

Chloride[®] FP Range

Configured to order with industrial options
Pre-defined blocks for shorter lead time



Benefits

Compact DC power pack: capability to integrate the battery inside the charger cabinet to save space.

Adaptability: wide choice of output voltages and industrialized options is available to meet your specific needs.

Easy diagnostic: the control system gives you a quick reLoading of the system status via the LEDs and the integrated display.

Availability: You need to have systems running all the time and be able to verify it. The automatic battery test quickly and safely validates battery availability. No manual test is required.

Key Features

Power factor corrector to limit perturbations on the upstream network.

Low voltage ripple to optimize battery life.

Fuse or circuit breaker on the output and on the battery line.

Up to IP41 ingress protection to meet installation requirements of industrial environments.

Design Flexibility which allows paralleling of the internal rectifier modules to increase the available power or to ensure N+1 redundancy.

The Chloride[®] FP20R is a battery charger for stationary batteries that is delivered in a compact enclosure. It is available in several configurations: as a DC power pack with integrated battery or as a stand-alone charger with external battery, it ensures the continuity of service to critical DC loads. As a stand-alone rectifier, it supplies DC power supply to industrial processes.

Range Overview

Chloride[®] FP20R is supplied with a single-phase input and offers a wide choice of output voltages, from 24 Vdc to 220 Vdc. The range of available ratings is from 6 to 60 A, according to the chosen output voltage.

Chloride[®] FP20R combines high frequency switch-mode technology with microprocessor control to bring a high performance level and exceptional output voltage stability in a very compact design.

To further ensure reliability of the connected load, Chloride[®] FP20R is provided with natural convection cooling, thus eliminating the need to replace worn mechanical parts.

Applications

- Programmable Logic Controllers (PLCs)
- Control and monitoring circuits
- Auxiliary relay circuits (coils)
- Drive circuits



Coffret CK (850x500x420)



Chloride[®] FP20R-CK

Available Ratings

Item Code	Output Voltage	Charger Current	Battery Capacity ⁽¹⁾	Available Power (Mains) ⁽²⁾	Available Power on Battery (W)					Acceptable Peaks (A)	
	VDC	A	Ah	W	30'	1h	2h	4h	8h	10 s	1 s
FP20R 24 30	24	30									
FP20R 24 30 24	24	30	24	662	720	416	252	128	68	60	100
FP20R 24 30 38	24	30	38	629	720	644	360	210	126	60	100
FP20R 24 30 48	24	30	48	605	720	720	504	256	136	60	100
FP20R 24 30 60	24	30	60	576	720	720	540	290	160	60	100
FP20R 24 30 76	24	30	76	538	720	720	720	420	250	60	100
FP20R 24 30 120	24	30	120	432	720	720	720	580	320	60	100
FP20R 24 60	24	60									
FP20R 24 60 24	24	60	24	1382	720	416	252	128	68	120	200
FP20R 24 60 38	24	60	38	1348	1158	644	360	210	126	120	200
FP20R 24 60 48	24	60	48	1325	1440	832	504	256	136	120	200
FP20R 24 60 60	24	60	60	1296	1440	940	540	290	160	120	200
FP20R 24 60 76	24	60	76	1257	1440	1288	720	420	250	120	200
FP20R 24 60 120	24	60	120	1152	1440	1440	1080	580	320	120	200
FP20R 24 60 200	24	60	200	960	1440	1440	1440	984	560	120	200
FP20R 48 15	48	15									
FP20R 48 15 24	48	15	24	605	720	720	504	256	136	30	50
FP20R 48 15 38	48	15	38	538	720	720	720	420	250	30	50
FP20R 48 15 60	48	15	60	432	720	720	720	580	320	30	50
FP20R 48 15 100	48	15	10	240	720	720	720	720	500	30	50
FP20R 48 30	48	30									
FP20R 48 30 24	48	30	24	1325	1140	832	504	256	136	60	100
FP20R 48 30 38	48	30	38	1258	1440	1288	720	420	250	60	100
FP20R 48 30 60	48	30	60	1152	1440	1440	1080	580	320	60	100
FP20R 48 30 100	48	30	100	960	1440	1440	1440	940	500	60	100
FP20R 110 06	110	06									
FP20R 110 06 07	110	6	7	583	660	432	243	144	81	12	20
FP20R 110 06 14	110	6	14	506	660	660	486	288	162	12	20
FP20R 110 12	110	12									
FP20R 110 12 07	110	12	7	1243	800	432	243	144	81	24	40
FP20R 110 12 14	110	12	14	1166	1320	864	486	288	162	24	40
FP20R 120 06	120	06									
FP20R 120 06 07	120	6	7	636	720	480	270	160	90	12	20
FP20R 120 06 14	120	6	14	552	720	720	540	320	180	12	20
FP20R 120 12	120	12									
FP20R 120 12 07	120	12	7	1356	800	480	270	160	90	24	40
FP20R 120 12 14	120	12	14	1272	1440	960	540	320	180	24	40
FP20R 220 06	220	06									
FP20R 220 06 07	220	06	07	1166	1320	864	486	288	162	12	30



