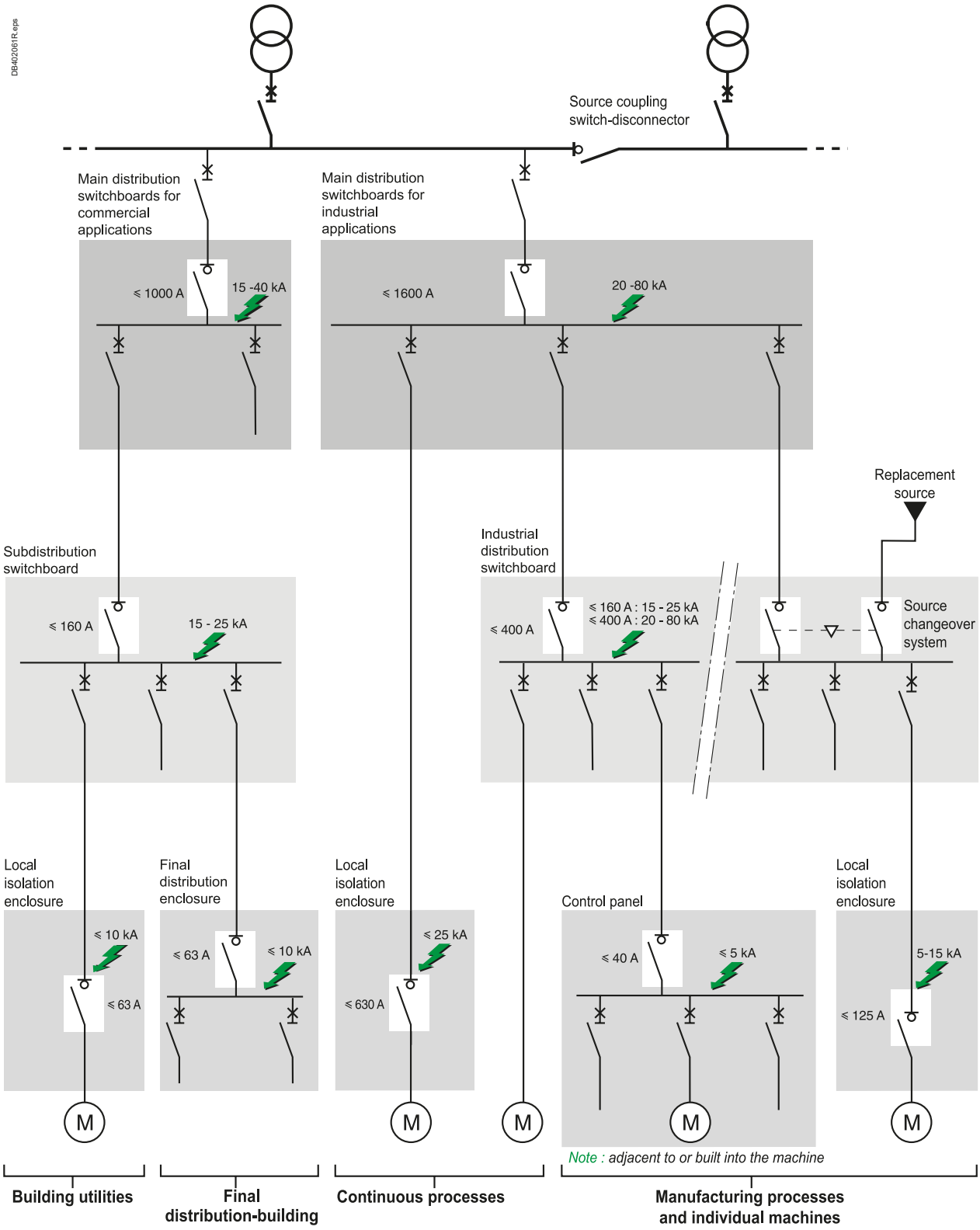
Use of LV switches

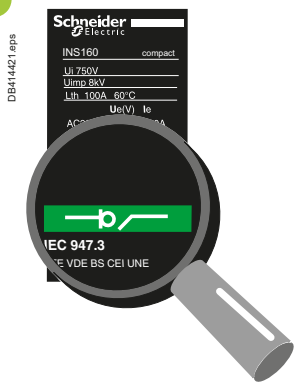
Presentation

Functions performed by switch



Use of LV switches

Presentation



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Functions and positions of LV switches

Switches are necessary in different level of low voltage installation for the following main applications :

- functional switching
- supplying installation from different sources (transfert-switching equipment)
- starting stopping equipements
- emergency switching
- switching off and disconnection for isolation of one circuit or switchboard for maintenance.

IEC 60364-5-53 Electrical installations of buildings – Part 5-53: Selection and erection of electrical equipment

Isolation, switching and control standard provides requirement for isolation of circuits, functional switching, and emergency switching.

IEC 60204-1 Safety of machinery - Electrical equipment of machines - Part 1: General requirements
standard provides requirements for disconnection of machines.

“Suitability for isolation” is necessary to ensure people safety in open position.

Suitable for isolation

Switch-disconnector
“Isolation” function i.e disconnection from supply is required for all circuits or equipement in order to guarantee the safety of people during repairs or maintenance.

Low voltage electrical installation standards (IEC 60364 series for example) provide requirements to ensure properly this function:

Device for isolation shall:

- isolate all live conductors (including neutral but not PEN)
- withstand specified impulse voltage in open position
- have a leakage current below specified values in open position
- be lockable in the “open” position so as to prevent any risk of unvolontary reclosing
- ensure that the isolating distance between open contacts of the device is visible or be clearly and reliably indicated by “off” or “open” marking.

These requirements are totally covered with devices compliant to IEC 60947-1/2/3 suitable for isolation.

This characteristics is clearly marked on product by the symbol of switch-disconnector.

Switch-disconnector standards and characteristics

IEC60947-3 Low-voltage switchgear and controlgear – Part 3:
Switches, disconnectors and fuse-combination units specifies the performances and test of switch-disconnector. The main characteristics of an industrial switch-disconnector are:

- Rated and limiting values for the main circuit: voltage, current, short time withstand in case of short circuit, making current in case of switch on-to short-circuit, rated conditional short-circuit with a specified short-circuit protection.
- Utilization category (for a switching device or a fuse) is a “combination of specified requirements related to the conditions in which the switching device or the fuse fulfils its purpose, selected to represent a characteristic group of practical applications” [IEV 441-17-19]

This characteristic (alphanumerical code) defines requirement linked to a type of load, such as making and breaking current for durability test, minimum number of operation, power factor of the current to make and breake.
See example below.

- control circuits: opening / closing Coils and auxiliaries allowing remote opening and/or closing if any.
- auxiliary circuits: O/C Contacts for remote signaling.

Example:
A switch with a rating of 125 A, from the AC23 category must be able to:

- make a 10 In (1250 A) current with a cos φ of 0.35
- break a 8 In (1000 A) current with a cos φ of 0.35.

Its other characteristics are:

- to withstand a 12 In - 1 s short-circuit current, which defines the Icw = 1500 A r.m.s. thermal withstand during 1 s.

Utilization category		Characteristic applications
Frequent operations	Non frequent operations	
AC-21A	AC-21B	Resistive loads including moderate overloads (cos φ = 0.95)
AC-22A	AC-22B	Mixed resistive and inductive loads including moderate overloads (cos φ = 0.65)
AC-23A	AC-23B	Motors with cage winding or orther loads which are highly inductive (cos φ = 0.45 or 0.35)

Choosing a Schneider Electric switch-disconnector

The switch must be chosen according to:
■ the characteristics of the network on which it is installed,
■ the location and the application,
■ coordination with the upstream protection devices (in particular overload and short-circuit).

Choice criteria

Network characteristics
Nominal voltage, nominal frequency and nominal current are determined in the same way as for a circuit breaker:
■ nominal voltage = nominal voltage of the network
■ frequency = network frequency
■ nominal current = rated current of a value immediately higher than the downstream load current. Note that the rated current is defined for a given ambient temperature and that a derating may have to be taken into account.

Location and application
This determines the type and characteristics or main functions that the switch must possess. There are 3 function levels (see table opposite):
■ basic functions, virtually common to all switch types:
□ isolation, control, padlocking, safety.
■ additional characteristic functions
□ direct formulation of the needs of the user and of the switch environment, i.e.:
- industrial type performance
- need for emergency stopping
- Isc level
- type of interlocking
- type of control
- utilization category
- mounting system.
■ specific functions
□ linked to operation and to installation requirements, i.e.:
- earth leakage protection
- motor mechanisms
- remote opening (“emergency stop” function)
- withdrawability.

The following table enables choice of switch according to requirements.
■ choice table
Comparison of the application table K (see page 227) and the switch technical data table M (see page 229) lets you specify which switch range should be used.

Coordination
All switches must be protected by an overcurrent protection device placed upstream.

The tables below give the coordination performance of circuit breakers and switch-disconnector of main Schneider Electric ranges: in the event of an overload or a short-circuit the circuit breaker proposed in the table will ensure protection of the Switch-disconnector according to its electrodynamic withstand and short-time and permanent withstand.

Choosing a Schneider Electric switch-disconnector

Switch-disconnector characteristics according to application

		Main distribution switchboards	Industrial distribution switchboard	Subdistribution switchboards	Final distribution enclosures	Control panel	Local isolation enclosures
Current range		400 to 6300 A	40 to 630 A	⩽ 160 A	⩽ 125 A	⩽ 40/125 A	10 to 630 A
LV switch basic functions							
making and breaking load current		■	■	■	■	■	■
Isolation [1]		■	■	■	■	■	■
Padlocking		■	■	■	■	■	■
Characteristics							
Maximum short-circuit level [2]		20 to 80 kA	■ I ⩽ 160 A: 15 to 25 kA	■ I ⩽ 63 A: 15 kA	10 kA	3 to 5 kA	■ I ⩽ 63 A: 10 kA
			■ I ⩽ 630 A: 20 to 80 kA	■ I ⩽ 160 A: 25 kA			■ I ⩽ 630 A: 25 kA
Utilization category	AC21A			■	■		
	AC22A	■	■	□	□		
	AC23		□			■	■
	AC3						■ I ⩽ 63 A
Handle	Rotary	■	■	■	□	■	■
	Direct front	■	□	■	■	■	□
	Front extended	□	□	□			■
	Side extended		□				■
Mounting	On plate	■	□	□		■	□
	Symmetrical rail (45 mm tip)	□	■	■	■	□	
Specific functions							
Earth leakage protection		□	□	□	□		
Other	Draw-out, auxiliary switches, auxiliary releases, remote control	■	■	□			□
	Emergency stop		□	□	□		□

Table K
■ compulsory.
□ possible.

[1] with positive break indication or visible isolation
[2] values are indicative. Maximum presumed short-circuit current shall be calculated for each installation

Choosing a Schneider Electric switch-disconnector

The switches available in the Schneider Electric offer

Schneider Electric offers its customers several ranges of switches.
Choice depends on:
- the application
- the additional functions to be implemented (accessories, installation, residual current protection, etc.).

The following table summarises the possibilities offered by all the Schneider Electric ranges according to the applications described above.

Applications / Products	Incoming switches for					Local isolation switches
	Main distribution switchboards 400-6300 A	Industrial distribution switchboards 400-630 A	Subdistribution switchboards ≤ 160 A	Final distribution enclosures ≤ 125 A	Control panels ≤ 40/125 A	Local isolation enclosures 10-630 A
Vario					■	■
Acti 9 iSW / iID (modular profile)				■		□
Acti 9 iSW-NA (modular profile)				□		■
Compact INS ≤ 160 (modular profile)		■	■	■		■
NG125 NA (modular profile)			■	■		■
Compact INS (industrial)	■	■				■
Compact NSXm NA (Modular / Industrial)			■	□		□
Compact NSX-NA (industrial)	□	■	□			■
Masterpact NA/HA/HF (industrial)	■					

Table L
■ very common
□ fairly common.

Choosing a Schneider Electric switch-disconnector

Switch-disconnector range technical data

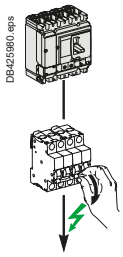
Table M below lists the main technical data of the switches in the Schneider Electric ranges.

Range		Vario	Acti 9				Compact					Masterpact		
			iSW	iSW NA	iID	NG125 NA	INS	INV	NSXm NA	NSX NA	NS NA	NA	HA	HF
Clip-on on rail			■	■	■	■	■ [3]	■ [3]	■					
Main functions	Isolation	■	■ [5]	■	■	■	■	■	■	■	■	■	■	■
	Positive break indication	■	■	■	■	■	■	■	■	■	■	■	■	■
	Visible isolation							■						
Emergency stop	Manual [7]	■				■	■ [4]	■ [4]	■ [4]					
	Remote (MN coil)			■ [6]	■ [6]	■ [6]			■ [6]	■ [6]	■ [6]	■ [6]	■ [6]	■ [6]
Other functions	Residual current				■	■ [8]				■ [8]				
	Remote opening (MX)			■	■	■			■	■	■	■	■	■
	Remote control (Open Close)									■	■ [9]	■	■	■
Fixed/drawout	Fixed	■	■	■	■	■	■	■	■	■	■	■	■	■
	Drawout									■	■ [9]	■	■	■
On/Off indication contact		■	■	■	■ [1]	■ [1]	■ [2]	■ [2]	■	■	■	■	■	■
Ratings (A)	12	■												
	16				■									
	20	■												
	25	■			■									
	32	■												
	40	■	■	■	■		■							
	50								■					
	63	■	■	■	■	■	■							
	80	■		■	■	■	■							
	100		■	■	■	■	■	■	■	■				
	125	■	■			■	■							
	160	■					■	■	■	■				
	175	■												
	250						■	■		■				
	320						■	■						
	400						■	■		■				
	500						■	■						
	630						■	■		■	■		■	
	800						■	■			■	■	■	■
	1000						■	■			■	■	■	■
	1250						■	■			■	■	■	■
	1600						■	■			■	■	■	■
	2000						■	■			■		■	■
	2500						■	■			■		■	■
	3200										■		■	■
	4000												■	
	5000												■	
	6300												■	

Table M
[1] SD auxilary contact available on iID.
[2] OF contact and CAO or CAF.
[3] Only 40 to 160 A (modular profile).
[4] Specific INS/INV emergency stop switches.
[5] Only on ratings 40/63/100/125. iSW 20 and 32 are switch without isolation function according to IEC 60669-1.
[6] With MN auxiliaries.
[7] Yellow front plate/red handle.
[8] Associated Vigi bloc.
[9] Option available up to 1600 A.

