

made
in
Germany

Data Sheet

Switching Power Supply . Three Phase

Switched-Mode Power Supply (SMPS)



PS3-2440

24 VDC - 40 A

Input	Three-Phase. 400 Vac - 480 Vac
Output	24 Vdc - 40 A (One Output)
Efficiency	Up to 86%
Power Continuity	Strong Overload Without Switch-Off
Protection	From 720 W to 960 W - Flexible
Installation	1) Short-Circuit Protection
Size	2) Over-Voltage Protection
Warranty	DIN Rail Mountable
	Extremely Small Size
	1 Year



Features

Input Data

Nominal Input Voltage (3 x Vac)	400 Vac - 480 Vac
Input Voltage range (Vac)	360 Vac to 530 Vac (400-480 Vac)
Inrush Current (Vn and In Load) I ² T	≤ 10 A ≤ 5 msec.
Frequency	47 Hz to 63 Hz ±6%
Input Current (400 Vac - 480 Vac)	1.7 A - 1.5 A
Internal Fuse	T 6.3 A
External Fuse (recommended)	Fast 6 A

Output Data

Output Voltage (Vn) / Nominal Current (In)	24 Vdc ±3% / 40 A
Adjustment Range (Vadj)	22 Vdc to 26 Vdc
Start Up with Strong Load (Capacitive Load)	≤ 30.000µF
Turn-On Delay After Applying Mains Voltage ¹	≤ 1 sec. (Approx.)
Max. Continuous Current	1.1 × In ± 5%
Reserve Out Current (Max. 1 min. 50 °C)	I_{max} = In + 25% (Approx.)
Hold-up Time (at 100 Vac - 240 Vac)	Typ. 27 msec
Residual Ripple	≤ 100 mV_{pp}
Minimum Load	No
Efficiency	≥ 86 %
Short-Circuit Protection (Hiccup Mode)	Yes
Over Load Protection (Hiccup Mode)	Yes
Over Voltage Output Protection	Yes. (Max. 35 Vdc)
Parallel Connection	Yes

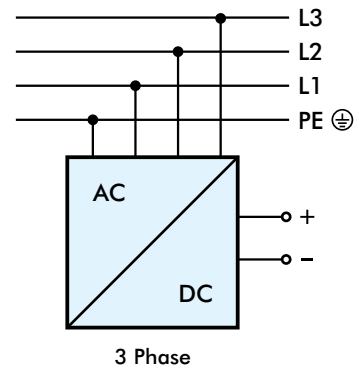
Climatic Data

Ambient Temperature Operation	-10 °C Up to +70 °C (>50° Derating 2.5% °C)
Ambient Temperature Storage	-25 °C Up to +85 °C
Humidity, No Moisture Condensation	95 % to 25 °C

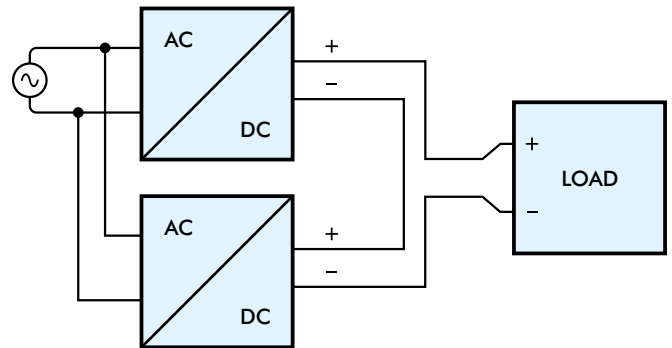
General Data

Isolation Voltage (Input / Output)	3000 Vac
Input / Ground Isolation PE (Input / PE)	1605 Vac
Output / Ground Isolation PE (Output / PE)	500 Vac
Degree of Protection (EN/IEC 60529)	IP20
Protection Class	I with PE Connected
Dimension (W-H-D)	250 mm × 150 mm × 160 mm
Weight	4.4 kg Approx.

