



## Technische Informationen

*Architects and engineers specifications*

**H 2 5 0 0**

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**Power H SERIES**

- Stabile, sehr hohe Ausgangsleistung
- Sehr hoher Wirkungsgrad
- Sehr geringes Gewicht
- 3-stufige Grounded Bridge Class-H Topologie
- „Floating“ Schaltnetzteil
- Grosses LC-Display
- Integrierter Micro-Controller für interne Steuerung
- Nachrüstbare Remote Control Module für die Integration in IRIS-Net™ mit Fernüberwachung, Fernsteuerung, Digital Controller Funktionen und Digital Audio Inputs

- stable, very high power output
- very high efficiency
- very light weight
- 3-stage Grounded Bridge Class-H topology
- floating switching power supply
- large LC-display
- integrated micro-controller for internal control
- retrofitable remote control module for integration into the IRIS-Net™ with remote supervision, remote control, digital controller functions and digital audio inputs

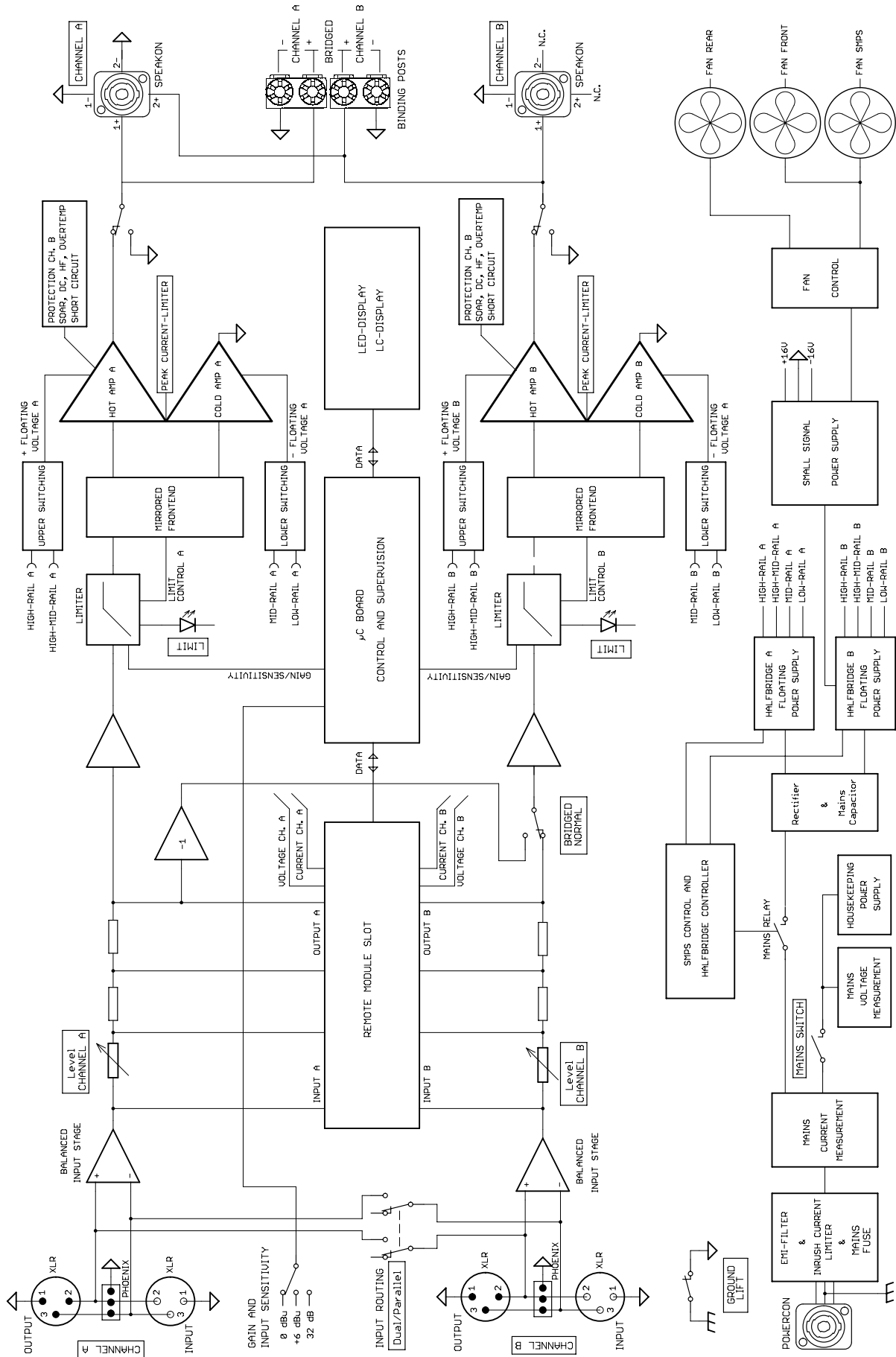
Die Endstufe H2500/H5000 gehört zur neuen PowerH SERIES von Dynacord, die einen Meilenstein in Design und Produktion von Hochleistungs-Endstufen darstellt. Die innovative 3-stufige Grounded Bridge Class H Topologie mit „Floating“ Schaltnetzteil bietet