ETIPOWER

Air Circuit Breakers

Air Circuit Breakers EPL..., EPH...

/etigroup

ETI
SWITCH TO
A SAFE FUTURE

ETIPOWER Air Circuit Breakers

Air Circuit Breakers EPL..., EPH...

- Integrated draw-in/ out handle ensures reliable operation

- SHT and UVT coils for different voltages. Easy replacement.

- Counter in standard version of ACB

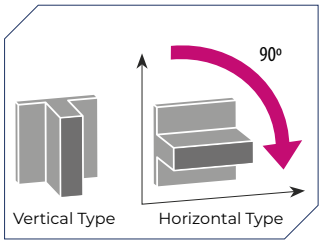
- Possibility to use mechanical interlock for up to 3 devices in both draw-out and fixed versions

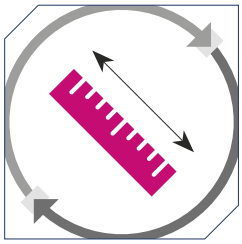
- Advanced OCR protection for demanding applications. Switch disconnectors versions available for all current sizes

- Wide selection options due to model dualization, compact design, and a current range from 630 A to 6300 A.

- FIX version

- D/O version





Multipurpose

Versatile Design: The busbar terminal can be adjusted to horizontal or vertical orientation for EPL/EPH models:
- A-frame: 630 A to 1600 A
- B-frame: 2000 A to 3200 A

For currents above 4000 A, horizontal/vertical adjustments require additional components. Please contact our company for details.

Retrofit

Customized Retrofit ACBs can be Provided
New products can be developed to ensure compatibility and installation according to the cradle phase, pole, earth, and terminal dimensions of previously installed ACBs.

- Maximum Breaking Capacity:
  150 kA (At 500 V, EPH D Frame)

- Rated Impulse Withstand Voltage (Uimp) :
  12 kV

- Type per Rating
  2 Frames, EPL 1600/3200 A
  4 Frames, EPH 2000/4000/5000/6300 A

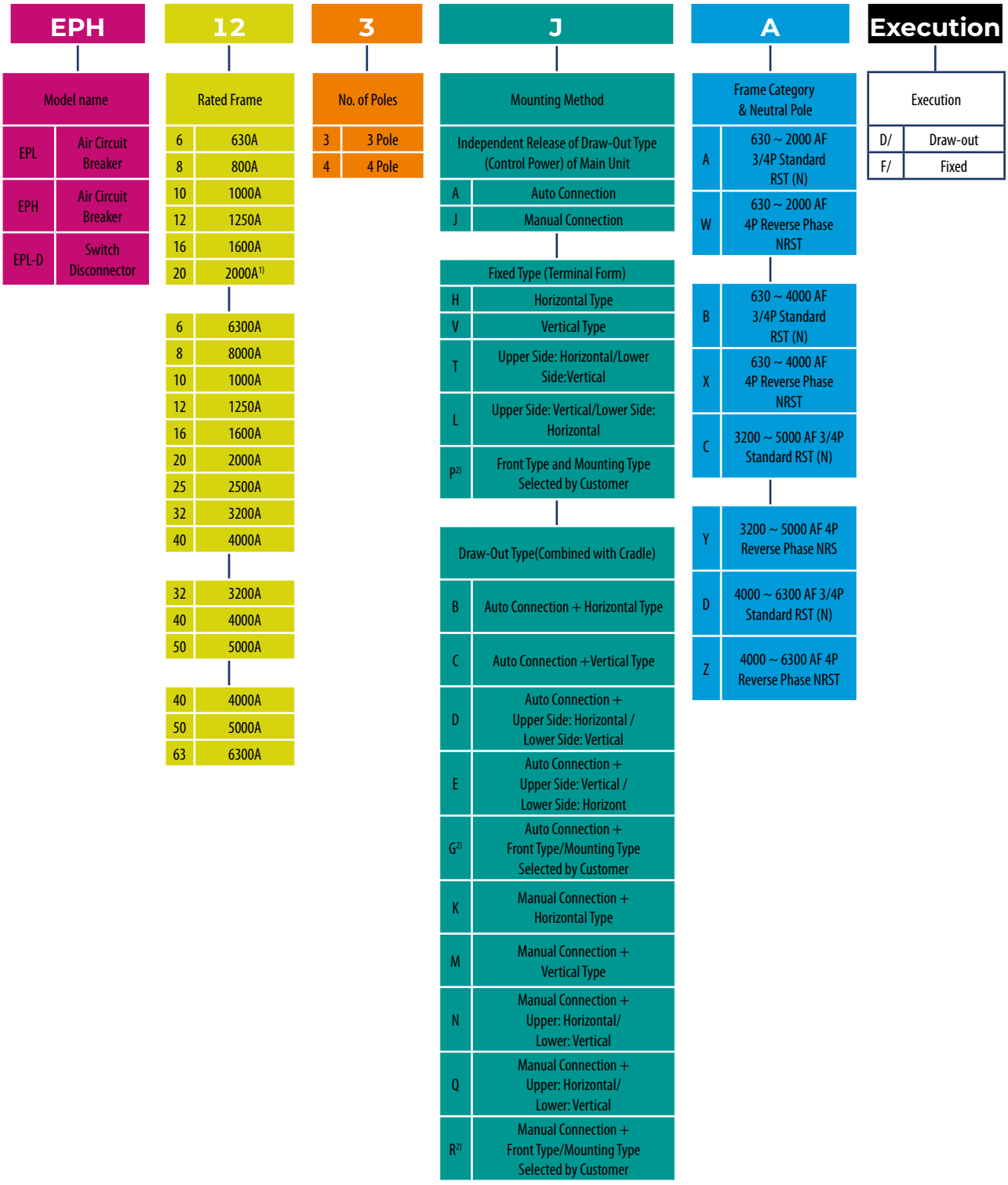
- 100 % N Phase Current Flow Capacity for all Types
  The neutral conductor is designed to handle the full load current (100%) of the phase conductors, ensuring:
  - Full Neutral Current Capacity: It can handle imbalances in the system effectively, especially in cases with high harmonics or single-phase loads.
  - Improved Safety and Reliability: This avoids overheating or damage to the neutral conductor, even under maximum load conditions.
  - Versatility: The feature is standard across all device types or models offered.

- A Frame [85 kA]
- 630 ... 1600 A (EPL) / 630 ... 2000 A (EPH)

- B Frame [100 kA]
- 2000 ... 3200 A (EPL) / 630 ... 4000 A (EPH)

- C Frame [100 kA]
- 3200 ... 5000 A (EPH)

- D Frame [150 kA]
- 4000 ... 6300 A (EPH)



1) A frame, 2000 A is only available for vertical terminal busbar arrangement.
2) P, G, R type of fixed terminal busbar arrangement should be ordered per terminal and mounted personally.
(Refer to the additional components). Applicable frames are A06 - -16, B06 32.
3) CT for Over-Current
- A/W Frame : 200 - 2000 A
- B/X Frame :400 - 4000 A
- C/Y Frame : 3,200 - 5000 A
- D/Z Frame : 4,000 - 6300 A 4)
4) When applying OCR high-end type P, H type, place an order for voltage module (EPLH VM) additionally for mounting

M2	
Charging Motor Power	
M0	Manual Type
M1	AC/DC 110V
M2	AC/DC 220V
M7	DC 24V
M8	DC 48V
M9	DC 125V

C2	
Closing Coil	
C0	N/A
C1	AC/DC 110V
C2	AC/DC 220V
C3	AC 380V
C4	AC 440V
C7	DC 24V
C8	DC 48V
C9	DC 125V

S2	
Trip Coil	
S0	N/A
S1	AC/DC 110
S2	AC/DC 220
S3	AC 380V
S4	AC 440V
S7	DC 24V
S8	DC 48V
S9	DC 125V
Trip Supervision Coil	
T1	AC/DC 110V
T2	AC/DC 220V
T3	AC 380V
T4	AC 440V
T7	DC 24V
T8	DC 48V
T9	DC 125V

/PR-...	
Over-Current Trip	
General Feeder	
00	N/A
50 Hz	
50	PR-LN
51	PR-LA
52	PR-LAG
54	PR-LP [4]
55	PR-LH [4]
60 Hz	
60	PR-LN
61	PR-LA
62	PR-LAG
64	PR-LP [4]
65	PR-LH [4]
Generator	
50 Hz	
57	PR-SN
58	PR-SA
59	PR-SP [4]
60 Hz	
67	PR-SN
68	PR-SA
69	PR-SP [4]

-K	
CT [3]	
0	OCR N/A
O	200A
V	320A
E	400A
T	630A
H	800A
J	1000A
K	1250A
L	1600A
M	2000A
N	2500A
P	3200A
Q	4000A
S	5000A
X	6300A

$U_{\square}$: Applicable only for instantaneous type ACBs and when only the UVT coil is installed. For time delay types, place a separate order for the time delay controller (EPLH) and install it externally.
$V_{\square}$: Applicable only for time delay types with the UVT coil installed in the main unit and the time delay controller mounted at the side of the cradle. In case of dimension constraints, order EPLH V for separate installation.
B0: The mechanical interlock device must be ordered separately. When B0 is specified, only the interlocked components inside the main unit are assembled for release. (Refer to additional components for details.)
SI Application: When Secondary Trip (SI) is applied, the UVT coil cannot be used simultaneously.
Trip Coil Monitoring Contact: Using this contact changes the configuration to 4a3b. When the MCP function of B8 OCR is applied, it can be configured as 4a5b. If both functions are used simultaneously, the configuration will be 3a3b.
Main Unit Order Codes (A/J/Fixed Type): Combination with cradle accessories is not possible when ordering only the main unit. Cradle accessory arrangements are available only when purchased with a cradle. For independent main unit release, place a separate order (EPLH). Refer to additional components for details.
Position Switch: Cannot be used in overlapping configurations and can only be installed on the right side of the cradle. For combinations outside the standard options, contact us for a custom inquiry.
Incompatible Combinations:
- The mechanical interlock device (B0), external auxiliary contact (MC), and fixing block (AF) cannot be used together.
- AA and BA (BH) cannot be attached simultaneously.
- UVT and Secondary Trip Coil cannot be installed together.
Control Terminal Safety Cover (BC): Available only for automatic connection systems.
Short "b" (AK): Available only for automatic connection systems and attaches to terminals 51 and 52. For additional mounting, place a separate order (EPLH).
Front Cover (AG): Shipped with the front cover inserted, even if attached separately during assembly.
Standard Accessories (MR): AE, AC, AF, and AM are included as standard options and are not marked separately.
Auxiliary Contacts: The standard version of the ACB includes 5 pairs of auxiliary contacts (5x NO and 5x NC).

Versatile Solutions for Various Applications

The EPL/EPH series air circuit breakers combine high breaking capacity with advanced overcurrent relay (OCR) functionality, enabling them to meet the diverse needs of industrial buildings, data centers, equipment manufacturers, and more. With 100% N-phase current flow capacity across all models, the breakers provide reliable protection against abnormal conditions, such as harmonic distortion.

Advanced Accessories and Protection Features - Overcurrent Relay (OCR)
The OCR is equipped with enhanced power monitoring capabilities, including temperature monitoring, fault recording, and storage, ensuring a stable and reliable power supply.