Switch-disconnector - Circuit breaker coordination

Upstream: iC60, C120, NG125, Compact NSXm, NSX100, NSX160
Downstream: iSW-NA, iID



Ue ≤ 415 V AC

Downstream	Switch-disconnector	iSW-NA				iID [1]				
	Rating (A)	40	63	80	100	25	40	63	100	125
	Icw (A)	800	1260	1600	2000	500	800	1260	1200	1500
	Icm (kÂ)	5	5	5	5	5	5	5	5	5

Upstream Circuit breaker	Rating or setting	Icu (kA) 415 V	Switch-disconnector conditionnal short-circuit current and related making capacity								
iC60N	**≤ 25**	10	T	T	T	T	T	T	T	T	T
B-C-D Curves	**32**	10	T	T	T	T		T	T	T	T
	40	10	T	T	T	T		T	T	T	T
	50-63	10		T	T	T			T	T	T
iC60H	**≤ 25**	15	T	T	T	T	T	T	T	T	T
B-C-D Curves	**32**	15	T	T	T	T		T	T	T	T
	40	15	T	T	T	T		T	T	T	T
	50-63	15		T	T	T			T	T	T
iC60L	**≤ 25**	25	T	T	T	T	T	T	T	T	T
B-C-D-K-Z Curves	**32**	20	T	T	T	T		T	T	T	T
	40	20	T	T	T	T		T	T	T	T
	50-63	15		T	T	T		T	T	T	T
C120N	**63**	10		T	T	T			T	T	T
B-C-D Curves	**80**	10			6/9	6/9				6/9	6/9
	100	10				6/9					6/9
	125	10									6/9
C120H	**63**	20		T	T	T			T	T	T
B-C-D Curves	**80**	20			6/9	6/9				6/9	6/9
	100	20				6/9					6/9
	125	20									6/9
NG125N	**≤ 40**	25	16/27	16/27	16/27	16/27		16/27	16/27	16/27	16/27
B-C-D Curves	**50-63**	25		16/27	16/27	16/27		16/27	16/27	16/27	16/27
	80	25			10/17	10/17				10/17	10/17
	100	25				10/17					10/17
	125	25									10/17
NG125H	**≤ 40**	36	16/27	16/27	16/27	16/27		16/27	16/27	16/27	16/27
C Curves	**50-63**	36		16/27	16/27	16/27		16/27	16/27	16/27	16/27
	80	36			10/17	10/17				10/17	10/17
NG125L	**≤ 40**	50	16/27	16/27	16/27	16/27		16/27	16/27	16/27	16/27
	50-63	50		16/27	16/27	16/27		16/27	16/27	16/27	16/27
B-C-D Curves	**80**	50			10/17	10/17				10/17	10/17
NSXm	**Ir ≤ 25**	*	0.8/5	1.25/5	1.6/5	2/5	0.5/5	0.8/5	1.25/5	1.2/5	1.5/5
TMD, Micrologic	**Ir ≤ 32**	*	0.8/5	1.25/5	1.6/5	2/5		0.8/5	1.25/5	1.2/5	1.5/5
	Ir ≤ 40	*	0.8/5	1.25/5	1.6/5	2/5		0.8/5	1.25/5	1.2/5	1.5/5
Icu 415V:	**Ir ≤ 50**	*		1.25/5	1.6/5	2/5			1.25/5	1.2/5	1.5/5
E/B/F/N/H	**Ir ≤ 63**	*		1.25/5	1.6/5	2/5			1.25/5	1.2/5	1.5/5
16/25/36/50/70	**Ir ≤ 80**	*			1.6/5	2/5				1.2/5	1.5/5
	Ir ≤ 100	*				2/5				1.2/5	1.5/5
	Ir ≤ 125	*									1.5/5
	Ir ≤ 160	*									
NSX100	**Ir ≤ 25**	*	0.8/5	1.25/5	1.6/5	2/5	0.5/5	0.8/5	1.25/5	1.2/5	1.5/5
TMD, Micrologic	**Ir ≤ 32**	*	0.8/5	1.25/5	1.6/5	2/5		0.8/5	1.25/5	1.2/5	1.5/5
	Ir ≤ 40	*	0.8/5	1.25/5	1.6/5	2/5		0.8/5	1.25/5	1.2/5	1.5/5
Icu 415V:	**Ir ≤ 50**	*		1.25/5	1.6/5	2/5			1.25/5	1.2/5	1.5/5
B/F/N/H/S/L	**Ir ≤ 63**	*		1.25/5	1.6/5	2/5			1.25/5	1.2/5	1.5/5
25/36/50/70/100/150	**Ir ≤ 80**	*			1.6/5	2/5				1.2/5	1.5/5
	Ir ≤ 100	*				2/5				1.2/5	1.5/5
NSX160	**Ir ≤ 125**	*									1.5/5
TMD, Micrologic B/F/N/H/S/L	**Ir ≤ 160**	*									

[1] See Guide CA908023 for additional information.

T : Protection of the switch-disconnector is ensured but combination not very relevant

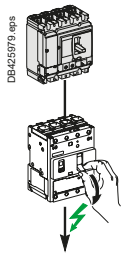
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ.

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: iC60, C120, NG125, Compact NSXm, NSX100, NSX160
Downstream: iSW, NG125NA, Compact NSXm NA



Ue ≤ 415 V AC

Downstream	Switch-disconnector	iSW				NG125NA				NSXm NA		
	Rating (A)	40	63	100	125	63	80	100	125	50	100	160
	Icw (kA)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.9	1.5	1.5
	Icm (kÂ)	5	5	5	5	2	2	2	2	1.38	2.13	2.13

Upstream Circuit breaker	Rating or setting	Icu (kA) 415 V	Switch-disconnector conditionnal short-circuit current and related making capacity										
iC60N/H/L	**≤ 25**	10/15/25	T	T	T	T	T	T	T	T	T	T	T
All Curves	**32**	10/15/20	T	T	T	T	T	T	T	T	T	T	T
	40	10/15/20	T	T	T	T	T	T	T	T	T	T	T
	50	10/15/15		T	T	T	T	T	T	T	T	T	T
	63	10/15/15		T	T	T	T	T	T	T		T	T
C120N	**63**	10		10/17	10/17	10/17		T	T	T		T	T
B-C-D Curves	**80**	10			10/17	10/17			T	T		T	T
	100	10				6/9			T	T		T	T
	125	10								T			T
C120H	**63**	20		15/25	15/25	15/25		T	T	T		T	T
B-C-D Curves	**80**	20			10/17	10/17			T	T		T	T
	100	20				10/17			T	T		T	T
	125	20								T			T
NG125N	**≤ 40**	25	16/27	16/27	16/27	16/27	T	T	T	T	T	T	T
B-C-D Curves	**50**	25		16/27	16/27	16/27		T	T	T	T	T	T
	63	25		16/27	16/27	16/27		T	T	T		T	T
	80	25			10/17	10/17			T	T		T	T
	100	25				10/17			T	T		T	T
	125	25								T			T
NG125H	**≤ 40**	36	16/27	16/27	16/27	16/27	T	T	T	T	T	T	T
	50	36		16/27	16/27	16/27	T	T	T	T	T	T	T
C Curve	**63**	36		16/27	16/27	16/27	T	T	T	T		T	T
	80	36			10/17	10/17		T	T	T		T	T
NG125L	**≤ 40**	50	20/40	20/40	20/40	20/40	T	T	T	T	T	T	T
	50	50		16/27	16/27	16/27		T	T	T	T	T	T
B-C-D Curves	**63**	50		16/27	16/27	16/27			T	T		T	T
	80	50			10/17	10/17			T	T		T	T
NSXm	**Ir ≤ 40**	*	1.5/5	1.5/5	1.5/5	1.5/5	T	T	T	T	T	T	T
TMD, Micrologic	**Ir ≤ 50**	*		1.5/5	1.5/5	1.5/5	T	T	T	T	T	T	T
Icu 415V:	**Ir ≤ 63**	*		1.5/5	1.5/5	1.5/5	T	T	T	T		T	T
E/B/F/N/H	**Ir ≤ 80**	*			1.5/5	1.5/5		T	T	T		T	T
16/25/36/50/70	**Ir ≤ 100**	*			1.5/5	1.5/5			T	T		T	T
	Ir ≤ 125	*				1.5/5				T			T
	Ir ≤ 160	*				1.5/5				T			T
NSX100	**Ir ≤ 40**	*	1.5/5	1.5/5	1.5/5	1.5/5	T	T	T	T	T	T	T
TMD Micrologic	**Ir ≤ 50**	*		1.5/5	1.5/5	1.5/5	T	T	T	T	T	T	T
Icu 415V:	**Ir ≤ 63**	*		1.5/5	1.5/5	1.5/5	T	T	T	T		T	T
B/F	**Ir ≤ 80**	*			1.5/5	1.5/5		T	T	T		T	T
25/36	**Ir ≤ 100**	*			1.5/5	1.5/5			T	T			T
NSX160	**Ir ≤ 125**	*				1.5/5				T			T
B/F	**Ir ≤ 160**	*				1.5/5				T			T
NSX100	**Ir ≤ 40**	*	1.5/5	1.5/5	1.5/5	1.5/5	36/75	36/75	36/75	36/75	T	T	T
TMD, Micrologic	**Ir ≤ 50**	*		1.5/5	1.5/5	1.5/5	36/75	36/75	36/75	36/75	T	T	T
Icu 415V:	**Ir ≤ 63**	*		1.5/5	1.5/5	1.5/5	36/75	36/75	36/75	36/75		T	T
N/H	**Ir ≤ 80**	*			1.5/5	1.5/5		36/75	36/75	36/75		T	T
50/70	**Ir ≤ 100**	*			1.5/5	1.5/5			36/75	36/75			T
NSX160	**Ir ≤ 125**	*				1.5/5				36/75			T
N/H	**Ir ≤ 160**	*				1.5/5				36/75			T
NSX100	**Ir ≤ 40**	*	1.5/5	1.5/5	1.5/5	1.5/5	36/75	36/75	36/75	36/75	70/150	70/150	70/150
TMD, Micrologic	**Ir ≤ 50**	*		1.5/5	1.5/5	1.5/5	36/75	36/75	36/75	36/75	70/150	70/150	70/150
Icu 415V:	**Ir ≤ 63**	*		1.5/5	1.5/5	1.5/5	36/75	36/75	36/75	36/75		70/150	70/150
S/L	**Ir ≤ 80**	*			1.5/5	1.5/5		36/75	36/75	36/75		70/150	70/150
100/150	**Ir ≤ 100**	*			1.5/5	1.5/5			36/75	36/75			70/150
NSX160	**Ir ≤ 125**	*				1.5/5				36/75			70/150
S/L	**Ir ≤ 160**	*				1.5/5				36/75			70/150

T : Protection of the switch-disconnector is ensured but combination not very relevant

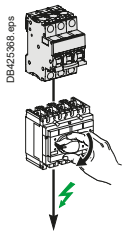
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: iC60, C120, NG125
Downstream: Compact INS40 to INS250, INV100 to INV250



Ue ≤ 415 V AC

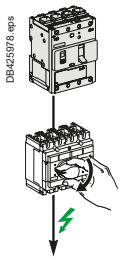
Downstream	Switch-disconnector	INS40	INS63	INS80	INS100	INS 250-100 INV100	INS125	INS160	INS 250-160 INV160	INS 250-200 INV200	INS250 INV250
	Ith (A) 60°	40	63	80	100	100	125	160	160	250	250
	Icw (kA)	3	3	3	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kÂ)	15	15	15	20	30	20	20	30	30	30

Upstream Circuit breaker	Rating	Icu (kA) 415 V	Switch-disconnector conditionnal short-circuit current and related making capacity									
iC60N B-C-D Curves	≤ 32	10	T	T	T	T	T	T	T	T	T	T
	40	10	T	T	T	T	T	T	T	T	T	T
	50	10		T	T	T	T	T	T	T	T	T
	63	10		T	T	T	T	T	T	T	T	T
iC60H B-C-D Curves	≤ 32	15	T	T	T	T	T	T	T	T	T	T
	40	15	T	T	T	T	T	T	T	T	T	T
	50	15		T	T	T	T	T	T	T	T	T
	63	15		T	T	T	T	T	T	T	T	T
iC60L B-C-D-K-Z Curves	≤ 25	25	T	T	T	T	T	T	T	T	T	T
	32	20	T	T	T	T	T	T	T	T	T	T
	40	20		T	T	T	T	T	T	T	T	T
	50	15		T	T	T	T	T	T	T	T	T
	63	15		T	T	T	T	T	T	T	T	T
C120N	63	10		T	T	T	T	T	T	T	T	T
B-C-D Curves	80	10			T	T	T	T	T	T	T	T
1P 240V	100	10				T	T	T	T	T	T	T
2, 3, 4P 415 V	125	10						T	T	T	T	T
C120H	63	20		T	T	T	T	T	T	T	T	T
B-C-D Curves	80	20			T	T	T	T	T	T	T	T
1P 240V	100	20				T	T	T	T	T	T	T
2, 3, 4P 415 V	125	20						T	T	T	T	T
NG125N	≤ 40	25	T	T	T	T	T	T	T	T	T	T
B-C-D Curves	63	25		T	T	T	T	T	T	T	T	T
	80	25			T	T	T	T	T	T	T	T
	100	25				T	T	T	T	T	T	T
	125	25						T	T	T	T	T
NG125H C Curves	≤ 40	36	T	T	T	T	T	T	T	T	T	T
	63	36		T	T	T	T	T	T	T	T	T
	80	36			T	T	T	T	T	T	T	T
	100	36				T	T	T	T	T	T	T
	125	36						T	T	T	T	T
NG125L B-C-D Curves	≤ 40	50	T	T	T	T	T	T	T	T	T	T
	63	50		T	T	T	T	T	T	T	T	T
	80	50			T	T	T	T	T	T	T	T

