

Click Here To Start Demo

Version 3.0 Copyright © 2005 by Case Engineering inc

This is intended as a working active demonstration only. Every attempt has been made to replicate the AirLogix™ control system. However limitations in the software used to create the demo prevent an exact replica. Minor differences may exist between the AirLogix™ control system and this demonstration.

Case has mature compressed air solutions built on other platforms and more such installations than everyone else combined.

For more information, a personal presentation or to visit us for a tour of our facility contact:

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Allen-Bradley

PanelView Plus 700

This screen shows the version number of your controller, Case contact information and control panel temperature. It also provides access to the main screen and the PanelView Plus setup menu.

The screen displays the AIR LOGIX logo and version number (3.0.0) in the center. To the left, the text "CASE CONTROLS" is written vertically. Below the logo, a box contains the following text: "Developed By: Case Engineering, 1401 W. Franklin St, Evansville, IN 47710, Phone: (800) 294-7856". Below this, a box shows "Control Panel Temperature 94.2". At the bottom, there are five icons: a blue square with "Main [F2]", a red square with a white "M" logo, a purple square with a white spiral logo, a blue square with a white fan logo, and a green square with a white lightning bolt logo. The text "GoTo Config [F5]" is at the bottom right of the screen.

K1

K2

K3

K4

K5

K6

K7

K8

K9

K10

K11

K12

7 8 9

4 5 6

1 2 3

- 0 .

← ↵

⬅ ➡ SHIFT

ESC CTRL ALT



F1 F2 F3 F4 F5

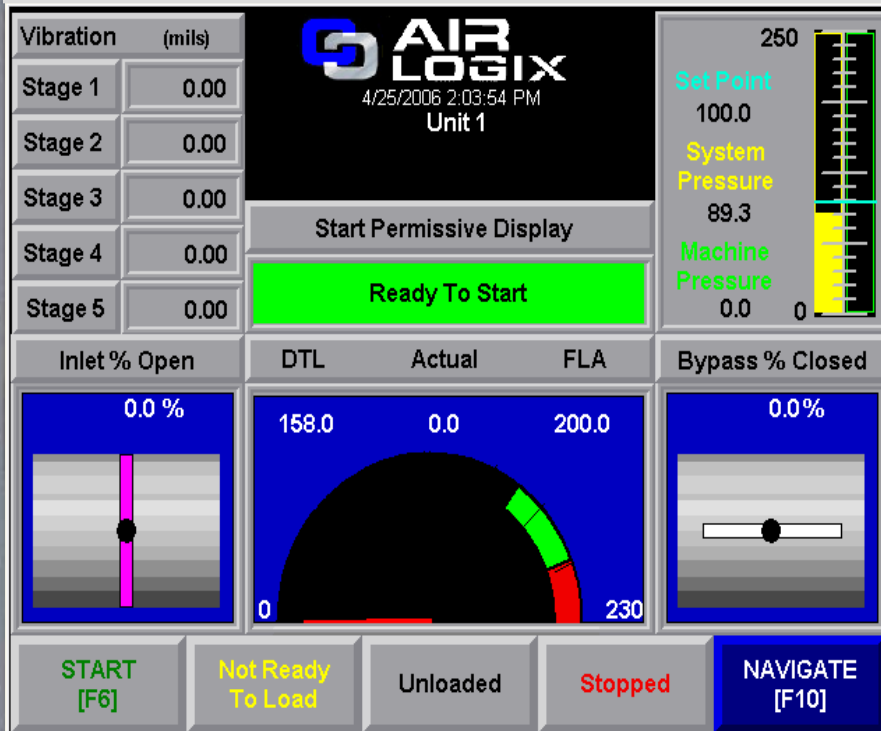
F6 F7 F8 F9 F10



Allen-Bradley

PanelView Plus 700

The AirLogix™ Main Operator Screen has a wealth of information about your compressor with one look at this display. [Click \[HERE\]](#)



Use this button to return to the beginning of the demonstration

Use this button to explore the different AirLogix™ screens



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % Closed

0.0

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

▲

◀

▼

250

Set Point

100.0

System Pressure

89.3

Machine Pressure

0.0 0

Bypass % Closed

0.0%

Log In [F2]

Close [F10]

START [F6]

To Load

Unloaded

Stopped

NAVIGATE [F10]

7 8 9

4 5 6

1 2 3

- 0 .

