

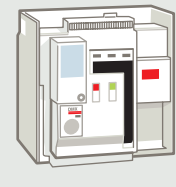
Air circuit breakers: DMX and DMX-E from 800 to 4 000 A

DMX and DMX-E from 2500 to 4000 A provide protection or control at the head of low voltage distribution installations up to 4 000 A

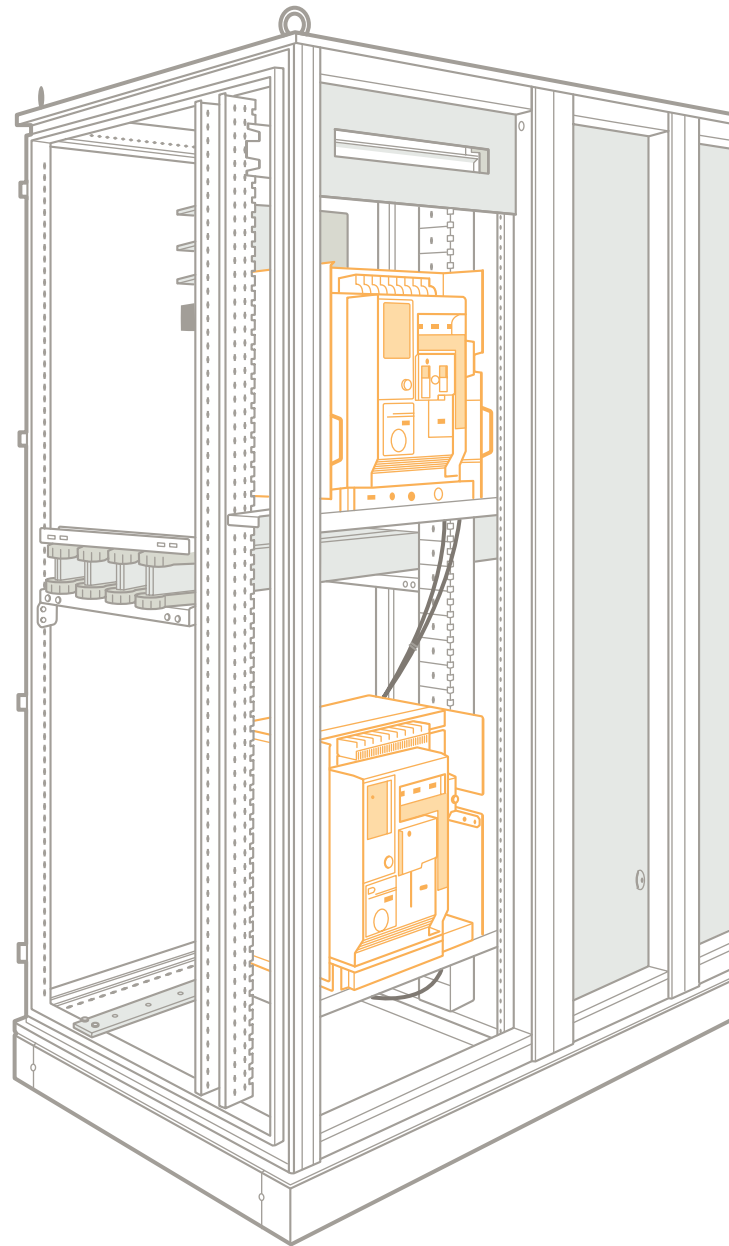
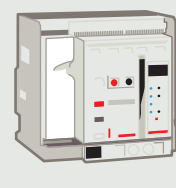
The range

THE PRODUCTS

- DMX
 - 2 SIZES OF UNIT
 - DMX 2500
 - DMX-L 2500, DMX 4000 and DMX-L 4000
 - 3 BREAKING CAPACITIES 50, 65 and 100 kA
 - 2 VERSIONS
 - Fixed: DMX with rear terminals fixed in a horizontal position
 - Draw-out: Supplied with base equipped with adjustable rear terminals and upstream and downstream isolation shutters
 - INTEGRATED MP 17 PROTECTION UNIT
 - MP 18 and MP 20 versions on request



- DMX-E
 - 3 SIZES OF UNIT
 - Up to 1 600 A
 - From 2 000 to 2 500 A
 - From 3 200 to 4 000 A
 - 4 BREAKING CAPACITIES 55, 65, 80 and 100 kA
 - 2 VERSIONS
 - Fixed
 - Draw-out: supplied with a base equipped with adjustable rear terminals and independently lockable safety shutters
 - ELECTRONIC PROTECTION UNIT MP 2G SUPPLIED
 - MP 3 electronic protection unit on request



EQUIPMENT

- Control and signalling auxiliaries (trips and releases, motor-driven controls, closing coils, signalling contacts)
- Wired supply inverter up to 3 devices

Supply inverter (for DMX)

- Interlocking system using cables
- Inverters for 2 or 3 devices
 - No set positioning of the devices in the enclosures
 - The automation control unit and the motor operators controls can be used to create totally automatic inverters

Installation principle (for DMX)

- Mounting on fixing plate
 - Up to 2 DMX can be mounted per XL³ 4000 enclosure
 - Connection and identification of auxiliaries on terminal blocks on front panel
- Available in fixed or draw-out version

LEGRAND ADVANTAGES

- 1 1 device = 1 catalogue number
Devices supplied ready to use
- 2 Single installation principle for all device ratings or versions
- 3 Interchangeability of devices
- 4 Safety when carrying out work: positions can be locked, and isolation shutters
- 5 Highly accurate settings

@ See the on-line catalogue: instructions, technical data sheets, etc.

🎓 Come and be trained at Innoval see p. 409

DMX™

air circuit breakers from 800 to 4 000 A



267 13



268 13



268 17



Dimensions (p. 39)
Electrical characteristics (p. 42)

Air circuit breakers equipped with:
- MP 17 electronic protection unit
- rear terminals
- 8 auxiliary contacts (5 NO + 3 NC)

Pack	Cat.Nos		Fixed version
	3P	4P	
			DMX 2500 Breaking capacity Icu 50 kA (415 V~) In
1	267 00	267 10	800 A
1	267 01	267 11	1 000 A
1	267 02	267 12	1 250 A
1	267 03	267 13	1 600 A
1	267 04	267 14	2 000 A
1	267 05	267 15	2 500 A
			DMX-H 2500 Breaking capacity Icu 65 kA (415 V~) In
1	267 20	267 30	800 A
1	267 21	267 31	1 000 A
1	267 22	267 32	1 250 A
1	267 23	267 33	1 600 A
1	267 24	267 34	2 000 A
1	267 25	267 35	2 500 A
			DMX-L 2500 Breaking capacity Icu 100 kA (415 V~) In
1	267 50	267 60	800 A
1	267 51	267 61	1 000 A
1	267 52	267 62	1 250 A
1	267 53	267 63	1 600 A
1	267 54	267 64	2 000 A
1	267 55	267 65	2 500 A
			DMX 4000 Breaking capacity Icu 50 kA (415 V~) In
1	267 06	267 16	3 200 A
1	267 07	267 17	4 000 A
			DMX-H 4000 Breaking capacity Icu 65 kA (415 V~) In
1	267 26	267 36	3 200 A
1	267 27	267 37	4 000 A
			DMX-L 4000 Breaking capacity Icu 100 kA (415 V~) In
1	267 56	267 66	3 200 A
1	267 57	267 67	4 000 A

Pack	Cat.Nos		Draw-out version
	3P	4P	
			Supplied with a base equipped with adjustable rear terminals and independently lockable safety shutters
			DMX 2500 Breaking capacity Icu 50 kA (415 V~) In
1	268 00	268 10	800 A
1	268 01	268 11	1 000 A
1	268 02	268 12	1 250 A
1	268 03	268 13	1 600 A
1	268 04	268 14	2 000 A
1	268 05	268 15	2 500 A
			DMX-H 2500 Breaking capacity Icu 65 kA (415 V~) In
1	268 20	268 30	800 A
1	268 21	268 31	1 000 A
1	268 22	268 32	1 250 A
1	268 23	268 33	1 600 A
1	268 24	268 34	2 000 A
1	268 25	268 35	2 500 A
			DMX-L 2500 Breaking capacity Icu 100 kA (415 V~) In
1	268 50	268 60	800 A
1	268 51	268 61	1 000 A
1	268 52	268 62	1 250 A
1	268 53	268 63	1 600 A
1	268 54	268 64	2 000 A
1	268 55	268 65	2 500 A
			DMX 4000 Breaking capacity Icu 50 kA (415 V~) In
1	268 06	268 16	3 200 A
1	268 07	268 17	4 000 A
			DMX-H 4000 Breaking capacity Icu 65 kA (415 V~) In
1	268 26	268 36	3 200 A
1	268 27	268 37	4 000 A
			DMX-L 4000 Breaking capacity Icu 100 kA (415 V~) In
1	268 56	268 66	3 200 A
1	268 57	268 67	4 000 A

DMX™ 2 500 - 4 000

electronic protection units



MP 17 delivered on standard on DMX



MP 18 only delivered on request



MP 20 only delivered on request



Curves (p. 41)

DMX 2500 and DMX 4000 circuit breakers take protection units that enable very precise adjustments of the protection conditions, while maintaining total discrimination with downstream devices

Pack	Cat.Nos	Electronic protection unit MP 17
		As standard DMX 2500 and DMX 4000 are equipped with electronic protection unit MP 17 with I_r , I_m , T_m , I_i adjustments on the front
1	269 28	Test equipment For checking the operation of the protection unit and tripping and opening conditions of the DMX poles Test unit
1	269 27	External power supply For powering the protection unit when the circuit breaker is open or not powered Fixed unsecured external power supply

