

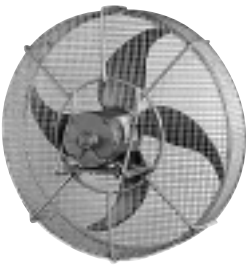
PowerFlow

APPLICATION NOTE

PRODUCTS AND INFORMATION FOR POWER PROFESSIONALS

TruPower Associates Application Note #103

Application Note: Transformer Fans to Handle Growing Electric Loads



Electrical loads often increase over time resulting in an existing transformer that now requires additional cooling. In fact, OA/FA transformers are specifically designed to provide for an increased load in the future. Fluidix,

a Division of Pier Engineering, provides fan packages to address just such a situation.

Fluidix fan packages provide additional fans and controls that will give existing transformers the additional cooling needed to handle an increased electrical load. If the radiator is not fully populated, Fluidix fans can be added to increase the kVA capacity of the transformer as designed.

Fluidix produces forced air cooling fans (FAC) specifically for use in cooling transformers and heavy electrical equipment. Fluidix fans are designed to provide long and dependable service and to withstand harsh weather conditions. These fans have a proven performance record and reliability.

TruPower Associates and Pier Engineering provide engineering support for adding additional cooling including sizing, control packages, and more.

Specifications for Fluidix FAC:

- **Fan housing** made from 0.375" diameter steel rod welded frame with finger-proof 0.5" X 0.5" 16 gauge wire mesh or 0.125" dia. wire rings as an added safety feature.
- **Fan guards** are hot-dip galvanized and meet OSHA specifications.
- **Motors** are totally enclosed and weatherproof. Rugged design allows for continuous duty air over maximum ambient temperature and features an automatic overload temperature protection. They are UL and CSA approved.
- **Fan motor shafts** are stainless steel.
- **Fan blades** are one-piece cast aluminum for maximum air movement (CFM), durability, low vibration and low noise level.
- **Mounting:** All cooling fans can be installed on panel or tube transformer radiators at any angle or on floor pads.
- **Controls** are housed in a weatherproof cabinet and are designed for single start or two stage fan start. Oil thermometer and cabling can be provided as part of the fan package.
- Fluidix fans are immune from RF interference and comply with ANSI C37.17, as well as qualify for nuclear applications.