← →

← → SHIFT

ESC CTRL ALT

▲

◀ ▶

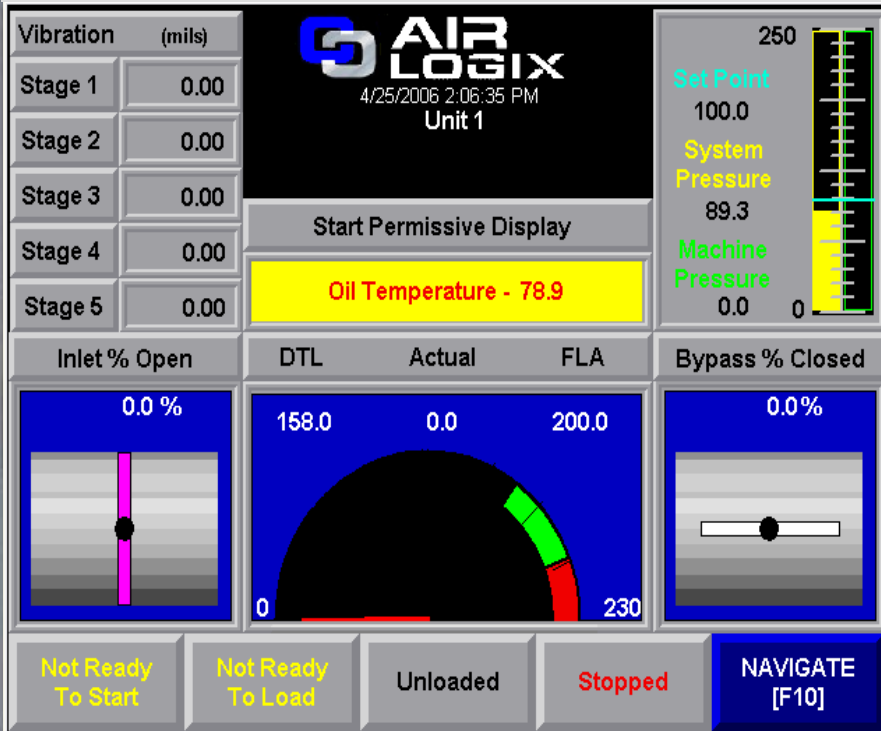
▼



Allen-Bradley

PanelView Plus 700

Notice the Oil Temperature is too low to start the machine. [Click \[HERE\]](#) to heat the oil and prepare the machine for starting.





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % Closed

0.0

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In [F2]

Close [F10]

Set Point 100.0

System Pressure 89.3

Machine Pressure 0.0

250

Bypass % Closed

0.0%

Not Ready To Start

To Load

Unloaded

Stopped

NAVIGATE [F10]

K7

7

K8

8

K9

9

K10

4

K11

5

K12

6

K1

1

K2

2

K3

3

K4

-

K5

0

K6

.

