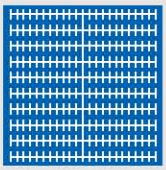
Air Circuit Breaker
2008

new

2008

Welcome to use Hager ACB 2008 catalogue. you will get to know more detailed information about the Hager distribution system.
Hager provides a complete set of distribution system products for you. We have labeled products with corresponding color coded pictogram for you to know more about Hager product.
If you have any suggestion or request for help, please contact your nearest Hager office.



Distribution box

Widely used as the distribution board in residential building and commercial purpose that includes plastic type and metal type. Hager provides complete range of distribution enclosures for commercial and industrial distribution system.

Modular electric device & main switch serial product

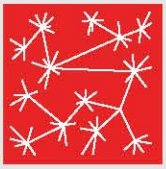
Modular protection devices include: miniature circuit breaker, residual current breaker, fuse carrier, contactor, time switch, surge protection device, isolating switch, etc. and related auxiliary equipment and accessory.
Main switchgear product includes: moulded case circuit breaker, load breaker switch, contactor, etc.

Connection device

Connection block, connector, bus bar and terminals.

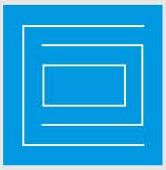
Wiring Accessories

Hager wiring accessories includes: 8000,9000,9088 metallic range, door bell, emergency light, etc.



Intellectualized building management system

Hager provides a complete set of devices for intelligent building mangement system, which includes: timer, temperature controller, presence detector, building automation system based on EIB bus system, remote control system, etc.



Cable management system

Hager provides a complete set of cabling system for cable management system.

hager

the success is in the system

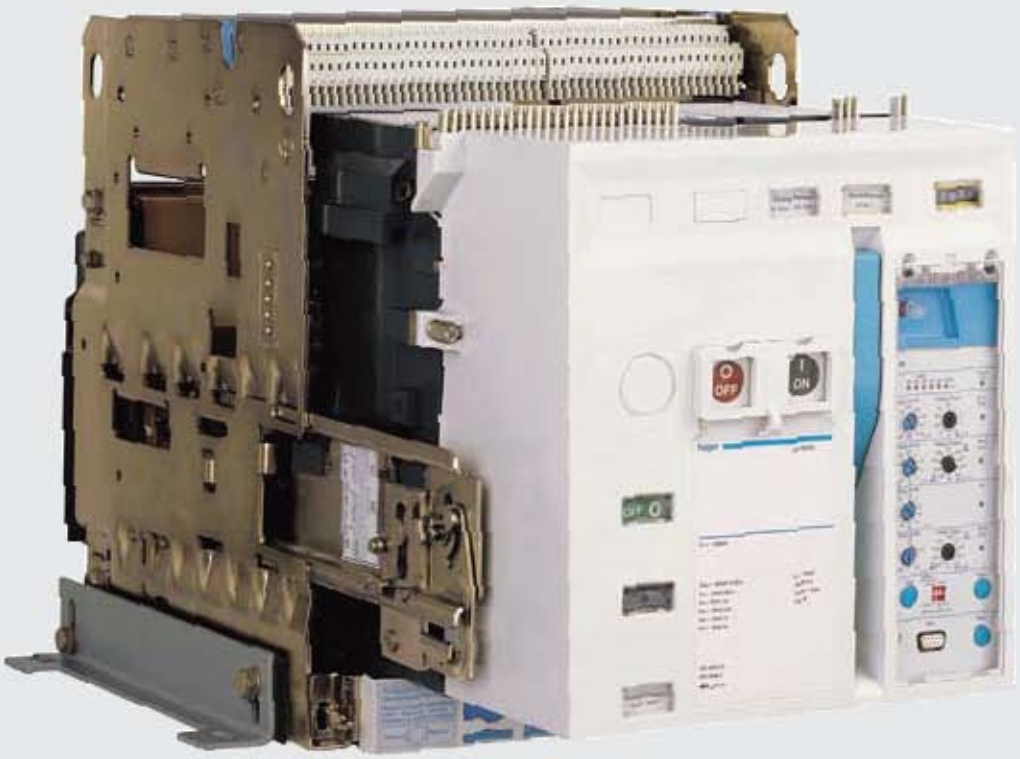
Features of Air Circuit Breaker

Air Circuit Breakers are widely used in low voltage power distribution systems of industrial, residential and commercial buildings.

As the main incoming device, Hager ACBs have high dynamic and thermal stability. It not only ensures reliable power distribution, but also protects the installation at high short circuit currents.

Hager ACBs are available from 630 A to 4000 A, in three frame sizes, in breaking capacities of 55kA, 65kA, 80kA & 100kA, Icu = Ics = Icw.

