



# AIRFLOW CONTROLLER

## OVERVIEW

Our Airflow Controller lets you automatically manage fan motor speed for your Donaldson Torit dust collector so that the fan is used only as much or as little as needed for optimum performance. The results are energy savings, longer filter life, and optimal collector performance.

### HOW IT WORKS:

- The Controller reads the static pressure at the inlet of the dust collector and signals to the VFD to adjust fan speed accordingly. Components needed:
  - Control panel for the dust collector must be equipped with the Airflow Controller
  - Variable frequency drive (VFD), either in the control box or installed nearby
  - A premium efficiency motor (or inverter duty motor)

### WHY IT WORKS:

- Air has mass, and to move more air, the fan on your dust collector must work harder and faster to pull the airflow demanded (measured in cubic feet of air per minute or cfm).
- Typically, when filters are new and clean, the airflow moves through the filter media at a fairly high rate. As filters load with dust, air can't move through as easily, and the fan must work a little harder to supply enough airflow.
- Most fan motors run at constant rates, meaning their speed is not adjusted for the resistance (static pressure) offered by the condition of the filters.
- When you adjust fan speed to accommodate the resistance, the fan can run slower during times of low resistance and higher only when necessary. The fan is adjusted to operate at optimum airflow for the collector.
- Many people have dampers they adjust manually. This works to an extent; the Airflow Controller/VFD combo adjusts constantly and automatically.

### PAYBACK?

- Situations vary, of course, but we have found that typically, the payback on a 30 HP or larger fan is less than two years. Additionally, any power suppliers are offering discounts and rebates for installing energy-saving devices like this – be sure to check with your local electric company! Applicable for both cartridge collectors, baghouse, and PowerCore® collectors:
  - Recommended for new dust collectors
  - Can be retrofitted to existing collectors

Significantly improve the performance of your collector with genuine Donaldson Torit replacement filters and parts. **Call Donaldson Torit at 800-365-1331.**

**Important Notice:** Many factors beyond the control of Donaldson can affect the use and performance of Donaldson products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, availability and data are subject to change without notice, and may vary by region or country.

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