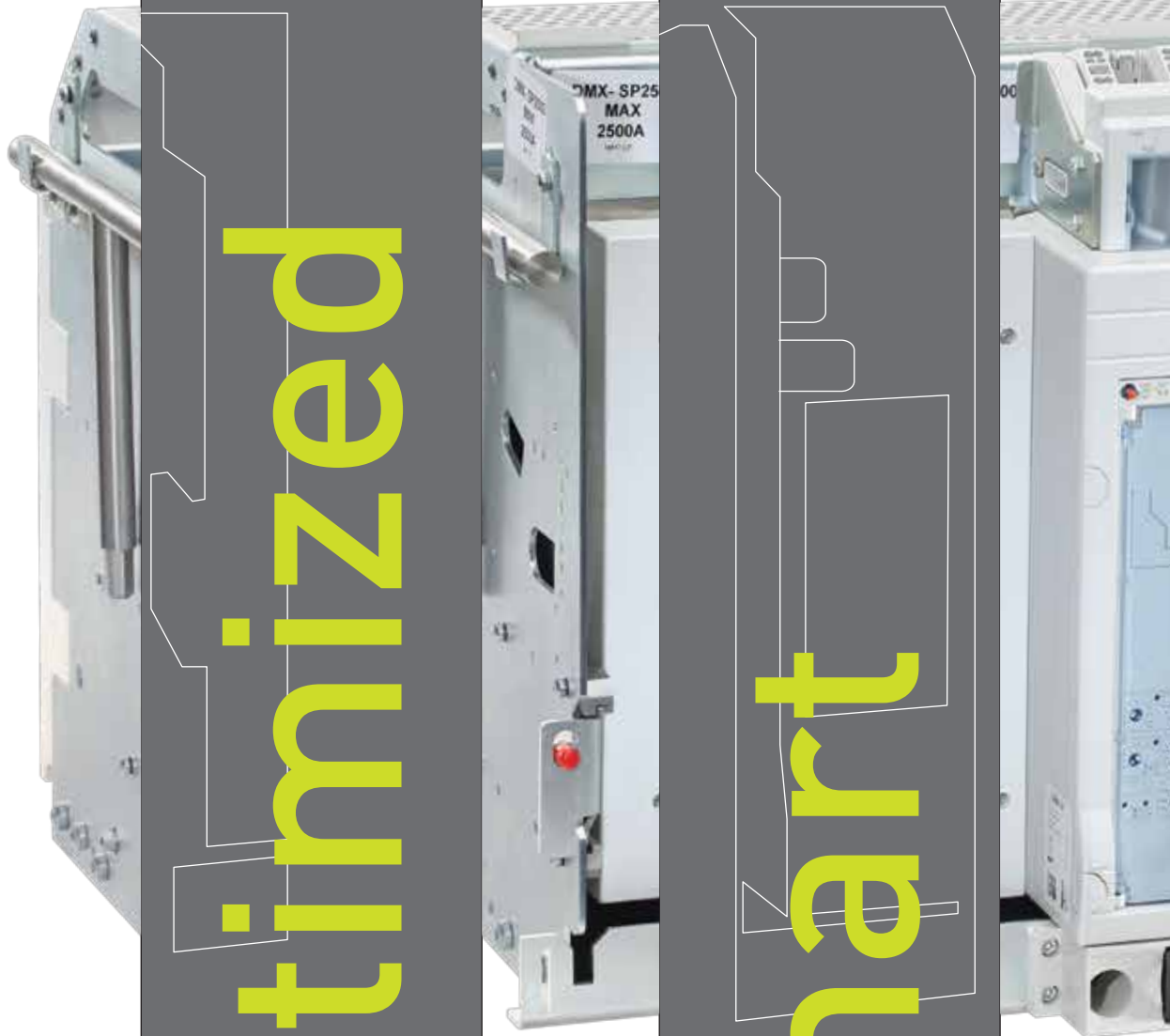


Three unique advantages make
it the only one you will need.



Optimized

Smart

Efficient

DMX

SP-2500

LIVE THE ADVANTAGE

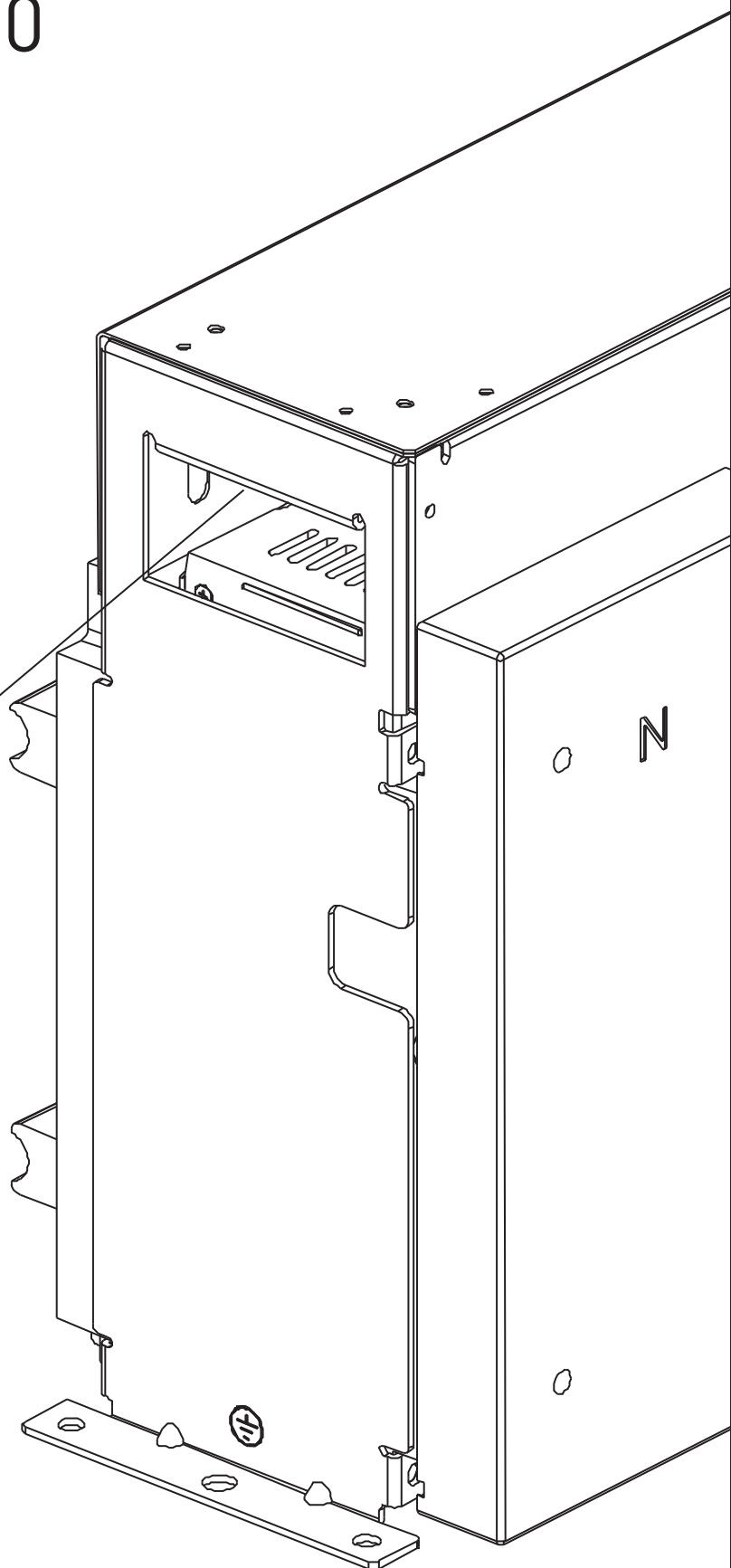
The pace of today's life demands continuous upgrades in efficiency and ways to live smarter. At Legrand, we anticipate your needs with technologically advanced products, investing as much as 5% on R&D to deliver superior electrical and digital building infrastructure.

As global specialists, we make things that are not just essential but actually desirable. Our engineering is exacting, and is fuelled by design thinking. We call this Designeering. It's not just a deep understanding of our markets, but delivering innovation and technology for uninterrupted living.

Such expertise helps us fulfil your needs. It also ensures that we keep introducing products that change the way you look at form and function. The extraordinary DMX SP 2500 is a case in point. It combines three advantages in one ACB to give you the advantage.

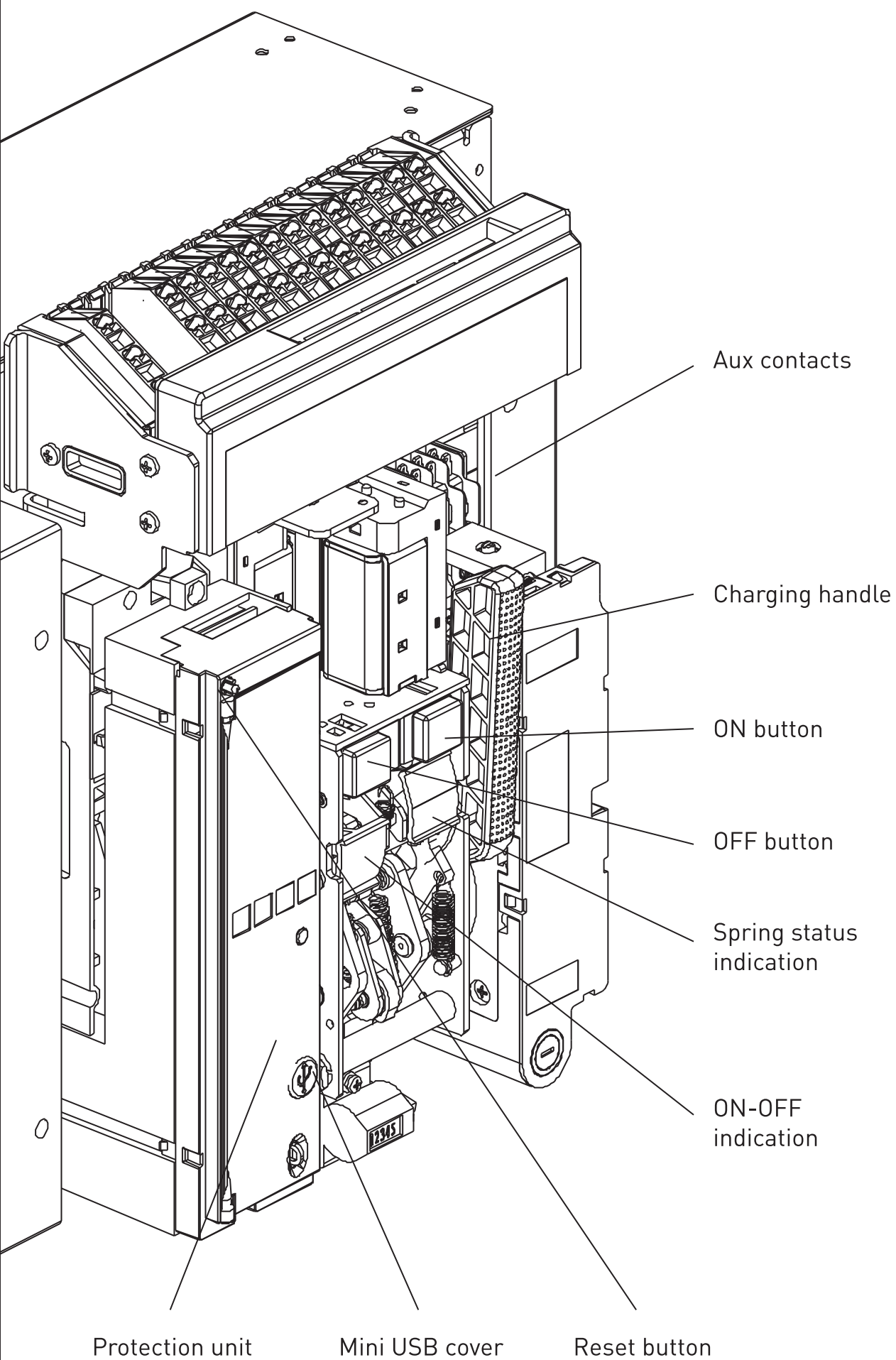
DMX SP-2500

Lifting handle



DMX

SP-2500



Introducing

DMX SP 2500

from Legrand. A superior ACB in the 630A to 2500A kA range. It is packed with benefits which includes protection features, high mechanical and electrical endurance. No need to change busbar design. No compromise on termination space. DMX SP 2500 is thoughtfully designed to minimize power loss which translates into direct cost savings to customers. All of which makes DMX SP 2500 the perfect ACB across applications in commercial, residential, medium-scale industries, hospitals, malls and hotels.



