

CHLORIDE® FP30R

Rectifier / Battery Charger
25 to 100 A (3-ph input)



CHLORIDE® FP RANGE

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

BENEFITS

Improved reliability assured by a fully controlled SCR bridge and a reduced number of components

Adaptability thanks to a selection of industrialized options and an easy parameter settings for quick onsite adjustments.

Simplicity of the product design to improve MTBF and to reduce MTTR.

KEY FEATURES

Low Voltage Ripple to optimize battery life.

Low inrush current < 8In not to oversize mains power supply (3-phase).

Compact design with the capability to integrate the battery in the charger cabinet.

Human-Machine Interface (HMI) to deliver appropriate information level to the user.

Compatibility with nickel-cadmium and lead-acid batteries, vented or gas-recombination types.

Galvanic isolation between input and output.

Digital control and monitoring

Chloride® FP30R Industrial Rectifier is the result of engineering research in product simplification to offer an SCR based standardized design with adaptability to industrial requirements.



Applications

- Power Transmission and Distribution
- Continuous Process Industries
- Petrochemical and Chemical Industries
- Water & Wastewater Industries

Range Overview

Chloride® FP30R Rectifier is available from 25 A to 100 A in three-phase input configuration. It offers a range of output voltages, from 24 Vdc to 125 Vdc.

Chloride® FP30R is suitable for use either as a Battery Charger, a Rectifier or as a DC Power Supply. It features a microprocessor control which offers exceptional stability and allows adaptability for different application requirements.

To further improve load availability and process reliability, Chloride® FP30R is able to operate in dual parallel configuration.



Example of Chloride® FP30R-CR1888

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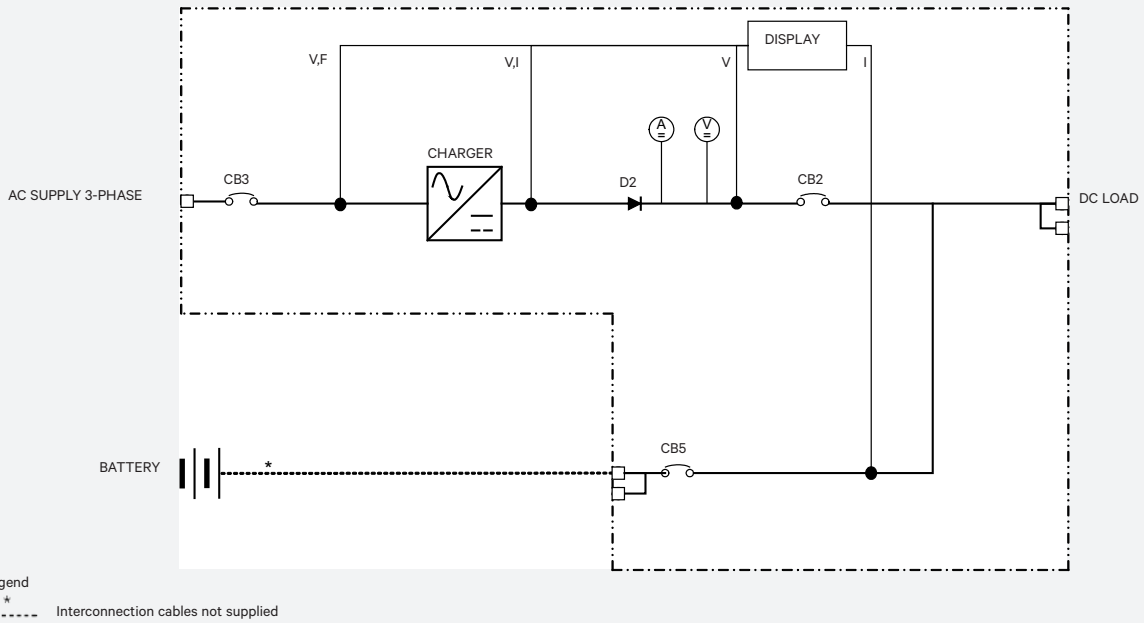