Connection

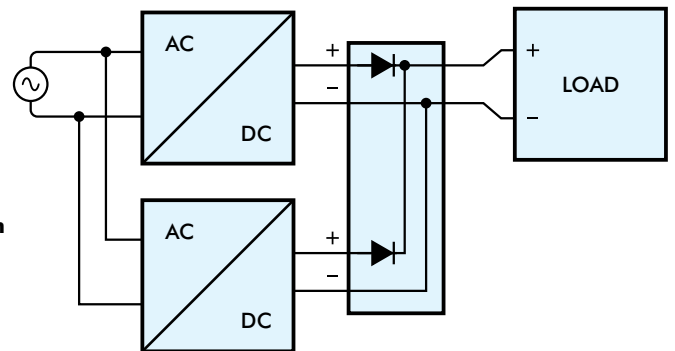


Serial Connection

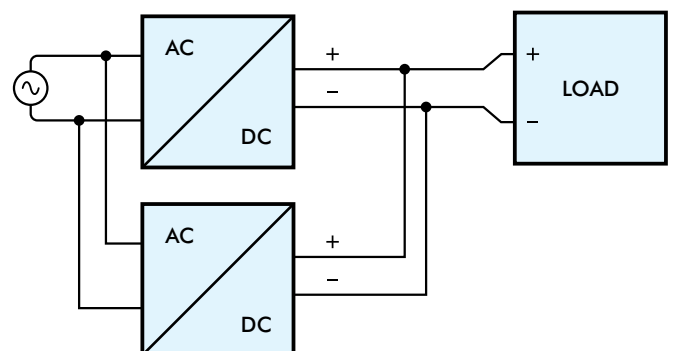


Parallel Connection