OPTIMIZED

- Ample termination space
- Generous clearances
- Smart dimensions to reduce panel size

SMART

- Electronic releases offering precise protection
- In-built temperature protection

EFFICIENT

- Easy installation
- Easy maintenance
- Fast operation reduces stress on the system

DMX SP 2500

COMES WITH THE
FOLLOWING FEATURES

ELECTRICAL
ENDURANCE
- 3000 OPERATIONS

FIXED, DRAW-
OUT AND SWITCH
-DIS-CONNECTORS
IN 3P & 4P

ELECTRONIC
TRIP UNIT WITH
ROTARY KNOBS
OFFERS LSI/LSIG
PROTECTION

MECHANICAL
ENDURANCE

WITH MAINTENANCE
- 10000 CYCLES
WITHOUT MAINTENANCE
- 5000 CYCLES

$I_{cu}=I_{cs}$
 $=I_{cw}=50kA$



630A-2500A

WIDE RANGE
OF ACCESSORIES
TO SUIT VARIOUS
APPLICATIONS

LARGE
TERMINATION
AREA FOR
ALUMINUM
AND COPPER
LINKS

FAST
OPERATION,
OFFERING
BEST-IN-CLASS
PERFORMANCE

IN-BUILT
TEMPERATURE
PROTECTION







Protection



DMX SP 2500 is armed with Rotary knob protection unit and the following features.

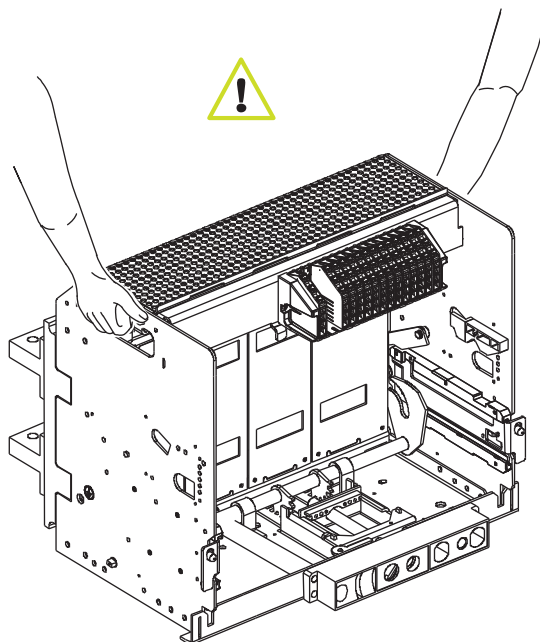
MP2		
Features	LSI	LSIg
Overload protection	●	●
Short-circuit protection	●	●
Instantaneous protection	●	●
Ground protection	X	●
N phase protection	●	●
Tripping test	●	●
Programming interface	●	●
External Neutral option	●	●
Rotary knobs	●	●
Temperature protection	●	●





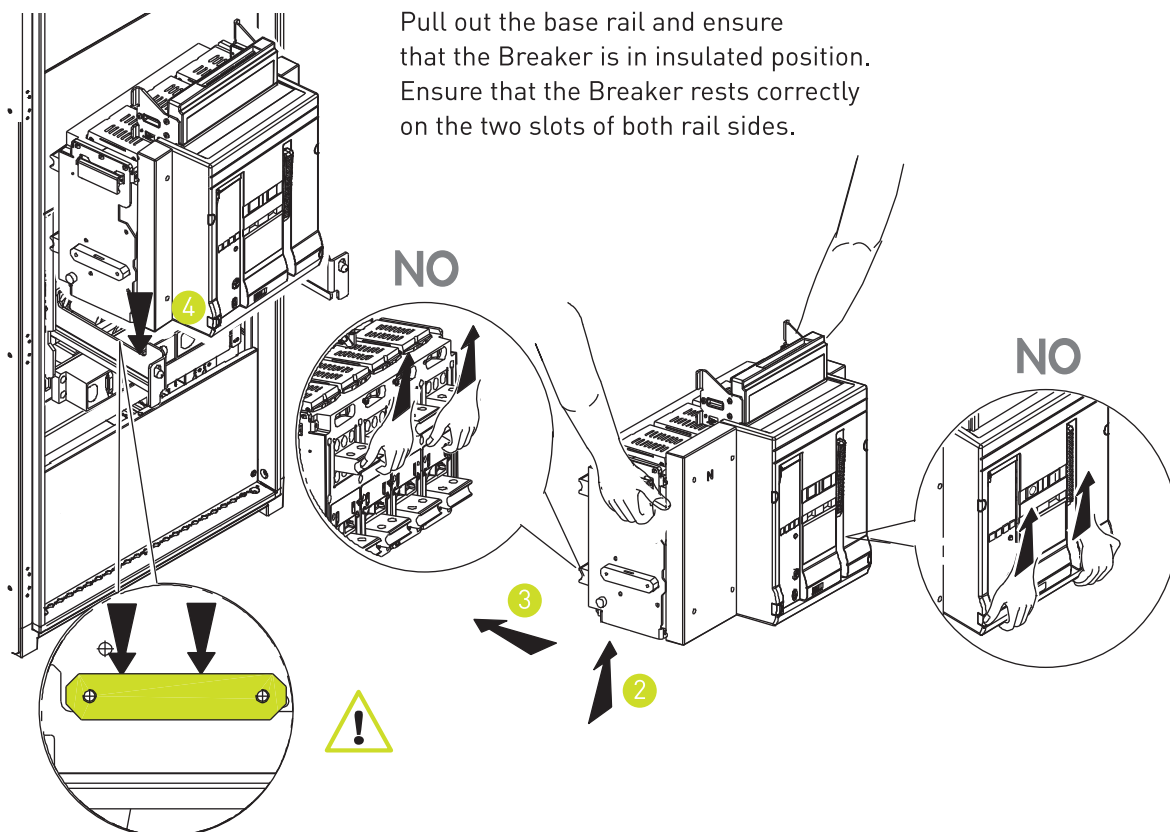
Easy to install and use

1



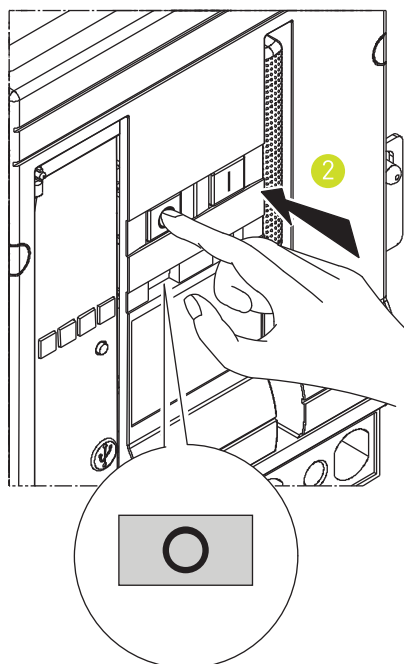
Remove the Breaker from the wooden casing.

2



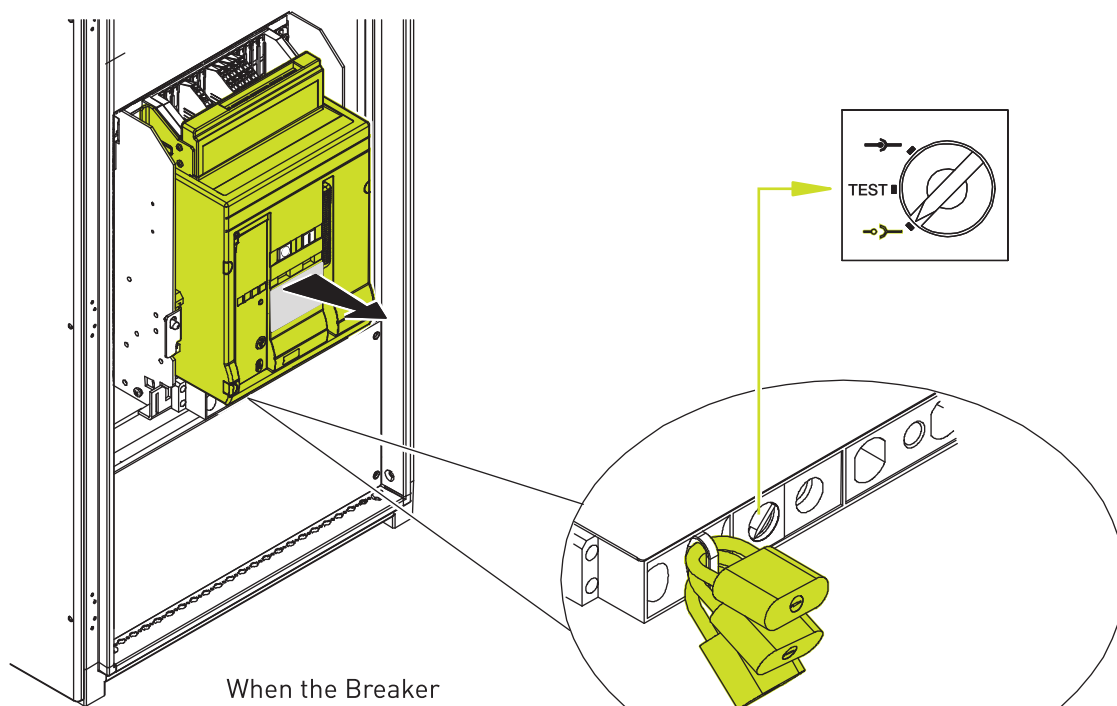
Pull out the base rail and ensure that the Breaker is in insulated position. Ensure that the Breaker rests correctly on the two slots of both rail sides.

3



Press the Off button when the Breaker is under current. The rack-out operation must be done by specialized personnel.