CK Cabinet (850x500x420)

⁽¹⁾ VRLA battery

⁽²⁾ Output power value given with mains input available and battery in recharge at 0.1C₁₀

Technical Data

Input	
Main supply	230 Vac 1 ph
Input voltage tolerance	-20 % / +15 %
Power factor	> 0.95
Input frequency	50 / 60 Hz
Frequency range	From 47 to 63 Hz

Output	
Nominal voltage	See selection table
Output voltage range	±15 %
Static regulation	±1 %
Voltage ripple	< 0.1 % RMS

Battery	
Type	Valve regulated lead acid

Monitoring	
Type of display	Alphanumerical, 2 lines of 8 characters Monitoring of the DC voltage
Main functions	LED test Battery recharge current limitation
Measurements	Output voltage Output current
Remote signaling	By alarm delay on dry contact

General data	
Rectifier efficiency	From 83 % to 91 %
Operating temperature	From 0 to 40 °C
Storage temperature	From -5 °C to +45 °C
Relative humidity	< 95 % non condensing at 20 °C
Operating altitude	1000 m (without system derating)
Cooling	Natural convection cooling
External protection	IP31
Internal protection	Protection against unintentional direct contacts, as per IEC 60950-14
Noise (at 1m in front of the unit)	≤ 60 dB
Input / output insulation	2500 VAC / 1 minute
Frame colour	RAL 7035
Dimensions	H 850 mm x W 500 mm x D 420 mm

Options			
Charger / load	400	Single-phase 400 Vac input voltage	O
	Q	Position contact on AC input circuit breaker	O
	D	Paralleling diode	O
	I	DC earth fault alarm	O
Battery	FB	Battery protection (fuse 32 A)	.
	A	Low-voltage battery cut-off	O
	B	Battery test	O
	C	C13-100 automatic control system - programmable	O
	T	0.5 to 24 h (in compliance with French standards) Temperature probe for battery charge compensation	O
Communication	RS	Modbus RS485	O

"O"= Option
"."= Included

Special request			
Battery	JB / HB	Battery protection (circuit breaker with or without contact)	O
Load	J / H	Integrated distribution board, up to 6 feeders (circuit breakers with or without contact)	O

Compliance

Standards	
IEC/NF EN 60146-1-1: 2009	Semiconductor converters - Part 1-1: Specification of basic requirements
IEC/NF EN 61000-6-2: 2006	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments
IEC/NF EN 61000-6-4: 2007 AMD1: 2011	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standards for industrial environments
IEC/NF EN 61439-1: 2012	Low voltage switchgear and controlgear assemblies - Part1: General rules
IEC/NF EN 60950-1: 2013 AMD2: 2014	Information technology equipment - Safety - Part 1: General requirements
NF C58-311: 1990	Procedure for type tests for rectifier-battery charger and batteries

European directives	
Low voltage directive	2006/95/EC (before April 2016) 2014/35/EU (after April 2016)
EMC directive	2004/108/EC (before April 2016) 2014/30/EU (after April 2016)