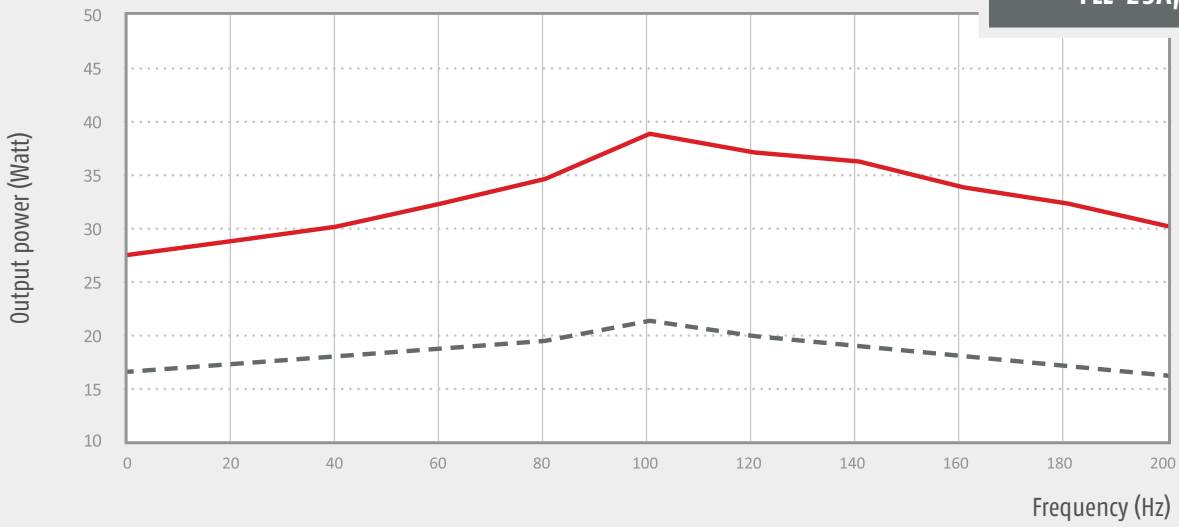


10 KHz – 300 MHz

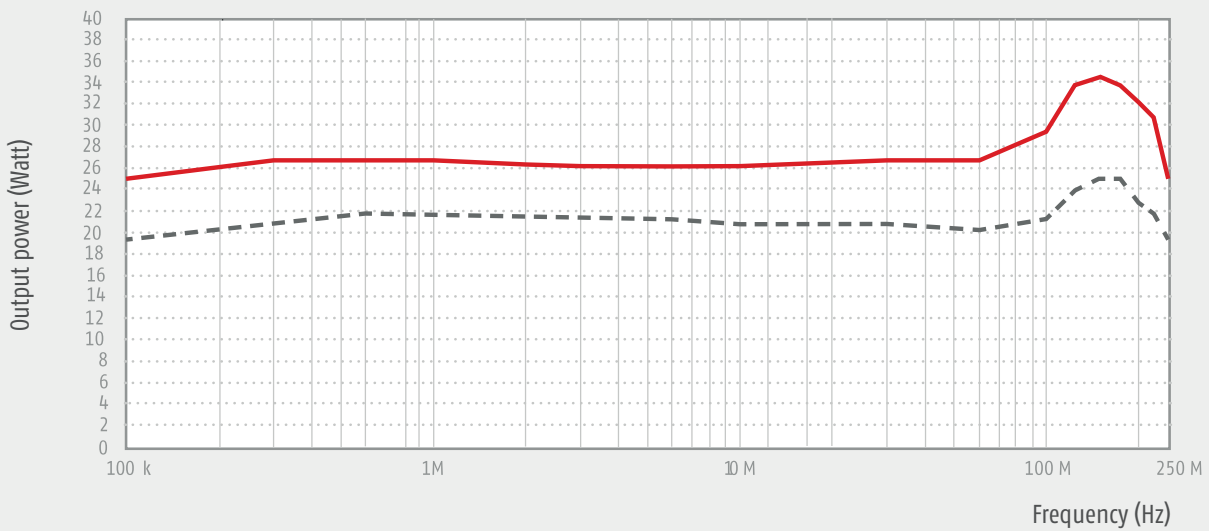
| Part Number | | FLL-25A | FLL-25 | FLL-75 |
|--|---|--|----------------------------------|--|
| Frequency range | | 10kHz-230MHz | 100kHz-250MHz | 100kHz-300MHz |
| Output Power typ. | | 25 W | 25 W | 75 W |
| Output Power @ 1dB Compression, typ. min | | see diagramm | see diagramm | see diagramm |
| RF Input, max. | | +3 dBm | 0 dBm | 0 dBm |
| Gain, typ. | | +43 dB | +46 dB | +51 dB |
| Flatness, typ. | | ±2 dB | ±1.5 dB | ±1.5 dB |
| IP3, typ. | | +48 dBm | +48 dBm | +52 dBm |
| Input VSWR, max. | | 2:1 | 1.5:1 | 1.5:1 |
| Harmonics @ 1 dB com., typ. | | -15 dBc @ 15 W | -20 dBc @ 20 W | -20 dBc @ 20 W |
| Spurious Signals @ 1 dB comp., typ. | | <-60 dBc @ 15 W | -75 dBc @ 20 W | -75 dBc @ 75 W |
| Input Output Impedance | | 50 Ω / 50 Ω | 50 Ω / 50 Ω | 50 Ω / 50 Ω |
| Connectors In / Out | | N(f)N(f) | N(f)N(f) | N(f)N(f) |
| Dimensions (mm) | W | 483 (19") | 483 (19") | 483 (19") |
| | H | 134 (3 HU) | 134 (3 HU) | 134 (3 HU) |
| | D | 508 | 436 | 436 |
| Weight | | 16 kg | 8 kg | 10 kg |
| AC Power Input (W) | | 300 | 150 | 400 |
| Power Supply (VAC) | | 100-240 | 88-264 | 100-240 |
| Phases | | 1 | 1 | 1 |
| Operating Humidity Non-Condensing (%) | | 95 | 95 | 95 |
| Cooling | | Internal forced air | Internal forced air | Internal forced air |
| Circuit Protection | | Thermal Overload Over Current Over Voltage | Thermal Overload Over Current | Thermal Overload Over Current Over Voltage |
| Following types available: | | S, E | S | S |