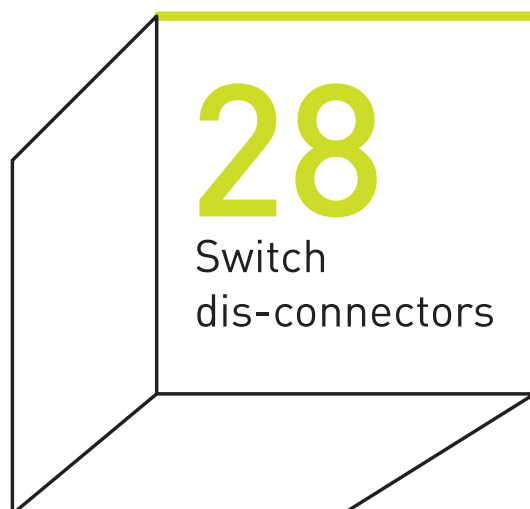
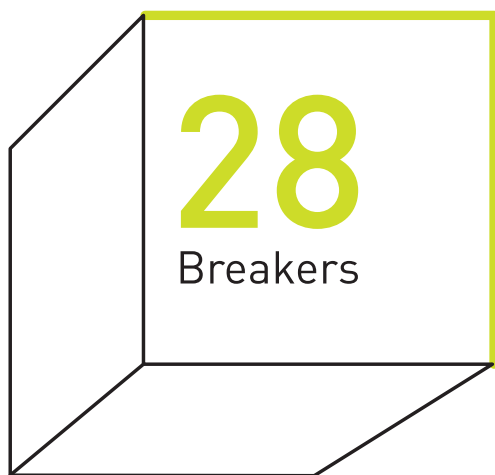
4



When the Breaker is in draw-out position, lock the racking.

Comprehensive range of item codes to suit your requirements

100+ New Codes



DMX

SP-2500

**A Superior ACB
in the 630A – 2500A range**



DMX-SP 2500

air circuit breakers from 630 A to 2500 A

CIRCUIT BREAKERS		
According to IEC60947-2		DMX-SP 2500
		Version 50 kA
Number of poles		3 P - 4 P
Rating in (A)		630/800/1000/1250/1600/2000/2500
Rated insulation voltage U_i (V)		1000
Rated impulsive voltage U_{imp} (kV)		12
Rated operational voltage (50/60Hz) U_e (V)		690
Rated ultimate breaking capacity I_{cu} (kA)	220/240 VAC	50
	380/415 VAC	50
	440/460 VAC	50
	600 VAC	42
	690 VAC	42
Rated service breaking capacity I_{cs} (% I_{cu})		100%
Rated short-circuit making capacity I_{cm} (kA)	220/240 VAC	105
	380/415 VAC	105
	440/460 VAC	105
	600 VAC	88
	690 VAC	88
Rated short-circuit withstand current I_{cw} (kA)	220/240 VAC (t=1s)	50
	380/415 VAC (t=1s)	50
	440/460 VAC (t=1s)	50
	600 VAC (t=1s)	42
	690 VAC (t=1s)	42
	690 VAC (t=3s)	25
Neutral protection (%)		OFF / 50 / 100
Category of use		B
Suitability for insulation		YES
Mechanical endurance cycles	with maintenance	10000
	without maintenance	5000
Electrical endurance (cycles)		3000
Minimum opening time		15 ms
Maximum closing time		30 ms
Visualization of contacts position		S
Visualization of charged / discharged springs		S
Auxiliary contacts		S*
Fault contacts		S
Shunt trip		O
Closing coil		O
Undervoltage release		O
Undervoltage release with time delay		O
Motor operator		O
Mechanical counter		O
*Standard version with no.4 NO/NC (max no.6 option contacts 0281 75). S = Standard O = Optional		

SWITCH DISCONNECTORS (AC23)		
According to IEC60947-3		DMX-SP-I-2500
Number of poles		3 P - 4 P
Rating in (A)		630/800/1000/1250/1600/2000/2500
Rated insulation voltage U_i (V)		1000
Rated impulsive voltage U_{imp} (kV)		12
Rated operational voltage (50/60Hz) U_e (V)		690
Rated short circuit making capacity I_{cu} (kU)	230 VAC	105
	415 VAC	105
	500 VAC	105
	600 VAC	88
	690 VAC	88
Rated short-circuit withstand current I_{cw} (kA)	230 VAC (t=1s)	50
	415 VAC (t=1s)	50
	500 VAC (t=1s)	50
	600 VAC (t=1s)	42
	690 VAC (t=1s)	42
	230-690 VAC (t=3s)	25
Suitability for insulation		YES
Mechanical endurance (cycles)	with maintenance	10000
	without maintenance	5000
Electrical endurance (cycles)		3000
Minimum opening time		15 ms
Maximum closing time		30 ms
Visualization of contacts position		S
Visualization of charged / discharged springs		S
Auxiliary contacts		S*
Shunt trip		O
Closing coil		O
Undervoltage release		O
Undervoltage release with time delay		O
Motor operator		O
Mechanical counter		O
*Standard version with no.4 NO/NC (max no.6 option contacts 0281 75). S = Standard O = Optional		

DMX-SP 2500

air circuit breakers from 630 A to 2500 A



6695 26



6695 31

Air circuit breakers to be equipped with Microprocessor release
Release to be ordered with breaker for factory assembly
4 inbuilt auxiliary contact
Breaking capacity 50 KA

Pack	Cat.Nos		Fixed version
	3P	4P	In(A)
1	6695 24	6695 30	630
1	6695 25	6695 31	800
1	6695 26	6695 32	1000
1	6695 27	6695 33	1250
1	6695 28	6695 34	1600
1	6695 29	6695 35	2000
1	6695 76	6695 77	2500

	3P	4P	In(A)	Draw-out version
1	6695 36	6695 42	630	
1	6695 37	6695 43	800	
1	6695 38	6695 44	1000	
1	6695 39	6695 45	1250	
1	6695 40	6695 46	1600	
1	6695 41	6695 47	2000	
1	6695 78	6695 79	2500	

DMX-SP-I 2500

switch disconnectors from 630 A to 2500 A



6695 68

Switch disconnectors
4 inbuilt auxiliary contact

Pack	Cat.Nos		Fixed version
	3P	4P	In(A)
1	6695 48	6695 54	630
1	6695 49	6695 55	800
1	6695 50	6695 56	1000
1	6695 51	6695 57	1250
1	6695 52	6695 58	1600
1	6695 53	6695 59	2000
1	6695 80	6695 81	2500

	3P	4P	In(A)	Draw-out version
1	6695 60	6695 66	630	
1	6695 61	6695 67	800	
1	6695 62	6695 68	1000	
1	6695 63	6695 69	1250	
1	6695 64	6695 70	1600	
1	6695 65	6695 71	2000	
1	6695 82	6695 83	2500	

DMX-SP 2500

electronic protection units



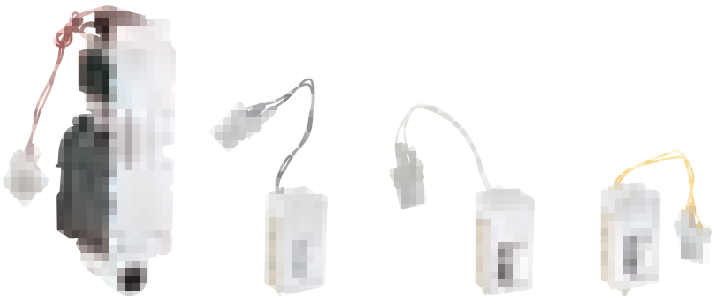
0281 67

0281 68

Pack	Cat.Nos	Microprocessor base protection unit
1	0281 67	Microprocessor based protection unit MP2 LSI
1	0281 68	Microprocessor based protection unit MP2 LSIg

DMX-SP 2500

auxiliaries and accessories



0281 23

0281 29

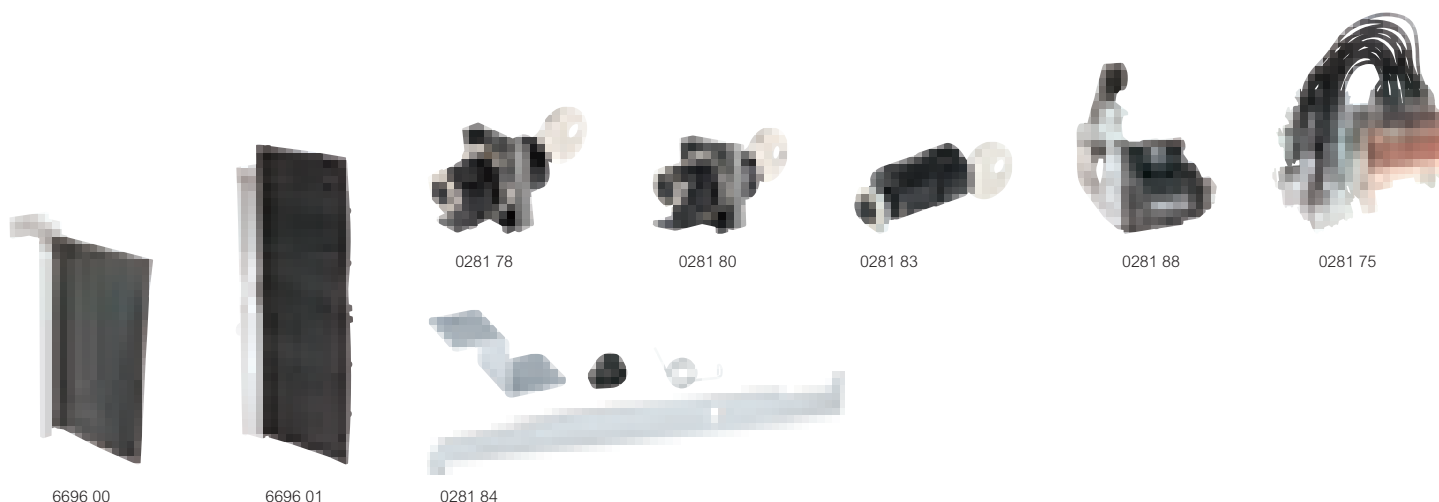
0281 34

0281 39

Pack	Cat.Nos	Control & signalling accessories
		Motor Operator
1	0281 20	24 V AC/DC
1	0281 21	48 V AC/DC
1	0281 22	110-130 V AC/DC
1	0281 23	220-250 V AC/DC
1	0281 24	415-440 V AC
		Closing coil
1	0281 26	24 V AC/DC
1	0281 27	48 V AC/DC
1	0281 28	110-130 V AC/DC
1	0281 29	220-250 V AC/DC
1	0281 30	415-440 V AC
		Shunt Trip
1	0281 31	24 V AC/DC
1	0281 32	48 V AC/DC
1	0281 33	110-130 V AC/DC
1	0281 34	220-250 V AC/DC
1	0281 35	415-440 V AC
		Undervoltage release
1	0281 36	24 V AC/DC
1	0281 37	48 V AC/DC
1	0281 38	110-130 V AC/DC
1	0281 39	220-250 V AC/DC
1	0281 40	415-440 V AC
		Time delay undervoltage release
1	0288 62	110 V AC/DC
1	0288 63	230 V AC/DC

DMX-SP 2500

auxiliaries and accessories



Pack	Cat.Nos	Accessories
		Insulated Shield
1	6696 00	Fixed version 3P
1	6696 01	Fixed version 4P
1	6696 02	Draw-out version 3P
1	6696 03	Draw-out version 4P
		Key lock
1	0281 78	Keylock in open position (1 lock 1 Ronis random)
1	0281 79	Keylock in open position (1 lock 1 Ronis type "A")
1	0281 80	Keylock in open position (1 lock 1 Ronis type "B")
1	0281 81	Keylock in open position - Profalux
1	0281 82	Keylock ins./test/drawnout - Profalux
1	0281 83	Keylock ins./test/drawnout - Ronis
1	0281 84	Door lock for both right & left handle
1	6696 08	Safety button for test position