Types of Protection and Features:
N Type
Overcurrent Protection: Long-time (L), Short-time (S), Instantaneous (I), Ground Fault (G)
World's first NFC-enabled functionality
Fault recording (10 events) and waveform data (4 cycles) viewable via mobile app

A Type
Overcurrent Protection: L/S/I/G
Self-powered operation
Individual continuous power contact
Fault recording (256 events) and waveform data (4 cycles) viewable via communication
Supports MODBUS communication and external CT/ZCT for ground/earth leakage detection

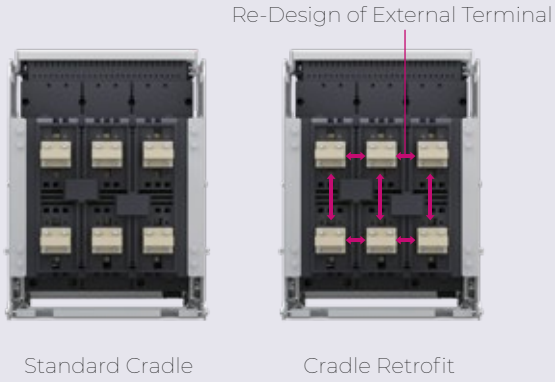
P Type
Overcurrent Protection: L/S/I/G
External power supply
Individual continuous power contact
Fault recording (256 events) and waveform data (4 cycles) viewable via communication
Additional features: Over-voltage/under-voltage protection, power and energy monitoring, power factor display

H Type
Overcurrent Protection: L/S/I/G with precise minute current adjustments
External power supply
Individual continuous power contact
Fault recording (256 events) and waveform data (4 cycles) viewable via communication
Voltage/current harmonics analysis (1st to 63rd order)
Real-time 3-phase waveform visualization

Flexible Busbar Terminal Design
The busbar terminal configuration can be adjusted between horizontal and vertical orientations to accommodate customer panel layouts:
A-frame: 630 A to 1600 A
B-frame: 630 A to 3200 A

Easy Maintenance with Draw-In/Out Design
The breakers feature a draw-in/out mechanism integrated into the body, enabling convenient maintenance and quick operational adjustments.

Customized Retrofit Solutions
Customized retrofit ACBs can be developed to ensure compatibility with existing installations, considering cradle phase, pole, earth, and terminal dimensions of previously installed devices.
Economic Benefits: Avoids the need for busbar and external box replacement, reduces construction time, and allows uninterrupted replacement for retrofitting.
Enhanced Stability: Extends lifespan with the latest relay technology and ensures high-breaking performance.
Seamless Compatibility: Provides stable operation with compatible control terminal bars, busbar structures, and plug-in devices.
Technical Support: Comprehensive inspection of old panel accessories to ensure customer satisfaction.



Equipped with Temperature Sensor
The integrated temperature sensor enables reliable and accurate measurement of heat sources, with a measurement range of -5°C to 250°C.

Applied Standards and Certifications
The EPL/EPH series air circuit breakers are certified in compliance with IEC 60947-1 and IEC 60947-2 by recognized testing institutions. They can be installed and used according to the environmental conditions and usage parameters defined by these standards.
Certifications Obtained:
- CB Certification (DEKRA, KERI): IEC 60947-1, 2
- CE Mark

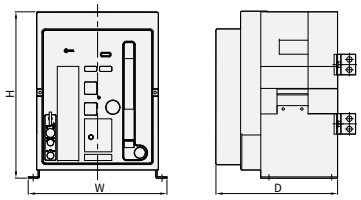
Technical data

				EPL		EPH			
				A Frame	B Frame	A Frame	B Frame	C Frame	D Frame
Rated Current [In max]	Based on 40 °C		A	06 : 630	20 : 2000	06 : 630	06 : 630	32 : 3200	40 : 4000
				08 : 800	25 : 2500	08 : 800	08 : 800	40 : 4000	50 : 5000
				10 : 1000	32 : 3200	10 : 1000	10 : 1000	50 : 5000	63 : 6300
				12 : 1250		12 : 1250	12 : 1250		
				16 : 1600		16 : 1600	16 : 1600		
						20 : 2000	20 : 2000		
							25 : 2500		
							32 : 3200		
							40 : 4000		
Rated Operational Voltage [Ue]			V	690		690			
Rated Insulation Voltage [Ui]			V	1000		1000			
Frequency			Hz	50/60		50/60			
No. of Poles			P	3, 4		3, 4			
Current Setting Range (…× In max)			A	0.4 ~ 1.0		0.4 ~ 1.0			
Rated Current of Neutral Pole (N) (··· %×In)			A	100 %	100 %	100 %	100 %	100 %	100 %
Rated Breaking Capacity [Icu] [Sym]									
IEC 60947-2 Category "B" KS C 4620	AC	690/600/550 V	kA	50	70 [1] (KS : 65)	65	85	85	100
		500/480/460 V		65	85	85	100	100	150
		415/380/230/220 V		65	85	85	100	100	150
Rated Service Short-Circuit Breaking Capacity [Ics] …%×Icu			kA	100 %	100 %	100 %	100 %	100 %	100 %
Rated Service Short-Circuit Breaking Capacity									
IEC 60947-2 Kategoria "B" KS C 4620	AC	690/600/550 V	kA	105	154	143	187	187	220
		500/480/460 V		143	187	187	220	220	330
		415/380/230/220 V		143	187	187	220	220	330
Rated Short-Time withstand Voltage [Icw] (Without Inst)									
1 s			kA	50	70	65	85	85	100
2 s				35	65	42	75	75	85
3 s				28	50	35	65	65	75
Rated Impulse withstand Voltage[Uimp]			kV	12		12			
Total Breaking-Time			ms	40 [3]		40 [3]			
Closing Operational Time									
Motor Charging Time (s) max.				10		10			
Rated Trip Time (ms) max.				80		80			
Lifecycle (Cycles)									
Mechanical				20000	15000	20000	15000	10000	10000
Electrical				5000	5000	5000	5000	2000	2000
Weight									
3 Pole	Draw-Out Type - D/O		kg	63	87	63	87 (107) [2]	145	169
	Fixed Type - FIX			34	44	34	44 (61) [2]	76	108
4 Pole	Draw-Out Type - D/O			74	103	74	103 (140) [2]	173	214
	Fixed Type - FIX			44	55	44	55 (80) [2]	81	137
(W×H×D)									
3 Pole	Draw-Out Type - D/O		mm	328×460×368.4	399×460×368.4	328×460×368.4	399×460×368.4	624×460×368.4	766×460×368.4
	Fixed Type - FIX			337.4×404.4×295.8	408.4×404.4×295.8	337.4×404.4×295.8	408.4×404.4×295.8	633.4×404.4×295.8	775.4×404.4×295.8
4 Pole	Draw-Out Type - D/O			413×460×368.4	514×460×368.4	413×460×368.4	514×460×368.4	794×460×368.4	996×460×368.4
	Fixed Type - FIX			422.4×404.4×295.8	523.4×404.4×295.8	422.4×404.4×295.8	523.4×404.4×295.8	803.4×404.4×295.8	1005×404.4×295.8

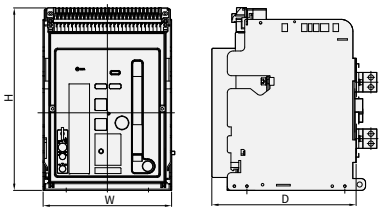
1) 70 kA is DEKRA certified
2) 4,000 AF
3) In case of MCR and override setting, INST is 50 ms.

Life time is the limit lifespan and is not the guaranteed lifespan. In case of maintenance, it is charged. In the event of abnormalities in accessories during use, it can be replaced. Quality Assurance : Based on IEC 60947-2's number of opening/closing within the warranty period.

Fixed Type - FIX



Draw-Out Type - D/O



Air Circuit Breakers

Circuit breakers equipped with OCR (PR-LP), without motor drive and coils

Type	Code No.	In [A]	Ampere Frame [AF]	No. of poles	Frame type	Terminal busbar arrangement	Rated Breaking Capacity [kA]	kg	Width (mm)	Depth (mm)	Height (mm)	
EPL-06 3H AD/M0C0S0/PR-LP	004690300	630	A	3	D/O	Horizontal	65	68	600	700	600	1
EPL-08 3H AD/M0C0S0/PR-LP	004690301	800	A	3	D/O	Horizontal	65	68	600	700	600	1
EPL-10 3H AD/M0C0S0/PR-LP	004690302	1000	A	3	D/O	Horizontal	65	68	600	700	600	1
EPL-12 3H AD/M0C0S0/PR-LP	004690303	1250	A	3	D/O	Horizontal	65	68	600	700	600	1
EPL-16 3H AD/M0C0S0/PR-LP	004690304	1600	A	3	D/O	Horizontal	65	68	600	700	600	1
EPL-20 3H BD/M0C0S0/PR-LP	004690305	2000	B	3	D/O	Horizontal	85	92	600	700	600	1
EPL-25 3H BD/M0C0S0/PR-LP	004690306	2500	B	3	D/O	Horizontal	85	92	600	700	600	1
EPL-32 3H BD/M0C0S0/PR-LP	004690307	3200	B	3	D/O	Horizontal	85	92	600	700	600	1
EPL-06 4H AD/M0C0S0/PR-LP	004690308	630	A	4	D/O	Horizontal	65	79	600	700	600	1
EPL-08 4H AD/M0C0S0/PR-LP	004690309	800	A	4	D/O	Horizontal	65	79	600	700	600	1
EPL-10 4H AD/M0C0S0/PR-LP	004690310	1000	A	4	D/O	Horizontal	65	79	600	700	600	1
EPL-12 4H AD/M0C0S0/PR-LP	004690311	1250	A	4	D/O	Horizontal	65	79	600	700	600	1
EPL-16 4H AD/M0C0S0/PR-LP	004690312	1600	A	4	D/O	Horizontal	65	79	600	700	600	1
EPL-20 4H BD/M0C0S0/PR-LP	004690313	2000	B	4	D/O	Horizontal	85	111	650	1050	620	1
EPL-25 4H BD/M0C0S0/PR-LP	004690314	2500	B	4	D/O	Horizontal	85	111	650	1050	620	1
EPL-32 4H BD/M0C0S0/PR-LP	004690315	3200	B	4	D/O	Horizontal	85	111	650	1050	620	1
EPL-06 3H AF/M0C0S0/PR-LP	004690316	630	A	3	FIX	Horizontal	65	39	600	700	600	1
EPL-08 3H AF/M0C0S0/PR-LP	004690317	800	A	3	FIX	Horizontal	65	39	600	700	600	1
EPL-10 3H AF/M0C0S0/PR-LP	004690318	1000	A	3	FIX	Horizontal	65	39	600	700	600	1
EPL-12 3H AF/M0C0S0/PR-LP	004690319	1250	A	3	FIX	Horizontal	65	39	600	700	600	1
EPL-16 3H AF/M0C0S0/PR-LP	004690320	1600	A	3	FIX	Horizontal	65	39	600	700	600	1
EPL-20 3H BF/M0C0S0/PR-LP	004690321	2000	B	3	FIX	Horizontal	85	49	600	700	600	1
EPL-25 3H BF/M0C0S0/PR-LP	004690322	2500	B	3	FIX	Horizontal	85	49	600	700	600	1
EPL-32 3H BF/M0C0S0/PR-LP	004690323	3200	B	3	FIX	Horizontal	85	49	600	700	600	1
EPL-06 4H AF/M0C0S0/PR-LP	004690324	630	A	4	FIX	Horizontal	65	49	600	700	600	1
EPL-08 4H AF/M0C0S0/PR-LP	004690325	800	A	4	FIX	Horizontal	65	49	600	700	600	1
EPL-10 4H AF/M0C0S0/PR-LP	004690326	1000	A	4	FIX	Horizontal	65	49	600	700	600	1
EPL-12 4H AF/M0C0S0/PR-LP	004690327	1250	A	4	FIX	Horizontal	65	49	600	700	600	1
EPL-16 4H AF/M0C0S0/PR-LP	004690328	1600	A	4	FIX	Horizontal	65	49	600	700	600	1
EPL-20 4H BF/M0C0S0/PR-LP	004690329	2000	B	4	FIX	Horizontal	85	63	650	1050	620	1
EPL-25 4H BF/M0C0S0/PR-LP	004690330	2500	B	4	FIX	Horizontal	85	63	650	1050	620	1
EPL-32 4H BF/M0C0S0/PR-LP	004690331	3200	B	4	FIX	Horizontal	85	63	650	1050	620	1
EPH-40 3H BD/M0C0S0/PR-LP	004690340	4000	B	3	D/O	Horizontal	85	112	600	700	600	1

