

## Merlin Gerin circuit breaker Cradle for SF1

Up to 24 kV, 1250 A, 25 kA

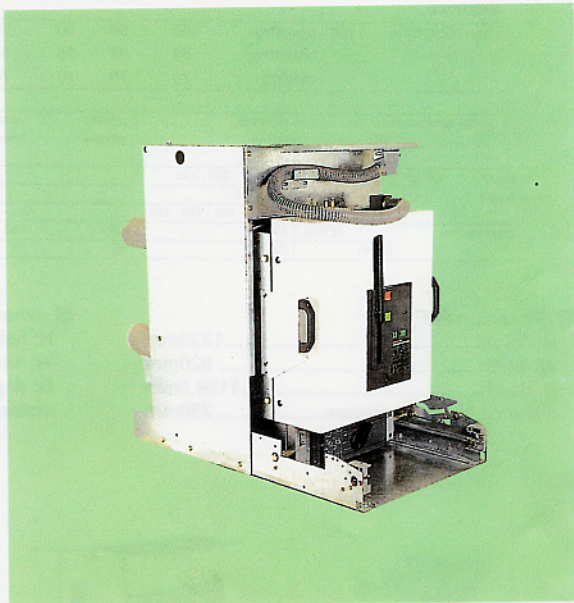
## Cradle for LF1

Up to 12 kV, 1250 A, 31.5 kA

Ready to install withdrawable circuit breaker in all type of cubicle for a complete safe to operate.

withdrawable SF1/LF1 circuit breaker

- SF6 breaking technique
  - 3 separated poles (SF1 only)
  - electrical RI operation mechanism including:
    - electrical "closing" and "opening" system;
    - electrical spring charging device;
    - operations counter.
  - slide-out truck fitted with:
    - a earthing clip;
    - a mechanical system securing the unit being withdrawn only possible in "open" state;
    - a mechanical system securing the unit operations (closing/opening) only possible in "service" or "test" position.
  - fixed portion fitted with:
    - bushings: electrical insulating and built-in contacts;
    - metal safety shutters: automatically blank off the fixed contacts and manually be pad-lockable in "test" position;
    - a guide rail at the bottom;
    - a earthing pad: to maintain the continuity to earth while the unit being inserted.
- The LV plug of unit, which used to connect auxiliary circuits, cannot be accessed in "service" position but in "test" position. (SF1 only)



## A complete safe to operate

- bushings with metallic shutters
- operating and test position
- interlocking and padlocking
- conformity standard:
  - IEC 60694:
    - common specifications for high voltage switchgear
  - IEC 60056:
    - high voltage alternating current circuit breakers

Merlin Gerin

Modicon

Square D

Telemecanique

# Technical characteristics

|  |                  | SF1  |    |      |    |    | LF1 |      |    |      |  |
|--|------------------|------|----|------|----|----|-----|------|----|------|--|
| Rated voltage                            | kV               | 24   |    |      |    |    | 12  |      |    |      |  |
| Insulation level                         | kV rms.1mn       | 50   |    |      |    |    | 28  |      |    |      |  |
|  | kV impulse       | 125  |    |      |    |    | 75  |      |    |      |  |
| Rated current                            | 630 A            | ■    | ■  |      |    |    | ■   | ■    |    |      |  |
|  | 1250A            |      |    | ■    | ■  | ■  |     |      | ■  | ■    |  |
| Breaking capacity                        | kA rms           | 12,5 | 16 | 12,5 | 16 | 25 | 25  | 31.5 | 25 | 31.5 |  |
| Making capacity                          | kA peak          | 31,5 | 40 | 31,5 | 40 | 63 | 63  | 79   | 63 | 79   |  |
| Permissible short time withstand current | kA rms.3s        | 12,5 | 16 | 12,5 | 16 | 25 | 25  | 31.5 | 25 | 31.5 |  |
| Rated switching sequence                 | O-0,3s-CO-15s-CO | ■    | ■  | ■    | ■  | ■  | ■   | ■    | ■  | ■    |  |
| Operating time                           | ms opening       | 50   | 50 | 50   | 50 | 50 | 48  | 48   | 48 | 48   |  |
|  | breaking         | 65   | 65 | 65   | 65 | 65 | 70  | 70   | 70 | 70   |  |
|  | closing          | 70   | 70 | 70   | 70 | 70 | 65  | 65   | 65 | 65   |  |

| RI operating mechanism |               | electrical spring charging | closing release      | opening release | electrical spring charging | closing release | opening release |
|------------------------|---------------|----------------------------|----------------------|-----------------|----------------------------|-----------------|-----------------|
| power supply           | voltage AC(V) | 50 Hz                      | 48 - 110 - 220 - 230 |                 | 48 - 110 - 220             |                 |                 |
|                        |               | 60 Hz                      | 120 - 240            |                 | 120 - 240                  |                 |                 |
|                        | DC(V)         | 24 - 48 - 110 - 125 - 220  |                      |                 | 24 - 48 - 110 - 125 - 220  |                 |                 |
| consumption            | AC(WA)        | 390                        | 180                  | 180             | 380                        | 160             | 160             |
|                        | DC(W)         | 390                        | 65                   | 65              | 380                        | 50              | 50              |

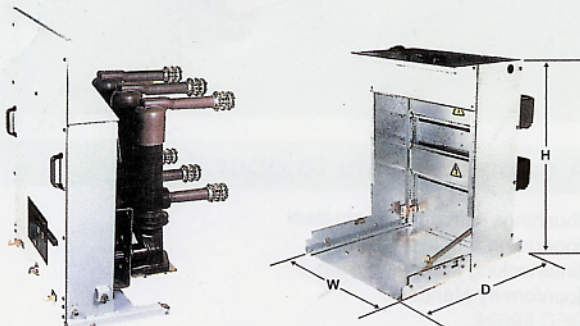
## ■ dimensions:SF1

H: height..... 1223mm  
 W: width..... 920mm  
 D: depth..... 1189,5mm  
 distance between phases..... 250mm

## ■ dimensions:LF1

H: height..... 960mm  
 W: width..... 590mm  
 D: depth..... 1254.1mm  
 distance between phases..... 145mm

## ■ SF1



## ■ LF1