FLL-25A

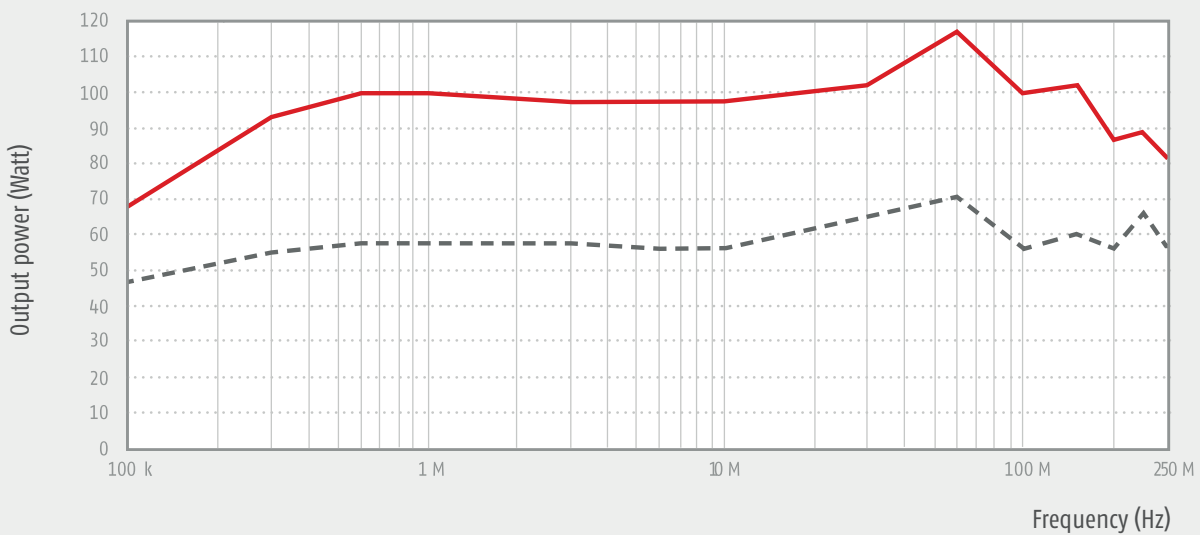
FLL-25A, FLL-25, FLL-75



FLL-25



FLL-75



Output Power (compression max. = 1dB)

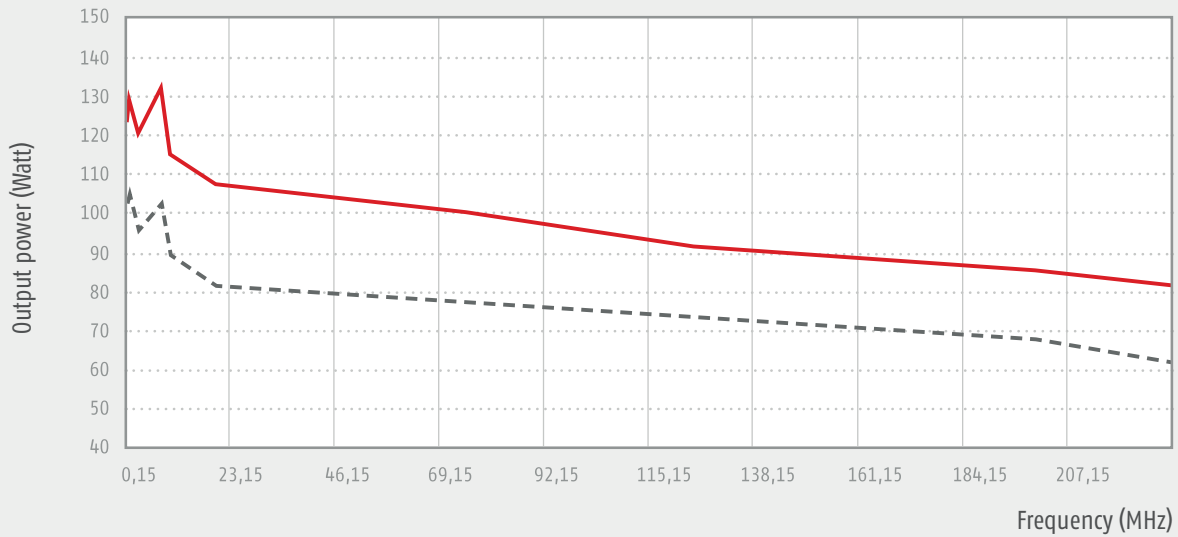
Output Power (compression max. = 3dB)



