

Datasheet

DC Power Supplies HXF 150 – HXF 300



HXF in vertical position with rotatable display



HXF in horizontal position with rotatable display



HXF in horizontal position, rear view



Combination DC and AC: HXF with Unipolar Pulse Generator

The HXF is especially designed for sputtering of sensitive coatings. The fully automatic arc handling reduces the arc energy to less than 0.3 mJ / kW. The HXF is electrically and mechanically compatible with the power supplies type HX and has an interface for the operation of pulse generators as well. The impressively compact power supply can be integrated or attached to the plasma chamber in any position. Efficient water cooling ensures the highest reliability even in non-air-conditioned rooms. In order to avoid condensation water, an external magnetic valve can be connected via the integrated temperature control. The output power can be increased up to 240 kW in parallel operation.

★ Highlights

- ★ Output Power 15 kW – 30 kW
- ★ Parallel operation up to 240 kW
- ★ Water cooling
- ★ Magnetic valve control
- ★ Housing ventilation with integrated particle separator
- ★ ½ 19"-case, 5 HU
- ★ Flange mounting
- ★ M8-female thread for crane eye
- ★ Replaceable, rotatable display
- ★ Automatic arc handling

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Variants

Type	DC-Output			Order-No.
HXF 150/500	15 kW	500 V	60 A	13Z410
HXF 150/600	15 kW	400 V	50 A	13Z420
HXF 150/800	15 kW	800 V	30 A	13Z430
HXF 200/800	20 kW	800 V	40 A	13Z460
HXF 250/800	25 kW	800 V	50 A	13Z480
HXF 300/800	30 kW	800 V	60 A	13Z490

We are happy to help!

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Options and Accessories - detailed Information see Datasheet "Accessories"

Type	Order-No.
Control Interfaces	
AS4 - analogue for U-, I- or P-Regulation	01Y001
AS4F – analogue for U-, I- or P-Regulation, fast Data Transfer	01Y021
AS6 - analogue for U-, I-, P-Limit Specification	01Y061
Profibus DP	01Y160
EtherCAT®	01Y170
RS232/485	01Y181
Indications	
HXF-Display for single Unit	01Y100
Master Display MD 4 for up to 4 Units in parallel Operation	50Y261
Master Display MD 8 for up to 8 Units in parallel Operation	50Y262
Connectors	
HXF-Connector Set X1 / X2 Harting straight	03Y400
HXF-Connector Set X1 / X2 Harting angled	03Y410
HXF-Water Connection Festo (default)	04Y100
HXF-Water Connection Walther	04Y400
Walther Couplings straight	04Y420
Walther Couplings angled	04Y440
Magnetic Valve 24 V with Control Cable (2 m)	04Y030
Miscellaneous	
Line Voltage 3 x 400 V (default)	10Y022
Line Voltage 3 x 440 V	10Y025
Line Voltage 3 x 480 V	10Y030
Arc-Link for parallel Operation	10Y100
Interface Combiner AM 2/3 for parallel Operation up to 3 Units	50Y242
Interface Combiner MS 4 for parallel Operation up to 4 Units	50Y245
Interface Combiner S 4 for Extension of MS 4 up to 4 Units	50Y246
Remote Control RC 4	06Y401

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Technical Data

	HXF 150/500	HXF 150/600	HXF 150/800
Operational Data			
Nominal Power	15 kW	15 kW	15 kW
Output Voltage	500 V	600 V	800 V
Output Current	60 A	50 A	30 A
Indication (Option)	3 ½-digit display for current, voltage and power		
Control	Current, voltage or power controlled		
Operation Mode	External via control interface		
Set Point	0 ... 100 % of nominal value for current, voltage or power		
Output Accuracy	+ / - 1 % of nominal value for current, voltage and power		
Arc Suppression	Quenching time: 2 µs to ca. 20 µs, automatically Delay time: 10 µs to ca. 50 µs, automatically		
Mains Input Connection			
Line Voltage	3 x 400 V, + / - 10 %, 50/60 Hz, PE, (Option: 3 x 440 V or 3 x 480 V)		
Fusing	3 x 25 A	3 x 25 A	3 x 25 A
Mains Cable	4 x 4 mm ²	4 x 4 mm ²	4 x 4 mm ²
Mains Connector (X2)	Harting Han-k4/0		
Power Consumption	16.5 kVA	16.5 kVA	16.5 kVA
DC-Output Connection			
DC-Cable JZ-600-Y-CY	2 x 16 mm ²	2 x 10 mm ²	2 x 6 mm ²
DC-Connection (X1)	Harting Han 2 MOD		
Cooling System			
Water Cooling	Flow > 3 l / min, 2 to 8 Bar, < 40° C		
Water Connection	Festo KQ2 10 mm (Option: Walther CT-003)		
Water Cooling Capacity	680 W	680 W	680 W
Air Cooling	Built-in fan, maximum ambient temperature 40° C		
Air Cooling Capacity	80 W	80 W	80 W
Fan Noise Emission	L _{pA} < 70 dB (A)		
Mechanical Data			
Size (without Plug)	Width: 218 mm (½ 19"), Height: 222 mm (3 HU), Length 645 mm		
Weight (without Packaging)	35 kg	35 kg	35 kg

