

Analyze, Optimize, Comply



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



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.

Specifications

Other:

Meets US EPA MACT 40 CFR Part 63

Requires proper configuration

Control Unit	
Power Supply:	115VAC or 230VAC 50/60Hz Std, 24VDC Opt
	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)
	Solid state intelligent triac with protective snubber circuit
On Timing:	16mSec to 2000mSec
	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
	Programmable patter pulsing Opt
	Multicompartment master control with online & offline cleaning, Opt
Diagnostics	1 Requires optional sensor
Solenoid Failure:	Instant detection and row identification, Std
Diaphragm Failure ^{1:}	Instant detection and row identification, Opt
Filter Leak Locating ¹ :	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
	3, 5, 10, 15, 20, 30, 36" probe (Approximately 1/2 duct/pipe I.D.)
	Extended nipples & rope sensors for large multicompartment baghouses
a	

Airflow, Fan amps, hopper level, temperature & more Opt

FilterSense

800 Cummings Center Beverly, MA 01915 USA Tel: 978-927-4304 Fax: 978-927-4329 www.filtersense.com info@filtersense.com

Advanced Solutions for Process Filtration

Copyright 2008 Specifications Subject to Change

CE