



Analoge & Digitale
Leistungselektronik
GmbH

DC-Sputtering- Power Supply

MARIS

Technical Data

Series GS

Series GSW

Series GS

<i>Table 1</i>	GS05	GS10	GS15	GS20	GS30
Nominal power	0,5kW	1kW	1,5kW	2kW	3kW
Output voltage	800V				
Output current	0,9A	1,7A	3A	3,5A	5,3A
Control	Current, voltage or power controlled.				
Modes of operation	Manual via front panel or external via A/D interface AS 4 or profibus				
Set point	0...100% of nominal voltage, current or power				
Output accuracy	+/- 1% of nominal value for voltage, current and power				
Arc suppression	Quenching time: 6 μ s up to 3ms, automatically Delay time: 6 μ s up to 10ms, automatically				
Indication	3½-digit display for voltage, current and power				
Noise emission	LpA < 70db (A)				
Mains connection	230V, +5/-10%,50/60Hz, PE (Option: 200V, L1, L2, PE)			3 x 400V, +5/-10%, 50/60Hz, PE	
Power consumption	0,6kVA	1,2kVA	1,8kVA	2,4kVA	3,6kVA
Fusing	6A	10A	6A	6A	10A
Cooling	Forced air, maximum ambient temperature 40° C				
Size	9,5" slide in, 3HU, (132,5mm) (Option: 200V, L1, L2, PE) 560mm deep			(Option: 3 x 200V, GS 15, GS20 only) 9,5" slide in, 3HU, (132,5mm), 560mm deep	
Weight	12kg				

Table 2	GS60	GS100	GS120	GS150	
Nominal power	6kW	10kW	12kW	15kW	
Output voltage	800V				
Output current	10A	17A	20A	25A	
Control	Current, voltage or power controlled				
Modes of operation	Manual via front panel or external via A/D interface AS 4 or profibus				
Set point	0...100% of nominal voltage, current or power				
Output accuracy	+/- 1% of nominal value for voltage, current and power				
Arc suppression	Quenching time: 6µs up to 3ms, automatically Delay time: 6µs up to 10ms, automatically				
Indication	3½-digit display for voltage, current and power				
Noise emission	LpA < 70db (A)				
Mains connection	3 x 400V, +5/-10%, 50/60Hz, PE				
Power consumption	6,6kVA	11kVA	13,2kVA	16,5kVA	
Fusing	16A	20A	25A	25A	
Cooling	Forced air, maximum ambient temperature 40° C				
Size	19" slide in, 3HU (132,5mm) 570mm deep				
Weight	27kg	29kg	29kg	31kg	

Table 3	GS200	GS240	GS300	GS360	
Nominal power	20kW	24kW	30kW	36kW	
Output voltage	800V				
Output current	40A	50A	60A	75A	
Control	Current, voltage or power controlled				
Modes of operation	Manual via front panel or external via A/D interface AS 4 or profibus				
Setpoint	0...100% of nominal voltage, current or power				
Output accuracy	+/- 1% of nominal value for voltage, current and power				
Arc suppression	Quenching time: 6µs up to 3ms, automatically Delay time: 6µs up to 10ms, automatically				
Indication	3½-digit display for voltage, current and power				
Noise emission	LpA < 70db (A)				
Converter	2 x E100	2 x E120	3 x E100	3 x E120	
Mains connection	3 x 400V, +/-10%, 50/60Hz				
Power consumption	22kVA	27kVA	33kVA	40kVA	
Fusing	3 x 35A	3 x 50A	3 x 50A	3 x 63A	
Cooling	Forced air, maximum ambient temperature 40° C.				
Size	19" cabinet x 10HU x 770mm deep				
Weight	128kg	132kg	150kg	156kg	
Mains cable	4 x 6mm ²	4 x 10mm ²	4 x 10mm ²	4 x 16mm ²	
Output cable	3 x 10mm ²	3 x 10mm ²	3 x 16mm ²	3 x 25mm ²	

