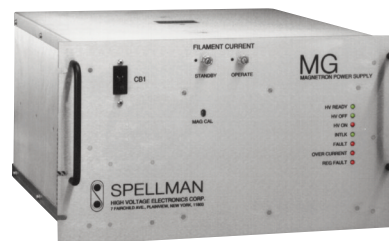


MG36-36kW Supply

- **CURRENT OUTPUT SOURCE**
- **LOW STORED ENERGY**
- **FAST FAULT SHUTDOWN (<30 SEC)**
- **PROVISION TO LIMIT MICROWAVE REFLECTED POWER**
- **PROGRAMMABLE FILAMENT SUPPLY**
- **OVERVOLTAGE, OVERCURRENT, ARC, AND SHORT CIRCUIT PROTECTION**
- **LOW COST**
- **LIGHTWEIGHT**
- **OEM CUSTOMIZATION AVAILABLE**

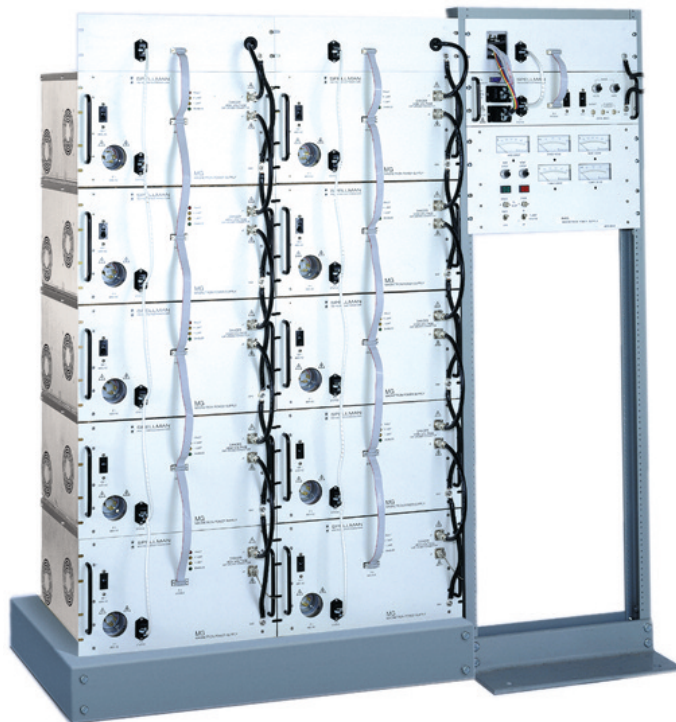


MG10/MG12-10kW/12kW Supply

Spellman's MG Series of magnetron HV power supplies are rugged, high frequency, high efficiency units designed specifically to power CW magnetrons ranging from 10kW to 120kW. They contain filament and optional magnet control supplies to provide a complete drive system.

TYPICAL APPLICATIONS

- Industrial Cooking
- Powder Drying
- Rubber Vulcanization
- Sintering of Ceramics
- Processing of Radioactive Waste
- Plasma Generation



MG120-120kW Supply

SPECIFICATIONS

Input:

480Vac±10%, 3 phase, 50/60Hz. 400Vac and 440Vac optional. Specify with order.

Output Voltage:

See Table.

Output Current:

See Table.

Output Power:

See Table.

Voltage Regulation:

Load: 0.5% for 0 to 100% change in output current.
Line: ±0.1% for ±10% change in line voltage.

Current Regulation:

Load: 0.5% of rated current for any voltage change.
Line: ±0.1% of rated current over the specified input range.

Current Ripple: 5% rms.

Lower ripple available on special order.

Temperature Range:

Operating: 0°C to +40°C.
Storage: -40°C to +85°C.

Front Panel Metering:

Voltage and current meters optional.

Voltage and Current Programming:

10V = full output, Z in ≥1 megohm

Voltage Monitor:

0 to 10V = 0 to full output kV, Z out = 1Kohm.

Current Monitor:

0 to 10V = 0 to full output current, Z out = 1Kohm.

Filament Supply:

The power supply provides a regulated filament current at the secondary of an external filament isolation transformer supplied with each unit.

Magnet Power Supply:

See Table.

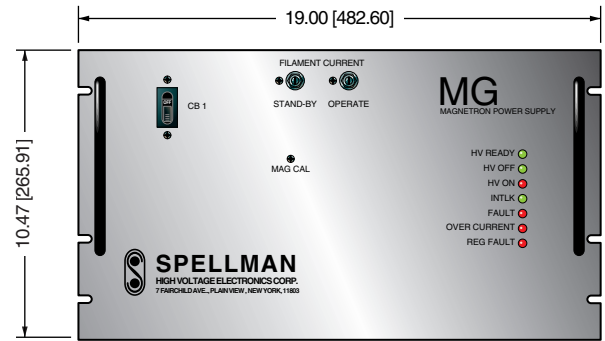
Regulatory Approvals:

Compliant to 2004/108/EC, the EMC Directive and 2006/95/EC, the Low Voltage Directive.

