## Mains Transformers for Tube Amplifiers

## LL1683

C-core mains transformer. The core is assembled with a small air-gap to compensate for any mains DC-unbalance. Estimated power rating 120 VA , which can be increased with good cooling. The $2 \times 250 \mathrm{~V}$ secondaries are internally divided between the two coils. As a result, the transformer can be used with bridge or full wave rectifiers without a problem of asymmetric load. Magnetic stray is extremely small if filament secondaries of the two coils are loaded identically.

Physical dimensions, pin and mounting hole layout (all dimensions in mm)


Winding schematics:


Usage hints


No load output voltage, max recommended transformer current (rms) and coil resistance with primary
connected to 230 V series / 115 V parallel

| Primary res. | Sec 1 | Sec 2 | Sec 3 | Sec 4 | Sec 5 | Sec 6 | Sec 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series/parallel | Pins 15-22 | Pins 24-17 | Pins 26-19 | Pins B7 - B4 | Pins B6-B1 | Pins B3-B8 | Pins B2 - B5 |
| $7.5 \Omega / 1.9 \Omega$ | $250 \mathrm{~V} / 80 \mathrm{~mA}$ | $250 \mathrm{~V} / 80 \mathrm{~mA}$ | $48 \mathrm{~V} / 0.1 \mathrm{~A}$ | $6.6 \mathrm{~V} / 3 \mathrm{~A}$ | $6.6 \mathrm{~V} / 3 \mathrm{~A}$ | $5.2 \mathrm{~V} / 3 \mathrm{~A}$ | $5.2 \mathrm{~V} / 3 \mathrm{~A}$ |
|  | $100 \Omega$ | $100 \Omega$ | $40 \Omega$ | $0.2 \Omega$ | $0.2 \Omega$ | $0.2 \Omega$ | $0.2 \Omega$ |

Please note! Output current from rectifier: $63 \%$ of above with cap. input rectifier, $95 \%$ of above with choke input rectifier.

