### CHAUVIN ARNOUX ENERGY

# Generation & transmission Automation relays

# Monostable and bistable relays

- Fast-response relays
- Time-delay and supervision relays

A comprehensive offering for the energy market

**Designed and manufactured in France** 

Chauvin Arnoux Energy proposes an offering suitable for the most demanding environments

### **Nuclear power**

Drawing on our expertise acknowledged by the decision-makers in the energy sector, we continue to constantly innovate in the field of automation relays, adapting to the most demanding technical and standardization constraints.

✓ Qualified by electricity generators

## Hydroelectric dam

In nuclear, thermal and hydroelectric power plants, we have been handling the specific, demanding requirements of power generation companies for decades.

### **Power grids**

We propose rugged, long-term solutions for power transmission and distribution networks which are continuously operated, maintained and developed.

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## Our relays range: suitable for all your markets

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### Monostable relays

- = 2 4 6 8 12 20 change-over contacts
- Compact
- Contact position indicator
- K3-qualified relays for the nuclear range

### Fast-acting monostable relays

- 4 8 12 change-over contacts
- Operating time < 8 ms</li>
- High Burden option
- Lever for manual operation

### **Bistable relays**

- 3 4 8 12 20 change-over contacts
- Magnetic holding action
- Contact position indicator
- Permanent or pulse control
- Lever for manual operation

### Fast-acting bistable relays

- 4 8 12 change-over contacts
- Operating time < 10ms</li>
- High Burden option
- Lever for manual operation

### Time-delay relays and supervision relays

- 4 time-delay change-over contacts or (2 time-delay + 2 instantaneous) change-over contacts
- Time delay on pick-up or drop-out
- Adjustable time delay (from a few ms to more than 16 hours)
- No programmable digital components (valid for our nuclear power offering)

## Our sockets offering: optimize your connections

Wide range of sockets with front and rear mounting.











Faston











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## **Relays offering for power grids**

Discover our new range of fast-acting monostable and bistable relays (4, 8 or 12 contacts). Also called "Tripping relays" or "Lockout relays", these meet the strictest requirements for power grids and have already been qualified by grid managers, guaranteeing reliability and high performance.

## **Overview of ranges**





RMMV / RMBV Range ↓ ↓ Tripping Lockout



## **Strengths**

Manual lever For SET and RESET operations on bistable / lockout relays

#### **High insulation**

5 kV insulation level (1.2/50 µs – 0.5 J)



**High Burden** option provides immunity against capacitive discharges

#### **Relays equipped as**

**standard** with a magnet for magnetic blowout, allowing the breaking capacity of the contacts to be increased



Knurled contacts Can also be used to control light loads Our contacts are sized to break heavy loads

#### Switching time on pick-up

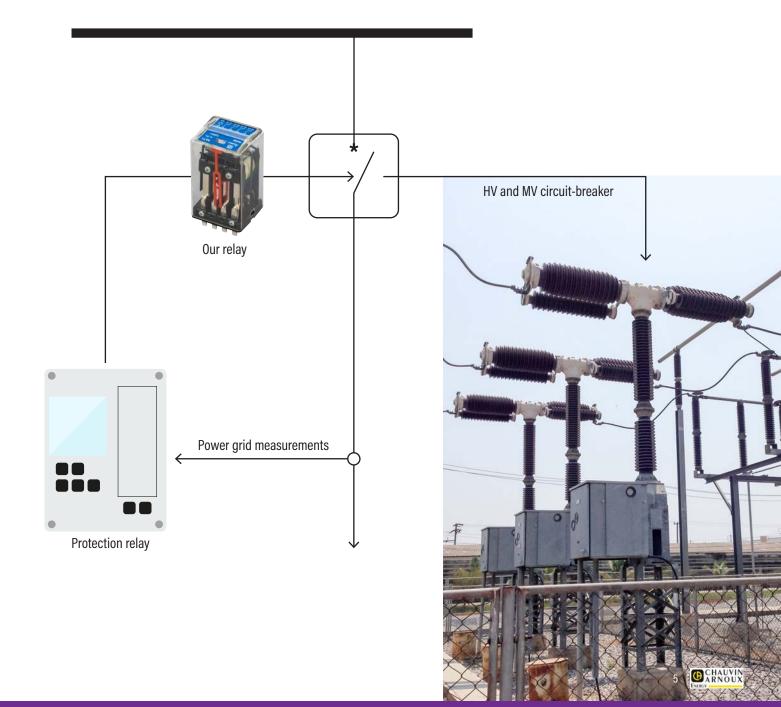
*Monostable / tripping : ≤ 8ms Bistable / lockout : ≤ 10ms* 

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## Our fast-acting relays at the heart of a protective chain

Our products are used as interfaces between the protection relays and the HV and MV circuit-breakers. In this protective chain, information must be passed on quickly, which is why a fast-acting relay is used.



