

DPX³ 250 electronic release

MCCBs from 40 to 250 A (continued)



4 205 49

Electrical characteristics **see e-catalogue**
Dimensions **see e-catalogue**

Can be mounted on rail or on plate in XL³ cabinets and enclosures MCCBs for switching, control isolation and protection of low voltage electrical lines

Supplied with fixing screws, connection plates for bars and cable lugs and insulated shIELDS (phase barriers)

Can be fitted with cage terminals 120 mm² max. (flexible cable) or 150 mm² max. rigid cable (p. 133) and with DPX³ 160 and 250 common auxiliaries and accessories (p. 134)

Conform to IEC 60947-2

Pack	Cat.Nos		Electronic release Sg MCCBs - fixed version
	3P	4P	
			Breaking capacity I_{cu} 25 kA (400 V\sim)
			I _n (A)
1	4 205 02	4 205 12	40
1	4 205 05	4 205 15	100
1	4 205 07	4 205 17	160
1	4 205 09	4 205 19	250
			Breaking capacity I_{cu} 36 kA (400 V\sim)
1	4 205 22	4 205 32	40
1	4 205 25	4 205 35	100
1	4 205 27	4 205 37	160
1	4 205 29	4 205 39	250
			Breaking capacity I_{cu} 50 kA (400 V\sim)
1	4 205 42	4 205 52	40
1	4 205 45	4 205 55	100
1	4 205 47	4 205 57	160
1	4 205 49	4 205 59	250
			Breaking capacity I_{cu} 70 kA (400 V\sim)
1	4 206 92	4 207 02	40
1	4 206 95	4 207 05	100
1	4 206 97	4 207 07	160
1	4 206 99	4 207 09	250

Dimensions
see e-catalogue



DPX³ 250 equipment and mounting accessories



4 210 44

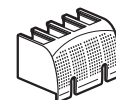
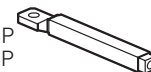
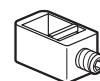


4 210 31








4 210 72

Pack	Cat.Nos	Equipment for plug-in version
		A plug-in version DPX ³ is a fixed version DPX ³ mounted on a plug-in base
		Plug-in bases for DPX³ 250
		Front or rear terminal mounting base
1	4 210 42	For DPX ³ 250 - 3P
1	4 210 43	For DPX ³ 250 - 4P with or without earth leakage module
		Connectors for auxiliary contacts
1	4 210 44	Set of connectors
		Padlocks for plug-in base
1	4 210 45	Key barrel and flat key N° ABA90GEL6149
1	4 210 46	Key barrel and star key N° HBA90GPS6149
1	4 210 47	Padlock accessory
		Connection accessories
		Cage terminals
		For Cu/Al cables, 1 x 120 mm ² for flexible cables and 1 x 150 mm ² for rigid cables and lugs 28.5 x 8 x 8.5 mm
1	4 210 30	Set of 3 terminals
1	4 210 31	Set of 4 terminals
		Screw terminals for bar connections
1	4 210 79	Set of 3 terminals
1	4 210 80	Set of 4 terminals
		Insulated shields (phase barriers)
1	4 210 70	Set of 36 insulated shields
		Spreaders
		For incoming bars or cable lugs
1	4 210 34	Set of 3 spreaders for DPX ³ 250 3P
1	4 210 35	Set of 4 spreaders for DPX ³ 250 4P
		Rear terminals
		Flat swivel terminals
		Used to convert a fixed version with front terminals to a fixed version with rear terminals
1	4 210 38	Set of 3 rear terminals for DPX ³ 250 3P
1	4 210 39	Set of 4 rear terminals for DPX ³ 250 4P
		Sealable terminal shields
		For front terminals
1	4 210 56	For DPX ³ 250 3P
1	4 210 57	For DPX ³ 250 4P
		For rear terminals
1	4 210 52	For DPX ³ 250 3P
1	4 210 53	For DPX ³ 250 4P
		Fixing plates
1	4 210 72	For fixing DPX ³ 250 on rail or on plate
1	4 210 74	For DPX ³ 250 3P/4P without earth leakage module
1	4 210 69	For DPX ³ 250 3P/4P with side mounting motor operator