Pack	Cat.Nos	Electronic protection units on request
		On request, DMX's can be equipped with an electronic protection unit including an LCD adjustable by keyboard and an external memory unit on draw-out versions
		MP 18 Enables I_r , I_m , T_r , T_m , I_i adjustments on the front Functions: - current display - fault adjustment and log
		MP 20 Enables I_r , I_m , T_r , T_m , I_i adjustments on the front Functions: - current display - fault adjustment and log Optional functions can be added: - load check and load-shedding - trip warning - centralised communication and check function - auxiliary power supply



For electronic protection units MP 18, MP 20 mounted on DMX, please consult us

DMX™-I

trip free switches from 1 250 to 4 000 A



267 83



Dimensions (p. 39)
Technical characteristics (p. 42)

Trip free switches equipped with:
- rear terminals
- 8 auxiliary contacts (5 NO + 3 NC)

Pack	Cat.Nos	Fixed version
		DMX-I 2 500
		In
1	267 72	1 250 A
1	267 73	1 600 A
1	267 74	2 000 A
1	267 75	2 500 A
		DMX-I 4 000
		In
1	267 76	3 200 A
1	267 77	4 000 A

Pack	Cat.Nos	Draw-out version
		Supplied with a base equipped with adjustable rear terminals and independently lockable upstream / downstream isolation shutters
		DMX-I 2 500
		In
1	268 72	1 250 A
1	268 73	1 600 A
1	268 74	2 000 A
1	268 75	2 500 A
		DMX-I 4 000
		In
1	268 76	3 200 A
1	268 77	4 000 A

DMX™

auxiliaries and accessories



269 74



269 60



267 15
DMX 2500, mounted on base Cat.No 269 03



261 93



Technical characteristics (p. 43)

Pack	Cat.Nos	Control and signalling auxiliaries
		Shunt trip
		When energised the circuit breaker will be tripped
1	269 64	24 V $\overline{\text{---}}$
1	269 65	48 V $\overline{\text{---}}$
1	269 66	110/130 V $\sim$ or $\overline{\text{---}}$
1	269 67	220/250 V $\sim$ or $\overline{\text{---}}$
1	269 68	380/440 V $\sim$ or $\overline{\text{---}}$
		Undervoltage releases
		When the coil is de-energised, the circuit breaker will be tripped
1	269 73	24 V $\overline{\text{---}}$
1	269 69	48 V $\overline{\text{---}}$
1	269 70	110/130 V $\overline{\text{---}}$
1	269 71	220/250 V $\sim$
1	269 72	380/440 V $\sim$
		Delayed undervoltage releases
		Improves immunity to nuisance tripping
1	269 74	48 V $\overline{\text{---}}$
1	269 75	110/130 V $\overline{\text{---}}$
1	269 76	220/250 V $\sim$ or $\overline{\text{---}}$
1	269 77	380/440 V $\sim$ or $\overline{\text{---}}$
		Motor operators
		To motorise a DMX, it is necessary to attach, to the motor operators, a release coil (undervoltage or trip on energising) and a closing coil
		The motor operator is delivered with a spring charge contact
1	269 54	24/30 V $\overline{\text{---}}$
1	269 55	48 V $\overline{\text{---}}$
1	269 56	110/130 V $\sim$
1	269 57	110/130 V $\overline{\text{---}}$
1	269 58	220/250 V $\sim$
		Closing coils
		Enables remote closing of the circuit breaker if the closing spring is charged
1	269 60	24/30 V $\overline{\text{---}}$
1	269 61	48 V $\overline{\text{---}}$
1	269 62	110/130 V $\sim$ and $\overline{\text{---}}$
1	269 63	110/130 V $\sim$ and $\overline{\text{---}}$
		Signalling contacts
1	269 52	1 NO fault signal contact
1	269 50	6 NO + 6 NC position contact (in/test/out) for draw-out version

		Locking
		Key locking in "open" position
1	269 31	Mounting of the lock on the ACBs
1	269 32	Ronis lock (lock and key included)
		Profalux lock (lock and key not included)
		Key locking in the draw-out position
		Mounting of the lock on the base
1	269 41	Ronis lock (lock and key included)
1	269 42	Profalux lock (lock and key not included)
		Door locking
		Prevents opening of the door with the circuit breaker closed
1	269 88	Left-hand side mounting (hinges on the right)
1	269 87	Right-hand side mounting (hinges on the left)

Pack	Cat.Nos	Equipment for supply invertors
		Devices placed above one another or installed side by side
		Interlocking units
		For installation on the side of ACBs or trip free switches DMX/DMX-I
1	269 95	For DMX/DMX-I 2500 fixed version
1	269 97	For DMX/DMX-I 4000 and DMX-L fixed version
1	269 91	For DMX/DMX-I 2500 draw-out version
1	269 93	For DMX/DMX-I 4000 and DMX-L draw-out version
		Cable for interlocking assemblies
1	269 99	Set of cable for 2 devices Length: 2 m

		Equipment for conversion of a fixed device into draw-out device
		Base, set of cluster contacts and mounting tool required
		Bases for draw-out device
1	269 00	For DMX/DMX-I 2500
1	269 01	For DMX/DMX-I 4000 and DMX-L $\leq$ 3200 A
1	269 02	For DMX/DMX-I and DMX-L = 4000 A
		Set of cluster contacts
1	269 78	For mounting on rear terminals
1	269 79	For DMX/DMX-I $\leq$ 1600 A
1	269 80	For DMX/DMX-I = 2000 to 2500 A
1	269 81	For DMX/DMX-I and DMX-L $\leq$ 3200 A
		For DMX/DMX-I and DMX-L = 4000 A
		Cluster mounting tool
1	269 08	For mounting the cluster on the rear terminals of the device

		Automation control unit
		For setting the conditions for supply inversion, generator on/off, status acquisition for DMX and DPX circuit-breakers, open/closed
		Power supply: 230 V $\sim$ and 12-24-48 V $\overline{\text{---}}$
		Connection by plug-in terminals
1	261 93	Standard unit
1	261 94	Communicating unit, enabling data transmission (RS 485 port)

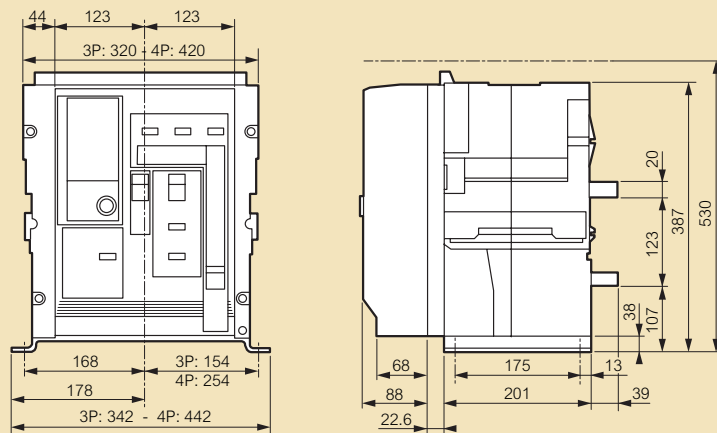
		Accessories
		Rating mis-insertion device
		Prevents the insertion of a draw-out circuit breaker in an incompatible base
1	269 86	Base/circuit breaker insertion lock
		Rating mis-insertion device
		Counts total number of operation cycles of the device
1	269 89	Operations counter

