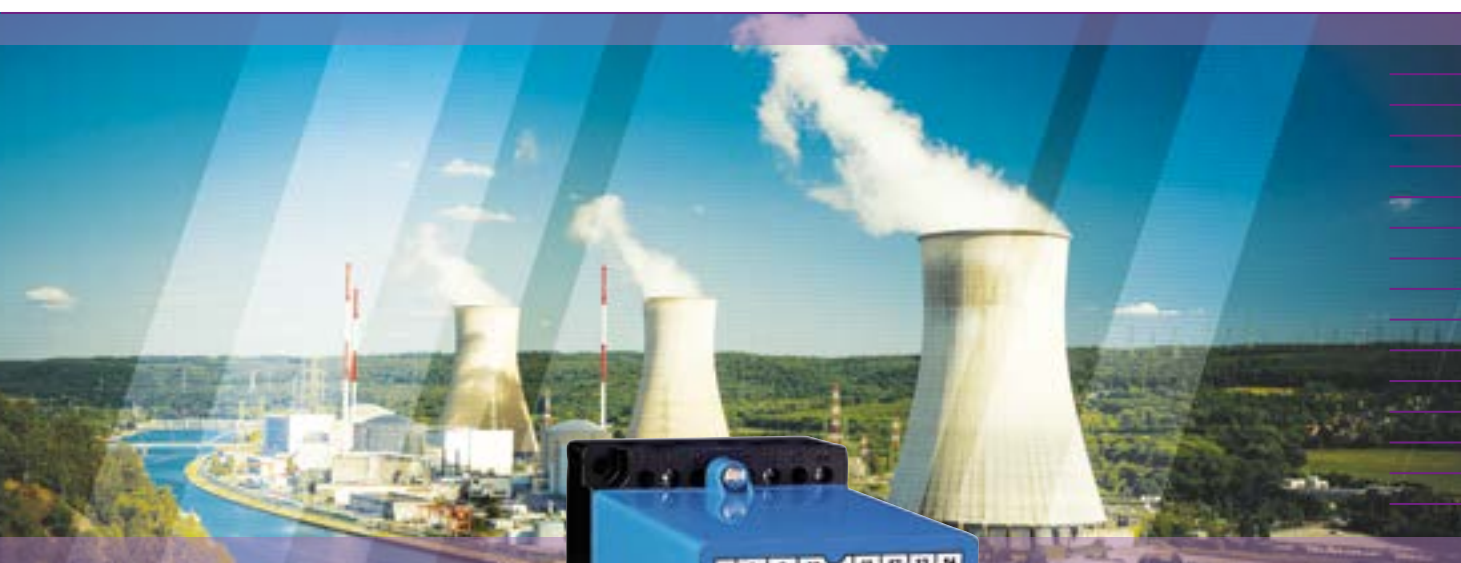


## PRODUCTS FOR NUCLEAR ENVIRONMENTS



Totally analog

Guaranteed for extreme conditions

K3-qualified

Made in France

*Measure up*





## A French brand

Chauvin Arnoux Energy, a French company in the Chauvin Arnoux Group, meets the specific needs of the nuclear sector by providing its expertise built up over the last thirty years. Our teams handle every aspect of our product manufacturing, from design through to final inspection of the equipment. Experienced and qualified, they guarantee quality, reliability and long-term support.

## A long-term offering

Total mastery of our industrial know-how in our factories in France and our ability to match the market trends in terms of the components and materials used in our instruments enable us to guarantee constant product quality and availability over the long term.



## An acknowledged quality approach



The major players on the nuclear market (EDF, Tractebel, Alstom, etc.) have all demonstrated their trust in ENERDIS due to its rigorous commitment to:

- qualification and training of its teams
- control of its manufacturing processes
- structured documentation

## International presence

As a member of the Chauvin Arnoux Group, Chauvin Arnoux Energy benefits from a worldwide presence through its network of ten subsidiaries and expert partners in the major countries. Sales and technical teams in China ensure highly responsive coverage across the Asian continent. The Chauvin Arnoux Group has been present in China's nuclear plants for many years and is continuing with its partnerships to meet the requirements of the vast Chinese nuclear energy development program.