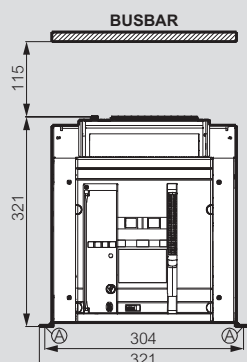
Pack	Cat.Nos	Accessories (contd.)
		Accessories
1	0281 88	Mechanical counter
1	0281 99	Programmable contact
1	0281 77	Padlock for button
1	0281 71	External neutral
1	0281 72	Power Supply 24 V DC
1	0281 73	Signalling contac inserted-test-D/O DMX2000
1	0281 74	AUX ready to close-charged springs DMX2000
1	0281 75	Module with 6 aux contacts DMX2000
1	0281 90	Mechanical interlock two device
		Terminals
1	0288 84	Real terminals - flat connections with bars
1	0288 82	Real terminals - vertical connections with bars
1	0288 85	Real terminals - flat connections with bars
1	0288 83	Real terminals - vertical connections with bars
1	0288 96	Real terminals - vertical or horizontal connection with bars to be fixed onto plate
1	0288 97	Real terminals - vertical or horizontal connection with bars to be fixed onto plate
1	0288 86	Spreaders - flat connection with bars
1	0288 88	Spreaders - vertical connection with bars
1	0288 90	Spreaders - horizontal connection with bars
1	0288 87	Spreaders - flat connection with bars
1	0288 89	Spreaders - vertical connection with bars
1	0288 91	Spreaders - horizontal connection with bars

DMX-SP 2500

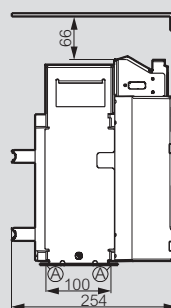
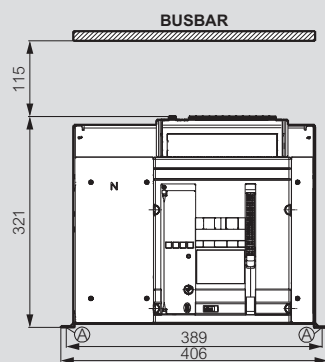
dimensions

Installation of breaker DMX-SP 2500 - Fixed version

3P version

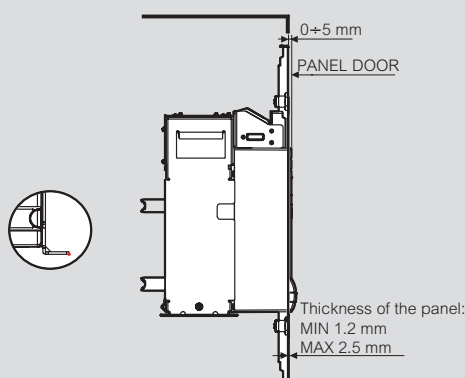
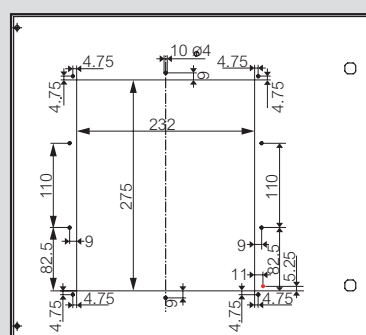


4P version



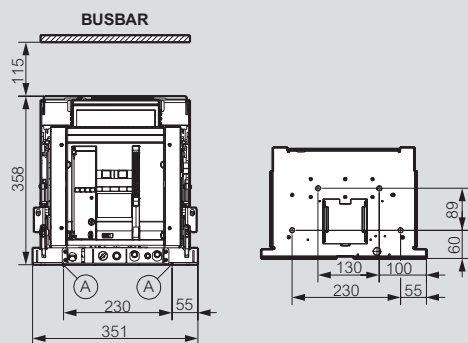
A = fixing point on plate of enclosure

Door cut-out - Fixed version

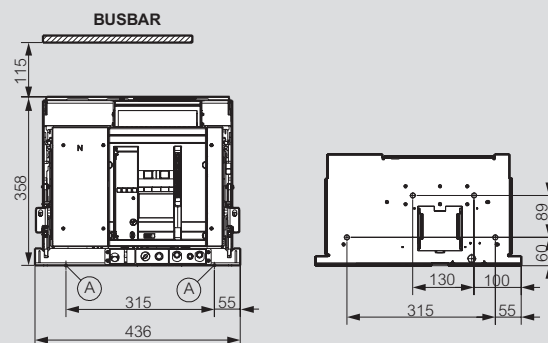


Installation of breaker DMX-SP 2500 - Draw-out version

3P version

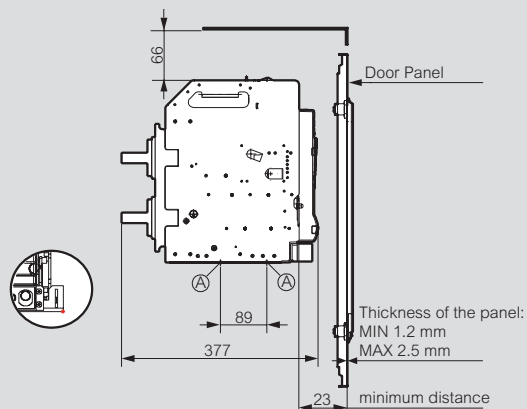
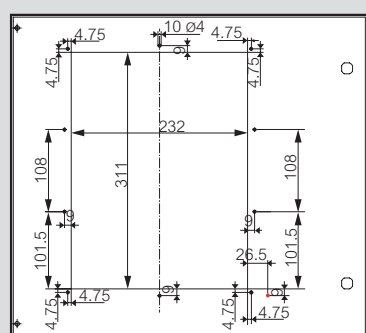


4P version



A = fixing point on plate of enclosure

Door cut-out and door drilling - Draw-out version



A = fixing point on plate of enclosure

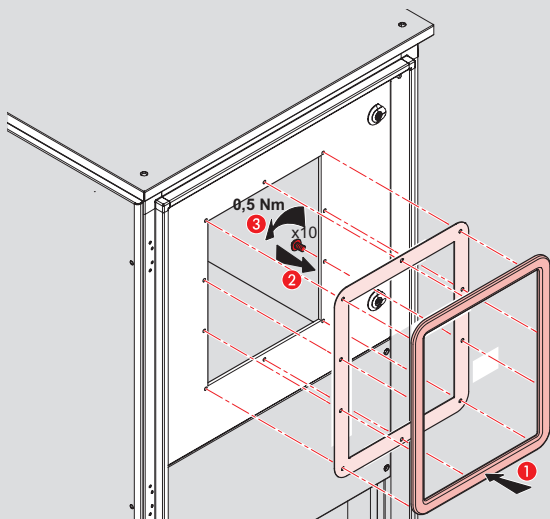
DMX-SP 2500

air circuit breakers

Fixing door sealing frame

Function: To provide ingress protection.

Installation: Fix the sealing frame and the rubber on the panel door to fit the drilling on the door. Screw the sealing frame.



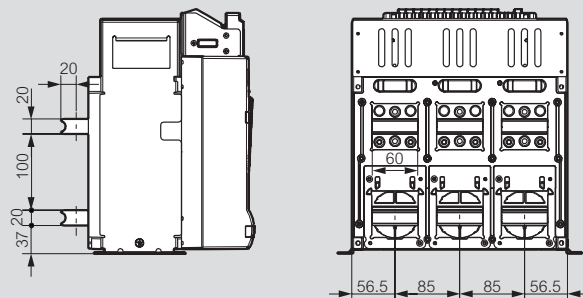
DMX-SP 2500

dimensions

Terminals - Fixed breakers

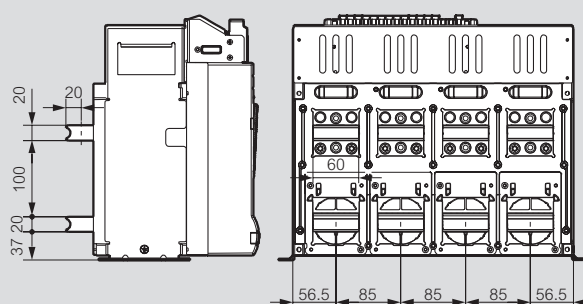
3 Poles

Horizontal terminals



4 Poles

Horizontal terminals



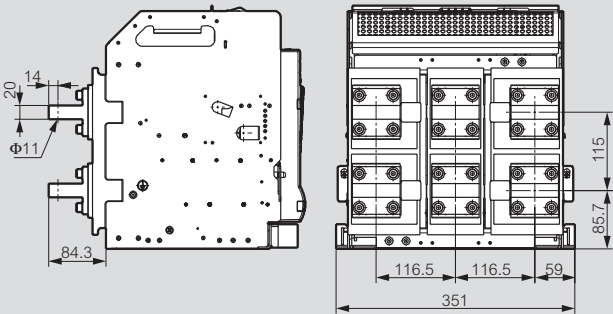
DMX-SP 2500

dimensions

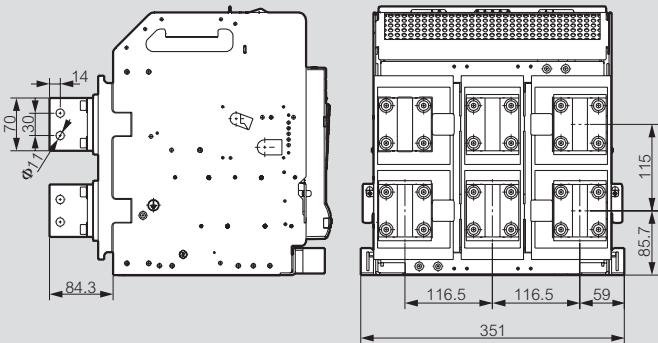
Terminals - Draw-out breakers

3 Poles

Horizontal terminals

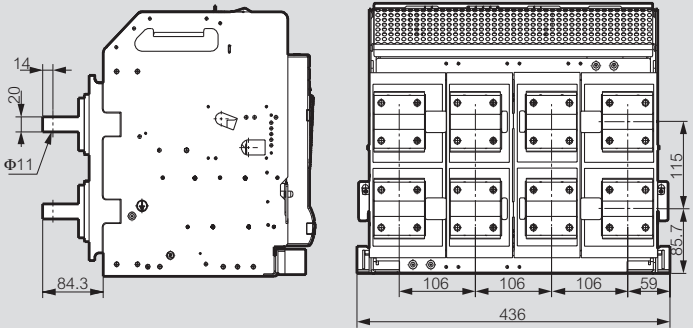


Vertical terminals

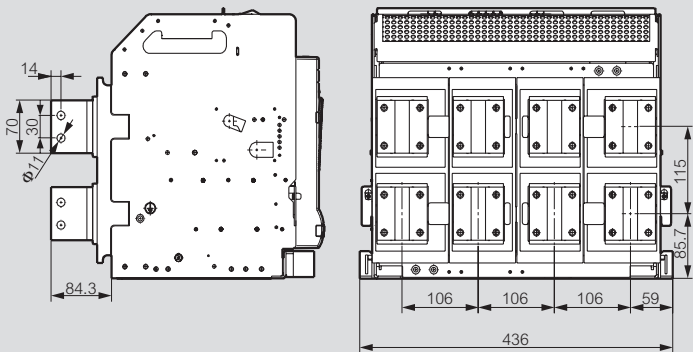


4 Poles

Horizontal terminals



Vertical terminals

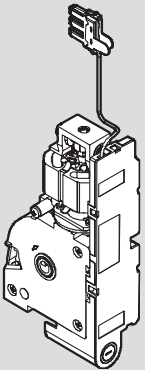
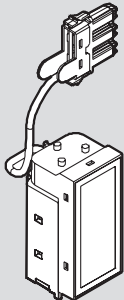
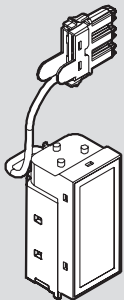
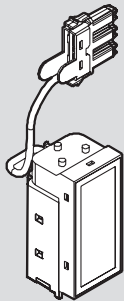


