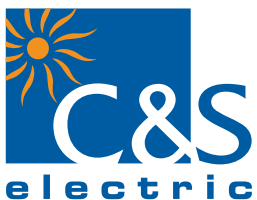


We touch your **electricity** everyday!

ACB-B Type

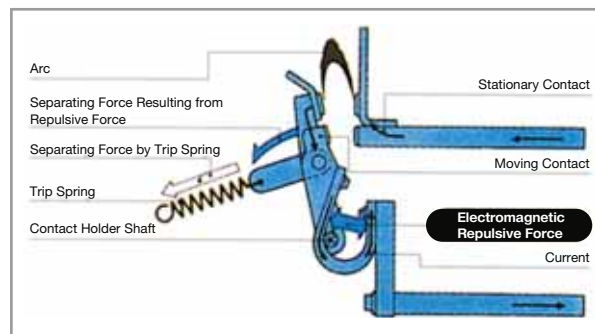
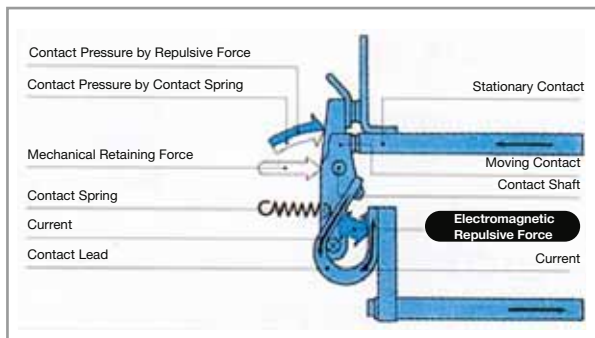


Air Circuit Breaker

Technical Overview

Salient Features

- 400~1600A in single frame size
- Light & compact
- High breaking capacity - 45/50kA
- Reliable system protection thru:
 - a) Thermal Magnetic (TOMCR)
 - b) Microprocessor Release (μ IT-100)
- Fast acting mechanism (total breaking time less than 30ms including arcing time of less than 10ms) minimizes installation stress under fault condition
- Easy termination - horizontal Bus bar connection.
- High mechanical & electrical life.
- High dielectric strength due to use of class 'B' and 'F' insulating material ensures reliable performance in tropical conditions
- Comply with utilization category B & pollution degree 3 group 1 of IEC60947-Part1
- Tested for seismic conditions .
- Wide range of accessories offered- Shunt trip, UVT, Auxiliary Switch, Trip indication switches to meet market specifications.



High Breaking & Short Time Withstand Capacity

Full utilization of electromagnetic repulsive force

Even though it is sound and compact in design, it provides high breaking capacity and short - time withstand current capacity by fully utilizing electromagnetic repulsive force.

- The contact spring normally provides an adequate contact pressure.
- A large current flow causes an electromagnetic repulsive force between the contact lead halves.
- This repulsive force works in a direction to turn the moving contact clockwise about the contact shaft, giving it more contact pressure.
- Hence this unique design ensures a high short-time withstand current capacity.
- When interrupting a large current, the electromagnetic repulsive force works in a direction to separate the moving contact from the stationary contact.
- A separating force resulting from the electromagnetic repulsive force adds to that by the trip spring, assisting a high-speed interruption. This is why our design provides a high breaking capacity

Technical Specifications

Amperes Frame (based on IEC / IS) Type (3 Poles)	400 AH-4B	630 AH-6B*	800 AH-8B*	1000 AH-10B	1250 AH-12B	1600 AH-16B
Insulation Voltage U_i (V) AC	1000	1000	1000	1000	1000	1000
Impulse Voltage U_{imp} (V) AC (Peak)	8	8	8	8	8	8
Dielectric strength (for a minute) kV	3.5	3.5	3.5	3.5	3.5	3.5
Rated Making Capacity I_{cm} (Peak) kA	105	105	105	105	105	105
Rated Breaking Capacity $I_{cu}=I_{cs}$ (RMS) kA 415V AC	50	50	50	50	50	50
Short time withstand current I_{cw} kA for 1 sec. RMS	50	50	50	50	50	50
Total breaking time/closing time (m.sec.)	30/40	30/40	30/40	30/40	30/40	30/40
Weight (kg)	40	40	40	42	42	44
Overall Dimension (H x W x D) (mm)	483 x 332 x 323					

* 630A & 800A ACBs are also available in 45kA breaking capacity at 415V AC operating voltage & 690V insulation voltage.