Parallel Connection Redundancy



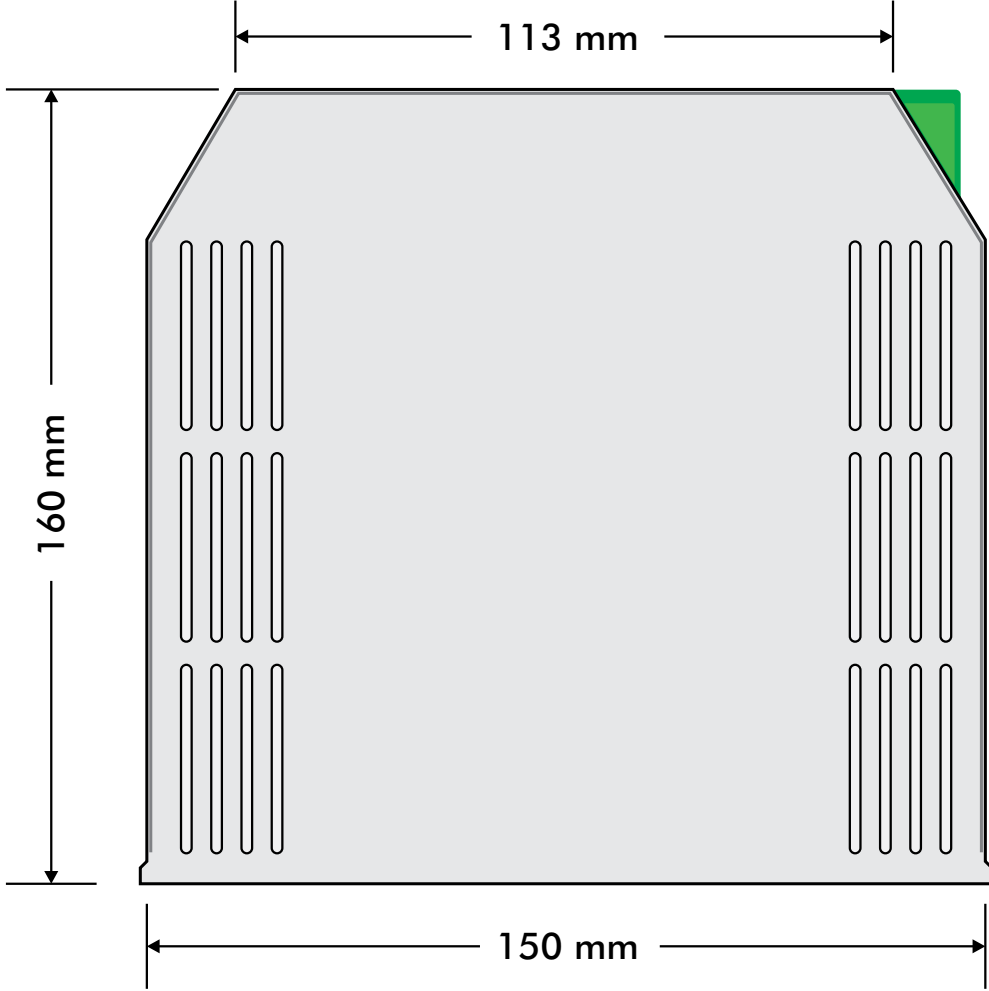
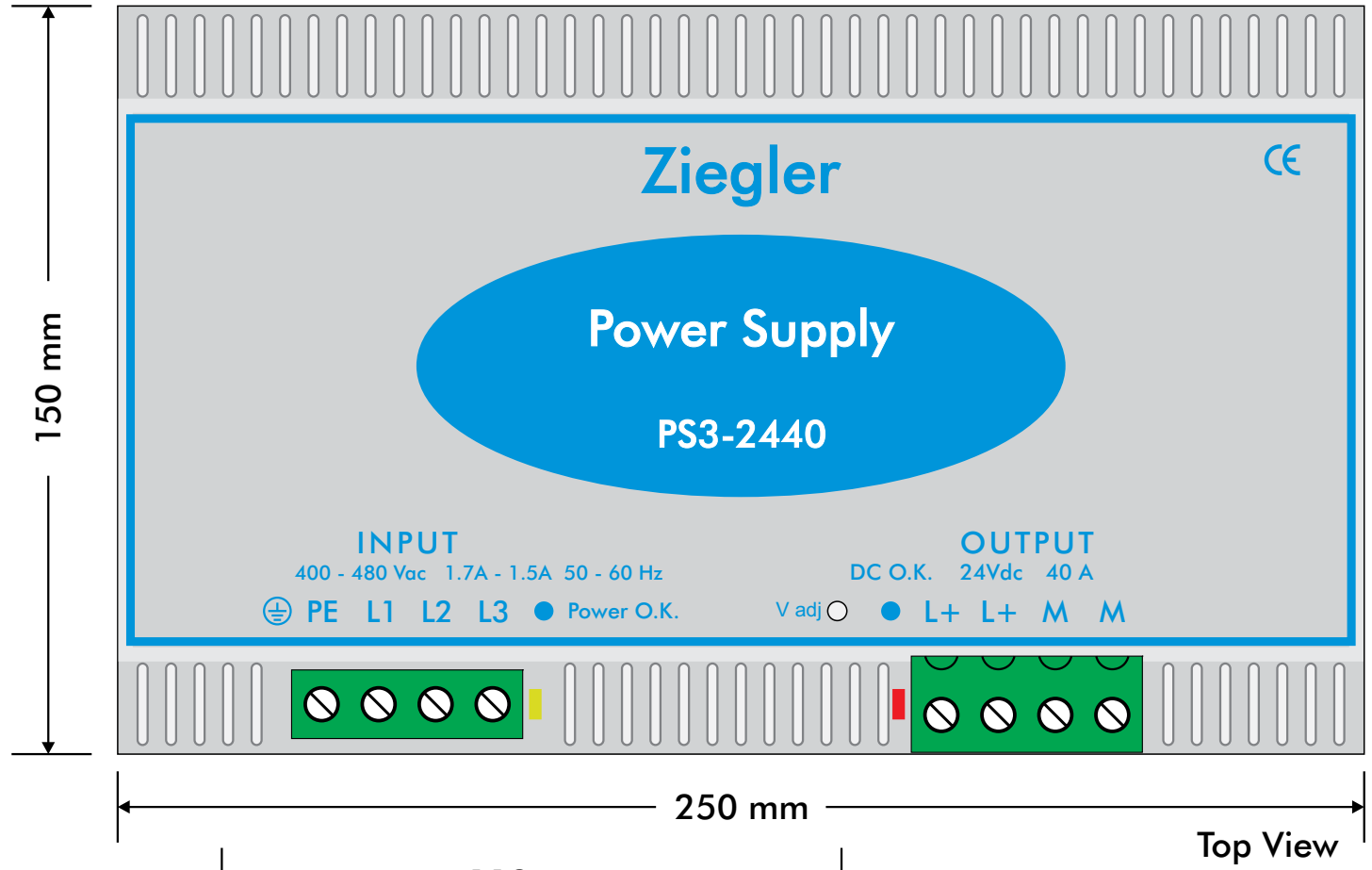
Parallel Connection, to Increase Output Power