Red catalogue numbers: New products

DMX™ 2500, DMX™-I 2500

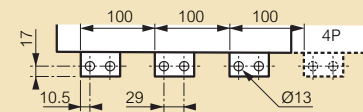
■ Dimensions

Fixed version

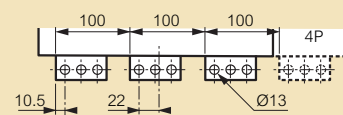


Rear terminals fixed version

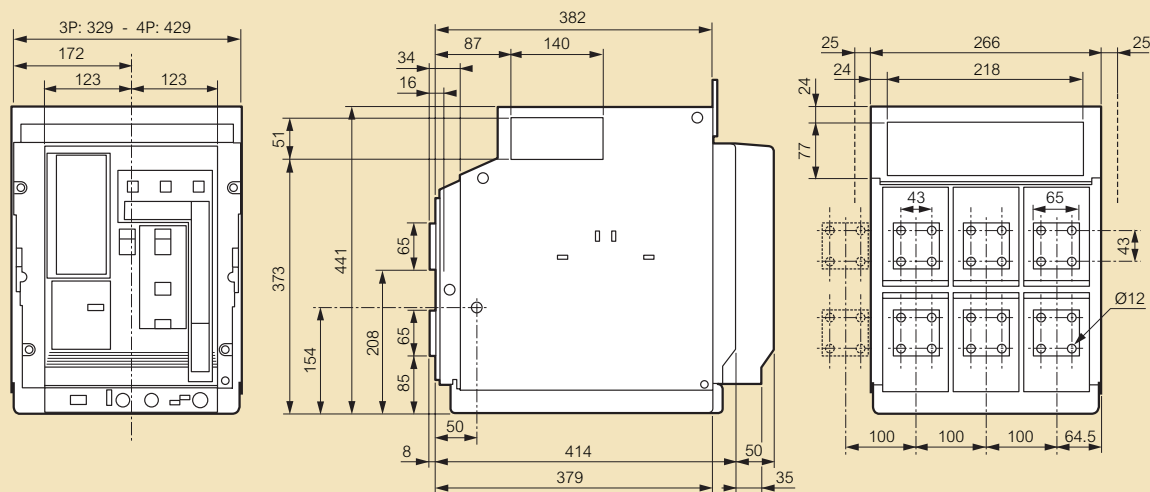
800 - 1600 A



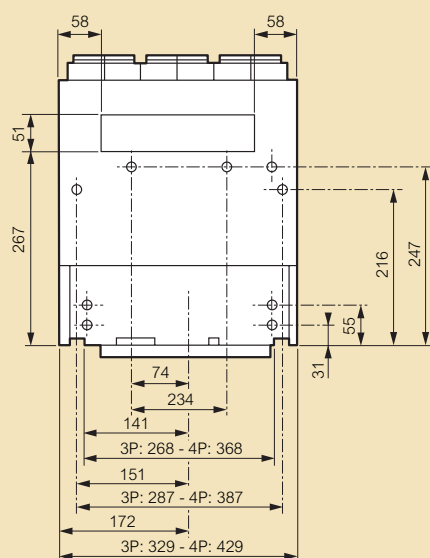
2000 - 2500 A



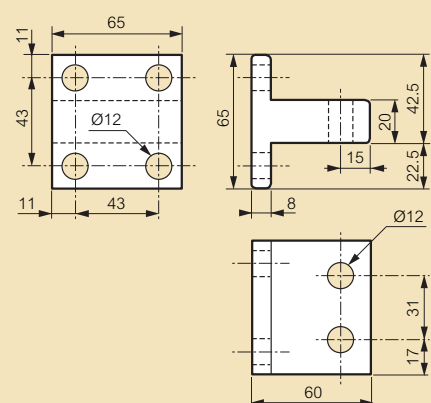
Draw-out version



Base for draw-out version

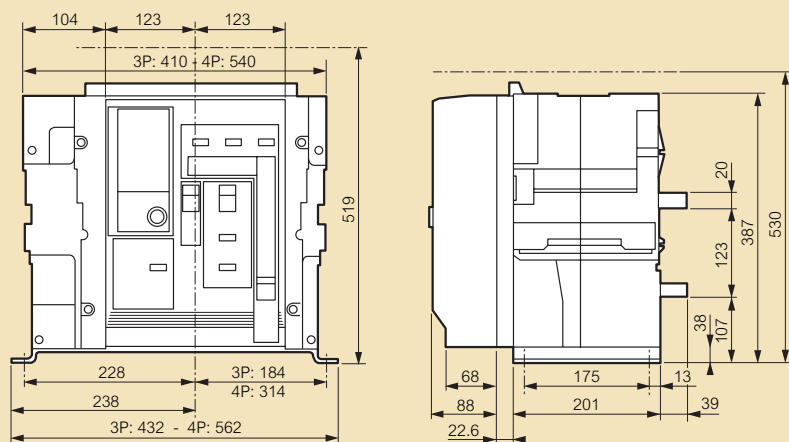


Adjustable rear terminals draw-out version

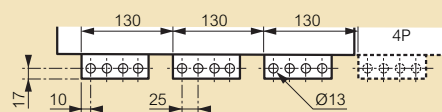


■ Dimensions

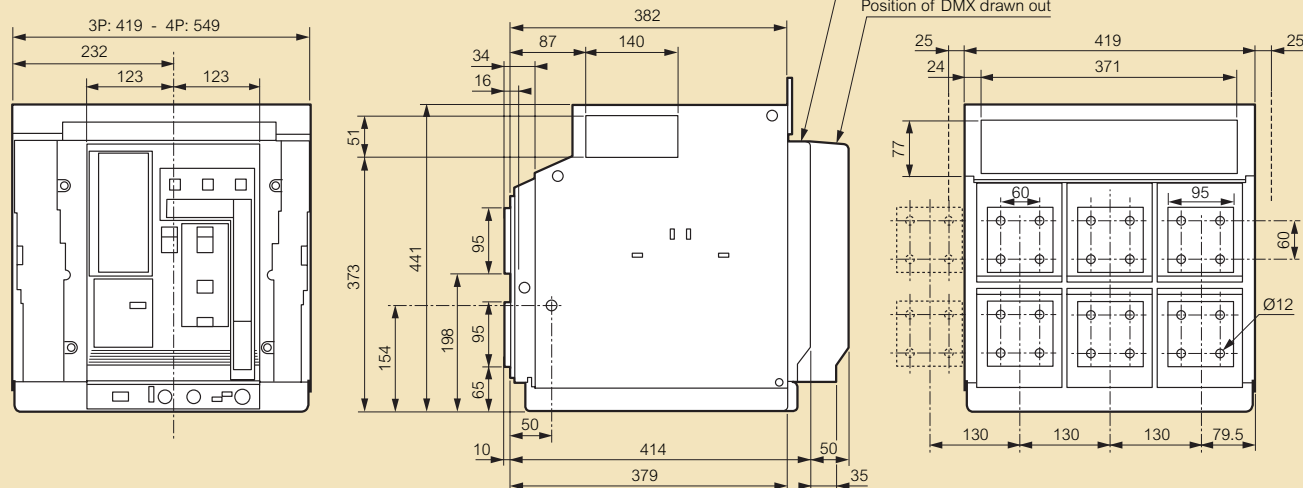
Fixed version



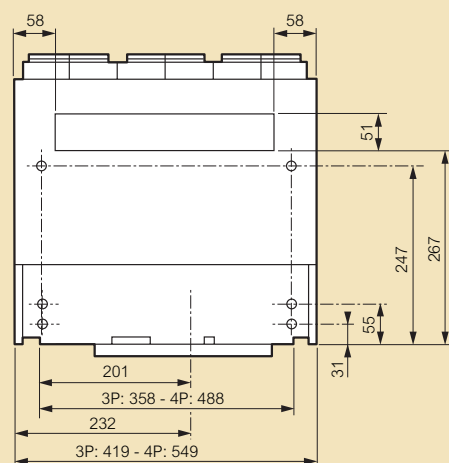
Rear terminal fixed version



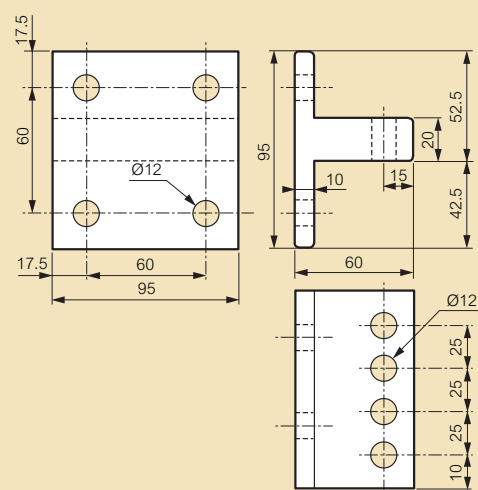
Draw-out version



Base for draw-out version



Adjustable rear terminals draw-out version⁽¹⁾



(1) except DMX 4000 A fixed vertical position

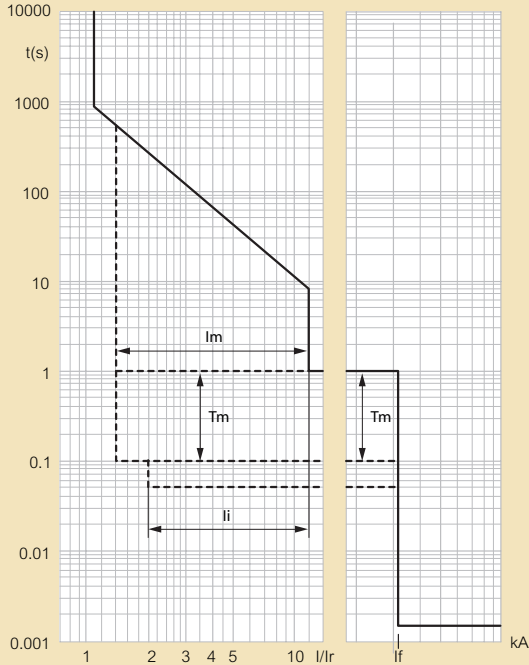
DMX™ electronic protection units

DMX™ and DPX™ automation control units

MP 17

I_r , I_m , T_m adjustment on front panel

Tripping curves



Long delay protection against overloads

$I_r = 0.4 - 0.5 - 0.6 - 0.7 - 0.8 - 0.9 - 1 \times I_n$ (7 steps)
Neutral protection 50 % of phases values

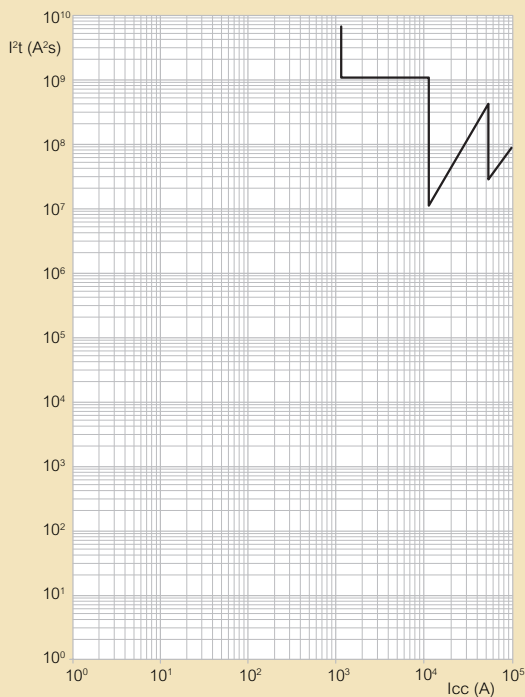
Short delay protection against short-circuits

$I_m = 1.5 - 2 - 3 - 4 - 6 - 8 - 10 - 12 \times I_r$ (8 steps)
 $T_m = 0.1 - 0.2 - 0.4 - 0.5 - 0.6 - 0.8 - 1.0$ s (7 steps)

Instantaneous protection

$I_i = \text{OFF}, 2, 3, 4, 6, 8, 10 \times I_n$
 I_f (if $I_i = \text{OFF}$) = 50 kA for DMX
80 kA for DMX-L

Thermal stress limitation curve



Functions

Standard unit Cat.No 261 93

- Used to adjust and manage the source inversion operating conditions (DMX and DPX):
- Remote control (opening/closing) of MCBs
 - Microprocessor output from unit (positive safety)
 - Programmable I/O
 - Voltage reading: 3-phase
phase-neutral
phase-phase
 - Control (on/off) of generator set
 - Indication of the state of the MCBs (open/closed/tripped)
 - Source inversion blocked in the event of:
 - Tripping of 1 or 2 devices
 - If a draw-out MCB is not inserted in its base, as the open/close command of the unit is inoperative