Circuit breakers equipped with OCR (PR-LP), with motor drive (24V DC), shunt trip (24V DC) and closing coil (24V DC)

Type	Code No.	In [A]	Ampere Frame [AF]	No. of poles	Frame type	Terminal busbar arrangement	Rated Breaking Capacity [kA]	kg	Width (mm)	Depth (mm)	Height (mm)	
EPL-06 3H AD/M7C7S7/PR-LP	004694700	630	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-08 3H AD/M7C7S7/PR-LP	004694701	800	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-10 3H AD/M7C7S7/PR-LP	004694702	1000	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-12 3H AD/M7C7S7/PR-LP	004694703	1250	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-16 3H AD/M7C7S7/PR-LP	004694704	1600	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-20 3H BD/M7C7S7/PR-LP	004694705	2000	B	3	D/O	Horizontal	85	94	600	700	600	1
EPL-25 3H BD/M7C7S7/PR-LP	004694706	2500	B	3	D/O	Horizontal	85	94	600	700	600	1
EPL-32 3H BD/M7C7S7/PR-LP	004694707	3200	B	3	D/O	Horizontal	85	94	600	700	600	1
EPL-06 4H AD/M7C7S7/PR-LP	004694708	630	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-08 4H AD/M7C7S7/PR-LP	004694709	800	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-10 4H AD/M7C7S7/PR-LP	004694710	1000	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-12 4H AD/M7C7S7/PR-LP	004694711	1250	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-16 4H AD/M7C7S7/PR-LP	004694712	1600	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-20 4H BD/M7C7S7/PR-LP	004694713	2000	B	4	D/O	Horizontal	85	112	650	1050	620	1
EPL-25 4H BD/M7C7S7/PR-LP	004694714	2500	B	4	D/O	Horizontal	85	112	650	1050	620	1
EPL-32 4H BD/M7C7S7/PR-LP	004694715	3200	B	4	D/O	Horizontal	85	112	650	1050	620	1
EPL-06 3H AF/M7C7S7/PR-LP	004694716	630	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-08 3H AF/M7C7S7/PR-LP	004694717	800	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-10 3H AF/M7C7S7/PR-LP	004694718	1000	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-12 3H AF/M7C7S7/PR-LP	004694719	1250	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-16 3H AF/M7C7S7/PR-LP	004694720	1600	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-20 3H BF/M7C7S7/PR-LP	004694721	2000	B	3	FIX	Horizontal	85	51	600	700	600	1
EPL-25 3H BF/M7C7S7/PR-LP	004694722	2500	B	3	FIX	Horizontal	85	51	600	700	600	1
EPL-32 3H BF/M7C7S7/PR-LP	004694723	3200	B	3	FIX	Horizontal	85	51	600	700	600	1
EPL-06 4H AF/M7C7S7/PR-LP	004694724	630	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-08 4H AF/M7C7S7/PR-LP	004694725	800	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-10 4H AF/M7C7S7/PR-LP	004694726	1000	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-12 4H AF/M7C7S7/PR-LP	004694727	1250	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-16 4H AF/M7C7S7/PR-LP	004694728	1600	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-20 4H BF/M7C7S7/PR-LP	004694729	2000	B	4	FIX	Horizontal	85	64	650	1050	620	1
EPL-25 4H BF/M7C7S7/PR-LP	004694730	2500	B	4	FIX	Horizontal	85	64	650	1050	620	1
EPL-32 4H BF/M7C7S7/PR-LP	004694731	3200	B	4	FIX	Horizontal	85	64	650	1050	620	1
EPH-40 3H BD/M7C7S7/PR-LP	004694740	4000	B	3	D/O	Horizontal	85	114	600	700	600	1

Circuit breakers equipped with OCR (PR-LP), with motor drive (230V AC/DC), shunt trip (230V AC/DC) and closing coil (230V AC/DC)

Type	Code No.	In [A]	Ampere Frame [AF]	No. of poles	Frame type	Terminal busbar arrangement	Rated Breaking Capacity [kA]	kg	Width (mm)	Depth (mm)	Height (mm)	
EPL-06 3H AD/M2C2S2/PR-LP	004695700	630	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-08 3H AD/M2C2S2/PR-LP	004695701	800	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-10 3H AD/M2C2S2/PR-LP	004695702	1000	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-12 3H AD/M2C2S2/PR-LP	004695703	1250	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-16 3H AD/M2C2S2/PR-LP	004695704	1600	A	3	D/O	Horizontal	65	70	600	700	600	1
EPL-20 3H BD/M2C2S2/PR-LP	004695705	2000	B	3	D/O	Horizontal	85	94	600	700	600	1
EPL-25 3H BD/M2C2S2/PR-LP	004695706	2500	B	3	D/O	Horizontal	85	94	600	700	600	1
EPL-32 3H BD/M2C2S2/PR-LP	004695707	3200	B	3	D/O	Horizontal	85	94	600	700	600	1
EPL-06 4H AD/M2C2S2/PR-LP	004695708	630	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-08 4H AD/M2C2S2/PR-LP	004695709	800	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-10 4H AD/M2C2S2/PR-LP	004695710	1000	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-12 4H AD/M2C2S2/PR-LP	004695711	1250	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-16 4H AD/M2C2S2/PR-LP	004695712	1600	A	4	D/O	Horizontal	65	81	600	700	600	1
EPL-20 4H BD/M2C2S2/PR-LP	004695713	2000	B	4	D/O	Horizontal	85	112	650	1050	620	1
EPL-25 4H BD/M2C2S2/PR-LP	004695714	2500	B	4	D/O	Horizontal	85	112	650	1050	620	1
EPL-32 4H BD/M2C2S2/PR-LP	004695715	3200	B	4	D/O	Horizontal	85	112	650	1050	620	1
EPL-06 3H AF/M2C2S2/PR-LP	004695716	630	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-08 3H AF/M2C2S2/PR-LP	004695717	800	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-10 3H AF/M2C2S2/PR-LP	004695718	1000	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-12 3H AF/M2C2S2/PR-LP	004695719	1250	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-16 3H AF/M2C2S2/PR-LP	004695720	1600	A	3	FIX	Horizontal	65	41	600	700	600	1
EPL-20 3H BF/M2C2S2/PR-LP	004695721	2000	B	3	FIX	Horizontal	85	51	600	700	600	1
EPL-25 3H BF/M2C2S2/PR-LP	004695722	2500	B	3	FIX	Horizontal	85	51	600	700	600	1
EPL-32 3H BF/M2C2S2/PR-LP	004695723	3200	B	3	FIX	Horizontal	85	51	600	700	600	1
EPL-06 4H AF/M2C2S2/PR-LP	004695724	630	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-08 4H AF/M2C2S2/PR-LP	004695725	800	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-10 4H AF/M2C2S2/PR-LP	004695726	1000	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-12 4H AF/M2C2S2/PR-LP	004695727	1250	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-16 4H AF/M2C2S2/PR-LP	004695728	1600	A	4	FIX	Horizontal	65	51	600	700	600	1
EPL-20 4H BF/M2C2S2/PR-LP	004695729	2000	B	4	FIX	Horizontal	85	64	650	1050	620	1
EPL-25 4H BF/M2C2S2/PR-LP	004695730	2500	B	4	FIX	Horizontal	85	64	650	1050	620	1
EPL-32 4H BF/M2C2S2/PR-LP	004695731	3200	B	4	FIX	Horizontal	85	64	650	1050	620	1
EPH-40 3H BD/M2C2S2/PR-LP	004695740	4000	B	3	D/O	Horizontal	85	114	600	700	600	1

Air Switch Disconnectors

Air switch disconnectors without motor drive and coils

Type	Code No.	In [A]	Ampere Frame [AF]	No. of poles	Frame type	Terminal busbar arrangement	kg	Width (mm)	Depth (mm)	Height (mm)	
EPL-D-06 3H AD/M0C0S0	004696000	630	A	3	D/O	Horizontal	65	600	700	600	1
EPL-D-08 3H AD/M0C0S0	004696001	800	A	3	D/O	Horizontal	65	600	700	600	1
EPL-D-10 3H AD/M0C0S0	004696002	1000	A	3	D/O	Horizontal	65	600	700	600	1
EPL-D-12 3H AD/M0C0S0	004696003	1250	A	3	D/O	Horizontal	65	600	700	600	1
EPL-D-16 3H AD/M0C0S0	004696004	1600	A	3	D/O	Horizontal	65	600	700	600	1
EPL-D-20 3H BD/M0C0S0	004696005	2000	B	3	D/O	Horizontal	89	600	700	600	1
EPL-D-25 3H BD/M0C0S0	004696006	2500	B	3	D/O	Horizontal	89	600	700	600	1
EPL-D-32 3H BD/M0C0S0	004696007	3200	B	3	D/O	Horizontal	89	600	700	600	1
EPL-D-06 4H AD/M0C0S0	004696008	630	A	4	D/O	Horizontal	76	600	700	600	1
EPL-D-08 4H AD/M0C0S0	004696009	800	A	4	D/O	Horizontal	76	600	700	600	1
EPL-D-10 4H AD/M0C0S0	004696010	1000	A	4	D/O	Horizontal	76	600	700	600	1
EPL-D-12 4H AD/M0C0S0	004696011	1250	A	4	D/O	Horizontal	76	600	700	600	1
EPL-D-16 4H AD/M0C0S0	004696012	1600	A	4	D/O	Horizontal	76	600	700	600	1
EPL-D-20 4H BD/M0C0S0	004696013	2000	B	4	D/O	Horizontal	108	650	1050	620	1
EPL-D-25 4H BD/M0C0S0	004696014	2500	B	4	D/O	Horizontal	108	650	1050	620	1
EPL-D-32 4H BD/M0C0S0	004696015	3200	B	4	D/O	Horizontal	108	650	1050	620	1
EPL-D-06 3H AF/M0C0S0	004696016	630	A	3	FIX	Horizontal	36	600	700	600	1
EPL-D-08 3H AF/M0C0S0	004696017	800	A	3	FIX	Horizontal	36	600	700	600	1
EPL-D-10 3H AF/M0C0S0	004696018	1000	A	3	FIX	Horizontal	36	600	700	600	1
EPL-D-12 3H AF/M0C0S0	004696019	1250	A	3	FIX	Horizontal	36	600	700	600	1
EPL-D-16 3H AF/M0C0S0	004696020	1600	A	3	FIX	Horizontal	36	600	700	600	1
EPL-D-20 3H BF/M0C0S0	004696021	2000	B	3	FIX	Horizontal	46	600	700	600	1
EPL-D-25 3H BF/M0C0S0	004696022	2500	B	3	FIX	Horizontal	46	600	700	600	1
EPL-D-32 3H BF/M0C0S0	004696023	3200	B	3	FIX	Horizontal	46	600	700	600	1
EPL-D-06 4H AF/M0C0S0	004696024	630	A	4	FIX	Horizontal	46	600	700	600	1
EPL-D-08 4H AF/M0C0S0	004696025	800	A	4	FIX	Horizontal	46	600	700	600	1
EPL-D-10 4H AF/M0C0S0	004696026	1000	A	4	FIX	Horizontal	46	600	700	600	1
EPL-D-12 4H AF/M0C0S0	004696027	1250	A	4	FIX	Horizontal	46	600	700	600	1
EPL-D-16 4H AF/M0C0S0	004696028	1600	A	4	FIX	Horizontal	46	600	700	600	1
EPL-D-20 4H BF/M0C0S0	004696029	2000	B	4	FIX	Horizontal	60	650	1050	620	1
EPL-D-25 4H BF/M0C0S0	004696030	2500	B	4	FIX	Horizontal	60	650	1050	620	1
EPL-D-32 4H BF/M0C0S0	004696031	3200	B	4	FIX	Horizontal	60	650	1050	620	1
EPH-D-40 3H BD/M0C0S0	004696040	4000	B	3	D/O	Horizontal	109	600	700	600	1

Air switch disconnectors equipped with OCR (PR-LP), with motor drive (24V DC), shunt trip (24V DC) and closing coil (24V DC)

