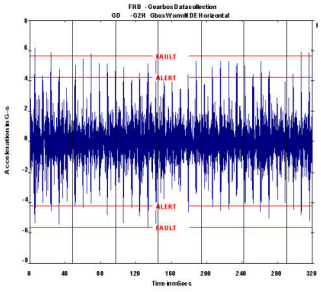
When the Going gets Tough..... Conformal Coating can make the Most Difficult Applications Possible

Moisture



Shock & Vibration

Dust & Contamination

Thermal Shock

There are many applications where the environment in which equipment is located is less than perfect. In these situations power supplies can be subjected to adverse operating conditions, making even the most rugged design susceptible to a premature failure. Dust, contaminants and temporary high humidity can create corrosion or unwanted connections between traces on the PC board. Vibration and thermal shock can cause components on the PC board to stress and break. In these conditions, it is always best to use a device that has a conformal coated PC board. Conformal coating can prevent short circuits and corrosion of components and solder connections, creating a higher level of safety. The protective coating also holds components firmly in place. This prevents components from swaying back and forth in vibration situations, possibly breaking a lead away from the PC board.

Catalog Number	Output		Input	Standard Unit
ML50.109	24-28VDC, 2.1-1.8A	50W	100-240VAC, 1Ph	ML50.100
ML100.109	24-28VDC, 4.2-3.6A	100W	100-120/208-240VAC, 1Ph	ML100.100
CS5.241-C1	24-28VDC, 5-4.3A	120W	100-120/208-240VAC, 1Ph	CS5.241
QS5.241-A1	24-28VDC, 5-4.3A	120W	100-240VAC, 1Ph	QS5.241
CP10.241-C1	24-28VDC, 10-9A	240W	100-240VAC, 1Ph	CP10.241
CT10.241-C1	24-28VDC, 10-8.6A	240W	380-480VAC, 3Ph	CT10.241
QS10.241-A1	24-28VDC, 10-9A	240W	100-240VAC, 1Ph	QS10.241
QS10.241-C1	24-28VDC, 10-9A	240W	100-240VAC, 1Ph	QS10.241
SL10.309	24-28VDC, 10-8.6A	240W	380-480VAC, 3Ph	SL10.300
CP20.241-C1	24-28VDC, 20-17.5A	480W	100-240VAC, 1Ph	CP20.241
CPS20.241-C1	24-28VDC, 20-17.5A	480W	100-240VAC, 1Ph	CPS20.241
QS20.241-A1	24-28VDC, 20-17.5A	480W	100-240VAC, 1Ph	QS20.241
QS20.241-C1	24-28VDC, 20-17.5A	480W	100-240VAC, 1Ph	QS20.241
QT20.241-C1	24-28VDC, 20-17.5A	480W	380-480VAC, 3Ph	QT20.241

Conformal Coating

The protective coating is accomplished by spraying the assembled PC board in an acrylic varnish. The components not allowed to be coated, such as fuses and terminal blocks, are protected by a mask before the spraying process. The coating has no impact on the electrical performance of the power supply, so deration of the supply is not necessary.

Typical Applications

- Paper processing industry which produces very fine dust and electrostatic discharge.
- Railroad, construction and industrial equipment that are subjected to consistent vibration and frequent temperature changes.
- Welding Machines where metallic dust is created.
- Outdoor equipment where moisture and condensation is occasionally present.
- Fan cooled equipment where extreme dust deposits are present.
- Regions with high humidity and high temperature, or coastal areas with salty air.
- Water Treatment plants wjhere hydrogen sulfide is present.

PULS currently offers 14 standard 24VDC models with conformal coating. These units have a variety of output wattages and are offered both in single and three phase. Conformal Coated products from PULS are standard stock items and do not require a minimum order.