T	: Protection of the switch-disconnector is ensured but combination not very relevant
T	: Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side
36/75	: Switch-disconnector is protected up to 36 kA rms / 75 kÂ
	: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSXm
Downstream: Compact INS40 to 250, Compact INV100 to 250



Ue ≤ 440 V AC

Downstream	Switch-disconnector	INS40	INS63	INS80	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	40	63	80	100	100	125	160	160	200	200
	Icw (kA)	3	3	3	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kÂ)	15	15	15	20	30	20	20	30	30	30

Upstream Circuit breaker:	Icu (kA) 415 V	440 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity									
NSXm E	16	10	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T
TMD, Micrologic			Ir ≤ 50		T	T	T	T	T	T	T	T	T
			Ir ≤ 63		T	T	T	T	T	T	T	T	T
			Ir ≤ 80			T	T	T	T	T	T	T	T
			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
NSXm B	25	20	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T
TMD, Micrologic			Ir ≤ 50		T	T	T	T	T	T	T	T	T
			Ir ≤ 63		T	T	T	T	T	T	T	T	T
			Ir ≤ 80			T	T	T	T	T	T	T	T
			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
NSXm F	36	35	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T
TMD, Micrologic			Ir ≤ 50		T	T	T	T	T	T	T	T	T
			Ir ≤ 63		T	T	T	T	T	T	T	T	T
			Ir ≤ 80			T	T	T	T	T	T	T	T
			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
NSXm N	50	50	Ir ≤ 40	36/75	36/75	36/75	T	T	T	T	T	T	T
TMD, Micrologic			Ir ≤ 50		36/75	36/75	T	T	T	T	T	T	T
			Ir ≤ 63		36/75	36/75	T	T	T	T	T	T	T
			Ir ≤ 80			36/75	T	T	T	T	T	T	T
			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
NSXm H	70	65	Ir ≤ 40	36/75	36/75	36/75	T	T	T	T	T	T	T
TMD, Micrologic			Ir ≤ 50		36/75	36/75	T	T	T	T	T	T	T
			Ir ≤ 63		36/75	36/75	T	T	T	T	T	T	T
			Ir ≤ 80			36/75	T	T	T	T	T	T	T
			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

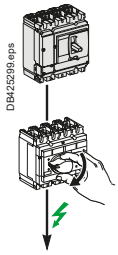
36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX100 to 250

Downstream: Compact INS40 to INS250, INV100 to INV250



Ue ≤ 440 V AC

Downstream	Switch-disconector	INS40	INS63	INS80	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	40	63	80	100	100	125	160	160	200	250
	Icw (kA)	3	3	3	5,5	8,5	5,5	5,5	8,5	8,5	8,5
	Icm (kÂ)	15	15	15	20	30	20	20	30	30	30

Upstream circuit breaker	Icu (kA) 415V	Icu (kA) 440V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity									
NSX100B	25	20	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T
NSX160B			Ir ≤ 63		T	T	T	T	T	T	T	T	T
TMD / TMG /			Ir ≤ 80			T	T	T	T	T	T	T	T
Micrologic			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
NSX250B	25	20	Ir ≤ 40	T	T	T	T	T	T	T	T	T	T
TMD / TMG /			Ir ≤ 63		T	T	T	T	T	T	T	T	T
Micrologic			Ir ≤ 80			T	T	T	T	T	T	T	T
			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
			Ir ≤ 200									T	T
			Ir ≤ 250										T
NSX100F	36	35	Ir ≤ 40	36/75	36/75	36/75	T	T	T	T	T	T	T
NSX160F			Ir ≤ 63		36/75	36/75	T	T	T	T	T	T	T
TMD / TMG /			Ir ≤ 80			36/75	T	T	T	T	T	T	T
Micrologic			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
NSX250F	36	35	Ir ≤ 40	25/52	25/52	25/52	T	T	T	T	T	T	T
TMD / TMG /			Ir ≤ 63		25/52	25/52	T	T	T	T	T	T	T
Micrologic			Ir ≤ 80			25/52	T	T	T	T	T	T	T
			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
			Ir ≤ 200									T	T
			Ir ≤ 250										T
NSX100N/H	50/70	50/65	Ir ≤ 40	25/52	25/52	25/52	T	T	T	T	T	T	T
NSX160N/H			Ir ≤ 63		25/52	25/52	T	T	T	T	T	T	T
TMD / TMG /			Ir ≤ 80			25/52	T	T	T	T	T	T	T
Micrologic			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
NSX250N/H	50/70	50/65	Ir ≤ 40	25/52	25/52	25/52	T	T	T	T	T	T	T
TMD / TMG /			Ir ≤ 63		25/52	25/52	T	T	T	T	T	T	T
Micrologic			Ir ≤ 80			25/52	T	T	T	T	T	T	T
			Ir ≤ 100				T	T	T	T	T	T	T
			Ir ≤ 125						T	T	T	T	T
			Ir ≤ 160							T	T	T	T
			Ir ≤ 200									T	T
			Ir ≤ 250										T
NSX100S/L/R	100/	90/	Ir ≤ 40	36/75	36/75	36/75	65/143	T	65/143	65/143	T	T	T
TMD / TMG /	150/	130/	Ir ≤ 63		36/75	36/75	65/143	T	65/143	65/143	T	T	T
Micrologic	200	200	Ir ≤ 80			36/75	65/143	T	65/143	65/143	T	T	T
			Ir ≤ 100				65/143	T	65/143	65/143	T	T	T
NSX160S/L	100/	90/	Ir ≤ 40	36/75	36/75	36/75	65/143	T	65/143	65/143	T	T	T
TMD / TMG /	150	130	Ir ≤ 63		36/75	36/75	65/143	T	65/143	65/143	T	T	T
Micrologic			Ir ≤ 80			36/75	65/143	T	65/143	65/143	T	T	T
			Ir ≤ 100				65/143	T	65/143	65/143	T	T	T
			Ir ≤ 125						65/143	65/143	T	T	T
			Ir ≤ 160							65/143	T	T	T
NSX250S/L/R	100/	90/	Ir ≤ 40	25/52	25/52	25/52	65/143	T	65/143	65/143	T	T	T
TMD / TMG /	150/	130/	Ir ≤ 63		25/52	25/52	65/143	T	65/143	65/143	T	T	T
Micrologic	200	200	Ir ≤ 80			25/52	65/143	T	65/143	65/143	T	T	T
			Ir ≤ 100				65/143	T	65/143	65/143	T	T	T
			Ir ≤ 125						65/143	65/143	T	T	T
			Ir ≤ 160							65/143	T	T	T
			Ir ≤ 200									T	T
			Ir ≤ 250										T

T : Protection of the switch-disconnector is ensured but combination not very relevant

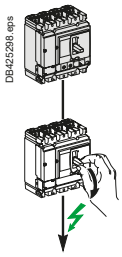
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX100 to 630
Downstream: Compact NSX100 to 630 NA



Ue ≤ 440 V AC

Downstream			Switch-disconnector	NSX100NA	NSX160NA	NSX250NA	NSX400NA	NSX630NA
			Ith A 60°	100	160	250	400	630
			Icw (kA)	1.8	2.5	3.5	5	6
			Icm (kÂ)	2.6	3.6	4.9	7.1	8.5
Upstream Circuit breaker	**Icu (kA) 415 V**	**440 V**	**Ir**	**Switch-disconnector conditionnal short-circuit current and related making capacity**				
NSX100B	25	20	Ir ≤ 100	T	T	T	T	T
NSX160B			Ir ≤ 160		T	T	T	T
NSX250B			Ir ≤ 200			T	T	T
TMD / TMG / Micrologic			Ir ≤ 250			T	T	T
NSX100F	36	35	Ir ≤ 100	T	T	T	T	T
NSX160F			Ir ≤ 160		T	T	T	T
NSX250F			Ir ≤ 200			T	T	T
TMD / TMG / Micrologic			Ir ≤ 250			T	T	T
NSX400F	36	30	Ir = 100 [1]	T	T	T	T	T
NSX630F			Ir ≤ 160		T	T	T	T
Micrologic			Ir ≤ 250			T	T	T
			Ir ≤ 400				T	T
			Ir ≤ 630					T
NSX100N	50	50	Ir ≤ 100	T	T	T	T	T
NSX160N			Ir ≤ 160		T	T	T	T
NSX250N			Ir ≤ 200			T	T	T
TMD / TMG / Micrologic			Ir ≤ 250			T	T	T
NSX400N	50	42	Ir = 100 [1]	T	T	T	T	T
NSX630N			Ir ≤ 160		T	T	T	T
Micrologic			Ir ≤ 250			T	T	T
			Ir ≤ 400				T	T
			Ir ≤ 630					T
NSX100H	70	65	Ir ≤ 100	T	T	T	T	T
NSX160H			Ir ≤ 160		T	T	T	T
NSX250H			Ir ≤ 200			T	T	T
TMD / TMG / Micrologic			Ir ≤ 250			T	T	T
NSX400H	70	65	Ir = 100 [1]	T	T	T	T	T
NSX630H			Ir ≤ 160		T	T	T	T
Micrologic			Ir ≤ 250			T	T	T
			Ir ≤ 400				T	T
			Ir ≤ 630					T
NSX100S	100	90	Ir ≤ 100	T	T	T	T	T
NSX160S			Ir ≤ 160		T	T	T	T
NSX250S			Ir ≤ 200			T	T	T
TMD / TMG / Micrologic			Ir ≤ 250			T	T	T
NSX400S	100	90	Ir = 100 [1]	T	T	T	T	T
NSX630S			Ir ≤ 160		T	T	T	T
Micrologic			Ir ≤ 250			T	T	T
			Ir ≤ 400				T	T
			Ir ≤ 630					T
NSX100L	150	130	Ir ≤ 100	T	T	T	T	T
NSX160L			Ir ≤ 160		T	T	T	T
NSX250L			Ir ≤ 200			T	T	T
TMD / TMG / Micrologic			Ir ≤ 250			T	T	T
NSX400L	150	130	Ir = 100 [1]	T	T	T	T	T
NSX630L			Ir ≤ 160		T	T	T	T
Micrologic			Ir ≤ 250			T	T	T
			Ir ≤ 400				T	T
			Ir ≤ 630					T
NSX100R	200	200	Ir ≤ 100	T	T	T	T	T
NSX250R			Ir ≤ 160		T	T	T	T
TMD / TMG / Micrologic			Ir ≤ 200			T	T	T
			Ir ≤ 250			T	T	T
NSX400R	200	200	Ir = 100 [1]	T	T	T	T	T
NSX630R			Ir ≤ 160		T	T	T	T
Micrologic			Ir ≤ 250			T	T	T
			Ir ≤ 400				T	T
			Ir ≤ 630					T

[1] NSX400 with Micrologic 250 A can be set down to 100 A.