¹: Switching On Delay Applying Mains Voltage

Features

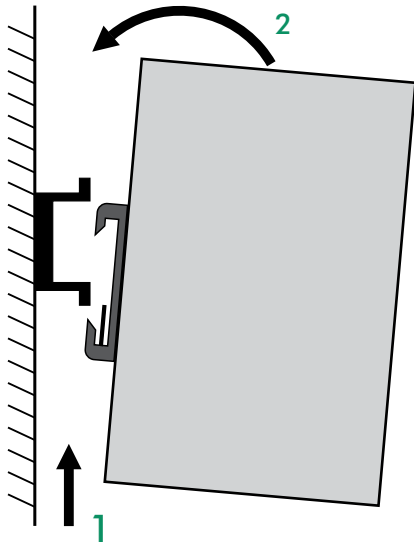
Connection



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Rail Mounting

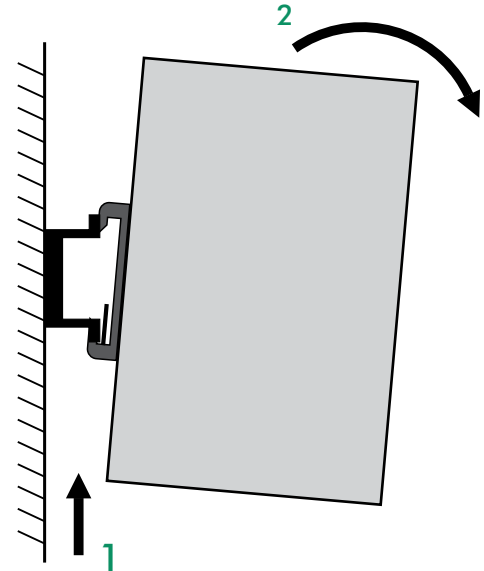
■ Assembly



- ▶ Place the Module with the Mounting Rail Guide at the Lower Edge and Snap in with an Upward Movement.



■ Disassembly



- ▶ Push the Module Upwards and Pull.

Other Models / Modules Must have a Minimum Vertical and Horizontal Distance of 10 cm to This Power Supply in Order to Guarantee Sufficient Auto Convection. Depending on the Ambient Temperature and Load of the Device, the Temperature of the Housing Can Become Very High.

Standards and Certification

Norms and Certifications

The CE Mark in According to EMC 89/336/EEC and Low Voltage 93/68/EEC.

Electrical Safety

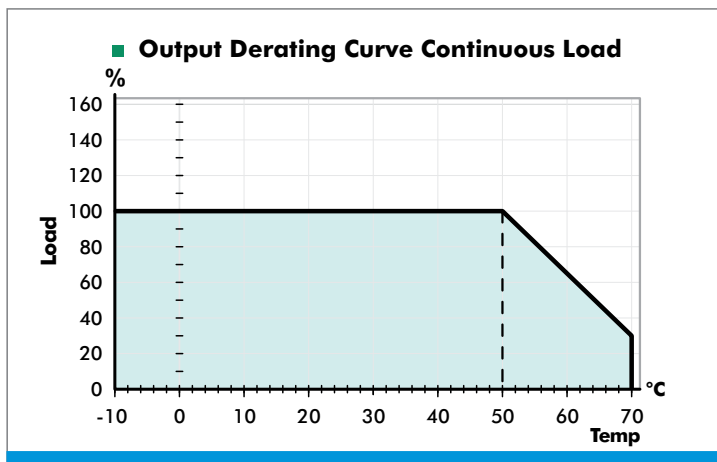
According to IEC/EN 60950 (VDE 0805) e EN 50178 (VDE0160) for Assembling Device. The Unit Must be Installed According to IEC/EN 60950.

Generic

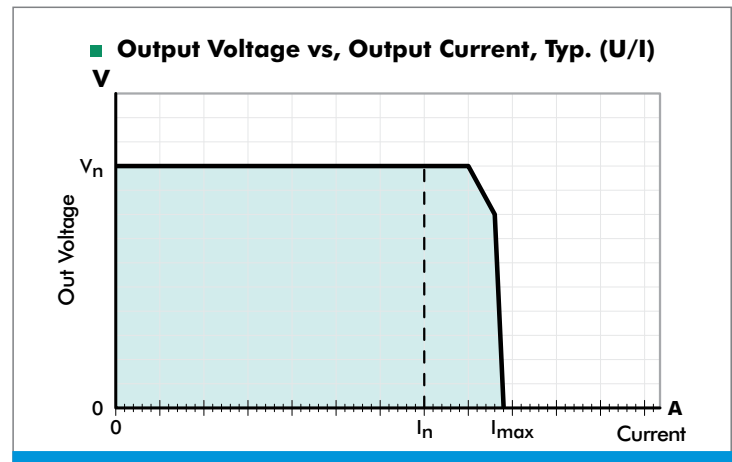
Immunity According to EN 50082-2 Level 4 Class B.

Noise Radiation According to EN 55011.

Temperature Ratings



Output Device



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