

Emax-Air Circuit Breakers

E4 4000A Fixed and Drawout

IEC

AC Circuit Breakers and Switches

Fixed and Drawout

3 and 4 Pole

Field Interchangeable Modular Trip Units

Extremely Simple Installation

Standardized Accessories Across the Entire Range

Higher Performances in Less Space

Multiple Communication Options



| Dimensions | 3P Fixed | 16.46H x 22.28W x 11.89D |
|------------|------------|--------------------------|
| | 3P Drawout | 18.15H x 23.39W x 15.61D |

Compliance with Global Standards

IEC 60947, EN 60947, CEI EN 60947, IEC 6100

CCC

Marine and others

Also available as:

UL 1066

ANSI C37, C37.13, C37.16, C37.17, C37.50

The ABB Quality System complies with the international ISO 9001 - 2000 Standard (model for quality assurance in design, development, construction, and installation and service) and with the equivalent European EN ISO 9001 and Italian UNI EN ISO 9001 Standards

| IEC 60947-2 | | E4 | | | | |
|--|--------------------|-------------|-----------------|-------------|------------------|------------------|
| | | S | H | V | S/f ^① | H/f ^① |
| Levels of performance | | | | | | |
| Currents: rated uninterrupted current (at 40°C) I _u | [A] | 4000 | 3200 | 3200 | 4000 | 3200 |
| | [A] | | 4000 | 4000 | | 4000 |
| | [A] | | | | | |
| | [A] | | | | | |
| | [A] | | | | | |
| | [A] | | | | | |
| Capacity of neutral pole for four-pole circuit breakers | [%I _u] | 50 | 50 | 50 | 100 | 100 |
| Rated ultimate breaking capacity under short circuit I _{cu} | | | | | | |
| 220/230/380/400/415V | [kA] | 75 | 100 | 150 | 80 | 100 |
| 440V | [kA] | 75 | 100 | 150 | 80 | 100 |
| 500/525V | [kA] | 75 | 100 | 130 | 75 | 100 |
| 660/690V | [kA] | 75 | 85 ^② | 100 | 75 | 100 |
| Rated service breaking capacity under short circuit I _{cs} | | | | | | |
| 220/230/380/400/415V | [kA] | 75 | 100 | 150 | 80 | 100 |
| 440V | [kA] | 75 | 100 | 150 | 80 | 100 |
| 500/525V | [kA] | 75 | 100 | 130 | 75 | 100 |
| 660/690V | [kA] | 75 | 85 | 100 | 75 | 100 |
| Rated short time withstand current I _{cw} (1s) | [kA] | 75 | 100 | 100 | 80 | 85 |

① four poles only
② 100kA @ 600V



Connections

Rear connections-Horizontal (standard on fixed breaker) or Vertical

Trip Unit

The latest generation electronics from ABB have made it possible to design the new, revolutionary PR121, PR122 and

PR123 trip units. The re-engineered hardware architecture allows flexible and precise configuration. With the new Emax modular trip units one can simply add the appropriate module to satisfy your requirement: a great advantage, both in terms of flexibility and customization.

| | | |
|---------------------|------------|-----|
| Weight (lbs) | 3P Fixed | 214 |
| | 3P Drawout | 324 |

Auxiliary Devices for Indication and Control

Control

- Shunt trip/closing coil (YO/YC) and second shunt trip (YO2)
- Undervoltage release (YU)
- Time-delay device for undervoltage release (D)
- External current sensors for neutral conductor outside circuit breaker (neutral CTS)
- Homopolar toroid for the main power supply grounding conductor (star center of the transformer)
- Mechanical operation counter

Indication

- Gear motor for the automatic charging of the closing springs (M)
- Bell alarm
- Bell alarm with remote reset command
- Electrical signaling of circuit breaker open/closed (Aux contacts - MOC)
- Electrical signaling of circuit breaker racked-in/test isolated/racked-out (position contacts -TOC)
- Contact signaling closing springs charged
- Contact signaling undervoltage release de-energized (C. Aux YU)

Safety

- Lock in open position: key
- Lock in open position: padlocks
- Circuit breaker lock in racked-in/test isolated/racked-out position
- Accessories for lock in test isolated/racked-out position
- Padlock device for safety shutter
- Mechanical lock for compartment door
- Anti-racking-out device when the springs are charged (FAIL SAFE)
- Protection for opening and closing pushbuttons
- Mechanical interlock



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