DPX³

electrical characteristics

DEVICES	DPX ³ 160 thermal magnetic				DPX ³ 250 thermal magnetic				DPX ³ 250 electronic release				DPX ³ 630 thermal magnetic				DPX ³ 630 electronic release				DPX ³ 1600 thermal magnetic				DPX ³ 1600 electronic release																															
Mounting	On rail  or on plate								On rail  or on plate								On rail  or on plate								On plate								On plate								On plate								On plate							
Breaking capacity (kA) (EN 60947-2 and IEC 60947-2)	16 kA	25 kA	36 kA	50 kA	25 kA	36 kA	50 kA	70 kA	25 kA	36 kA	50 kA	70 kA	36 kA	50 kA	70 kA	100 kA	36 kA	50 kA	70 kA	100 kA	36 kA	50 kA	70 kA	100 kA	36 kA	50 kA	70 kA	100 kA	36 kA	50 kA	70 kA	100 kA																								
380/415 V~	16	25	36	50	25	36	50	70	25	36	50	70					36	50	70	100	36	50	70	100	36	50	70	100	36	50	70	100	36	50	70	100																				
220/240 V~	25	35	50	65	40	60	100	100	40	60	100	100					70	100	120	170	70	100	120	170	70	100	120	170	70	100	120	170	70	100	120	170																				
Breaking capacity (% Icu)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100																				
Characteristic of use																																																								
Nominal frequency	50/60 Hz																50/60 Hz																																							
Maximum rated operating voltage Ue	690 V (500 V with integrated e.l.c.bs)								690 V (500 V with integrated e.l.c.bs)								690 V (500 V with integrated e.l.c.bs)								690 V~																															
Category of use	A								A								A								A: In 630 A - B: In 200 to 400 A																															
Thermal magnetic adjustment																																																								
 Thermal	0,8 to 1 In								0,8 to 1 In								-								0.8 to 1 In																															
Magnetic	10 In (400 A for 16 A and 25 A sizes)								5 to 10 In								-								5 to 10 In																															
Electronic protection adjustment																																																								
 S2																	S2				Sg								S2				Sg																							
Sg																	Ir : 0.4 to 1 In I _{sd} : 1.5 to 10 Ir																																							
Ir = 0.4 - 1 x In																	•				•								•				•																							
Ir = 3-30 s																	•				•								•				•																							
I _{sd} = 1.5 - 10 Ir																	•				•								•				•																							
tsd (I=K) = 0-500 ms																	•				•								•				•																							
tsd (I≠K) = 0-500 ms																	•				•								•				•																							
I _g = 0.2 - 1 x In																	•				•								•				•																							
I _g = 0.1 - 1 s																	•				•								•				•																							
Maximum cable cross-section																																																								
Rigid cable	150 mm ²								150 mm ²								150 mm ²								300 mm ² or 2 x 240 mm ²																															
Flexible cable	120 mm ²								120 mm ²								120 mm ²								240 mm ² or 2 x 185 mm ²																															
Copper bar and lug width	18 mm								28.5 mm ⁽¹⁾								28.5 mm ⁽¹⁾								32 mm																															
Tightening torque	8 Nm								10 Nm								10 Nm								15 Nm																															
Nominal current (In) at 40 °C (A)																																																								
In (A)	16	25	40	63	80	100	125	160	100	160	200	250	40	100	160	250	250	320	400	500	630	250	320	400	500	630	500	630	800	1000	1250	500	630	800	1000	1250	1600																			
Phase	16	25	40	63	80	100	125	160	100	160	200	250	40	100	160	250	250	320	400	500	630	250	320	400	500	630	500	630	800	1000	1250	500	630	800	1000	1250	1600																			
N	16	25	40	63	80	100	125	160	100	160	200	250	40	100	160	250	250	320	400	500	630	0 - 50 - 100 % of phase value								500	630	800	1000	1250	0 - 50 - 100 % of phase value																					
N/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250	250	250	320	-								-	-	-	500	630	-																					
Magnetic threshold (Im) (A) ⁽²⁾ of DPX ³ thermal magnetic																																																								
In (A)	Fixed								Adjustable								Adjustable								Adjustable																															
Phase	400	400	400	630	800	1000	1250	1600	125-250	200-400	315-630	500-1000	-	-	-	-	250	320	400	500	630	-	-	-	-	-	500	630	800	1000	1250	-	-	-	-	-																				
N	400	400	400	630	800	1000	1250	1600	125-250	200-400	315-630	500-1000	-	-	-	-	1250-2500	1600-3200	2000-4000	2500-5000	3150-6300	-	-	-	-	-	2500-5000	3150-6300	4000-8000	5000-10000	6250-12500	-	-	-	-	-																				
N/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000-2000	1250-2500	1600-2500	2000-4000	-	-	-	-	-	-	-	-	2500-5000	3150-6000	-	-	-	-	-																				
Endurance (cycles)																																																								
Electrical	8000								8000								8000								5000																															
Mechanical	25000								20000								20000								10000																															
Electronic earth leakage module																																																								
Type	without or integrated								without or integrated								without or integrated								downstream e.l.c.bs.																															