Hager ACBs are equipped with microprocessor based advanced protection controller units, which ensures wide protection range, with adjustment scope, to facilitate all tripping functions and easy operations to users.



Hager ACBs allow users to perform all the operations from the front fascia. It helps users to operate buttons, settings, and identify the indications clearly.

Hager ACB has two installation types: fixed type and drawout type. With simple tools and accessories, the user can convert one type to another.

Fixed type

Draw-out type

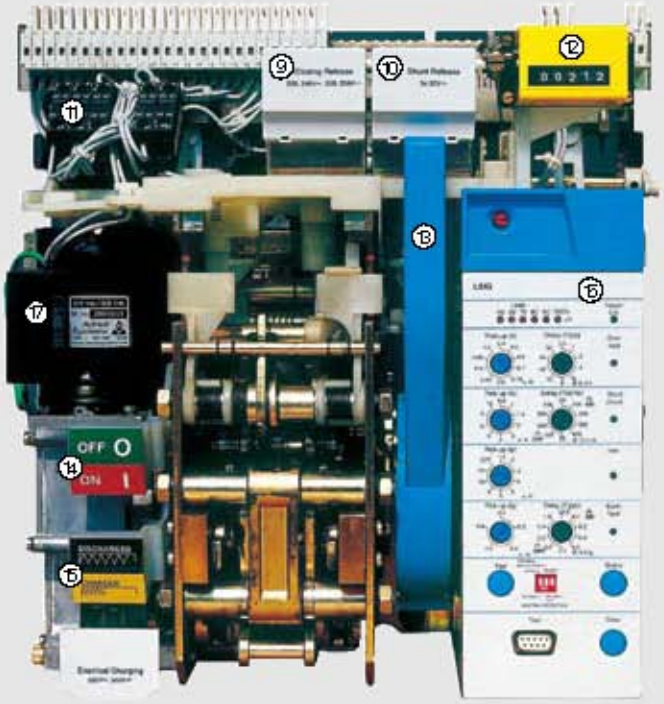
Features of Air Circuit Breaker

Compact Structure

- ACBs are available in three frame sizes from 630 A to 4000 A.
- All the three frames have same depth and height, facilitating easy panel design.
- In a standard distribution panel, ACBs can be installed with only 50 mm distance between them for optimized space designs.

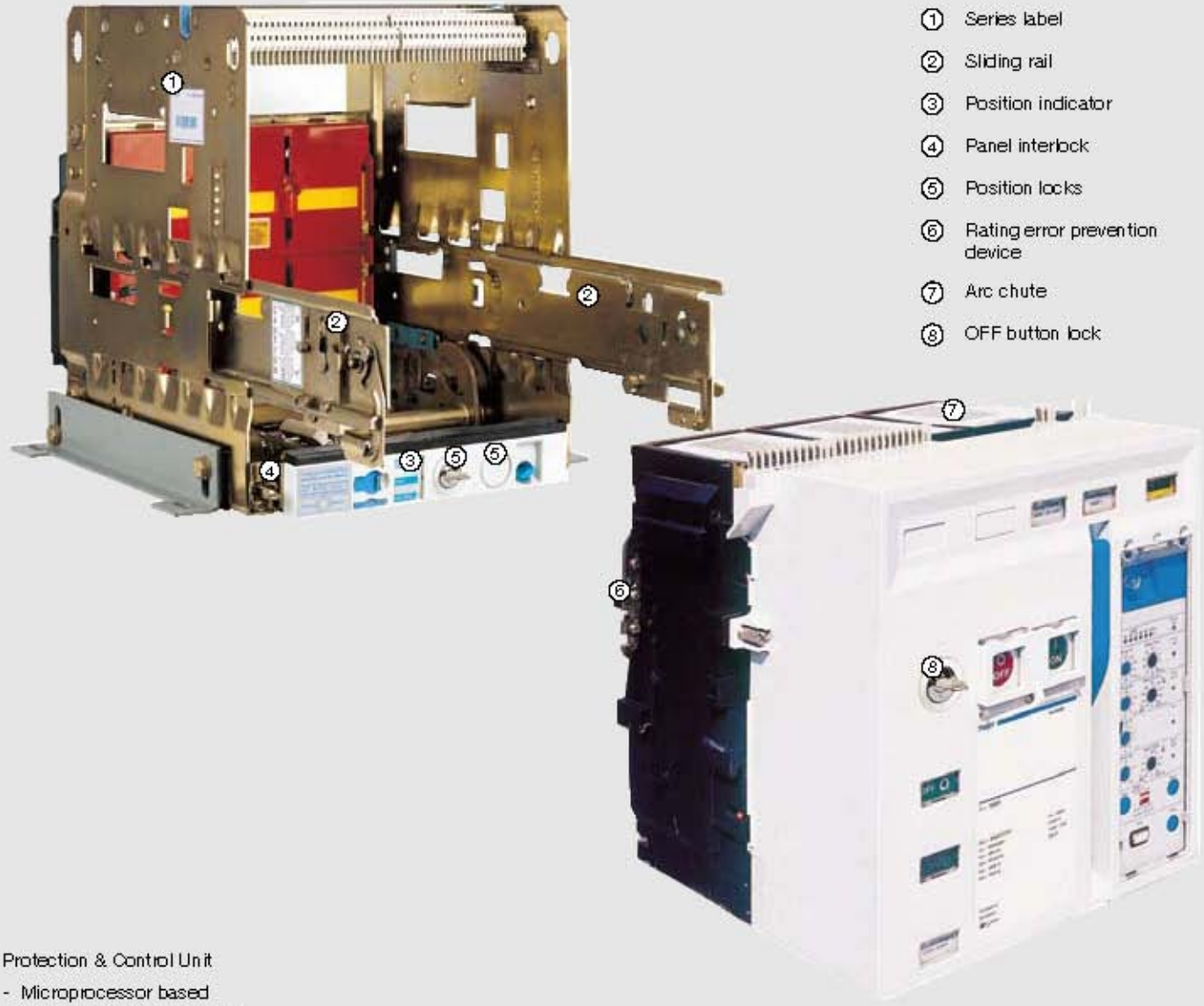
① Additional position indicator
② SICs (Secondary Isolation Contacts)
③ Shroud for ON-OFF button
④ Racking shutter
⑤ Arc shield cover
⑥ Lifting hole
⑦ Nameplate
⑧ Racking handle