Table 4	GS400	GS480	GS600	GS720	GS840
Nominal power	40kW	48kW	60kW	72kW	84kW
Output voltage	800V				
Output current	80A	100A	125A	150A	175A
Control	Current, voltage or power controlled				
Modes of operation	Manual via front panel or external via A/D interface AS 4 or profibus				
Set point	0...100% of nominal voltage, current or power				
Output accuracy	+/- 1% of nominal value for voltage, current and power				
Arc suppression	Quenching time: 6µs up to 3ms, automatically Delay time: 6µs up to 10ms, automatically				
Indication	3½-digit display for voltage, current and power				
Noise emission	LpA < 70db (A)				
Converter	4 x E100	4 x E120	5 x E120	6 x E120	7 x E120
Mains connection	3 x 400V, +/-10%, 50/60Hz				
Power consumption	44kVA	53kVA	66kVA	80kVA	93kVA
Fusing	3 x 80A	3 x 80A	3 x 100A	3 x 125A	3 x 160A
Cooling	Forced air, maximum ambient temperature 40° C				
Size	19" cabinet x 31HU x 770mm deep				
Weight	265kg	273kg	297kg	321kg	345kg
Mains cable	4 x 25mm ²	4 x 25mm ²	4 x 35mm ²	4 x 50mm ²	4 x 70mm ²
Output cable	3 x 25mm ²	3 x 35mm ²	3 x 50mm ²	3 x 70mm ²	3 x 70mm ²

Table 5	GS960	GS1080	GS1200		
Nominal power	96kW	108kW	120kW		
Output voltage	800V				
Output current	200A	225A	250A		
Control	Current, voltage or power controlled				
Modes of operation	Manual via front panel or external via A/D interface AS 4 or profibus				
Set point	0...100% of nominal voltage, current or power				
Output accuracy	+/- 1% of nominal value for voltage, current and power				
Arc suppression	Quenching time: 6µs up to 3ms, automatically Delay time: 6µs up to 10ms, automatically				
Indication	3½-digit display for voltage, current and power				
Noise emission	LpA < 70db (A)				
Converter	8 x E120	9 x E120	10 x E120		
Mains connection	3 x 400V, +/-10%, 50/60Hz				
Power consumption	106kVA	119kVA	132kVA		
Fusing	3 x 160A	3 x 200A	3 x 200A		
Cooling	Forced air, maximum ambient temperature 40° C				
Size	19" cabinet x 40HU x 770mm deep				
Weight	422kg	446kg	470kg		
Mains cable	4 x 70mm ²	4 x 95mm ²	4 x 95mm ²		
Output cable	3 x 95mm ²	3 x 120mm ²	3 x 120mm ²		

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<i>Table 6</i>	GSW 200	GSW 250	GSW 300		GSW 200/ 500/400
Nominal power	20kW	25kW	30kW		20kW
Output voltage	800V	800V	800V		500V
Output current	40A	50A	60A		70A
Control	Current, voltage or power controlled				
Modes of operation	External via A/D interface AS 4, AS 4 F or profibus				
Set point	0...100% of nominal voltage, current or power				
Output accuracy	+/- 1% of nominal value for voltage, current and power				
Arc-suppression	Quenching time: 6µs up to 3ms, automatically Delay time: 6µs up to 10ms, automatically				
Noise emission	LpA < 70db (A)				
Mains connection	3 x 400V, +/-10%, 50/60Hz				
Power consumption	22kVA	28kVA	33kVA		22kVA
Fusing	3 x 35A	3 x 50A	3 x 63A		3 x 35A
Cooling	Water, > 3 l/min, 2 to 8 Bar, < 40° C Forced air, maximum ambient temperature 40° C				
Water connection	Swagelok SS-QC6				
Cooling capability of water	900W	1100W	1300W		950W
Cooling capability of air	100W	110W	150W		150W
Size	19" slide-in, 3HU x 700mm deep (without plug)				
Weight	49kg	51kg	53kg		49kg
Mains cable	4 x 6mm ²	4 x 10mm ²	4 x 10mm ²		4 x 6mm ²
Output cable	3 x 10mm ²	3 x 10mm ²	3 x 16mm ²		3 x 16mm ²
Mains connection (X2)	Harting Han k4/0				
DC-connection (X1)	Harting Han 2 MOD				