Communicating unit Cat.No 261 94

- All the standard functions, plus:
- Maximum voltage reading
 - Reading of phase rotation direction
 - Frequency reading
 - Communication: data transmission via the RS 485 port (Modbus protocol)

Technical characteristics

Power supply: 187 to 264 V~
9 to 65 V~

Frequency: 45 to 65 Hz

Un: 80 to 690 V~

Control relay (1 and 4): 1 NO - 12 A - 250 V~
1 NO - 5 A - 250 V~
1 NO/NC - 5 A - 250 V~

Cable cross-section: 0.2 to 2.5 mm²

Dimensions (width x height x depth): 144 x 144 x 90 mm

Protection: IP 20 at the rear

IP 41 at the front

IP 54 at the front with protective screen

Operating temperature: - 20 °C to + 60 °C

	Operating ranges
Main/secondary minimum voltage range	70-98 % Un
Main/secondary voltage absence range	60-85 % Un
Main/secondary minimum voltage delay	0.1-900 s
Main/secondary voltage absence delay	0.1-30 s
Generator operating delay	0-900 s
Main to secondary switching delay	0.1-90 s
Main line presence delay	1-3600 s
Secondary to main switching delay	0.1-90 s
Generator set stopping delay	1-3600 s

DMX™, DMX™-L, DMX™-I

■ Technical characteristics

DMX / DMX-L 2 500/4 000

According to IEC 60947-2		DMX 2 500 / DMX-L 2 500								DMX 4 000 / DMX-L 4 000					
		800		1 250		1 600		2 000		2 500		3 200		4 000	
		DMX	DMX-L	DMX	DMX-L	DMX	DMX-L	DMX	DMX-L	DMX	DMX-L	DMX	DMX-L	DMX	DMX-L
Number of pole		3P - 4P		3P - 4P		3P - 4P		3P - 4P		3P - 4P		3P - 4P		3P - 4P	
Rating In (A)		800		1 250		1 600		2 000		2 500		3 200		4 000	
Neutral protection		50 %		50 %		50 %		50 %		50 %		50 %		50 %	
Rated insulation voltage Ui (V)		1 000		1 000		1 000		1 000		1 000		1 000		1 000	
Rated impulse withstand voltage Uimp (kV)		8		8		8		8		8		8		8	
Rated operational voltage (50/60Hz) Ue (V)		690		690		690		690		690		690		690	
Ultimate breaking capacity Icu (kA)	230 V~	50	100	50	100	50	100	50	100	50	100	50	100	50	100
	415 V~	50	100	50	100	50	100	50	100	50	100	50	100	50	100
	500 V~	50	80	50	80	50	80	50	80	50	80	50	80	50	80
	600 V~	50	65	50	65	50	65	50	65	50	65	50	65	50	65
	690 V~	40	60	40	60	40	60	40	60	40	60	40	60	40	60
Service breaking capacity (% Icu)		100	80	100	80	100	80	100	80	100	80	100	80	100	80
Short-circuit making capacity Icm (kA)	415 V~	143	220	143	176	143	176	143	176	143	176	143	176	143	176
	500 V~	105	176	105	176	105	176	105	176	105	176	105	176	105	176
	600 V~	105	176	105	143	105	143	105	143	105	143	105	143	105	143
	690 V~	84	105	84	105	84	105	84	105	84	105	84	105	84	105
Short time withstand current Icw (kA)	t = 1s	50	80	50	80	50	80	50	80	50	80	50	80	50	80
Category of use		B		B		B		B		B		B		B	
Suitable for isolation		YES		YES		YES		YES		YES		YES		YES	
Electronic protection units	MP 17			Standard		Standard		Standard		Standard		Standard		Standard	
	MP 18/MP 20			Option		Option		Option		Option		Option		Option	
Endurance (cycles)	mechanical	20 000	20 000	20 000	20 000	20 000	20 000	20 000	20 000	20 000	20 000	20 000	20 000	20 000	20 000
	electrical	5 000	3 000	5 000	3 000	5 000	3 000	5 000	3 000	5 000	3 000	5 000	3 000	5 000	3 000

DMX-I 2 500/4 000

According to 60947-3		DMX-I 2 500				DMX-I 4 000	
		1 250	1 600	2 000	2 500	3 200	4 000
Number of pole		3P - 4P		3P - 4P		3P - 4P	
Rating In (A)		1 250		1 600		2 000	
Neutral adjustment		50 %		50 %		50 %	
Rated insulation voltage Ui (V)		1 000		1 000		1 000	
Rated impulse withstand voltage Uimp (kV)		8		8		8	
Rated operational voltage Ue (V~)	50/60 Hz	690		690		690	
	direct	250		250		250	
Short-circuit making capacity Icm (kA)	415 V~	143		143		143	
	500 V~	105		105		105	
	600 V~	105		105		105	
	690 V~	84		84		84	
Short time withstand current Icw (kA)	t = 1 s	50		50		50	
Category of use		B		B		B	
Suitable for isolation		YES		YES		YES	
Endurance (cycles)	mechanical	20 000		20 000		20 000	
	electrical	5 000		5 000		5 000	

■ Selection in three-phase network 400 V~

DMX/DPX

Upstream		DMX 2 500					DMX 4 000	
		800	1 250	1 600	2 000	2 500	3 200	4 000
Downstream								
DPX 125 ⁽¹⁾		T	T	T	T	T	T	T
DPX 160 ⁽¹⁾		T	T	T	T	T	T	T
DPX 250 ER ⁽¹⁾		T	T	T	T	T	T	T
DPX 250 ⁽¹⁾ TM and elec.		T	T	T	T	T	T	T
DPX 630 ⁽¹⁾ TM and elec.		T	T	T	T	T	T	T
DPX 1 600 ⁽¹⁾ thermal magnetic	630 A	T	T	T	T	T	T	T
	800 A		T	T	T	T	T	T
	1 000 A		T	T	T	T	T	T
	1 250 A			T	T	T	T	T
DPX 1 600 ⁽¹⁾ electronic	630 A		T	T	T	T	T	T
	800 A		T	T	T	T	T	T
	1 250 A			T	T	T	T	T
	1 600 A				T	T	T	T

DMX/DMX

Upstream		DMX/DMX-L						
		800	1 250	1 600	2 000	2 500	3 200	4 000
Downstream								
DMX/DMX-L	800			T	T	T	T	T
	1 250				T	T	T	T
	1 600					T	T	T
	2 000						T	T
	2 500							T
	3 200							
	4 000							

DMX/DX

	DMX/DMX-L						
	800	1 250	1 600	2 000	2 500	3 200	4 000
DX	T	T	T	T	T	T	T
DX-H	T	T	T	T	T	T	T
DX-D	T	T	T	T	T	T	T
DX-L	T	T	T	T	T	T	T

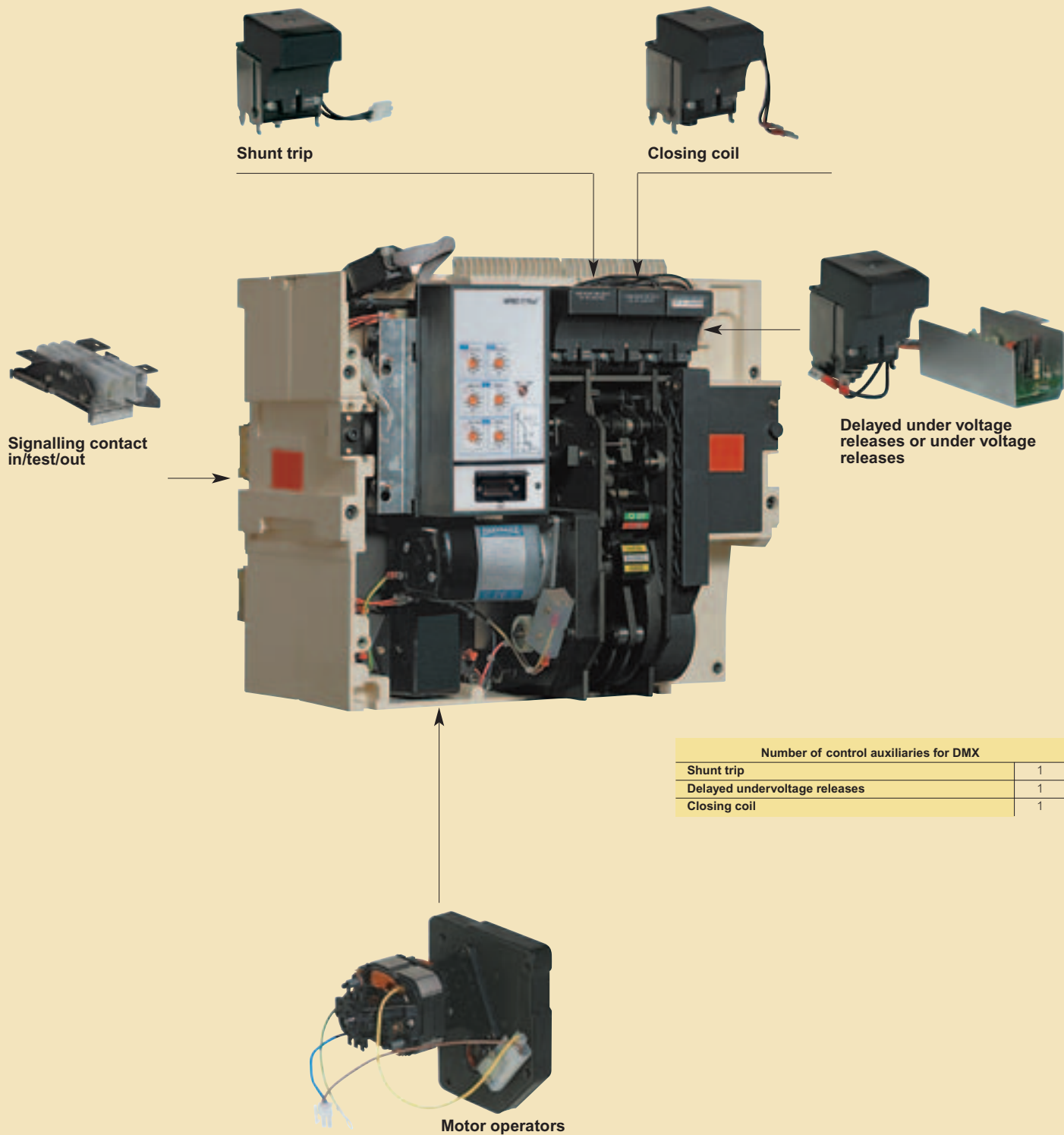
(1) All breaking capacity

T: total selection, up to downstream circuit breaker breaking capacity according to IEC 60947-2

