

MAGNET POWER SUPPLY 853 SYSTEM 8000

SPECIFICATIONS

DC OUTPUT RATINGS:

- Power range : 5 - 300 kW
- Standard current range : 120 - 2000 A
- Standard voltage range : 10 - 300 V

PERFORMANCE:

All drift and regulation data are given for max. current output.

- Warm up time (cold start) : 30 min.
- Warm up time (from stand by) : 15 min.

- Drift:
 - Short term 30 min. (fwhm) : < +/- 3 ppm, optional < +/- 1 ppm
 - Long term 8 hours (fwhm) : < +/- 10 ppm, optional < +/- 3 ppm

- Line regulation:
 - +/- 10% slow, T > 1 min. : < 0.5 ppm
 - +/- 1% fast, T > 3 m sec. : < 0.5 ppm

- Load regulation:
 - +/- 10% resistance change : < 0.5 ppm

- PARV (Periodic and Random Variations):
 - Output voltage f > 1 Hz (resistive load) : 5 mV + 0.01% of V_{out}

- Temperature coefficient:
 - Ambient : 1 ppm/°C

- Ramp. time 0-full scale (load dependent) : 10 - 200 sec.
 - MPS with preregulator : 60 - 200 sec.

- DC output isolation resistance : > 1 Mohm
(without earth leakage detector and cooling water)

- Output polarity switch : Remote controllable (optional)

- Current setting resolution:
 - Standard : 16 bit (15 ppm)
 - Optional : 18 bit (4 ppm)
 - Current fine control (optional) : Up to +/- 1500 ppm for +/- 0.6 mA
- Absolute calibration of current : < 400 ppm
- Current readback resolution:
 - Standard : 8 bit (3906 ppm)
 - Optional : 16 bit (15 ppm)

INPUT/OUTPUT INTERFACES

OPERATOR CONTROL PANEL, TYPE M

- Current setting by knob control with a digital bit generator. Three resolution ranges for the control of 1/10, 1/1000, and 1/100,000 per rev. of full scale.
- Alphanumeric LCD display - with push-button selection of:
 - Preset output current (%)
 - Actual output current (%) - A (optional)
 - Output output voltage (%) - V (optional)
 - Transistor passbank voltage
 - Interlock status text string
- Regulation system status readback:
 - Polarity (LED)
 - Local remote (LED)

COMPUTER INTERFACE

- RS232C/RS422
- RS422 Multidrop
- IEEE-488 (GPIB) (optional)
- Customer specified interface

INTERLOCKS

- DC overcurrent and overload
- Regulation module failure
- Phase failure, thermal breaker
- Overtemperature
- Water flow and earth leakage (optional)
- Two user supplied inputs for remote shutdown

TEMPERATURE RATINGS

- MAIN COOLING : Water
- OPERATING TEMPERATURE Ambient : 15 to 35°C
 Water : 15 to 35°C
- STORAGE TEMPERATURE : -20 to 50°C
- COOLING WATER PRESSURE:
 - Minimum diff. : 3 bar
 - Max. absolute : 12 bar
 - Test pressure : 15 bar

AC INPUT:

- CONTROL VOLTAGE,
single phase, 50-60 Hz, +/- 5%,
standard : Europe 220 V, USA 115 V

available on request : 110 V, 240 V
- MAINS VOLTAGE,
3 phase, 3 or 4 wire, 50-60 Hz, +/- 5%,
standard : Europe 380 V, USA 480 v

available on request : 208 V, 415 V, 565 V

CABINET:

Steel cabinet - welded structure.

Dimensions W x H x D : See SYSTEM 8000 general brochure
or ask for assy drawing of specific
power supply.

Weight : Same as above.

OPERATOR CONTROL PANEL:

Removable W x H x D : 483 x 88 x 75 mm

Specifications are subject to change without notice.