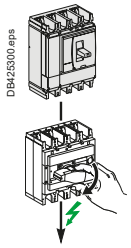
T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX400 to 630
Downstream: Compact INS/INV100 to 630



Ue ⩽ 440 V AC

Downstream	Switch-disconnector	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250	INS320 INV320	INS400 INV400	INS500 INV500	INS630 INV630	INS630b INV630b
	Ith A 60°	100	100	125	160	160	200	250	320	400	500	630	630
	Icw (kA)	5.5	8.5	5.5	5.5	8.5	8.5	8.5	20	20	20	20	35
	Icm (kÂ)	20	30	20	20	30	30	30	50	50	50	50	75

Upstream Circuit breaker	Icu (kA) 415 V	Icu (kA) 440 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity											
NSX400F	36	30	Ir = 100 [1]	16/32	T	16/32	16/32	T	T	T	T	T	T	T	T
NSX630F			Ir ⩽ 160				16/32	T	T	T	T	T	T	T	T
Micrologic			Ir ⩽ 200						T	T	T	T	T	T	T
			Ir ⩽ 250							T	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T
			Ir ⩽ 400									T	T	T	T
			Ir ⩽ 500										T	T	T
			Ir ⩽ 630											T	T
NSX400N	50	42	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
NSX630N			Ir ⩽ 160				16/32	36/75	36/75	36/75	T	T	T	T	T
Micrologic			Ir ⩽ 200						36/75	36/75	T	T	T	T	T
			Ir ⩽ 250							36/75	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T
			Ir ⩽ 400									T	T	T	T
			Ir ⩽ 500										T	T	T
			Ir ⩽ 630											T	T
NSX400H	70	65	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
NSX630H			Ir ⩽ 160				16/32	36/75	36/75	36/75	T	T	T	T	T
Micrologic			Ir ⩽ 200						36/75	36/75	T	T	T	T	T
			Ir ⩽ 250							36/75	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T
			Ir ⩽ 400									T	T	T	T
			Ir ⩽ 500										T	T	T
			Ir ⩽ 630											T	T
NSX400S	100	90	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
NSX630S			Ir ⩽ 160				16/32	36/75	36/75	36/75	T	T	T	T	T
Micrologic			Ir ⩽ 200						36/75	36/75	T	T	T	T	T
			Ir ⩽ 250							36/75	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T
			Ir ⩽ 400									T	T	T	T
			Ir ⩽ 500										T	T	T
			Ir ⩽ 630											T	T
NSX400L	150	130	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	T	T	T	T	T
NSX630L			Ir ⩽ 160				16/32	36/75	36/75	36/75	T	T	T	T	T
Micrologic			Ir ⩽ 200						36/75	36/75	T	T	T	T	T
			Ir ⩽ 250							36/75	T	T	T	T	T
			Ir ⩽ 320								T	T	T	T	T
			Ir ⩽ 400									T	T	T	T
			Ir ⩽ 500										T	T	T
			Ir ⩽ 630											T	T
NSX400R	200	200	Ir = 100 [1]	16/32	36/75	16/32	16/32	36/75	36/75	36/75	150/330	150/330	150/330	150/330	T
NSX630R			Ir ⩽ 160				16/32	36/75	36/75	36/75	150/330	150/330	150/330	150/330	T
Micrologic			Ir ⩽ 200						36/75	36/75	150/330	150/330	150/330	150/330	T
			Ir ⩽ 250							36/75	150/330	150/330	150/330	150/330	T
			Ir ⩽ 320								150/330	150/330	150/330	150/330	T
			Ir ⩽ 400									150/330	150/330	150/330	T
			Ir ⩽ 500										150/330	150/330	T
			Ir ⩽ 630											150/330	T

[1] NSX400 with Micrologic 250 A can be set down to 100 A.

T : Protection of the switch-disconnector is ensured but combination not very relevant

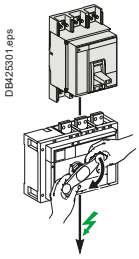
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NS630b to 3200, Masterpact MTZ1
Downstream: Compact INS/INV500 to 2500



Ue ⩽ 440 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	500	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kÂ)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA) 415 V	Icu (kA) 440 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NS630bN	50	50	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
NS800N			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
NS1000N			Ir ⩽ 800				35/75	35/75	35/75	35/75	T	T
NS1250N			Ir ⩽ 1000					35/75	35/75	35/75	T	T
NS1600N			Ir ⩽ 1250						35/75	35/75	T	T
			Ir ⩽ 1600							35/75	T	T
NS630bH	70	65	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
NS800H			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
NS1000H			Ir ⩽ 800				35/75	35/75	35/75	35/75	50/105	50/105
NS1250H			Ir ⩽ 1000					35/75	35/75	35/75	50/105	50/105
NS1600H			Ir ⩽ 1250						35/75	35/75	50/105	50/105
			Ir ⩽ 1600							35/75	50/105	50/105
NS630bL	150	130	Ir ⩽ 500	50/105	50/105	T	T	T	T	T	T	T
NS800L			Ir ⩽ 630		50/105	T	T	T	T	T	T	T
NS1000L			Ir ⩽ 800				T	T	T	T	T	T
			Ir ⩽ 1000					T	T	T	T	T
NS630bLB	200	200	Ir ⩽ 500	90/200	90/200	T	T	T	T	T	T	T
NS800LB			Ir ⩽ 630		90/200	T	T	T	T	T	T	T
			Ir ⩽ 800				T	T	T	T	T	T
NS1600bN	70	65	Ir ⩽ 1250						35/75	35/75	50/105	50/105
NS2000N			Ir ⩽ 1600							35/75	50/105	50/105
NS2500N			Ir ⩽ 2000								50/105	50/105
NS3200N			Ir ⩽ 2500									50/105
NS1600bH	85	85	Ir ⩽ 1250						35/75	35/75	50/105	50/105
NS2000H			Ir ⩽ 1600							35/75	50/105	50/105
NS2500H			Ir ⩽ 2000								50/105	50/105
NS3200H			Ir ⩽ 2500									50/105
MTZ1 06H1	42	42	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ1 08H1			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ1 10H1			Ir ⩽ 800				35/75	35/75	35/75	35/75	T	T
MTZ1 12H1			Ir ⩽ 1000					35/75	35/75	35/75	T	T
MTZ1 16H1			Ir ⩽ 1250						35/75	35/75	T	T
			Ir ⩽ 1600							35/75	T	T
MTZ1 06H2	50	50	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ1 08H2			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ1 10H2			Ir ⩽ 800				35/75	35/75	35/75	35/75	T	T
MTZ1 12H2			Ir ⩽ 1000					35/75	35/75	35/75	T	T
MTZ1 16H2			Ir ⩽ 1250						35/75	35/75	T	T
			Ir ⩽ 1600							35/75	T	T
MTZ1 06H3	66	66	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ1 08H3			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ1 10H3			Ir ⩽ 800				35/75	35/75	35/75	35/75	50/105	50/105
MTZ1 12H3			Ir ⩽ 1000					35/75	35/75	35/75	50/105	50/105
MTZ1 16H3			Ir ⩽ 1250						35/75	35/75	50/105	50/105
			Ir ⩽ 1600							35/75	50/105	50/105
MTZ1 06L1	150	130	Ir ⩽ 500	50/105	50/105	100/220	100/220	100/220	100/220	100/220	100/220	100/220
MTZ1 08L1			Ir ⩽ 630		50/105	100/220	100/220	100/220	100/220	100/220	100/220	100/220
MTZ1 10L1			Ir ⩽ 800				100/220	100/220	100/220	100/220	100/220	100/220
			Ir ⩽ 1000					100/220	100/220	100/220	100/220	100/220

T : Protection of the switch-disconnector is ensured but combination not very relevant

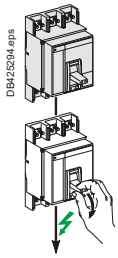
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NS630b to 3200, Masterpact MTZ1
Downstream: Compact NS630b to 3200 NA



Ue ≤ 440 V AC

Downstream	Switch-disconnector	NS630b NA	NS800 NA	NS1000 NA	NS1250 NA	NS1600 NA	NS1600b NA	NS2000 NA	NS2500 NA	NS3200 NA
	Ith A 60°	630	800	1000	1250	1600	1600	2000	2500	3200
	Icw (kA)	25 (0.5s)	25 (0.5s)	25 (0.5s)	25 (0.5s)	25 (0.5s)	32 (3s)	32 (3s)	32 (3s)	32 (3s)
	Icm (kÂ)	52	52	52	52	52	135	135	135	135

Upstream Circuit breaker	Icu (kA) 415 V	Icu (kA) 440 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NS630bN	50	50	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800N			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1000N			Ir ≤ 1000			T	T	T	T	T	T	T
NS1250N			Ir ≤ 1250				T	T	T	T	T	T
NS1600N			Ir ≤ 1600					T	T	T	T	T
NS630bH	70	65	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800H			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1000H			Ir ≤ 1000			T	T	T	T	T	T	T
NS1250H			Ir ≤ 1250				T	T	T	T	T	T
NS1600H			Ir ≤ 1600					T	T	T	T	T
NS630bL	150	130	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800L			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1000L			Ir ≤ 1000			T	T	T	T	T	T	T
NS630bLB	200	200	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800LB			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1600bN	70	65	Ir ≤ 1600						T	T	T	T
NS2000N			Ir ≤ 2000							T	T	T
NS2500N			Ir ≤ 2500								T	T
NS3200N			Ir ≤ 3200									T
NS1600bH	85	85	Ir ≤ 1600						T	T	T	T
NS2000H			Ir ≤ 2000							T	T	T
NS2500H			Ir ≤ 2500								T	T
NS3200H			Ir ≤ 3200									T
MTZ1 06H1	42	42	Ir ≤ 630	25/52	25/52	25/52	25/52	25/52	T	T	T	T
MTZ1 08H1			Ir ≤ 800		25/52	25/52	25/52	25/52	T	T	T	T
MTZ1 10H1			Ir ≤ 1000			25/52	25/52	25/52	T	T	T	T
MTZ1 12H1			Ir ≤ 1250				25/52	25/52	T	T	T	T
MTZ1 16H1			Ir ≤ 1600					25/52	T	T	T	T
MTZ1 06H2	50	50	Ir ≤ 630	25/52	25/52	25/52	25/52	25/52	T	T	T	T
MTZ1 08H2			Ir ≤ 800		25/52	25/52	25/52	25/52	T	T	T	T
MTZ1 10H2			Ir ≤ 1000			25/52	25/52	25/52	T	T	T	T
MTZ1 12H2			Ir ≤ 1250				25/52	25/52	T	T	T	T
MTZ1 16H2			Ir ≤ 1600					25/52	T	T	T	T
MTZ1 06H3	66	66	Ir ≤ 630	25/52	25/52	25/52	25/52	25/52	T	T	T	T
MTZ1 08H3			Ir ≤ 800		25/52	25/52	25/52	25/52	T	T	T	T
MTZ1 10H3			Ir ≤ 1000			25/52	25/52	25/52	T	T	T	T
MTZ1 12H3			Ir ≤ 1250				25/52	25/52	T	T	T	T
MTZ1 16H3			Ir ≤ 1600					25/52	T	T	T	T
MTZ1 06L1	150	130	Ir ≤ 630	T	T	T	T	T	T	T	T	T
MTZ1 08L1			Ir ≤ 800		T	T	T	T	T	T	T	T
MTZ1 10L1			Ir ≤ 1000			T	T	T	T	T	T	T

T : Protection of the switch-disconnector is ensured but combination not very relevant

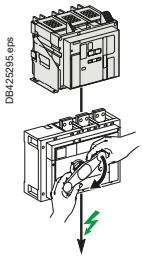
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Masterpact MTZ2
Downstream: Compact INS/INV500 to 2500



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Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	500	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kÂ)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA) 415 V	Icu (kA) 440 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
MTZ2 08N1	42	42	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ2 10N1			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
MTZ2 12N1			Ir ⩽ 800				35/75	35/75	35/75	35/75	T	T
MTZ2 16N1			Ir ⩽ 1000					35/75	35/75	35/75	T	T
MTZ2 20N1			Ir ⩽ 1250						35/75	35/75	T	T
			Ir ⩽ 1600							35/75	T	T
			Ir ⩽ 2000								T	T
MTZ2 08H1	66	66	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 10H1			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 12H1			Ir ⩽ 800				35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 16H1			Ir ⩽ 1000					35/75	35/75	35/75	50/105	50/105
MTZ2 20H1			Ir ⩽ 1250						35/75	35/75	50/105	50/105
MTZ2 25H1			Ir ⩽ 1600						35/75	35/75	50/105	50/105
			Ir ⩽ 2000								50/105	50/105
			Ir ⩽ 2500									50/105
MTZ2 08H2	100	100	Ir ⩽ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 10H2			Ir ⩽ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 12H2			Ir ⩽ 800				35/75	35/75	35/75	35/75	50/105	50/105
MTZ2 16H2			Ir ⩽ 1000					35/75	35/75	35/75	50/105	50/105
MTZ2 20H2			Ir ⩽ 1250						35/75	35/75	50/105	50/105
MTZ2 25H2			Ir ⩽ 1600						35/75	35/75	50/105	50/105
MTZ2 20H3	150	150	Ir ⩽ 2000								50/105	50/105
MTZ2 25H3			Ir ⩽ 2500									50/105

T : Protection of the switch-disconnector is ensured but combination not very relevant

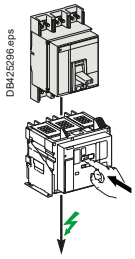
T : Switch-disconnector is Totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NS630b -1600, Masterpact MTZ1, MTZ2
Downstream: Masterpact MTZ1 HA, Masterpact MTZ2 NA



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Downstream	Switch-disconnector	MTZ1 06HA	MTZ1 08HA	MTZ1 10HA	MTZ1 12HA	MTZ1 16HA	MTZ2 08NA	MTZ2 10NA	MTZ2 12NA	MTZ2 16NA
	Ith A 60°	630	800	1000	1250	1600	800	1000	1250	1600
	Icw (kA)	36	36	36	36	36	42	42	42	42
	Icm (kÂ)	75	75	75	75	75	88	88	88	88