⑨ Closing release
⑩ Shunt release
⑪ Auxiliary contacts
⑫ Operation counter
⑬ Spring charging handle
⑭ ON-OFF Indication
⑮ Indication of spring charging status
⑯ Protection & Control Unit
⑰ Electrical charging device



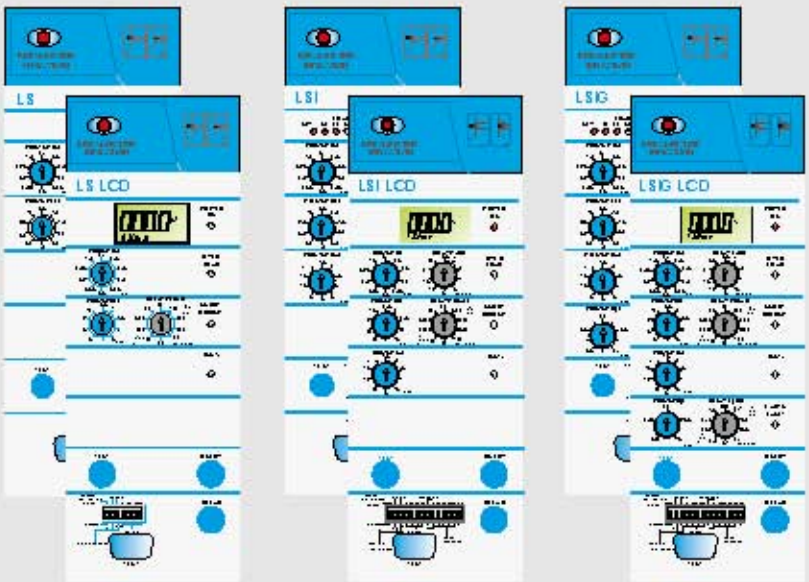
Features of Air Circuit Breaker

Innovative performance
- State of the art technology and breaking techniques enhances the operational safety.
- The control and protection unit indicates the tripping fault.
- Ease of setting.
- Self diagnostic function of control and protection unit.



1. Series label
2. Sliding rail
3. Position indicator
4. Panel interlock
5. Position locks
6. Rating error prevention device
7. Arc chute
8. OFF button lock

Protection & Control Unit
- Microprocessor based technology, with complete tripping functions.
- Equipped with self-check test kit for diagnosis.
- True RMS measurements.
- Indication of load current percentage.
- Automatic / manual resetting option.
- Settings protected with sealable front cover.
- Instantaneous protection.
- Protection of neutral against overload.
- Faster response for recurrent faults in overload zone, ie thermal reflectivity.



Features of Air Circuit Breaker

Modular Design

- Easy replacement of main contacts, jaw contact and bus bar terminal adapters reduce maintenance and replacement time.
- The innovative jaw contact installed at the back of the frame can be maintained without any tools.
- All the frames have the same front face (operating area) with door sealing to simplify design cutting of distribution cabinet's door. User can install door sealing without any adhesives and tools.
- Accessories such as shunt, under voltage & closing releases are plug in type design. It helps users to install and replace easily.
- The bus bar terminals of the ACB can be fixed directly when the bus bar terminal adapters are used. The connections can be changed from horizontal to vertical.

