

Chloride® XP Range

DC & AC UPS rated for Hazardous Locations zone 1 & 2 using EX d protection and natural cooling



Benefits

Small footprint:

- High power DC UPS system available in small size to optimize space on offshore platform

Optimized thermal management:

- Uses our latest patented Ex d enclosure cooling system

Strong immunity to perturbations:

- Integrates an isolating input transformer

Safe control, door closed:

- Allows the user to operate the switches, circuit breakers, and control buttons door closed

Smart access to UPS data:

- Large graphical user interface on the front
- Software update possible by "Wifi or cable" and configuration of parameters through PC with PPVIS software
- Embedded event logger (up to 2000 events)
- Close range Wi-Fi module - to download the event logger without opening the equipment enclosure

Safe and easy maintenance:

- Once open, the front door gives direct access to all components

Chloride® XP90R Ex d industrial rectifier / battery charger explosion proof Zone 1 & 2 developed specifically for offshore environment & tough operating conditions.

Range Overview

Combined with an industrial stand-by battery, Chloride® XP90R Ex d Rectifier - Charger protects DC critical industrial equipment and processes from the damaging effects of power interruptions and losses. It features a microprocessor control which offers exceptional output stability and allows adaptability to various application requirements.

Chloride® XP90R Ex d Rectifier - Charger is available from 35 A to 1 000 A with 3-phase input. It offers several output voltages from 24 Vdc to 220 Vdc.

To further improve load availability and process reliability, Chloride® XP90R Ex d Rectifier - Charger is able to operate in dual or trial parallel configuration, with single or dual batteries, and can include a DC bus-tie.

Applications

- Fixed platforms (Jacket platform, gravity platform, compliant tower, artificial islands)
- Floating platforms (FSO, FPU, FPSO, FDPSO, TLP)
- Mobile platforms (Jack-up, semi-sub, drilling barge, drill ship)



Example of Chloride® XP90R

Technical Data

Input	
AC voltage	3 x 400 V (380, 415) ⁽¹⁾
Voltage tolerance	+/- 10 %
Frequency	50 Hz (60 Hz)
Frequency tolerance	+/- 5 %

Output	
DC voltage (nominal)	24 / 48 / 110 / 125 / 220 / 400V ⁽²⁾
Voltage stability (Input within tolerance)	+/- 1% in float mode +/- 1.5% for parallel rectifiers
Voltage ripple	0.1 RMS, in float mode, battery connected
Current limitation	I nominal / up to 150% for 1 minute
Charging characteristics	IU according to DIN 41773

















Battery	
Type	Valve Regulated Lead Acid (VRLA) Recombinaison Nickel Cadmium
Autonomy	From few minutes to several hours, as per customer's requirement
Battery current limitation (typical, float, mode)	0.1 (Lead Acid or Nickel Cadmium battery)
Battery temperature compensation	-3 mV / °C / cell

General Data	
Operating temperature	up to 55°C
Relative humidity	100% condensing
Operating altitude	1000m max without derating
Cooling	Natural
Efficiency	Up to 90% according to rating and configuration

(1) other available on request

(2) other available on request

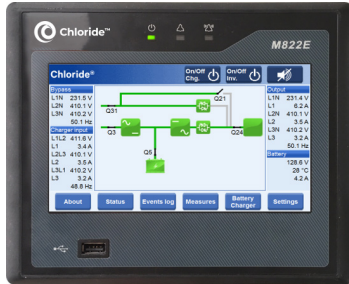
Enclosure	
Design	ATEX/IECex certified for Zone1, II 2G Ex d IIB+H2 T3 (IEC 60079)
Material	Stainless steel (SS316L), Carbon steel (mild steel) or Aluminum
External ingress protection	IP 66 according to IEC 60529
Dimensions	Varying according to ratings & options

Rating Voltage	35A	60A	85A	100A	125A	160A	200A	250A	350A	500A	600A	800A	1000A
24Vdc													
48Vdc													
110Vdc													
220Vdc													



Intuitive human-machine interface (HMI)

The front panel of the system includes a large, colour touchscreen with intuitive graphical interface that simplifies system setup, operation, and troubleshooting.



Chloride CP70Z - human-machine interface (HMI)

System Set-up

- Selection of the language
- Set-up of the date and time
- Adjustment of the brightness
- Configuration of the main screen: the user can choose between displaying the block diagram only or the block diagram with the input and/or output measurements
- Configuration of the Modbus (optional)
- Adjustment of system parameters in a password protected area (e.g. battery voltage level, number of cells)

System Operation

- View of the single line diagram with color-coded blocks and power flow
- Check the position of the system main isolators (open/close status)
- Access to blocks information and measurements via a simple touch
- Change of the battery charging mode (float, boost, initial charge)
- Launch of a battery test

System troubleshooting

- Color-coding of each block for immediate identification of possible alarm
- Memorization of some critical fault messages with a mandatory fault acknowledgement
- Checking of all the triggered status, warning and fault messages with detailed description via a simple touch
- Event logger that records up to 2000 events with date and time stamp
- Export of all the recorded events using USB flash drive. The extracted HTML file allows root cause analysis.



With complete service portfolio and extensive field service network, we ensure system lifelong reliability.

- Project services and commissioning
- Maintenance services and plans
- Performance improvement and upgrades

At Chloride we design, manufacture and service custom-made Uninterruptible Power Systems to protect your mission-critical industrial applications.