

Chloride CP-70R 10 Rectifier-Charger

25 to 250A - 1ph input

Industrial Power for
Business-Critical Continuity™

The Chloride CP-70R industrial rectifier-battery charger is the flagship rectifier of Chloride Industrial Power. It combines conservative design topology with proven digital control technology to offer the best performances in any electrical and environmental condition.

The Chloride CP range is designed to meet the stringent electrical and mechanical requirements in industrial environments. Each Chloride CP product is based on interchangeable sub-assemblies to allow full customization, in compliance with client's technical specification and with project documentation requirements.

Benefits

- **Made to order** DC back-up power solutions to exactly fit the industrial application requirements
- **Complete power protection solution**, including switchgear, DC distribution, monitoring suite
- **Ruggedized solutions** for demanding environments: extended temperatures, vibrations, dust, elevation, dripping water and moisture.

Key Features

- **Reliability** - Unique design which allows the rectifier to continuously operate at full load at a permanent 40°C ambient temperature.
- **High MTBF** - Natural cooling available on most of the range.
- **Reduced MTTR** - Direct access to components from the front of the equipment.
- **Robustness** - Mechanical design to withstand vertical and horizontal acceleration stress up to 0.5g as standard.
- **20 years + life span** - system design to meet industrial requirements, with appropriate maintenance.
- **Isolation transformer**
- Multilingual digital graphic display with embedded event log
- Remote monitoring capabilities: Modbus, Profibus, DF1, Ethernet, volt-free contacts, monitoring software
- Full compatibility with lead-acid and nickel-cadmium batteries, sealed or vented

Applications

The Chloride CP-70R Rectifier-Charger range suits all DC applications requiring a large battery back-up:

- Power Transmission and Distribution
- Continuous process industries
- Oil and Gas and Petrochemical industries
- Transportation (rail, metro, tramway)

The Chloride CP range is designed to meet the harshest electrical and mechanical requirements in industrial environments.

Each Chloride CP product is based on interchangeable sub-assemblies to allow full customization, in compliance with client's technical specification and with project documentation requirements.

Associated with an industrial stand-by battery, the Chloride CP-70R range protects DC critical industrial equipments and processes from the damaging effects of power interruptions and losses.



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Ratings - Output current (A) vs voltage (VDC)		
24 Vdc	48Vdc	110-120Vdc
25	25	25
60	60	60
100	100	100
160	160	160
250	250	250

Options	
Rectifier	Ripple filters Blocking diode Dropping diodes Other input voltage Surge and Lightning protections
Battery	Battery circuit protection box Battery cabinet Low-voltage disconnect contactor Battery middle-point measure Battery Management System Battery room temperature sensor
System	Dual or trial configurations Hot stand-by configuration DC/DC serial regulator Isolated DC/DC converter DC distribution Earth fault monitoring Internal lighting Anti-condensation heater Temperature monitor Special cabinet identification
Mechanical	Up to IP65 external Top cable entry Other frame colour Anti-seismic design
Communication	Front-panel analog meters (72x72 class 1.5) Transducers Volt-free contacts Remote monitoring via Modbus Remote monitoring via other bus PPVis monitoring software Passive or active mimic panel

Non-exhaustive list of options. Consult us for any other requirements.

Technical Data	
Input	
Nominal AC voltage	1 x 230 V (220, 240)*
Input voltage tolerance	+/- 10%
Input frequency	50Hz (60Hz)
Input frequency tolerance	+/- 5%
Intermediate DC Circuit	
Nominal DC voltage	24 / 48 / 110 / 120
Available ratings	see table above
Voltage stability	+/- 1% in float mode, input within tolerance +/-1.5% for parallel rectifiers
Voltage ripple	1% RMS, in float, battery connected
Current limitation	I nominal
Characteristic	UI according to DIN 41773
Battery	
Type	Lead Acid or Nickel Cadmium vented or recombination
Autonomy	From few minutes to several hours, as per customer's requirement
Battery current limitation (typical, float & charge modes)	0.1C (Lead Acid battery) 0.2C (Nickel Cadmium battery)
Battery current limitation (typical, boost mode)	0.05C (Lead acid battery) 0.1C (Nickel Cadmium battery)
General Data	
Operating temperature	0 to 40°C*
Storage temperature (°C)	-20 to +70°C
Relative humidity (%)	<90% non condensing
Operating altitude (m)	1000 m max without derating
Cooling	Natural convection
Efficiency	Up to 89% according to rating
External protection	IP 20* according to IEC 60529
Noise (dB)	55 – 65 dB according to rating
Frame colour	Grey RAL 7032
Dimensions	Varying according to ratings & options

* other available on request

Standards	
Compliance	IEC 60146 – IEC 60439 - IEC 60726 –IEC 61000-6-2 IEC 61000-6-4 – IEC 62040 (-1, -2, -3)
Conformity	Low voltage directive: 2006/95/EC EMC directive: 2004/108/EC CE Mark

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- Connectivity
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- Embedded Power
- Industrial Power
- Infrastructure Management & Monitoring
- Outside Plant

- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services

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CP70R 10 Rectifier-Charger-DSUK-Rev2-02/2013