DMX™ 2500 - DMX™ 4000

■ Common auxiliaries from 800 to 4000 A

Removing front plate gives direct access to all control and signalling accessories
Front connection: 32 available connecting points



Number of control auxiliaries for DMX	
Shunt trip	1
Delayed undervoltage releases	1
Closing coil	1

DMX™-E

air circuit breakers from 800 to 4 000 A



6261 29



6260 75



6261 17 with MP 3 electronic protection unit



Electrical characteristics (p. 48)
Dimensions (p. 51 to 53)

Air circuit breakers equipped with:
- MP 2G electronic protection unit
- rear terminals
- 8 auxiliary contacts (4 NO + 4 NC)

Pack	Cat.Nos		Fixed version
	3P	4P	
			DMX-E 55 Breaking capacity Icu 55 kA (415 V~) In
1	6260 02	6260 12	800 A
1	6260 03	6260 13	1 000 A
1	6260 04	6260 14	1 250 A
1	6260 05	6260 15	1 600 A
			DMX-E 65 Breaking capacity Icu 65 kA (415 V~) In
1	6260 42	6260 52	800 A
1	6260 43	6260 53	1 000 A
1	6260 44	6260 54	1 250 A
1	6260 45	6260 55	1 600 A
1	6260 46	6260 56	2 000 A
1	6260 47	6260 57	2 500 A
			DMX-E 80 Breaking capacity Icu 80 kA (415 V~) In
1	6260 86	6260 96	2 000 A
1	6260 87	6260 97	2 500 A
1	6260 88	6260 98	3 200 A
1	6260 89	6260 99	4 000 A
			DMX-E 100 Breaking capacity Icu 100 kA (415 V~) In
1	6261 26	6261 36	2 000 A
1	6261 27	6261 37	2 500 A
1	6261 28	6261 38	3 200 A
1	6261 29	6261 39	4 000 A

Pack	Cat.Nos		Draw-out version
	3P	4P	
			Supplied with a base equipped with adjustable rear terminals and independently lockable safety shutters
			DMX-E 55 Breaking capacity Icu 55 kA (415 V~) In
1	6260 22	6260 32	800 A
1	6260 23	6260 33	1 000 A
1	6260 24	6260 34	1 250 A
1	6260 25	6260 35	1 600 A
			DMX-E 65 Breaking capacity Icu 65 kA (415 V~) In
1	6260 62	6260 72	800 A
1	6260 63	6260 73	1 000 A
1	6260 64	6260 74	1 250 A
1	6260 65	6260 75	1 600 A
1	6260 66	6260 76	2 000 A
1	6260 67	6260 77	2 500 A
			DMX-E 80 Breaking capacity Icu 80 kA (415 V~) In
1	6261 06	6261 16	2 000 A
1	6261 07	6261 17	2 500 A
1	6261 08	6261 18	3 200 A
1	6261 09	6261 19	4 000 A
			DMX-E 100 Breaking capacity Icu 100 kA (415 V~) In
1	6261 46	6261 56	2 000 A ⁽¹⁾
1	6261 47	6261 57	2 500 A ⁽¹⁾
1	6261 48	6261 58	3 200 A
1	6261 49	6261 59	4 000 A

(1) Not equipped with adjustable rear terminals

DMX™-E electronic protection unit



6263 79



MP 3 available
on request



Technical characteristics (p. 49)

The circuit breakers are delivered on standard with their protection unit MP 2G

Pack	Cat.Nos	MP 2G electronic protection unit
1	6263 79	On standard, the DMX-E are equipped with an MP 2G electronic protection unit, with rotary selectors for adjustment of the operating parameters (p. 49) Adjustment of neutral protection: 0, 50 or 100 % Other versions on request Test box Use to verify the correct functioning of the protection unit and the opening conditions

MP 3 electronic protection unit

On request, the DMX-E can be equipped with an MP 3 electronic protection unit provided with a liquid crystal display high resolution, additional protections, functions of measurement and communication

DMX™-EI trip-free switches



6262 05



Electrical characteristics (p. 48)
Dimensions (p. 51 to 53)

Non automatic air circuit breakers with rear terminals and 8 auxiliary contacts (4 NO + 4 NF)
Suitable for isolation

Pack	Cat.Nos		Fixed version
	3P	4P	In
1	6262 01	6262 11	630 A
1	6262 02	6262 12	800 A
1	6262 03	6262 13	1000 A
1	6262 04	6262 14	1250 A
1	6262 05	6262 15	1600 A
1	6262 06	6262 16	2000 A
1	6262 07	6262 17	2500 A
1	6262 08	6262 18	3200 A
1	6262 09	6262 19	4000 A

Draw-out version

Supplied with a base equipped with adjustable rear terminals and independently lockable safety shutters

Pack	3P	4P	In
1	6262 21	6262 31	630 A
1	6262 22	6262 32	800 A
1	6262 23	6262 33	1000 A
1	6262 24	6262 34	1250 A
1	6262 25	6262 35	1600 A
1	6262 26	6262 36	2000 A ⁽¹⁾
1	6262 27	6262 37	2500 A ⁽¹⁾
1	6262 28	6262 38	3200 A
1	6262 29	6262 39	4000 A

(1) Not equipped with adjustable rear terminals

DMX™-E

control and signalling auxiliaries and locking options



6262 64



6262 95



6263 04

Pack	Cat.Nos	Control and signalling auxiliaries
		Shunt trips
		Trip the breaker from a remote location when energized
1	6262 60	24/30 V _~
1	6262 62	110 V _~ - 50/60 Hz - 110 V _~
1	6262 64	220/240 V _~ - 50/60 Hz - 220/250 V _~
1	6262 65	415 V _~ - 50 Hz - 380/415 V _~ - 60 Hz
		Undervoltage releases
		Trip the breaker from a remote location when its voltage drops
1	6262 70	24/30 V _~
1	6262 71	48 V _~
1	6262 72	110 V _~ - 50 Hz
1	6262 73	110 V _~ - 60 Hz
1	6262 74	110 V _~
1	6262 77	240 V _~ - 50 Hz
1	6262 78	240 V _~ - 60 Hz
1	6262 79	380/415 V _~ - 50 Hz
1	6262 80	380/415 V _~ - 60 Hz
		Delayed undervoltage releases
		Trip the breaker from a remote location after a time delay when its voltage drops
1	6262 81	48 V _~
1	6262 82	110 V _~ - 50 Hz
1	6262 83	110 V _~ - 60 Hz
1	6262 84	110 V _~
1	6262 87	240 V _~ - 50 Hz
1	6262 88	240 V _~ - 60 Hz
1	6262 89	380/415 V _~ - 50 Hz
1	6262 90	380/415 V _~ - 60 Hz
		Motor operators
		To motorise a DMX-E, it is necessary to attach to the motor operator, a release coil (undervoltage or shunt trip) and a closing coil
1	6262 91	24/30 V _~
1	6262 92	48/60 V _~
1	6262 93	110 V _~ - 50/60 Hz - 110/125 V _~
1	6262 95	240 V _~ - 50/60 Hz - 250 V _~
1	6262 96	380/415 V _~ - 50/60 Hz - 400 V _~

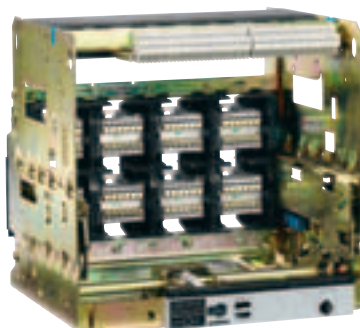
Pack	Cat.Nos	Control and signalling auxiliaries (continued)
		Closing coils
		Enables remote closing of the circuit breaker if the closing spring is charged
1	6263 00	24/30 V _~
1	6263 01	48/60 V _~
1	6263 02	110 V _~ - 50/60 Hz - 110 V _~
1	6263 04	240 V _~ - 50 Hz - 220/240 V _~ - 60 Hz - 220/250 V _~
1	6263 05	415 V _~ - 50 Hz - 380/415 V _~ - 60 Hz
		Signalling contacts
1	6263 11	Position signal contact
1	6263 17	Fault signal contact
1	6263 18	True "ready to close" contact
1	6263 15	Shunt release action signal contact
1	6263 16	Undervoltage release action signal contact
		Locking options
		Key locking in "open" position
		For lock (not supplied)
1	6263 40	Ronis
1	6263 41	Profalux
1	6263 42	Castell
1	6263 43	Kirk
		Key locking in "drawn-out" position
		1 or 2 locks for one DMX-E for lock (not supplied)
1	6263 45	Ronis
1	6263 46	Profalux
1	6263 47	Castell
1	6263 48	Kirk
		Door locking
1	6263 22	Prevents opening of the door with the circuit breaker closed For left or right hand side mounting door Door locking



For other voltage, please consult us

DMX™-E

equipment and accessories



6263 87

Pack	Cat.Nos
1	6263 80
1	6263 81
1	6263 82
1	6263 83

Equipment for supply invertors

The mechanical interlock is set up using cables and can interlock 2 or 3 devices, which may be different type in a vertical or horizontal configuration. The interlock unit are mounted on the right-hand side of the device (see p. 50). Supplied complete with cable set.