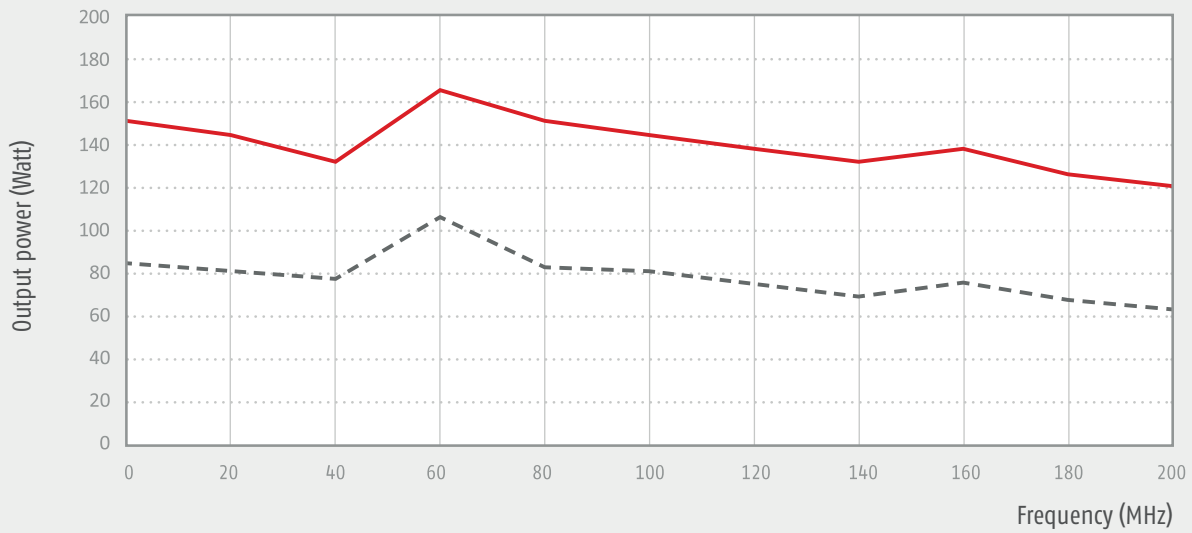
10 KHz – 300 MHz

| Part Number | | FLL-75A | FLL-100A |
|--|---|--|--|
| Frequency range | | 150kHz-230MHz | 10kHz-250MHz |
| Output Power typ. | | 75 | 100 |
| Output Power @ 1dB Compression, typ. min | | see diagramm | see diagramm |
| RF Input, max. | | 0 dBm | 0 dBm |
| Gain, typ. | | +51 dB | +50 dB |
| Flatness, typ. | | ±1.5 dB | ±2.5 dB |
| IP3, typ. | | +54 | +54 |
| Input VSWR, max. | | 2:1 | 2:1 |
| Harmonics @ 1 dB com., typ. | | -20 dBc @ 45W | -20 dBc @ 60W |
| Spurious Signals @ 1 dB comp., typ. | | <-60 dBc @ 45W | <-60 dBc @ 60W |
| Input Output Impedance | | 50 Ω / 50 Ω | 50 Ω / 50 Ω |
| Connectors In / Out | | N(f)N(f) | N(f)N(f) |
| Dimensions (mm) | W | 483 (19") | 483 (19") |
| | H | 134 (3 HU) | 223 (5 HU) |
| | D | 508 | 660 |
| Weight | | 17,5 kg | 26 kg |
| AC Power Input (W) | | 400 | 700 |
| Power Supply (VAC) | | 100-240 | 100-240 |
| Phases | | 1 | 1 |
| Operating Humidity Non-Condensing (%) | | 95 | 95 |
| Cooling | | Internal forced air | Internal forced air |
| Circuit Protection | | Thermal Overload Over Current Over Voltage | Thermal Overload Over Current Over Voltage |
| Following types available: | | S, E | S, E |

FLL-75A



FLL-100A

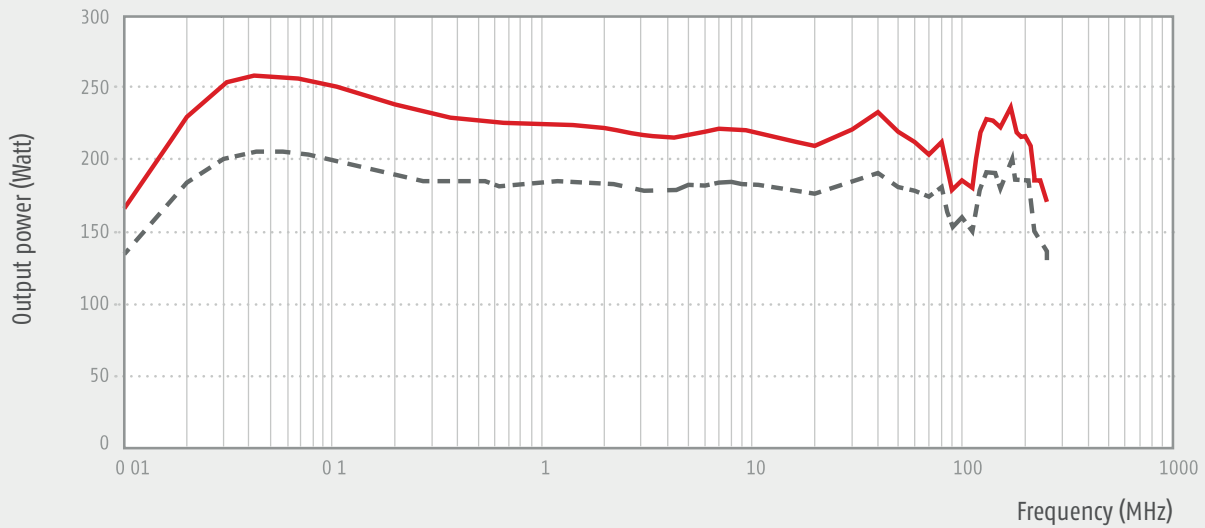


- Output Power (Compression max. = 3dB)
- Output Power (Compression max. = 1dB)

