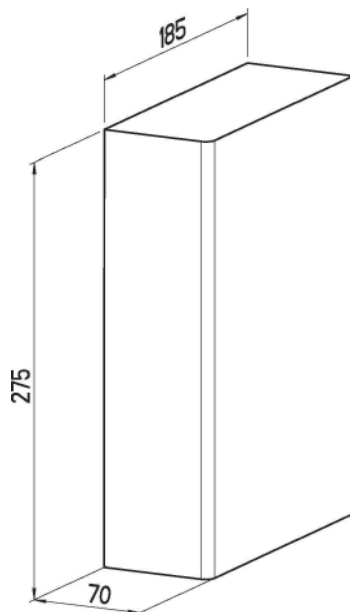


**INTERMEDIATE CIRCUIT POWER SUPPLY  
PRIMARY SWITCHED · SINGLE OUTPUT  
SUH1000-2440 (INPUT: AC AND DC)**



- 960 watts output power
- Only 70 mm wide
- Optimized for Intermediate DC-bus
- Input: AC 3 x 340 - 550 V  
DC 350 - 780 V permanent  
DC 780 - 910 V for max. 2 min
- Output: DC 22.5 - 26 V
- Advanced Power Boost up to 80 A for max. 2 s
- Primary and secondary overvoltage protection
- Overtemperature protection
- Operation possible in any installation position due to integrated fan
- Remote OFF
- DC-OK Relay Contact
- 3 Year Warranty



Dimensions W x H x D: 70 x 275 x 185 (+25 for connector) mm  
Detailed dimension drawing on request or [www.mgv.de](http://www.mgv.de)



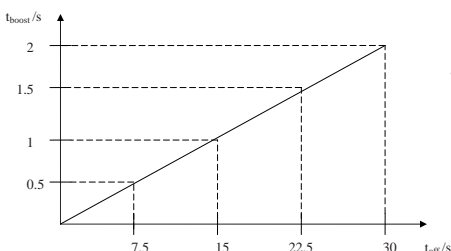
There should be a distance of at least 50 mm between the air inlets and outlets and the surrounding devices. Please ensure that the air extracted is not immediately sucked in again.

**ORDER DATA**

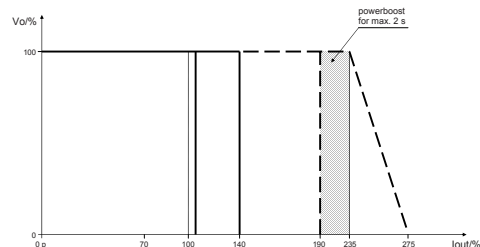
Vo V	Io A	Adjustment range Vo V	Input voltage range	Type number Order number
24	0 - 40	22.5 - 26	AC 3 x 340 - 550 V DC 350 - 780 V permanent DC 780 - 910 V continuous operation at < 70 % duty cycle is allowed, 100 % duty cycle for max. 2min	SUH1000-2440 14.5944.305 Wall mounting