eine sehr hohe, stabile Ausgangsleistung bei sehr hohem Wirkungsgrad auf extrem hohem Performance-Niveau und dabei äußerst geringem Gewicht. Die PowerH-Endstufen sind damit der ideale Antrieb für professionelles Touring, High-End Concert-Sound sowie Pro-Sound Applikationen. Neben den klassischen Schutzschaltungen kommt erstmals das mehrstufige ATP-System (Advanced Thermal Protection) zum Einsatz. Durch dieses System kann in den meisten Fällen ein Abschalten der Endstufe bei Übertemperatur verhindert werden. Ein Ausfall der Endstufe durch das Auslösen des zur Absicherung der Endstufe verwendeten Sicherungsautomaten wird durch das neuartige MCS-System (Mains Current Supervision) verhindert. Hierzu wird unter anderem die hochpräzise Messung des RMS-Wertes des aufgenommenen Netzstromes verwendet. Informationen über den Status der Endstufe und der integrierten Schutzschaltungen werden über ein LC-Display angezeigt. Durch den optionalen Einsatz eines IRIS-Net™ kompatiblen Remote-Control-Moduls bietet die Endstufe zudem umfangreiche Fernüberwachungs- und Steuerungsfunktionen, sowie einen universellen 2-kanaligen digitalen Audio-Controller (DSP) einschließlich hochgenauer FIR-Filterung und digitaler Algorithmen zum Lautsprecherschutz.

