

## Datasheet

### Unipolar Pulse Generator HXD 901 – HXD 1401



Cabinet - Front view

The HXD 901 – HXD 1401 is a very convenient solution, which combines high power, easy handling and stable processes. The modularly designed unipolar pulse generators are optimized for reactive coating processes for cathodes up to 4 meters in length. The generator recognizes all relevant process parameters fully automatically and adjusts its arc detection and arc erosion independently. To start the operation or to make a target change, no adjustments have to be done by hand. Powerful water cooling guarantees the highest reliability – even in a non-air-conditioned environment.



Mains Controller MC 8 and

Master Display MD 4

#### ★ Highlights

- ★ Output power 90 kW - 140 kW
- ★ Water cooling
- ★ Magnetic valve control
- ★ Ideal for reactive coating processes for cathodes up to 4 meters in length
- ★ Stable processing with arc-critical targets
- ★ Fully automatic arc management (0.3 mJ / kW)
- ★ Automatic power compensation
- ★ Fast discharge with reverse pulse

#### We are happy to help!

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## Variants

Type	Pulse Output			Order-No.
<b>HXD 901</b>	20 kHz	800 V	90 kW	<a href="#">14Z210</a>
<b>HXD 1051</b>	20 kHz	800 V	105 kW	<a href="#">14Z220</a>
<b>HXD 1201</b>	20 kHz	800 V	120 kW	<a href="#">14Z230</a>
<b>HXD 1401</b>	20 kHz	800 V	140 kW	<a href="#">14Z240</a>

## Options and Accessories - detailed Information see Datasheet "Accessories"

Type	Order-No.
<b>Control Interfaces</b>	
AS4 - analogue for U-, I- or P-Regulation	<a href="#">01Y001</a>
AS4F - analogue for U-, I- or P-Regulation, fast Data Transfer	<a href="#">01Y021</a>
AS6 - analogue for U-, I-, P-Limit Specification	<a href="#">01Y061</a>
Profibus DP	<a href="#">01Y160</a>
EtherCAT®	<a href="#">01Y170</a>
RS232/485	<a href="#">01Y181</a>
Control Interfaces	<a href="#">06Y401</a>
<b>Indications</b>	
Master Display MD 4 for up to 4 Units in parallel Operation	<a href="#">50Y261</a>
<b>Miscellaneous</b>	
Supply Connectors on Top	<a href="#">04Y310</a>
Line Voltage 3 x 400 V (default)	<a href="#">10Y022</a>
Line Voltage 3 x 440 V	<a href="#">10Y025</a>
Line Voltage 3 x 480 V	<a href="#">10Y030</a>

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## Technical Data

	HXD 901	HXD 1051	HXD 1201	HXD 1401
<b>Operational Data</b>				
Output Power	90 kW	105 kW	120 kW	140 kW
Output Voltage	800 V	800 V	800 V	800 V
Output Current	180 A	210 A	240 A	280 A
Control	Current, voltage or power controlled or voltage controlled with ignition automatic			
Operation Mode	External via control interface			
Output Accuracy	+ / - 1 % of nominal value for current, voltage or power			
Pulse Frequency	20 kHz, fixed, external setting from 1 kHz to 40 kHz			
Pulse Off Time	2 µs, external setting from 2 µs to 10 µs (depending on frequency)			
Principle of Operation	Unipolar with reverse voltage impulse			
Arc Suppression	Automatic parameter setting			
Quenching Time	< 2 µs			
Break Time	2 to 20 µs (automatic setting)			
Arc Energy	< 0.3 mJ / kW			
<b>Mains Input Connection</b>				
Line Voltage	3 x 400 V, + / - 10 %, 50/60 Hz, PE, (Option: 3 x 440 V or 3 x 480 V)			
Fusing	3 x 160 A	3 x 200 A	3 x 224 A	3 x 250 A
Mains Cable	4 x 50 mm <sup>2</sup>	4 x 70 mm <sup>2</sup>	4 x 95 mm <sup>2</sup>	4 x 95 mm <sup>2</sup>
Power Consumption	100 kVA	118 kVA	135 kVA	155 kVA
<b>Pulse-Output</b>				
DC-Cable JZ-600-Y-CY	3 x JZ-600-Y-CY, 2 x 16 mm <sup>2</sup>		4 x JZ-600-Y-CY, 2 x 16 mm <sup>2</sup>	
Load Inductance	max. 10 µH			
<b>Cooling System</b>				
Water Cooling	Flow, > 15 l / min, 4 to 8 Bar, < 40° C		Flow, > 20 l / min, 4 to 8 Bar, < 40° C	
Water Connection	1" female thread			
Water Cooling Capacity	4 kW	5 kW	5.5 kW	6.5 kW
Water Outlet	10 mm tube connection			
Compressed Air	4 to 8 bar, 10 mm tube connection			

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## Technical Data

	HXD 901	HXD 1051	HXD 1201	HXD 1401
<b>Cooling System</b>				
Air Cooling	Built-in fans, maximum ambient temperature 40° C			
Air Cooling Capacity	1.2 kW		1.6 kW	
Fan Noise Emission	$L_{pA} < 70$ dB (A)			
<b>Mechanical Data</b>				
Size (without Plug)	Cabinet, Width: 600 mm, Height: 1800 mm, Depth 830 mm			
Weight (without Packaging)	430 kg		500 kg	

### We are happy to help!

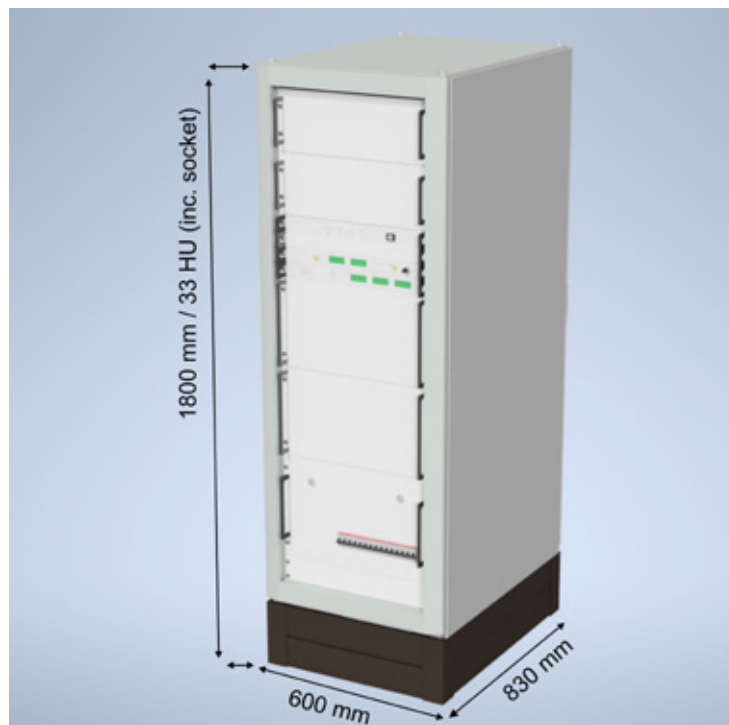
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## Dimensions



Exemplary illustration for cabinets HX..., front panel and rear view can differ, nevertheless, dimensions are the same.

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