



DPA-Q Series 4-Channel Amplifier Heat Loss

September 2019

Heat losses are the thermal emissions from an amplifier while it is operating. It comes from dissipated waste power—i.e., real AC power in minus audio power out. Measurements are provided for various loads at idle, all mute, standby, 1/8 of average full power, and 1/3 of average full power, with all channels driven simultaneously. For typical usage, use the idle and 1/8 power figures. Where an asterisk (*) appears, the data was not available at press time. The designation "na" means not applicable to the particular amplifier model and "nr" means the model is not rated for the particular load. This data is measured from representative samples; due to production tolerances, actual heat emissions may vary slightly from one unit to another. Bridged mono into 8 ohms is equivalent to 4 ohms per channel; into 4 ohms is equivalent to 2 ohms per channel.

NOTE: Power dissipation in DPA-Q amplifiers varies only minimally among different mains voltages. The data presented is representative of all operating mains voltages from 100 to 230 VAC.

| Model | Idle Thermal loss at idle or with very low signal level. | | Mute Thermal loss with all channels muted. | | Standby Thermal loss with the amplifier in standby. | | 1/8 Power Thermal loss at 1/8 of full power is measured with a pink noise signal. It approximates operating with music or voice with light clipping and represents the amplifier's typical "clean" maximum level, without audible clipping. Use these figures for typical maximum level | | | | | | | | 1/3 Power Thermal loss at 1/3 of full power is measured with a 1 kHz sine wave signal. It approximates operating with music or voice with very heavy clipping and a very compressed dynamic range. | | | | | | | | | | | |
|---------------------|--------------------------------------------------------------------|---------|------------------------------------------------------|---------|---------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|---------|--------|---------|--------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|
| | | | | | | | 70V | | | | 100V | | | | 8Ω | | | | 4Ω | | | | 2Ω | | | |
| | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr | BTU/hr | kcal/hr |
| DPA-2K4Q, DPA-2K4Qn | 345 | 87 | 106 | 27 | 150 | 38 | 611 | 154 | 618 | 156 | 614 | 155 | 539 | 136 | 843 | 212 | 768 | 194 | 683 | 172 | 860 | 217 | 1079 | 272 | 1382 | 348 |
| DPA-4K4Q, DPA-4K4Qn | 348 | 88 | 109 | 27 | 154 | 39 | 679 | 171 | 669 | 169 | 679 | 171 | 788 | 199 | 983 | 248 | 993 | 250 | 874 | 220 | 993 | 250 | 1195 | 301 | 1614 | 407 |
| DPA-8K4Q, DPA-8K4Qn | 590 | 149 | 123 | 31 | 270 | 68 | 1304 | 329 | 1263 | 318 | 1263 | 318 | 1304 | 329 | 1611 | 406 | 2126 | 536 | 1819 | 458 | 1819 | 458 | 2126 | 536 | 2826 | 712 |