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CB5500611



<b>Ui=690V~ 50/60Hz</b>	<b>Uimp=6kV</b>	<b>Cat.A</b>	<b>40°C</b>
<b>IEC 60947-2</b>	<b>Ue (V)</b>	<b>Icu/Ics (kA)</b>	
<b>JIS C8201-2-1</b>	<b>230/240~</b>	<b>85 / 43</b>	
	<b>400/415~</b>	<b>36 / 18</b>	
	<b>440</b>	<b>25 / 13</b>	
	<b>550</b>	<b>10 / 5</b>	
	<b>250</b>	<b>30 / 15</b>	
<b>NEMA - AB1</b>	<b>U (V)</b>	<b>HIC (kAmps)</b>	
	<b>240</b>	<b>85</b>	
	<b>277/480~</b>	<b>25</b>	
DL 06253			

CB5500613

**EasyPact™ EZC 250**

suitable for use at 50°C without derating

75°C Cu Wire  
torque 8-13 Nm (71-115 lb.in)

LISTED MAN. MOTOR CTRL.  
277V Max. CB 800A  
Break all Lines

Short Circuit rating	240 Vac		480 Vac	
	5 kA	5 kA	5 kA	5 kA
163A	150A	5	10	10
163A	164A	5	10	20
163A	180A	5	10	20
163A	100A	5	10	20
163A	120A	5	10	20
163A	120A	5	10	20
163A	120A	5	10	20
163A	140A	5	10	20
200A	180A	5	40	20
225A	180A	5	40	20
250A	200A	5	40	20

GB 14048-2  
50Hz F N H  
230V~ 25kA 50kA 85kA  
400V~ 18kA 25kA 36kA

Merkin Gerin made in China

Example for 250 A frame.

Standardised characteristics indicated on the rating plate:

- Ui:** rated insulation voltage
- Uimp:** rated impulse withstand voltage
- Ue:** rated operational voltage
- Icu:** ultimate breaking capacity, for various values of the rated operational voltage Ue
- Ics:** rated operational voltage Ue
- Cat:** utilisation category
- Ics:** service breaking capacity
- In:** rated current
- suitability for isolation

CPB100602



## Compliance with standards

EasyPact EZC circuit breakers and auxiliaries comply with the following international standards:

- IEC 60947-1 - general rules
- IEC 60947-2 - low-voltage switchgear and controlgear, part 2 (circuit breakers)
- European (EN 60947-1 and EN 60947-2) and the corresponding national standards
- GB 14048.2
- JIS C8201-2-1 Annex 1 and Annex 2, for molded case circuit breakers
- JIS C8201-2-2 Annex 1 and Annex 2, for earth-leakage circuit breakers
- NEMA-AB1 (High Interrupting Capacity): American standard
- UL508/CSA 22-2 no. 14.

## Approvals and Certifications

- IEC certification by independent laboratories (ASEFA, KEMA, TÜV)
- marking
- certified by third party Tilva
- certified by third party Underwriter Laboratories as a "Manual Motor Controller" (EZC250/EZCV250).

## Vibration and shock withstand test

EasyPact EZC circuit breakers resist mechanical vibrations and shocks. Tests are carried out in compliance with standard IEC 60068-2-6 for the levels required by merchant-marine inspection organisation IACS: International Association of Classification Societies up to 250 A (ABS, BV, DNV, GL, LR, KRS, RINA, NK):

- 2 to 13.2 Hz: amplitude ± 1 mm
- 13.2 to 100 Hz: acceleration 0.7 g.

## Pollution degree

EasyPact EZC circuit breakers are certified for operation in pollution-degree III environments as defined by IEC standard 60947 (industrial environments).

## Tropicalisation

EasyPact EZC circuit breakers have successfully passed the tests prescribed by the following standards for extreme atmospheric conditions:

- IEC 60068-2-1 - dry cold (-55 °C)
- IEC 60068-2-2 - dry heat (+85 °C)
- IEC 60068-2-30 - damp heat (95 % relative humidity at 55 °C)
- IEC 60068-2-52 - salt mist (severity level 2).

## Positive contact indication

All EasyPact EZC circuit breakers are suitable for isolation as defined in IEC standard 60947-2:

- the isolation position corresponds to the O (OFF) position
  - the operating handle cannot indicate the O (OFF) position ("green colour" visible) unless the contacts are effectively open
  - padlocks may not be installed unless the contacts are open
  - installation of a rotary handle does not alter the reliability of the position-indication system.
- The isolation function is certified by tests guaranteeing:
- the mechanical reliability of the position indication system
  - the absence of leakage currents
  - overvoltage withstand capacity between upstream and downstream connections.

EasyPact EZC circuit breakers take into account important concerns for environmental protection. Most components are recyclable and the parts are marked as specified in applicable standards.

## Ambient temperature

- EasyPact EZC circuit breakers has been particularly designed to hold 100 % In at 50 °C without tripping in normal condition (except for earth-leakage circuit breakers).
- EasyPact EZC circuit breakers may be used between -25 °C and +70 °C.
- The permissible storage-temperature range for EasyPact EZC circuit breakers in the original packing is -35 °C to +85 °C.

## Installation

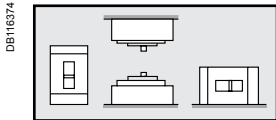
EasyPact EZC circuit breakers are designed for easy installation in the various types of switchboards. They may be mounted vertically, horizontally or flat on their back without any derating of characteristics.

## Power supply

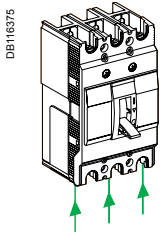
EasyPact EZC circuit breaker can be supplied from either the top or the bottom (reverse feeding) without any reduction in performance. For earth-leakage circuit breakers, reverse feeding is possible only up to 240 V AC. This capability facilitates connection when installed in a switchboard.

## Degree of protection

As per standards IEC 60529 (IP degree of protection) and EN 50102 (IK degree of protection against external mechanical impacts).



Installation positions.



Reverse feeding.

### Bare circuit breaker with terminal shields

	With toggle	IP20	IK07
	With direct rotary handle standard	IP40	IK07

### Circuit breaker installed in a switchboard

	With toggle	IP40	IK07
	With direct rotary handle standard/VDE MCC	IP54	IK07
	With extended rotary handle	IP54	IK08

CPB 100611



## Earth-leakage protection

EasyPact EZC circuit breakers have a specific version including earth-leakage protection.

This protection is fully integrated inside the breaker and does not require any additional space.

EasyPact EZC circuit breakers and earth-leakage circuit breakers are fully interchangeable.

## Compliance with standards

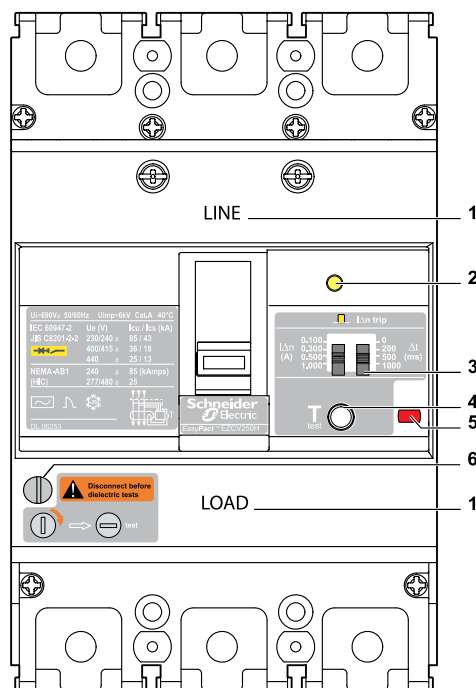
EasyPact EZC earth-leakage circuit breakers comply with all the international standards listed [page A-2](#):

- IEC 60947-1
- IEC 60947-2
- EN 60947-1
- EN 60947-2
- GB 14048.2
- JIS C8201-2-2 Annex 1 and Annex 2
- NEMA-AB1 (High Interrupting Capacity)
- UL508/CSA 22-2 no. 14.

They also comply with:

- VDE 664, operation down to -25 °C
- IEC 60255-4 and IEC 60801-2 to 60801-5 covering protection against nuisance tripping due to transient overvoltages, lightning strikes, switching of devices on the distribution system, electrostatic discharges, radiofrequency interference.

DB125803



- 1 Line-Load ( $U_e > 300$  V AC)
- 2 Mechanical indicator (ELCB)
- 3 Adjustable settings  $I_{\Delta n}$  and time delay
- 4 ELCB test button
- 5 Push to trip button (MCCB)
- 6 Dielectric tests: disconnecting switch

## Power supply

### Reverse feeding

EasyPact EZC earth-leakage circuit breakers can be supplied from either the top or the bottom for voltages up to 300 V AC. For voltages over 300 V AC, only supply from the top is possible (Line-Load indication on the cover of the breaker).

### Power supply of the electronics

EasyPact EZC earth-leakage circuit breakers are self-supplied by the distribution-system voltage and therefore do not require any external source. They fully comply with new IEC requirements (Annex B): they are powered from the three phases and continue to function even if one phase is missing.

## Dielectric tests

EasyPact EZC earth-leakage circuit breakers are equipped with a disconnecting switch in order to protect the electronics during dielectric tests.

When the disconnecting switch is activated, the circuit breaker is automatically tripped. It is mechanically impossible to switch on the circuit breaker, until the earth-leakage function is re-energised.

## Tripping features

### Tripping indications:

- EasyPact EZC earth-leakage circuit breakers have a yellow mechanical indicator to locally signal tripping due to an earth fault.
- EasyPact EZC earth-leakage circuit breakers may be equipped with an earth-leakage alarm switch (ALV) to remotely signal tripping due to an earth fault.

### Resetting

EasyPact EZC earth-leakage circuit breakers are fully reset by the operating handle. After resetting, tripping indicators (mechanical and ALV) come to normal position.

## ELCB protection characteristics

Sensitivity $I_{\Delta n}$ (A)		adjustable	0.1 - 0.3 - 0.5 - 1
Time delay	Intentional delay (ms)	adjustable	0 - 200 - 500 - 1000
	Max. breaking time (s)		0.15 - 0.4 - 1 - 2
Rated voltage	AC 50/60 Hz (V)		100...440

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## Earth-leakage circuit breakers

With three built-in protections:

- overload
- short-circuit
- earth-leakage.