DMX-SP 2500

air circuit breakers accessories

Technical features

Features of the main electrical accessories

Motor operator	
	Cat.Nos 0281 20, 0281 21, 0281 22, 0281 23, 0281 24 Rated operating voltage Vn (Va.c.): 24V-48V-110V ÷ 130V-220V ÷ 250V-415V ÷ 440V (Vd.c.): 24V-48V-110V ÷ 130V-220V ÷ 250V Voltage range (% Vn): 85 ÷ 110 Maximum power consumption (W/VA): 240/240 Maximum peak current for about 80ms: 2 ÷ 3xIn Charging time (s): 5 Operating frequency (no/min): 2
Closing Coil	
	Cat.Nos 0281 26, 0281 27, 0281 28, 0281 29, 0281 30 Rated operating voltage Vn (Va.c.): 24V-48V-110V ÷ 130V-220V ÷ 250V-415V ÷ 440V (Vd.c.): 24V-48V-110V ÷ 130V-220V ÷ 250V Voltage range (% Vn): 85 ÷ 110 Pick-up consumption (W/VA): 400/400 Pick-up time (ms): 300 Hold consumption (W/VA): 50/50 Closing time (ms): 50 Isolation voltage (kV): 2,5
Shunt trip	
	Cat.Nos 0281 31, 0281 32, 0281 33, 0281 34, 0281 35 Rated operating voltage Vn (Va.c.): 24V-48V-110V ÷ 130V-220V ÷ 250V - 415V ÷ 440V (Vd.c.): 24V-48V-110V ÷ 130V-220V ÷ 250V Voltage range (% Vn): 70 ÷ 110 Pick-up consumption (W/VA): 400/400 Pick-up time (ms): 300 Hold consumption (W/VA): 50/50 Opening time (ms): 50 Isolation voltage (kV): 2,5
Undervoltage release	
	Cat.Nos 0281 36, 0281 37, 0281 38, 0281 39, 0281 40 Rated operating voltage Vn (Va.c.): 24V-48V-110V ÷ 130V-220V ÷ 250V - 415V ÷ 440V (Vd.c.): 24V-48V-110V ÷ 130V-220V ÷ 250V Voltage range (% Vn): 85 ÷ 110 Pick-up consumption (W/VA): 400/400 Pick-up time (ms): 300 Hold consumption (W/VA): 50/50 Opening time (ms): 60 Isolation voltage (kV): 2,5

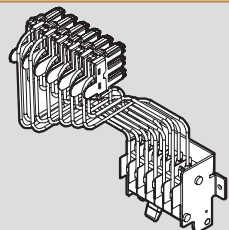
DMX-SP 2500

air circuit breakers accessories

Technical features

Features of the main electrical accessories

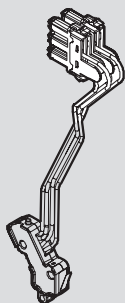
Additional signaling contact (6 NO/NC)



Cat.No 0281 75

Rated operating voltage Vn (Va.c.): 125V-250V 16A
(Vd.c.): 125V 0,6A - 250V 0,3A

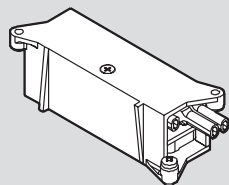
Contact ready to close with charged springs



Cat.No 0281 74

Rated operating voltage Vn (Va.c.): 125V 3A - 250V 0,5A
(Vd.c.): 30V 3A

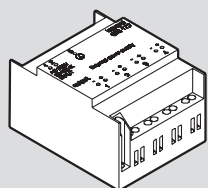
Inserted/test/draw-out contacts



Cat.No 0281 73

Rated operating voltage Vn (Va.c.): 125V-250V 16A
(Vd.c.): 125V 0,6A - 250V 0,3A

External auxiliary supply



Cat.No 0281 72

Input supply : 50-60 Hz; AC230V

Input power supply (VA) $\geq$ 25

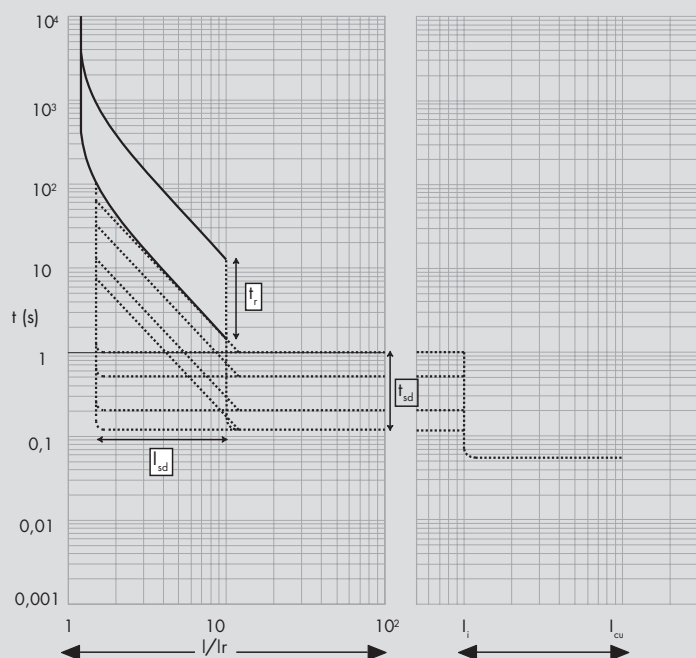
Operating temperature: (-10) - (+55) °C

DMX-SP 2500

tripping characteristics

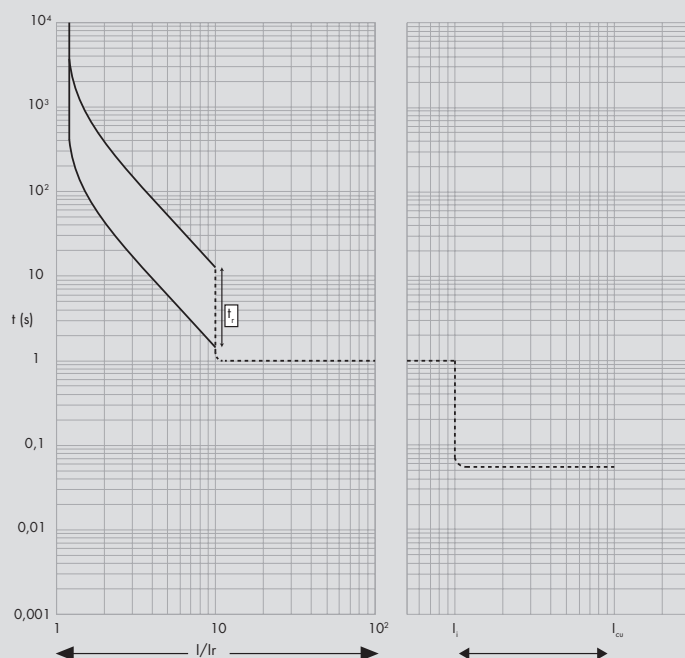
Technical annexes

Time-current tripping characteristic

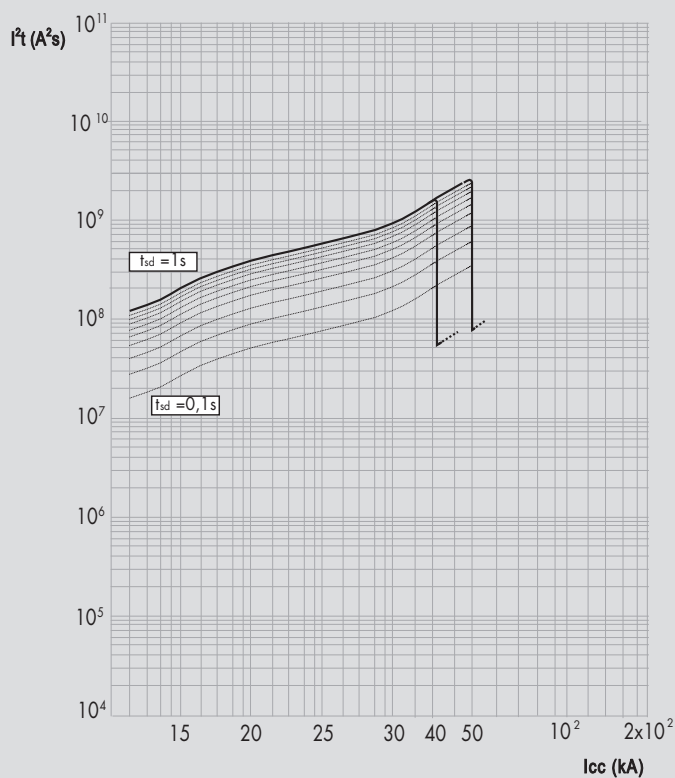


If short-circuit current is higher than low value or I_i is set at low position, tripping time is equal to 30ms.