1: Copper bars only
2: Trip current for 50/60 Hz. For direct current, multiply by 1.5

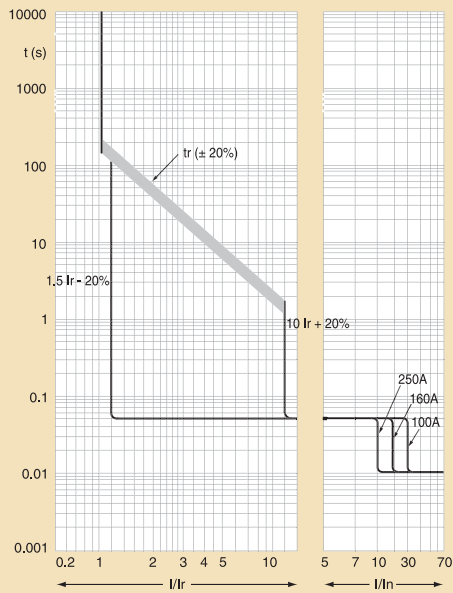
 For DPX³ magnetic release only, Please, consult us

■ Technical data

Electrical characteristics for DPX 250 (microprocessor release)

Maximum nominal operating voltage	690 V~
Nominal frequency	50/60 Hz
Nominal rating (40° C)	40 to 250 A
Category of use	A
Overload protection	0.4 to 1 In
Short circuit protection	1.5 to 10 In
Maximum permitted cross-sections	
- rigid cables ⁽¹⁾	185 mm ²
- flexible cables ⁽¹⁾	150 mm ²
- copper bar (width)	25 mm

Performance data for DPX 250 (microprocessor release)



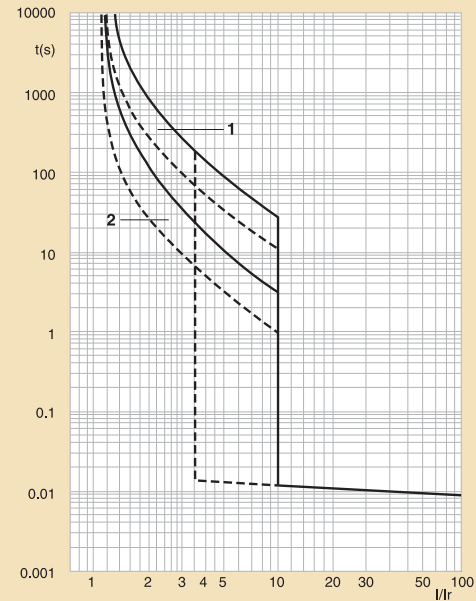
I_{cc} = prospective short-circuit symmetrical current (rms value in A)
 IP = maximum peak value (kA)
 1 = current, max. peak, short-circuit rms
 2 = current, unlimited peak (max.) corresponding to power factors shown above (0.15 to 0.9)

Electrical characteristics for DPX 250 (thermal magnetic release)

Maximum nominal operating voltage	690 V~ - 250 V=
Nominal frequency	50/60 Hz
Nominal rating (40° C)	25 to 250 A
Category of use	A
Thermal adjustment	0.64 to 1 In
Magnetic release	3.5 to 10 In
Maximum permitted cross-sections	
- rigid cables ⁽¹⁾	185 mm ²
- flexible cables ⁽¹⁾	150 mm ²
- copper bar (width)	25 mm