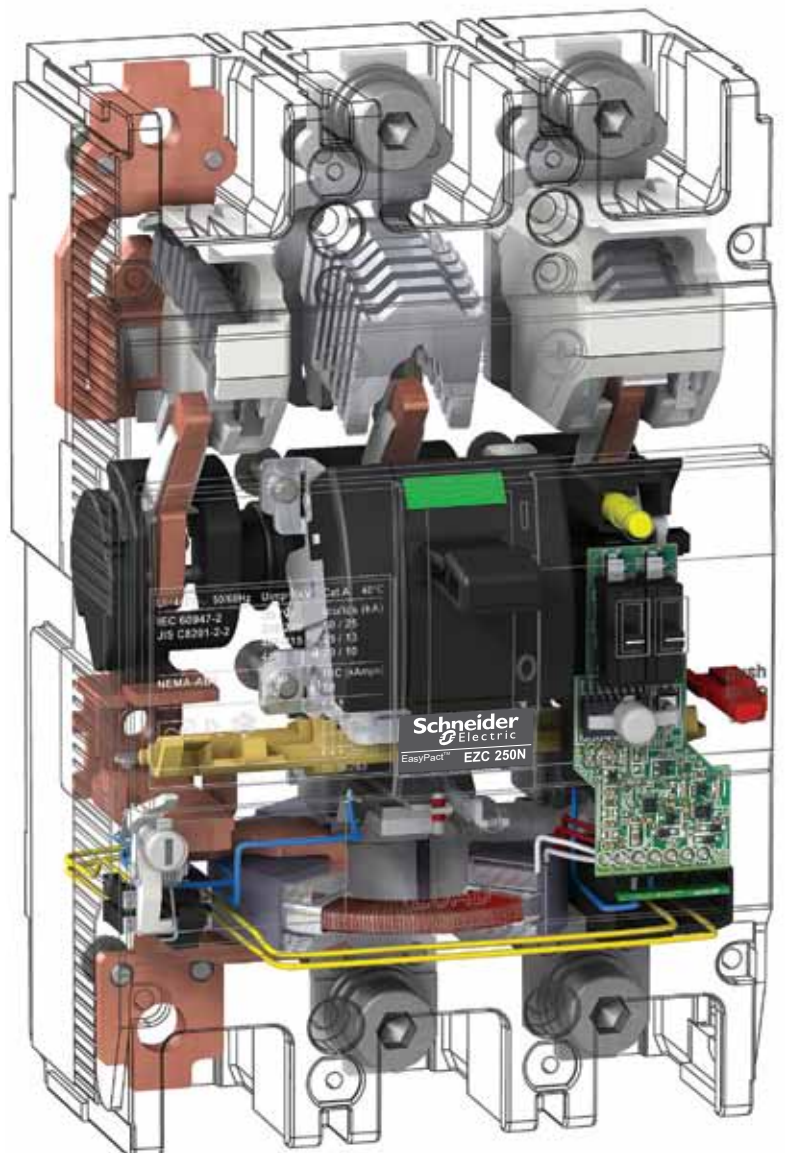
From 63 A to 250 A

With adjustable sensibility and time delay

Up to 36 kA at 415 V

In 3 poles and 4 poles

DB125805



CPB100600



EZC100-1P.

CPB100601



EZC100-2P.

CPB100602



EZC100-3P.

CPB100603



EZC100-4P.

CPB100604



EZC250-3P.

## EasyPact EZC circuit breakers

Fixed version		
Plug-in version		
Number of poles		
Rated current (A)	<b>In</b>	at 40 °C
Rated insulation voltage (V)		
<b>Ui</b>		
Rated impulse withstand voltage (kV)		
<b>Uimp</b>		
Rated operational voltage (V)		
<b>Ue</b>		AC 50/60 Hz DC

## Electrical characteristics as per IEC 60947-2, EN 60947-2, JIS C8201-2-1

Ultimate breaking capacity (kA rms)	<b>Icu</b>	AC 50/60 Hz	110/130 V
			220/230/240 V
			380 V
			<b>400/415 V</b>
			440 V
DC	125 V (1P)		
	250 V (2P in series)		
	415-550 V		
Rated service breaking capacity (kA rms)	<b>Ics</b>	% Icu	110-400 V 415-550 V

Suitability for isolation		
Utilisation category		
Pollution degree		
Endurance (C-O cycles)	Mechanical	
	Electrical	In/415 V

## Electrical characteristics as per NEMA-AB1

Breaking capacity (kA rms)	<b>HIC</b>	AC 50/60 Hz	240 V 277/480 V
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## Protection

Overload protection	Bimetal	
Instantaneous protection	Magnetic	Fixed (±20 %)

## Auxiliaries

Indication contacts	Auxiliary switch	AX
	Alarm switch	AL
	Combined AX + AL	AXAL
Voltage releases	Shunt trip release	SHT
	Undervoltage release	UVR

## Installation

Connection	Crimp lugs/bars	
Accessories	Box lugs for bare cables	
	Rotary handles	Direct Extended
	Terminal extensions	
	Spreaders	
	Phase barriers	
	Terminal shields	
	Padlocking system	
	DIN rail adaptor	

## Dimension and weight

Dimensions (mm)	D x H W
Weight (kg)	

	EZC100B	EZC100F	EZC100N	EZC100H		EZC250F	EZC250N	EZC250H	
	■	■	■	■	■	■	■	■	
	■	■	-	■ <sup>(4)</sup>	-	■	■	■	
	3	3	1	3-4	1	2-3-4	3	3	
	15, 16, 20, 25, 30, 32, 40, 45, 50, 60	15, 16, 20, 25, 30, 32, 40, 45, 50, 60, 63, 75, 80, 100	15, 16, 20, 25, 30, 32, 40, 45, 50, 60, 63, 75, 80, 100	15, 16, 20, 25, 30, 32, 40, 45, 50, 60, 63, 75, 80, 100	15, 16, 20, 25, 30, 32, 40, 45, 50, 60, 63, 75, 80, 100	15, 16, 20, 25, 30, 32, 40, 45, 50, 60, 63, 75, 80, 100	100, 125, 150, 160, 175, 200, 225, 250	100, 125, 150, 160, 175, 200, 225, 250	100, 125, 150, 160, 175, 200, 225, 250
	690	690	690	690	690	690	690	690	
	6	6	6	6	6	6	6	6	
	550	550	415	550	415	550	550	550	
	-	250	125	250	125	250	250	250	
	10	25	25	25	50	100	25	50	
	10	25	18	25	25	100 <sup>(1)</sup>	25	50	
	7.5	10	2.5	18	5	30	18	25	
	<b>7.5</b>	<b>10</b>	<b>2.5</b>	<b>15</b>	<b>5</b>	<b>30</b>	<b>18</b>	<b>25</b>	
	5	7.5	-	10	-	20	15	20	
	2.5	5	-	5	-	10	5	8	
	-	5	5	5	10	10	5	20	
	-	5	-	5	-	10	5	20	
	25 %	50 %	50 %	50 %	50 %	50 %	50 %	50 %	
	25 %	50 %	50 %	50 %	50 %	25 %	50 %	50 %	
	■	■	■	■	■	■	■	■	
	A	A	A	A	A	A	A	A	
	3	3	3	3	3	3	3	3	
	8 500	8 500	8 500	8 500	8 500	8 500	10 000	10 000	
	1 500	1 500	1 500	1 500	1 500	1 500	5 000	5 000	
	-	-	10	25	18	100	25	50	
	-	-	10 <sup>(2)</sup>	10	18 <sup>(2)</sup>	18 <sup>(3)</sup>	15	18	
	fixed	fixed	fixed	fixed	fixed	fixed	fixed	fixed	
	fixed	fixed	fixed	fixed	fixed	fixed	10 In	10 In	
	■	■	-	■	-	■	■	■	
	■	■	-	■	-	■	■	■	
	■	■	-	■	-	■	■	■	
	■	■	-	■	-	■	■	■	
	■	■	-	■	-	■	■	■	
	■	■	■	■	■	■	■	■	
	■	■	■	■	■	■	■	■	
	■	■	-	■	-	■ <sup>(3)</sup>	■	■	
	■	■	-	■	-	■ <sup>(3)</sup>	■	■	
	-	-	-	-	-	-	■	■	
	■	■	-	■	-	■	■	■	
	■	■	■	■	■	■	■	■	
	■	■	-	■	-	■ <sup>(3)</sup>	■	■	
	■	■	■	■	■	■	■	■	
	■	■	■	■	■	■	-	-	
	60 x 130	60 x 130	60 x 130	60 x 130	60 x 130	60 x 130	60 x 165	60 x 165	
	75	75	25	75 (3P) 100 (4P)	25	50 (2P) 75 (3P) 100 (4P)	105	105	
	0.78	0.78	0.28	0.78 (3P) 1.0 (4P)	0.28	0.6 (2P) 0.78 (3P) 1.0 (4P)	1.3	1.3	
							1.1 (2P) 1.3 (3P)		

(1) 50 kA for 2 poles.  
(2) For 277 V only.  
(3) For 3 and 4 poles only.  
(4) For 3P only.



CPB100605



EZC250-4P.

CPB100606



EZCV250-4P.

CPB100607



EZC400-3P.

## EasyPact EZC circuit breakers

Fixed version		
Plug-in version		
Number of poles		
Rated current (A)	<b>In</b>	at 40 °C
Rated insulation voltage (V)	<b>Ui</b>	
Rated impulse withstand voltage (kV)	<b>Uimp</b>	
Rated operational voltage (V)	<b>Ue</b>	AC 50/60 Hz DC

## Electrical characteristics as per IEC 60947-2, EN 60947-2 and JIS C8201-2-1/C8201-2-2

Ultimate breaking capacity (kA rms)	<b>Icu</b>	AC 50/60 Hz	220/230 V 380 V <b>400/415 V</b> 440 V 550 V
		DC	125 V (1P) 250 V (2P in series)
Rated service breaking capacity (kA rms)	<b>Ics</b>	% Icu	

Suitability for isolation		
Utilisation category		
Pollution degree		
Endurance (C-O cycles)	Mechanical	
	Electrical	In/415 V

## Electrical characteristics as per NEMA-AB1

Breaking capacity (kA rms)	<b>HIC</b>	AC 50/60 Hz	240 V 277/480 V
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## Protection

Overload protection	Bimetal	
Instantaneous protection	Magnetic	fixed (± 20 %)

## Earth-leakage protection

Sensitivity (A)	<b>I<math>\Delta</math>n</b>	adjustable
Time-delay (ms)	<b><math>\Delta</math>t</b>	adjustable
Max. breaking time (s)	at 2 I $\Delta$ n	

## Auxiliaries

Indication contacts	Auxiliary switch	OF/AX
	Alarm switch	SD/AL
	Combined AX + AL	AXAL
	Earth-alarm switch	ALV
Voltage releases	Shunt trip release	MX/SHT
	Undervoltage release	MN/UVR

## Installation

Connection	Crimp lugs / bars	
Accessories	Box lugs for bare cables	
	Rotary handles	Direct Extended
	Terminal extensions	
	Spreaders	
	Phase barriers	
	Terminal shields	
	Padlocking system	

## Dimension and weight

Dimensions (mm)	D x H W
Weight (kg)	