- 1 standard power supply + 1 standby power supply
- 3 power supplies
- 2 standard power supplies + 1 standby power supply
- 2 power supplies + 1 coupler

Conversion of a fixed device into a draw-out device

Converting a fixed device requires a base and a set of rear terminals.

Bases for draw-out device

- For DMX-E 55 and DMX-E 65, $I_n \leq 1\,600\text{ A}$
- For DMX-E 65, $I_n = 2\,000$ and $2\,500\text{ A}$
- For DMX-E 80, $I_n = 2\,000$ and $2\,500\text{ A}$
- For DMX-E 80, $I_n = 3\,200$ and $4\,000\text{ A}$
- For DMX-E 100, $I_n = 2\,000$ and $2\,500\text{ A}$

Rear terminals

Rear terminals are supplied singly the number (for 3P, order 3 devices, for 4P, order 4 devices).

1	6263 30	Horizontal or vertical 400 - 1 600 A or 3 200 - 4 000 A
1	6263 31	Horizontal 2 000 - 2 500 A
1	6263 32	Vertical 2 000 - 2 500 A

Accessories

Rating mis-insertion device

Prevents the insertion of a draw-out circuit breaker in an incompatible base.

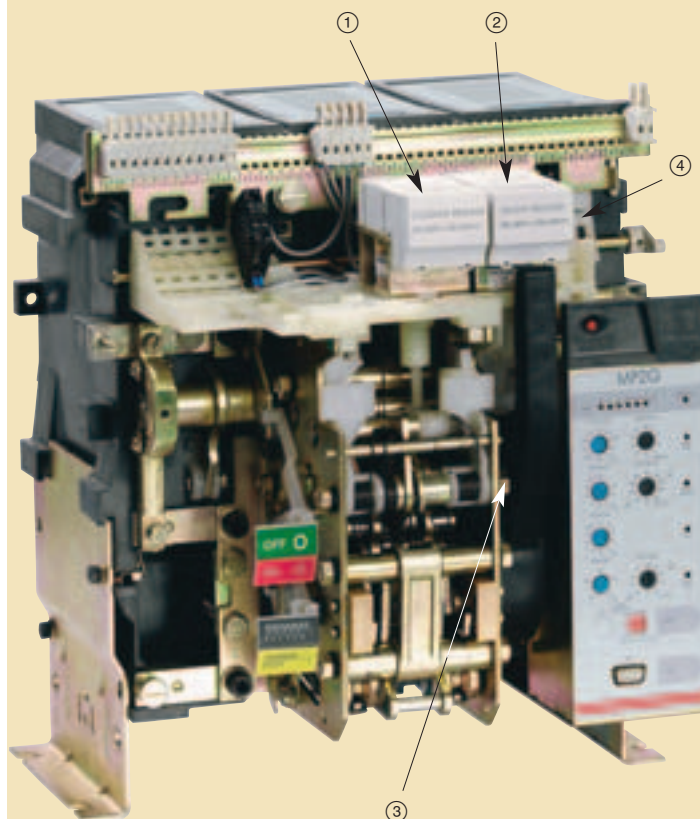
Operation counter

Counts total number of operation cycles.

DMX™-E

air circuit breakers

Common auxiliaries from 800 to 4 000 A



- ① Closing coil
- ② Shunt trip
- ③ Contact indicating readiness to close
- ④ Operation counter

Number of control auxiliaries for DMX-E

Shunt release	1
Undervoltage release or delayed undervoltage release	1
Closing coil	1

Auxiliaries only for draw-out version

- Position indicating control
- Key lock in "draw-out" position
- Rating mis-insertion

DMX™-E - DMX™-EI

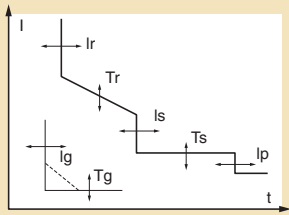
electrical characteristics



IEC EN 60947-2			DMX-E 55	DMX-E 65	DMX-E 80			DMX-E 100	DMX-EI		
			800 - 1 600	800 - 1 600	2 000 - 2 500	2 000 - 2 500	3 200 - 4 000	2 000 - 4 000	400 - 1 600	2 000 - 2 500	3 200 - 4 000
Rating (In) at 40 °C	A		800 - 1 600	800 - 1 600	2 000 - 2 500	2 000 - 2 500	3 200 - 4 000	2 000 - 4 000	400 - 1 600	2 000 - 2 500	3 200 - 4 000
Neutral protection			0 - 50 - 100 %						-		
Rated insulation voltage (Ui)	V		1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Rated impulse withstand voltage (Uimp)	kV		12	12	12	12	12	12	12	12	12
Rated operational voltage (Ue)	V		690	690	690	690	690	690	-	-	-
Ultimate breaking capacity (Icu) 50-60 Hz	400/415 V~	kA	55	65	65	80	80	100	-	-	-
	500/550 V~		50	55	55	70	65	85	-	-	-
	660/690 V~		42	50	50	55	55	75	-	-	-
Service breaking capacity (Ics) 50-60 Hz	400/415 V~		100 % Icu						-		
	500/550 V~										
	660/690 V~										
Short time withstand current (Icw)	t = 0.5 s	kA	55	65	65	80	80	100	143	176	220
	t = 1 s		50	50	55	65	65	70	121	154	187
	t = 3 s		23	26	35	35	42	50	105	121	165
Short-circuit making capacity (Icm) 50-60 Hz	400/415 V~	kA	121	143	143	176	176	220	143	176	220
	500/550 V~		105	121	121	154	154	187	121	154	187
	660/690 V~		88	105	105	121	121	165	105	121	165
Opening time	ms		40						-	-	-
Closing time	ms		60						-	-	-
Suitable for isolation			Yes						Yes		
Dimensions	Fixed version	width 3P	347	347	447	447	647	647	347	447	647
		width 4P	447	447	581	581	847	847	447	581	847
		depth	355						355		
		height	430						430		
	Draw-out version	width 3P	347	347	447	447	647	647	347	447	647
		width 4P	447	447	581	581	847	847	447	581	847
		depth	421						421		
		height	433						433		
Frame size			I	I	II	II	III	III	I	II	III

DMX™-E electronic protection unit

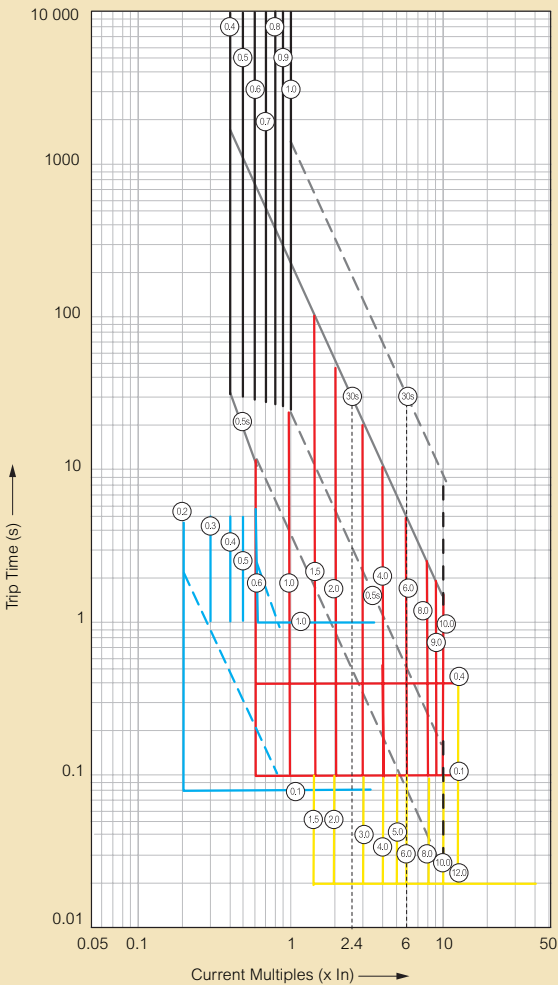
Protection unit MP 2G



Parameters		Settings
Overload	Ir	$I_r = I_n \times \dots$ 0.4 - 0.5 - 0.6 - 0.7 - 0.75 - 0.8 - 0.85 - 0.9 - 0.95 - 1
	Tr	Time delay in s at $6 \times I_r$ 0.5 - 1 - 2 - 4 - 6 - 8 - 12 - 18 - 24 - 30
	Neutral protection	$I_N = I_r \times \dots$ 0 % - 50 % - 100 %
Short-circuit	Is	$I_s = I_n \times \dots$ 0.6 - 1 - 1.5 - 2 - 3 - 4 6 - 8 - 9 - 10
	Ts	Time delay in ms at $10 \times I_n - I_{2t} \text{ Off}$ 20 - 100 - 200 - 300 - 400
		Time delay in ms at $10 \times I_n - I_{2t} \text{ On}$ 20 - 100 - 200 - 300 - 400
Instantaneous	Ip	$I_p = I_r \times \dots$ 1.5 - 2 - 3 - 4 - 5 - 6 - 8 - 10 - 12 - Max.
Ground fault	Ig	$I_g = I_r \times \dots$ 0.2 - 0.3 - 0.4 - 0.5 - 0.6
	Tg	Time delay in s - $I_{2t} \text{ Off}$ 0.1 - 0.2 - 0.3 - 0.4 - 1 - Off
		Time delay in s - $I_{2t} \text{ On}$ 0.1 - 0.2 - 0.3 - 0.4
Thermal memory		On/Off

LED indication for:

- device load percentage
- reason of tripping (overload, short-circuit, instantaneous, ground fault)
- presence of feeding voltage



selection tables ACBs/ACBs and ACBs/MCCBs

In 3-phases networks 400-415 V~

ACBs/ACBs

		DMX-E upstream				
		1600 A	2000 A	2500 A	3200 A	4000 A
DMX-E downstream	800 A	T	T	T	T	T
	1000 A		T	T	T	T
	1250 A			T	T	T
	1600 A				T	T
	2000 A					T
	2500 A					
	3200 A					
	4000 A					