Time-current tripping characteristic item 0281 64



Pass-through specific energy characteristic



I_{cc} = estimated short circuit symmetrical current (RMS value)
 I^2t (A²s) = pass-through specific energy

DMX-SP 2500

selectivity tables

■ Limits of selectivity (average values kA at 415 V~)

Down-stream Protection	Icu [kA]	In [A]	Upstream ACB Protection							
			DMX-SP 2500							
			50							
			630	800	1000	1250	1600	2000	2500	
DRX 125	10	15	T	T	T	T	T	T	T	
		20	T	T	T	T	T	T	T	
		25	T	T	T	T	T	T	T	
		30	T	T	T	T	T	T	T	
		40	T	T	T	T	T	T	T	
		50	T	T	T	T	T	T	T	
		60	T	T	T	T	T	T	T	
		63	T	T	T	T	T	T	T	
		75	T	T	T	T	T	T	T	
		100	T	T	T	T	T	T	T	
		125	T	T	T	T	T	T	T	
DPX ³ 160 DPX ³ 160+RCD	16	16	T	T	T	T	T	T	T	
		25	T	T	T	T	T	T	T	
		40	T	T	T	T	T	T	T	
		63	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	T	T	
		160	T	T	T	T	T	T	T	
DPX ³ 160 DPX ³ 160+RCD	25	16	T	T	T	T	T	T	T	
		25	T	T	T	T	T	T	T	
		40	T	T	T	T	T	T	T	
		63	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	T	T	
		160	T	T	T	T	T	T	T	
DPX ³ 160 DPX ³ 160+RCD	36	16	T	T	T	T	T	T	T	
		25	T	T	T	T	T	T	T	
		40	T	T	T	T	T	T	T	
		63	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	T	T	
		160	T	T	T	T	T	T	T	
DPX ³ 160 MT DPX ³ 160+RCD	50	16	T	T	T	T	T	T	T	
		25	T	T	T	T	T	T	T	
		40	T	T	T	T	T	T	T	
		63	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	T	T	
		160	T	T	T	T	T	T	T	
DPX ³ 160 MS DPX ³ 160 MS+RCD	16	16	T	T	T	T	T	T	T	
		25	T	T	T	T	T	T	T	
		50	T	T	T	T	T	T	T	
		63	T	T	T	T	T	T	T	
DPX ³ 160 MS DPX ³ 160 MS+RCD	25	16	T	T	T	T	T	T	T	
		25	T	T	T	T	T	T	T	
		50	T	T	T	T	T	T	T	
		63	T	T	T	T	T	T	T	
DPX ³ 250 DPX ³ 250+RCD	25	100	T	T	T	T	T	T	T	
		160	T	T	T	T	T	T	T	
		200	T	T	T	T	T	T	T	
		250	T	T	T	T	T	T	T	

Down-stream Protection	Icu [kA]	In [A]	Upstream ACB Protection							
			DMX-SP 2500							
			50							
			630	800	1000	1250	1600	2000	2500	
DPX ³ 250 DPX ³ 250+RCD	36	100	T	T	T	T	T	T	T	
		160	T	T	T	T	T	T	T	
		200	T	T	T	T	T	T	T	
		250	T	T	T	T	T	T	T	
DPX ³ 250 DPX ³ 250+RCD	50	100	T	T	T	T	T	T	T	
		160	T	T	T	T	T	T	T	
		200	T	T	T	T	T	T	T	
		250	T	T	T	T	T	T	T	
DPX ³ 250 DPX ³ 250+RCD	70	100	50	50	50	50	50	50	50	
		160	50	50	50	50	50	50	50	
		200	50	50	50	50	50	50	50	
		250	50	50	50	50	50	50	50	
DPX ³ 250 DPX ³ 250+RCD elec : S2 - Sg HIGH	25	40	T	T	T	T	T	T	T	
		100	T	T	T	T	T	T	T	
		160	T	T	T	T	T	T	T	
		250	T	T	T	T	T	T	T	
DPX ³ 250 DPX ³ 250+RCD elec : S2 - Sg HIGH	36	40	T	T	T	T	T	T	T	
		100	T	T	T	T	T	T	T	
		160	T	T	T	T	T	T	T	
		250	T	T	T	T	T	T	T	
DPX ³ 250 DPX ³ 250+RCD elec : S2 - Sg HIGH	50	40	T	T	T	T	T	T	T	
		100	T	T	T	T	T	T	T	
		160	T	T	T	T	T	T	T	
		250	T	T	T	T	T	T	T	
DPX ³ 250 DPX ³ 250+RCD elec : S2 - Sg HIGH	70	40	50	50	50	50	50	50	50	
		100	50	50	50	50	50	50	50	
		160	50	50	50	50	50	50	50	
		250	50	50	50	50	50	50	50	
DPX ³ 250 DPX ³ 250+RCD elec : S2 - Sg LOW	25	40	T	T	T	T	T	T	T	
		100	T	T	T	T	T	T	T	
		160	T	T	T	T	T	T	T	
		250	T	T	T	T	T	T	T	
DPX ³ 250 DPX ³ 250+RCD elec : S2 - Sg LOW	36	40	T	T	T	T	T	T	T	
		100	T	T	T	T	T	T	T	
		160	T	T	T	T	T	T	T	
		250	T	T	T	T	T	T	T	
DPX ³ 250 DPX ³ 250+RCD elec : S2 - Sg LOW	50	40	50	50	50	50	50	50	50	
		100	50	50	50	50	50	50	50	
		160	50	50	50	50	50	50	50	
		250	50	50	50	50	50	50	50	
DPX ³ 250 DPX ³ 250+RCD elec : S2 - Sg LOW	70	40	50	50	50	50	50	50	50	
		100	50	50	50	50	50	50	50	
		160	50	50	50	50	50	50	50	
		250	50	50	50	50	50	50	50	
DPX ³ 250 MO DPX ³ 250 MS+RCD	36	100	T	T	T	T	T	T	T	
		160	T	T	T	T	T	T	T	
		200	T	T	T	T	T	T	T	
		250	T	T	T	T	T	T	T	
DPX ³ 250 MO DPX ³ 250 MS+RCD	70	100	50	50	50	50	50	50	50	
		160	50	50	50	50	50	50	50	
		200	50	50	50	50	50	50	50	
		250	50	50	50	50	50	50	50	

T = total selectivity up to breaking capacity of down-stream circuit breaker, according IEC-EN 60947-2, at 415V. Down-stream circuit breaker has magnetic threshold less then up-stream breaker. With 1P+N circuit breaker selectivity refers to 230 Vac. Not guarantee selectivity with MGT up-stream and Electronic sel. LOW down-stream. Legend: Nd (not declared)----> tests not performed

DMX-SP 2500

selectivity tables

■ Limits of selectivity (average values kA at 415 V~) (Contd.)

Down-stream Protection	Icu [kA]	In [A]	Upstream ACB Protection						
			DMX-SP 2500						
			50						
			630	800	1000	1250	1600	2000	2500
DPX ³ 630	36	250	T	T	T	T	T	T	T
		320	T	T	T	T	T	T	T
		400	T	T	T	T	T	T	T
		500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
DPX ³ 630	50	250	T	T	T	T	T	T	T
		320	T	T	T	T	T	T	T
		400	T	T	T	T	T	T	T
		500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
DPX ³ 630	70	250	50	50	50	50	50	50	50
		320	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
DPX ³ 630	100	250	50	50	50	50	50	50	50
		320	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
DPX ³ 630 elec : S2 - Sg HIGH	36	250	T	T	T	T	T	T	T
		320	T	T	T	T	T	T	T
		400	T	T	T	T	T	T	T
		500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
DPX ³ 630 elec : S2 - Sg HIGH	50	250	T	T	T	T	T	T	T
		320	T	T	T	T	T	T	T
		400	T	T	T	T	T	T	T
		500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
DPX ³ 630 elec : S2 - Sg HIGH	70	250	50	50	50	50	50	50	50
		320	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
DPX ³ 630 elec : S2 - Sg HIGH	100	250	50	50	50	50	50	50	50
		320	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
DPX ³ 630 elec : S1-S2-Sg LOW	36	250	T	T	T	T	T	T	T
		320	T	T	T	T	T	T	T
		400	T	T	T	T	T	T	T
		500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
DPX ³ 630 elec : S1-S2-Sg LOW	50	250	T	T	T	T	T	T	T
		320	T	T	T	T	T	T	T
		400	T	T	T	T	T	T	T
		500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
DPX ³ 630 elec : S1-S2-Sg LOW	70	250	50	50	50	50	50	50	50
		320	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
Down-stream Protection	Icu [kA]	In [A]	Upstream ACB Protection						
			DMX-SP 2500						
			50						
			630	800	1000	1250	1600	2000	2500
DPX ³ 630 elec : S1-S2-Sg LOW	100	250	50	50	50	50	50	50	50
		320	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
DPX ³ 630 MO	36	400	T	T	T	T	T	T	T
		500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
		400	50	50	50	50	50	50	50
		500	50	50	50	50	50	50	50
DPX ³ 630 MO	70	400	50	50	50	50	50	50	50
		500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		500	50	50	50	50	50	50	50
DPX ³ 630 MO elec : S2 - Sg HIGH	36	320	T	T	T	T	T	T	T
		400	T	T	T	T	T	T	T
		320	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		320	T	T	T	T	T	T	T
DPX ³ 630 MO elec : S2 - Sg HIGH	70	320	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		320	T	T	T	T	T	T	T
		400	T	T	T	T	T	T	T
		320	50	50	50	50	50	50	50
DPX ³ 630 MO elec : S1-S2-Sg LOW	36	320	T	T	T	T	T	T	T
		400	T	T	T	T	T	T	T
		320	50	50	50	50	50	50	50
		400	50	50	50	50	50	50	50
		320	50	50	50	50	50	50	50
DPX ³ 1600	36	500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
		800	-	T	T	T	T	T	T
		1000	-	-	T	T	T	T	T
		1250	-	-	-	T	T	T	T
DPX ³ 1600	50	500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
		800	-	T	T	T	T	T	T
		1000	-	-	T	T	T	T	T
		1250	-	-	-	T	T	T	T
DPX ³ 1600	70	500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50
DPX ³ 1600	100	500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50
DPX ³ 1600 elec : S2 - Sg HIGH	36	500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
		800	-	T	T	T	T	T	T
		1000	-	-	T	T	T	T	T
		1250	-	-	-	T	T	T	T
DPX ³ 1600 elec : S2 - Sg HIGH	50	500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
		800	-	T	T	T	T	T	T
		1000	-	-	T	T	T	T	T
		1250	-	-	-	T	T	T	T
DPX ³ 1600 elec : S2 - Sg HIGH	70	500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50
DPX ³ 1600 elec : S2 - Sg HIGH	100	500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50

T = total selectivity up to breaking capacity of down-stream circuit breaker, according IEC-EN 60947-2, at 415V. Down-stream circuit breaker has magnetic threshold less then up-stream breaker. With 1P+N circuit breaker selectivity refers to 230 Vac. Not guarantee selectivity with MGT up-stream and Electronic sel. LOW down-stream. Legend: Nd (not declared)----> tests not performed

DMX-SP 2500

selectivity tables

■ Limits of selectivity (average values kA at 415 V~) (Contd.)