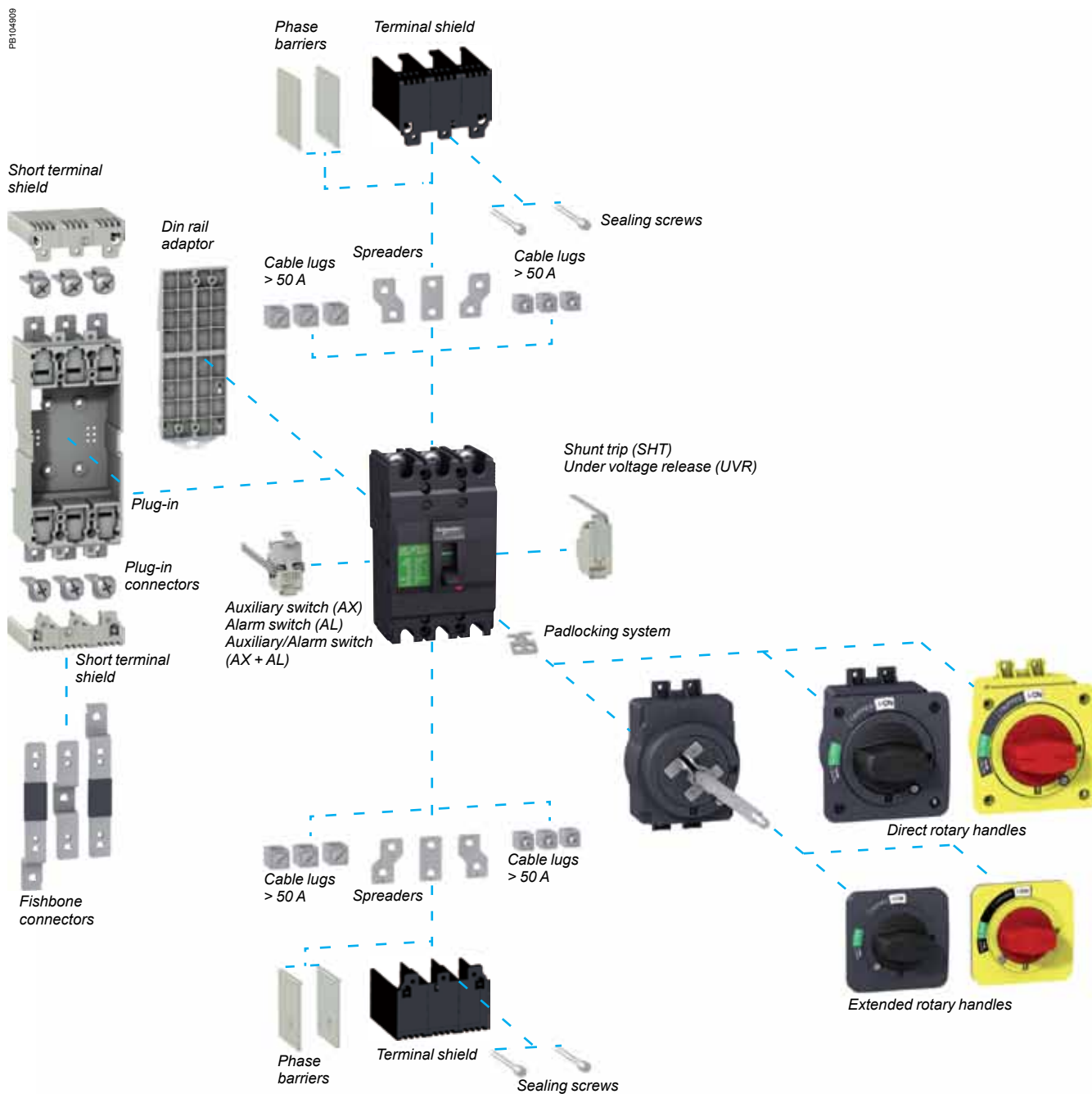


	EZC250N	EZC250H	EZCV250N	EZCV250H	EZC400N	EZC400H	EZC630N	EZC630H
	■	■	■	■	■	■	■	■
	■	■	■	■	-	-	-	-
	4	4	3-4	3-4	3-4	3-4	3-4	3-4
	63, 80, 100, 125, 150, 160, 175, 200, 225, 250	63, 80, 100, 125, 150, 160, 175, 200, 225, 250	63, 80, 100, 125, 150, 160, 175, 200, 225, 250	63, 80, 100, 125, 150, 160, 175, 200, 225, 250	320, 350, 400	320, 350, 400	400, 500, 600	400, 500, 600
	690	690	440	440	690	690	690	690
	6	6	6	6	6	6	6	6
	550	550	440	440	440	440	440	440
	250	250	-	-	250	250	250	250
	50	85	85	100	40	70	40	70
	25	36	25	36	36	50	36	50
	<b>25</b>	<b>36</b>	<b>25</b>	<b>36</b>	<b>36</b>	<b>50</b>	<b>36</b>	<b>50</b>
	20	25	20	25	36	50	36	50
	8	10	-	-	-	-	-	-
	20	30	-	-	-	-	-	-
	20	30	-	-	-	-	-	-
	50 %	50 %	50 %	50 %	50 %	50 %	100% (220-415V) 50% (440V)	100% (220-415V) 50% (440V)
	■	■	■	■	■	■	■	■
	A	A	A	A	A	A	A	A
	3	3	3	3	3	3	3	3
	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
	5 000	5 000	5 000	5 000	4 000	4 000	3 000	3 000
	50	85	50	85	50	85	50	85
	18	25	-	-	25	35	25	35
	fixed	fixed	fixed	fixed	fixed	fixed	fixed	fixed
	10 In	10 In	10 In	10 In	10 In	10 In	10 In (400/500A) 5000A (600A)	10 In (400/500A) 5000A (600A)
	-	-	0.1/0.3/0.5/1	0.1/0.3/0.5/1	-	-	-	-
	-	-	0/200/500/1000	0/200/500/1000	-	-	-	-
	-	-	0.15/0.4/1/2	0.15/0.4/1/2	-	-	-	-
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	-	-	-	-
	-	-	■	■	-	-	-	-
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■
	68 x 165	68 x 165	68 x 165	68 x 165	140 x 255	140 x 255	140 x 255	140 x 255
	140	140	105 (3P) 140 (4P)	105 (3P) 140 (4P)	140 (3P) 185 (4P)	140 (3P) 185 (4P)	140 (3P) 185 (4P)	140 (3P) 185 (4P)
	1.8	1.8	1.6 (3P) 2.1 (4P)	1.6 (3P) 2.1 (4P)	4.8 (3P) 6.4 (4P)	4.8 (3P) 6.4 (4P)	4.8 (3P) 6.4 (4P)	4.8 (3P) 6.4 (4P)

# Electrical and mechanical accessories overview

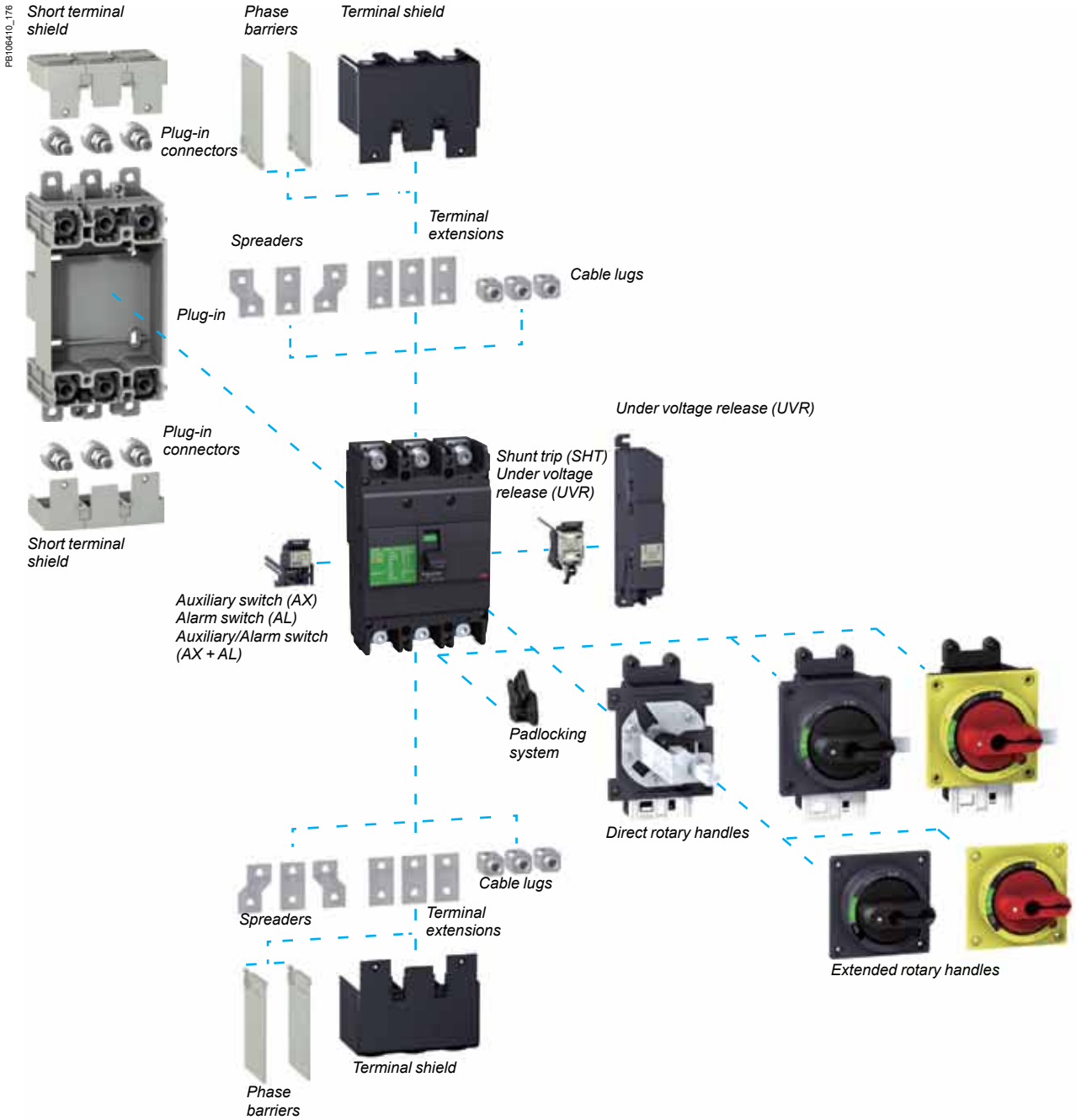
## EasyPact EZC100

EasyPact EZC circuit breaker EZC100 comes with a full range of accessories to fulfill different application requirements and make it easy for the end-user.



