

MODEL SMAC-PRO

Description

The sMAC-PRO™ master control panel provides a quick and easily deployable solution for installations in need of automated blower sequencing and process control. By interfacing with multiple process variable inputs the sMAC-PRO™ can provide automated sequencing of the blowers as well as automated control of system flow control valves, thereby giving you fully automated control of the entire aeration process. The sMAC-PRO™ utilizes Most-Open-Valve (MOV) control philosophies to minimize system pressure and significantly reduce operating costs. The system is fully configurable to fit your application and has additional features such as remote monitoring and control capability, ethernet or hardwired connectivity, and a 15" touch screen interface.

Control Options

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| Control Methods | Blower Sequencing + Process Control via Aeration Flow Control Valves |
| Control Modes | DO, Ammonia, Flow, Pressure |

Available Protections & Functionality

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| Process Control via DO and Ammonia | Communication Monitoring |
| Aeration Zone Valve Control | Equipment Monitoring |
| Aeration Zone Flow Meter Monitoring | Header Temperature Monitoring |
| Equipment Sequencing | Header Pressure Monitoring |
| Run Time Balancing | Header Blow-Off Valve Control |

Documentation, Testing & Startup Services

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| Operation Manuals |
| System Integration Support Documents |
| Factory Acceptance Testing (witnessed available) |
| Installation Support |
| Commissioning & Training |

Standard Panel Specifications*

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| Approvals | UL/ULC 508A |
| Warranty | Lifetime Warranty with Standard Hardware |
| Enclosure Size | 36H x 30W x 10D |
| Enclosure Rating | TYPE 4 |
| HMI | 15" Phoenix Contact WP 6156-WHPS |
| PLC | |
| Model | Phoenix Contact PLCnext AXC F 3152 |
| Programming Software | PLCnext Engineer (Free Software) |
| CPU | Intel Atom™ x5-E3930, 2x 1.3GHz |
| Internal Memory | 1GB |
| Expansion Memory | SD Card - 2GB |
| Communications | ProfiNet, EtherNet/IP, Modbus TCP, MQTT, OPC UA (more options available) |
| Ethernet Connections | x3 RJ45 |
| Operating Temperature | -25°C to 60°C |
| I/O | |
| Discrete Inputs | x16 |
| Discrete Outputs | x16 |
| Analog Inputs | x40 |
| Analog Outputs | x12 |

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| Other Product Features |
| High-Resolution Analogs |
| LED Fuse Blocks |
| 120V Convenience Outlet |
| Ethernet Switch |
| Electrical Surge Protection |
| Isolated Instrument Ground |
| Available Options |
| Alternate PLC Brand (Allen Bradley, Siemens, Schneider, Other) |
| Alternate HMI Brand (Allen Bradley, Siemens, Schneider, Other) |
| Type 4X or Type 12 Enclosure |
| Hinged HMI Cover |
| Interior Light |
| Alarm Beacon or Siren |
| Pilot Devices - Push Buttons, Switches, or Indicator Lights |
| Ethernet Switch - Managed or Unmanaged |
| Cooling - Fans, Vortex Cooler, or Panel Mount A/C |
| Panel Heater |
| Purge Systems |
| Other Approval Ratings |



*Customization may affect the standard listed specifications

* Information is approximate and can change without notice

* Air Performance Based on 1 Atm, 68F/20C, 36% RH and 3550 rpm