



Datasheet

DC Power Supplies HX 150 – HX 350



HX in vertical position with rotatable display



HX in horizontal position with rotatable display



HX in horizontal position, rear view



Combination DC and AC – HX with Unipolar Pulse Generator

The very compact design, with ½ 19" width and 5 HU height, is especially designed for installing directly in the production plant without cabinets. The HX has mounting flanges and can be integrated or attached to the plasma chamber in any position. The display can be swiveled and separated from the power supply. Efficient water cooling ensures 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. Output can be increased up to 280 kW in parallel operation. The special electronic design allows "Master-Slave" operation as well as parallel operation via interface combiner or directly via the PLC. The extremely fast arc handling works completely automatically, so that no parameters have to be set.

★ Highlights

- ★ Output Power 15 kW – 35 kW
- ★ Parallel operation up to 280 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.
HX 150/400	15 kW	400 V	80 A	13Z010
HX 150/500	15 kW	500 V	60 A	13Z020
HX 150/600	15 kW	600 V	50 A	13Z030
HX 150/800	15 kW	800 V	30 A	13Z040
HX 150/1000	15 kW	1000 V	25 A	13Z050
HX 200/500	20 kW	500 V	70 A	13Z100
HX 200/800	20 kW	800 V	40 A	13Z110
HX 200/1000	20 kW	1000 V	35 A	13Z120
HX 250/500	25 kW	500 V	80 A	13Z190
HX 250/800	25 kW	800 V	50 A	13Z200
HX 250/1000	25 kW	1000 V	40 A	13Z210
HX 300/800	30 kW	800 V	60 A	13Z300
HX 300/1000	30 kW	1000 V	50 A	13Z310
HX 350/800	35 kW	800 V	70 A	13Z320
HX 350/1000	35 kW	1000 V	60 A	13Z330

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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	
HX-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	
HX-Connector Set X1 / X2 Harting straight	03Y400
HX- Connector Set X1 / X2 Harting angled	03Y410
HX-Water Connection Festo (default)	04Y100
HX-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
Cathode Clamp Diode	50Y001
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

	HX 150/400 *	HX 150/500	HX 150/600	HX 150/800	HX 150/1000
Operational Data					
Output Power	15 kW	15 kW	15 kW	15 kW	15 kW
Output Voltage	400 V	500 V	600 V	800 V	1000 V
Output Current	80 A	60 A	50 A	30 A	25 A
Indications (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: 6 µs up to 3 ms, automatically Delay time: 6 µs up to 10 ms, 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	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	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	16.5 kVA	16.5 kVA
DC-Output Connection					
DC-Cable JZ-600-Y-CY	2 x 25 mm ² *	2 x 16 mm ²	2 x 10 mm ²	2 x 6 mm ²	2 x 4 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	680 W	680 W
Air Cooling	Built-in fan, maximum ambient temperature 40° C				
Air Cooling Capacity	80 W	80 W	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 (5 HU), Length 645 mm				
Weight (without Packaging)	35 kg	35 kg	35 kg	35 kg	35 kg

* alternatively 24 x 1.5 mm²

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Technical Data

	HX 200/500	HX 200/800	HX 200/1000	HX 250/500 *	HX 250/800
Operational Data					
Output Power	20 kW	20 kW	20 kW	25 kW	25 kW
Output Voltage	500 V	800 V	1000 V	500 V	800 V
Output Current	70 A	40 A	35 A	80 A	50 A
Indications (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: 6 µs up to 3 ms, automatically Delay time: 6 µs up to 10 ms, 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 35 A	3 x 35 A	3 x 50 A	3 x 50 A
Mains Cable	4 x 6 mm ²	4 x 6 mm ²	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	22 kVA	22 kVA	28 kVA	28 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	2 x 25 mm ² *	2 x 10 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	950 W	900 W	900 W	1100 W	1100 W
Air Cooling	Built-in fan, maximum ambient temperature 40° C				
Air Cooling Capacity	150 W	100 W	100 W	110 W	110 W
Fan Noise Emission	L _{pA} < 70 dB (A)				
Mechanical Data					
Size (without Plug)	Width: 218 mm (½ 19"), Height: 222 mm (5 HU), Length 645 mm				
Weight (without Packaging)	37 kg	37 kg	37 kg	39 kg	39 kg

* alternatively 24 x 1.5 mm²

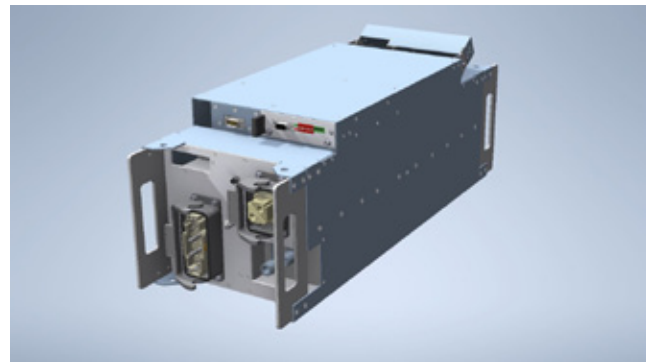
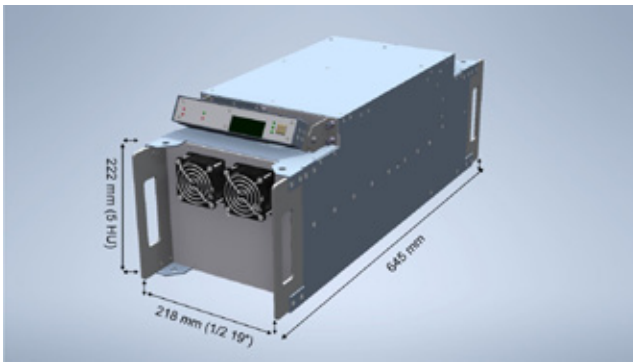
Datasheet

Technical Data

	HX 250/1000	HX 300/800	HX 300/1000	HX 350/800	HX 350/1000
Operational Data					
Output Power	25 kW	30 kW	30 kW	35 kW	35 kW
Output Voltage	1000 V	800 V	1000 V	800 V	1000 V
Output Current	40 A	60 A	50 A	70 A	60 A
Indications (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: 6 µs up to 3 ms, automatically Delay time: 6 µs up to 10 ms, 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 50 A	3 x 63 A	3 x 63 A	3 x 63 A	3 x 63 A
Mains Cable	4 x 10 mm ²	4 x 10 mm ²	4 x 10 mm ²	4 x 10 mm ²	4 x 10 mm ²
Mains Connector (X2)	Harting Han-k4/0				
Power Consumption	28 kVA	33 kVA	33 kVA	39 kVA	39 kVA
DC-Output Connection					
DC-Cable JZ-600-Y-CY	2 x 10 mm ²	2 x 16 mm ²	2 x 10 mm ²	2 x 16 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	1100 W	1300 W	1300 W	1500 W	1500 W
Air Cooling	Built-in fan, maximum ambient temperature 40° C				
Air Cooling Capacity	110 W	150 W	150 W	150 W	150 W
Fan Noise Emission	L _{pA} < 70 dB (A)				
Mechanical Data					
Size (without Plug)	Width: 218 mm (½ 19"), Height: 222 mm (5 HU), Length 645 mm				
Weight (without Packaging)	39 kg	41 kg	41 kg	41 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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We are happy to help!

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