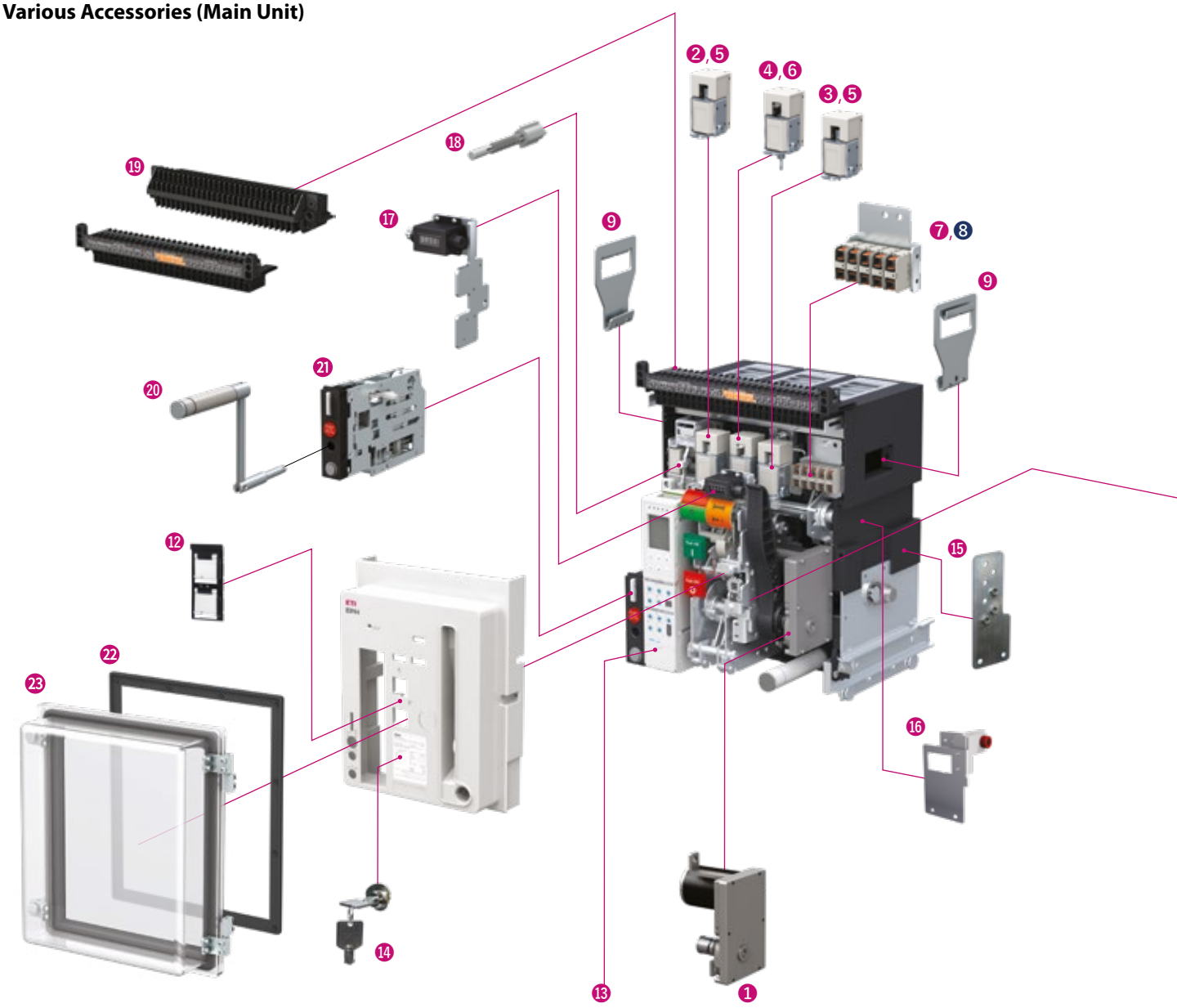
Type	Code No.	In [A]	Ampere Frame [AF]	No. of poles	Frame type	Terminal busbar arrangement	kg	Width (mm)	Depth (mm)	Height (mm)	
EPL-D-06 3H AD/M7C7S7	004696400	630	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-08 3H AD/M7C7S7	004696401	800	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-10 3H AD/M7C7S7	004696402	1000	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-12 3H AD/M7C7S7	004696403	1250	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-16 3H AD/M7C7S7	004696404	1600	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-20 3H BD/M7C7S7	004696405	2000	B	3	D/O	Horizontal	91	600	700	600	1
EPL-D-25 3H BD/M7C7S7	004696406	2500	B	3	D/O	Horizontal	91	600	700	600	1
EPL-D-32 3H BD/M7C7S7	004696407	3200	B	3	D/O	Horizontal	91	600	700	600	1
EPL-D-06 4H AD/M7C7S7	004696408	630	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-08 4H AD/M7C7S7	004696409	800	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-10 4H AD/M7C7S7	004696410	1000	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-12 4H AD/M7C7S7	004696411	1250	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-16 4H AD/M7C7S7	004696412	1600	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-20 4H BD/M7C7S7	004696413	2000	B	4	D/O	Horizontal	109	650	1050	620	1
EPL-D-25 4H BD/M7C7S7	004696414	2500	B	4	D/O	Horizontal	109	650	1050	620	1
EPL-D-32 4H BD/M7C7S7	004696415	3200	B	4	D/O	Horizontal	109	650	1050	620	1
EPL-D-06 3H AF/M7C7S7	004696416	630	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-08 3H AF/M7C7S7	004696417	800	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-10 3H AF/M7C7S7	004696418	1000	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-12 3H AF/M7C7S7	004696419	1250	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-16 3H AF/M7C7S7	004696420	1600	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-20 3H BF/M7C7S7	004696421	2000	B	3	FIX	Horizontal	48	600	700	600	1
EPL-D-25 3H BF/M7C7S7	004696422	2500	B	3	FIX	Horizontal	48	600	700	600	1
EPL-D-32 3H BF/M7C7S7	004696423	3200	B	3	FIX	Horizontal	48	600	700	600	1
EPL-D-06 4H AF/M7C7S7	004696424	630	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-08 4H AF/M7C7S7	004696425	800	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-10 4H AF/M7C7S7	004696426	1000	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-12 4H AF/M7C7S7	004696427	1250	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-16 4H AF/M7C7S7	004696428	1600	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-20 4H BF/M7C7S7	004696429	2000	B	4	FIX	Horizontal	61	650	1050	620	1
EPL-D-25 4H BF/M7C7S7	004696430	2500	B	4	FIX	Horizontal	61	650	1050	620	1
EPL-D-32 4H BF/M7C7S7	004696431	3200	B	4	FIX	Horizontal	61	650	1050	620	1
EPH-D-40 3H BD/M7C7S7	004696440	4000	B	3	D/O	Horizontal	111	600	700	600	1

Air switch disconnectors equipped with OCR (PR-LP), with motor drive (230V AC/DC), shunt trip (230V AC/DC) and closing coil (230V AC/DC)

Type	Code No.	In [A]	Ampere Frame [AF]	No. of poles	Frame type	Terminal busbar arrangement	kg	Width (mm)	Depth (mm)	Height (mm)	
EPL-D-06 3H AD/M2C2S2	004696600	630	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-08 3H AD/M2C2S2	004696601	800	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-10 3H AD/M2C2S2	004696602	1000	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-12 3H AD/M2C2S2	004696603	1250	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-16 3H AD/M2C2S2	004696604	1600	A	3	D/O	Horizontal	67	600	700	600	1
EPL-D-20 3H BD/M2C2S2	004696605	2000	B	3	D/O	Horizontal	91	600	700	600	1
EPL-D-25 3H BD/M2C2S2	004696606	2500	B	3	D/O	Horizontal	91	600	700	600	1
EPL-D-32 3H BD/M2C2S2	004696607	3200	B	3	D/O	Horizontal	91	600	700	600	1
EPL-D-06 4H AD/M2C2S2	004696608	630	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-08 4H AD/M2C2S2	004696609	800	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-10 4H AD/M2C2S2	004696610	1000	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-12 4H AD/M2C2S2	004696611	1250	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-16 4H AD/M2C2S2	004696612	1600	A	4	D/O	Horizontal	78	600	700	600	1
EPL-D-20 4H BD/M2C2S2	004696613	2000	B	4	D/O	Horizontal	109	650	1050	620	1
EPL-D-25 4H BD/M2C2S2	004696614	2500	B	4	D/O	Horizontal	109	650	1050	620	1
EPL-D-32 4H BD/M2C2S2	004696615	3200	B	4	D/O	Horizontal	109	650	1050	620	1
EPL-D-06 3H AF/M2C2S2	004696616	630	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-08 3H AF/M2C2S2	004696617	800	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-10 3H AF/M2C2S2	004696618	1000	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-12 3H AF/M2C2S2	004696619	1250	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-16 3H AF/M2C2S2	004696620	1600	A	3	FIX	Horizontal	38	600	700	600	1
EPL-D-20 3H BF/M2C2S2	004696621	2000	B	3	FIX	Horizontal	48	600	700	600	1
EPL-D-25 3H BF/M2C2S2	004696622	2500	B	3	FIX	Horizontal	48	600	700	600	1
EPL-D-32 3H BF/M2C2S2	004696623	3200	B	3	FIX	Horizontal	48	600	700	600	1
EPL-D-06 4H AF/M2C2S2	004696624	630	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-08 4H AF/M2C2S2	004696625	800	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-10 4H AF/M2C2S2	004696626	1000	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-12 4H AF/M2C2S2	004696627	1250	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-16 4H AF/M2C2S2	004696628	1600	A	4	FIX	Horizontal	48	600	700	600	1
EPL-D-20 4H BF/M2C2S2	004696629	2000	B	4	FIX	Horizontal	61	650	1050	620	1
EPL-D-25 4H BF/M2C2S2	004696630	2500	B	4	FIX	Horizontal	61	650	1050	620	1
EPL-D-32 4H BF/M2C2S2	004696631	3200	B	4	FIX	Horizontal	61	650	1050	620	1
EPH-D-40 3H BD/M2C2S2	004696640	4000	B	3	D/O	Horizontal	111	600	700	600	1