Upstream Circuit breaker	Icu (kA) 415 V	Icu (kA) 440 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NS630bN	50	50	Ir ⩽ 630	T	T	T	T	T	T	T	T	T
NS800N			Ir ⩽ 800		T	T	T	T	T	T	T	T
NS1000N			Ir ⩽ 1000			T	T	T		T	T	T
NS1250N			Ir ⩽ 1250				T	T			T	T
NS1600N			Ir ⩽ 1600					T				T
NS630bH	70	65	Ir ⩽ 630	50/105	50/105	50/105	50/105	50/105	50/105	50/105	50/105	50/105
NS800H			Ir ⩽ 800		50/105	50/105	50/105	50/105	50/105	50/105	50/105	50/105
NS1000H			Ir ⩽ 1000			50/105	50/105	50/105		50/105	50/105	50/105
NS1250H			Ir ⩽ 1250				50/105	50/105			50/105	50/105
NS1600H			Ir ⩽ 1600					50/105				50/105
NS630bL	150	130	Ir ⩽ 630	T	T	T	T	T	T	T	T	T
NS800L			Ir ⩽ 800		T	T	T	T	T	T	T	T
NS1000L			Ir ⩽ 1000			T	T	T		T	T	T
NS630bLB	200	200	Ir ⩽ 630	T	T	T	T	T	T	T	T	T
NS800LB			Ir ⩽ 800		T	T	T	T	T	T	T	T
MTZ1 06H1	42	42	Ir ⩽ 630	36/75	36/75	36/75	36/75	36/75	42/88	42/88	42/88	42/88
MTZ1 08H1			Ir ⩽ 800		36/75	36/75	36/75	36/75	42/88	42/88	42/88	42/88
MTZ1 10H1			Ir ⩽ 1000			36/75	36/75	36/75		42/88	42/88	42/88
MTZ1 12H1			Ir ⩽ 1250				36/75	36/75			42/88	42/88
MTZ1 16H1			Ir ⩽ 1600					36/75				42/88
MTZ1 06H2	50	50	Ir ⩽ 630	36/75	36/75	36/75	36/75	36/75	42/88	42/88	42/88	42/88
MTZ1 08H2			Ir ⩽ 800		36/75	36/75	36/75	36/75	42/88	42/88	42/88	42/88
MTZ1 10H2			Ir ⩽ 1000			36/75	36/75	36/75		42/88	42/88	42/88
MTZ1 12H2			Ir ⩽ 1250				36/75	36/75			42/88	42/88
MTZ1 16H2			Ir ⩽ 1600					36/75				42/88
MTZ1 06H3	66	66	Ir ⩽ 630	36/75	36/75	36/75	36/75	36/75	42/88	42/88	42/88	42/88
MTZ1 08H3			Ir ⩽ 800		36/75	36/75	36/75	36/75	42/88	42/88	42/88	42/88
MTZ1 10H3			Ir ⩽ 1000			36/75	36/75	36/75		42/88	42/88	42/88
MTZ1 12H3			Ir ⩽ 1250				36/75	36/75			42/88	42/88
MTZ1 16H3			Ir ⩽ 1600					36/75				42/88
MTZ1 06L1	150	130	Ir ⩽ 630	T	T	T	T	T	T	T	T	T
MTZ1 08L1			Ir ⩽ 800		T	T	T	T	T	T	T	T
MTZ1 10L1			Ir ⩽ 1000			T	T	T		T	T	T
MTZ2 08N1	42	42	Ir ⩽ 800		36/75	36/75	36/75	36/75	42/88	42/88	42/88	42/88
MTZ2 10N1			Ir ⩽ 1000			36/75	36/75	36/75		42/88	42/88	42/88
MTZ2 12N1			Ir ⩽ 1250				36/75	36/75			42/88	42/88
MTZ2 16N1			Ir ⩽ 1600					36/75				42/88
MTZ2 20N1												
MTZ2 08H1	66	66	Ir ⩽ 800		36/75	36/75	36/75	36/75	42/88	42/88	42/88	42/88
MTZ2 10H1			Ir ⩽ 1000			36/75	36/75	36/75		42/88	42/88	42/88
MTZ2 12H1			Ir ⩽ 1250				36/75	36/75			42/88	42/88
MTZ2 16H1			Ir ⩽ 1600					36/75				42/88

T : Protection of the switch-disconnector is ensured but combination not very relevant

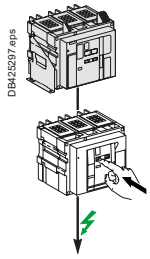
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Masterpact MTZ2, MTZ3
Downstream: Masterpact MTZ2 HA, MTZ3 HA



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Downstream	Switch-disconnector	MTZ2 08 HA	MTZ2 10 HA	MTZ2 12 HA	MTZ2 16 HA	MTZ2 20 HA	MTZ2 25 HA	MTZ2 32 HA	MTZ2 40 HA	MTZ3 40 HA	MTZ3 50 HA	MTZ3 63 HA
	Ith A 60°	800	1000	1250	1600	2000	2500	3200	4000	4000	5000	6300
	Icw (kA)	66	66	66	66	66	66	66	66	85	85	85
	Icm (kÂ)	145	145	145	145	145	145	145	145	187	187	187

Upstream Circuit breaker	Icu (kA) 415 V	Icu (kA) 440 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity										
MTZ2 08N1	42	42	Ir ⩽ 800	T	T	T	T	T	T	T	T	T	T	T
MTZ2 10N1			Ir ⩽ 1000		T	T	T	T	T	T	T	T	T	T
MTZ2 12N1			Ir ⩽ 1250			T	T	T	T	T	T	T	T	T
MTZ2 16N1			Ir ⩽ 1600				T	T	T	T	T	T	T	T
MTZ2 20N1			Ir ⩽ 2000					T	T	T	T	T	T	T
MTZ2 08H1	66	66	Ir ⩽ 800	T	T	T	T	T	T	T	T	T	T	T
MTZ2 10H1			Ir ⩽ 1000		T	T	T	T	T	T	T	T	T	T
MTZ2 12H1			Ir ⩽ 1250			T	T	T	T	T	T	T	T	T
MTZ2 16H1			Ir ⩽ 1600				T	T	T	T	T	T	T	T
MTZ2 20H1			Ir ⩽ 2000					T	T	T	T	T	T	T
MTZ2 25H1			Ir ⩽ 2500						T	T	T	T	T	T
MTZ2 32H1			Ir ⩽ 3200							T	T	T	T	T
MTZ2 40H1			Ir ⩽ 4000								T	T	T	T
MTZ3 40H1	100	100	Ir ⩽ 4000								66/145	85/187	85/187	85/187
MTZ3 50H1			Ir ⩽ 5000										85/187	85/187
MTZ3 63H1			Ir ⩽ 6300											85/187
MTZ2 08H2	100	100	Ir ⩽ 800	66/145	66/145	66/145	66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 10H2			Ir ⩽ 1000		66/145	66/145	66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 12H2			Ir ⩽ 1250			66/145	66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 16H2			Ir ⩽ 1600				66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 20H2			Ir ⩽ 2000					66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 25H2			Ir ⩽ 2500						66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 32H2			Ir ⩽ 3200							66/145	66/145	85/187	85/187	85/187
MTZ2 40H2			Ir ⩽ 4000								66/145	85/187	85/187	85/187
MTZ2 08L1	150	150	Ir ⩽ 800	66/145	66/145	66/145	66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 10L1			Ir ⩽ 1000		66/145	66/145	66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 12L1			Ir ⩽ 1250			66/145	66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 16L1			Ir ⩽ 1600				66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 20L1			Ir ⩽ 2000					66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 20H3			Ir ⩽ 2000					66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 25H3			Ir ⩽ 2500						66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 32H3			Ir ⩽ 3200							66/145	66/145	85/187	85/187	85/187
MTZ2 40H3			Ir ⩽ 4000								66/145	85/187	85/187	85/187
MTZ3 40H2	150	150	Ir ⩽ 4000								66/145	85/187	85/187	85/187
MTZ3 50H2			Ir ⩽ 5000										85/187	85/187
MTZ3 63H2			Ir ⩽ 6300											85/187

T : Protection of the switch-disconnector is ensured but combination not very relevant

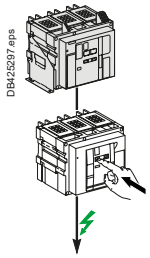
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Masterpact MTZ2, Masterpact MTZ3
Downstream: Masterpact NW HF, NW HH



Ue ⩽ 440 V AC

Downstream	Switch-disconnector	NW08 HF	NW10 HF	NW12 HF	NW16 HF	NW20 HF	NW25 HF	NW32 HF	NW40 HF	NW40b HH	NW50 HH	NW63 HH
	Ith A 60°	800	1000	1250	1600	2000	2500	3200	4000	4000	5000	6300
	Icw (kA)	85	85	85	85	85	85	85	85	100	100	100
	Icm (kÂ)	187	187	187	187	187	187	187	187	220	220	220

Upstream Circuit breaker	Icu (kA) 415 V	Icu (kA) 440 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity										
MTZ2 08N1	42	42	Ir ⩽ 800	T	T	T	T	T	T	T	T	T	T	T
MTZ2 10N1			Ir ⩽ 1000		T	T	T	T	T	T	T	T	T	T
MTZ2 12N1			Ir ⩽ 1250			T	T	T	T	T	T	T	T	T
MTZ2 16N1			Ir ⩽ 1600				T	T	T	T	T	T	T	T
MTZ2 20N1			Ir ⩽ 2000					T	T	T	T	T	T	T
MTZ2 08H1	66	66	Ir ⩽ 800	T	T	T	T	T	T	T	T	T	T	T
MTZ2 10H1			Ir ⩽ 1000		T	T	T	T	T	T	T	T	T	T
MTZ2 12H1			Ir ⩽ 1250			T	T	T	T	T	T	T	T	T
MTZ2 16H1			Ir ⩽ 1600				T	T	T	T	T	T	T	T
MTZ2 20H1			Ir ⩽ 2000					T	T	T	T	T	T	T
MTZ2 25H1			Ir ⩽ 2500						T	T	T	T	T	T
MTZ2 32H1			Ir ⩽ 3200							T	T	T	T	T
MTZ2 40H1			Ir ⩽ 4000								T	T	T	T
MTZ3 40H1	100	100	Ir ⩽ 2500						85/187	85/187	85/187	T	T	T
MTZ3 50H1			Ir ⩽ 3200							85/187	85/187	100/220	T	T
MTZ3 63H1			Ir ⩽ 4000								85/187	100/220	100/220	100/220
			Ir ⩽ 5000										100/220	100/220
			Ir ⩽ 6300											100/220
MTZ2 08H2	100	100	Ir ⩽ 800	85/187	85/187	85/187	85/187	85/187	85/187	85/187	85/187	T	T	T
MTZ2 10H2			Ir ⩽ 1000		85/187	85/187	85/187	85/187	85/187	85/187	85/187	T	T	T
MTZ2 12H2			Ir ⩽ 1250			85/187	85/187	85/187	85/187	85/187	85/187	T	T	T
MTZ2 16H2			Ir ⩽ 1600				85/187	85/187	85/187	85/187	85/187	T	T	T
MTZ2 20H2			Ir ⩽ 2000					85/187	85/187	85/187	85/187	T	T	T
MTZ2 25H2			Ir ⩽ 2500						85/187	85/187	85/187	T	T	T
MTZ2 32H2			Ir ⩽ 3200							85/187	85/187	T	T	T
MTZ2 40H2			Ir ⩽ 4000								85/187	T	T	T
MTZ2 08L1	150	150	Ir ⩽ 800	85/187	85/187	85/187	85/187	85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 10L1			Ir ⩽ 1000		85/187	85/187	85/187	85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 12L1			Ir ⩽ 1250			85/187	85/187	85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 16L1			Ir ⩽ 1600				85/187	85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 20L1			Ir ⩽ 2000					85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 20H3	150	150	Ir ⩽ 2000					85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 25H3			Ir ⩽ 2500						85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 32H3			Ir ⩽ 3200							85/187	85/187	100/220	100/220	100/220
MTZ2 40H3			Ir ⩽ 4000								85/187	100/220	100/220	100/220
MTZ3 40H2	150	150	Ir ⩽ 2500						85/187	85/187	85/187	100/220	100/220	100/220
MTZ3 50H2			Ir ⩽ 3200							85/187	85/187	100/220	100/220	100/220
MTZ3 63H2			Ir ⩽ 4000								85/187	100/220	100/220	100/220
			Ir ⩽ 5000										100/220	100/220
			Ir ⩽ 6300											100/220

T : Protection of the switch-disconnector is ensured but combination not very relevant

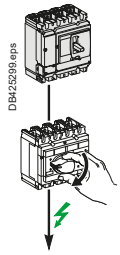
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSXm, Compact NSX100 to 250
Downstream: Compact INS40 to 250, Compact INV100 to 250



Ue = 500/525 V AC

Downstream	Switch-disconnector	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	100	100	125	160	160	200	250
	Icw (kA)	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kÂ)	20	30	20	20	30	30	30

Upstream Circuit breaker	Icu (kA) 500 V	525 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity						
NSXm E/B TMD	8/10	-	Ir ≤ 40	T	T	T	T	T	T	T
			Ir ≤ 50	T	T	T	T	T	T	T
			Ir ≤ 63	T	T	T	T	T	T	T
NSXm F TMD	15	10	Ir ≤ 40	T	T	T	T	T	T	T
			Ir ≤ 50	T	T	T	T	T	T	T
			Ir ≤ 63	T	T	T	T	T	T	T
NSXm N TMD	25	15	Ir ≤ 40	T	T	T	T	T	T	T
			Ir ≤ 50	T	T	T	T	T	T	T
			Ir ≤ 63	T	T	T	T	T	T	T
NSXm H TMD	30	22	Ir ≤ 40	T	T	T	T	T	T	T
			Ir ≤ 50	T	T	T	T	T	T	T
			Ir ≤ 63	T	T	T	T	T	T	T
NSX100B NSX160B NSX250B TMD / TMG / Micrologic	15	-	Ir ≤ 100	T	T	T	T	T	T	T
			Ir ≤ 125			T	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100F NSX160F NSX250F TMD / TMG / Micrologic	25	22	Ir ≤ 100	T	T	T	T	T	T	T
			Ir ≤ 125			T	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100N NSX160N NSX250N TMD / TMG / Micrologic	36	35	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100H NSX160H NSX250H TMD / TMG / Micrologic	50	35	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100S NSX160S NSX250S TMD / TMG / Micrologic	65	40	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100L NSX160L NSX250L TMD / TMG / Micrologic	70	50	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T
NSX100R NSX250R TMD / TMG / Micrologic	80	65	Ir ≤ 100	22/46	T	22/46	T	T	T	T
			Ir ≤ 125			22/46	T	T	T	T
			Ir ≤ 160				T	T	T	T
			Ir ≤ 200						T	T
			Ir ≤ 250							T