Electric charging device

Closing release

Shunt release

Undervoltage release

- Bus bar terminations have a large surface area, facilitating termination of copper as well as aluminium bus bar.
- Drawout type ACBs are supplied with universal bus bar terminals and adapters, thereby providing the flexibility of termination of multiple bus bar configuration (front connection, horizontal, or vertical)
- For all frame sizes the connection can be changed from horizontal to vertical by rotating the bus bar adapter by 90°.
- Fixed type ACBs are supplied with horizontal type of busbar adapters.

It has provision to connect aluminum terminals

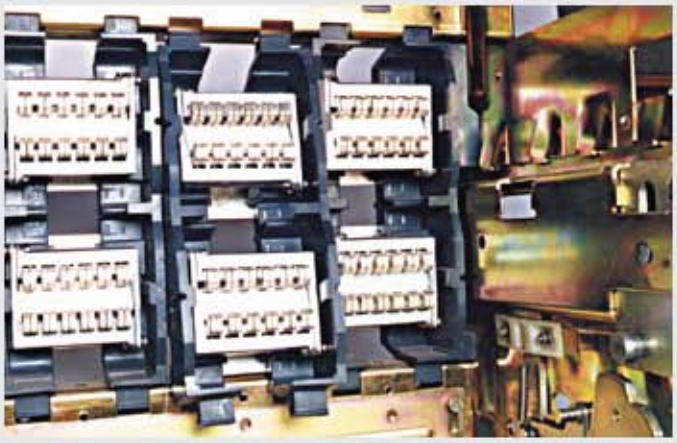
Features of Air Circuit Breaker

Safety of operation and maintenance

- Safety measures are incorporated to ensure operator and maintenance personnel safety.
- Safety shutters can be padlocked.
- Removal and fixing of arc chutes does not require any tools. This feature is useful in fixed type ACBs, to check the contacts when the clearance above the ACB is very limited.
- Cabinet door can be interlocked with racking shutter, which means that the breaker cannot be racked in or out when the cabinet door is opened.

If the ACB has to be racked out with the panel door open, the OFF button and the panel interlock has to be pressed to open the racking shutter.

When the racking handle is withdrawn from ACB, the racking shutter closes automatically.



Jaw coupling as well as cradle terminals can be replaced from the front side of cradle, without dismantling main cables and bus bar links.

After inspection or maintenance, if arc chute is not properly placed, the breaker can not be switched ON.

Plug in type arc chute can be removed without any tool.

Mismatching protection ensures the match of the breaker and frame.

When the breaker is at isolated or test position, it prevents access to live parts of jaw contacts.

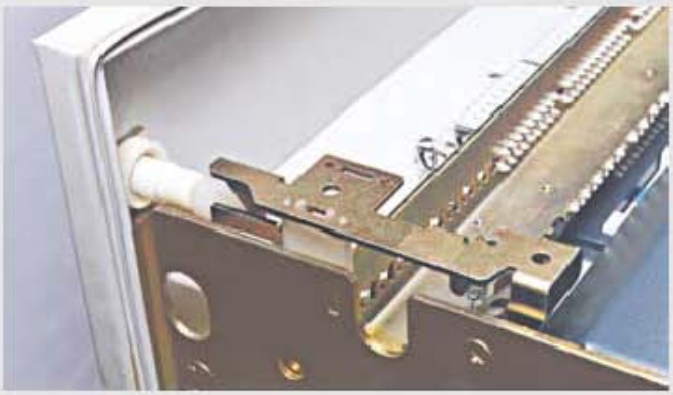
Features of Air Circuit Breaker

Safety of operation and maintenance

- All position lock ensures the frame can be locked in isolated, test or service position.
- The racking shutter can be locked with 3 pad locks(6mm), to prevent input operation handle at service position(ON).
- Up to three ACBs can be mechanically inter-locked.
- The ingress protection degree of ACB fascia is IP53.
- Door interlock prevents opening of panel door in service or test position.
- Padlocking at isolated position ensures safety of down stream maintenance operators as it prevents switching on of the ACB.
- Fully sealed main contacts help confine the arc within the chamber itself.

ON/OFF buttons can be sealed/padlocked.

Racking shutter can be locked with 3 pad locks(6mm)



Door interlock can be installed at the left or right side of the frame.

Panel door ingress seal can be fitted around the rectangular panel door cutout in minutes. After closing the cabinet, it helps prevent ingress of dust & moisture. There are two types of ingress seal:
I. For drawout type of breakers.
II. For fixed type of breakers.

Two position locks can be installed on the rack (any position or isolated position).

OFF Button can be locked using a lock