Accessories

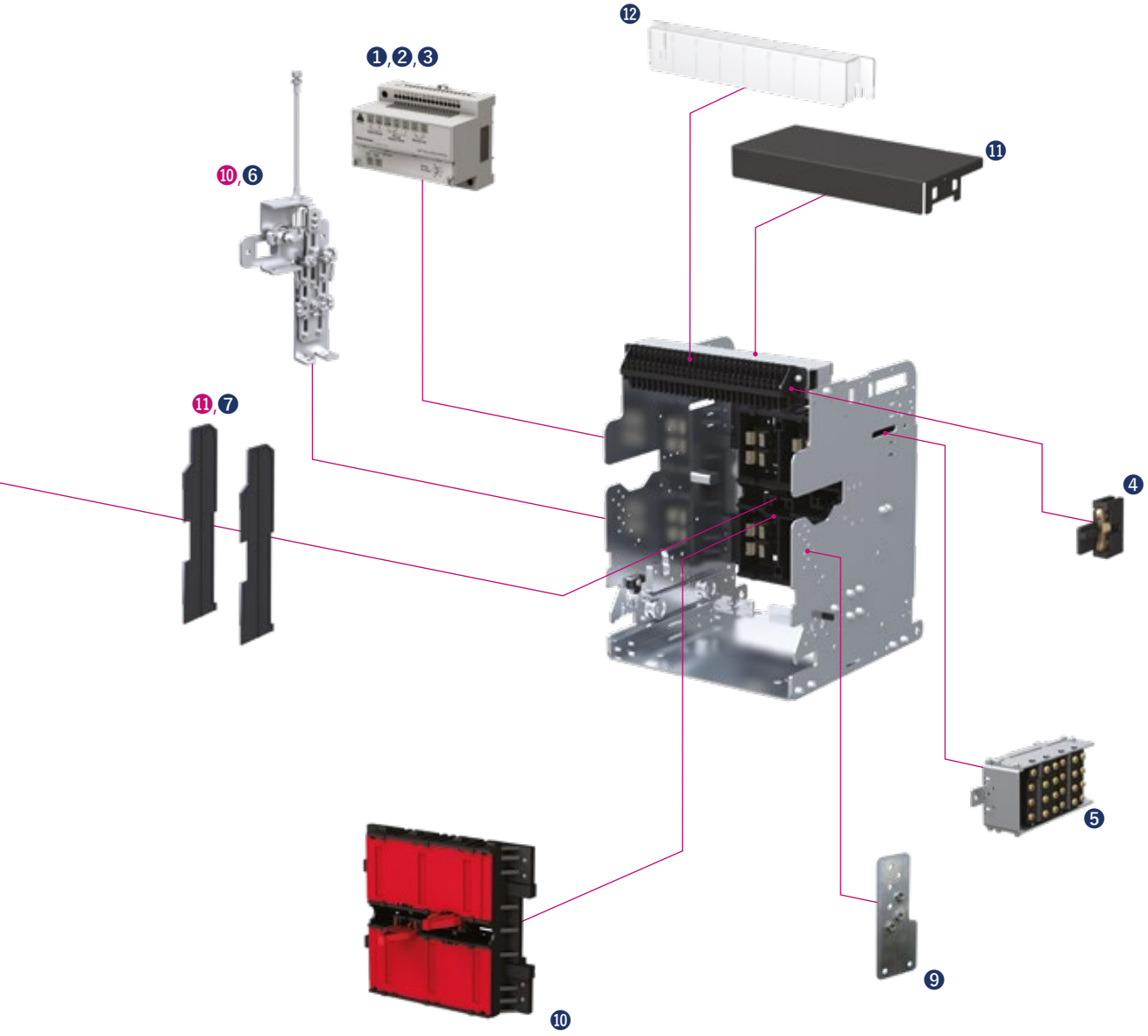
Various Accessories (Main Unit)



Accessories for Circuit Breaker

1. Spring Charge Geared Motor
2. Closing Coil
3. Trip Coil
4. Secondary SHT Trip Coil
5. Trip Coil Supervision
6. UVT Coil
7. AUX Switch (5x NO and 5X NC)
9. Lifting Lug
10. Mechanical Interlock
11. Phase Insulation Barrier
12. On/Off Button Lock
13. OCR
14. Key Lock
15. Miss-Insertion Preventer
16. Fixing Block
17. Counter
18. OCR & Alarm S/W Reset Button
19. Test Jumper
20. Draw-In/Out Handle
21. Position Pad Lock
22. Door Flange
23. Dust Cover

Various Accessories (Cradle)



Accessories for Cradle

1. UVT Time Delay Controller
2. Remote Closing Prevention Module
3. Temperature Monitoring Device Module
4. Short “b” Contact
5. Position Switch
6. Mechanical Interlock
7. Phase Insulation Barrier
8. Mechanical Operated Cell Switch
9. Miss-Insertion Preventer
10. Safety Shutter
11. Arc Shield
12. Control Terminal Protection Cover

Motor operators

Type	Code No.	Rated operational voltage [V]	kg	Width (mm)	Depth (mm)	Height (mm)	
EPLH-M1U	004697000	AC/DC110V	1,550	180	130	110	1
EPLH-M2U	004697001	AC/DC220V	1,550	180	130	110	1
EPLH-M7U	004697002	DC24V	1,550	180	130	110	1
EPLH-M8U	004697003	DC48V	1,550	180	130	110	1
EPLH-M9U	004697004	DC125V	1,550	180	130	110	1

Closing coils

Type	Code No.	Rated voltage [V]	kg	Width (mm)	Depth (mm)	Height (mm)	
EPLH-C1	004697005	AC/DC110V	0,190	45	50	100	1
EPLH-C2	004697006	AC/DC220V	0,190	45	50	100	1
EPLH-C3	004697007	AC380V	0,190	45	50	100	1
EPLH-C4	004697008	AC440V	0,190	45	50	100	1
EPLH-C7	004697009	DC24V	0,190	45	50	100	1
EPLH-C8	004697010	DC48V	0,190	45	50	100	1
EPLH-C9	004697011	DC125	0,190	45	50	100	1

Shunt trips (SHT)

Type	Code No.	Rated voltage [V]	kg	Width (mm)	Depth (mm)	Height (mm)	
EPLH-S1	004697012	AC/DC110V	0,185	45	50	100	1
EPLH-S2	004697013	AC/DC220V	0,185	45	50	100	1
EPLH-S3	004697014	AC380V	0,185	45	50	100	1
EPLH-S4	004697015	AC440V	0,185	45	50	100	1
EPLH-S7	004697016	DC24V	0,185	45	50	100	1
EPLH-S8	004697017	DC48V	0,185	45	50	100	1
EPLH-S9	004697018	DC125	0,185	45	50	100	1

Secondary shunt trips (SHT)

Type	Code No.	Rated voltage [V]	kg	Width (mm)	Depth (mm)	Height (mm)	(pc)
EPLH-SS1	004697019	AC/DC110V	0,185	45	50	100	1
EPLH-SS2	004697020	AC/DC220V	0,185	45	50	100	1
EPLH-SS3	004697021	AC380V	0,185	45	50	100	1
EPLH-SS4	004697022	AC440V	0,185	45	50	100	1
EPLH-SS7	004697023	DC24V	0,185	45	50	100	1
EPLH-SS8	004697024	DC48V	0,185	45	50	100	1
EPLH-SS9	004697025	DC125	0,185	45	50	100	1

Undervoltage coils (UVT)

Type	Code No.	Rated voltage [V]	kg	Width (mm)	Depth (mm)	Height (mm)	
EPLH-U1	004697033	AC/DC110V	0,200	45	50	100	1
EPLH-U2	004697034	AC/DC220V	0,200	45	50	100	1
EPLH-U3	004697035	AC380V	0,200	45	50	100	1
EPLH-U4	004697036	AC440V	0,200	45	50	100	1
EPLH-U7	004697037	DC24V	0,200	45	50	100	1
EPLH-U8	004697038	DC48V	0,200	45	50	100	1
EPLH-U9	004697039	DC125	0,200	45	50	100	1

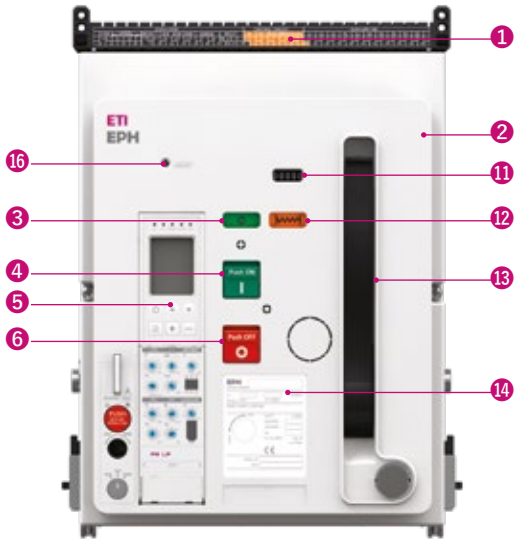
Position switches

Type	Code No.	Type of contact	kg	Width (mm)	Depth (mm)	Height (mm)	
EPLH-AQ	004697052	TEST:1C, CONN:1C	0,53	210	100	60	1
EPLH-AR	004697053	CONN:2C	0,53	210	100	60	1
EPLH-AS	004697054	TEST:2C	0,53	210	100	60	1
EPLH-AT	004697055	ISOLATED:1C, INSERTED:1C	0,53	210	100	60	1
EPLH-AU	004697056	INSERTED:2C	0,53	210	100	60	1
EPLH-AV	004697057	ISOLATED:2C	0,53	210	100	60	1
EPLH-PS	004697058	TEST:1C, ISOLATED:1C, CONN:2C	0,62	210	100	60	1
EPLH-P4	004697059	TEST:2C,CONN:2C	0,62	210	100	60	1
EPLH-PQ	004697060	INSERTED:1C, ISOLATED:1C, TEST:1C, CONN:1C	0,62	210	100	60	1
EPLH-P8	004697061	INSERTED:2C, ISOLATED:2C, TEST:2C, CONN:2C	0,62	210	100	60	1
EPLH-PR	004697062	INSERTED:1C, ISOLATED:1C, TEST:3C, CONN:3C	0,9	210	100	60	1

