

Datasheet

Bipolar Pulse Generators SB 150 and SB 300



Front view



Rear view

The generators can be used both as medium frequency generators to generate symmetric AC current and as bipolar pulse generators to generate asymmetrical square pulses. With a special power ratio controller the target lifetime for dual magnetrons can be exactly symmetrized. Furthermore, two different target materials can also be controlled with asymmetrical pulse power. The power ratio controller automatically sets the pulse times via pulse width modulation (PWM). The units work with a fixed frequency of 20 kHz. The generators have an automatic arc suppression. The parameters for trip level and break times are automatically adjusted to the chosen process. Programming by the user is not necessary. For an automatic

synchronization, multiple generators can be connected via control cables. In this case, the pulse generators automatically switch to external synchronization.

★ Highlights

- ★ Output power 15 kW, 35 kW, AC
- ★ Parallel operation up to 280 kW
- ★ Power ratio controller
- ★ Automatic arc handling
- ★ Automatic synchronization
- ★ Water cooling
- ★ Very compact design

We are happy to help!

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Variants

Type	AC-Output			Order-No.
SB 150	20 kHz	800 V	15 kW	11Z070
SB 300	20 kHz	800 V	35 kW	11Z050

Options and Accessories - detailed Information see Datasheet "Accessories"

Type	Order-No.
Indications	
Status LEDs (default)	-
Connectors	
SB-150 Connector Set X1 / X6 Harting straight	03Y055
SB-150 Connector Set X1 / X6 Harting angled	03Y075
SB-300 Connector Set X1 / X6 Harting straight	03Y060
SB-300 Connector Set X1 / X6 Harting angled	03Y080
SB-Water Connector Festo (default)	04Y100
SB-Water connector Walther	04Y400
Walther Water Couplings straight	04Y420
Walther Water Couplings angled	04Y440

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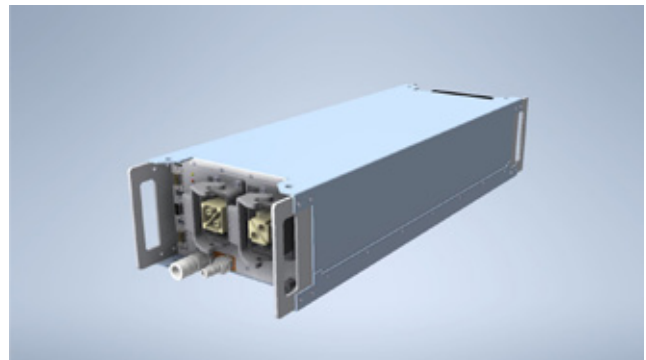
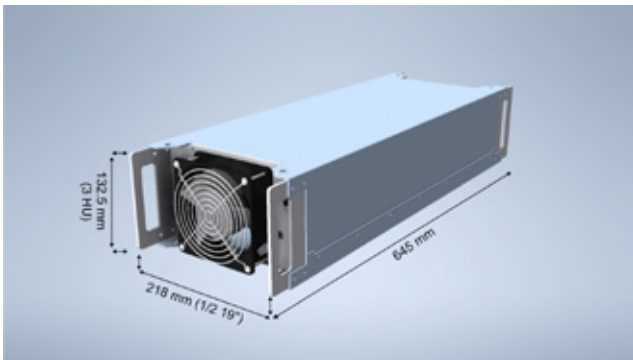
Technical Data

	SB 150	SB 300
Operational Data		
Input Voltage	Maximum 800 V DC	
Output Current	38 A (DC-Output current of power supply)	70 A (DC-Output current of power supply)
Output Power	15 kW (DC-Output of power supply)	35 kW (DC-Output of power supply)
Pulse Frequency	20 kHz, fixed	
Principle of Operation	AC, bipolar	
Arc Suppression	Automatic parameter setting	
Quenching Time	< 2 μ S	
Arc Energy	< 0.3 mJ / kW	
Indications	Status LEDs	
DC-Input		
DC-Cable JZ-600-Y-CY	2 x 6 mm ²	2 x 16 mm ²
AC-Output Cable JZ-600-Y-CY	24 x 1.5 mm ²	
Maximum Cable Length	5 m (between Pulse Generator and Cathode)	
Output Inductance	Max. 10 μ H (cable + cathode)	
Auxiliary Voltage	24 V DC + / - 10 %, 1.5 A	
Cooling System		
Water Cooling	Flow > 1.5 l / min, 2 to 8 Bar, < 40° C	
Water Connection	Festo KQ2 10 mm (Option: Walther CT-003)	
Air Cooling	Built-in fan, maximum ambient temperature 40° C	
Mechanical Data		
Size (without Plug)	Width: 218 mm (1/2 19"), Height: 130 mm (3 HE), Length 645 mm	
Weight (without Packaging)	23 kg	
Compatible with the following Power Supplies:	GX 60 - GX 150 (except all versions over 800 V or over 38 A).	HX 150 - HX 300 (except all versions over 800 V or over 70 A).
ONLY with interface X4P for pulse generators		



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Dimensions



Exemplary illustration, front panel, rear view and dimensions are the same with SB 150 and SB 300.

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