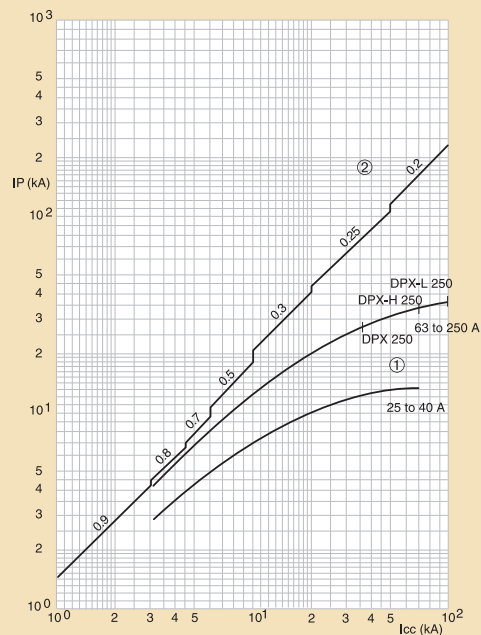
⁽¹⁾ With cage terminal cat. no. 292 48

Performance data for DPX 250



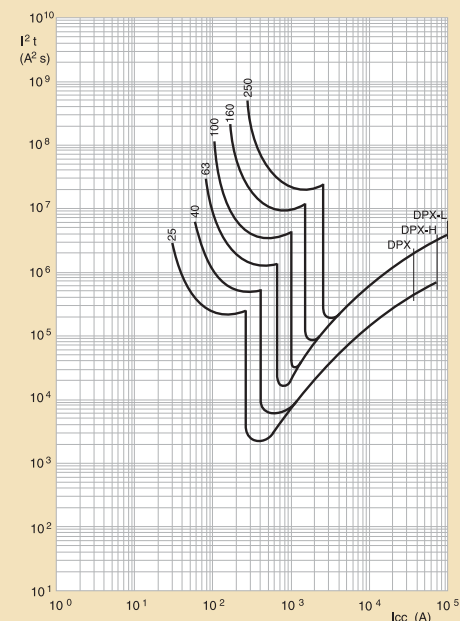
at ambient $\theta = 40^\circ \text{C}$
 I = actual current
 Ir = max. adjustment current of thermal release
 1 = thermal release zone when cold
 2 = thermal release zone when hot (in steady state)

Current limitation curves



I_{cc} = prospective short-circuit symmetrical current (rms value in kA)
 IP = maximum peak value (in kA)
 ① = max. peak rms short-circuit currents
 ② = max. unlimited peak currents, corresponding to power factors indicated above (0.15 to 0.9)

Thermal stress limitation curves



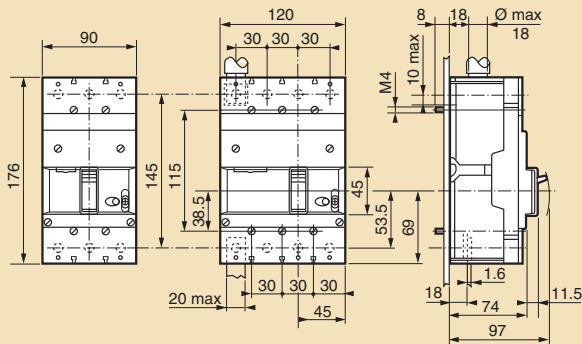
I_{cc} = prospective short-circuit symmetrical current (rms value in A)
 I²t = limited thermal stress (in A²s)