# EasyPact EZC250

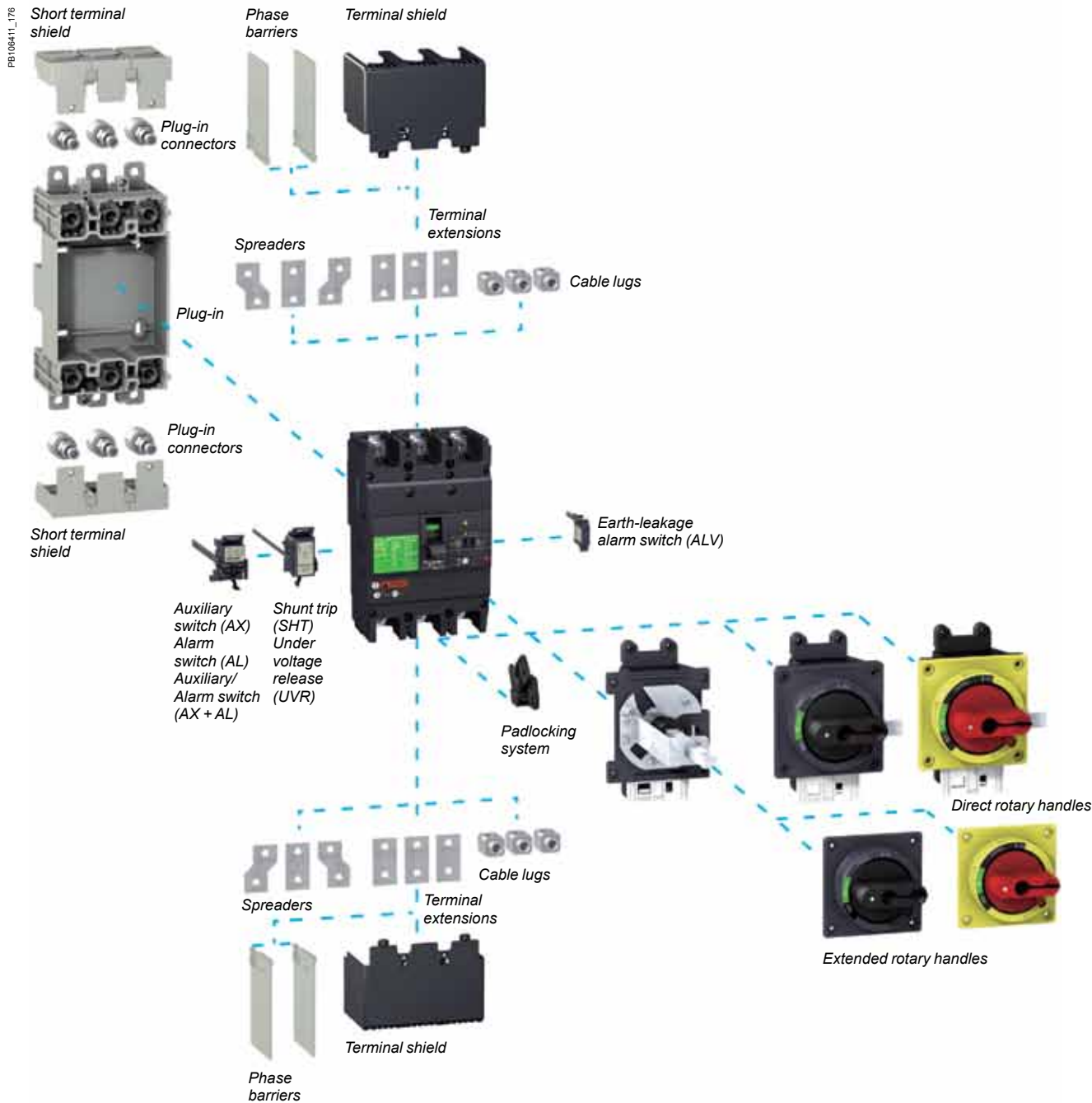
EasyPact EZC circuit breaker EZC250 comes with a full range of accessories to fulfill different application requirements and make it easy for the end-user.



# Electrical and mechanical accessories overview

## EasyPact EZCV250

EasyPact EZC circuit breaker EZCV250 comes with a full range of accessories to fulfill different application requirements and make it easy for the end-user.

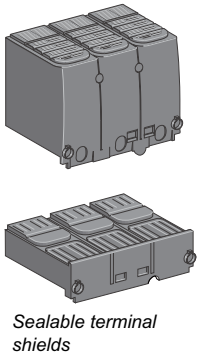


# EasyPact Ezc400-630

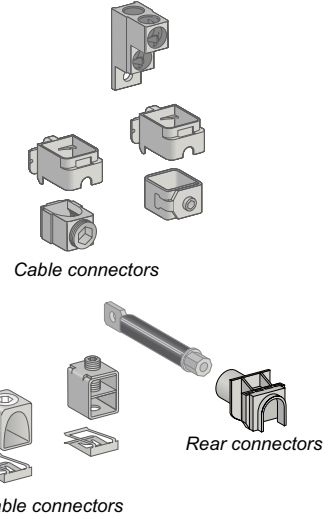
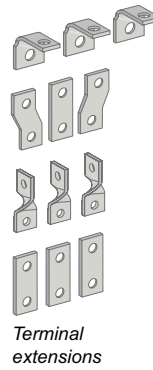
EasyPact Ezc circuit breaker Ezc400-630 comes with a full range of accessories to fulfill different application requirements and make it easy for the end-user.

DB440001\_1

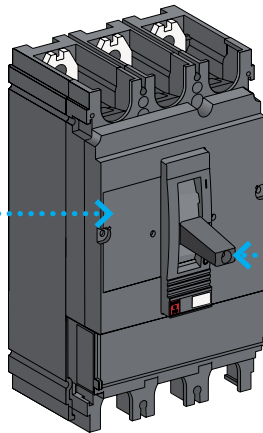
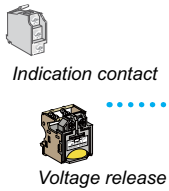
## Insulation accessories



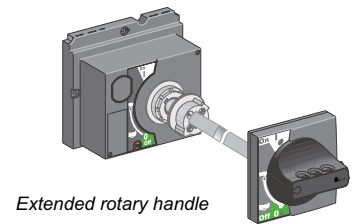
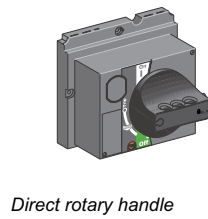
## Connection



## Electrical auxiliaries



## Control accessories



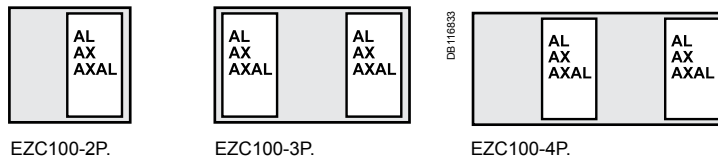
# Electrical auxiliaries

## 100-250AF

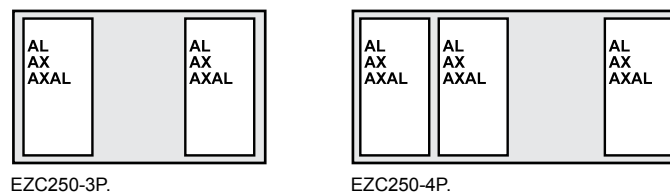
### AX - AL - AXAL - ALV

#### Plug-in location: AX - AL - AXAL - ALV

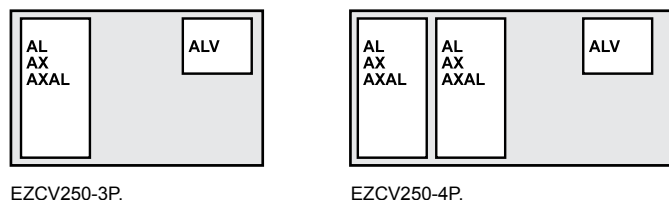
##### EZC100



##### EZC250



##### EZCV250

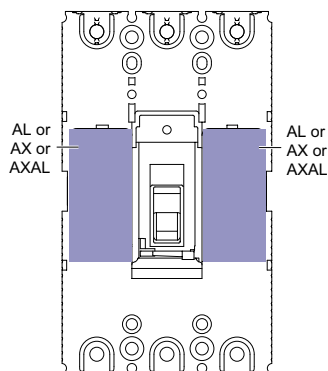


CFP100812



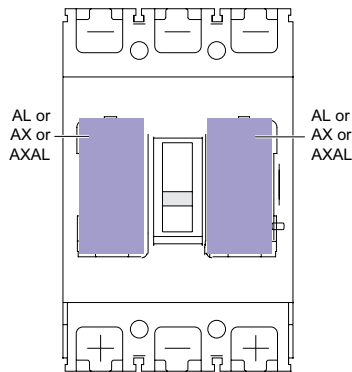
EZC100.

CD8500603



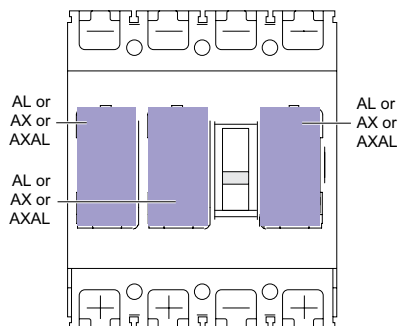
AXAL and AX electrical auxiliaries on EZC100.

CD8500604



AXAL electrical auxiliaries on EZC250.

CD8500605



AXAL, AX and ALV electrical auxiliaries on EZCV250.

## Indication contacts

Provide remote circuit breaker status information. They can be used for indications, electrical locking, relaying, etc. Common-point changeover contacts.

### Auxiliary switch (ON/OFF)

AX indicates the position of the circuit breaker contacts.

### Alarm switch (trip indication)

■ AL indicates that the circuit breaker has tripped due to:

- an overload
- a short-circuit
- operation of a voltage release.

■ ALV indicates that the circuit breaker has tripped due to an of earth-leakage fault.

They return to de-energised state when the circuit breaker is reset.

## Characteristics

### Contacts

Rated thermal current (A)	5				
Minimum load	10 mA at 24 V				
Utilisation category (IEC 60947-5-1)	AC12	AC15	DC12	DC14	
Operational current (A)	24 V	5	5	4	3
	48 V	5	5	2.5	1
	125 V	5	3	0.4	0.4
	250 V	3	2	0.2	0.2

### Connections

Connection wire length	450 mm
Cross-section	EZC100: 1 mm <sup>2</sup> ,
	EZC250/EZCV250: 1.5 mm <sup>2</sup>

PB101862-21



Auxiliary switch (AX)  
EZAUX10.

PB101876-21



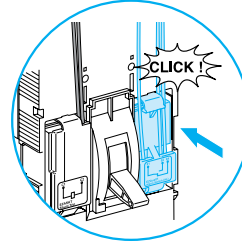
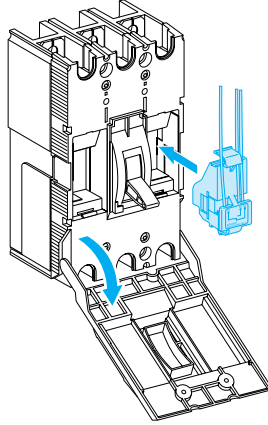
Auxiliary switch (AX)  
EZEAX.

PB101893-28



Earth-leakage alarm switch  
(ALV).

DB116396



All EasyPact EZC  
electrical auxiliaries  
are "snapped in place"



# Electrical auxiliaries

## 100-250AF

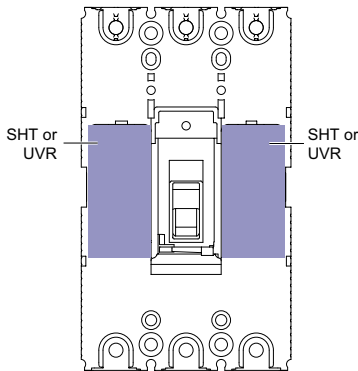
### SHT - UVR - UVRN

CPB100816



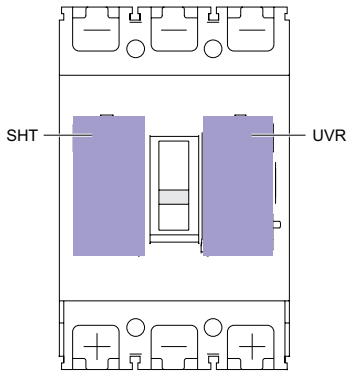
EZC250.