Down-stream Protection	Icu [kA]	In [A]	Upstream ACB Protection						
			DMX-SP 2500						
			50						
			630	800	1000	1250	1600	2000	2500
DPX ³ 1600 elec : S2 - Sg HIGH	70	500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50
		1600	-	-	-	-	50	50	50
DPX ³ 1600 elec : S2 - Sg HIGH	100	500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50
DPX ³ 1600 elec : S1-S2-Sg LOW	36	500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
		800	-	T	T	T	T	T	T
		1000	-	-	T	T	T	T	T
		1250	-	-	-	T	T	T	T
		1600	-	-	-	-	T	T	T
DPX ³ 1600 elec : S1-S2-Sg LOW	50	500	T	T	T	T	T	T	T
		630	T	T	T	T	T	T	T
		800	-	T	T	T	T	T	T
		1000	-	-	T	T	T	T	T
		1250	-	-	-	T	T	T	T
		1600	-	-	-	-	T	T	T
DPX ³ 1600 elec : S1-S2-Sg LOW	70	500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50
		1600	-	-	-	-	50	50	50
DPX ³ 1600 elec : S1-S2-Sg LOW	100	500	50	50	50	50	50	50	50
		630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50
		1600	-	-	-	-	50	50	50
DMX-SP 2500	50	630	T	T	T	T	T	T	T
		800	-	T	T	T	T	T	T
		1000	-	-	T	T	T	T	T
		1250	-	-	-	T	T	T	T
		1600	-	-	-	-	T	T	T
		2000	-	-	-	-	-	T	T
		2500	-	-	-	-	-	-	T
		630	T	T	T	T	T	T	T
DMX ³ - N 2500	50	800	-	T	T	T	T	T	T
		1000	-	-	T	T	T	T	T
		1250	-	-	-	T	T	T	T
		1600	-	-	-	-	T	T	T
		2000	-	-	-	-	-	T	T
		2500	-	-	-	-	-	-	T
DMX ³ - H 2500	65	630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50
		1600	-	-	-	-	50	50	50
		2000	-	-	-	-	-	50	50
		2500	-	-	-	-	-	-	50
		630	50	50	50	50	50	50	50
DMX ³ - L 2500	100	800	-	50	50	50	50	50	50
		1000	-	-	50	50	50	50	50
		1250	-	-	-	50	50	50	50
		1600	-	-	-	-	50	50	50
		2000	-	-	-	-	-	50	50
		2500	-	-	-	-	-	-	50
		630	50	50	50	50	50	50	50
		800	-	50	50	50	50	50	50
DMX ³ - N 4000	50	3200	-	-	-	-	-	-	-
		4000	-	-	-	-	-	-	-
	65	3200	-	-	-	-	-	-	-
		4000	-	-	-	-	-	-	-
	100	3200	-	-	-	-	-	-	-
		4000	-	-	-	-	-	-	-
	100	4000	-	-	-	-	-	-	-
		5000	-	-	-	-	-	-	-
DMX ³ - L 4000	65	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
DMX ³ - H 4000	65	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
DMX ³ - L 4000	65	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
DMX ³ - N 2500	50	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	65	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
DMX ³ - L 2500	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-
	100	6300	-	-	-	-	-	-	-
		6300	-	-	-	-	-	-	-

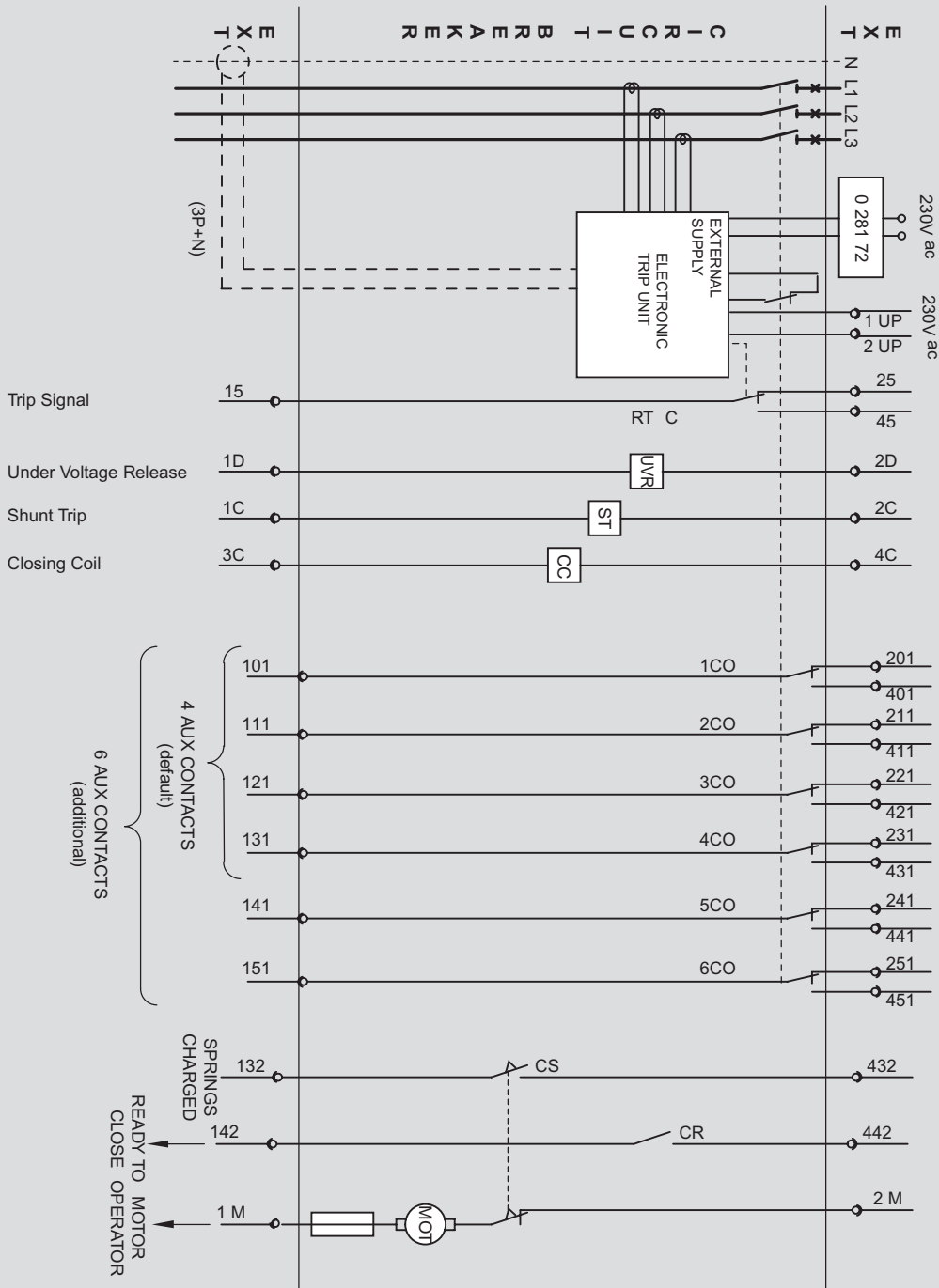
T = total selectivity up to breaking capacity of down-stream circuit breaker, according IEC-EN 60947-2, at 415V. Down-stream circuit breaker has magnetic threshold less then up-stream breaker. With 1P+N circuit breaker selectivity refers to 230 Vac. Not guarantee selectivity with MGT up-stream and Electronic sel. LOW down-stream. Legend: Nd (not declared)----> tests not performed