K7

←

K8

→

K9

SHIFT

K10

ESC

K11

CTRL

K12

ALT

↑

↓

←

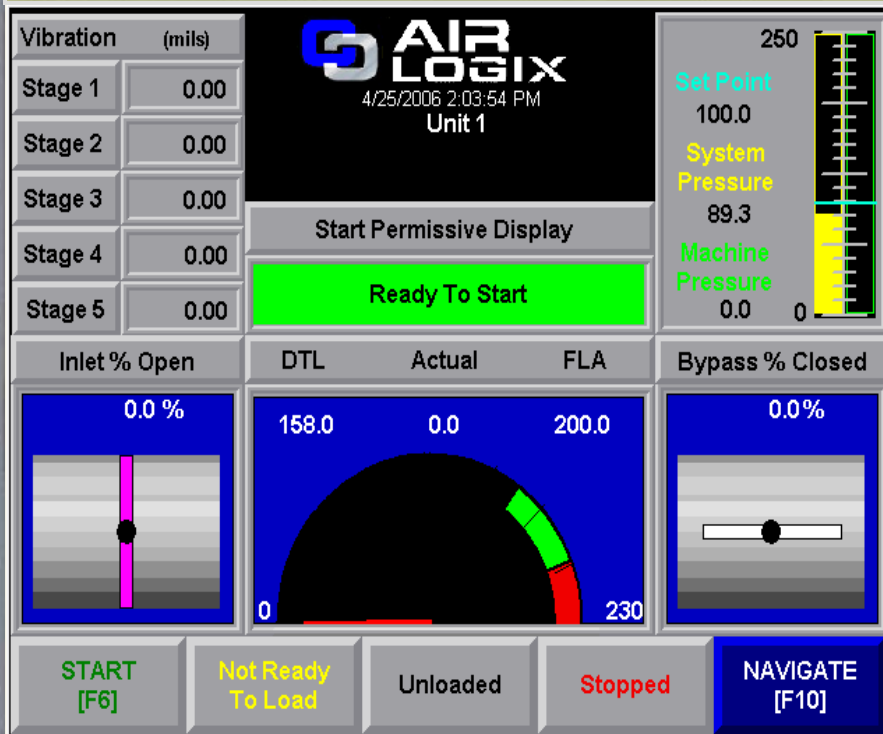
→



Allen-Bradley

PanelView Plus 700

Now that the Start Permissive Display says "Ready To Start". Click **Start [F6]** below on the screen to start the compressor.





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % Closed

0.0

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

▲

◀

▼

250

Set Point

100.0

System Pressure

89.3

Machine Pressure

0.0 0

Bypass % Closed

0.0%

Log In [F2]

Close [F10]

START [F6]

To Load

Unloaded

Stopped

NAVIGATE [F10]

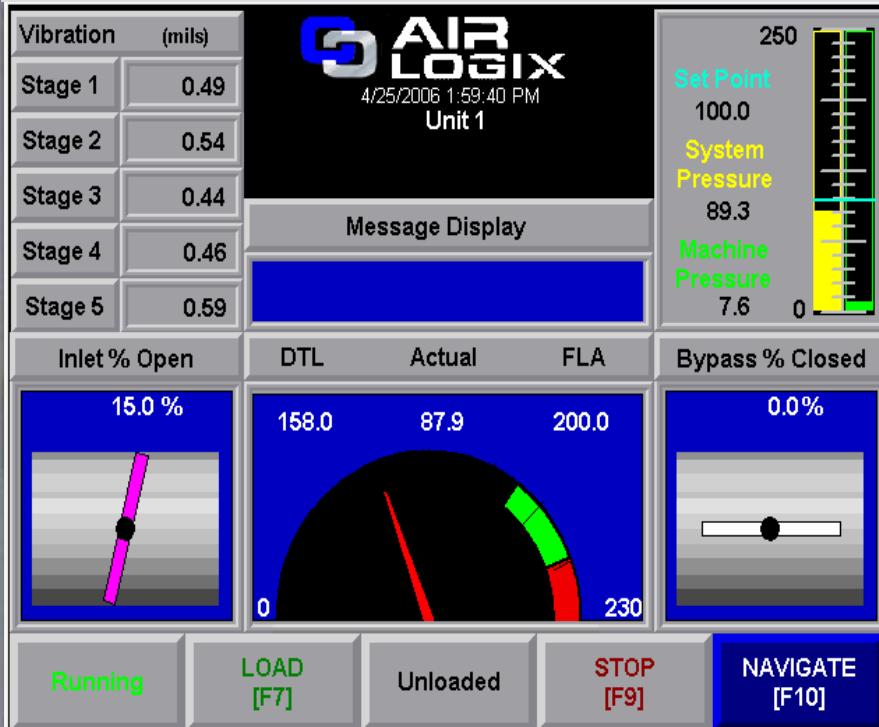




Allen-Bradley

PanelView Plus 700

First the inlet valve moves to start position. Notice you can watch the pinion vibrations during start-up. The **red needle** below illustrates **Motor Current** (proportional to Flow).



Click Load [F7] on the screen above to begin loading the compressor.



