



## B-PAC™ Controls



### Air Pollution Control Systems

- Aluminum
- Cement
- Power
- Smelting
- Steel

### Powder Recovery Baghouses

- Chemicals & Plastics
- Pharmaceuticals & Food
- Carbon Black & Toner
- Minerals

### Industrial Ventilation Dust Collectors

- Automotive
- Foundries
- Lead Battery
- Woodworking

Made in USA

### Baghouse Performance Analyzer and Controller

B-PAC™ Controls are turn-key optimization and automation solutions for pulse-jet fabric filters. FilterSense pioneered and leads the industry with field proven technologies that improve filtration efficiency, lower energy consumption, reduce maintenance costs and prevent unforeseen downtime. B-PACs typically provide a return on investment within 1 year.

B-PACs are DSP based, purpose built controllers that tightly integrate control, sensing and high speed digital signal analysis to deliver reliable diagnostics including: the ability to detect/locate leaks weeks before emissions are visible; the ability to detect/locate failed solenoids that can lead to plugged filters; and the ability to instantly detect/locate ruptured or frozen pulse jet diaphragms where one undetected rupture can cost \$1K of compressed air per week.

The controller architecture and over 10 years of field experience provide performance that cannot be matched by PLC logic controllers. A range of fieldbus options are available to communicate and network with PLCs and DCS systems.

B-PACs provide advanced filter cleaning such as IntelliPULSE which extends filter life and lowers emissions while reducing compressed air use by 15-40% over traditional PLC programming and up to 90% over continuous cleaning.

With integrated particulate sensors B-PACs are a superior compliance solution for EPA regulations. Optional FilterWare software provides further automation of EPA record keeping as well as maintenance planning and process control. A range of configurations for small cartridge collectors to large multicompartment baghouses is available. B-PACs are easy-to-use, high quality, heavy duty products designed for long-life in harsh process environments.

## Meets US EPA MACT

40 CFR Part 63

Requires proper configuration

## Specifications

### Control Unit

|                      |  |
|----------------------|--|
| Power Supply:        | 115VAC or 230VAC 50/60Hz Std, 24VDC Opt<br>24Watts (Control unit only, not valves) |
| Alarm Outputs:       | (2) Relay Std (5A@240VAC Resistive Form A SPST)                                    |
| Analog Outputs       | (2) 4-20mA Std (5000hms Max, 100mA, 15VDC)   |
| Inputs:              | (2) Relay and (2) 4-20mA Std, (4) 4-20mA Opt                                       |
| Communications:      | (1) Modbus RTU Opt, Modbus TCP Opt or Ethernet IP Opt                              |
| Enclosure:           | NEMA 4X Aluminum Std Other Opt   |
| Temperature:         | -13F (-25C) to 160F (70C)  |
| User Interface:      | LCD with digital, analog & text display, 4 button keypad                           |
| Area Classification: | Ordinary locations (CE Approved) Std, Hazardous areas Opt                          |
| General:             | Circuit boards conformal coated to protect from dust, moisture & corrosives        |



### Cleaning Control

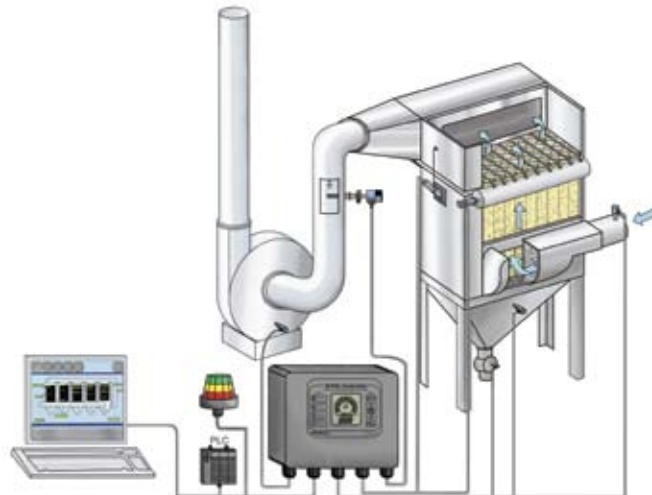
|                   |  |
|-------------------|--|
| Solenoid Outputs: | 8 Std, 16, 32, 48, 64, 80 or 96 Opt (600V/8A, 200VA per output max)<br>Solid state intelligent triac with protective snubber circuit   |
| On Timing:        | 16mSec to 2000mSec<br>Synchronized to AC line, Accuracy +/-1mSec, 16.67mSec increments   |
| Off Timing:       | 3Sec to 180Sec, Accuracy +/-0.5Sec, 1Sec increments  |
| Modes:            | IntelliPULSE (Single and multi row), single cycle, cycle down etc Std<br>Programmable pattern pulsing Opt<br>Multicompartment master control with online & offline cleaning, Opt |

### Diagnostics

|                                     |   |
|-------------------------------------|---|
|                                     | 1 Requires optional sensor                    |
| Solenoid Failure:                   | Instant detection and row identification, Std |
| Diaphragm Failure <sup>1</sup> :    | Instant detection and row identification, Opt |
| Filter Leak Locating <sup>1</sup> : | Row by row analysis and identification, Opt   |

### Sensors

|                        |  |
|------------------------|--|
| Differential Pressure: | 0-10"WC, Model DP 20T Non-Clogging Transmitter Opt   |
| Pulse Pressure:        | 0-150PSI, Model SP 10T Opt   |
| Particulate Sensor:    | 10pA, 5.0pA or 0.5pA Resolution (0-1000pA Range) Opt<br>3, 5, 10, 15, 20, 30, 36" probe (Approximately 1/2 duct/pipe I.D.)<br>Extended nipples & rope sensors for large multicompartment baghouses |
| Other:                 | Airflow, Fan amps, hopper level, temperature & more Opt  |



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