CDB500806



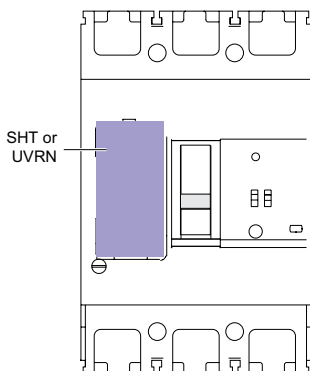
SHT and UVR releases on EZC100.

CDB500807



SHT and UVR releases on EZC250.

CDB500808



UVRN release on EZC250.

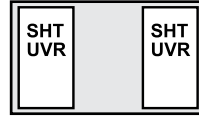
### Plug-in location : SHT - UVR - UVRN

#### EZC100

DB116836



EZC100-2P.



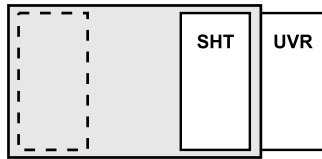
EZC100-3P.



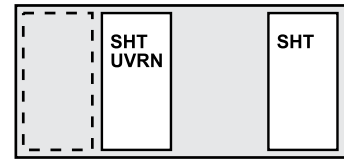
EZC100-4P.

#### EZC250

DB116838



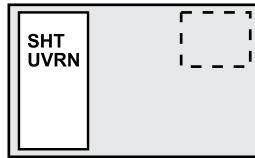
EZC250-3P.



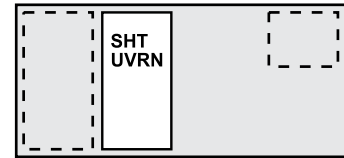
EZC250-4P.

#### EZCV250

DB116839



EZCV250-3P.



EZCV250-4P.

## Remote tripping

Shunt Trip (SHT) or Under Voltage Release (UVR/UVRN).

### Shunt Trip (SHT)

- This release trips the circuit breaker when the control voltage rises above  $0.7 \times U_n$
- Control signals can be of the impulse type ( $\geq 20$  ms) or maintained.

### Under Voltage Release (UVR/UVRN)

- This release trips the circuit breaker when the control voltage drops below a tripping threshold
- Tripping threshold between 0.35 and 0.7 times the rated voltage
- Circuit breaker closing is possible only if the voltage exceeds 0.85 times the rated voltage.

### Operation

When the circuit breaker has been tripped by an SHT or UVR/UVRN release, it must be reset locally:

- SHT or UVR/UVRN tripping takes priority over manual closing
- in the presence of a standing trip order, closing of the contacts, even temporary, is not possible.

Circuit breaker tripping by an SHT/UVR/UVRN release meets the requirements of standard IEC 60947-2.

## Characteristics

Mechanical			
Mechanical endurance	10 % of MCCB mechanical endurance		
Electrical		EZC100	EZC250/EZCV250
		AC/DC	AC DC
SHT	pick-up consumption	< 30 VA	< 35 W
	response time	< 50 ms	< 100 ms
UVR	seal-in consumption	< 5 VA	< 10 W
	response time	< 50 ms	< 100 ms
UVRN	seal-in consumption	< 5 VA	< 10 W
	response time	< 50 ms	< 100 ms
Connections		EZC100	EZC250/EZCV250
SHT		pre-wired (1 mm <sup>2</sup> )	pre-wired (0.5 mm <sup>2</sup> )
UVR		pre-wired (1 mm <sup>2</sup> )	screws (< 2 mm <sup>2</sup> )
UVRN		pre-wired (1 mm <sup>2</sup> )	pre-wired (0.5 mm <sup>2</sup> )

PB101865-16



*Shunt Trip EZASHT.*

PB101879-18



*Shunt Trip EZESHT.*

#### Installation

- Ezc100 SHT and UVR: internal mounting
- Ezc250/EzcV250:
  - SHT: internal mounting
  - UVR: external mounting
  - UVRN: internal mounting

PB101866-18



*Under Voltage Release  
EZAUVR.*

PB101864-27



*Under Voltage Release  
EZEUVRN.*

PB101860-15



*Under Voltage Release  
EZEUVR.*

# Direct rotary handle 100-250AF

PE101867-31



Direct rotary handle (black) for EZC100.

PB102156-30



Direct rotary handle (red/yellow) for EZC100.

PE101881-33



Direct rotary handle (black) for EZC250/EZCV250.

PB102157-33



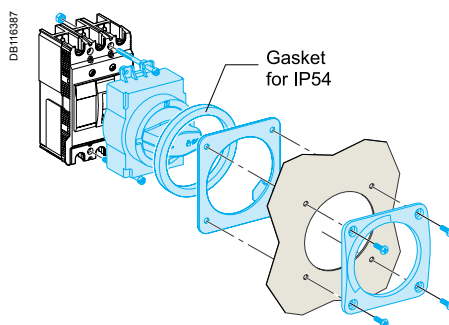
Direct rotary handle (red/yellow) for EZC250/EZCV250.

## Direct rotary handle

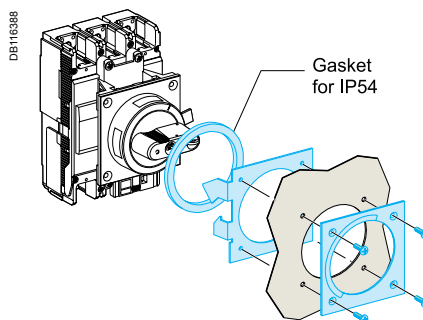
Suitable for Motor Control Centre (MCC) switchboards.

- Degree of protection IP40 or IP54, IK07 (IP54 with gasket supplied).
- The direct rotary handle maintains:
  - suitability for isolation
  - indication of the three positions O (OFF), I (ON) and tripped
  - circuit breaker locking capability in the OFF position by one to three padlocks, (padlock not supplied) shackle diameter Ø 5 for EZC100, Ø 8 for EZC250/EZCV250
  - door opening disabled when the circuit breaker is ON
  - circuit breaker closing is disabled if the door is open.

### IP40 or IP54

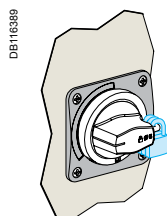


EZC100.

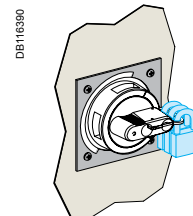


EZC250/EZCV250.

### Padlocking



EZC100.



EZC250/EZCV250.

Designation	Cat. no.	
	<b>EZC100</b>	<b>EZC250/EZCV250</b>
Direct rotary handle (black)	<b>EZAROTDS</b>	<b>EZEROTDS</b>
Direct rotary handle (red/yellow)	<b>EZAROTDSRY</b>	<b>EZEROTDSRY</b>

# Extended rotary handle 100-250AF

PB101868-46



Extended rotary handle (black) for EZC100.

PE102158-46



Extended rotary handle (red/yellow) for EZC100.

PB101862-42



Extended rotary handle (black) for EZC250/EZCV250.

PB102156-42



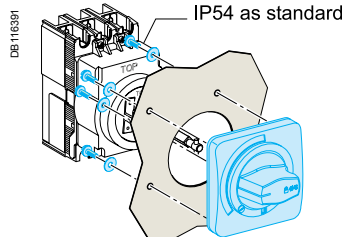
Extended rotary handle (red/yellow) for EZC250/EZCV250.

## Extended rotary handle

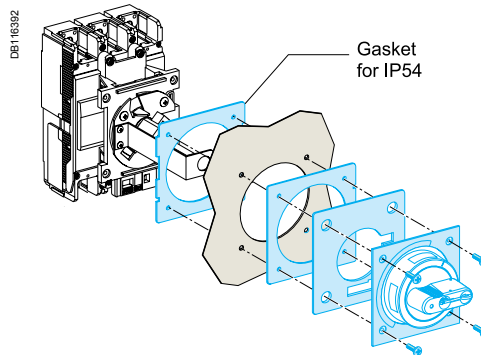
The extended rotary handle is used to control, from the front face of the switchboard, a device installed at the back of the switchboard.

- Degree of protection IP40 or IP54, IK08 (IP54 with gasket supplied).
- The extended rotary handle maintains:
  - suitability for isolation
  - indication of the three positions O (OFF), I (ON) and tripped
  - circuit breaker locking capability in the OFF position by one to three padlocks, (padlock not supplied) shackle diameter: Ø 5 for EZC100, Ø 8 for EZC250/EZCV250
  - door opening disabled when the circuit breaker is ON.
- The extended rotary handle is made up of:
  - a unit on the front cover of the circuit breaker (secured by screws)
  - an assembly (handle and front plate) on the door that is always secured in the same position, whether the circuit breaker is installed vertically or horizontally
  - an extension shaft that must be adjusted to the distance between back of circuit breaker and door.

### IP40 or IP54

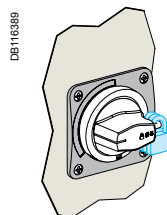


EZC100.

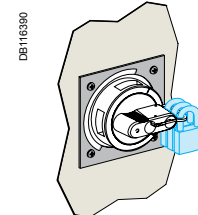


EZC250/EZCV250.

### Padlocking



EZC100.



EZC250/EZCV250.

Designation	Cat. no.	
	<b>EZC100</b>	<b>EZC250/EZCV250</b>
Extended rotary handle (black)	<b>EZAROTE</b>	<b>EZEROTE</b>
Extended rotary handle (red/yellow)	<b>EZAROTERY</b>	<b>EZEROTERY</b>

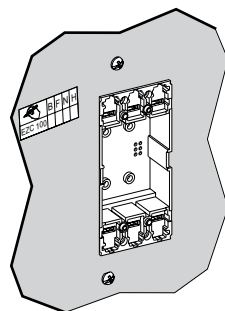
The plug-in allows you to connect, disconnect from the circuit breaker rapidly.

## Plug-in

The plug-in base is equipped with terminals which, depending on their orientation, serve for front and rear connection. Degree of protection IP20.

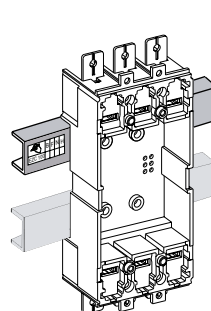


CPB100620



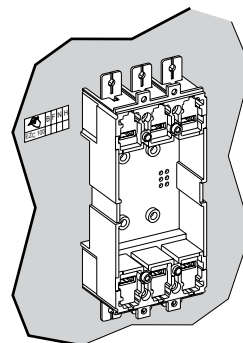
DB127465

Front connection.



DB127466

Fixation on rail DIN.

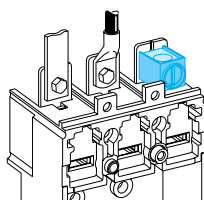


DB127467

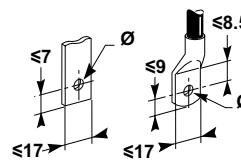
Fixation on rear plate.

