

AIR STAR PD™

Trusted, Open Local Controller for Rotary Screw/ Reciprocating Compressors

Why you should demand AirStarPD™

When you demand energy efficiency and machine safety, demand AirStarPD™. For proven reliability, flexibility, and functionality, AirStarPD™ is the trusted aftermarket local controller to manage one Rotary Screw or Reciprocating compressor.

AirStarPD™ is built on the Allen Bradley MicroLogix 1100 PLC platform to Nema and NEC standards, with all components housed in a Nema 12 enclosure, and offering six standard analog inputs (expandable to eighteen), ten digital inputs, plus six digital outputs. No proprietary hardware is provided.

For peace of mind, the HMI serves as the operator interface for all machine control functions, all set-point entry and modification, as well as all system monitoring and event history.

AirStarPD™ is your solutions-source. The data table is configured to 3PX standards, providing easy access from the 3PX-Backbone™ data concentrator for master control (sequencing) solutions, and SCADA or remote monitor routing.



AirStarPD™ Features & Benefits

- **Elaborate HMI Functionality** allows complete configuration, tuning, troubleshooting, and operation of the compressor.
- **Familiar Allen-Bradley Modular PLC Platform** is easily supported—no proprietary parts are used.
- **Support**, whether on-site, by phone, or via modem connection, support is prompt, effective, and available 24/7.
- **Documentation** thoroughly addresses set-up, tuning, troubleshooting, and operations.
- **Ethernet Communications** are native and Modbus is optional for connection to any third party DCS, MIS, or SCADA systems.
- **Special Retrokits Available:** - Atlas Elektronikon - IR Intellisys - SullAir Supervisor - and many other Retrokits include additional instruments and transmitters for complete installation. In some instances, the PLC requires a new enclosure due to space limitations in the existing enclosure.
- **Variable Speed Drive** control is optional for Rotary Screw Compressors.
- **Compatible with 3PX-Backbone™**, which permits electronic integration with numerous third party controllers.

CASE
CONTROLS
A Revolution in Compressor Automation

To learn more about AirStarPD™, please call Case Controls at (812) 422-2422.

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AIR STAR PD™

Allen-Bradley PLC-Based Open Local Controller

HARDWARE SPECIFICATIONS

Enclosure

Rating Nema 4/12
Dimensions 24h x 24w x 12d
Color White
Weight 115 lbs.

PLC Components

Processor A-B MicroLogix 1100
Analog Inputs Six
Digital Inputs Ten
Digital Outputs Six

Front Panel Devices

HMI 7" PanelView Plus 800 (Touch)
Emergency Stop Push Button
Control Power Selector Switch

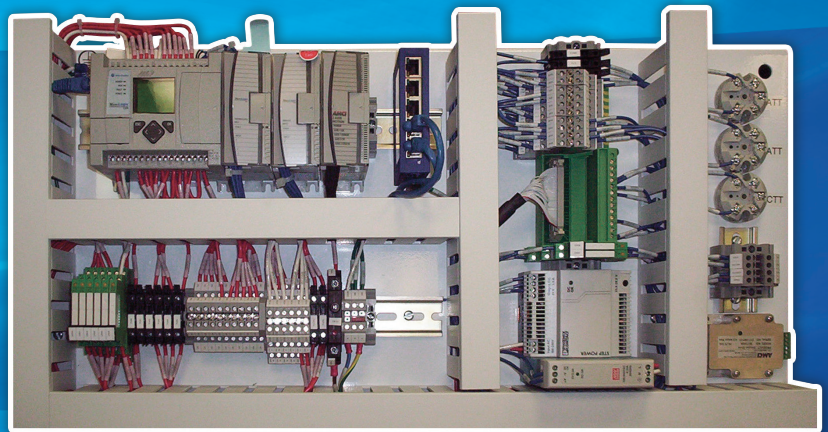
Communications

Ethernet Port used for connection to HMI
Serial Port Used for Connection to Modem
or Optional Modbus
Modbus Connection Optional

Power Requirements 120VAC, 10 amps

BASE SYSTEM

- The base system is defined as having six analog inputs (4-20ma or 1-5 VDC), ten digital inputs (120VAC), and six digital outputs which are dry contacts.
- Additional variables for display, alarming, machine trip, and start-permissive can be added and configured in the field.
- When requested, the analog inputs can be increased to eighteen.
- Instruments are not included as part of the controller and may be provided separately, or existing instruments may be reused.



** Pictured are numerous options not included with the base system.*

OPTIONS

Enclosure System

- Nema 4X SS Enclosure Rating
- Purgeable Instrument Access Door for HMI
- Vortec Panel Cooler
- Panel Air Conditioning
- Panel Heater
- Larger Display

PLC Components

- Analog Inputs - Up to Eighteen
- Analog Outputs - Up to Four

Control Scheme

- Variable Speed Drive - Optional

480V Power Package

- Oil Heater Contactor
- Blower motor starter
- Control Circuit Transformer
- Lockable Disconnect
- Main Motor Starter

Communications

- Modbus RTU
- Ethernet Switch (option)
Connection to DCS

I/O CONFIGURATION

Analog Inputs (4-20ma/1-5VDC) Loop Powered

- 1 Oil Pressure
- 1 Line (System) Air Pressure
- 1 Discharge Oil Temperature
- 1 Discharge Air Temperature
- 1 Spare

Digital Inputs (120VAC)

- 1 Main Motor Aux Contacts
- 1 Fan Motor Aux Contacts
- 1 Emergency Stop Pressed
- 7 Field Configurable Spares

Digital Outputs

- 1 Main Motor Run
- 1 Fan Motor Run
- 1 Common Alarm
- 1-4 Load Solenoids