

PowerKraft™

Power Supply Solution

/ For Hydrogen Production



Provides optimized power supply for your **Hydrogen application** and operating conditions



Competitive technology in Eco-design, high efficiency and Redundancy feature.



Standardized and customized solutions for different Hydrogen applications.



Global customer service and application support.



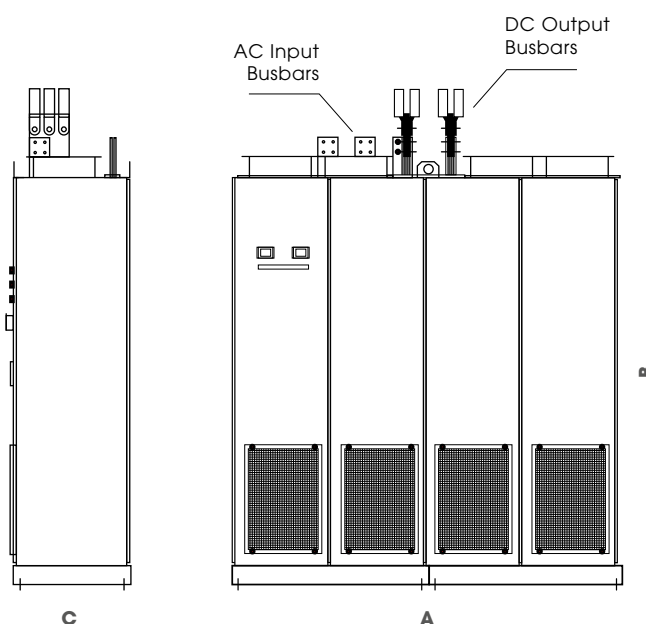
Designed according to major global standards IEC / UL / IEEE

DIMENSIONS

Rectifier dimensions (mm)	Voltage Range 150 - 1000 V Current range (Amps)		
	A	B	C
Up to 1000	1 000	600	2 235
2 500	1 000	600	2 235
5 000	2 000	600	2 235
8 000	4 000	600	2 235
10 000	4 000	600	2 235

Transformer size

Indicative dimensions to be informed at offer stage.



Note: Dimensions are indicative.

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The PowerKraft design ensures best performance in demanding electrolytic processes. The design is based on time proven thyristor technology. The equipment consist of a separate Transformer and Rectifier panel.

TECHNICAL DATA

General

Output Direct Voltage range:	150 V - 1000 V*
Output Direct Current range:	1500 A - 10 kA**
Input 3-phase AC Voltages:	380, 415, 440, 480 V, 6.6 kV - 33 kV (Higher voltages on request)
Frequency:	50/60 Hz
Auxiliary supply:	≤ 480 VAC ±10%, 3-phase
System topology:	6 to 48 pulse
Duty ratio:	Continuous operation at rated load up to 1000m altitude
Protection:	Overcurrent, Overvoltage, Thyristor Overtemperature, Thyristor fuse failure, Transformer Overtemperature

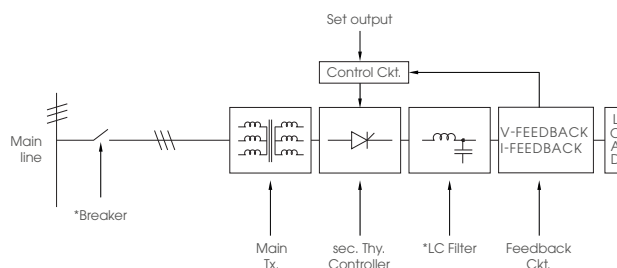
Rectifier

EMC conformity:	IEC 61000-6-4 (Emissions), IEC 61000-6-2 (Immunity), IEEE 519
Design Standards:	IEC 600146, IEC 62447-1 UL 2877, UL 62477-1
Protection class:	IP 2x
Power factor:	> 0.9 lagging at rated output and nominal input voltage
Efficiency:	> 0.9 at rated nominal current
Ambient temperature:	Std +5 to +40°C (other temperatures on request)
Cooling:	Forced air (AF) / Water Cooled
Humidity:	10-90% RH, non-condensing
Control precision:	Std. ±1%
Regulation range:	0-100% (10-100% ±1% control precision)

- * Other voltages on request
 ** Other currents on request
 *** Other Standards on request

BLOCK SCHEMATIC DIAGRAM

Secondary Controlled Rectifier with Ripple Filter



CONTROL INTERFACE

- Any modern Fieldbus system.
- Standard Profinet / 4 -20 mA analog signal.

OPTION

- Harmonic filter
- Power factor correction
- AC/DC busduct
- Off load transformer tapings

Transformer

Design types:	Dry Type, Oil Immersed (ONAN / ONAF)
Ambient temperature:	Std -25 up to +52°C (other temperatures on request)
Design Standards:	IEC 60076, IEC 61378-1, IEEE C57.12.00, C57.18.10

Specification is subject to change without notice