**INTERMEDIATE CIRCUIT POWER SUPPLY  
PRIMARY SWITCHED · SINGLE OUTPUT  
SUH1000-2440 (INPUT: AC AND DC)**

<b>1. INPUT</b>		<b>6. EMC</b>	
Input voltage range	AC 3 x 340 - 550 V DC 350 - 780 V permanent DC 780 - 910 V for max. 2 min	EMC-measurements with filter and B6-bridge:	External filter: Schaffner FN 3258-7-45 or Schaffner FN 3258-30-47
DC-bus operation is <b>only possible with passive B6-bridge.</b>		Flicker	EN 61000-3-3
Input ripple DC-bus	max. 10 V <sub>eff</sub>	Interference immunity	<b>EN 61000-6-2</b> Industrial generic standard
Input current limitation AC	≤ 35 A <sub>peak</sub> typ. in cold state ≤ 70 A <sub>peak</sub> typ. in hot state	Electrostatic discharge	EN 61000-4-2 8/15 KV
Efficiency	91 % typ.	Electromagnetic RF field	EN 61000-4-3 Noise level 10 V/m (Crit. A)
Internal fuse AC-input	intern 3 x 6.3 AT, external fuse with 16A to max. 32 A necessary (C, D, K)	Burst	EN 61000-4-4 4 KV (Crit. A)
Internal fuse DC-input	with DC-fuse 6 AF protected	Surge	EN 61000-4-5 4/2 KV (Crit. A)
<b>2. OUTPUT</b>		Conducted disturbance	EN 61000-4-6 Noise level 10 V (Crit. A)
Adjustment range Vo	DC 22.5 - 26 V factory-adjusted 24 V +/- 0.1 V	Magnetic fields	EN 61000-4-8 30 A/m
Max. output power	960 watts (I <sub>max</sub> = 40 A, I <sub>max boost</sub> = 80 A)	Mains voltage dips	EN 61000-4-11
Powerboost	Boost for 2 s possible, with break necessary afterwards (see diagram)	Interference emission	<b>EN 61000-6-3</b> Generic standard for living area EN 55022, EN 55011 Class B Radiation depends on assembly
Operation indicator	green LED for Vo / red LED for error	<b>7. OPERATING DATA</b>	
Ripple	50 mV <sub>ss</sub> typ	Temperature range	0...70 °C, integral temperature controlled fan, air intake bottom-up
Noise voltage	100 mV <sub>ss</sub> typ	Derating	1.25 % / K at +60 °C
Temperature coefficient	≤ 0.025 % / K	Weight	3.0 kg
Switch on / switch off	No Vo overshoot (soft-start)	Due to the integrated fan, the SUH1000 can be installed in any position. The passage of air must not be obstructed by installation. The distance to the air vents must be at least 50 mm. Fire protection must be ensured via the outer casing system.	
Start-up delay	≤ 1 s	<b>8. MECHANICS</b>	
Rise time	< 16 ms / 54 ms typ. at 100,000 µF Last	Connection: AC-input	4-pole, pluggable 1.5 - 4 mm <sup>2</sup> strand / wire min. tightening torque 0.5 Nm
Back feeding voltage	max. 35 Vdc	DC-input	3-pole, pluggable 1.5 - 4 mm <sup>2</sup> strand / wire min. tightening torque 0.5 Nm
Serial connection	on request	Load output	5-pole, pluggable 1.5 - 16 mm <sup>2</sup> strand / wire min. tightening torque 1.7 Nm
Parallel connection	yes, max. 3 identical power supplies	Control signals	5-pole, pluggable 0.14 - 1.5 mm <sup>2</sup> strand / wire min. tightening torque 0.22 Nm
Battery operation	on request	Assembly	The device can be fastened to an installation plate using the brackets. Please see the detailed dimensioned drawing for the exact dimensions of the holes.
<b>3. REGULATION</b>		<b>9. EXPLANATION</b>	
Line regulation	< 0.2 % for Vo at Vi <sub>min</sub> - Vi <sub>max</sub>	PE 	<b>Protective conductor</b> <b>Do not use supply without PE connection!</b>
Load regulation	< 0.5 % for Vo at Io 0 - 100 %	L1/L2/L3	<b>Mains phases (AC-input)</b>
Response time	< 5 % for Vo at Io 0 - 100 % parallel mode	+Ue / -Ue	<b>Mains phases (DC-input)</b>
<b>4. PROTECTION AND CONTROLING</b>		+ / -	<b>Load connection</b>
Oversvoltage protection (OVP)	approx. 27 - 35 Vdc automatical repeating	Relay OK/FAIL	<b>Monitoring connections</b>
Current limitation	Straight characteristic (see diagram) output permanent short-circuit proof	Remote OFF	<b>Control connection</b>
Overtemperature protection	Switches off if inside temperature is too high, periodic restart	AUX	<b>auxiliary voltage output</b>
Relay contact	Relay contact (< 60 V/0.2 A), changing at Vo < 18 V or OVP from OK to FAIL	 Please read the MGV safety instructions on our homepage before use: <a href="http://www.mgv.de">www.mgv.de</a> .	
Remote ON/OFF	external switch-off with 5-30 Vdc/5 mA <sub>min</sub> or switch from AUX-output		
AUX (auxiliary voltage)	11 V / 10 mA		
<b>5. SAFETY AND STANDARDS</b>			
IEC 60950, EN 60950, EN61800, UL 508 CSA22.2-107, CSA22.2-60950, UL 60950 safety class I, pollution degree 2 SELV output circuit according EN60950			
<b>Ensure fire protection via the outer casing!</b>			



Context between Powerboost time and minimum break time



Current limiting characteristic