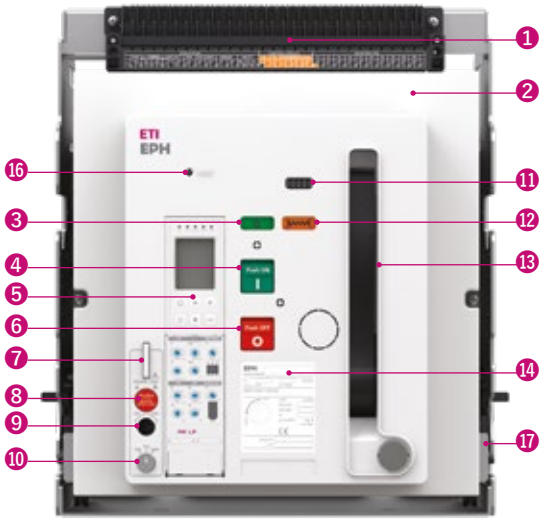
Accessories EPL

Type	Code No.	Description	kg	
EPLH-VM	004697128	Voltage Module	0,08	1
EPLH-AG	004697122	Door flange IP30	0,27	1
EPLH-DC	004697123	Dust Cover IP52	2,1	1
EPLH-FHVA3F	004697093	Upper & lower front type + Horizontal/Vertical terminal (A frame,630-1600A,3P)	7,24	1
EPLH-FHVA4F	004697094	Upper & lower front type + Horizontal/Vertical terminal (A frame, 630-1600A, 4P)	9,6	1
EPLH-FHVB3F	004697095	Upper & lower front type + Horizontal/Verticalterminal (B frame, 2000-3200A, 3P)	15,4	1
EPLH-FHVB4F	004697096	Upper & lower front type + Horizontal/Vertical terminal (B frame, 2000-3200A, 4P)	19,6	1
EPLH-FRA3F	004697124	Upper & lower front type terminal 6 (A frame,630-1600A,3P)	12,11	1
EPLH-FRA4F	004697125	Upper & lower front type terminal 8 (A frame,630-1600A,4P)	16,15	1
EPLH-FRB3F	004697126	Upper & lower front type terminal 6 (B frame, 2000-3200A, 3P)	25	1
EPLH-FRB4F	004697127	Upper & lower front type terminal 8 (B frame, 2000-3200A, 4P)	31,53	1
EPLH-DWB1	004697180	A & B & C & D Frame Draw-Out (Fixed) Type 2 Way MI (External Mounting Kit Only)	2,1	1
EPLH-DWB2	004697181	A & B & C & D Frame Draw-Out (Fixed) Type 3 Way MI (External Mounting Kit Only)	4,2	1
EPLH-FWB1	004697182	A & C Frame Fixed Type 2 Way MI (External Mounting Kit Only)	2,7	1
EPLH-FWB2	004697183	A & C Frame Fixed Type 3 Way MI (External Mounting Kit Only)	4,7	1
EPLH-B0DA	004697184	A Frame Interlock Part (B0)	0,2	1
EPLH-B0DB	004697185	B Frame Interlock Part (B0)	0,2	1
EPLH-B0DC3	004697186	C Frame 3P Interlock Part (B0)	0,2	1
EPLH-B0DC4	004697187	C Frame 4P Interlock Part (B0)	0,2	1
EPLH-B0DD3	004697188	D Frame 3P Interlock Part (B0)	0,2	1
EPLH-B0DD4	004697189	D Frame 4P Interlock Part (B0)	0,2	1
EPLH-B0FA	004697190	A Frame Interlock Part (B0) + Fixed Type of Installation Bracket	0,8	1
EPLH-B0FB	004697191	B Frame Interlock Part (B0) + Fixed Type of Installation Bracket	0,8	1
EPLH-B0FC3	004697192	C Frame 3P Interlock Part (B0) + Fixed Type of Installation Bracket	0,8	1
EPLH-B0FC4	004697193	C Frame 4P Interlock Part (B0) + Fixed Type of Installation Bracket	0,8	1
EPLH-B0FD3	004697194	D Frame 3P Interlock Part (B0) + Fixed Type of Installation Bracket	0,8	1
EPLH-B0FD4	004697195	D Frame 4P Interlock Part (B0) + Fixed Type of Installation Bracket	0,8	1
EPLH-DWB1A	004697196	A Frame Draw-Out Type 2 Way MI + Interlock Part (B0)	2,2	1
EPLH-DWB2A	004697197	A Frame Draw-Out Type 3 Way MI + Interlock Part (B0)	4,4	1
EPLH-DWB1B	004697198	B Frame Draw-Out Type 2 Way MI + Interlock Part (B0)	2,2	1
EPLH-DWB2B	004697199	B Frame Draw-Out Type 3 Way MI + Interlock Part (B0)	4,4	1
EPLH-DWB1C3	004697200	C Frame 3P Draw-Out 2 Way MI + Interlock Part (B0)	2,3	1
EPLH-DWB1C4	004697201	C Frame 4P Draw-Out 2 Way MI + Interlock Part (B0)	2,3	1
EPLH-DWB2C3	004697202	C Frame 3P Draw-Out 3 Way MI + Interlock Part (B0)	4,5	1
EPLH-DWB2C4	004697203	C Frame 4P Draw-Out 3 Way MI + Interlock Part (B0)	4,5	1
EPLH-DWB1D3	004697204	D Frame 3P Draw-Out 2 Way MI + Interlock Part (B0)	2,3	1
EPLH-DWB1D4	004697205	D Frame 4P Draw-Out 2 Way MI + Interlock Part (B0)	2,3	1
EPLH-DWB2D3	004697206	D Frame 3P Draw-Out 3 Way MI + Interlock Part (B0)	4,5	1
EPLH-DWB2D4	004697207	D Frame 4P Draw-Out 3 Way MI + Interlock Part (B0)	4,5	1
EPLH-FWB1A	004697208	A Frame Fixed Type 2 Way MI + Interlock Part (B0)	2,8	1
EPLH-FWB2A	004697209	A Frame Fixed Type 3 Way MI + Interlock Part (B0)	4,9	1
EPLH-FWB1B	004697210	B Frame Fixed Type 2 Way MI + Interlock Part (B0)	2,8	1
EPLH-FWB2B	004697211	B Frame Fixed Type 3 Way MI + Interlock Part (B0)	4,9	1
EPLH-FWB1C3	004697212	C Frame 3P Fixed Type 2 Way MI + Interlock Part (B0)	2,9	1
EPLH-FWB1C4	004697213	C Frame 4P Fixed Type 2 Way MI + Interlock Part (B0)	2,9	1
EPLH-FWB2C3	004697214	C Frame 3P Fixed Type 3 Way MI + Interlock Part (B0)	5	1
EPLH-FWB2C4	004697215	C Frame 4P Fixed Type 3 Way MI + Interlock Part (B0)	5	1
EPLH-FWB1D3	004697216	D Frame 3P Fixed Type 2 Way MI + Interlock Part (B0)	2,9	1
EPLH-FWB1D4	004697217	D Frame 4P Fixed Type 2 Way MI + Interlock Part (B0)	2,9	1
EPLH-FWB2D3	004697218	D Frame 3P Fixed Type 3 Way MI + Interlock Part (B0)	5	1
EPLH-FWB2D4	004697219	D Frame 4P Fixed Type 3 Way MI + Interlock Part (B0)	5	1

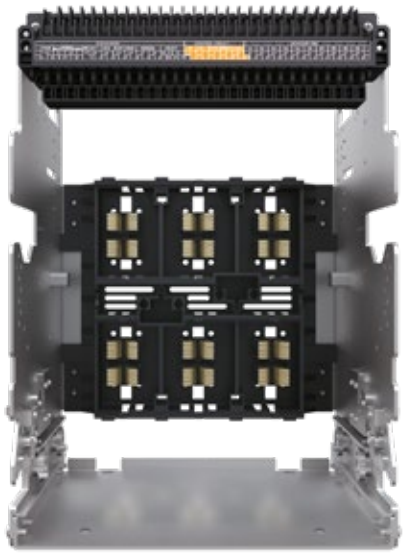
External Structure



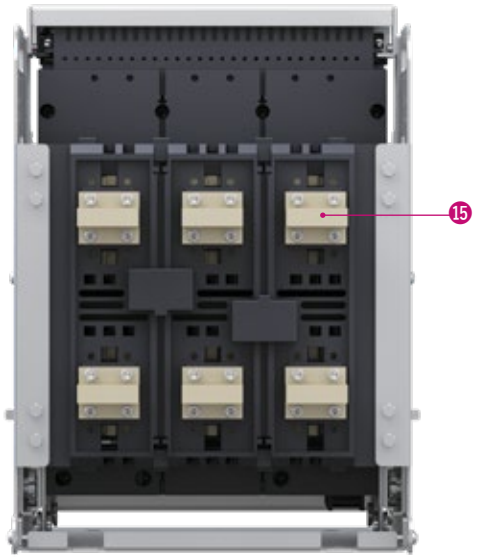
Draw-In/Out Type (ACB Body)



Draw-In/Out Type (Including Cradle)



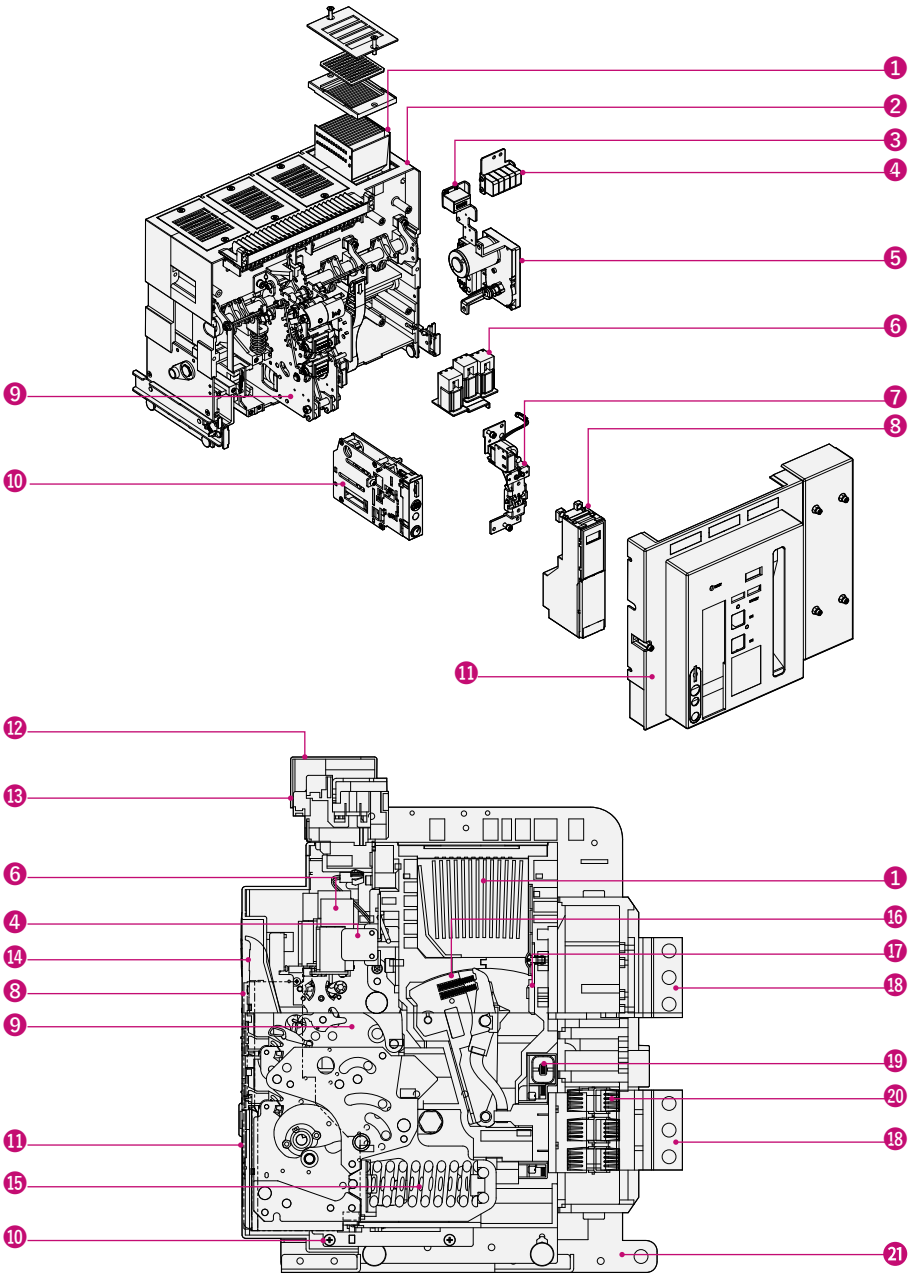
Cradle Front



Cradle Rear

1. Control Circuit Terminal
2. Front Cover
3. Close/Open Indicator
4. Close Button
5. Overcurrent Relay Device
6. Open Button
7. Position Padlock
8. Position Lock Release Button
9. Draw-In/Out Handle Insertion Hole
10. Position Indicator
11. Counter
12. Charged/Discharged Indicator
13. Manual Charging Handle
14. Rating Nameplate
15. Terminal Busbar
16. OCR & Alarm S/W Reset Button
17. Draw-In/Out Guide Rail

Internal Structure



1 DI Grid
2 CO Unit
3 Counter
4 AUX Switch
5 Motor operator
6 Closing/Trip/UVT Coil
7 MHT Device
8 OCR
9 Mechanism
10 DR Device
11 Cover
12 Control Terminal Protection Cover
13 Control Terminal
14 Manual Charging Handle
15 Closing Spring
16 Moving Contact
17 Fixed Contact
18 Terminal
19 Current Transformer(CT)
20 Terminal Clip
21 Cradle

EP Series air circuit breaker has been designed so that upon closing, the N phase is closed earlier than R, S, T phase and upon opening, the N phase is disconnected last in order to reduce burden of main contact and to prevent ripple effect of accident of N phase.

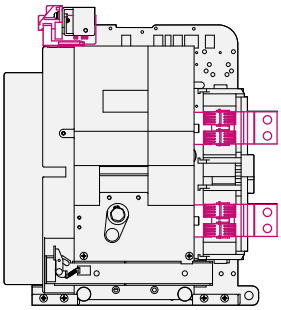
Convenient Connection Method

With EP Series air circuit breaker, 4 types of mounting (Connected, test, isolated, removed) are possible and offer easy maintenance.

Sliding Body Type (In Case of Draw-In/Out Type)

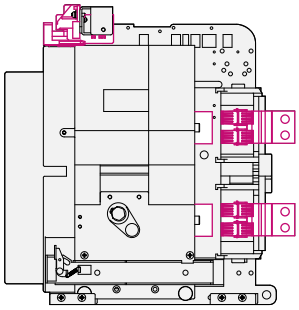
Connected Position

As a commonly used status, the main circuit and control circuit are both connected.



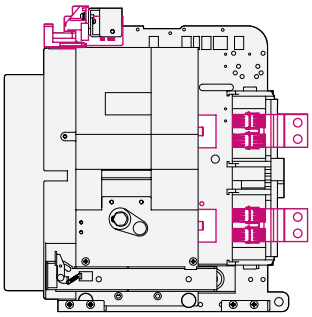
Test Position

As a status in which the main circuit is isolated and the control circuit is connected, the circuit breaker can be turned On/Off with the switchgear door closed.