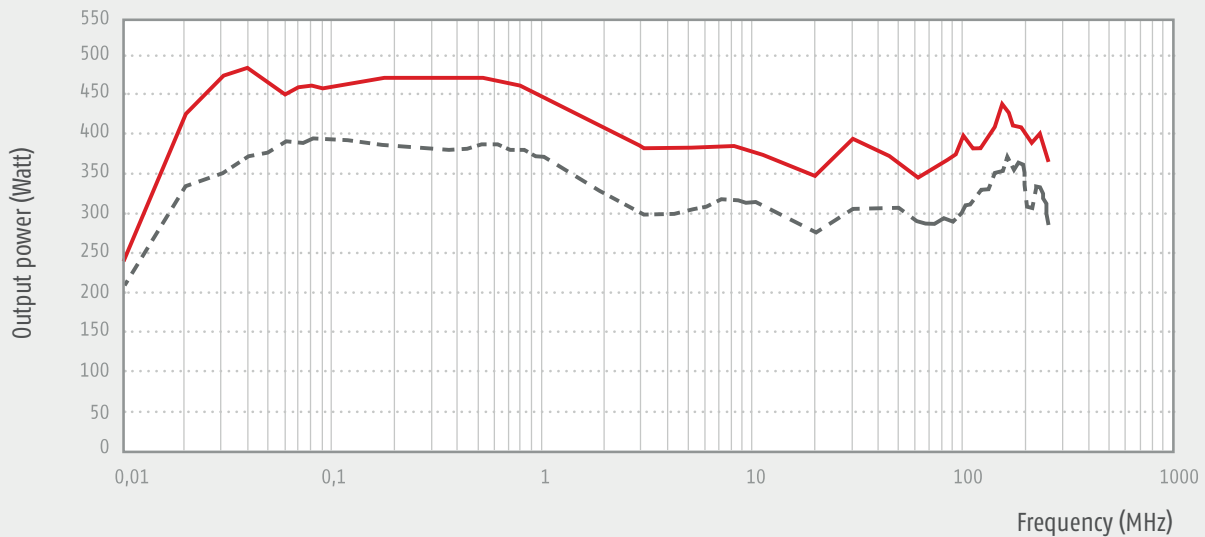
10 KHz – 300 MHz

| Part Number | VLL-140 | VLL-300 |
|--|-------------------------------------|-------------------------------------|
| Frequency range | 10kHz-250MHz | 10kHz-250MHz |
| Output Power typ. | 140 W | 300 W |
| Output Power @ 1dB Compression, typ. min | see diagramm | see diagramm |
| RF Input, max. | +10 dBm | +10 dBm |
| Gain, typ. | + 49 dB | + 53 dB |
| Flatness, typ. | ±3 dB | ±2.5 dB |
| Input VSWR | 2:1 | 2:1 |
| Harmonics @ 1 dB comp. | H2, H3 <-20 dBc | H2, H3 <-20 dBc |
| Class type | A | A |
| Input / Output Impedance | 50 Ω / 50 Ω | 50 Ω / 50 Ω |
| Connectors In / Out | N(f)N(f) | N(f)N(f) |
| Dimensions (mm) | | |
| W | 450 | 450 |
| H | 178 (4 HU) | 178 (4 HU) |
| D | 640 | 640 |
| Weight | 33 kg | 35 kg |
| Rated current | 7.5A @ 110VAC, 3.2A @ 230VAC | 13.2A @ 110VAC, 6.3A @ 230VAC |
| Power Supply (VAC) | 90-250, 47-63 Hz | 90-250, 47-63 Hz |
| Phases | 1 | 1 |
| Operating Temperature (°C) 0/+50 | 0 / +35 | 0 / +35 |
| Room temperature storage (°C) | -20 / +70 | -20 / +70 |
| Cooling / Forced air | Self contained fans 60l / sec. max. | Self contained fans 60l / sec. max. |
| Following types available: | S, SC, D, DC | S, SC, D, DC |

VLL-140



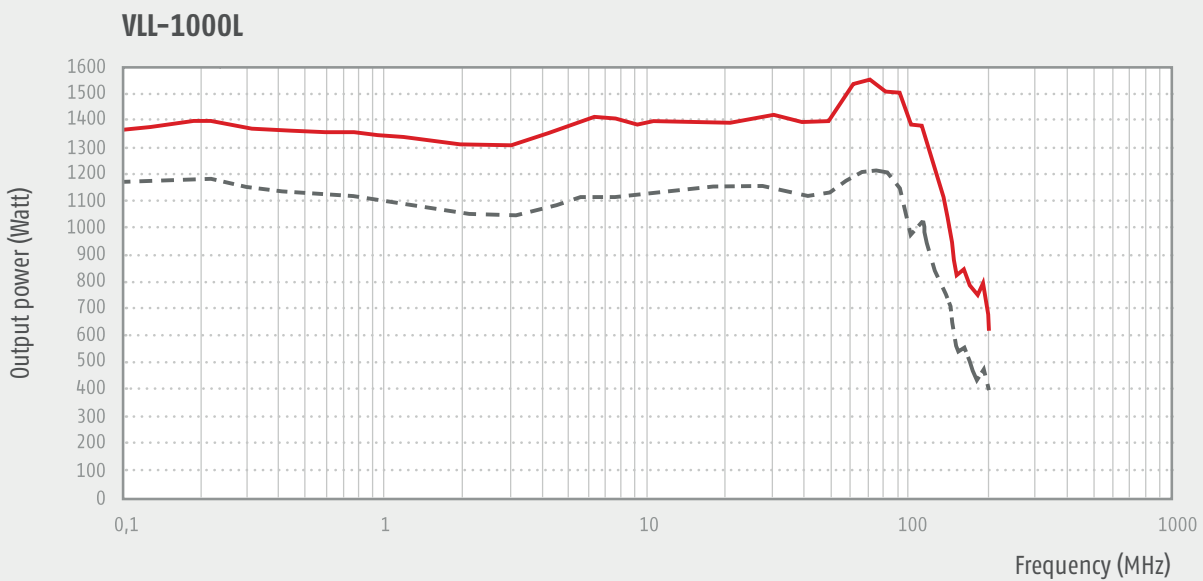
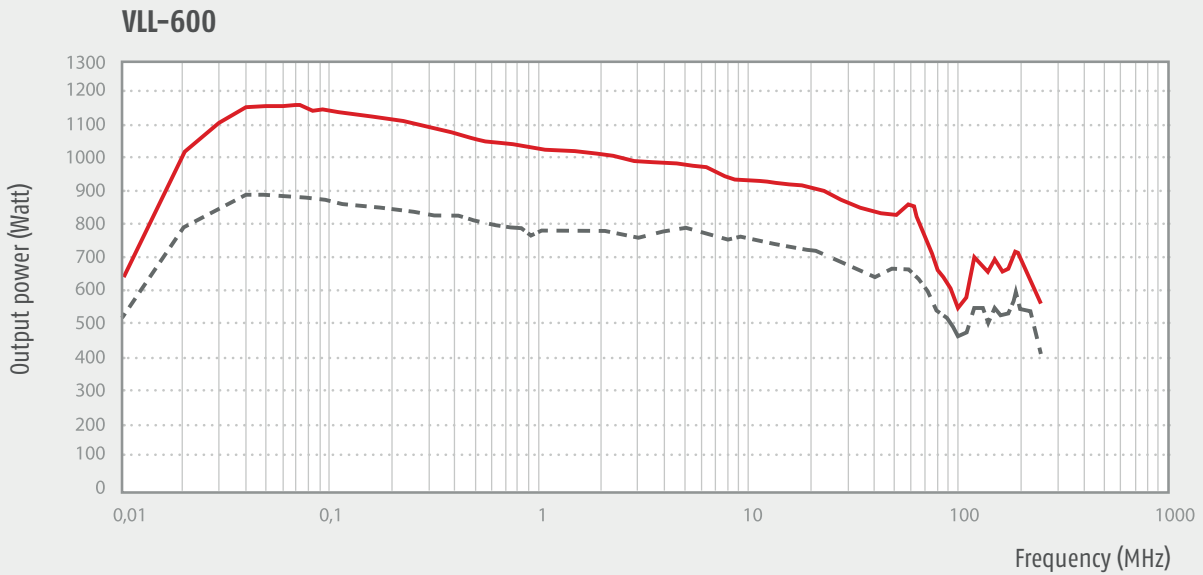
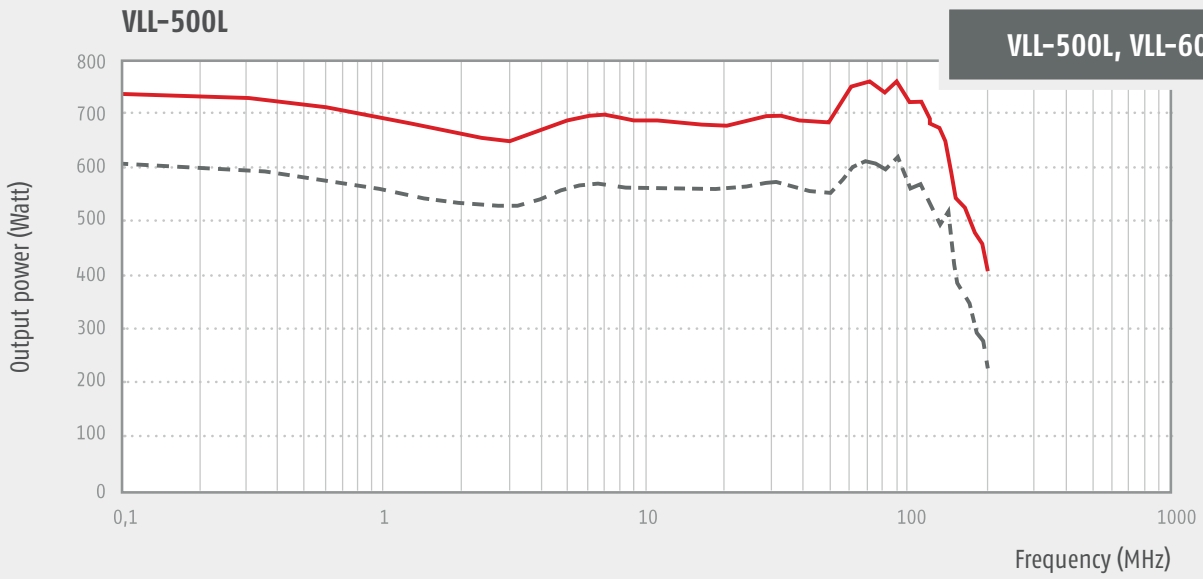
VLL-300