## Connection accessories

All accessories for fixed devices (bars, lugs) may be used with the plug-in base.



DB127468



Tightening torque

## References Plug-in

## 100 A

<b>EZAPLUG3L</b>	Kit, plug-in base 3P 15 A-50 A
<b>EZAPLUG3H</b>	Kit, plug-in base 3P 60 A-100 A
<b>EZAFSHB3</b> - set of 3	Fishbone connectors
<b>EZAPCON1L</b> - set of 2	Plug-in connectors 15 A-50 A
<b>EZAPCON1H</b>	Plug-in connectors 60 A-100 A



PB106398-30

EZAPCON1L



PB106398-33

EZAPCON1H



PB106397-27

EZAFSHB3



CPB100609

Fishbone.

## Fishbone

The fishbone, designed for vertical installation, saves space and reduces cabling time.

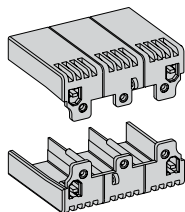
# Insulation of live parts

Short terminal shield only.

CFB100021



DB127460



## Terminal shields

Insulating accessories used for protection against direct contact with power circuits. They provide IP40 degree of protection and IK07 mechanical impact protection.

### Terminal-shield types

Easycompact EVC 100 to 250:

- short terminal shields

### Short terminal shields

They are used with:

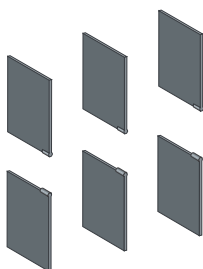
- plug-in in all connection configurations
- fixed versions with rear connection.

### Terminal shields and pitch

Combination possibilities are shown below.

<b>Circuit breaker Easycompact EVC</b>	<b>100/160/250</b>
Pitch (mm)	35

DB11356



## Interphase barriers

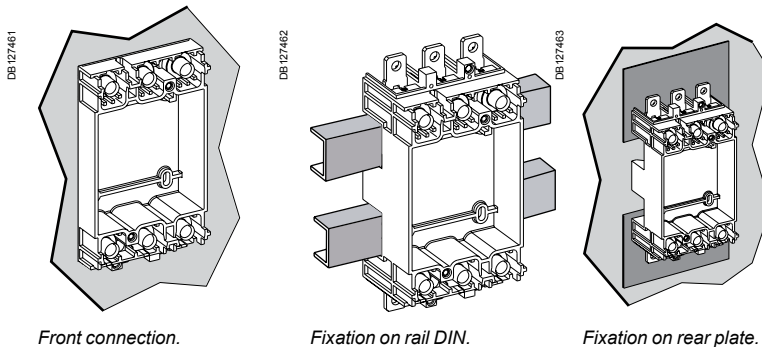
Safety accessories for maximum insulation at the power-connection points:

- they clip easily onto the circuit breaker
- single version for fixed devices and adapters on plug-in bases
- not compatible with terminal shields
- the adapter for the plug-in base is required for mounting on plug-in and withdrawable versions.

The plug-in allows you to connect, disconnect from the circuit breaker rapidly.

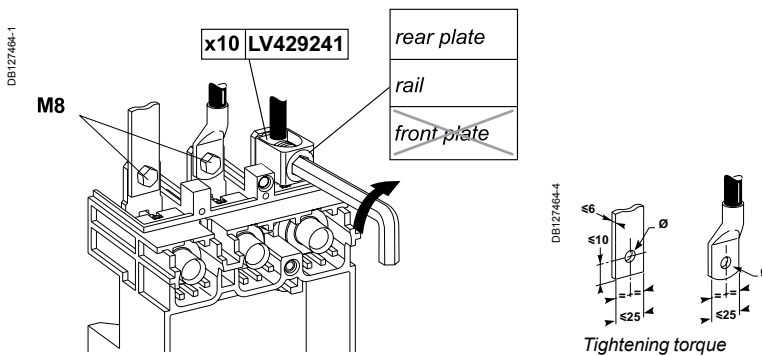
## Plug-in

The plug-in base is equipped with terminals which, depending on their orientation, serve for front and rear connection. Degree of protection IP20.



## Connection accessories

All accessories for fixed devices (bars, lugs).



References Plug-in	250 A
EZEPLUG3L - 60 mm breaker	Kit, plug-in base 3P 100 A - 250 A
EZEPLUG3H - 68 mm breaker	Kit, plug-in base 3P 100 A - 250 A
EZEPLUG4 - 68 mm breaker	Kit, plug-in base 4P 100 A - 250 A
EZEPCON1 - set of 2	Kit, plug-in connectors 100 A - 250 A

PB106402-43



EZEPCON1



# Insulation of live parts

## Short terminal shield only



CPB100622

## Terminal shields

Insulating accessories used for protection against direct contact with power circuits. They provide IP40 degree of protection and IK07 mechanical impact protection.

### Terminal-shield types

Easypact EZC 100 to 250:

- short terminal shields.

### Short terminal shields

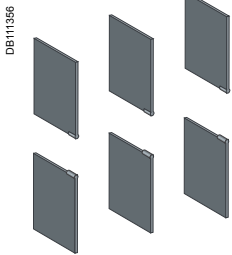
They are used with:

- plug-in in all connection configurations
- fixed versions with rear connection.

### Terminal shields and pitch

Combination possibilities are shown below.

Circuit breaker Easypact	100/160/250
Short terminal shields	
Pitch (mm)	35



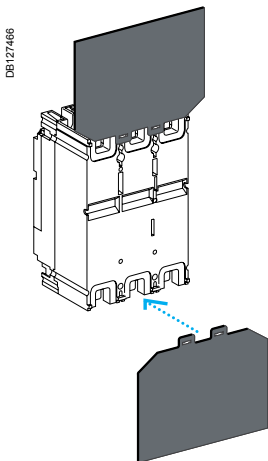
DB11356

Interphase barriers.

## Interphase barriers

Safety accessories for maximum insulation at the power-connection points:

- they clip easily onto the circuit breaker
- single version for fixed devices and adapters on plug-in bases
- not compatible with terminal shields
- the adapter for the plug-in base is required for mounting on plug-in and withdrawable versions.



DE127466

Rear insulating screens.

## Rear insulating screens

Safety accessories providing insulation at the rear of the device.

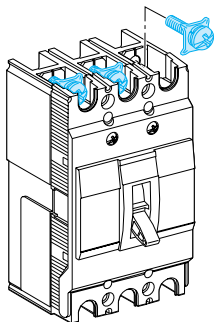
Their use is mandatory for devices with spreaders, installed on backplates, when terminal shields are not used.

The available screen dimensions are shown below.

Circuit breaker Easypact	100/160/250	
3P	W x H x thickness (mm)	140 x 105 x 1
4P	W x H x thickness (mm)	175 x 105 x 1

# Power connections and cable lugs 100-250AF

DB116395



## Standard circuit breaker terminals

All EasyPact EZC circuit breakers are supplied with terminal screws

EZC100 15 to 50 A

Screw M5

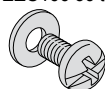
E88221



EZC100 60 to 100 A

Screw M8

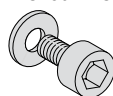
E88222



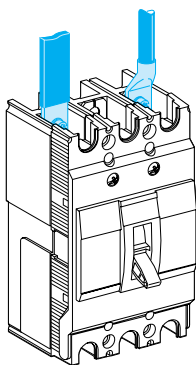
EZC250/EZCV250 63 to 250 A

Screw M8

DB112345



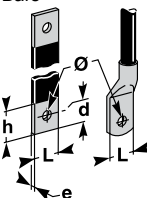
DB116396



## Connection of insulated bars or cables with lugs

Bars

DB112346



	EZC100	EZC250/ EZCV250
L (mm)	≤ 17	≤ 25
h (mm)	d + 10	d + 10
d (mm)	≤ 7	≤ 8
e (mm)	≤ 6	≤ 6
Ø (mm)	≤ 50 A	5.5
	> 50 A	8.5
		9

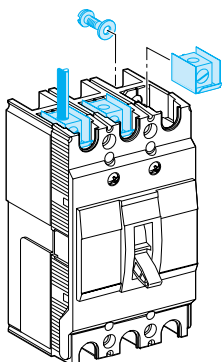
Crimp lugs

	EZC100	EZC250/ EZCV250
L (mm)	≤ 17	≤ 25
d (mm)	≤ 9	≤ 8
Ø (mm)	≤ 50 A	5.5
	> 50 A	8.5
		9

Tightening torque

≤ 50 A	2 N.m	-
> 50 A	5.5 N.m	13 N.m

DB116397



## Cable lugs

Cable lugs directly screwed on standard circuit breaker terminals.

≤ 50 A (EZC100)

> 50 A (EZC100)

≥ 100 A (EZC250/EZCV250)

E88190



E88189



DB115938



Cables from 2.5 to 16 mm<sup>2</sup>.

Cables from 10 to 50 mm<sup>2</sup>.

Cables from 42.2 to 150 mm<sup>2</sup>.

Designation	Cat. no.	
	EZC100	EZC250/EZCV250
Cable lug up to 50 A (set of 2)	EZALUG0502 <sup>(1)</sup>	-
Cable lug up to 50 A (set of 3)	EZALUG0503 <sup>(1)</sup>	-
Cable lug from 60 A up to 100 A (set of 2)	EZALUG1002 <sup>(2)</sup>	-
Cable lug from 60 A up to 100 A (set of 3)	EZALUG1003 <sup>(2)</sup>	-
Cable lug from 100 A up to 250 A (set of 3)	-	EZELUG2503
Cable lug from 100 A up to 250 A (set of 4)	-	EZELUG2504

### Important:

- (1) EZALUG0502 and EZALUG0503 can be use with maximum rating of 50 A.
- (2) EZALUG1002 and EZALUG1003 can be use with maximum rating of 100 A.

# Power connections and insulation of live parts 100-250AF

PB101856-32



Spreader.

PB101873-25



Terminal extensions.

PB101861-23



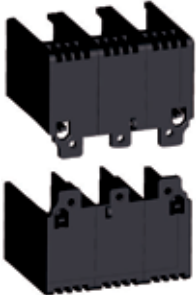
Phase barriers for Ezc100.

PB101875-15



Phase barriers for Ezc250/  
EzcV250.

PB104906



Terminal shield for Ezc100.

PB101874-25



Terminal shield  
for Ezc250/EzcV250.

## Spreaders

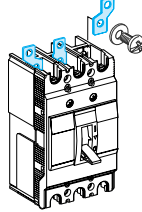
Increase the pitch of the circuit breaker terminals:

- Ezc100 from 25 mm to 35 mm
- Ezc250/EzcV250 from 35 mm to 45 mm.

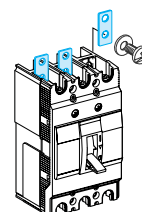
## Terminal extensions

Additional terminal extensions are available for Ezc250/EzcV250 at 35 mm pitch.