DMX-SP 2500

air circuit breakers wiring diagram

■ Electrical diagram

3 Poles

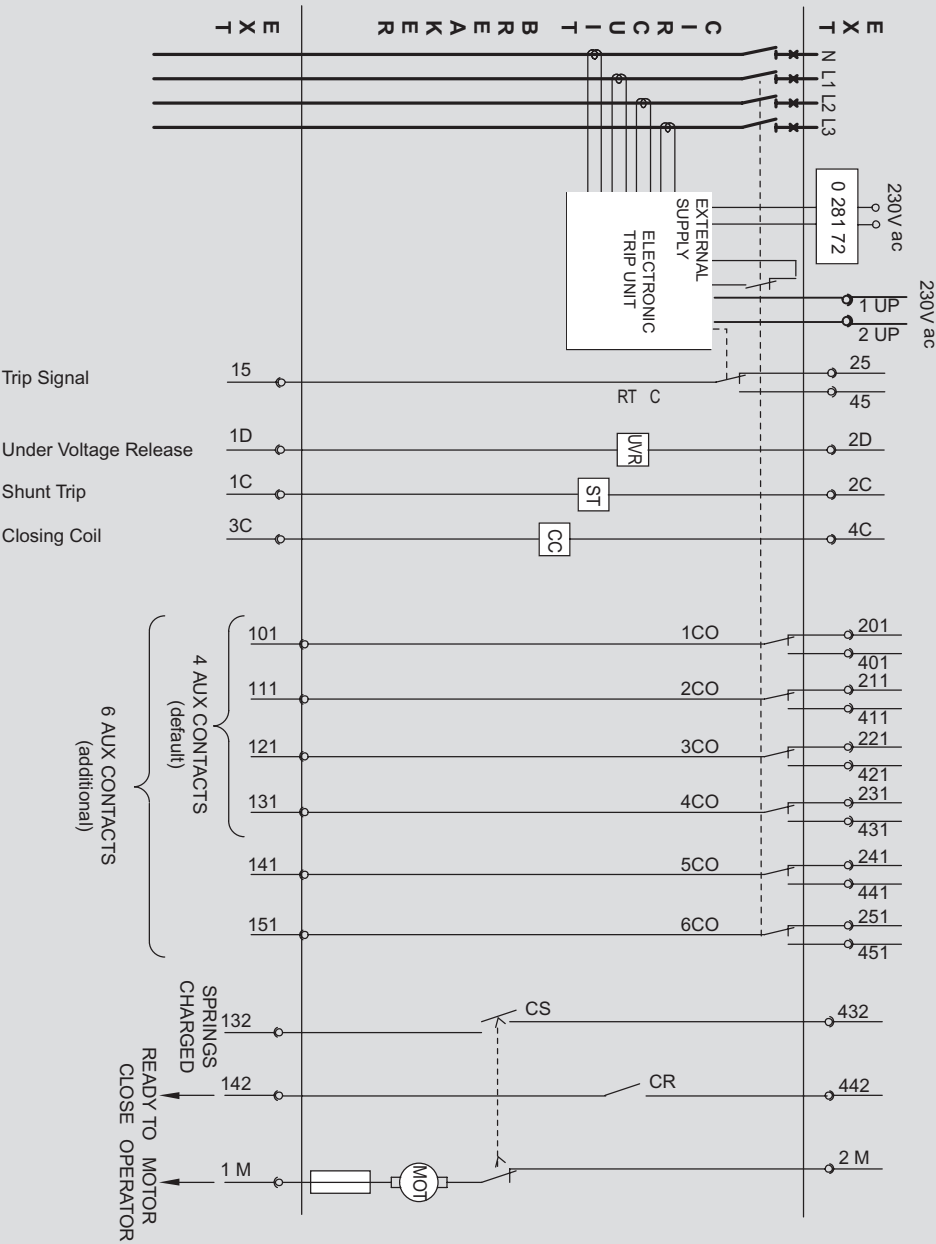


DMX-SP 2500

air circuit breakers wiring diagram

Electrical diagram

4 Poles

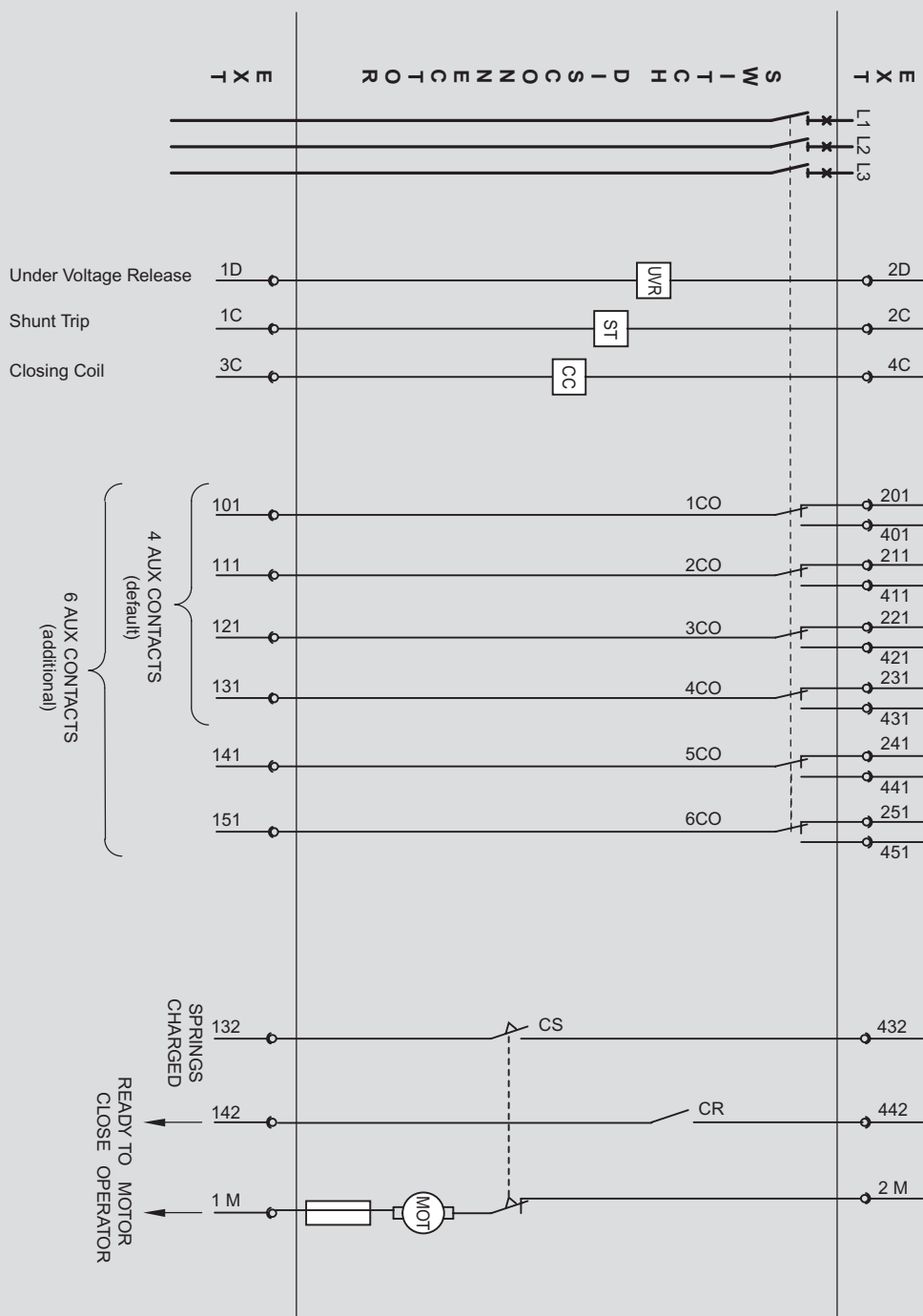


DMX-SP 2500

air circuit breakers wiring diagram

Electrical diagram

3 Poles

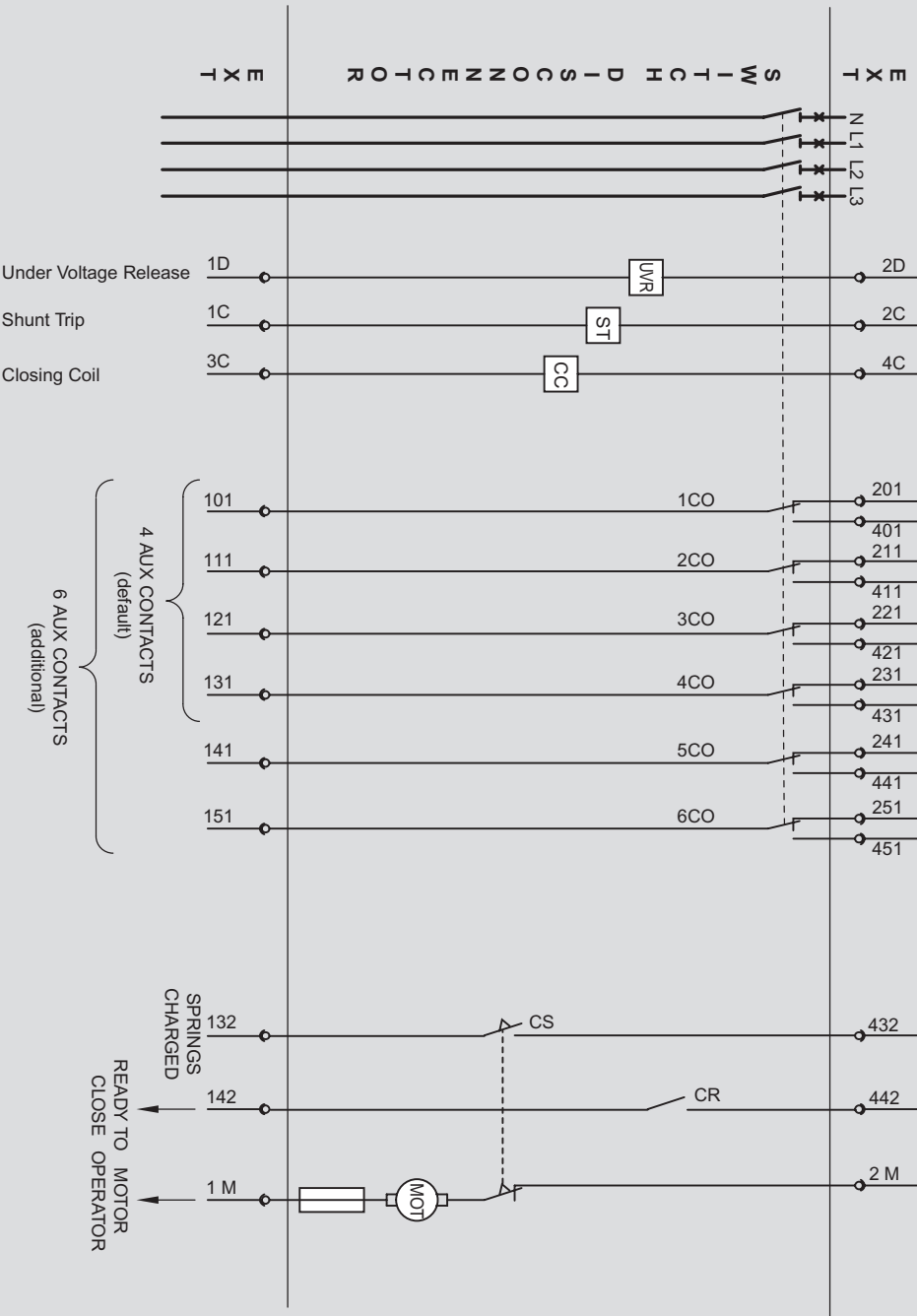


DMX-SP 2500

air circuit breakers wiring diagram

Electrical diagram

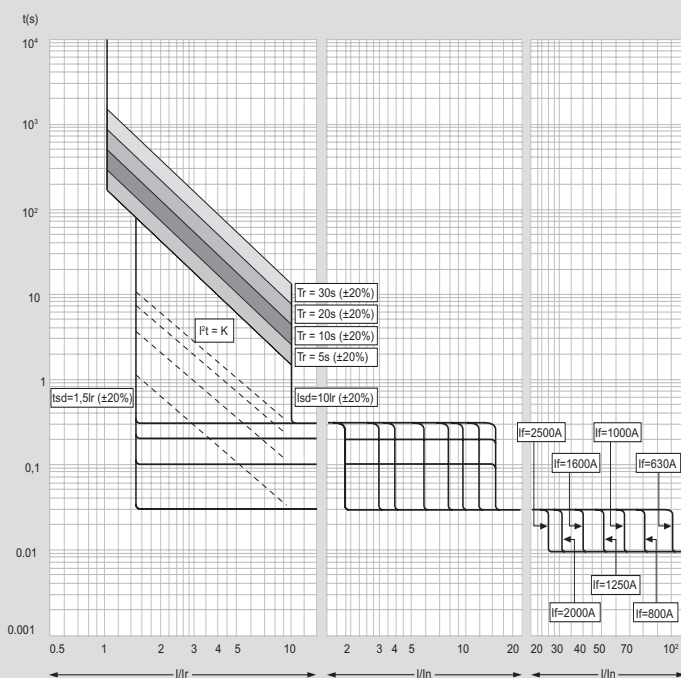
4 Poles



DMX-SP 2500

characteristics & setting

Tripping Curves for MP2 protection units

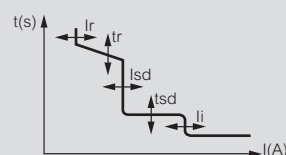


Ir = long time setting current
Tr = long time delay
Im = short time setting current
Tm = short time delay
If = Instantaneous intervention current

Setting of microprocessor protection units

MP2 LSI

Ir, tr, Isd, tsd, li adjustment on front Panel



Long Time Delay protection against Overloads

Ir from 0.4 to 1 x In (6 + 6 steps) on two sectors (0.4 - 0.9, by steps of 0.1 and 0.0-0.1, by steps of 0.02)

Long Delay protection operation time

tr - at 6 x Ir (4+4 Steps)
tr-5, 10, 20, 30 s (MEM ON)
30, 20, 10, 5s (MEM OFF)

Short Time Delay protection against short-circuits

Isd from 1.5 to 10 x Ir (9 Steps)
Isd - 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 x Ir

Short Time Delay protection Operation time

tsd from 0.1 to 1 s (4+4 steps)
tsd = 0.1, 0.2, 0.5, 1s (t=const),
tsd = 1, 0.5, 0.2, 0.1 (I²t=const)

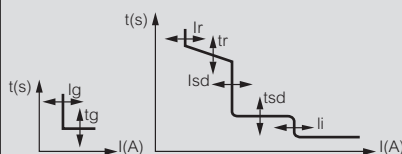
Instantaneous Protection against very high short circuits

li from 2 to 15 x in or low (9 steps)
li - 2, 3, 4, 6, 8, 10, 10, 15 x In or low

Netural Protection : IN - I, II, III, IV x Ir (0-50-100-100%)

Protection unit LSIg

Ir, tr, li, Ig, tg, Im, tm, adjustment on front panel



Long time delay protection against overloads

Ir from 0.4 to 1 x In (6 +6 steps) on two selectors (0.4 - 0.9, by steps of 0.1 and 0.0 - 0.1, by steps of 0.02)

Long delay protection operation time

tr - at 6 x Ir (4 + 4 steps) tr = 5, 10, 20, 30s (MEM ON)
30, 20, 10, 5s (MEM OFF)

Short time delay protection against short circuits

Isd from 1.5 to 10 x Ir (9 steps) Isd = 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 x Ir

Short time delay protection operation time

tsd from 0.1 to 1s (4 + 4 steps)
tsd = 0.1, 0.2, 0.5, 1s (t=constant),
tsd = 1, 0.5, 0.2, 0.1 (I²t=const)

Instantaneous protection against very high short circuits

li from 2 to 15 x In or low (9 steps) li = 2,3,4,6,8,10,12, 5 x In or low

Earth fault current

Ig from 0.2 to 1 x In (9 steps)

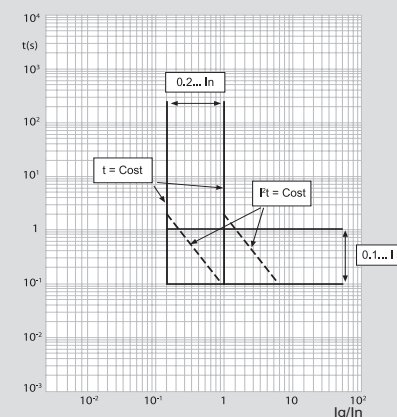
Time delay on earth fault tripping

tg from 0.1 to 1 x In (4 steps)

Neutral protection

IN = I, II, III, IV x Ir (0-50-100-100 %)

Ground fault tripping curve



Let through energy characteristics