- Output Power (Compression max. = 3dB)
- Output Power (Compression max. = 1dB)

10 KHz – 300 MHz

| Part Number | VLL-500L | VLL-600 | VLL-1000L |
|---|--|--|--|
| Frequency range | 100kHz-200MHz | 10kHz-250MHz | 100kHz-200MHz |
| Output Power typ. | 500 W | 600 W | 1000 W |
| Output Power @ 1dB Compression, typ. min. | see diagramm | see diagramm | see diagramm |
| RF Input, max. | +10 dBm | +10 dBm | +10 dBm |
| Gain, typ. | +55 dB | +57 dB | +58 dB |
| Flatness, typ. | ±3 dB | ±3 dB | ±3 dB |
| Input VSWR | 2:1 | 2:1 | 2:1 |
| Harmonics @ 1 dB comp. | H2, H3 <-20 dBc | H2, H3 <-20 dBc | H2, H3 <-20 dBc |
| Class type | A | A | A |
| Input / Output Impedance | 50 Ω / 50 Ω | 50 Ω / 50 Ω | 50 Ω / 50 Ω |
| Connectors In / Out | N(f)N(f) | N(f)N(f) | N(f) N(f) |
| Dimensions (mm) | W H D | 640 312 (7 HU) 840 | 640 360 (8 HU) 450 |
| Weight | 44 kg | 51 kg | 54 kg |
| Rated current | 8.7 A @ 230 VAC | 11.1A @ 230VAC | 15.2A @ 230VAC |
| Power Supply (VAC) | 200-250, 47-63 Hz | 200-250, 47-63 Hz | 200-250, 47-63 Hz |
| Phases | 1 | 1 | 1 |
| Operating Temperature (°C) 0/+50 | 0 / +35 | 0 / +35 | 0 / +35 |
| Room temperature storage (°C) | -20 / +70 | -20 / +70 | -20 / +70 |
| Cooling / Forced Air | Self contained fans, 240l / sec. max. | Self contained fans, 120l / sec. max. | Self contained fans, 240l / sec. max. |
| Following types available: | D, DC | D, DC | D, DC |



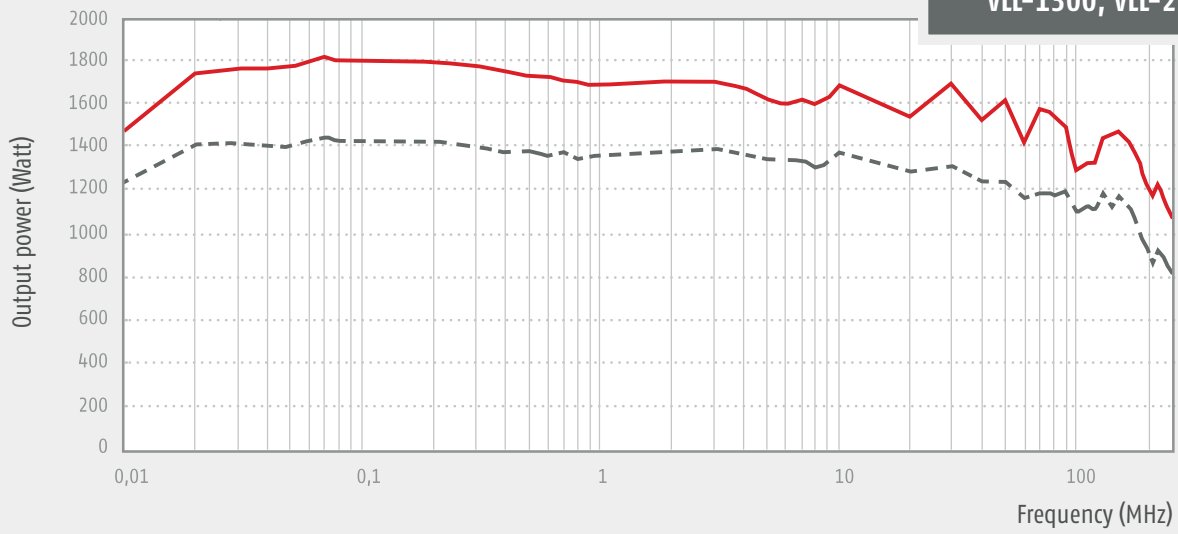
Output Power (compression max. = 1dB)

