

## ALS75-3.3

### Description:

The ALS75-3.3 is a single output power supply. It provides a DC output power in a cost-effective open frame package. Excellent performance specifications are provided, together with compliance to European EMC (EN55022, Class A).

### Specifications (@25C)

#### Input Characteristics:

<b>Input Voltage</b> (5):	110/220Vac (90-260Vac, 120-370Vdc)
<b>Input Frequency Range:</b>	47-63Hz
<b>Max Input Current:</b>	1.8A @ 110Vac; 0.9A @ 220Vac
<b>Max Inrush Current:</b>	30A @ 220VAc
<b>Hold-Up Time:</b>	17ms typ @ 110Vac, 100% Load

#### Output Characteristics:

<b>Output Voltage:</b>	3.3Vdc
<b>Output Current</b> (1,6):	12A
<b>Output Power</b> (1):	40W
<b>Ripple &amp; Noise</b> (20MHz BW):	100mV
<b>Line Regulation</b> (4):	1.0%
<b>Load Regulation</b> (3):	2.0%
<b>Temperature Drift:</b>	0.02%/°C
<b>Rise-UP Time:</b>	500ms max, 110Vac, 100% Load
<b>Over Current Protection:</b>	Shutdown, O.C.P Point>120%, recycle AC supply to recover
<b>Over Voltage Protection:</b>	>105% Zener across output
<b>Short Circuit Protection:</b>	Unit shutdown, recycle AC supply to recover
<b>Adj. O/P Voltage Range</b> (1,2):	±10%

#### Environmental Specifications:

<b>EMI (Conducted RFI):</b>	Built to comply with EN55022-B
<b>EFT:</b>	Built to comply with IEC61000-4-4
<b>ESD:</b>	Built to comply with IEC61000-4-2
<b>Surge:</b>	Built to comply with IEC61000-4-5
<b>Operating Temperature:</b>	Convection cooling 0 to 50°C:100%; 60°C:70%
<b>Operating Humidity:</b>	30% to 90% RH
<b>Storage Temperature:</b>	-25 to 85°C
<b>Storage Humidity:</b>	10% to 95% RH
<b>Cooling:</b>	Convection cooling
<b>Vibration:</b>	1min sweep 10-55Hz, 2G Amplitude, X,Y,Z axis 1hr each
<b>Shock:</b>	<20G

#### General Specifications:

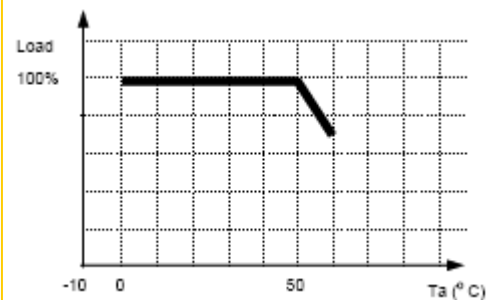
<b>Efficiency:</b>	70% Typical
<b>Dimensions (WxLxH):</b>	76.20x127x42mm
<b>Weight:</b>	350g
<b>Warranty:</b>	2 years @ 40°C, 100% Load

#### Safety Standards:

<b>Standard:</b>	UL60950-1 (E204980) Built to meet CSA 22.2
<b>Dielectric Strength:</b>	I/P-O/P:3kVac, I/P-FG:2.5kVac, <10mA, 1min
<b>Insulation Resistance:</b>	O/P-FG: 5000VDC>100Mohms



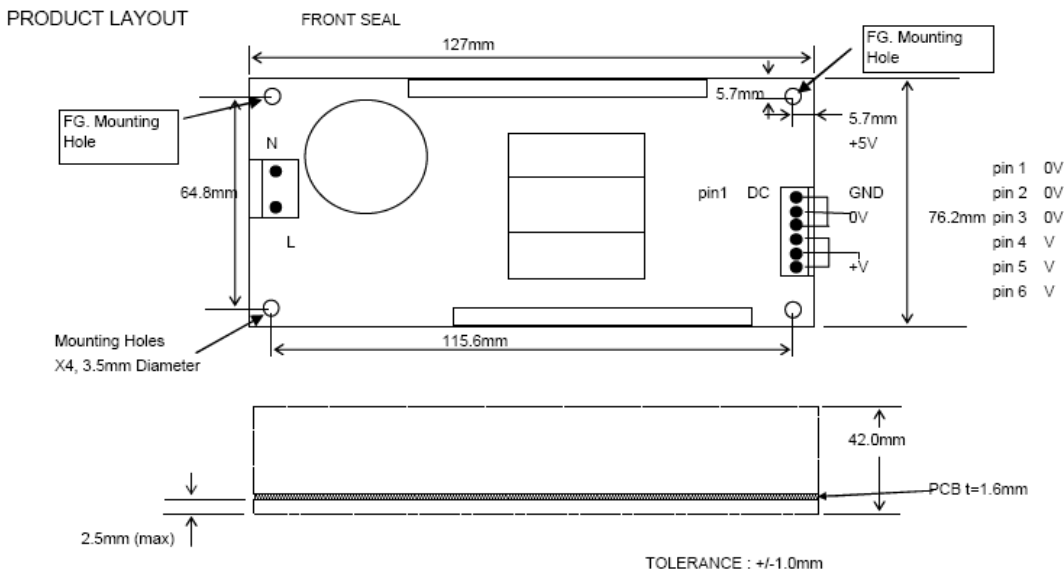
DERATING CURVE



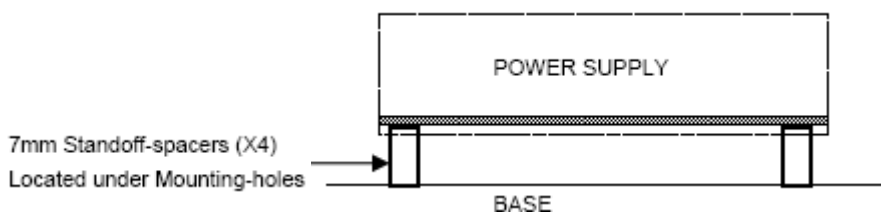
### Technical Notes:

1. Throughout  $V_{in}$  range.  $V_{out}$  must be measured as near as possible to the power supply.
2. Total output power by any combination of channel must not exceed  $P_{out(m)}$ .
3.  $V_{out}$  deviation as  $I_{out}$  varies from  $I_{o(min)}$ - $I_{o(max)}$ .
4.  $V_{out}$  deviation as  $V_{in}$  varies from 90-0260Vac.
5. Where UL and CSA is concerned, official rated input voltage range is 100-120Vac/200-240 Vac.
6. Current derated to avoid issues with heat dissipation due to large load current at such low voltages.

### Outline Dimensions (mm):



### Mounting Method:



### Connector Types:

**AC Housing:** Molex 09-50-3031  
**DC Housing:** Molex 09-50-3061

**Crimp Terminals:** Molex 08-50-0105  
**Crimp Terminals:** Molex 08-50-0105

**RoHS Compliance:** As of manufacturing date February 2016, all standard products meet the requirements of 2015/863/EU, known as the RoHS 3 initiative.

\* Upon printing, this document is considered "uncontrolled". Please contact Triad Magnetics' website for the most current version.