



ECO On Demand Controller

For Industrial Dust Collection and Air Filtration Units

Where most baghouse dust collectors rely on continuous pulse cleaning processes to maintain plant efficiency the ECO provides inbuilt capabilities to accurately measure the performance of a dust collection installation, and based on those measurements, manage the number of pulse cleaning cycles required to optimise baghouse productivity. The ECO can be retro-fitted to an existing dust collector in less than one hour, or supplied as an OEM component within a new baghouse dust collectors.

ECO equipped dust collectors deliver a broad range of operational benefits to industry including:



Significant efficiency improvements

Fewer cleaning cycles means more up time with maintenance hours reduced by up to 30%. In addition the ECO provides users with a range of efficiency enhancing features including:

- On Demand Cleaning
- Broken Bag Detection (with dust sensor)
- Filter state tracking
- Sensor tube cleaning
- Single valve pulsing
- Electronic /Mechanical fault detection on each solenoid valve
- Adjustable pressure levels for optimal operation

COMMUNICATIONS via RS485 ModBus



Direct cost savings

The efficiency improvements for an ECO equipped dust collector deliver a number of direct cost savings including:

- Maintenance hours reduced by up to 30%
- Compressed Air usage reduced by up to 50%
- Extended filter life of up to 30%
- Reductions in energy costs of 40 to 70%

Environmental impact improvements

The range of user definable alarms built into the ECO Controller mean that process monitoring to pre set performance conditions significantly reduces or eliminates the risk of contaminants escaping into the environment. In addition, the electrical energy savings accruing from the efficiency improvements deliver equivalent reductions in CO2 emissions of 30 to 50%

ECO On Demand Controllers are designed and manufactured in Australia and meet or exceed the following local and international standards: ISO9001:2008 - AS/NZS61000.6.3 - EN55011 - EN61000-6-1 - CE, cRUus.

TIMER

- Number of valves..... 1 - 10 (extendable to 250)
- ON time..... 50 - 999 ms
- OFF time 1..... 1 - 999 s
- OFF time 2 (fast)..... 1 - 999 s
- Pulsing mode..... Sequential or Arbitrary (any order)
- Clean after shutdown..... 1 - 255 cycles
- Auto Cycle 1 - 12 hours

ON DEMAND CLEANER

- Differential Pressure (DP)..... KPa, mm H2O or inWG
- Low level Pulsing stops
- High level 1 Pulsing starts
- High level 2 Pulses faster
- Alarm level Local and remote

INPUTS

- Supply voltage 110-240VAC or 24VDC
- Four sensors Digital and / or Analog 4-20mA

OUTPUTS

- Solenoid valves..... 24VDC or 240VAC
- System active..... Relay contact
- Differential pressure..... 4-20mA
- Three (3) alarms..... Relay contact

DISPLAY - Alphanumeric

In normal 'RUN' mode the following parameters are displayed:

- System mode – Manual or Auto
- System Halted or Pulsing
- Number of the next valve to trigger
- Differential pressure value
- Differential pressure mode

ALARMS

Selectable as General (G) or Critical (C) alarm

- Additional four inputs G or C for sensors i.e. header pressure, hopper level etc.
- Differential pressure
- Pulses & Hours counters

Key Features	ECO-0	ECO-t
Sequential timer valves	✓	✓
Differential pressure	✓	✓
Inputs analogue	✓	✓
Inputs digital	✓	✓
System active contacts	✓	✓
Tube cleaner		✓
Options		
Broken Filter Detection	✓	✓
Filter State Tracking	✓	✓
RS 485 compatibility	✓	✓