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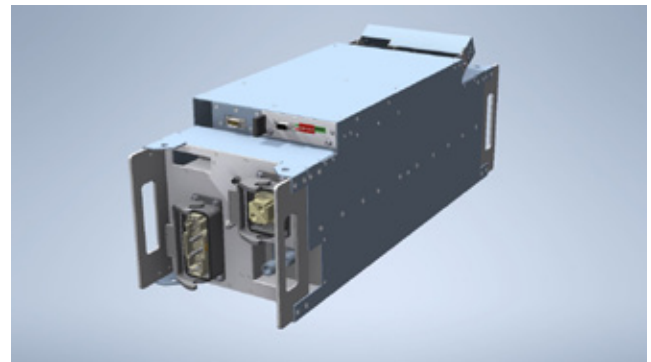
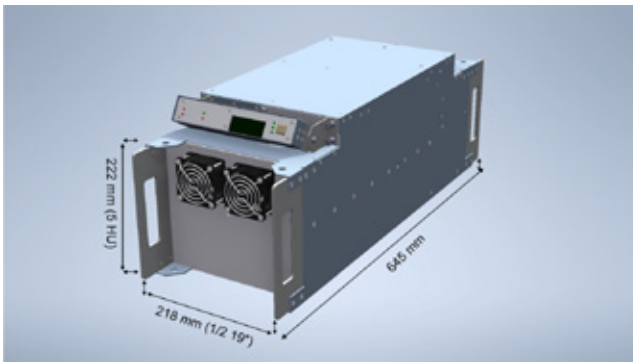
Technical Data

	HX 200/800	HX 250/800	HX 300/800
Operational Data			
Nominal Power	20 kW	25 kW	30 kW
Output Voltage	800 V	800 V	800 V
Output Current	40 A	50 A	60 A
Indication (Option)	3 ½-digit display for current, voltage and power		
Control	Current, voltage or power controlled		
Operation Mode	External via control interface		
Set Point	0 ... 100 % of nominal value for current, voltage or power		
Output Accuracy	+ / - 1 % of nominal value for current, voltage and power		
Arc Suppression	Quenching time: 2 µs to ca. 20 µs, automatically Delay time: 10 µs to ca. 50 µs, automatically		
Mains Input Connection			
Line Voltage	3 x 400 V, + / -10 %, 50/60 Hz, PE, (Option: 3 x 440 V or 3 x 480 V)		
Fusing	3 x 35 A	3 x 50 A	3 x 63 A
Mains Cable	4 x 6 mm ²	4 x 10 mm ²	4 x 10 mm ²
Mains Connector (X2)	Harting Han-k4/0		
Power Consumption	22 kVA	28 kVA	33 kVA
DC-Output Connection			
DC-Cable JZ-600-Y-CY	2 x 10 mm ²	2 x 10 mm ²	2 x 16 mm ²
DC-Connection (X1)	Harting Han 2 MOD		
Cooling System			
Water Cooling	Flow > 3 l / min, 2 to 8 Bar, < 40° C		
Water Connection	Festo KQ2 10 mm (Option: Walther CT-003)		
Water Cooling Capacity	900 W	1100 W	1300 W
Air Cooling	Built-in fan, maximum ambient temperature 40° C		
Air Cooling Capacity	100 W	110 W	150 W
Fan Noise Emission	L _{pA} < 70 dB (A)		
Mechanical Data			
Size (without Plug)	Width: 218 mm (½ 19"), Height: 222 mm (3 HU), Length 645 mm		
Weight (without Packaging)	37 kg	39 kg	41 kg



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Dimensions



Exemplary illustration, display and rear view can differ, depending on device type, nevertheless, dimensions are the same.

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