Output Power (compression max. = 3dB)

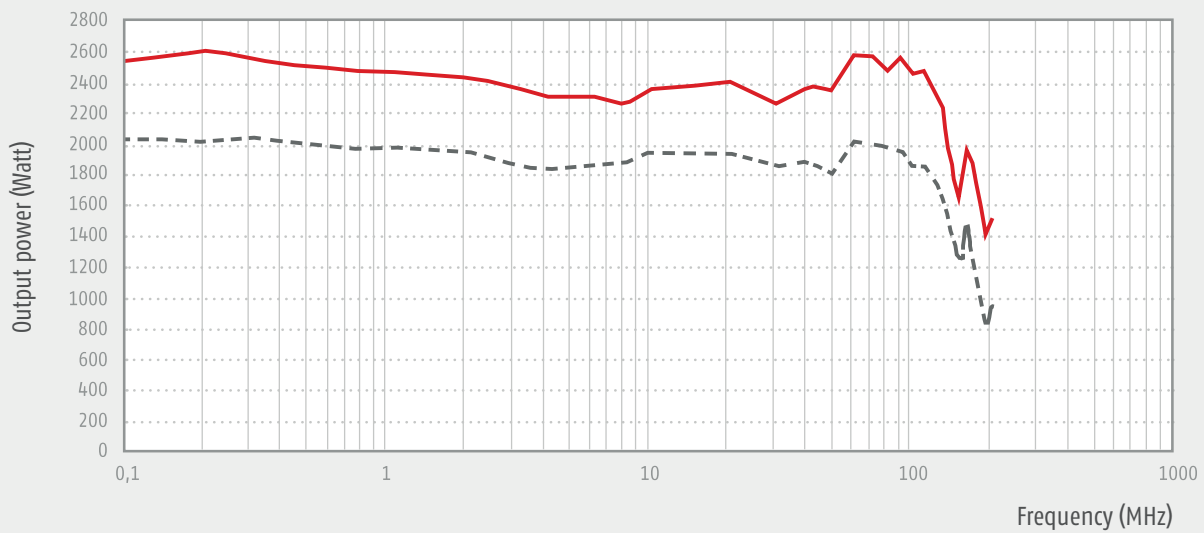


VLL-1300

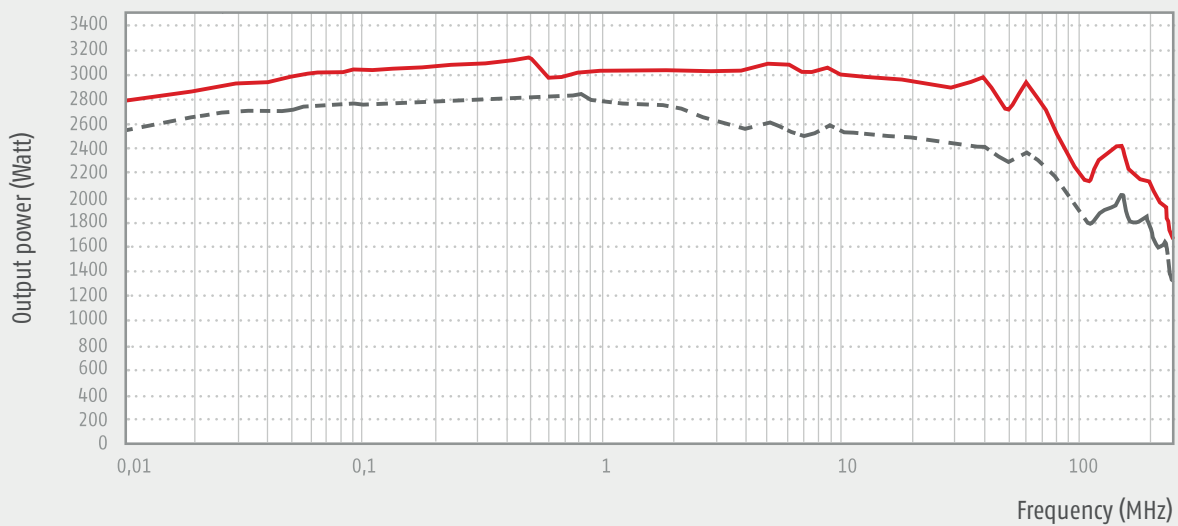
VLL-1300, VLL-2000L, VLL-2500



VLL-2000L



VLL-2500



Output Power (compression max. = 1dB)

Output Power (compression max. = 3dB)