DB116389



DB116389

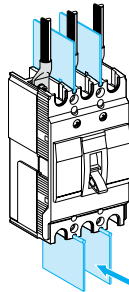


Designation	Cat. no.	
	Ezc100	Ezc250/EzcV250
Spreaders for 3-pole breaker (set of 3)	EZASPDR3P	EZESPDR3P
Spreaders for 4-pole breaker (set of 4)	EZASPDR4P	EZESPDR4P
Terminal extension for 3-pole breaker (set of 3)	-	EZETEX
Terminal extension for 4-pole breaker (set of 4)	-	EZETEX4P

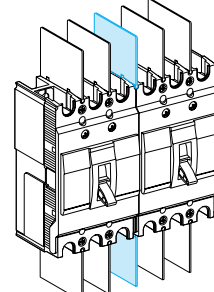
## Phase barriers

- Safety accessories for maximum insulation at the power connection points.
- Usable with all other connection accessories, except terminal shields.
- Each breaker is delivered with a set of phase barriers (1 for 2 poles, 2 for 3 poles and 3 for 4 poles breaker).
- Additional set of phase barriers available for insulation between outgoing or between 2 side by side mounted breakers.

DB116400



DB116401

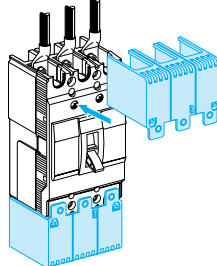


Designation	Cat. no.	
	Ezc100	Ezc250/EzcV250
Phase barriers for 60 mm depth (set of 2)	EZAFASB2	EZEFASB2
Phase barriers for 68 mm depth (set of 3)	-	EZEFASB3N

## Terminal shields

- Insulating accessory used for protection against direct contacts with power circuit connections. It provides a degree of protection of IP20 and a mechanical resistance of IK07.
- The long terminal shield is used with front cable or isolated busbar connections.
- Designed for 3-pole Ezc100, 3, 4-pole Ezc250/EzcV250.

DB402709



Designation	Cat. no.	
	Ezc100	Ezc250/EzcV250
Terminal shield 3P, 60 mm depth (set of 2)	EZATSHD3P	EZETSHD3P
Terminal shield 3P, 68 mm depth (set of 2)	-	EZETSHD3PN
Terminal shield 4P, 60 mm depth (set of 2)	EZATSHD4P	-
Terminal shield 4P, 68 mm depth (set of 2)	-	EZETSHD4PN

# DIN rail adaptor, padlocking, sealing screws 100-250AF

PB101870-10



PB101917-15



PB101869-22



Padlocking device for  
EZC100.

PB101920-20

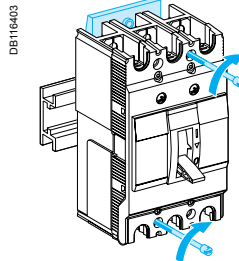


Padlocking device for  
EZC250/EZCV250.

## DIN rail adaptor

Breaker mounting on a DIN rail is possible by using special adaptor (EZC100 only).  
Number of adaptators:

- one for two 1P, or one 2P or one 3P
- two for one 4P.



Mounting on DIN rail (optional).

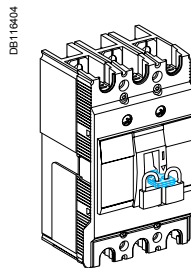
Designation	Cat. no.	
	EZC100	EZC250/EZCV250
Din rail adaptor	EZADINR	-

## Padlocking system

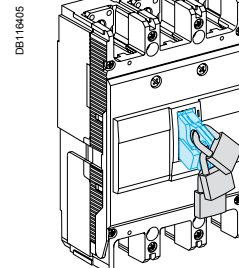
Locking in the OFF position guarantees isolation as per IEC 60947-2.

Padlocking system can receive:

- up to 2 padlocks Ø 5 mm (padlocks not supplied) for EZC100
- up to 3 padlocks Ø 8 mm for EZC250/EZCV250 (padlocks not supplied).



Toggle locking using a removable device:  
for EZC100



for EZC250/EZCV250

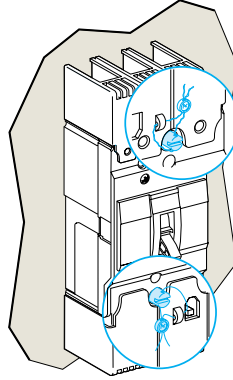
Designation	Cat. no.	
	EZC100	EZC250/EZCV250
Padlocking system	EZALOCK	-
Padlocking system for EZC250-3P	-	EZELOCK
Padlocking system for EZC250-4P and EZCV250-3/4P	-	EZELOCKN

PB 101860-30



## Sealing screws

DB 116406



Designation	Cat. no.	
	EZC100	EZC250/EZCV250
Sealing screws (set of 2)	EZASSCR	-

# Accessories and auxiliaries of EZC400-630

## Connection of devices

Fixed circuit breakers are designed for standard front connection using bars or cables with lugs. Cable connectors are available for bare cables. Rear connection is also possible.

### Front connection

#### Bars or cables with lugs

##### Standard terminals

EasyPact EZC400 to 630 come with terminals comprising snap-in nuts with screws:

- EasyPact EZC400/630: M10 nuts and screws.
- These terminals may be used for:
  - direct connection of insulated bars or cables with lugs
  - terminal extensions.

Interphase barriers or terminal shields are recommended. They are mandatory for certain connection accessories (in which case the interphase barriers are provided).

##### Bars

When the switchboard configuration has not been tested, insulated bars are mandatory. **Maximum size of bars**

EasyPact EZC circuit breaker	400/630	
Without spreaders	pitch (mm)	45
	maximum bar size (mm)	32 x 8
With spreaders	pitch (mm)	52.5
	maximum bar size (mm)	40 x 6

##### Crimp lugs

There are two modules of lugs, for aluminium and copper cables.

Interphase barriers or long terminal shields must be used with narrow lugs. The lugs are supplied with interphase barriers.

EasyPact EZC circuit breaker	400/630	
Copper cables	size (mm <sup>2</sup> )	240, 300
	crimping	hexagonal barrels or punching
Aluminium cables	size (mm <sup>2</sup> )	240, 300
	crimping	hexagonal barrels

##### Terminal extensions

Extensions with anti-rotation ribs can be attached to the standard terminals to provide numerous connection possibilities in little space:

- straight terminal extensions
- right-angle terminal extensions

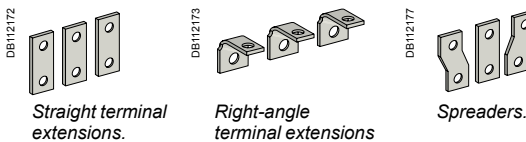
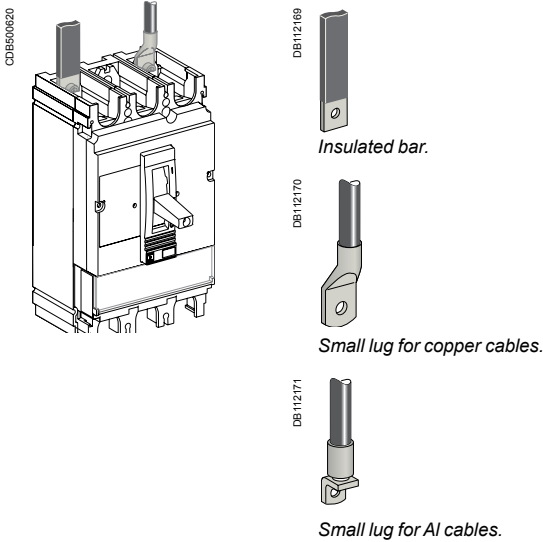
##### Spreaders

Spreaders may be used to increase the pitch:

- EZC400/630: the 45 mm pitch can be increased to 52 or 70 mm.
- Bars, cable lugs or cable connectors can be attached to the ends.

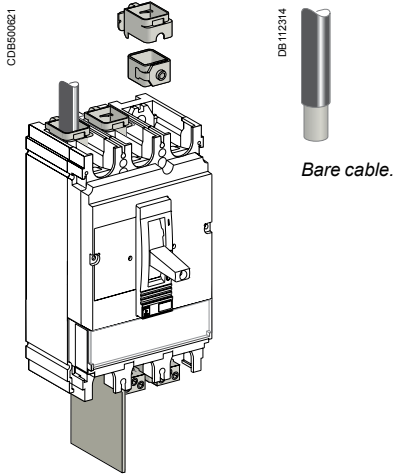
##### Pitch (mm) depending on the type of spreader

EasyPact EZC circuit breaker	EZC400 to 630
Without spreaders	45
With spreaders	52.5 or 70



# Accessories and auxiliaries of EZC400-630

## Connection of devices



DB112314

Bare cable.

### Bare cables

Bare-cable connectors may be used for both copper and aluminium cables.

#### 1-cable connectors for EasyPact EZC400 to 630

The connectors are screwed directly to the device terminals.

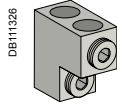
#### Maximum size of cables depending on the type of connector

EasyPact EZC circuit breaker		400	630
Aluminium connectors	2 cables 35 to 240 mm <sup>2</sup>	■	■
	35 to 300 mm <sup>2</sup>	■	■



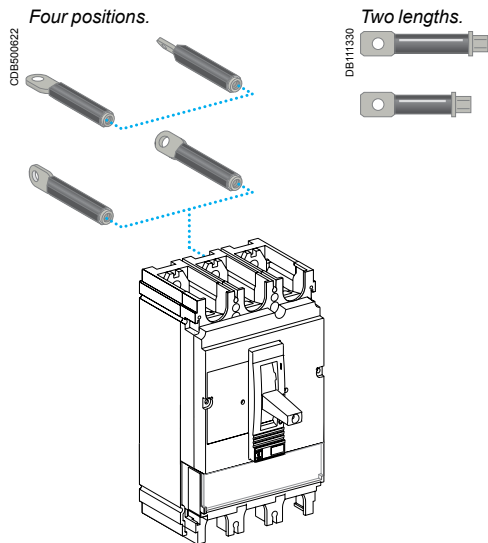
DB112316

1-cable connector for EZC400/630.



DB111226

2-cable connector for EZC400/630.



CD9500622

Four positions.

Two lengths.

DB111330

### Rear connection

Device mounting on a backplate with suitable holes enables rear connection.

#### Bars or cables with lugs

Rear connections for bars or cables with lugs are available in two lengths. Bars may be positioned flat, on edge or at 45° angles depending on how the rear connections are positioned.

The rear connections are simply fitted to the device connection terminals. All combinations of rear connection lengths and positions are possible on a given device.



# Accessories and auxiliaries of EZX400-630

## Selection of auxiliaries

### EasyPact EZX400/630

#### Standard

All EasyPact EZX400/630 circuit breakers and switch-disconnectors have slots for the electrical auxiliaries listed below.

