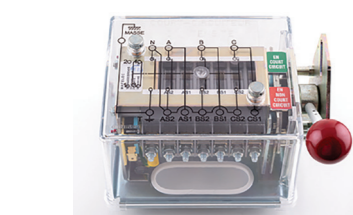


## SAFETY PROTECTION



### MODULAR MINIATURE CIRCUIT BREAKERS

Either thermal magnetic detection, magnetic only or thermal only. Development of non standard rated current. Specific triggers.



### CURRENT SHORT CIRCUITER

This short-circuit ensures the safety of workers on transformer secondaries by connecting them to earth.



### LOCKING SYSTEMS

Example of electro magnetic locking switches (switches used for control of spent nuclear fuel rods)



### INSULATORS

High electrical and mechanical performances due to compression-moulded polyester compound. Temperature range from -40° to +130°C



## MAFELEC TEAM

CREATING SMART AND SUSTAINABLE INTERFACES

### Your Trusted Partner in Nuclear Project Solutions

At MAFELEC TEAM we pride ourselves on our commitment to delivering robust and industrial solutions tailored to meet the unique challenges of nuclear projects, be it in new builds, operation, or refurbishment. As we gear up for an exciting exhibition alongside our esteemed existing customers, we want to share with you what sets us apart.

### A Legacy of Excellence

With a rich history in the nuclear industry with our brands PETERCEM, STOPCIRCUIT and MAFELEC, our record of accomplishment speaks for itself. We have navigated the complexities of this market segment with finesse, ensuring that our solutions stand the test of time without major failures.

### Dedicated Engineering Teams and State-of-the-Art Laboratory

Behind every successful project is a team of experts. At MAFELEC TEAM we organize our group capabilities with dedicated engineering teams and a cutting-edge laboratory equipped with specialized test equipment. Quality is at the forefront of everything we do.

### Endurance Tests and Quality Assurance

Quality assurance is paramount in our production processes. Our products undergo rigorous endurance tests in our state-of-the-art laboratory, covering functional, electromagnetic, and resistance aspects. We leave no stone unturned, conducting tests such as climate and salt spray tests and water tightness assessments. We are committed in the direction of the ISO 19443, our team is working on that subject.

### Obsolescence Management and Proactive Solutions

Ensuring the longevity of our products is not just a goal, it is a commitment. We work proactively with our operators in preventive maintenance approaches and obsolescence management, guaranteeing the continuity of energy production.



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### MEMBERS OF THE MAFELEC TEAM



# NUCLEAR ENERGY QUALIFIED SOLUTIONS

## APPLICATIONS AREAS

### STOPCIRCUIT

- Electrical protection (circuit breakers)
- Control cabinets
- Electrical cabinets, low and medium voltage
- Control and signalling for control rooms
- Synoptic Panels

### PETERCEM SWITCHES

- Safety and control valves
- Valve actuators
- HVAC
- Pressostats, manostats
- Level indicators
- Current and voltage sensors
- Excitation system
- Control rods
- Refueling and transfer machines
- Valve signalling (opening-closing)

### MAFELEC

- Electrical cabinets, low and medium voltage
- Control and signalling for control rooms
- Synoptic Panels
- Access control
- Remote control box
- Power switches

# COMMANDE / CONTROL / SIGNALLING



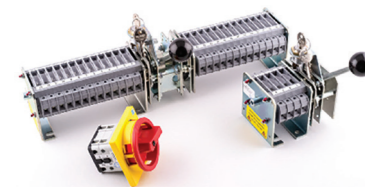
## CAM SWITCHES

18 Amps up to 8 positions  
45°



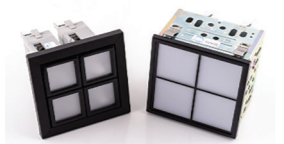
## MODULAR SWITCHES

Motorised  
10 to 2000 Amps AC/DC  
Direct or remote control



## SWITCH-DISCONNECTOR ON LOAD

2 positions snap action  
Switch with visible blade  
circuit breaking  
Up to 50 contacts



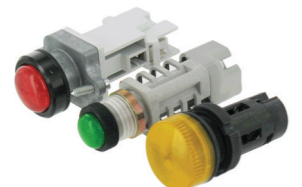
## SIGNALLING PANELS

Messages indicators  
Default indicators



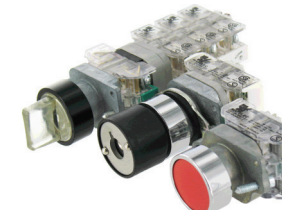
## C (10 Amps) & E (4 Amps) RANGES

Back-lit versions  
Many possible functions  
Customized solutions  
Turn push switches



## INDICATORS

Ø, 16, 22, 30  
LED or bulb technology  
Customized solutions



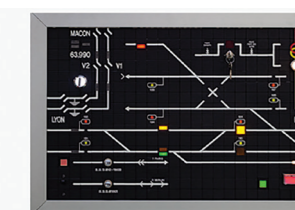
## AUXILIARY CONTROLS

Back-lit versions  
Ø 22 & Ø 30  
Raised, flush



## INDICATORS & PUSH BUTTONS

Back-lit information  
Square, rectangular



## SYNOPTICS - MIMIC PANELS

Modular bloc system for synoptic panels  
Complete synoptic customized (included switches, light indicators)



## ADAPTATIONS PRODUCTS

Basic Component



Adaptations



Bespoke customer control command panels



# PETERCEM SWITCHES



## LIMIT SWITCHES / POSITION SENSORS



## MICROSWITCHES

Most of our developments integrate hermetically sealed microswitches. This technology enables the protection of the sensitive part of the switching mechanism from the outside surrounding stress: pollution, corrosion, humidity.



## LIMIT SWITCHES

Hermetically sealed  
Multiple connection mode: cable and connector

Compact design  
2 control modes  
Connection by qualified connector  
AP1000 Qualification pending

We are putting forward a complete range of products K1, K2, K3, K3AD and ATEX qualified according to RCC-E.  
We also offer a I.E.E.E range for your projects involving the standard.

This nuclear range underwent the complete test file

- Ageing tests (radiation, temperature, humidity...)
- Vibration, seismic
- L.O.C.A (Loss of coolant accident) accident withstanding (radiation, thermodynamic conditions, chemical spray, post-accident conditions)
- Mechanical durability

## PRODUCTS ADAPTATION

By putting together perfectly mastered technological elements, our Research and Development department studies and develops solutions which are the most suitable to your needs. Petercem is integrated to the most advanced reactors EPR FA3 / EPR HPC / RJH / ITER.

Material involved :

- hermetically sealed microswitches: models R, G and T
- Sealed limit switches: models F2 and F3
- Immersible limit switches: models F2, F3 and G
- ATEX limit switches: model FX

Over 50 years experience in Nuclear field and a solid database allow us to always create and qualify the best solutions adapted to your environment.



Basic Component



Adaptations



Customized solutions