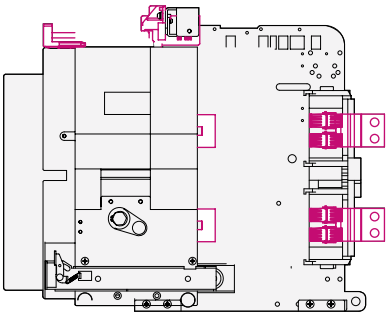
Isolated Position

With the main circuit and control circuit both isolated, the air circuit cannot be turned On/Off.



Removed Position

The air circuit braeaker body has completely been removed from the cradle.

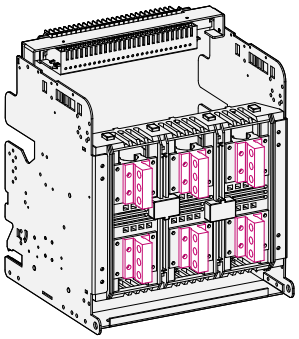


Connection Method

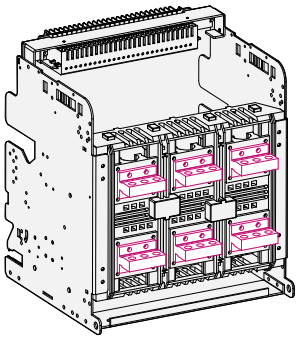
Enhanced user convenience through on-site adaptability: each terminal can be rotated 90 degrees to accommodate different busbar types in low-voltage switchgear.

Standard Type

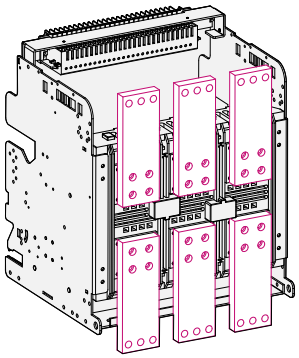
Vertical Type



Horizontal Type

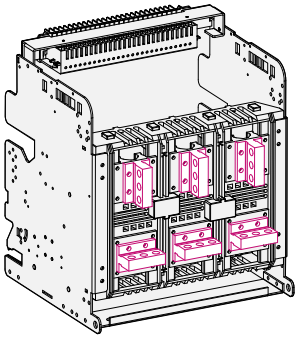


Front Type

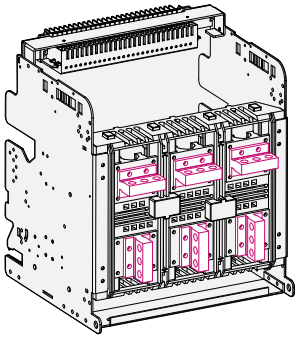


Combined Type

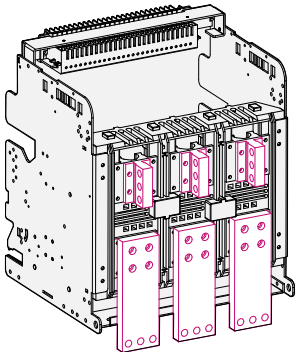
(Upper) Vertical Type +
(Lower) Horizontal Type



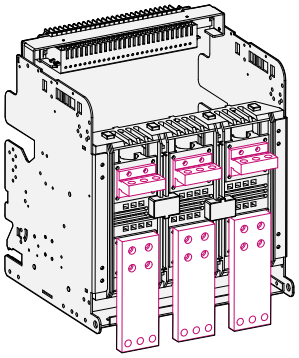
(Upper) Horizontal Type +
(Lower) Vertical Type



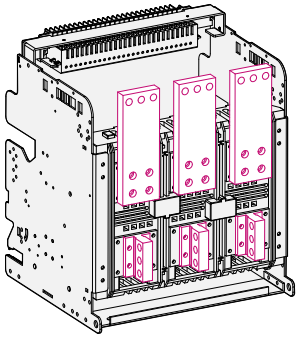
(Upper) Vertical Type +
(Lower) Front Type



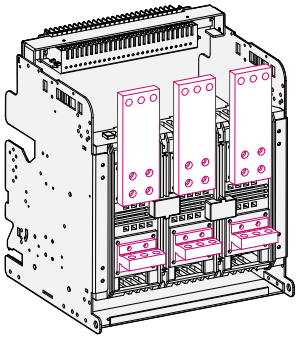
(Upper) Horizontal Type +
(Lower) Front Type



(Upper) Front Type +
(Lower) Vertical Type



(Upper) Front Type +
(Lower) Horizontal Type



Terminal Configuration and Compatibility
Terminal Change Options:

- Terminal changes are supported for EPL/EPH A frame (630–1600 A) and B frame (2000–3200 A) models.
- For current ratings above 4000 A, horizontal or vertical terminal adjustments require additional parts. Please contact our company for further details.

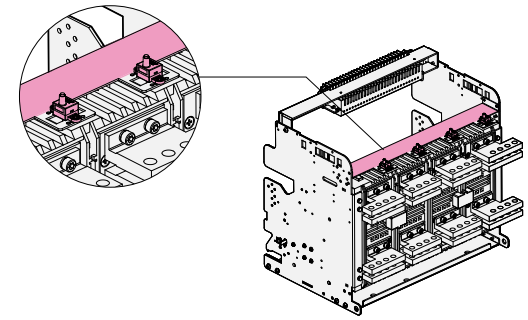
Front Type Terminal:

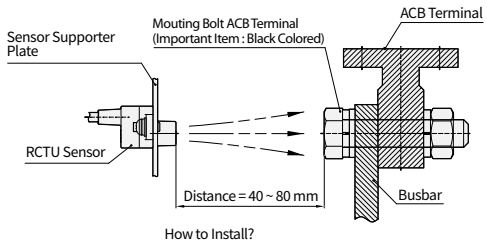
- The front-type terminal is designed for switchgear installations with spatial restrictions.
- For B frame (3200 A), the front-type terminal is provided separately for 2000 A and 2500 A.
- Front-type terminals must be purchased as separate components.

Temperature Sensor

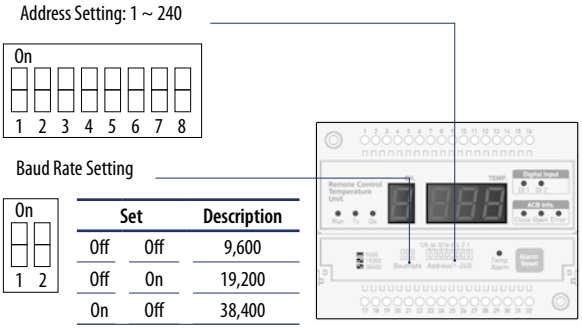
The integrated temperature sensor enables reliable and accurate measurement of heat sources, with a measurement range of -5℃ to 250℃.

Example of IR Sensor Application



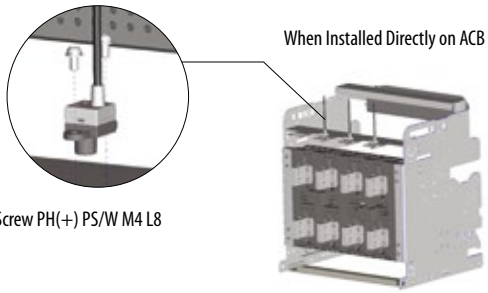


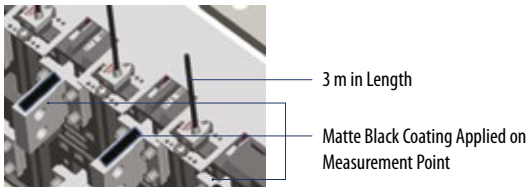
How to Install?



Set		Description
Off	Off	9,600
Off	On	19,200
On	Off	38,400

Installation of IR Sensor





IR Temperature Sensor Installation Guidelines

Ensure the IR temperature sensor is installed with sufficient insulation distance from the measurement point to avoid interference.

Recommended distance: Maintain a gap of 50–80 mm between the sensor and the measurement point.

Surface requirements: The measurement point should have a non-reflective surface to ensure accurate readings. A matte black coating is recommended to minimize reflection and optimize sensor performance.

⚠ Caution

Surface Reflection Impact:

The measurement accuracy of the IR sensor varies based on the reflectivity of the metal surface.

Use surfaces coated with matte black or non-metallic varnish for accurate measurements. Avoid metallic varnishes as they can distort readings.

Measurement Point Size:

The size of the measurement point depends on the Distance-to-Spot (D:S) Ratio and the distance from the surface.

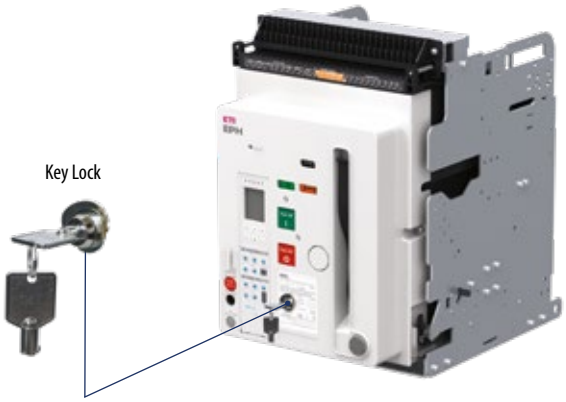
This sensor operates with a D:S Ratio of 8:1, meaning the measurement point's diameter is 1/8th of the distance from the sensor.

Key Lock

The Key Lock device ensures safety by maintaining the interlock condition to prevent electric or manual closing when the circuit breaker is open.
Operation Details:

- When the key is used to unlock, electric and manual On/Off operations become possible.
- When the key is removed, the circuit breaker becomes interlocked, preventing operation.
- To lock the device, the Off button must be pressed before turning the key to the lock position.

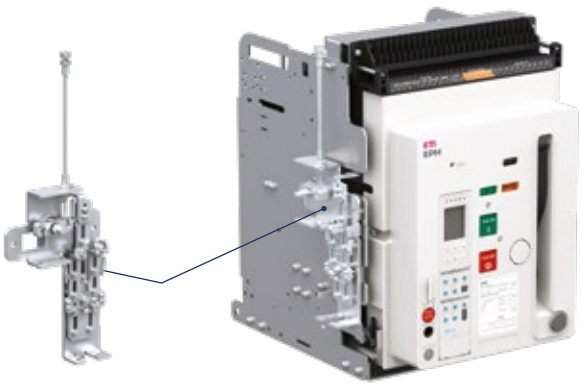
Ordering Information:
The key lock is mounted on the main unit. To include this feature, add AB to the order form when placing an order for the main unit.



Mechanical Interlock (MI)

The Mechanical Interlock (MI) is a device designed to mechanically link the closing and tripping operations of 2 or 3 circuit breakers. It operates using a combination of the MI unit and interlock components pre-installed within the main unit.
Key Features and Installation Guidelines:

- MI Unit and Components:
  - The MI unit is a separate product that must be ordered and installed additionally after the ACB is mounted in the panel.
  - When ordering the main unit, include BO in the order code to have only the interlock components pre-installed inside the main unit.
- External Mounting Kit:
  - The external MI mounting kit must be ordered separately as an additional product.
- Connection Requirements:
  - The MI wire must be connected within a 2-meter distance between ACBs.
- Panel Installation:
  - A square hole of 100 mm x 200 mm is required in the panel for installation.



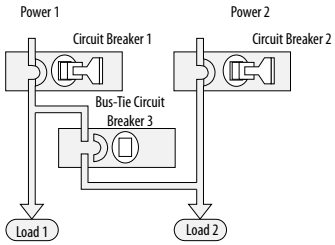
Mechanical Interlock

Key Lock & Key Interlock

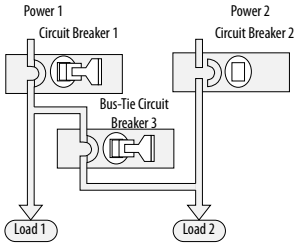
The Key Lock and Key Interlock system provides enhanced safety and control by interlocking multiple circuit breakers.
System Functionality:

- Up to three circuit breakers equipped with key lock devices can be integrated into the system.
- Using two keys, only two circuit breakers can be closed at a time, ensuring the third breaker remains interlocked.
- This configuration ensures a stable load distribution and prevents simultaneous operation of all breakers, enhancing system safety.