DPX™ 250 ER

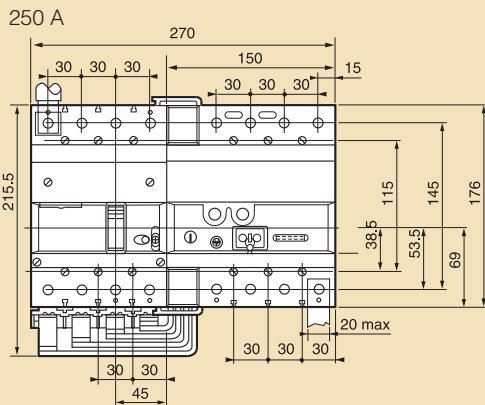
DPX™ 250

■ Dimensions

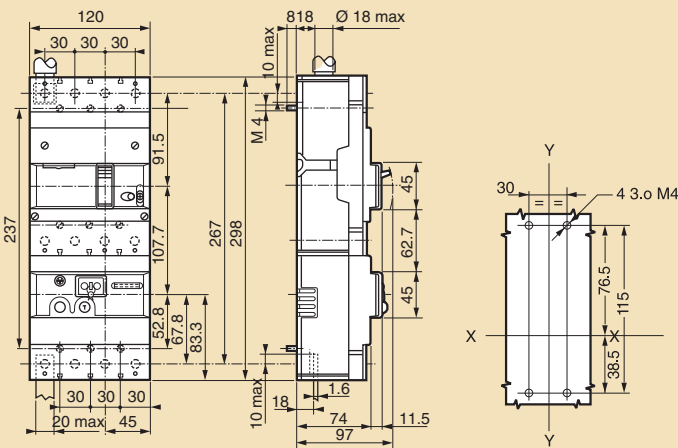
Fixed version, front terminals



Fixed version, front terminals with earth leakage modules mounted side by side

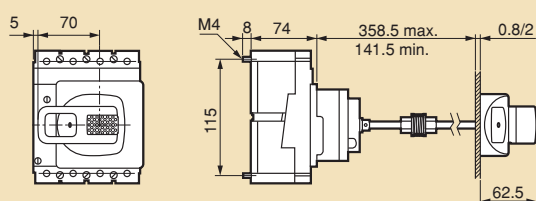


Fixed version, front terminals with earth leakage modules mounted underneath



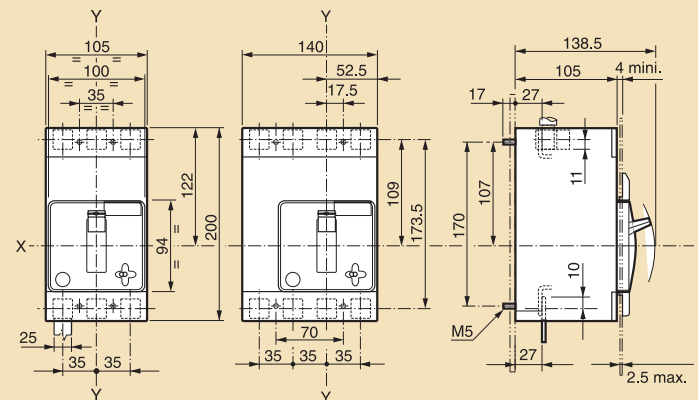
Rotary handle-vary-depth on door

Mounting flexible seal

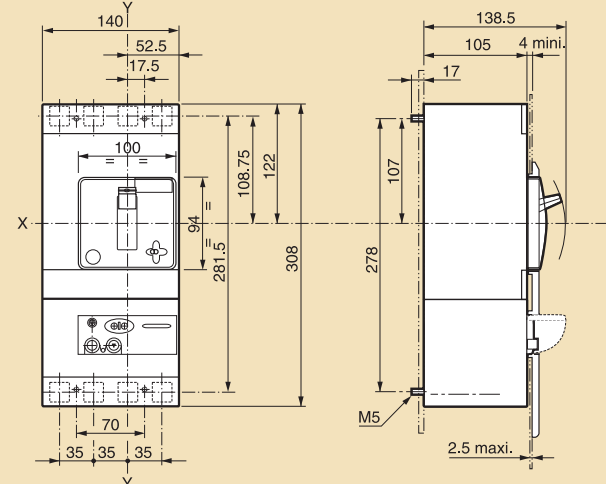


■ Dimensions

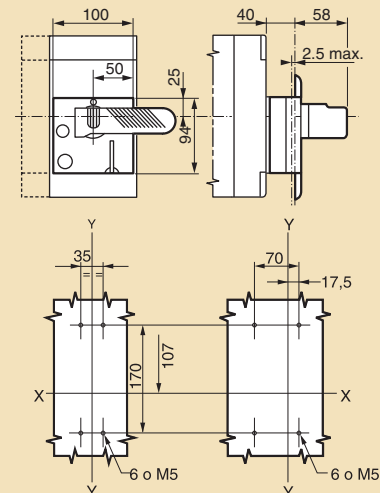
Fixed version, front terminals