## AUXILIARY RELAYS



- 4 x 10
- Non-c test fu
- Freew an opt

## NORMEUROPE ANALOG PANEL METER

- ✓ CUSTOMIZABLE PANEL METERS (ALS, SCALE, DEFLECTION, ETC.)
- ✓ REINFORCED PROTECTION: IP55

## ANALOG TRANSDUCERS T82N



- ✓ TOTALLY CONFIGURABLE ON REQUEST
- ✓ EXTENDED TEMPERATURE WITHSTAND

HIGH BREAK CAPACITY

VERY LONG MECHANICAL AND ELECTRICAL LIFE SPAN

INSTANTANEOUS

4 x 10 A changeover switches  
current-carrying contact  
function  
wheel diode available as  
option



OK B184

- 4 x 10 A changeover contacts
- Built-in magnetic blowout
- Break capacity adapted to inductive loads



TIME-DELAY

TOK

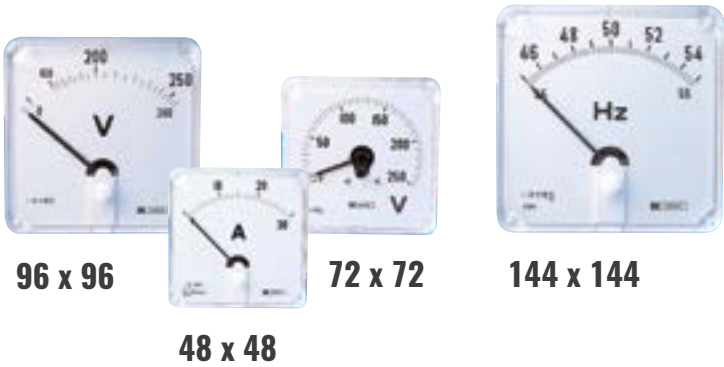
- 4 x 10 A changeover switches
- Electronics without programmable digital components
- Adjustable time-delay of 1, 2, 4, 8, 16, 32 or 64 second(s) or minute(s)



S

(DI-

5 - IK08



96 x 96

48 x 48

72 x 72

144 x 144

- Accuracy class 1.5
- Small-diameter housing for multiple connection possibilities

Available functions

AAC	VAC	F	AAC max	P	Q	S	Adc	Vdc	%
-----	-----	---	------------	---	---	---	-----	-----	---

UAR 1210B  
RMS AC voltage

IAR 1210B  
RMS AC current

PAR 1232B  
Active power

QAR 1232B  
Reactive power



- Linear transfer curve
- Accuracy class 0.5
- Direct input or via CT
- 2 mounting modes: fixed or plug-in
- IP 20, tropicalization available as an option

# T82N SPECIFICATIONS

Model	UAR 1210 B	IAR1210 B
<b>Measurement input</b>		
Un Voltage	100/√3 to 380 VAC	•
In Current	•	0.5 – 0.6 – 1 – 1.2 – 1.3 – 1.5 – 2.5 – 5 – 6 – 6.5 – 7 – 7.5 – 10
<b>Analog output</b>		
Current	0...Ymax	0/1 mA - 0/2.5 mA - 0/5 mA - 0/10 mA - 0/20 mA
	Ymin...Ymax	1/5 mA - 2/10 mA - 4/20 mA
Voltage	0...Ymax	0/1 V - 0/5 V - 0/10 V
	Ymin...Ymax	1/5 V - 2/10 V
<b>Auxiliary power supply</b>		
AC	100/√3 to 440 VAC	
DC	24, 48, 110, 125 VDC	

Model	QAR 1232 B	PAR1232 B
Network / Connection		
TE 3 wires		•
TNE 3/4 wires	•	•
Measurement input		
Un Voltage Ph - N	57.73 – 63.51 – 66.40 – 230 V	
Un Voltage Ph - Ph	100 – 110 – 115 – 120 – 127 – 230 – 240 – 380 – 400 V	
Analog output		
Current	0...Ymax	0/1 mA - 0/2.5 mA - 0/5 mA - 0/10 mA - 0/20 mA
	Ymin...Ymax	1/5 mA - 2/10 mA - 4/20 mA
Voltage	0...Ymax	0/1 V - 0/5 V - 0/10 V
	Ymin...Ymax	1/5 V - 2/10 V
Auxiliary power supply		
AC	100/√3 to 440 VAC	
DC	24, 48, 110, 125 VDC	

*To order your  
standard relays*

Reference	Model
RE3A4121	RE3000N 48 VDC
RE3A4125	RE3000N 125 VDC
RE3A4122	RE3000N 48 VDC with freewheel diode
P01456016	OK B184 48 VDC
P01456017	OK B184 125 VDC

**FOCUS**



**CHAUVIN  
ARNOUX**  
PYROCONTROLE



Drawing on its expertise built up over more than seventy years, **CA PYROCONTROLE** mainly designs tailored temperature sensors for cutting-edge industries such as the nuclear sector. At each strategic point in an installation, from the reactor building to the control room, including the auxiliary buildings, the sensors designed by CA **PYROCONTROLE** are qualified as K1, K2, K3 or NC to withstand the most extreme conditions in terms of irradiation, earthquake, high temperatures and high pressures.

- Fast-response sensors
- Surface sensors
- Motor or pump bearing sensors
- Pool sensors, etc.

**CA PYROCONTROLE**

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