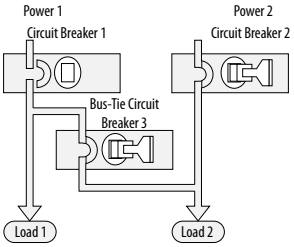
Circuit Breaker 3 cannot be closed



Circuit Breaker 2 cannot be closed



Circuit Breaker 1 cannot be closed



Example : Parallel feed at 2 power is prevented in case bus-tie circuit breaker is used .

Over Current Relay (OCR)

Function	General Feeder					Generator (Marine Type)		
Type	N	A		P	H	N	A	P
	PR-LN	PR-LA	PR-LG	PR-LP	PR-LH	PR-SN	PR-SA	PR-SP
Frequency								
50 Hz	50	50	50	50	50	50	50	50
60 Hz	60	60	60	60	60	60	60	60
Control Power								
External Power	☒	■	■	■	■	☒	■	■
Self-Power	■	■	■	■	■	■	■	■
Protection Function								
LTD (Long Time)	■	■	■	■	■	■	■	■
STD (Short Time)	■	■	■	■	■	■	■	■
INST (Instantaneous)	■	■	■	■	■	■	■	■
Pre-Trip Alarm	☒	■	■	■	■	☒	■	■
Ground Fault Trip	■	■	☒	■	■	☒	☒	☒
ELT Function	☒	☒	■ Outer CT Ground 2) (Ground fault at more than 30 A)	☒	☒	☒	☒	☒
Thermal Function	■	■	■	■	■	■	■	■
Field Test	☒	■	■	■	■	☒	■	■
Fail Safe	■	■	■	■	■	■	■	■
Indication								
True RMS Detection Method	■	■	■	■	■	■	■	■
LED Indication per Trip Type	☒	■	■	■	■	☒	■	■
Fault LED	L [1]	PTA, L, S/I, G	PTA, L, S/I, leakage	PTA, L, S/I, G	PTA, L, S/I, G	L [1]	PTA, L, S/I	PTA, L, S/I
Real-Time LCD Indication of Load Rate per Phase	☒	■	■	■	■	☒	■	■
Measurement LCD	☒	■	■	■	■	☒	■	■
Output Contact								
Integrated Instantaneous Contact (1a)	■	☒	☒	☒	☒		☒	☒
Individual Continuous Contact (4a)	☒	■	■	■	■	☒	■ [4]	■ [4]
Operation								
MCR [3]	☒	☐	☐	☐	☐	☒	☐	☐
Communication	NFC	Modbus-RTU				NFC	Modbus-RTU	
Event/Fault Recording	■	■	■	■	■	■	■	■

■: Standard, ☐: Option

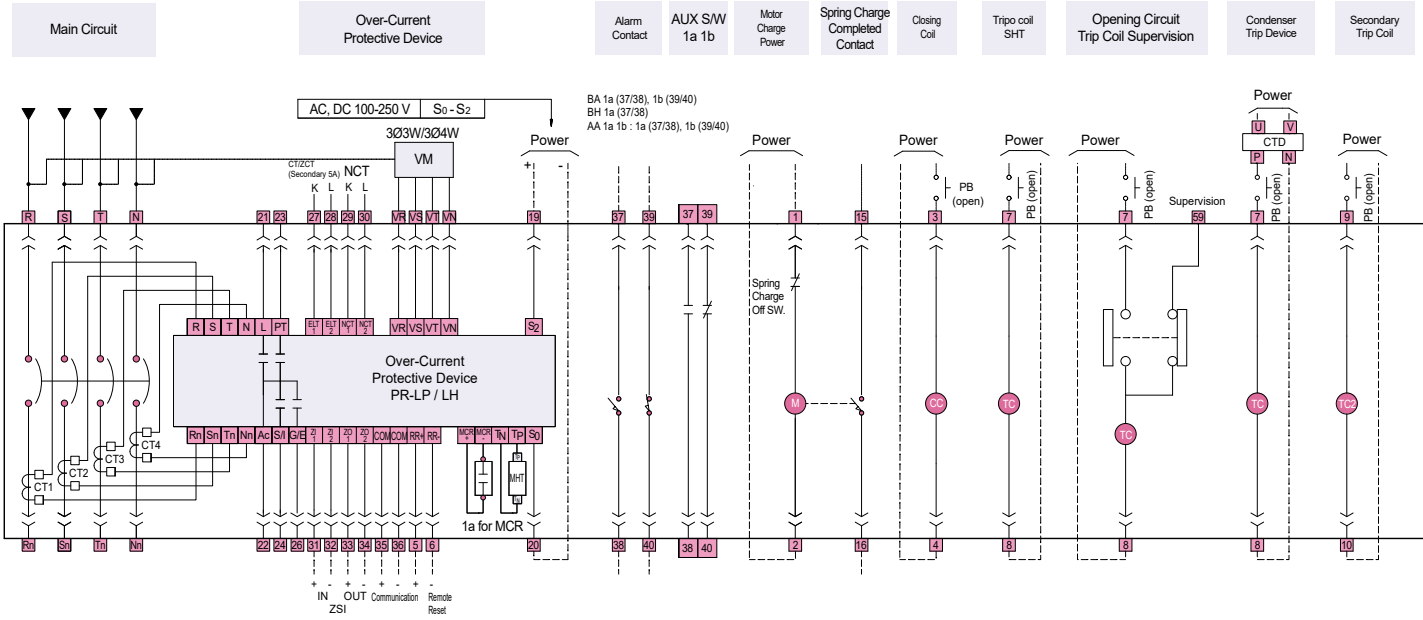
1) Indicates reserve before operation during long time delay.

2) ZCT designated by the customer is used.

3) ZCT designated by our company is used.

4) As for marine type, individual continuous contact is 3a.

Circuit diagram



Symbol Description

CT	Current Transformer
L	LTD Terminal
PT	Pre-Trip Alarm
G	Ground Fault Contact
S / I	STD/INST Contact
Ac	Common Contact
NCT	NCT (Neutral CT) Input
ZI	Zone Selective Interlock Input
ZO	Zone Selective Interlock Output
MCR +,-	MCR Input Terminal
Tp / Tn	MHT Output Terminal
M	Charging Motor
CC	Close Coil
TC	Trip Coil
UVT	Under-Current Voltage Trip Coil
CT	Magnetic Hold Trigger
SO/S2	OCR Power

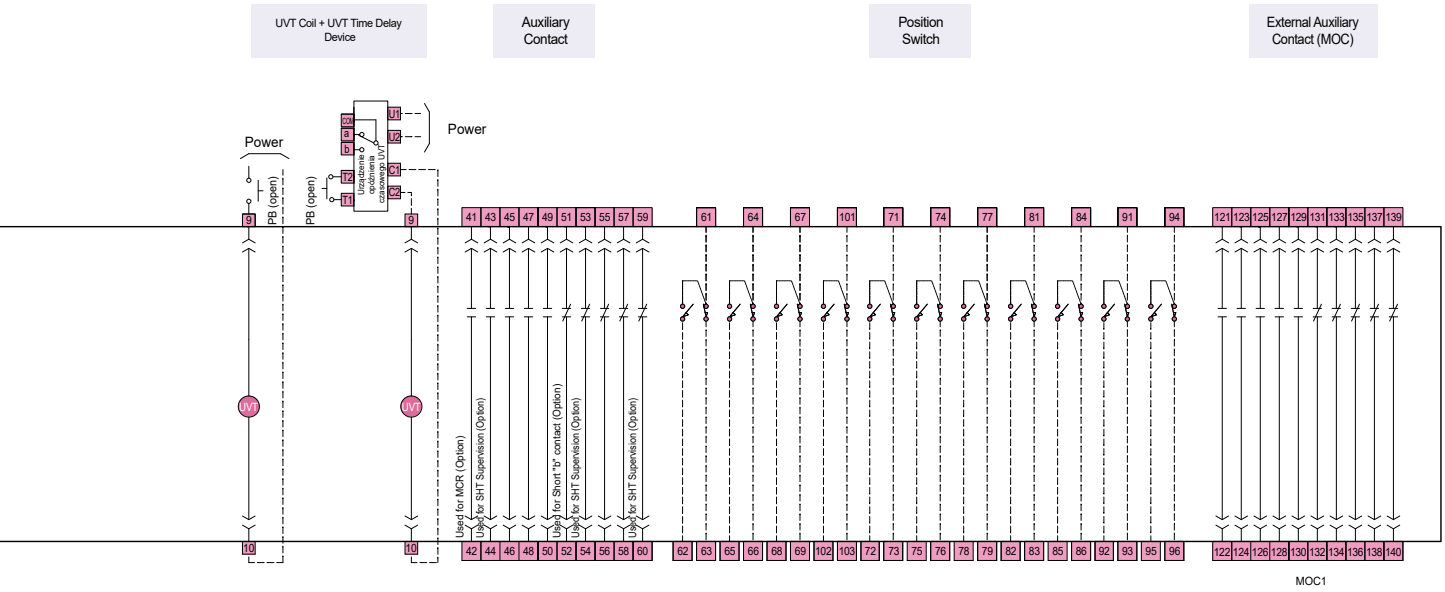
RR : Remote Reset • VM : Voltage Module • VR ~ VN : Voltage Phase Input
• R ~ N : Current Input • Rn ~ Nn : Current Input

Terminal Description

1 2	Charge Motor Power
3 4	Closing Coil Power
7 8	Trip Coil Power
9 10	UVT Coil Power
15 16	Spring Charge Switch
19 20	OCR Control Power
22 21	LTD Contact
22 23	Pre-Trip Alarm/Temperature Alarm Contact
22 24	STD/INST Contact
22 26	GFT/ELT Contact
22 30	NCT (Neutral CT) Input Terminal
31 ~ 34	ZSI (Zone Selective Interlock)
41 ~ 60	Auxiliary Contact
61 ~ 96	Position Switch

—— Manufacture's Wiring
---- User's Wiring
Disconnecting Device (Draw-Out Type)

This circuit diagram is equipped with the 'PR-LA' type of OCR and please refer to main ACB catalogue for other types of OCR.



TEST position	CONNECTION position	Pozycja ODIZOLOWANY	INSERT position
61-62 ON	71-72 ON	81-82 ON	84-85 ON
61-63 OFF	71-73 OFF	81-83 OFF	84-86 OFF
64-65 ON	74-75 ON	84-85 ON	91-92 ON
64-66 OFF	74-76 OFF	84-86 OFF	91-93 OFF
67-68 ON	77-78 ON		94-95 ON
67-69 OFF	77-79 OFF		94-96 OFF
101-102 ON			
101-103 OFF			

Control Jack Lay-Out

OCR														Operating					Auxiliary Switch (5x NO and 5X NC)									
POW	OCR Contact					ELT	N-CT	ZSI		COM	Temp		V Input		M	CC	TC	UVT	CHA	1a	2a	3a	4a	5a	1b	2b	3b	4b	5b
	COM	L	S/I	P/T	G/E																								
19	21		23		27	29	31		33	35	37		39	VR	VT	1	3	7	9	15	41	43	45	47	49	51	53	55	57	59
20	22		24		26	28	30		32	34	36		38	40	VS	VN	2	4	8	10	16	42	44	46	48	50	52	54	56	58	60
OCR Protection Relay														Operating Circuit						Auxiliary Switch									

OCR													
POW	OCR Contact					ELT	N-CT	ZSI		COM	Temp		V Input	
	COM	L	S/I	P/T	G/E									
19	21		23		27	29	31		33	35	37		39	VR	VT
20	22		24		26	28	30		32	34	36		38	40	VS	VN
OCR Protection Relay																

Operating				
M	CC	TC	UVT	CHA
1	3	7	9	15
2	4	8	10	16
Operating Circuit				

Auxiliary Switch									
1a	2a	3a	4a	5a	1b	2b	3b	4b	5b
41	43	45	47	49	51	53	55	57	59
42	44	46	48	50	52	54	56	58	60
Auxiliary Switch									