10 KHz – 300 MHz

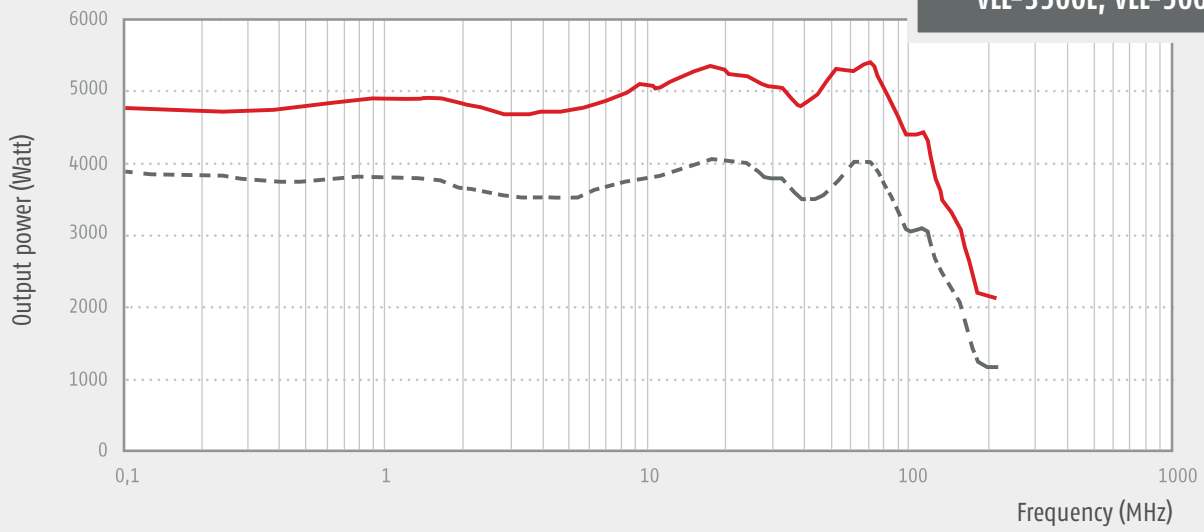
| Part Number | VLL-1300 | VLL-2000L | VLL-2500 |
|---|---|---|---|
| Frequency range | 10kHz-250MHz | 100kHz-200MHz | 10kHz-250MHz |
| Output Power typ. | 1300 W | 2000 W | 2500 W |
| Output Power @ 1dB Compression, typ. min. | see diagramm | see diagramm | see diagramm |
| RF Input, max. | +10 dBm | +10 dBm | +10 dBm |
| Gain, typ. | +60 dB | +60 dB | +63 dB |
| Flatness, typ. | ±2.5 dB | ±3 dB | ±3 dB |
| Input VSWR | 2:1 | 2:1 | 2:1 |
| Harmonics @ 1 dB comp. | H2, H3 <-20 dBc | H2, H3 <-20 dBc | H2, H3 <-20 dBc |
| Class type | A | A | A |
| Input / Output Impedance | 50 Ω / 50 Ω | 50 Ω / 50 Ω | 50 Ω / 50 Ω |
| Connectors In / Out | N(f) 7/16(f) | N(f) 7/16(f) | N(f) 7/16(f) |
| Dimensions (mm) | W H D | 600 1050 (18 HU) 840 | 600 1050 (18 HU) 840 |
| Weight | 230 kg | 230 kg | 390 kg |
| Rated current | 5,4kVA | 7.2 KVA | 10.35 KVA |
| Power Supply (VAC) | 47-63 Hz | 47-63 Hz | 47-63 Hz |
| Phases | 3 | 3 | 3 |
| Operating Temperature (°C) 0/+50 | 0 / +35 | 0 / +35 | 0 / +35 |
| Room temperature storage (°C) | -20 / +70 | -20 / +70 | -20 / +70 |
| Cooling / Forced Air | Self contained fans 240l / sec. max. | Self contained fans 240l / sec. max. | Self contained fans 480l / sec. max. |
| Following types available: | DC | DC | DC |

10 KHz – 300 MHz

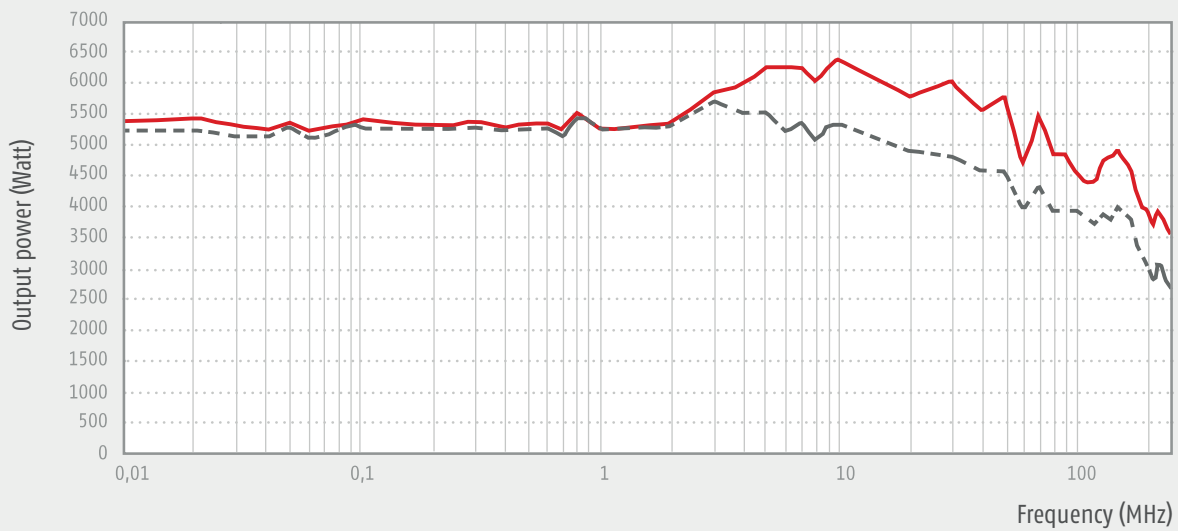
| Part Number | VLL-3500L | VLL-5000 | VLL-7000L |
|---|--|--|---|
| Frequency range | 100kHz-200MHz | 10kHz-250MHz | 100kHz-200MHz |
| Output Power typ. | 3500 W | 5000 W | 7000 W |
| Output Power @ 1dB Compression, typ. min. | see Diagramm | see Diagramm | see Diagramm |
| RF Input, max. | +10 dBm | +10 dBm | +10 dBm |
| Gain, typ. | +65 dB | +67 dB | +65 dB |
| Flatness, typ. | ±3 dB | ±4 dB | ±3.5 dB |
| Input VSWR | 2:1 | 2:1 | 2:1 |
| Harmonics @ 1 dB comp. | H2, H3 <-20 dBc | H2, H3 <-20 dBc | H2, H3 <-20 dBc |
| Class type | A | A | A |
| Input / Output Impedance | 50 Ω / 50 Ω | 50 Ω / 50 Ω | 50 Ω / 50 Ω |
| Connectors In / Out | N(f) 7/16(f) | N(f) 7/16(f) | N(f) EIA 1-5/8 |
| Dimensions (mm) | W H D | 800 840 (42 HU) 1590 | 800 840 (42 HU) 2120 |
| Weight | 390 kg | 590 kg | 400kg + 340kg |
| Rated current | 15 kVA | 21 kVA | 29 kVA |
| Power Supply (VAC) | 47-63 Hz | 47-63 Hz | 47-63Hz |
| Phases | 3 | 3 | 3 |
| Operating Temperature (°C) | 0 / +35 | 0 / +35 | 0 / +35 |
| Room temperature storage (°C) | -20 / +70 | -20 / +70 | -20 / +70 |
| Cooling / Forced Air | Self contained fans 480 l / sec. max. | Self contained fans 960 l / sec. max. | Self contained fans 2 x 480l / sec. max. |
| Following types available: | DC | DC | DC |