T : Protection of the switch-disconnector is ensured but combination not very relevant

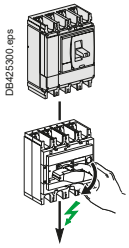
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX400 to 630
Downstream: Compact INS/INV100 to 630



Ue = 500/525 V AC

Downstream	Switch-Disconnector	INS250-100 INV100	INS250-160 INV160	INS250-200 INV200	INS250 INV250	INS320 INV320	INS400 INV400	INS500 INV500	INS630 INV630	INS630b INV630b
	Ith A 60°	100	160	200	250	320	400	500	630	630
	Icw (kA)	8.5	8.5	8.5	8.5	20	20	20	20	35
	Icm (kÂ)	30	30	30	30	50	50	50	50	75

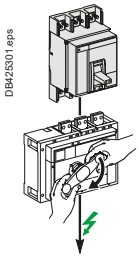
Upstream Circuit breaker	Icu (kA) 500 V	525 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NSX400F NSX630F Micrologic	25	20	Ir = 100 [1]	T	T	T	T	T	T	T	T	T
			Ir ≤ 160		T	T	T	T	T	T	T	T
			Ir ≤ 200			T	T	T	T	T	T	T
			Ir ≤ 250				T	T	T	T	T	T
			Ir ≤ 320					T	T	T	T	T
			Ir ≤ 400						T	T	T	T
			Ir ≤ 500							T	T	T
			Ir ≤ 630								T	T
NSX400N NSX630N Micrologic	30	22	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 200			25/52	25/52	T	T	T	T	T
			Ir ≤ 250				25/52	T	T	T	T	T
			Ir ≤ 320					T	T	T	T	T
			Ir ≤ 400						T	T	T	T
			Ir ≤ 500							T	T	T
			Ir ≤ 630								T	T
NSX400H NSX630H Micrologic	50	35	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 200			25/52	25/52	T	T	T	T	T
			Ir ≤ 250				25/52	T	T	T	T	T
			Ir ≤ 320					T	T	T	T	T
			Ir ≤ 400						T	T	T	T
			Ir ≤ 500							T	T	T
			Ir ≤ 630								T	T
NSX400S NSX630S Micrologic	65	40	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 200			25/52	25/52	T	T	T	T	T
			Ir ≤ 250				25/52	T	T	T	T	T
			Ir ≤ 320					T	T	T	T	T
			Ir ≤ 400						T	T	T	T
			Ir ≤ 500							T	T	T
			Ir ≤ 630								T	T
NSX400L NSX630L Micrologic	70	50	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 200			25/52	25/52	T	T	T	T	T
			Ir ≤ 250				25/52	T	T	T	T	T
			Ir ≤ 320					T	T	T	T	T
			Ir ≤ 400						T	T	T	T
			Ir ≤ 500							T	T	T
			Ir ≤ 630								T	T
NSX400R NSX630R Micrologic	80	65	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T
			Ir ≤ 200			25/52	25/52	T	T	T	T	T
			Ir ≤ 250				25/52	T	T	T	T	T
			Ir ≤ 320					T	T	T	T	T
			Ir ≤ 400						T	T	T	T
			Ir ≤ 500							T	T	T
			Ir ≤ 630								T	T

[1] NSX400 with Micrologic 250 A can be set down to 100 A.

T	: Protection of the switch-disconnector is ensured but combination not very relevant
T	: Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side
36/75	: Switch-disconnector is protected up to 36 kA rms / 75 kÂ
	: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NS630b to 3200, Masterpact MTZ1/2
Downstream: Compact INS/INV500 to 2500



Ue = 500/525 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	500	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kÂ)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA) 500/525 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NS630bN NS800N NS1000N NS1250N NS1600N	40	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
NS630bH NS800H NS1000H NS1250H NS1600H	50	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
NS630bL NS800L NS1000L	100	Ir ≤ 500	36/75	36/75	T	T	T	T	T	T	T
		Ir ≤ 630		36/75	T	T	T	T	T	T	T
		Ir ≤ 800				T	T	T	T	T	T
		Ir ≤ 1000					T	T	T	T	T
NS630bLB NS800LB	100	Ir ≤ 500	70/154	70/154	T	T	T	T	T	T	T
		Ir ≤ 630		70/154	T	T	T	T	T	T	T
		Ir ≤ 800				T	T	T	T	T	T
NS1600bN NS2000N NS2500N NS3200N	65	Ir ≤ 1250						35/75	35/75	50/105	50/105
		Ir ≤ 1600							35/75	50/105	50/105
		Ir ≤ 2000								50/105	50/105
		Ir ≤ 2500									50/105
MTZ1 06H1/H2 MTZ1 08H1/2 MTZ1 10H1/2 MTZ1 12H1/2 MTZ1 16H1/2	42	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
MTZ1 06L1 MTZ1 08L1 MTZ1 10L1	100	Ir ≤ 500	36/75	36/75	T	T	T	T	T	T	T
		Ir ≤ 630		36/75	T	T	T	T	T	T	T
		Ir ≤ 800				T	T	T	T	T	T
		Ir ≤ 1000					T	T	T	T	T
MTZ2 08N1 MTZ2 10N1 MTZ2 12N1 MTZ2 16N1 MTZ2 20N1	42	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
		Ir ≤ 2000								T	T
MTZ2 08 MTZ2 10 MTZ2 12 MTZ2 16 MTZ2 20 MTZ2 25 MTZ2 32 MTZ2 40	H1/H/H3/L1 66/85/130	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1000					35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1250						35/75	35/75	50/105	50/105
		Ir ≤ 1600						35/75	35/75	50/105	50/105
		Ir ≤ 2000								50/105	50/105
		Ir ≤ 2500									50/105

T : Protection of the switch-disconnector is ensured but combination not very relevant

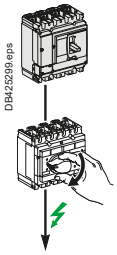
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSXm, Compact NSX100 to 250
Downstream: Compact INS40 to 250, Compact INV100 to 250



Ue = 690 V AC

Downstream	Switch-disconnector	INS100	INS250-100 INV100	INS125	INS160	INS250-160 INV160	INS250-200 INV200	INS250 INV250
	Ith A 60°	100	100	125	160	160	200	200
	Icw (kA)	5.5	8.5	5.5	5.5	8.5	8.5	8.5
	Icm (kÂ)	20	30	20	20	30	30	30

Upstream Circuit breaker	Icu (kA) 690 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity						
NSXm N TMD	10	Ir ≤ 40	T	T	T	T	T	T	T
		Ir ≤ 50	T	T	T	T	T	T	T
		Ir ≤ 63	T	T	T	T	T	T	T
NSXm H TMD	10	Ir ≤ 40	T	T	T	T	T	T	T
		Ir ≤ 50	T	T	T	T	T	T	T
		Ir ≤ 63	T	T	T	T	T	T	T
NSX100F NSX160F NSX250F TMD / TMG / Micrologic	8	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100N NSX160N NSX250N TMD / TMG / Micrologic	10	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100H NSX160H NSX250H TMD / TMG / Micrologic	10	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100S NSX160S NSX250S TMD / TMG / Micrologic	15	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100L NSX160L NSX250L TMD / TMG / Micrologic	20	Ir ≤ 100	T	T	T	T	T	T	T
		Ir ≤ 125			T	T	T	T	T
		Ir ≤ 160				T	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T
NSX100R NSX250R TMD / TMG / Micrologic	45	Ir ≤ 100	20/40	T	20/40	20/40	T	T	T
		Ir ≤ 125			20/40	20/40	T	T	T
		Ir ≤ 160				20/40	T	T	T
		Ir ≤ 200						T	T
		Ir ≤ 250							T

T : Protection of the switch-disconnector is ensured but combination not very relevant

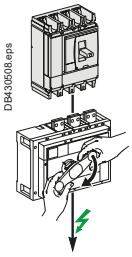
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX400 to 630
Downstream: Compact INS/INV100 to 630



Ue = 690 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	630	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kÂ)	50	50	75	75	75	75	75	105	105

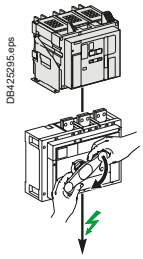
Upstream Circuit breaker	Icu (kA) 690 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NSX400F NSX630F Micrologic	10	Ir = 100 [1]	T	T	T	T	T	T	T	T	T
		Ir ≤ 160		T	T	T	T	T	T	T	T
		Ir ≤ 200			T	T	T	T	T	T	T
		Ir ≤ 250				T	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400N NSX630N Micrologic	10	Ir = 100 [1]	T	T	T	T	T	T	T	T	T
		Ir ≤ 160		T	T	T	T	T	T	T	T
		Ir ≤ 200			T	T	T	T	T	T	T
		Ir ≤ 250				T	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400H NSX630H Micrologic	20	Ir = 100 [1]	T	T	T	T	T	T	T	T	T
		Ir ≤ 160		T	T	T	T	T	T	T	T
		Ir ≤ 200			T	T	T	T	T	T	T
		Ir ≤ 250				T	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400S NSX630S Micrologic	25	Ir = 100 [1]	T	T	T	T	T	T	T	T	T
		Ir ≤ 160		T	T	T	T	T	T	T	T
		Ir ≤ 200			T	T	T	T	T	T	T
		Ir ≤ 250				T	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400L NSX630L Micrologic	35	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T
		Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T
		Ir ≤ 200			25/52	25/52	T	T	T	T	T
		Ir ≤ 250				25/52	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T
NSX400R NSX630R Micrologic	45	Ir = 100 [1]	25/52	25/52	25/52	25/52	T	T	T	T	T
		Ir ≤ 160		25/52	25/52	25/52	T	T	T	T	T
		Ir ≤ 200			25/52	25/52	T	T	T	T	T
		Ir ≤ 250				25/52	T	T	T	T	T
		Ir ≤ 320					T	T	T	T	T
		Ir ≤ 400						T	T	T	T
		Ir ≤ 500							T	T	T
		Ir ≤ 630								T	T

[1] NSX400 with Micrologic 250 A can be set down to 100 A.

T	: Protection of the switch-disconnector is ensured but combination not very relevant
T	: Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side
36/75	: Switch-disconnector is protected up to 36 kA rms / 75 kÂ
	: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NS630b to 3200, Masterpact MTZ1/2
Downstream: Compact INS/INV 500 to 2500



Ue = 690 V AC

Downstream	Switch-disconnector	INS500 INV500	INS630 INV630	INS630b INV630b	INS800 INV800	INS1000 INV1000	INS1250 INV1250	INS1600 INV1600	INS2000 INV2000	INS2500 INV2500
	Ith A 60°	630	630	630	800	1000	1250	1600	2000	2500
	Icw (kA)	20	20	35	35	35	35	35	50	50
	Icm (kÂ)	50	50	75	75	75	75	75	105	105

Upstream Circuit breaker	Icu (kA) 690 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NS630bN NS800N NS1000N NS1250N NS1600N	30	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
NS630bH NS800H NS1000H NS1250H NS1600H	42	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1000					35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1250						35/75	35/75	50/105	50/105
		Ir ≤ 1600							35/75	50/105	50/105
NS630bLB NS800LB	75	Ir ≤ 500	70/154	70/154	T	T	T	T	T	T	T
		Ir ≤ 630		70/154	T	T	T	T	T	T	T
		Ir ≤ 800				T	T	T	T	T	T
NS1600bN NS2000N NS2500N NS3200N	65	Ir ≤ 1250						35/75	35/75	50/105	50/105
		Ir ≤ 1600							35/75	50/105	50/105
		Ir ≤ 2000								50/105	50/105
		Ir ≤ 2500									50/105
MTZ1 06H1/H2 MTZ1 08H1/2 MTZ1 10H1/2 MTZ1 12H1/2 MTZ1 16H1/2	42	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
MTZ1 06L1 MTZ1 08L1 MTZ1 10L1	25	Ir ≤ 500	T	T	T	T	T	T	T	T	T
		Ir ≤ 630		T	T	T	T	T	T	T	T
		Ir ≤ 800				T	T	T	T	T	T
		Ir ≤ 1000					T	T	T	T	T
MTZ2 08N1 MTZ2 10N1 MTZ2 12N1 MTZ2 16N1 MTZ2 20N1	42	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	T	T
		Ir ≤ 800				35/75	35/75	35/75	35/75	T	T
		Ir ≤ 1000					35/75	35/75	35/75	T	T
		Ir ≤ 1250						35/75	35/75	T	T
		Ir ≤ 1600							35/75	T	T
		Ir ≤ 2000								T	T
MTZ2 08 MTZ2 10 MTZ2 12 MTZ2 16 MTZ2 20 MTZ2 25 MTZ2 32 MTZ2 40	H1/H2/H3/L1 66/85/100/100	Ir ≤ 500	20/50	20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 630		20/50	35/75	35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 800				35/75	35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1000					35/75	35/75	35/75	50/105	50/105
		Ir ≤ 1250						35/75	35/75	50/105	50/105
		Ir ≤ 1600						35/75	35/75	50/105	50/105
		Ir ≤ 2000								50/105	50/105
		Ir ≤ 2500									50/105

T : Protection of the switch-disconnector is ensured but combination not very relevant

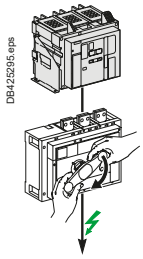
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NSX100 to 630
Downstream: Compact INS/INV500 to 1000



Ue = 500/525 V AC
Ue = 690 V AC

Downstream	Switch-disconnector	NSX100NA	NSX160NA	NSX250NA	NSX400NA	NSX630NA
	Ith A 60°	100	160	250	400	630
	Icw (kA)	1.8	2.5	3.5	5	6
	Icm (kÂ)	2.6	3.6	4.9	7.1	8.5

Upstream Circuit breaker	Icu (kA) 500 V	525 V	690 V	Ir	Switch-disconnector conditionnal short-circuit current and related making capacity				
NSX100B **NSX160B** **NSX250B** TMD / TMG / Micrologic	15	-	-	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX100F **NSX160F** **NSX250F** TMD / TMG / Micrologic	25	22	8	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400F **NSX630F** Micrologic	25	20	10	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T
NSX100N **NSX160N** **NSX250N** TMD / TMG / Micrologic	36	35	10	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400N **NSX630N** Micrologic	30	22	10	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T
NSX100H **NSX160H** **NSX250H** TMD / TMG / Micrologic	50	35	10	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400H **NSX630H** Micrologic	50	35	20	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T
NSX100S **NSX160S** **NSX250S** TMD / TMG / Micrologic	65	40	15	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400S **NSX630S** Micrologic	65	40	25	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T
NSX100L **NSX160L** **NSX250L** TMD / TMG / Micrologic	70	50	20	Ir ≤ 50	T	T	T	T	T
				Ir ≤ 100	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
NSX400L **NSX630L** Micrologic	70	50	35	Ir = 100 [1]	T	T	T	T	T
				Ir ≤ 160		T	T	T	T
				Ir ≤ 250			T	T	T
				Ir ≤ 400				T	T
				Ir ≤ 630					T

[1] NSX400 with Micrologic 250 A can be set down to 100 A.

