AC 50/60 Hz	220...240 V
		380...415 V
		440 V
		500 V
		525 V
		660...690 V

Service breaking capacity (kA rms)

Ics	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
	In
690 V	In/2
	In

Protection and Measurements

Overload/short-circuit protection	Thermal magnetic
	Electronic with Earth Leakage Protection (ELCB)
Options	Device status/control
	For ELCB [1]: alarming and fault differentiation

Installation/Connections

Dimensions and weights

Dimensions (mm) W x H x D	3P
	4P
Weight (kg)	ELCB [1]
	3P
	4P
	ELCB [1]

Connections

Pitch (mm)	Standard
	With spreaders
EverLink lug Cu or Al [2] cables	Cross-section (mm ²)
	Rigid
Crimp lugs Cu or Al	Flexible
	Rigid
	Flexible
	Flexible

Source Changeover System

Manual mechanical interlocking

[1] ELCB: Earth Leakage Circuit Breaker (MicroLogic Vigi 4.1).

[2] Al up to 100 A.

Characteristics and Performance

ComPacT NSXm Switch-Disconnectors from 50 to 160 A NA

A

Installation standards require upstream protection. However ComPacT NSXm 50 to 160 NA switch-disconnectors are self-protected by their high-set magnetic release.



ComPacT NSXm switch-disconnectors

Common Characteristics

Rated voltages	Insulation voltage (V)	Ui	800
	Impulse withstand voltage (kV)	Uimp	8
	Operational voltage (V)	Ue	AC 50/60 Hz 690
Suitability for isolation		IEC/EN 60947-3	yes
Utilization category		AC 22 A/AC 23 A	
Pollution degree		IEC 60664-1	3

Switch-Disconnectors

Electrical characteristics as per IEC/EN 60947-3

Conventional thermal current (A) I_{th} 40 °C

Number of poles

Operational current (A) depending on the utilization category	I _e	AC 50/60 Hz	
			220/240 V
			380/415 V
			440/480 V
			500/525 V
			660/690 V

Short-circuit making capacity (kA peak)	I _{cm}	min. (switch-disconnector alone) max. (protection by upstream circuit breaker)	
Rated short-time withstand current (A rms)	I _{cw}	for	1 s 3 s 20 s

Durability (C-O cycles)	Mechanical		
	Electrical	AC	
		440 V	I _e /2 I _e
		690 V	I _e /2 I _e

Positive contact indication

Pollution degree

Additional indication and control auxiliaries

Indication contacts

Voltage releases	MX shunt trip release MN undervoltage release
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Installation/connections

Dimensions and Weights

Dimensions (mm)	3P
W x H x D	4P
Weight (kg)	3P 4P

Connections

Pitch (mm)	Standard With spreaders
EverLink lug Cu or Al ^[1] cables	Cross-section (mm ²) Rigid Flexible
Crimp lugs Cu or Al	Cross-section (mm ²) Rigid Flexible

Source-changeover systems

Manual mechanical interlocking

[1] Al up to 100 A.

Characteristics and Performance

ComPacT NSXm Switch-Disconnectors from 50 to 160 A NA



Common Characteristics

Control	Manual	With toggle	<input checked="" type="radio"/>
		With direct or extended rotary handle	<input checked="" type="radio"/>
		With side rotary handle	<input checked="" type="radio"/>
Versions	Fixed		<input checked="" type="radio"/>

	NSXm50NA	NSXm100NA	NSXm160NA
	50	100	160
	3, 4	3, 4	3, 4
	AC22A/AC23A	AC22A/AC23A	AC22A/AC23A
	50	100	160/100
	50	100	160/100
	50	100	160/100
	50	100	160/100
	50	100	160/100
	1.28	2.13	2.13
	150	150	150
	900	1500	1500
	900	1500	1500
	200	335	335
	20000	20000	20000
	AC22A/AC23A	AC22A/AC23A	AC22A/AC23A
	20000/20000	20000/20000	20000/20000
	10000/10000	10000/10000	10000/10000
	10000/6000	10000/6000	10000/6000
	5000/3000	5000/3000	5000/3000
	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	3	3	3
	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	81 x 137 x 80		
	108 x 137 x 80		
	1.06		
	1.42		
	27		
	35		
	95		
	70		
	120		
	95		
	<input checked="" type="radio"/>		