ACBs/MCCBs

		DMX-E upstream							
		800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	4000 A
DPX downstream	DPX 125	T	T	T	T	T	T	T	T
	DPX 160	T	T	T	T	T	T	T	T
	DPX 250 ER	T	T	T	T	T	T	T	T
	DPX 630	< 400 A	T	T	T	T	T	T	T
		400 A	T	T	T	T	T	T	T
		630 A		T	T	T	T	T	T
	DPX 1600	800 A			T	T	T	T	T
		1250 A						T	T
		1600 A						T	T

T = total selectivity, up to downstream circuit breaker capacity according to IEC 60947-2

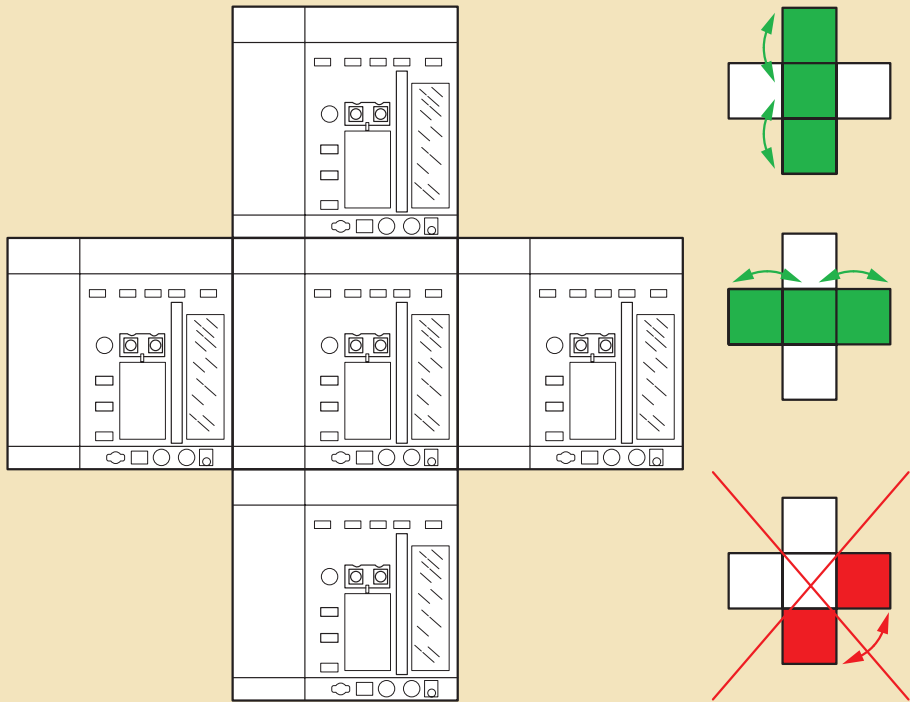
DMX™-E
mechanical interlock

Function: mechanical interlock is used for interlocking breakers as per the desired control scheme

Features: it can interlock up to 3 DMX-E breakers of fixed or draw-out versions
The breakers can be interlocked in vertical or horizontal configuration

■ Possible mounting arrangements

(cable length: 2 meters)



Type of Interlock	Typical circuit	Interlocks possible	Schematic diagram																								
Two Incomers		<table border="1"><tr><td>A</td><td>B</td></tr><tr><td>O</td><td>O</td></tr><tr><td>I</td><td>O</td></tr><tr><td>O</td><td>I</td></tr></table>	A	B	O	O	I	O	O	I	Cable length : 2 meters, min. Radius at cable bend : 70 mm																
A	B																										
O	O																										
I	O																										
O	I																										
Three Incomers		<table border="1"><tr><td>A</td><td>B</td><td>C</td></tr><tr><td>O</td><td>O</td><td>O</td></tr><tr><td>I</td><td>O</td><td>O</td></tr><tr><td>O</td><td>I</td><td>O</td></tr><tr><td>O</td><td>O</td><td>I</td></tr></table>	A	B	C	O	O	O	I	O	O	O	I	O	O	O	I	Cable length : 2 meters, min. Radius at cable bend : 70 mm									
A	B	C																									
O	O	O																									
I	O	O																									
O	I	O																									
O	O	I																									
Two Incomers One Standby		<table border="1"><tr><td>A</td><td>B</td><td>C</td></tr><tr><td>O</td><td>O</td><td>O</td></tr><tr><td>I</td><td>O</td><td>O</td></tr><tr><td>O</td><td>I</td><td>O</td></tr><tr><td>I</td><td>I</td><td>O</td></tr><tr><td>O</td><td>O</td><td>I</td></tr></table>	A	B	C	O	O	O	I	O	O	O	I	O	I	I	O	O	O	I	Cable length : 2 meters, min. Radius at cable bend : 70 mm						
A	B	C																									
O	O	O																									
I	O	O																									
O	I	O																									
I	I	O																									
O	O	I																									
Two Incomers One BusCoupler		<table border="1"><tr><td>A</td><td>B</td><td>C</td></tr><tr><td>O</td><td>O</td><td>O</td></tr><tr><td>I</td><td>O</td><td>O</td></tr><tr><td>O</td><td>I</td><td>O</td></tr><tr><td>I</td><td>O</td><td>I</td></tr><tr><td>O</td><td>I</td><td>I</td></tr><tr><td>I</td><td>I</td><td>O</td></tr><tr><td>I</td><td>O</td><td>I</td></tr></table>	A	B	C	O	O	O	I	O	O	O	I	O	I	O	I	O	I	I	I	I	O	I	O	I	Cable length : 2 meters, min. Radius at cable bend : 70 mm
A	B	C																									
O	O	O																									
I	O	O																									
O	I	O																									
I	O	I																									
O	I	I																									
I	I	O																									
I	O	I																									