Figure 1: Chloride® FP30R Battery Charger Single Line Diagram

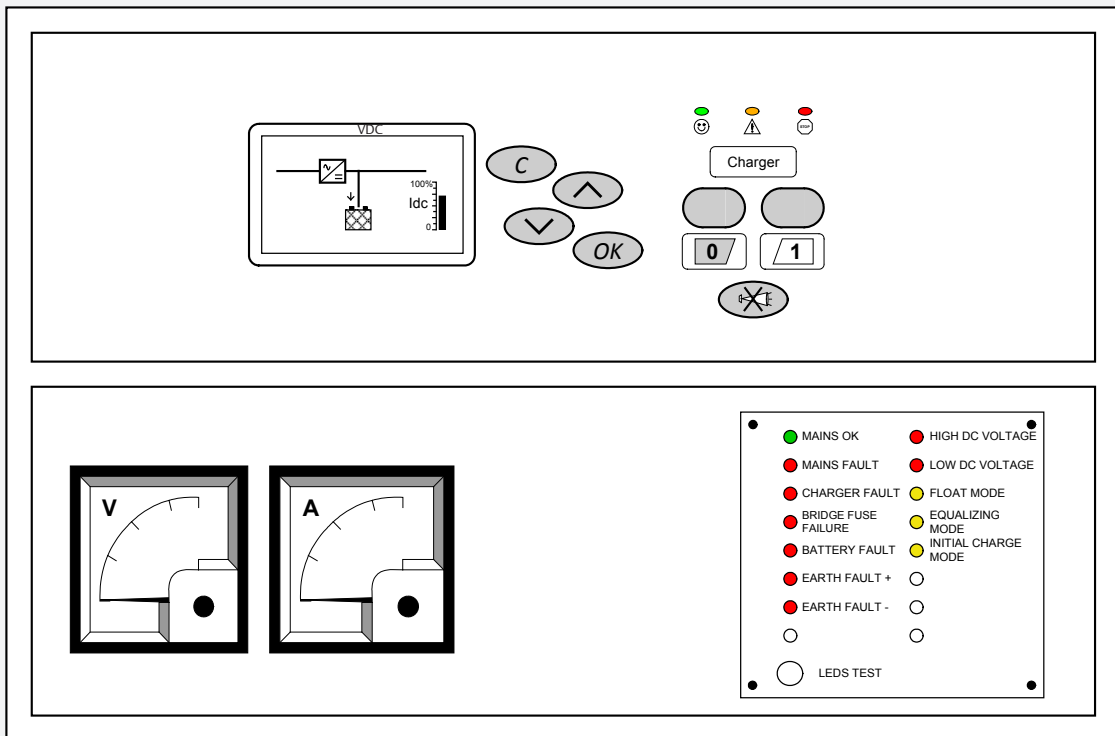


Figure 2: Front Panel with Analog Meters and CANOLED Option

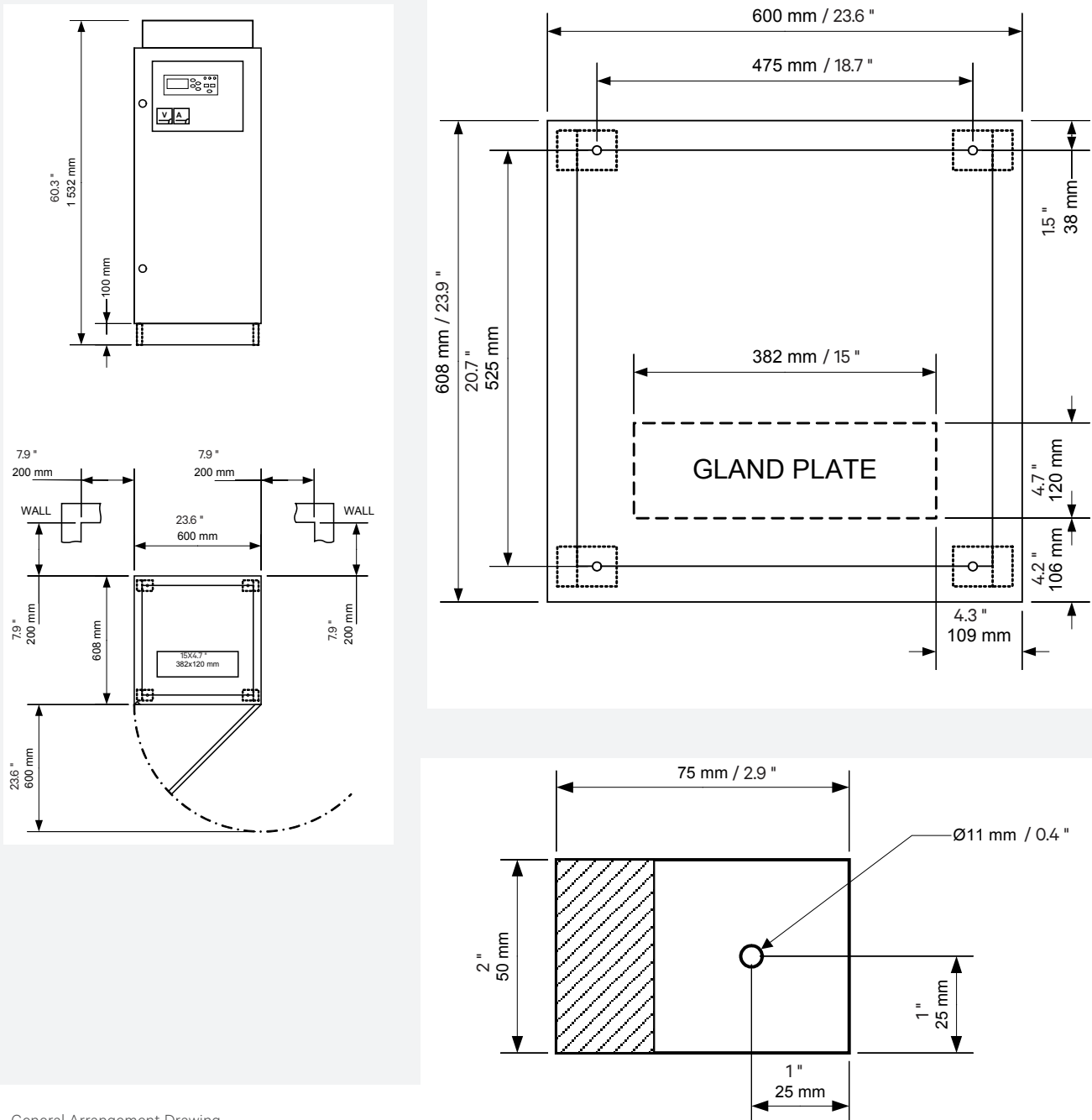


Figure 3: General Arrangement Drawing

MECHANICAL DIMENSIONS								
Output Voltage	(V)	24	48	48	48	125	125	125
Output Rating	(A)	25	25	60	100	25	60	100
Height	(mm/inches)	1532 / 60.3	1532 / 60.3	1532 / 60.3	1532 / 60.3	1532 / 60.3	1532 / 60.3	1532 / 60.3
Width	(mm/inches)	600 / 23.6	600 / 23.6	600 / 23.6	600 / 23.6	600 / 23.6	600 / 23.6	600 / 23.6
Depth	(mm/inches)	608 / 23.9	608 / 23.9	608 / 23.9	608 / 23.9	608 / 23.9	608 / 23.9	608 / 23.9
Weight	(lbs)	230	276	309	368	342	463	551

Ratings

MODEL NUMBERS (AVAILABLE RATINGS)		
Model Number	Output Voltage	Output Rating
FP30R_024_025	24 Vdc	25 A
FP30R_048_025	48 Vdc	25 A
FP30R_048_060	48 Vdc	60 A
FP30R_048_100	48 Vdc	100 A
FP30R_125_025	125 Vdc	25 A
FP30R_125_060	125 Vdc	60 A
FP30R_125_100	125 Vdc	100 A

Technical Specifications

INPUT	
Input Voltage	480 Vac \pm 10 %
Inrush Current	< 8In
Power Factor	0.8 (typical)
Frequency Range	from 60 Hz Nominal \pm 5 %

OUTPUT	
Available Ratings	See Table Above
Nominal DC Voltage	24, 48, 110, 125 V
Static Regulation	1 %
Voltage Ripple	1 % rms

MONITORING	
Charger Status and Alarms on Displaying Unit	
