# Hiah|Rower/SWitchesitches 

## 1000 V DC - 800 to 6300 A

- Cost saving against DC circuit breakers
- True opening and visible distance
- High loadbreak and loadmake performances
- Closing under large short circuit current



## Main characteristics

| $\begin{gathered} \text { Type: } \\ \text { IF } 1000 \text { V / ... A } \end{gathered}$ | Rated thermal current (ITH) (A) | Short time withstand current over 1 min (A) | Peak short-circuit current (kA) | Rate circuit making capacity (kA) |
| :---: | :---: | :---: | :---: | :---: |
| 800 | 800 | 2700 | 50 | 50 |
| 1600 | 1600 | 4800 | 75 * | 66 * |
| 2000 | 2000 | 6000 | 75 * | 66 * |
| 2500 | 2500 | 7500 | 75 * | 66 * |
| 3150 | 3150 | 9500 | 75 * | 66 * |
| 3800 | 3800 | 11500 | 75 * | 66 * |
| 4400 | 4400 | 13200 | 75 * | 66 * |
| 5000 | 5000 | 15000 | 75 * | 66 * |
| 5700 | 5700 | 17100 | 75 * | 66 * |
| 6300 | 6300 | 19000 | 75 * | 66 * |

* (minimum values as switch has not been tested further)

IF 1000V/800A to 6300A :

| Rated insulation <br> voltage | Rated breaking <br> capacity | Electrical <br> endurance $/ \mathbf{R}$ (ms) | Mechanical <br> endurance (cycles) |
| :---: | :---: | :---: | :---: |
| 1000 V DC * | $5 \mathrm{~ms} * *$ | $20 * * * \quad 100 * * *$ | 10000 |

* (1500 V DC under request)
** (1000 V-10000 A - L/R) : minimum value as switch has not been tested further
*** (100 cycles at $1000 \mathrm{~V}-5000 \mathrm{~A}-$ L/R)
**** 1600 cycles at $500 \mathrm{~V}-4000 \mathrm{~A}-$ LR $)$
Typical voltage drop at nominal current : 36 mV


## Technological features

- Separation between main contacts and arcing contacts
- Main contacts of silver-plated copper with two contact points per knife, and special shape for high withstand to short-circuit currents.
- Spring system made of stainless steel.
- Insulating parts made of self-extinguishing fiber glass polyester. Fire classification : UL 94 VO
- Conformity to norms NFC 20040 catg C

** Enlargement Dimensions
C, J, H for Motor drive

| Type: IF 1000 V <br> $=/ \ldots$ A | Number of <br> thermal poles | Number of <br> breaking poles | Dim. A | Weight without <br> motorization (kg) |
| :---: | :---: | :---: | :---: | :---: |
| 800 | 1 | 2 | 458.8 | 30 |
| $2 \times 800$ | $2 \times 1$ | 2 | 548.5 | 32 |
| 1600 | 2 | 2 | 517 | 32 |
| $2 \times 1600$ | $2 \times 2$ | 2 | 665.5 | 35 |
| 2000 | 3 | 2 | 575.5 | 34 |
| $2 \times 2000$ | $2 \times 3$ | 2 | 782.5 | 38 |
| 2500 | 4 | 2 | 634 | 35 |
| $2 \times 2500$ | $2 \times 4$ | 2 | 899.5 | 41 |
| 3150 | 5 | 2 | 692.5 | 37 |
| $2 \times 3150$ | $2 \times 5$ | 2 | 1016.5 | 43 |
| 3800 | 6 | 2 | 751 | 38 |
| 4400 | 7 | 2 | 809.5 | 40 |
| 5000 | 8 | 2 | 909.5 | 41 |
| 5700 | 9 | 2 | 968 | 42 |
| 6300 | 10 | 2 | 1026.5 | 43 |

Approximate weight of motorisation : 30 kg
For voltage above 500V use 2 switching poles in series (2-switching-pole loadbreak switch on request)

## References in the world

Subway : Athena, Barcelone, Bilbao, Cairo, Caracas, Docklande, Lille, Lisbone, Madrid, Marseille, Mexico, Midland metro, New-york, Paris, Santiago, Teheran.
Light Rail : Grenoble, Nantes, Melbourne, Rouen, Strasbourg.
Railways : Frenche railways, British-rail.

## Your choice of design

Capability of mounting in enclosure


With its engineering capability in Mannheim (Germany), in Provins (France), and its testing platforms in Saint-Bonnet-de-Mure (France), FERRAZ has it all for defining and offering customized solutions to meet your most specific requirements:

- Adapted drives or control units
- Enclosures for switch protection
- Adapted technical performances (short-circuit current capability, endurance...)

