

High-Performance, High-Quality



Introduction

Eaton's PSG Series of power supplies is designed to be a high-performance, high-quality line of products covering the majority of 24 Vdc control applications. With global certifications, compact size and an impressive operating temperature range, the PSG series fits a wide variety of applications at a competitive price.

The PSG family includes eight DIN-rail mounted power supplies with varying input and output ratings:

85 – 264 Vac Input Models:

- PSG60E — 2.5 amperes
- PSG120E — 5 amperes
- PSG240E — 10 amperes
- PSG480E — 20 amperes

320 – 575 Vac Input Models:

- PSG60F — 2.5 amperes
- PSG120F — 5 amperes
- PSG240F — 10 amperes
- PSG480F — 20 amperes

These products are the perfect complement to Eaton's other power supply products, which include the PSS series, ELC, EZ and sensor power supplies.

What's Important to You?

The PSG series was designed with your needs in mind. With comprehensive safety features, high reliability and a small footprint, the PSG is sure to give you a competitive advantage in your markets.

Safety

Eaton is committed to providing a safe power source for everyone that installs, operates and repairs equipment. Some of the many safety features included in the design of the PSG are:

- Class I, Division II protection ensures the product won't spark when flammable materials are present.

- Large screw terminals with a finger-safe protective cover allow easy access when wiring the unit without the need for special tools and tiny screwdrivers. Finger protection is maintained during operation.
- Surge protection against transient and internal surges prevents fires from lightning strikes and other voltage disruptions.



Powering Business Worldwide



Uptime and Reliability

Many standard features in the PSG allow for increased equipment uptime.

- Mean Time Between Failures (MTBF) of up to 800,000 hours minimize field maintenance and replacement.
- Wide operating temperature range means you'll have clean power even in harsh environments.
- LED indicator reduces troubleshooting time and gets you back online faster.
- Rugged, all-metal housing reduces potential for damage to the internal electronics.
- Power boost (outrush/current surge) of 1.5 times nominal current for 1 second allows start-up of tough loads and increases system uptime when downstream supplemental protection is used.

Environmental Responsibility

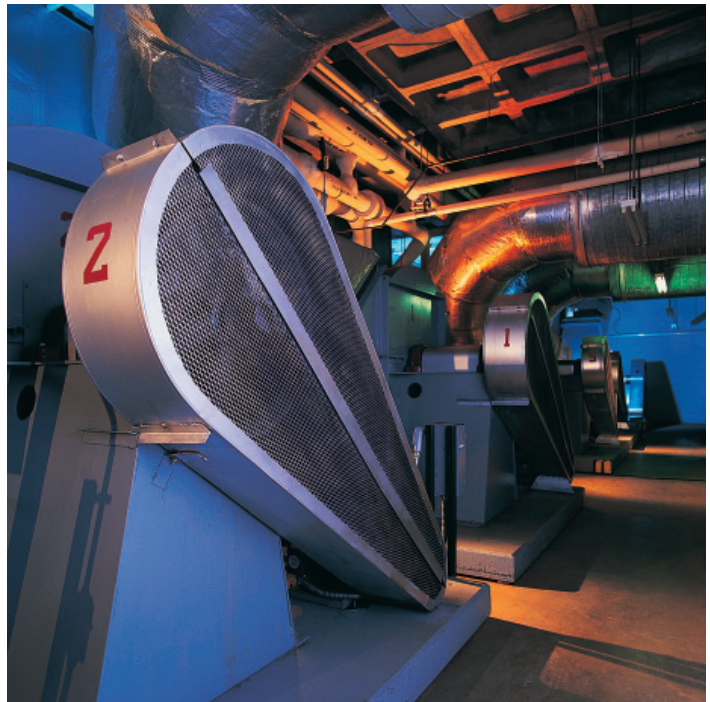
Eaton's commitment to the environment and sustainability of resources is a fundamental business philosophy. The PSG series is no exception.

- RoHS compliance eliminates hazardous substances and improves the ability to recycle our products.
- High efficiencies ensure the incoming power is effectively utilized and waste is minimal.
- Small footprint reduces space requirements and allows use of smaller panels and fewer raw materials.



PSG SPECIFICATIONS

Description	Specification
Input Voltage Range	Single-phase units ("E" suffix): 85 – 264 Vac/ 120 – 375 Vdc Three-phase units ("F" suffix): 320 – 575 Vac/450 – 800 Vdc
Input Frequency	47 – 63 Hz (0 Hz at dc input)
Input Fusing	All units are protected with internal fuse
Nominal Output Voltage	24 Vdc ±2%
Output Voltage Adjustment	22 – 28 Vdc
Efficiency	>84% all models
Power Boost (Outrush/Current Surge)	150% of nominal current
Power Boost Time/Cycle	1 second @ 10-second intervals
Residual Ripple	<50 mV
Parallel Operation	Allowed with external ORing diode protection
Galvanic Isolation	Input/output, input/ground, output/ground
Housing Material	Aluminum (Al5052)
Signals	Green LED of dc OK
Operating Temperature	-20°C to +75°C (>50°C derating), <95% non-condensing RH
Certifications & Standards	UL®/cUL® listed-UL508, cURus-UL60950-1, CSA®, CE, IEC, German Safety, RoHS, EN 60204, EN 50178, PELV (EN 60204), SELV (EN 60950), DIN 57100-410, EN 610003-2, EN 61000-6-2, EN 61000-4-2...EN 61000-406, EN 61000-4-11, EN 61000-6-3



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