The power amp H2500/H5000 is part of Dynacord's new PowerH SERIES, which marks a milestone in the design and the production of high-performance power amplifiers. The innovative 3-stage Grounded Bridge Class H Topology with "floating" switching power supply unit offers very high and stable output with extreme high efficiency on an extremely high performance level at minimum weight. PowerH amps are ideal for driving professional touring, high-end Concert-Sound and Pro-Sound applications. Next to classical protections, this new design employs the multi-stage ATP system (Advanced Thermal Protection) for the first time, which in most cases prevents the power amplifier from switching off when the temperature exceeds a critical level. The newly designed MCS system (Mains Current Supervision) prevents power amplifier breakdown caused by the activation of the automatic circuit breaker. For this, among other things, the MCS system uses the highly precise measurement of the RMS value of the actual mains current consumption. Information about the status of the power amplifier and its internal protections is provided on a LC-display. By utilizing the optionally available remote control module that is compatible with IRIS-Net™, this power amplifier additionally offers comprehensive remote monitoring and remote control functions plus a universal 2-channel digital audio controller (DSP) including highly precise FIR-filtering and digital speaker protection algorithms.

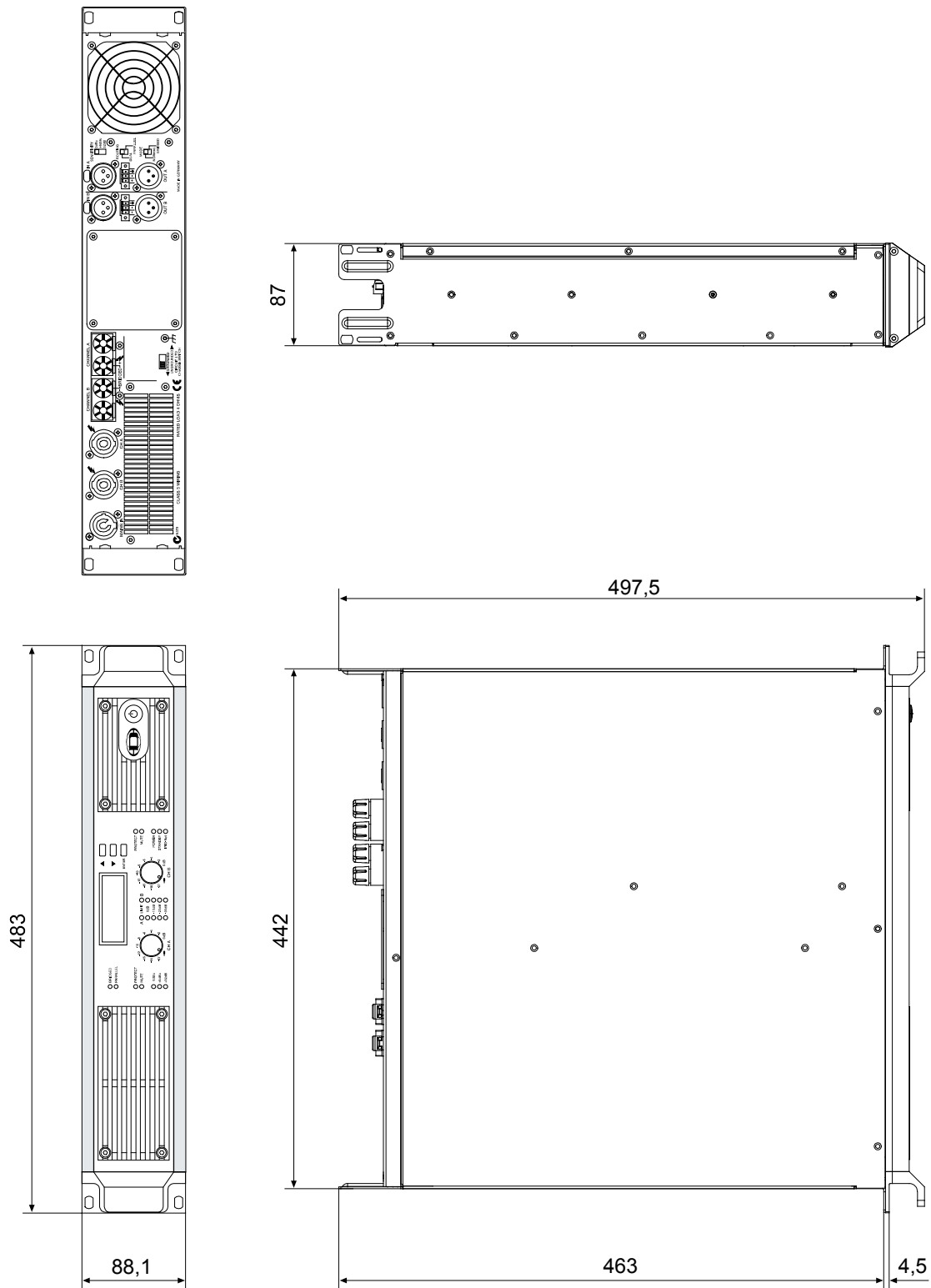
| <b>SPECIFICATIONS</b>  |   |               |               |  |               |               |
|--|---|---------------|---------------|--|---------------|---------------|
| Amplifier at rated conditions, both channels driven, 8 ohms loads, unless otherwise specified. |   |               |               |  |               |               |
|  | <b>H2500</b>  |               |               | <b>H5000</b>   |               |               |
| <b>Load Impedance</b>  | <b>2 ohms</b>   | <b>4 ohms</b> | <b>8 ohms</b> | <b>2 ohms</b>  | <b>4 ohms</b> | <b>8 ohms</b> |
| <b>Maximum Midband Output Power</b><br>THD = 1%, 1 kHz, Dual Channel                           | 2000W   | 1450W         | 850W          | 3500W  | 2500W         | 1500W         |
| <b>Rated Output Power</b><br>THD < 0.1%, 20 Hz...20 kHz  | -   | 1200W         | 600W          | -  | 2100W         | 1050W         |
| <b>Maximum Single Channel Output Power</b> Dyna-<br>mic-Headroom, IHF-A                        | 2400W   | 1700W         | 940W          | 4500W  | 3200W         | 1800W         |
| <b>Maximum Single Channel Output Power</b> Conti-<br>nuous, 1 kHz                              | 2050W   | 1600W         | 900W          | 4100W  | 2700W         | 1600W         |
| <b>Maximum Bridged Output Power</b><br>THD = 1%, 1 kHz   | -   | 3800W         | 2900W         | -  | 7000W         | 5000W         |
| <b>Maximum RMS Voltage Swing</b><br>THD = 1%, 1 kHz  | 95V   |               |               | 125V   |               |               |
| <b>Power Bandwidth</b><br>THD = 1%, ref. 1 kHz, half power @ 4 ohms                            | 10Hz...50kHz  |               |               |  |               |               |
| <b>Voltage Gain</b> , ref. 1 kHz   | 39dB / 35dB / 32dB (switchable)   |               |               | 41dB / 35dB / 32dB (switchable)  |               |               |