## **Relays offering for hydroelectric power**

Our hydroelectric offering comprises monostable relays with 2-4 and 8 contacts, bistable relays with 4 and 8 contacts and time-delay relays with 4 contacts for breaking **both light and very heavy loads**.

### **Overview of ranges**





**RDT** Range ↓ Time-delay



 $\begin{array}{c} \textbf{RMB} \\ \textbf{Range} \\ \downarrow \\ \textbf{Bistable} \end{array}$ 



## Focus on our high-EMC interface relays



Our 2 and 4-contact instantaneous relays (used as interfaces) have particularly high protection in terms of their EMC\* response, so that your installations do not suffer from untimely tripping in the event of lightning strikes, thus avoiding considerable restart costs for restarting.

\* ElectroMagnetic Compatibility



This offer is also available with an option for gold-plated contacts

## Compatible with our sockets with spring clamps





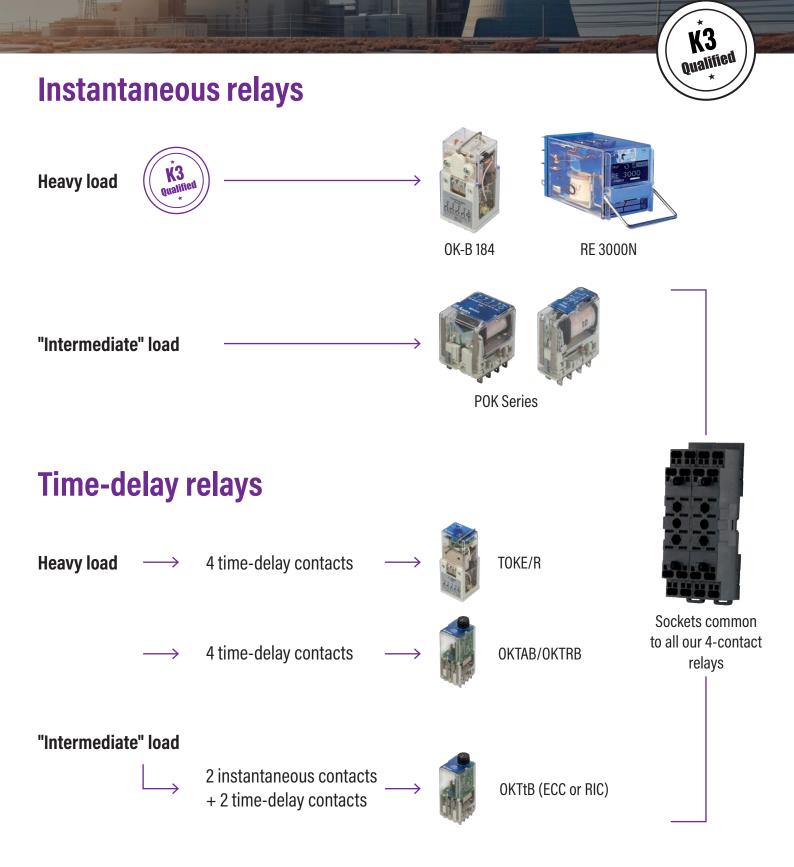
PAIR080

- Double output connectors
- Quick installation: 30% time saving on wiring work
- Connection on DIN Rail or panel



## **Relays offering for nuclear power**

Our relays offering has been approved and qualified by the major players in the nuclear sector involved in EPR reactors. With proven availability for more than 50 years, our reliable relay guarantees an exceptionally long life span.



## How to contact us

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### **Check out our catalogs**



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<u> 906 211 740 - Ed. 1 - 01/2025 - LB - Non-contractual document. Please</u>

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