VLL-3500L

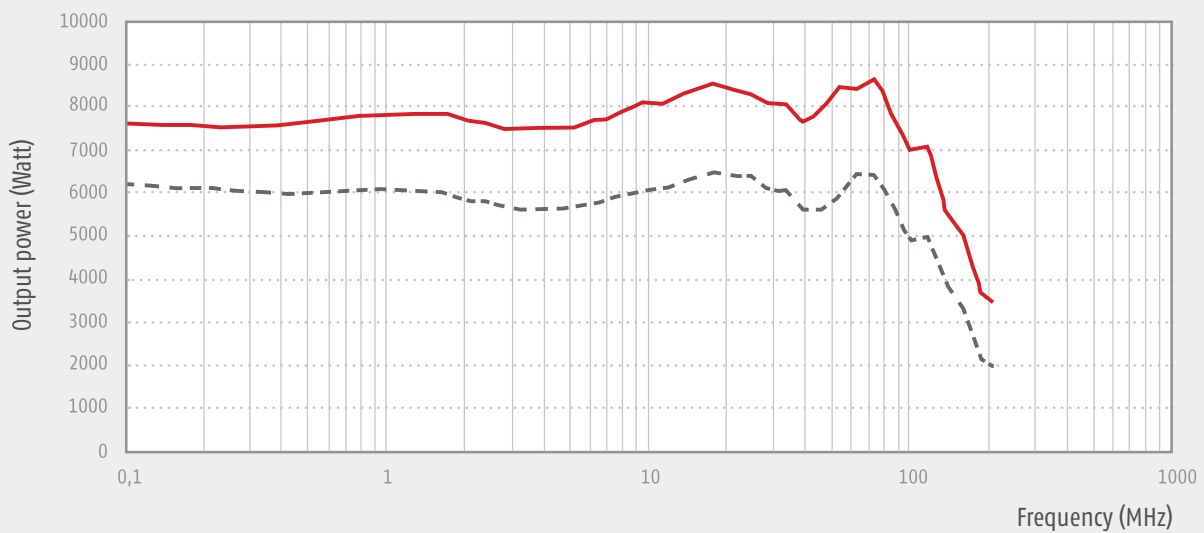
VLL-3500L, VLL-5000, VLL-7000L



VLL-5000



VLL-7000L



Output Power (compression max. = 1dB)

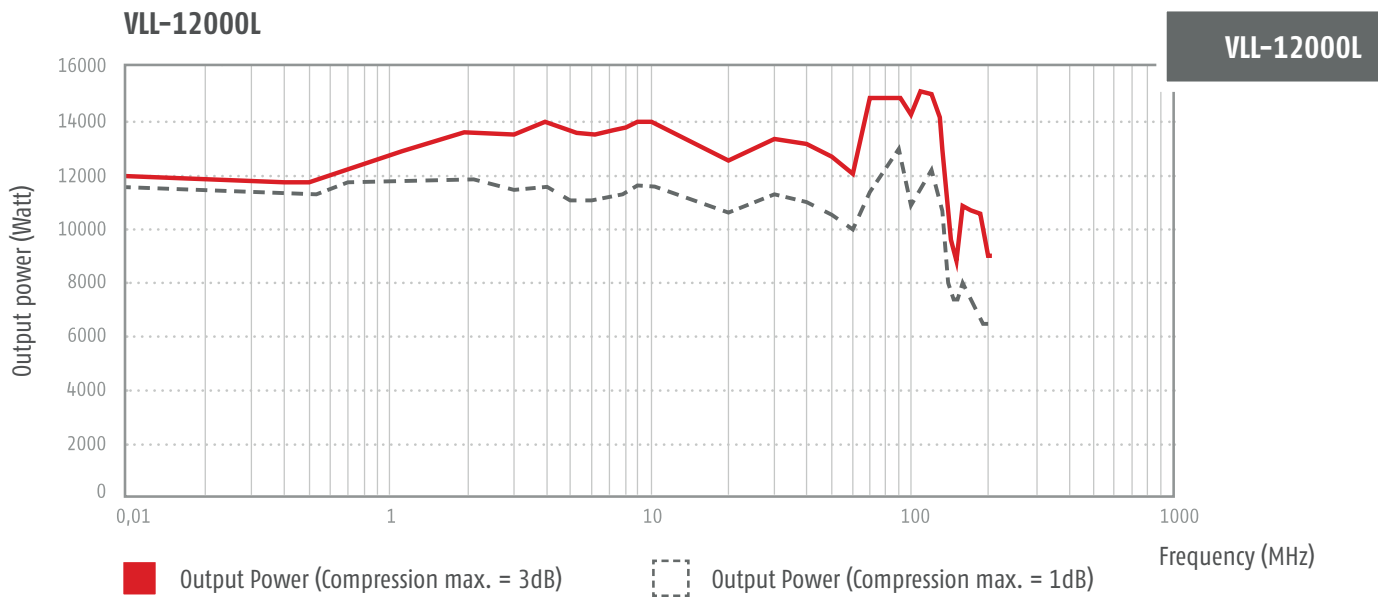


Output Power (compression max. = 3dB)



10 KHz - 300 MHz





| Part Number | VLL-12000L |
|---|--|
| Frequency range | 100kHz-200MHz |
| Output Power typ. | 12000 W |
| Output Power @ 1dB Compression, typ. min. | see Diagramm |
| RF Input, max. | +10 dBm |
| Gain, typ. | +68 dB |
| Flatness, typ. | ±3 dB |
| Input VSWR | 2:1 |
| Harmonics @ 1 dB comp. | H2, H3 <-20 dBc |
| Class type | A |
| Input / Output Impedance | 50 Ω / 50 Ω |
| Connectors In / Out | N(f) EIA 1-5/8 |
| Dimensions (mm) W x H x D | 2200 x 1950 (38 HU) x 840 |
| Weight | 1350 kg |
| Rated current | 51 kVA |
| Power Supply (VAC) | 47-63Hz |
| Phases | 3 |
| Operating Temperature (°C) | 0 / +35 |
| Room temperature storage (°C) | -20 / +70 |
| Cooling / Forced air | Self contained fans 3 x 960l / sec. max. |
| Following types available: | DC |