

General

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|---|---------|------------|---------|-------------------|-----------------------------------|
| Efficiency | | | | % | 230 VAC (see fig. 2 & 3) |
| Isolation: Input to Output Input to Ground Output to Ground | 3000 | | | VAC | |
| | 1500 | | | VAC | |
| | | | | VAC | |
| Switching Frequency | 50 | | 95 | kHz | Main converter |
| Power Density | | | 9 | W/in ³ | |
| Mean Time Between Failure | | 300 | | kHrs | MIL-HDBK-217F, Notice 2 +25 °C GB |
| Weight | | 0.32 (145) | | lb(g) | |

Efficiency Vs Load

Figure 2
LCE80PS12

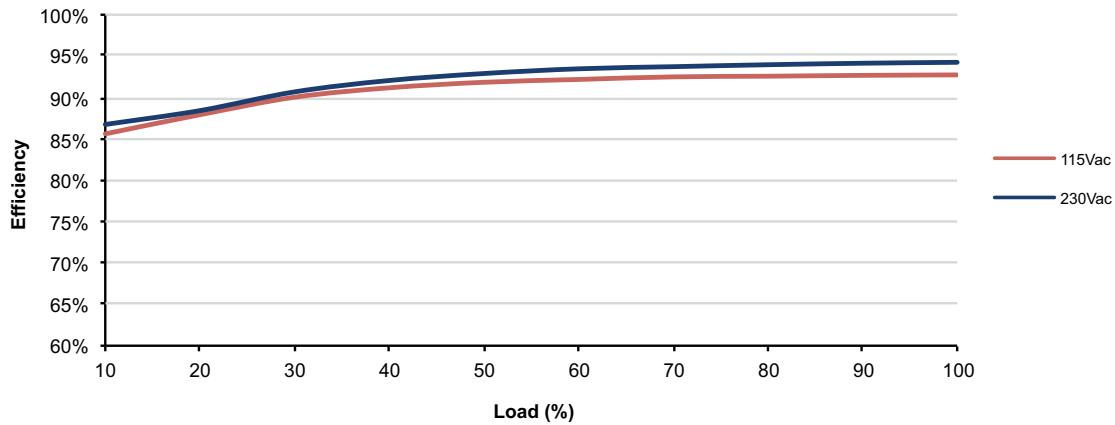
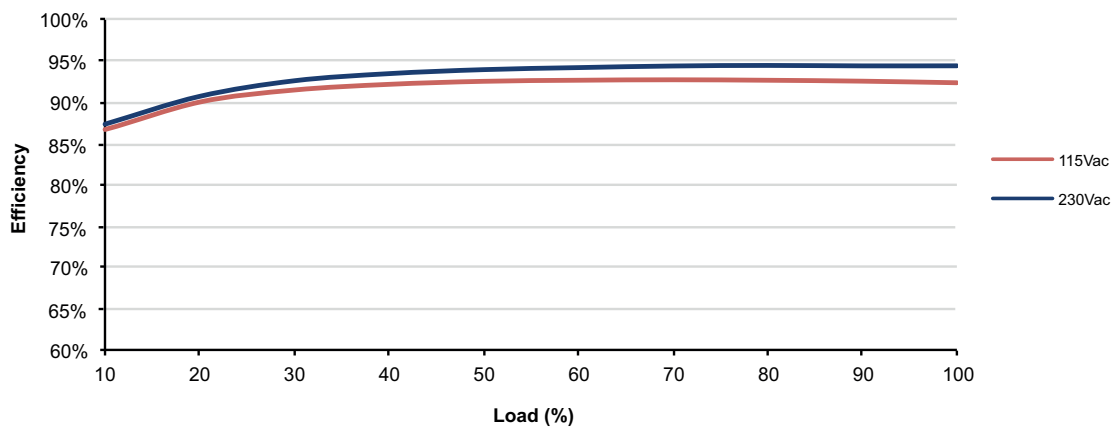


Figure 3
LCE80PS24

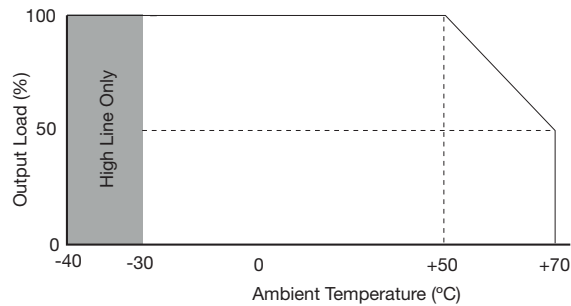


Environmental

| Characteristic | Minimum | Typical | Maximum | Units | Notes & Conditions |
|-----------------------|--|---------|---------|-------|---------------------------|
| Operating Temperature | -40 | | +70 | °C | See derating curve, fig.4 |
| Storage Temperature | -40 | | +85 | °C | |
| Cooling | 10 | | | CFM | Forced-cooled > 100W |
| Humidity | 5 | | 95 | %RH | Non-condensing |
| Operating Altitude | | | 5000 | m | |
| Shock | ±3 x 30g shocks in each plane, total 18 shocks. 30g = 11ms (+/- 0.5msecs), half sine. Conforms to EN60068-2-27 | | | | |
| Vibration | Single axis 10-500 Hz at 2g sweep and endurance at resonance in all 3 planes. Conforms to EN60068-2-6 | | | | |

Temperature Derating Curve

Figure 4



EMC: Emissions

| Phenomenon | Standard | Test Level | Criteria | Notes & Conditions |
|-------------------|-------------|------------|----------|--------------------------------|
| Conducted | EN55032 | Class B | | |
| Radiated | EN55032 | Class B | | |
| Harmonic Current | EN61000-3-2 | Class A, C | | Class C for 50W load and above |
| Voltage Functions | EN61000-3-3 | | | |

EMC: Immunity

| Phenomenon | Standard | Test Level | Criteria | Notes & Conditions |
|------------------------|---------------------------|---------------------------|----------|--------------------|
| Low Voltage PSU EMC | EN61204-3 | High severity level | as below | |
| ESD | EN61000-4-2 | 3 | A | |
| Radiated | EN61000-4-3 | 3 | A | |
| EFT | EN61000-4-4 | 3 | A | |
| Surges | EN61000-4-5 | Installation class 4 | A | |
| Conducted | EN61000-4-6 | 3 | A | |
| Magnetic Fields | EN61000-4-8 | 3 | A | |
| Dips and Interruptions | EN61000-4-11 (100 VAC) | Dip >95% (0 VAC), 8.3 ms | A | |
| | | Dip 30% (70 VAC), 416 ms | A | |
| | | Dip >95% (0 VAC), 4160 ms | B | |
| | EN61000-4-11 (240 VAC) | Dip >95% (0 VAC), 10.0 ms | A | |
| | | Dip 30% (168 VAC), 500 ms | A | |
| | | Dip >95% (0 VAC), 5000 ms | B | |