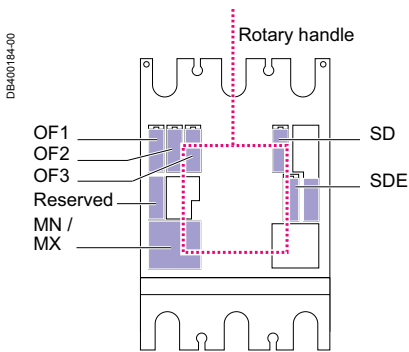
#### 5 indication contacts

- 3 ON/OFF (OF3)
- 1 trip indication (SD)
- 1 fault-trip indication (SDE)

#### 1 remote-tripping release

- either 1 MN undervoltage release
- or 1 MX shunt release.

All these auxiliaries can be installed with a rotary handle.



# Accessories and auxiliaries of EZC400-630

## Indication contacts

One contact model provides circuit-breaker status indications (OF - SD - SDE).

DB125549



Indication contacts.

These common-point changeover contacts provide remote circuit-breaker status information.

They can be used for indications, electrical locking, relaying, etc. They comply with the IEC 60947-5 international recommendation.

### Functions

#### Breaker-status indications, during normal operation or after a fault

A single type of contact provides all the different indication functions:

- OF (ON/OFF) indicates the position of the circuit breaker contacts
- SD (trip indication) indicates that the circuit breaker has tripped due to:
  - an overload
  - a short-circuit
  - an earth fault (Vigi)
  - operation of a voltage release
  - operation of the "push to trip" button
  - disconnection when the device is ON.

The SD contact returns to de-energised state when the circuit breaker is reset.

- SDE (fault-trip indication) indicates that the circuit breaker has tripped due to:
  - an overload
  - a short-circuit

### Installation

■ OF, SD, SDE functions: a single type of contact provides all these different indication functions, depending on where it is inserted in the device. The contacts clip into slots behind the front cover of the circuit breaker.

### Electrical characteristics of auxiliary contacts

Contacts	Standard				Low level				
Types of contacts	All				OF, SD, SDE				
Rated thermal current (A)	6				5				
Minimum load	100 mA at 24 V DC				1 mA at 4 V DC				
Utilisation cat. (IEC 60947-5-1)	AC12	AC15	DC12	DC14	AC12	AC15	DC12	DC14	
Operational current (A)	24 V AC/DC	6	6	6	1	5	3	5	1
	48 V AC/DC	6	6	2.5	0.2	5	3	2.5	0.2
	110 V AC/DC	6	5	0.6	0.05	5	2.5	0.6	0.05
	220/240 V AC	6	4	-	-	5	2	-	-
	250 V DC	-	-	0.3	0.03	5	-	0.3	0.03
	380/440 V AC	6	2	-	-	5	1.5	-	-

# Accessories and auxiliaries of EZC400-630

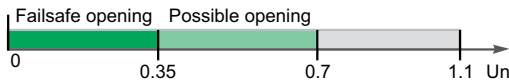
## Remote tripping

DB115650



MX or MN voltage release.

DB115605



Opening conditions of the MN release.

DB115606

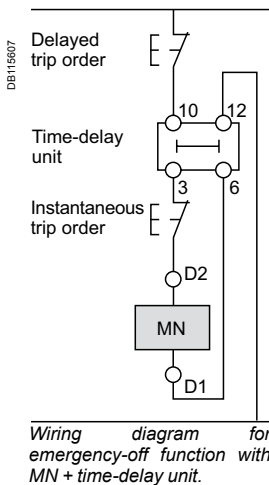


Closing conditions of the MN release.

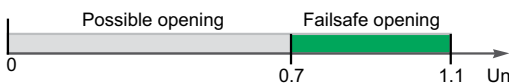
PB 103752-32



MN release with a time-delay unit.



DB115608



Opening conditions of the MX release.

### MN undervoltage release

- This release trips the circuit breaker when the control voltage drops below a tripping threshold
- The tripping threshold is between 0.35 and 0.7 times the rated voltage
- Circuit breaker closing is possible only if the voltage exceeds 0.85 times the rated voltage.

### Characteristics

Power supply	V AC	50/60 Hz: 24 - 48 - 100/130 - 200/240
		50 Hz: 380/415    60 Hz: 208/277
Operating threshold	V DC	12 - 24 - 30 - 48 - 60 - 125 - 250
	Opening	0.35 to 0.7 Un
	Closing	0.85 Un
Operating range		0.85 to 1.1 Un
Consumption (VA or W)		Pick-up: 10 - Hold: 5
Response time (ms)		50

### Time-delay unit for an MN release

A time delay unit for the MN release eliminates the risk of nuisance tripping due to a transient voltage dip lasting  $\leq 200$  ms. For shorter micro-outages, a system of capacitors provides temporary supply to the MN at  $U > 0.7$  to ensure non tripping. The correspondence between MN releases and time-delay units is shown below.

Power supply	Corresponding MN release
<b>Unit with fixed delay 200 ms</b>	
48 V AC	48 V DC
220 / 240 V AC	250 V DC
<b>Unit with adjustable delay (0.5s, 0.9s, 1.5s, 3s)</b>	
48 - 60 V AC/DC	48 V DC
100 - 130 V AC/DC	125 V DC
220 - 250 V AC/DC	250 V DC

### MX shunt release

The MX release opens the circuit breaker via an impulse-type ( $\geq 20$  ms) or maintained order.

### Opening conditions

When the MX release is supplied, it automatically opens the circuit breaker. Opening is ensured for a voltage  $U \geq 0.7 \times U_n$ .

### Characteristics

Power supply	V AC	50/60 Hz: 24 - 48 - 100/130 - 200/240
		50 Hz: 380/415    60 Hz: 208/277
	V DC	12 - 24 - 30 - 48 - 60 - 125 - 250
Operating range		0.7 to 1.1 Un
Consumption (VA or W)		Pick-up: 10
Response time (ms)		50

### Circuit breaker control by MN or MX

When the circuit breaker has been tripped by an MN or MX release, it must be reset before it can be reclosed.

MN or MX tripping takes priority over manual closing.

In the presence of a standing trip order, closing of the contacts, even temporary, is not possible.

Connection using wires up to 1.5mm<sup>2</sup> to integrated terminal blocks.

**Note:** circuit breaker opening using an MN or MX release must be reserved for safety functions. This type of tripping increases wear on the opening mechanism. Repeated use reduces the mechanical endurance of the circuit breaker by 50 %.

# Accessories and auxiliaries of EZC400-630

## Rotary handles escutcheons and protection collars

There are two types of rotary handle:

- direct rotary handle
- extended rotary handle.

CPB100628



EasyPact EZC400 with a rotary handle.

CPB100629



EasyPact EZC400 with an extended rotary handle installed at the back of a switchboard, with the keylock option and key.

CPB100630



Escutcheons are an optional feature mounted on the switchboard door. They increase the degree of protection to IP40, IK07. Protection collars maintain the degree of protection, whatever the position of the device (connected, disconnected).

### Direct rotary handle

#### Standard handle

Degree of protection IP40, IK07.

The direct rotary handle maintains:

- visibility of and access to trip-unit settings
- suitability for isolation
- indication of the three positions O (OFF), I (ON) and tripped
- access to the "push to trip" button.

#### Device locking

The rotary handle facilitates circuit-breaker locking.

- Padlocking:
  - standard situation, in the OFF position, using 1 to 3 padlocks, shackle diameter 5 to 8 mm, not supplied

### Extended rotary handle

Degree of protection IP56, IK08.

The extended rotary handle makes it possible to operate circuit breakers installed at the back of switchboards, from the switchboard front.

It maintains:

- visibility of and access to trip-unit settings
- suitability for isolation
- indication of the three positions O (OFF), I (ON) and tripped.

#### Device and door padlocking

Padlocking locks the circuit-breaker handle and disables door opening:

- standard situation, in the OFF position, using 1 to 3 padlocks, shackle diameter 5 to 8 mm, not supplied

#### Parts of the extended rotary handles

- A unit that replaces the front cover of the circuit breaker (secured by screws).
- An assembly (handle and front plate) on the door that is always secured in the same position, whether the circuit breaker is installed vertically or horizontally.
- An extension shaft that must be adjusted to the distance. The min/max distance between the back of circuit breaker and door is:
  - 209...600 mm for EasyPact EZC 400/630.

### Manual source-changeover systems

An additional accessory interlocks two devices with rotary handles to create a source-changeover system. Closing of one device is possible only if the second is open.

This function is compatible with direct or extended rotary handles.

Up to three padlocks can be used to lock in the OFF or ON position.

### IP40 escutcheons for fixed devices

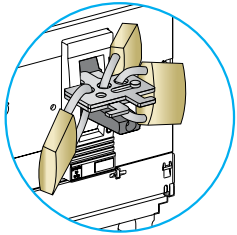
There are three types of escutcheon with a gasket which are screwed to the door cut-out:

- three escutcheons for all control types (toggle, handle or motor mechanism)
- a wide model for Vigi modules that can be combined with the above.

# Accessories and auxiliaries of EZC400-630

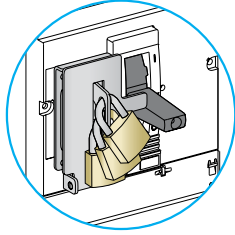
## Locks and sealing accessories

DB400025



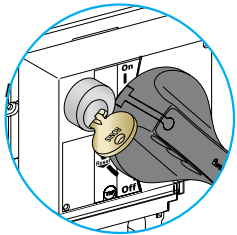
Toggle locking using padlocks and an accessory:  
Removable device

DB400026



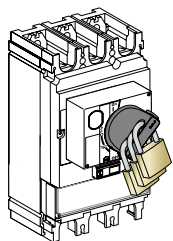
Fixed device attached to the case.

DB400027

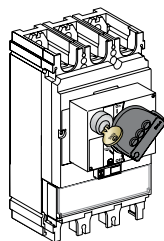


Rotary-handle locking using a keylock.

CDB500623

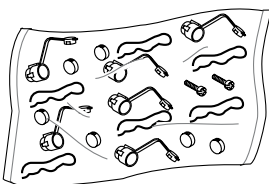


CDB500624



Rotary-handle locking using a padlock or a keylock.

DB115033



Sealing accessories.

### Locks

Locking in the OFF position guarantees isolation as per IEC 60947-2. Padlocking systems can receive up to three padlocks with shackle diameters ranging from 5 to 8 mm (padlocks not supplied). Certain locking systems require an additional accessory.

Control device	Function	Means	Required accessories
Toggle	Lock in OFF position	Padlock	Removable device
	Lock in OFF or ON position	Padlock	Fixed device
Direct rotary handle	Lock in OFF position	Padlock	-
	OFF or ON position <sup>(1)</sup>	Keylock	Locking device + keylock
Extended rotary handle	Lock in OFF position	Padlock	-
	OFF or ON position <sup>(1)</sup> with door opening prevented <sup>(2)</sup>	Padlock	-
	Lock in OFF position	Padlock	UL508 control accessory
	OFF or ON position <sup>(1)</sup> inside the switchboard	Keylock	Locking device + keylock

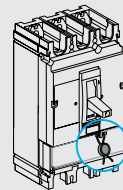
<sup>(1)</sup> Following a simple modification of the mechanism.

<sup>(2)</sup> Unless door locking has been voluntarily disabled.

### Sealing accessories

Toggle control

CDB500625



Rotary handle

CDB500626