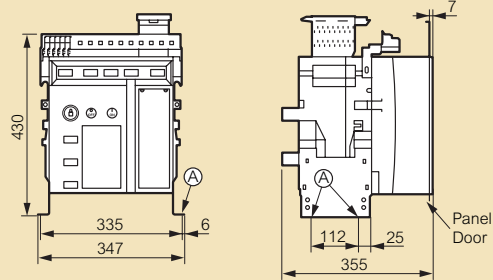
O - Breaker Open I - Breaker Closed

DMX™-E 55, DMX™-E 65, DMX™-EI up to 1 600 A

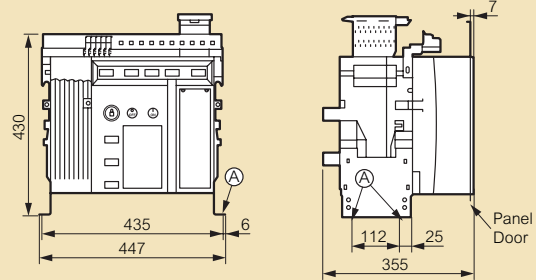
Dimensions

Fixed version

3P

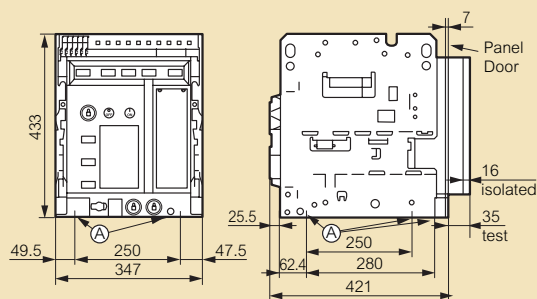


4P

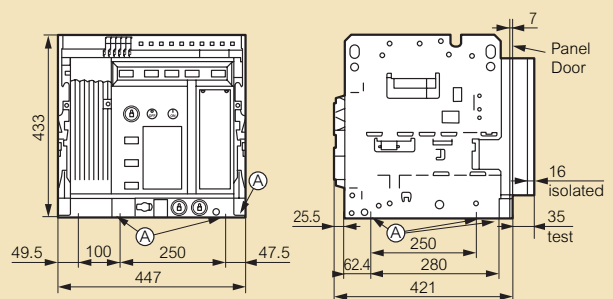


Draw-out version

3P

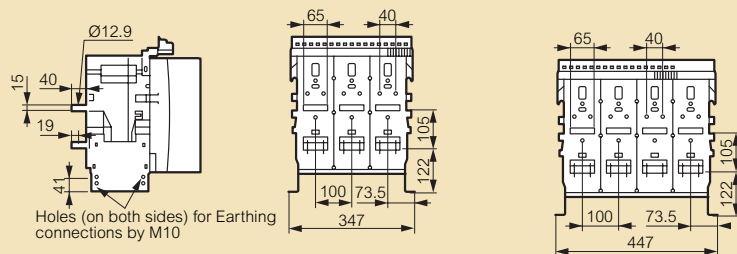


4P

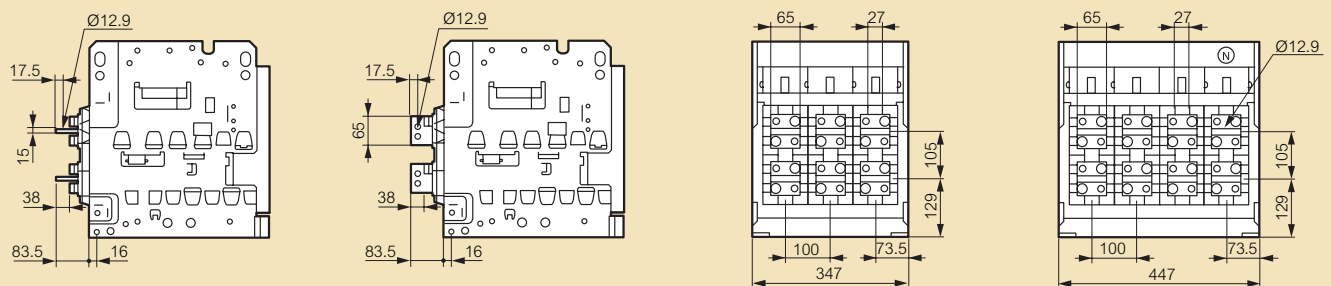


Connection

Fixed version 3P/4P



Draw-out version rear terminals 3P/4P



(A) Fixing holes suitable for M10

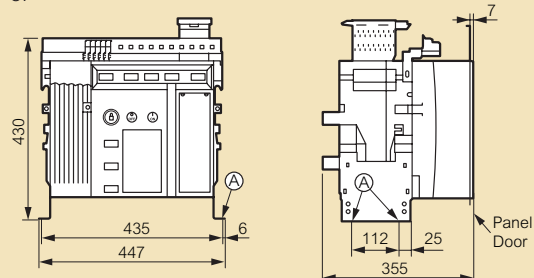
DMX™-E 65, DMX™-E 80, DMX™-EI

from 2000 to 2500 A

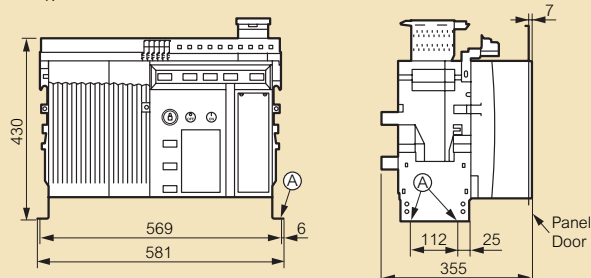
■ Dimensions

Fixed version

3P

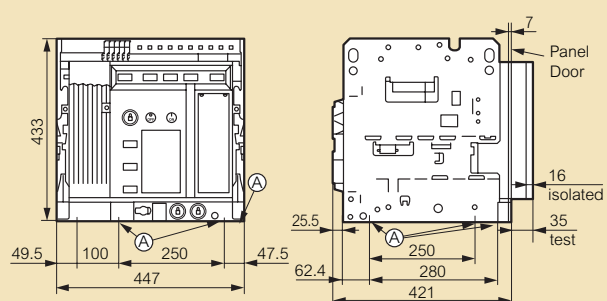


4P

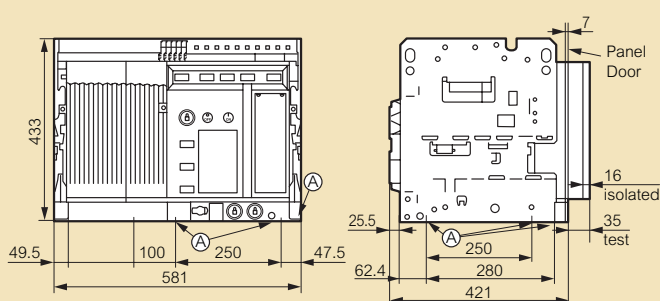


Draw-out version

3P

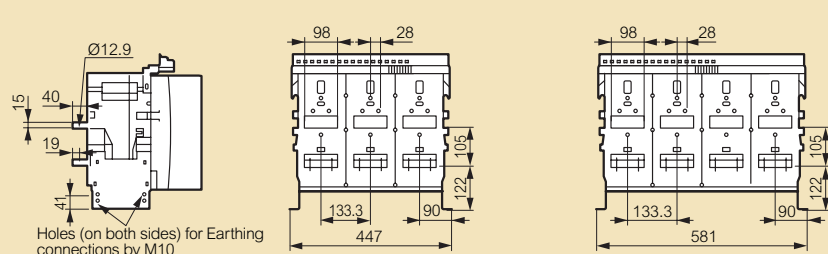


4P

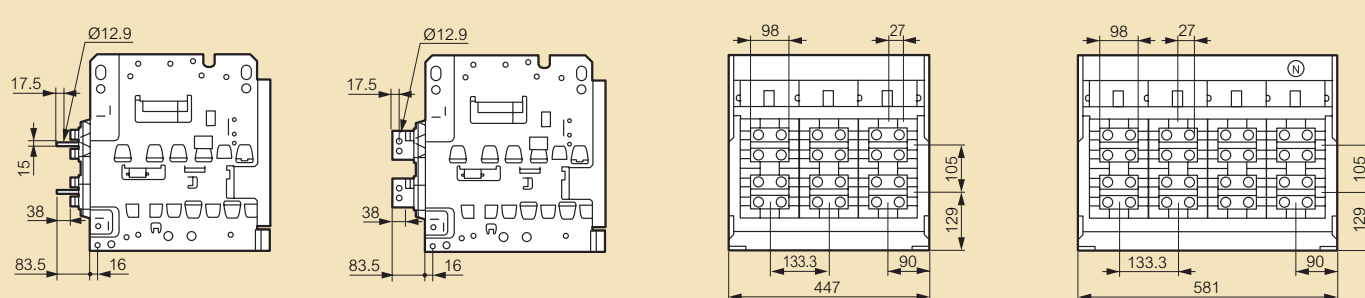


■ Connection

Fixed version 3P/4P



Draw-out version rear terminals 3P/4P



(A) Fixing holes suitable for M10

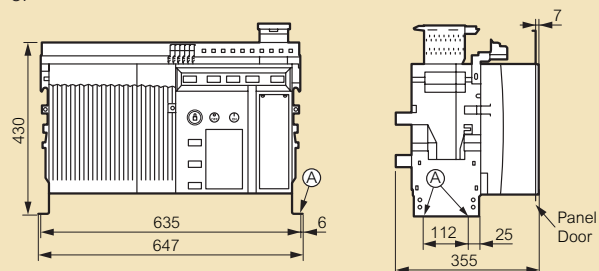
DMX™-E 80, DMX™-E 100, DMX™-EI

from 3 200 to 4 000 A

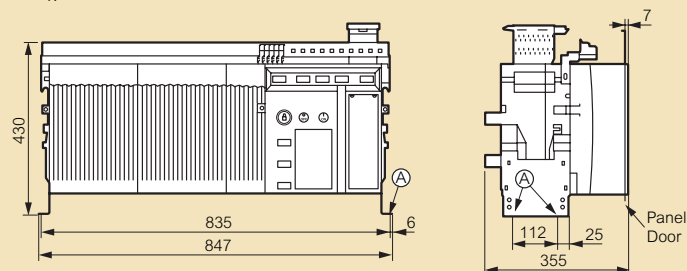
■ Dimensions

Fixed version

3P

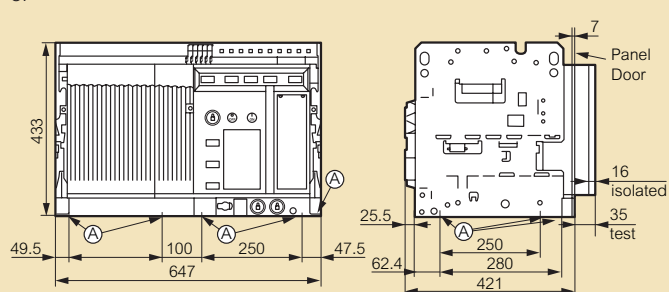


4P

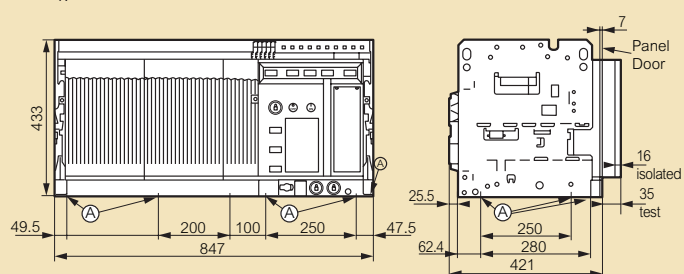


Draw-out version

3P

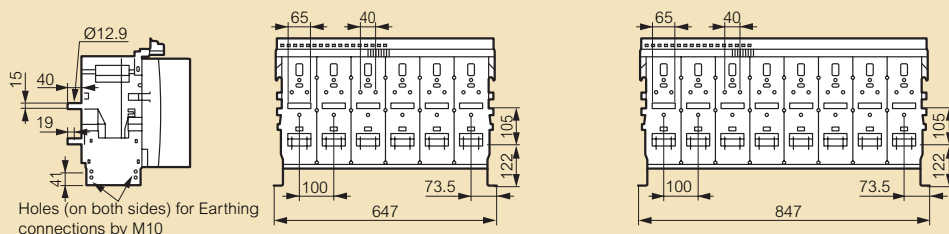


4P

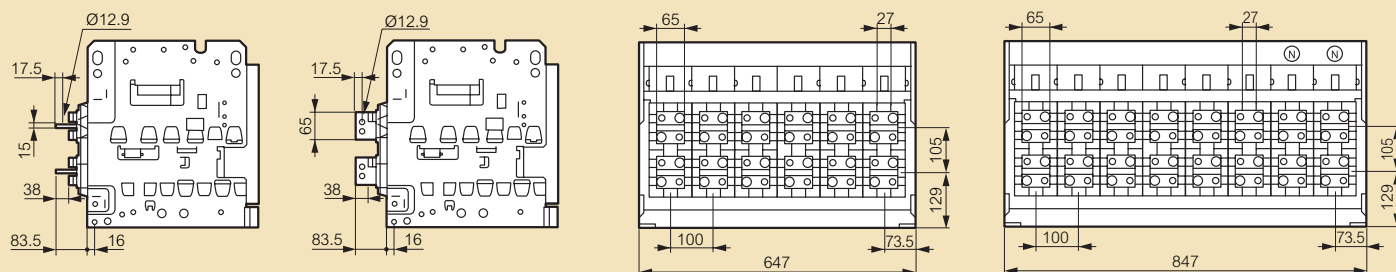


■ Connection

Fixed version 3P/4P



Draw-out version rear terminals 3P/4P



Ⓐ Fixing holes suitable for M10