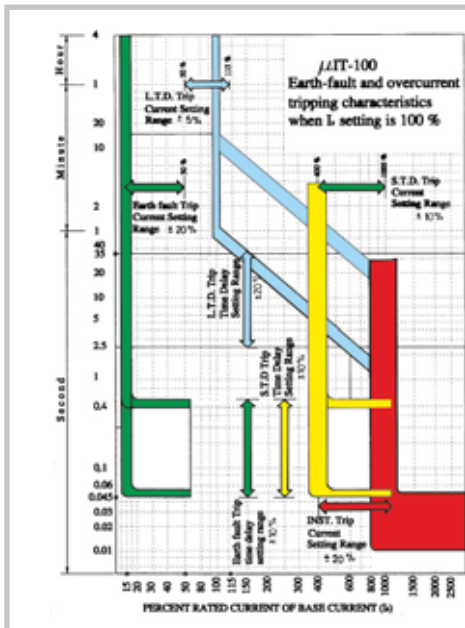
Protection Release

Microprocessor Release

μ IT-100 is a true RMS sensing overcurrent trip device, requires no external supply for its basic function.

Salient Features

- Error free and user friendly setting of current/time.
- Provides highest degree of system protection coordination.
- Self powered by built in current transformer.
- No mal-operation due to external disturbances.
- Built in operation check function.
- Visual fault discrimination by LEDs.
- Three phase and earth fault in one single compact unit.
- Self monitoring of trip unit with blinking indication.
- Function Blocking facility provided.



Tripping Characteristics

Over Load Current (LTD)

LTD Current Setting range: 0.5, 0.55 ... 1.15 In (in steps of 0.05)
 LTD Time Setting range: 2.5, 5 to 35 sec. (in steps of 2.5 sec.)

Short Circuit Current (STD)

STD Current Setting range: 4, 5 ... 10 In (in steps of 1)
 STD Time Setting Range: 50, 100, ... 550 ms. (in steps of 50 ms)

Instantaneous Current (INS)

Current (INS) Setting Ranges: 4, 5, ... 11In (in steps of 1)

Ground Fault (GFT)

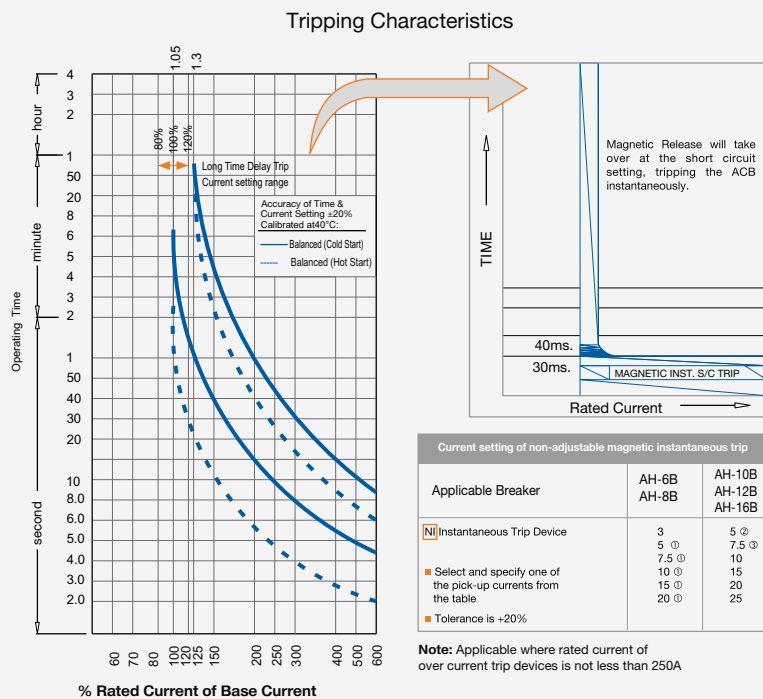
GFT Current Setting Range: 15, 20, ... 50% In (in steps of 5%)
 GFT Time Setting Range: 50, 100, ... 550 ms (in steps of 50ms)

Function Blocking In normal running operation of unit, any of the four function can be blocked by turning the DIP switches to ON position

