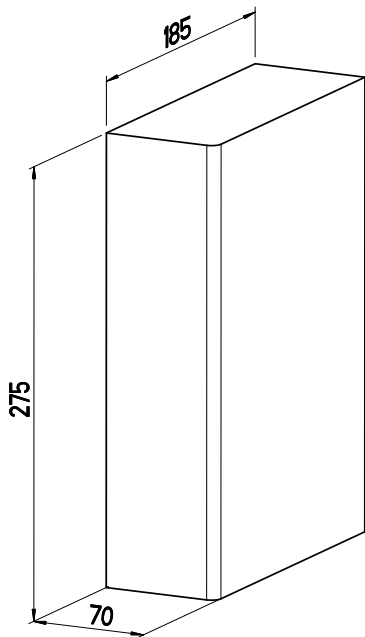


**INTERMEDIATE CIRCUIT POWER SUPPLY
PRIMARY SWITCHED · SINGLE OUTPUT
SDH1000-2440 (DC-INPUT)**



- 960 watts output power
- Only 70 mm wide
- Optimized for Intermediate DC-bus
- Input: 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





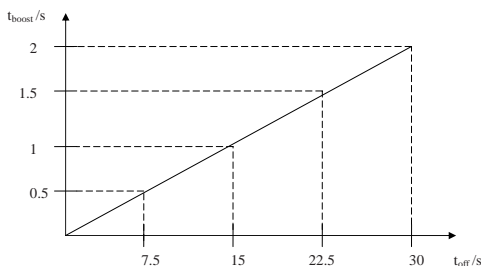
Dimensions W x H x D: 70 x 275 x 185 (+25 for connector) mm
Detailed dimension drawing on request or www.mgv.de

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.

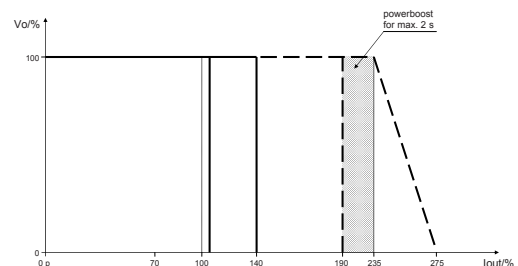
ORDER DATA				
Vo V	Io A	Adjustment range Vo V	Input voltage range	Type number Order number
24	0 - 40	22.5 - 26	DC 350 - 780 V permanent DC 780 - 910 V continuous operation at < 70 % duty cycle is allowed, 100 % duty cycle for max. 2 min	SDH1000-2440 14.5944.005 Wall mounting

**INTERMEDIATE CIRCUIT POWER SUPPLY
PRIMARY SWITCHED · SINGLE OUTPUT
SDH1000-2440 (DC-INPUT)**

<p>1. INPUT</p> <p>Input voltage range DC 350 - 780 V permanent DC 780 - 910 V for max. 2 min</p> <p>DC-bus operation is only possible with passive B6-bridge.</p> <p>Input ripple DC-bus max. 10 V_{eff}</p> <p>Efficiency 91 % typ.</p> <p>Internal fuse with DC-fuse 6 AF protected</p>	<p>6. EMC</p> <p>EMC-measurements with filter and B6-bridge: External filter: Schaffner FN 3258-7-45 or Schaffner FN 3258-30-47</p> <p>Interference immunity EN 61000-6-2 Industrial generic standard</p> <p>Electrostatic discharge EN 61000-4-2 8/15 KV</p> <p>Electromagnetic RF field EN 61000-4-3 Noise level 10 V/m (Crit. A)</p> <p>Burst EN 61000-4-4 4 KV (Crit. A)</p> <p>Surge EN 61000-4-5 4/2 KV (Crit. A)</p> <p>Conducted disturbance EN 61000-4-6 Noise level 10 V (Crit. A)</p> <p>Magnetic fields EN 61000-4-8 30 A/m</p> <p>Interference emission EN 61000-6-3 Generic standard for living area EN 55022, EN 55011 Class B Radiation depends on assembly</p>
<p>2. OUTPUT</p> <p>Adjustment range Vo DC 22.5 - 26 V factory-adjusted 24 V +/- 0.1V</p> <p>Max. output power 960 watts (I_{max} = 40 A, I_{max boost} = 80 A)</p> <p>Powerboost Boost for 2 s is possible, with break necessary afterwards (see diagram)</p> <p>Operation indicator green LED for Vo / red LED for error</p> <p>Ripple 50 mV_{ss} typ</p> <p>Noise voltage 100 mV_{ss} typ</p> <p>Temperature coefficient ≤ 0,025 % / K</p> <p>Switch on / switch off No Vo overshoot (soft-start)</p> <p>Start-up delay ≤ 1 s</p> <p>Rise time < 16 ms / 54 ms typ. at 100,000 µF Last</p> <p>Back feeding voltage max. 35 Vdc</p> <p>Serial connection on request</p> <p>Parallel connection yes, max. 3 identical power supplies</p> <p>Battery operation on request</p>	<p>7. OPERATING DATA</p> <p>Temperature range 0...70 °C, internal, temperature-regulated fan sucking in air from below</p> <p>Derating 1.25 % / K at +60 °C</p> <p>Weight 2.9 kg</p> <p>Due to the integrated fan, the SDH1000 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.</p>
<p>3. REGULATION</p> <p>Line regulation < 0.2 % for Vo at Vi_{min} - Vi_{max}</p> <p>Load regulation < 0.5 % for Vo at Io 0 - 100 % < 5 % for Vo at Io 0 - 100 % parallel</p> <p>Response time 1.5 ms at Io 20 - 80 %</p>	<p>8. MECHANICS</p> <p>Connection: DC-input 3-pole, pluggable 1.5 - 4 mm² strand / wire min. tightening torque 0.5 Nm</p> <p>Load output 5-pole, pluggable 1.5 - 16 mm² strand / wire min. tightening torque 1.7 Nm</p> <p>Control signals 5-pole, pluggable 0.14 - 1.5 mm² strand / wire min. tightening torque 0.22 Nm</p> <p>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.</p>
<p>4. PROTECTION AND CONTROLLING</p> <p>Overvoltage protection (OVP) approx. 27 - 35 Vdc automatical repeating</p> <p>Current limitation Straight characteristic (see diagramm) output permanent short-circuit proof</p> <p>Overtemperature Switches off if inside temperature is too high, periodic restart</p> <p>Relay contact Relay contact (< 60 V/0.2 A), changing at Vo < 18 V or OVP from OK to FAIL</p> <p>Remote OFF external switch-off with 5-30 Vdc/5 mA_{min} or switch from AUX-output</p> <p>AUX (auxiliary voltage) 11 V / 10 mA</p>	<p>9. EXPLANATION</p> <p>PE  Protective conductor Do not use supply without PE connection!</p> <p>+Vi / -Vi Input voltage connection</p> <p>+ / - Load connection (Vo)</p> <p>Relay OK/FAIL Monitoring connections</p> <p>Remote OFF Control connection</p> <p>AUX auxiliary voltage output</p>
<p>5. SAFETY AND STANDARDS</p> <p>IEC 60950, EN 60950, EN61800 CSA22.2-107, CSA22.2-60950 UL508, UL60950 safety class I, pollution degree 2 SELV output circuit according EN60950</p> <p>Ensure fire protection via the outer casing!</p>	<p> safety information www.mgv.de</p> <p>Please read the MGV safety instructions on our homepage before use: www.mgv.de.</p>



Context between powerboost time and minimum break time



Current limiting characteristic