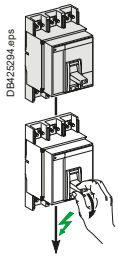
T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NS630b to 3200, Masterpact MTZ1
Downstream: Compact NS630b to 3200 NA



Ue = 500/525 V AC
Ue = 690 V AC

Downstream	Switch-disconnector	NS630b NA	NS800 NA	NS1000 NA	NS1250 NA	NS1600 NA	NS1600b NA	NS2000 NA	NS2500 NA	NS3200 NA
	Ith A 60°	630	800	1000	1250	1600	1600	2000	2500	3200
	Icw (kA)	25 (0.5s)	25 (0.5s)	25 (0.5s)	25 (0.5s)	25 (0.5s)	32 (3s)	32 (3s)	32 (3s)	32 (3s)
	Icm (kÂ)	52	52	52	52	52	135	135	135	135

Upstream Circuit breaker	Icu (kA) 500/525 V	Icu (kA) 690 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NS630bN	40	30	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800N			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1000N			Ir ≤ 1000			T	T	T	T	T	T	T
NS1250N			Ir ≤ 1250				T	T	T	T	T	T
NS1600N			Ir ≤ 1600					T	T	T	T	T
NS630bH	50	42	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800H			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1000H			Ir ≤ 1000			T	T	T	T	T	T	T
NS1250H			Ir ≤ 1250				T	T	T	T	T	T
NS1600H			Ir ≤ 1600					T	T	T	T	T
NS630bL	100	-	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800L			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1000L			Ir ≤ 1000			T	T	T	T	T	T	T
NS630bLB	100	75	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800LB			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1600bN	65	65	Ir ≤ 1600						T	T	T	T
NS2000N			Ir ≤ 2000							T	T	T
NS2500N			Ir ≤ 2500								T	T
NS3200N			Ir ≤ 3200									T
MTZ1 06H1	42	42	Ir ≤ 630	25/52	25/52	25/52	25/52	25/52	T	T	T	T
MTZ1 08H1			Ir ≤ 800		25/52	25/52	25/52	25/52	T	T	T	T
MTZ1 10H1			Ir ≤ 1000			25/52	25/52	25/52	T	T	T	T
MTZ1 12H1			Ir ≤ 1250				25/52	25/52	T	T	T	T
MTZ1 16H1			Ir ≤ 1600					25/52	T	T	T	T
MTZ1 06L1	100	25	Ir ≤ 630	T	T	T	T	T	T	T	T	T
MTZ1 08L1			Ir ≤ 800		T	T	T	T	T	T	T	T
MTZ1 10L1			Ir ≤ 1000			T	T	T	T	T	T	T

T : Protection of the switch-disconnector is ensured but combination not very relevant

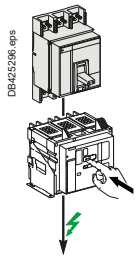
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Compact NS630b to1600, Masterpact MTZ1, MTZ2
Downstream: Masterpact MTZ1 HA, Masterpact MTZ2 NA



Ue = 500/525 V AC
Ue = 690 V AC

Downstream	Switch-disconnector	MTZ1 06HA	MTZ1 08HA	MTZ1 10HA	MTZ1 12HA	MTZ1 16HA	MTZ2 08NA	MTZ2 10NA	MTZ2 12NA	MTZ2 16NA
	Ith A 60°	630	800	1000	1250	1600	800	1000	1250	1600
	Icw (kA)	36	36	36	36	36	42	42	42	42
	Icm (kÂ)	75	75	75	75	75	88	88	88	88

Upstream Circuit breaker	Icu (kA) 500/525 V	690 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity								
NS630bN	40	30	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800N			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1000N			Ir ≤ 1000			T	T	T		T	T	T
NS1250N			Ir ≤ 1250				T	T			T	T
NS1600N			Ir ≤ 1600					T				T
NS630bH	50	42	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800H			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1000H			Ir ≤ 1000			T	T	T		T	T	T
NS1250H			Ir ≤ 1250				T	T			T	T
NS1600H			Ir ≤ 1600					T				T
NS630bL	100	-	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800L			Ir ≤ 800		T	T	T	T	T	T	T	T
NS1000L			Ir ≤ 1000			T	T	T		T	T	T
NS630bLB	100	75	Ir ≤ 630	T	T	T	T	T	T	T	T	T
NS800LB			Ir ≤ 800		T	T	T	T	T	T	T	T
MTZ1 06H1/2	42	42	Ir ≤ 630	36/75	36/75	36/75	36/75	36/75	T	T	T	T
MTZ1 08H1/2			Ir ≤ 800		36/75	36/75	36/75	36/75	T	T	T	T
MTZ1 10H1/2			Ir ≤ 1000			36/75	36/75	36/75		T	T	T
MTZ1 12H1/2			Ir ≤ 1250				36/75	36/75			T	T
MTZ1 16H1/2			Ir ≤ 1600					36/75				T
MTZ1 06L1	100	25	Ir ≤ 630	T	T	T	T	T	T	T	T	T
MTZ1 08L1			Ir ≤ 800		T	T	T	T	T	T	T	T
MTZ1 10L1			Ir ≤ 1000			T	T	T		T	T	T
MTZ2 08N1	42	42	Ir ≤ 800		36/75	36/75	36/75	36/75	T	T	T	T
MTZ2 10N1			Ir ≤ 1000			36/75	36/75	36/75		T	T	T
MTZ2 12N1			Ir ≤ 1250				36/75	36/75			T	T
MTZ2 16N1			Ir ≤ 1600					36/75				T
MTZ2 20N1												
MTZ2 08H1	66	66	Ir ≤ 800		36/75	36/75	36/75	36/75	42/88	42/88	42/88	42/88
MTZ2 10H1			Ir ≤ 1000			36/75	36/75	36/75		42/88	42/88	42/88
MTZ2 12H1			Ir ≤ 1250				36/75	36/75			42/88	42/88
MTZ2 16H1			Ir ≤ 1600					36/75				42/88
MTZ2 20H1												

T : Protection of the switch-disconnector is ensured but combination not very relevant

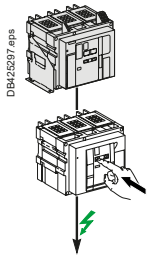
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Masterpact MTZ2, MTZ3
Downstream: Masterpact MTZ2 HA, MTZ3 HA



Ue = 500/525 V AC
Ue = 690 V AC

Downstream	Switch-disconnector	MTZ2 08 HA	MTZ2 10 HA	MTZ2 12 HA	MTZ2 16 HA	MTZ2 20 HA	MTZ2 25 HA	MTZ2 32 HA	MTZ2 40 HA	MTZ3 40 HA	MTZ3 50 HA	MTZ3 63 HA
	Ith A 60°	800	1000	1250	1600	2000	2500	3200	4000	4000	5000	6300
	Icw (kA)	66	66	66	66	66	66	66	66	85	85	85
	Icm (kÂ)	145	145	145	145	145	145	145	145	187	187	187

Upstream Circuit breaker	Icu (kA) 500/525 V	690 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity										
MTZ2 08N1	42	42	Ir ≤ 800	T	T	T	T	T	T	T	T	T	T	T
MTZ2 10N1			Ir ≤ 1000		T	T	T	T	T	T	T	T	T	T
MTZ2 12N1			Ir ≤ 1250			T	T	T	T	T	T	T	T	T
MTZ2 16N1			Ir ≤ 1600				T	T	T	T	T	T	T	T
MTZ2 20N1			Ir ≤ 2000					T	T	T	T	T	T	T
MTZ2 08H1	66	66	Ir ≤ 800	T	T	T	T	T	T	T	T	T	T	T
MTZ2 10H1			Ir ≤ 1000		T	T	T	T	T	T	T	T	T	T
MTZ2 12H1			Ir ≤ 1250			T	T	T	T	T	T	T	T	T
MTZ2 16H1			Ir ≤ 1600				T	T	T	T	T	T	T	T
MTZ2 20H1			Ir ≤ 2000					T	T	T	T	T	T	T
MTZ2 25H1			Ir ≤ 2500						T	T	T	T	T	T
MTZ2 32H1			Ir ≤ 3200							T	T	T	T	T
MTZ2 40H1			Ir ≤ 4000								T	T	T	T
MTZ3 40H1	100	100	Ir ≤ 4000								66/145	85/187	85/187	85/187
MTZ3 50H1			Ir ≤ 5000										85/187	85/187
MTZ3 63H1			Ir ≤ 6300											85/187
MTZ2 08H2	85	85	Ir ≤ 800	66/145	66/145	66/145	66/145	66/145	66/145	66/145	66/145	T	T	T
MTZ2 10H2			Ir ≤ 1000		66/145	66/145	66/145	66/145	66/145	66/145	66/145	T	T	T
MTZ2 12H2			Ir ≤ 1250			66/145	66/145	66/145	66/145	66/145	66/145	T	T	T
MTZ2 16H2			Ir ≤ 1600				66/145	66/145	66/145	66/145	66/145	T	T	T
MTZ2 20H2			Ir ≤ 2000					66/145	66/145	66/145	66/145	T	T	T
MTZ2 25H2			Ir ≤ 2500						66/145	66/145	66/145	T	T	T
MTZ2 32H2			Ir ≤ 3200							66/145	66/145	T	T	T
MTZ2 40H2			Ir ≤ 4000								66/145	T	T	T
MTZ2 08L1	130	100	Ir ≤ 800	66/145	66/145	66/145	66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 10L1			Ir ≤ 1000		66/145	66/145	66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 12L1			Ir ≤ 1250			66/145	66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 16L1			Ir ≤ 1600				66/145	66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 20L1			Ir ≤ 2000					66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 20H3	130	100	Ir ≤ 2000					66/145	66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 25H3			Ir ≤ 2500						66/145	66/145	66/145	85/187	85/187	85/187
MTZ2 32H3			Ir ≤ 3200							66/145	66/145	85/187	85/187	85/187
MTZ2 40H3			Ir ≤ 4000								66/145	85/187	85/187	85/187
MTZ3 40H2	130	100	Ir ≤ 4000								66/145	85/187	85/187	85/187
MTZ3 50H2			Ir ≤ 5000										85/187	85/187
MTZ3 63H2			Ir ≤ 6300											85/187

T : Protection of the switch-disconnector is ensured but combination not very relevant

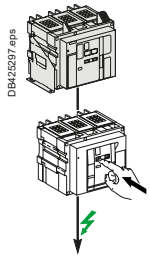
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Circuit breaker coordination

Upstream: Masterpact MTZ1, MTZ2
Downstream: Masterpact NW HF, NW HH



Ue = 500/525 V AC
Ue = 690 V AC

Downstream	Switch-disconnector	NW08 HF	NW10 HF	NW12 HF	NW16 HF	NW20 HF	NW25 HF	NW32 HF	NW40 HF	NW40b HH	NW50 HH	NW63 HH
	Ith A 60°	800	1000	1250	1600	2000	2500	3200	4000	4000	5000	6300
	Icw (kA)	85	85	85	85	85	85	85	85	100	100	100
	Icm (kÂ)	187	187	187	187	187	187	187	187	220	220	220