<i>Table 7</i>	GSW 100/500/ 440	GSW 150/500/ 440	GSW 150/750/ 440	GSW 200/750/ 440	GSW 250/750/ 440
Nominal power	10kW	15kW	15kW	20kW	25kW
Output voltage	500V	500V	750V	750V	750V
Output current	40A	60A	38A	50A	60A
Control	Current, voltage or power controlled				
Modes of operation	External via A/D interface AS 4, AS 4 F or profibus				
Set point	0...100% of nominal voltage, current or power				
Output accuracy	+/- 1% of nominal value for voltage, current and power				
Arc-suppression	Quenching time: 6µs up to 3ms, automatically Delay time: 6µs up to 10ms, automatically				
Noise emission	LpA < 70db (A)				
Mains connection	3 x 440V, +/-10%, 50/60Hz				
Power consumption	11kVA	16,5kVA	16,5kVA	22kVA	28kVA
Fusing	3 x 20A	3 x 25A	3 x 25A	3 x 35A	3 x 50A
Cooling	Water, > 3 l/min, 2 to 8 Bar, < 40° C Forced air, maximum ambient temperature 40° C				
Water connection	Swagelok SS-QC6				
Cooling capability of water	500W	680W	680W	900W	1100W
Cooling capability of air	80W	80W	80W	100W	110W
Size	19" slide-in, 3HU x 700mm deep (without plug)				
Weight	42kg	44kg	44kg	49kg	51kg
Mains cable	4 x 2,5mm ²	4 x 4mm ²	4 x 4mm ²	4 x 6mm ²	4 x 10mm ²
Output cable	3 x 10mm ²	3 x 16mm ²	3 x 10mm ²	3 x 10mm ²	3 x 16mm ²
Mains connection (X2)	Harting Han k4/0				
DC-connection (X1)	Harting Han 2 MOD				

Table 8	GSW 100/500/ 480	GSW 150/500/ 480	GSW 150/750/ 480	GSW 200/750/ 480	GSW 250/750/ 480
Nominal power	10kW	15kW	15kW	20kW	25kW
Output voltage	500V	500V	750V	750V	750V
Output current	40A	60A	38A	50A	60A
Control	Current, voltage or power controlled				
Modes of operation	External via A/D interface AS 4, AS 4 F or profibus				
Set point	0...100% of nominal voltage, current or power.				
Output accuracy	+/- 1% of nominal value for voltage, current and power				
Arc-suppression	Quenching time: 6µs up to 3ms, automatically Delay time: 6µs up to 10ms, automatically				
Noise emission	LpA < 70db (A)				
Mains connection	3 x 480V, +/-10%, 50/60Hz				
Power consumption	11kVA	16,5kVA	16,5kVA	22kVA	28kVA
Fusing	3 x 20A	3 x 25A	3 x 25A	3 x 35A	3 x 50A
Cooling	Water, > 3 l/min, 2 to 8 Bar, < 40° C Forced air, maximum ambient temperature 40° C				
Water connection	Swagelok SS-QC6				
Cooling capability of water	500W	680W	680W	900W	1100W
Cooling capability of air	80W	80W	80W	100W	110W
Size	19" slide-in, 3HU x 700mm deep (without plug)				
Weight	42kg	44kg	44kg	49kg	51kg
Mains cable	4 x 1,5mm ²	4 x 4mm ²	4 x 4mm ²	4 x 6mm ²	4 x 10mm ²
Output cable	3 x 10mm ²	3 x 16mm ²	3 x 10mm ²	3 x 10mm ²	3 x 16mm ²
Mains connection (X2)	Harting Han k4/0				
DC-connection (X1)	Harting Han 2 MOD				

Maris Remote Control	
Type	RC4
Interface compatibility	AS 3, AS 4, AS 4 F (with Adapter)
Control connection	25-pol. Sub.-D
Operating voltage	24V DC, internal voltage supply via interface
Indication	3½-digit LCD, switchable to actual value power, actual value current and actual value voltage, set point, reference voltage
Modes of operation	Switchable: Operation via remote control or via front panel
Control	Switchable: Current, voltage or power control
Set value setting	Potentiometer with 10-turn-dial mechanism
Size	280mm x 140mm x 110mm
Weight	Ca. 0,7kg (without cable)

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In case of any trouble, or if you just have a question, feel free to contact either company at any time. We shall be glad to help you.