| <b>Input Sensitivity</b><br>rated power @8 ohms, 1 kHz   | 0dBu / +4dBu / +7dBu (switchable)   |               |               | 0dBu / +6dBu / +9dBu (switchable)  |               |               |
| <b>THD at rated output power</b><br>MBW = 80 kHz, 1 kHz  | < 0.05%   |               |               |  |               |               |
| <b>IMD-SMPTE</b><br>60 Hz, 7 kHz   | < 0.05%   |               |               |  |               |               |
| <b>DIM30</b><br>3.15 kHz, 15 kHz   | < 0.02%   |               |               |  |               |               |
| <b>Maximum Input Level</b>   | +22dBu (9.75Vrms)   |               |               |  |               |               |
| <b>Crosstalk</b><br>ref. 1 kHz, at rated output power  | < -80dB   |               |               |  |               |               |
| <b>Frequency Response</b> , ref. 1 kHz   | < 10Hz...30kHz ( $\pm$ 1dB)   |               |               |  |               |               |
| <b>Input Impedance</b> , active balanced   | 20 kohms  |               |               |  |               |               |
| <b>Damping Factor</b> , 1 kHz  | > 400   |               |               |  |               |               |
| <b>Slew Rate</b>   | 30V/ $\mu$ s  |               |               | 35V/ $\mu$ s   |               |               |
| <b>Signal to Noise Ratio Amplifier</b><br>A-weighted, 32 dB constant gain                      | 109dB   |               |               | 111dB  |               |               |
| <b>Output Noise</b> , A-weighted, sensitivity 32 dB  | < -70dBu  |               |               |  |               |               |
| <b>Output Stage Topology</b>   | Class H Grounded Bridge (2-stage)   |               |               | Class H Grounded Bridge (3-stage)  |               |               |
| <b>Power Requirements</b>  | 100-240V, 50-60Hz / 100V, 50-60Hz   |               |               |  |               |               |
| <b>Power Consumption</b><br>1/8 maximum output power @4 ohms                                   | 1000W   |               |               | 1450W  |               |               |
| <b>Protection</b>  | Audio Limiters, High Temperature, DC, HF, Short Circuit, Back-EMF, Peak Current Limiters, Inrush Current Limiters, Turn-on Delay, Mains Circuit Breaker Protection, Mains Over/Undervoltage |               |               | Audio Limiters, High Temperature, DC, HF, Short Circuit, Back-EMF, Peak Current Limiters, Inrush Current Limiters, Turn-on Delay, Mains Circuit Breaker Protection, Mains Overvoltage Protection |               |               |
| <b>Cooling</b>   | Front-to-Rear, 5-Stage-Fans   |               |               |  |               |               |
| <b>Ambient Temperatur Limits</b>   | +5°C...+40°C (40°F...105°F)   |               |               |  |               |               |
| <b>Safety Class</b>  | I   |               |               |  |               |               |
| <b>Dimensions</b> (W x H x D), mm  | 483 x 88.1 x 497.5  |               |               |  |               |               |
| <b>Weight</b>  | 14.2kg (31.3 lbs)   |               |               | 14.5kg (32.0lbs)   |               |               |

Depending on the ambient temperature, the unit might not operate continuously at 2 ohms load in Normal Mode or 4 ohms in Bridged Mode.

# Blockdiagram



Abmessungen / Dimensions (in mm)



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