Thermal Magnetic Release

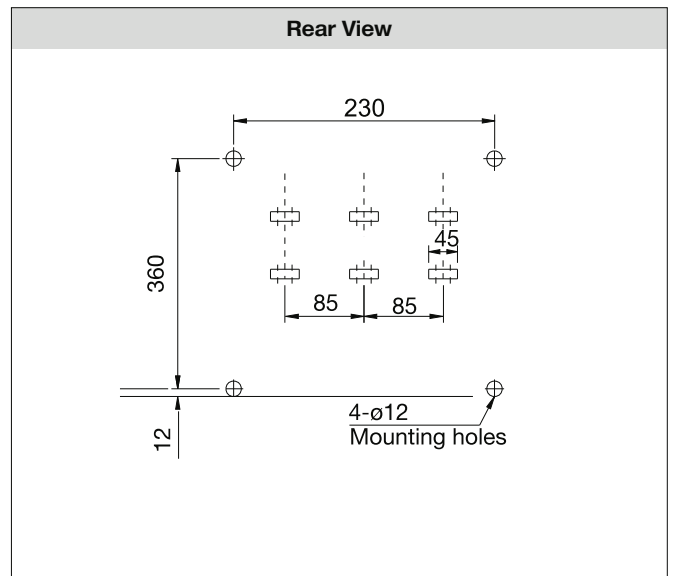
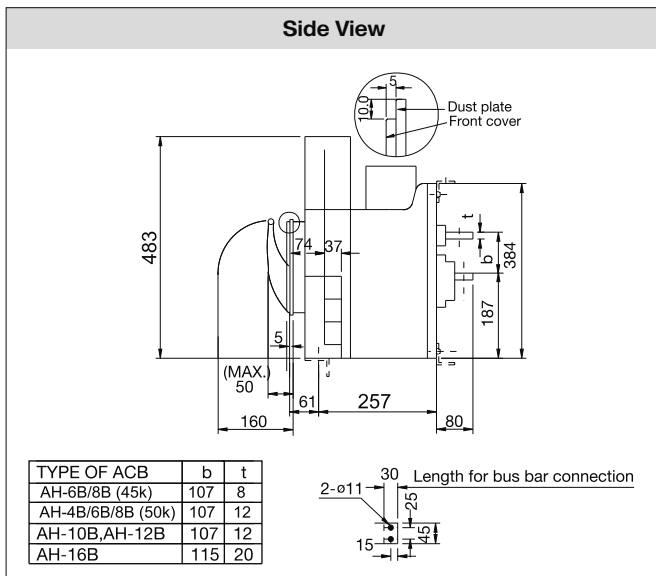
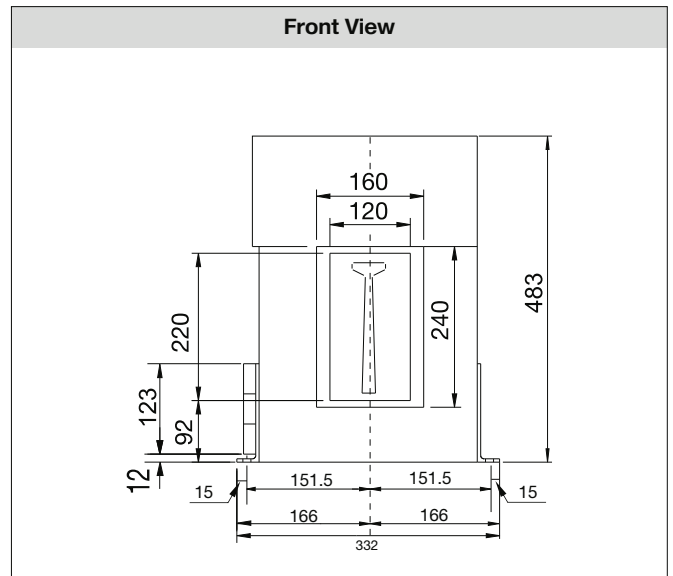
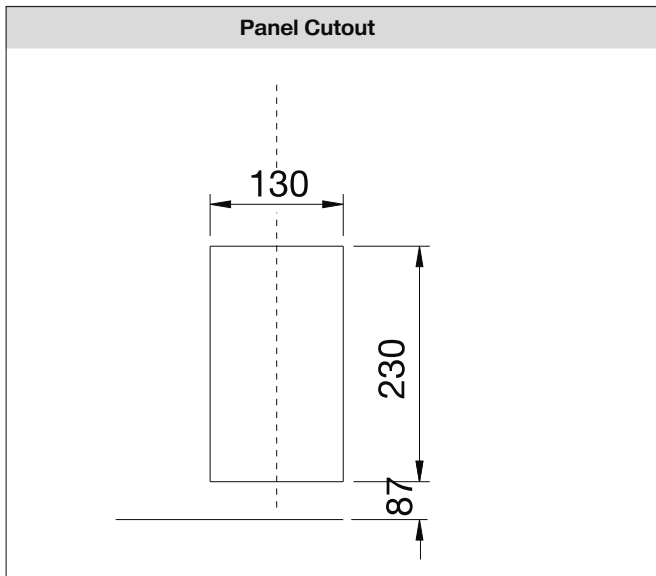
A direct acting electromagnetic instantaneous trip device with fixed current setting for Short Circuit Protection.

CT actuated thermal Overload relay offers O/L Protection along with Shunt trip. Current setting are 60-100% or 80-120%.



Air Circuit Breakers - B Series

Overall Dimensions (AH-4B~AH-16B)



C&S Electric Ltd.

Corporate Office : 222, Okhla Industrial Estate, New Delhi - 110 020
 Tel. : +91-11-3088 7520 - 29, Fax: +91-11-2684 7154, 2682 9063

International Business Division: Tel. : +91-11-4161 3503, 3088 7520-29, Fax: +91-11-2683 8291, 2684 7342
 email : exports@cselectric.co.in

Central Marketing Office: Tel. : +91-11-3088 7520-29, Fax: +91-11-2684 8241, 2684 7342
 email : cmo@cselectric.co.in, info@cselectric.co.in