MG SELECTION TABLE

	MODEL	MG10/MG12	MG36	MG72	MG120
RF Power max	kW	6/8.5	20	60	100
DC Power max	kW	10/12.5	36	72	120
V max	-kV	8	15	17	20
I max	A	1.25/1.7	2.5	5	6
V Fil Preheat	V	5	10	12.6	14
I Fil Preheat	A	33/52	50	115	115
Time Preheat	Sec	10	180	180	180
I Fil @ I max	A	0/40	20	86	74
I Magnet	A	3	5	5	5
V Magnet	V	16	50	50	50
Height	in(mm)	10.5 (26.7)	36.75(93.4)	72(183)	63(160)
Width & Depth		19" x 19" (48.26 x 48.26cm)			2 x 19"x19"
Weight	lb(kg)	55 (25)	275(125)	310(141.2)	600(275)

DIMENSIONS: in.[mm]



Model MG10/MG12-10kW/12kW Supply

ANALOG CONTROL INTERFACE

P4	SIGNAL	P4	SIGNAL
1	Return	14	I Program
2	Return	15	I Anode Monitor
3	Return	16	V Cathode Monitor
4	Return	17	Magnet Program
5	Return	18	Magnet Monitor
6	Return	19	Filament Program
7	Return	20	I Filament Monitor
8	Return	21	Control Fault
9	Return	22	+10V Reference
10	Return	23	RF Arc
11	Spare	24	Spare
12	Spare	25	Spare
13	Spare		

DIGITAL INTERFACE & AUX. POWER

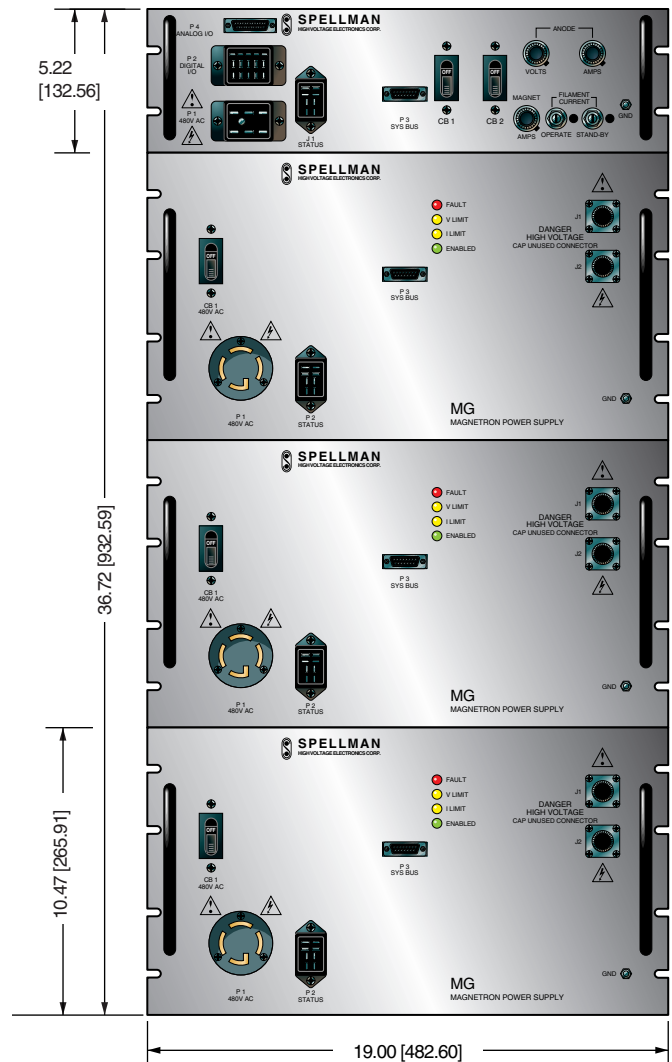
P2	SIGNAL	P2	SIGNAL
1	110Vac Input	9	Arc Detect
2	110Vac Return	10	Control Fault
3	HV Enable	11	Breakers Healthy
4	HV On	12	Temp Warning
5	Power On	13	Fault 1
6	Filament Warmup	14	Fault 2
7	Filament Ready	15	Fault 3
8	HV On Indicator		

POWER, FILAMENT & MAGNET CONNECTIONS

P1	SIGNAL	P1	SIGNAL
7	480Vac (Phase A)	10	Filament Out-A
8	480Vac (Phase B)	11	Mag. Output +
9	Filament Out-B	12	Mag. Output Rtn.



FRONT VIEW



Model MG36-36kW Supply