

Application Note

From Astec Power

Rev. 00

APPLICATION OVERVIEW: Efficiency Curve of the LPS255

PRODUCT: Low Power Products

ORIGINATOR: Tom Tillman, Product Line Manager

DESCRIPTION

The LPS255 efficiency was measured at 230V ac, 50Hz and 110V ac, 60Hz input with the output set at 24V and 48V. The results are plotted below.

The power supply when set at 24V gives 82% efficiency at 230V input and full load, and 79% efficiency at 110V input and full load.

When set at 48V the power supply gives 85% efficiency at 230V input and full load, and 92% efficiency at 110V input and full load.

At the minimum load of 24V @ 0.3A the average power consumption is 22-23W. The fan in the LPS255-CF is 2.4W of this is load so LPS255-C takes 20W from the mains.

When the outputs are inhibited the power consumption is 4.5W @ 110VAC, 6W@ 230 Vac for the LPS255-CF, 2.7W @ 110Vac, 4.2W @ 230Vac for the LPA255-C (i.e. without the fan).