Displayed Values: Output Voltage, Output Current, Battery Current	
Dry Contact Relays	
Automatic Battery Test	
Event Log Up to 100 Events	

BATTERY	
Type	Lead Acid or Nickel Cadmium, Vented or Valve Regulated
Autonomy	from 10 Minutes to 10 Hours

GENERAL DATA	
Rectifier Efficiency	76 % to 89 % (according to model)
Operating Temperature	0 °C / 32 °F to 50 °C / 122 °F (without system derating)
Storage Temperature	-20 °C / -4 °F to +70 °C / +158 °F (battery excluded)
Relative Humidity	<95 % non Condensing at 20 °C / 68 °F
Operating Altitude	1000 m (without system derating)
Cooling	Natural (Fan assisted for 100A Rated Chargers)
External Protection	NEMA 1 / IP 22
Noise (at 1m in front of the unit)	\leq 60 dB
Isolation	Input - Output 2500 VAC / 1 Minute
Enclosure Color	RAL 7035
Compliance	UL 1012 listed, NEMA PE 5, ISO 9001, ISO 14001

DEFAULT FEATURES	
AC Input Circuit Breaker	25 kA MCCB
Monitoring - LED	16 LEDs on the front door
Temperature Compensated Charging	Mandatory for use with VRLA batteries
Battery Voltage Filter	Reduces DC ripple voltage to 0.2 %
DC Earth Fault Monitoring	Monitoring of DC bus insulation resistance

AVAILABLE OPTIONS	
Monitoring - MODBUS	RS-232 or RS-485 Port
Enclosure Feature - Light	Internal Lighting
Enclosure Feature - Heater	Space Heater with Thermostat