Upstream Circuit breaker	Icu (kA) 525 V	690 V	Setting Ir	Switch-disconnector conditionnal short-circuit current and related making capacity										
MTZ2 08N1	42	42	Ir ≤ 800	T	T	T	T	T	T	T	T	T	T	T
MTZ2 10N1			Ir ≤ 1000		T	T	T	T	T	T	T	T	T	T
MTZ2 12N1			Ir ≤ 1250			T	T	T	T	T	T	T	T	T
MTZ2 16N1			Ir ≤ 1600				T	T	T	T	T	T	T	T
MTZ2 20N1			Ir ≤ 2000					T	T	T	T	T	T	T
MTZ2 08H1	66	66	Ir ≤ 800	T	T	T	T	T	T	T	T	T	T	T
MTZ2 10H1			Ir ≤ 1000		T	T	T	T	T	T	T	T	T	T
MTZ2 12H1			Ir ≤ 1250			T	T	T	T	T	T	T	T	T
MTZ2 16H1			Ir ≤ 1600				T	T	T	T	T	T	T	T
MTZ2 20H1			Ir ≤ 2000					T	T	T	T	T	T	T
MTZ2 25H1			Ir ≤ 2500						T	T	T	T	T	T
MTZ2 32H1			Ir ≤ 3200							T	T	T	T	T
MTZ2 40H1			Ir ≤ 4000								T	T	T	T
MTZ3 40H1	100	100	Ir ≤ 2500						85/187	85/187	85/187	T	T	T
MTZ3 50H1			Ir ≤ 3200							85/187	85/187	T	T	T
MTZ3 63H1			Ir ≤ 4000								85/187	T	T	T
			Ir ≤ 5000										T	T
			Ir ≤ 6300											T
MTZ2 08H2	85	85	Ir ≤ 800	T	T	T	T	T	T	T	T	T	T	T
MTZ2 10H2			Ir ≤ 1000		T	T	T	T	T	T	T	T	T	T
MTZ2 12H2			Ir ≤ 1250			T	T	T	T	T	T	T	T	T
MTZ2 16H2			Ir ≤ 1600				T	T	T	T	T	T	T	T
MTZ2 20H2			Ir ≤ 2000					T	T	T	T	T	T	T
MTZ2 25H2			Ir ≤ 2500						T	T	T	T	T	T
MTZ2 32H2			Ir ≤ 3200							T	T	T	T	T
MTZ2 40H2			Ir ≤ 4000								T	T	T	T
MTZ2 08L1	130	100	Ir ≤ 800	85/187	85/187	85/187	85/187	85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 10L1			Ir ≤ 1000		85/187	85/187	85/187	85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 12L1			Ir ≤ 1250			85/187	85/187	85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 16L1			Ir ≤ 1600				85/187	85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 20L1			Ir ≤ 2000					85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 20H3	130	100	Ir ≤ 2000					85/187	85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 25H3			Ir ≤ 2500						85/187	85/187	85/187	100/220	100/220	100/220
MTZ2 32H3			Ir ≤ 3200							85/187	85/187	100/220	100/220	100/220
MTZ2 40H3			Ir ≤ 4000								85/187	100/220	100/220	100/220
MTZ3 40H2	130	100	Ir ≤ 2500						85/187	85/187	85/187	100/220	100/220	100/220
MTZ3 50H2			Ir ≤ 3200							85/187	85/187	100/220	100/220	100/220
MTZ3 63H2			Ir ≤ 4000								85/187	100/220	100/220	100/220
			Ir ≤ 5000										100/220	100/220
			Ir ≤ 6300											100/220

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

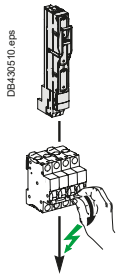
36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Switch-disconnector - Fuse coordination

Upstream: gG Fuse

Downstream: iSW-NA, iID, iSW, NG125NA



Ue ≤ 440 V AC

Downstream	Switch-disconnector	iSW-NA				iID [1]				
	Rating (A)	40	63	80	100	25	40	63	100	125
	Icw (kA)	800	1260	1600	2000	500	800	1260	1200	1500
	Icm (kÂ)	5	5	5	5	5	5	5	5	5

Upstream Fuse type	Rating (A)	Switch-disconnector conditionnal short-circuit current and related making capacity								
gG fuse link without overload relay	16	T	T	T	T	T	T	T	T	T
	20	T	T	T	T		T	T	T	T
	25	T	T	T	T		T	T	T	T
	32		80/176	80/176	80/176			80/176	80/176	80/176
	40		80/176	80/176	80/176			80/176	80/176	80/176
	50			30/63	30/63				30/63	30/63
	63				30/63					30/63

Downstream	Switch-disconnector	iSW				NG125NA			
	Rating (A)	40	63	100	125	63	80	100	125
	Icw (kA)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	Icm (kÂ)	5	5	5	5	2	2	2	2

Upstream Fuse type	Rating (A)	Switch-disconnector conditionnal short-circuit current and related making capacity							
gG fuse link without overload relay	16	60/132	60/132	60/132	60/132	T	T	T	T
	20	40/84	40/84	40/84	40/84	T	T	T	T
	25	25/52	25/52	25/52	25/52	T	T	T	T
	32		20/40	20/40	20/40	80/176	80/176	80/176	80/176
	40		10/17	10/17	10/17	80/176	80/176	80/176	80/176
	50			10/17	10/17		50/105	50/105	50/105
	63			10/17	10/17			50/105	50/105
	80				10/17				50/105

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

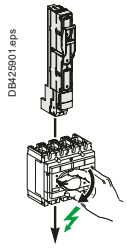
: Protection of the switch-disconnector is not ensured

Note: Current limitation caracteristics can be signifiantly different from one manufacturer to another.
This table can not dispense to check selected fuse charactersistics

Switch-disconnector - Fuse coordination

Upstream: gG, aM, BS fuses

Downstream: Compact INS40 to 630, INV100 to 360



Ue ≤ 500 V AC

Downstream	Switch-Disconnector	Compact INS 40 - 160						Compact INS250 Compact INV				Compact INS Compact INV			
	Ith (A) 60°	40	63	80	100	125	160	100	160	200	250	320	400	500	630
	Icw (kA)	3	3	3	5.5	5.5	5.5	8.5	8.5	8.5	8.5	20	20	20	20
	Icm (kÂ)	15	15	15	20	20	20	30	30	30	30	50	50	50	50
Upstream Fuse type	**Rating**	**Switch-disconnector conditionnal short-circuit current and related making capacity**													
gG fuse link without overload relay	25	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	40		T	T	T	T	T	T	T	T	T	T	T	T	T
	50		T	T	T	T	T	T	T	T	T	T	T	T	T
	63				T	T	T	T	T	T	T	T	T	T	T
	80				T	T	T	T	T	T	T	T	T	T	T
	100					T	T		T	T	T	T	T	T	T
	125						T		T	T	T	T	T	T	T
	160									T	T	T	T	T	T
	200										T	T	T	T	T
	225-250											T	T	T	T
	300-315												T	T	T
	355													T	T
	400													T	T
	450														T
	500														T
gG fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50-63	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	125	80/176	80/176	80/176	T	T	T	T	T	T	T	T	T	T	T
	160	36/75	36/75	36/75	50/105	50/105	50/105	T	T	T	T	T	T	T	T
	200				36/75	36/75	36/75	T	T	T	T	T	T	T	T
	225-250							T	T	T	T	T	T	T	T
	300							T	T	T	T	T	T	T	T
	315							T	T	T	T	T	T	T	T
	355							50/105	50/105	50/105	50/105	T	T	T	T
	400-450											T	T	T	T
	500											T	T	T	T
	630											50/105	50/105	50/105	50/105
	800														
aM Fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	50 - 63	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	80	80/176	80/176	80/176	T	T	T	T	T	T	T	T	T	T	T
	100	50/105	50/105	50/105	T	T	T	T	T	T	T	T	T	T	T
	125				T	T	T	T	T	T	T	T	T	T	T
	160				50/105	50/105	50/105	T	T	T	T	T	T	T	T
	200				36/75	36/75	36/75	T	T	T	T	T	T	T	T
	225							80/176	80/176	80/176	80/176	T	T	T	T
	250							50/105	50/105	50/105	50/105	T	T	T	T
	300-315											T	T	T	T
	355-400											T	T	T	T
	450											50/105	50/105	50/105	50/105
	500											50/105	50/105	50/105	50/105
	630											30/63	30/63	30/63	30/63
BS Fuse link with overload relay	32M63	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63M80	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	63M100	T	T	T	T	T	T	T	T	T	T	T	T	T	T
	100M125	50/105	50/105	50/105	T	T	T	T	T	T	T	T	T	T	T
	100M160				50/105	50/105	50/105	T	T	T	T	T	T	T	T
	100M200							T	T	T	T	T	T	T	T
	200M250							T	T	T	T	T	T	T	T
	200M315											T	T	T	T
	315M400											50/105	50/105	50/105	50/105
	400M500												40/84	40/84	40/84

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to the breaking capacity of the fuse installed on supply side.

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

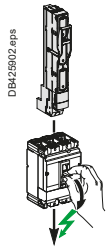
: Protection of the switch-disconnector is not ensured

Note: Current limitation caracteristics can be signifiantly different from one manufacturer to another.
This table can not dispense to check selected fuse charactersistics

Switch-disconnector - Fuse coordination

Upstream: gG, aM, BS fuses

Downstream: Compact NSXm50 to 160NA, NSX100 to 630NA



Ue ≤ 500 V AC

Downstream	Switch-Disconnector	NSXm50NA	NSXm100NA	NSXm160NA	NSX100NA	NSX160NA	NSX250NA	NSX400NA	NSX630NA
	Ith (A) 60°	50	100	160	100	160	250	400	630
	Icw (kA)	50	100	160	1,8	2,5	3,5	5	6
	Icm (kÂ)	0,9 1,38	1,5 2,13	1,5 2,13	2,6	3,6	4,9	7,1	8,5

Upstream Fuse type	Rating	Switch-disconnector conditionnal short-circuit current and related making capacity							
gG fuse link without overload relay	40	T	T	T	T	T	T	T	T
	50-63		T	T	T	T	T	T	T
	80		T	T	T	T	T	T	T
	100			T		T	T	T	T
	125			T		T	T	T	T
	160						T	T	T
	200						T	T	T
	225-250							T	T
	300-315							T	T
	355								T
	400-450								T
	500								T
gG fuse link with overload relay	40	T	T	T	T	T	T	T	T
	50-63	T	T	T	T	T	T	T	T
	80		T	T	T	T	T	T	T
	100		T	T	T	T	T	T	T
	125			T		T	T	T	T
	160			T		T	T	T	T
	200						T	T	T
	225-250						T	T	T
	300-315							T	T
	355							T	T
	400-450							T	T
	500								T
	630								T
aM Fuse link with overload relay	40	T	T	T	T	T	T	T	T
	50 - 63	T	T	T	T	T	T	T	T
	80		T	T	T	T	T	T	T
	100		T	T	T	T	T	T	T
	125			T		T	T	T	T
	160			T		T	T	T	T
	200						T	T	T
	225-250						T	T	T
	300-315							T	T
	355							T	T
	400-450								T
	500								T
	630								T
BS Fuse link with overload relay	32M63	T	T	T	T	T	T	T	T
	63M80		T	T	T	T	T	T	T
	63M100		T	T	T	T	T	T	T
	100M125		T	T	T	T	T	T	T
	100M160		T	T	T	T	T	T	T
	100M200						T	T	T
	200M250						T	T	T
	200M315							T	T
	315M400							T	T
	400M500								T

T : Protection of the switch-disconnector is ensured but combination not very relevant

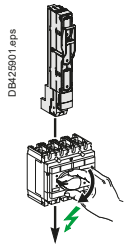
T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

: Protection of the switch-disconnector is not ensured

Note: Current limitation caracteristics can be signifiantly different from one manufacturer to another.
This table can not dispense to check selected fuse charactersistics

Switch-disconnector - Fuse coordination

Upstream: gG, aM, BS fuses
Downstream: Compact INS40 to 630, INV100 to 630



Ue ≤ 690 V AC

Downstream	Switch-Disconnector	Compact INS 40 - 160			Compact INS250 Compact INV				Compact INS Compact INV			
	Ith (A) 60°	100	125	160	100	160	200	250	320	400	500	630
	Icw (kA)	5.5	5.5	5.5	8.5	8.5	8.5	8.5	20	20	20	20
	Icm (kÂ)	20	20	20	30	30	30	30	50	50	50	50
Upstream												
Fuse type	**Rating**											
gG fuse link without overload relay	25	T	T	T	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T	T	T	T
	40	T	T	T	T	T	T	T	T	T	T	T
	50	T	T	T	T	T	T	T	T	T	T	T
	63	T	T	T	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T	T	T	T
	100	T	T		T	T	T	T	T	T	T	T
	125		T		T	T	T	T	T	T	T	T
	160					T	T	T	T	T	T	T
	200						T	T	T	T	T	T
	225-250							T	T	T	T	T
	300-315								T	T	T	T
	355									T	T	T
	400									T	T	T
	450										T	T
	500										T	T
gG fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T
	50-63	T	T	T	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T	T	T	T
	100	T	T	T	T	T	T	T	T	T	T	T
	125	T	T	T	T	T	T	T	T	T	T	T
	160			T	T	T	T	T	T	T	T	T
	200			T	T	T	T	T	T	T	T	T
	225-250							T	T	T	T	T
	300							T	T	T	T	T
	315							T	T	T	T	T
	355							T	T	T	T	T
	400-450							T	T	T	T	T
	500							T	T	T	T	T
	630							50/105	50/105	50/105	50/105	50/105
	800											
aM Fuse link with overload relay	40	T	T	T	T	T	T	T	T	T	T	T
	50 - 63	T	T	T	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T	T	T	T
	100	T	T	T	T	T	T	T	T	T	T	T
	125			T	T	T	T	T	T	T	T	T
	160			T	T	T	T	T	T	T	T	T
	200			T	T	T	T	T	T	T	T	T
	225			50/105	50/105	50/105	50/105	T	T	T	T	T
	250							T	T	T	T	T
	300-315							T	T	T	T	T
	355-400							T	T	T	T	T
	450							50/105	50/105	50/105	50/105	50/105
	500							50/105	50/105	50/105	50/105	50/105
	630											30/63

T : Protection of the switch-disconnector is ensured but combination not very relevant

T : Switch-disconnector is totally coordinated up to Icu of circuit breaker installed on supply side

36/75 : Switch-disconnector is protected up to 36 kA rms / 75 kÂ

: Protection of the switch-disconnector is not ensured

Note: Current limitation caracteristics can be signifiantly different from one manufacturer to another.
This table can not dispense to check selected fuse charactersistics.