Fixed version, front terminals with earth leakage modules mounted underneath

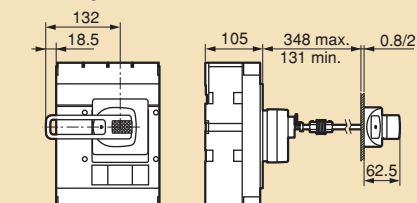


Rotary handles



Rotary handle-vary-depth on door

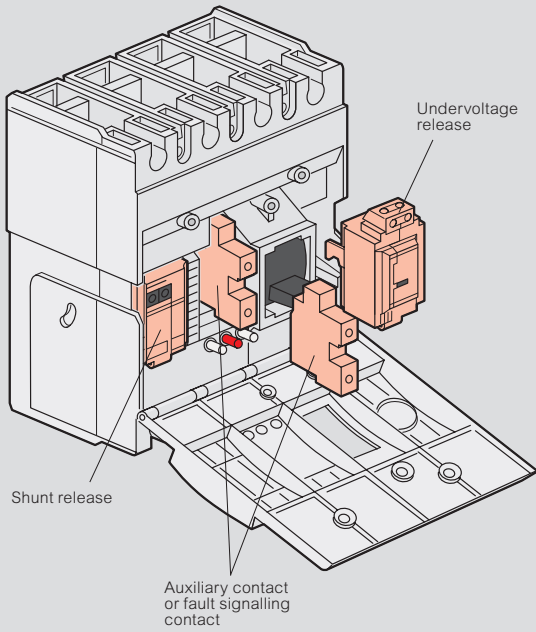
Mounting with flexible seal



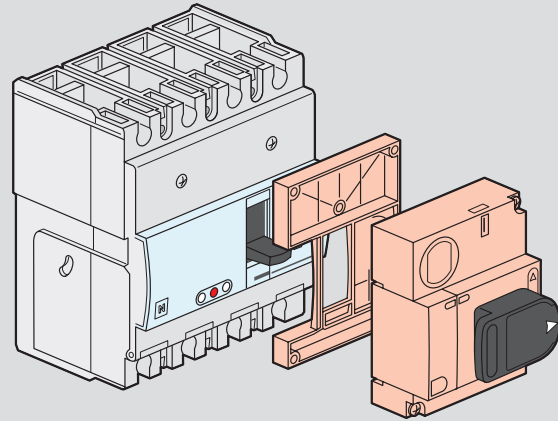
DPX³ 160/250

installation principle

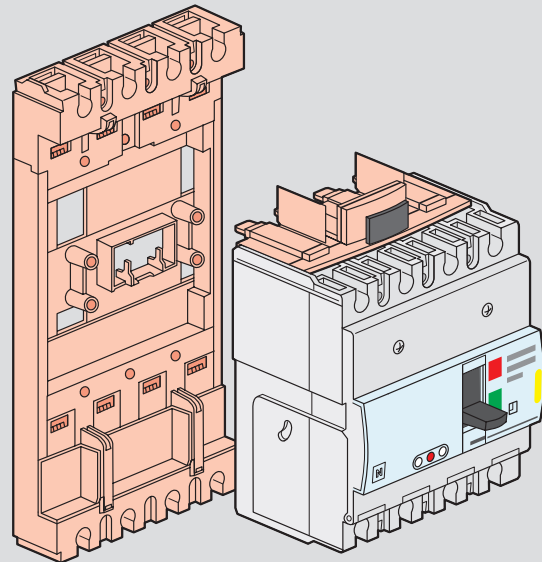
Auxiliaries mounting



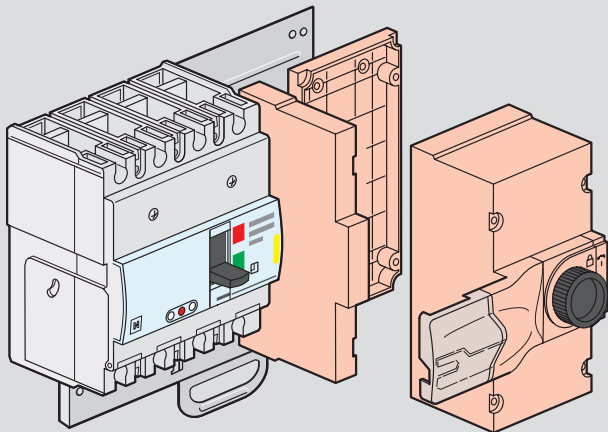
Direct rotary handle



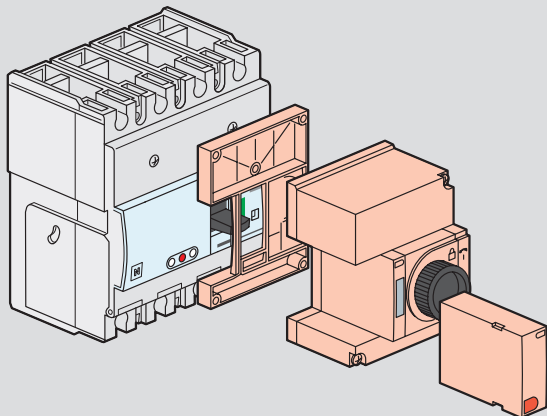
Plug-in version



Side mounting motor-driven handle



Front mounting motor-driven handle



Supply inverter type