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % C

15.0

Running

► Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In [F2]

Close [F10]

250

Set Point 100.0

System Pressure 89.3

Machine Pressure 7.6

0

Bypass % Closed

0.0%

Unloaded





Allen-Bradley

PanelView Plus 700

Vibration (mils)

Stage 1	0.49
Stage 2	0.54
Stage 3	0.44
Stage 4	0.46
Stage 5	0.59

4/29/2006 11:32:19 AM
Unit 1

Message Display

Set Point
100.0

System Pressure
89.3

Machine Pressure
7.6

250
0

Inlet % Open

DTL

Actual

FLA

Bypass % Closed

32.8 %
Controlling To DTL

158.0 158.4 200.0

0 230

0.0 %

Running

Loading

Unloaded

STOP
[F9]

NAVIGATE
[F10]

The inlet valve throttles open until Motor Current has reached DTL (Dynamic Throttle Limit). [Click \[HERE\]](#) to continue to the next step.

K7

K8

K9

K10

K11

K12

7

8

9

4

5

6

1

2

3

-

0

.

←

←

←

→

SHIFT

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % C

32.8

Controlling T

Running

Loading

Unloaded

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In [F2]

Close [F10]

250

Set Point 100.0

System Pressure 89.3

Machine Pressure 7.6

0

Bypass % Closed

0.0%

[F9]

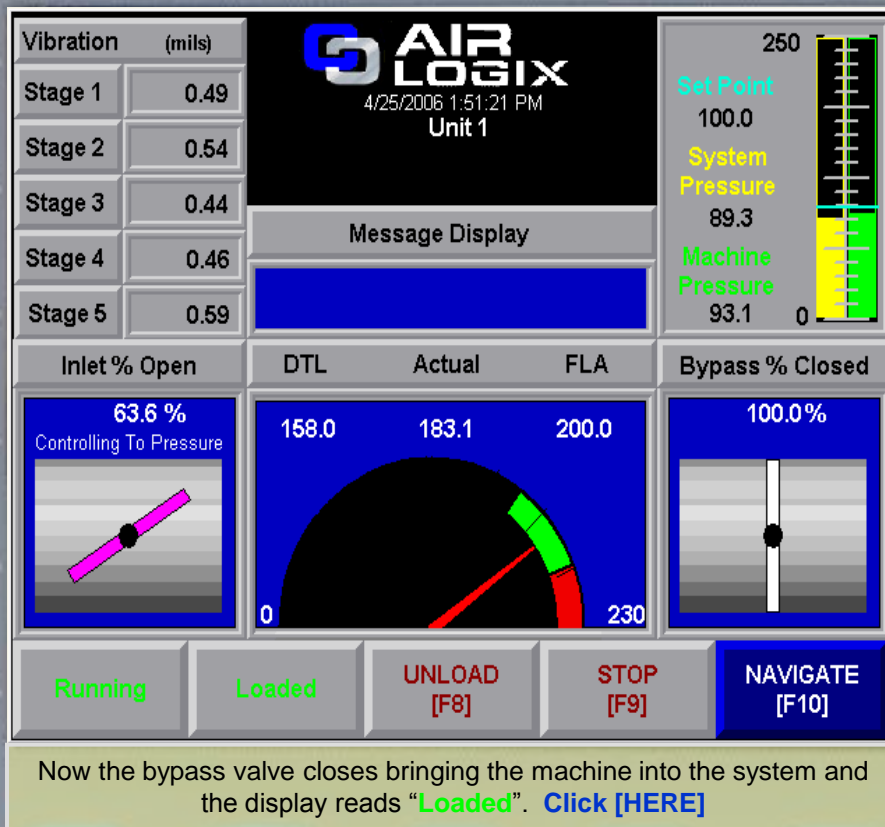
NAVIGATE [F10]





Allen-Bradley

PanelView Plus 700





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % O

63.6

Controlling To

Running

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In

[F2]

Close

[F10]

250

Set Point

100.0

System

Pressure

89.3

Machine

Pressure

93.1

0

Bypass % Closed

100.0%

NAVIGATE

[F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

-

0

.

K11

←

→

SHIFT

K12

ESC

CTRL

ALT




Allen-Bradley

PanelView Plus 700

Vibration (mils)

Stage 1	0.49
Stage 2	0.54
Stage 3	0.44
Stage 4	0.46
Stage 5	0.59


4/25/2006 1:49:14 PM
Unit 1


Message Display

Set Point
100.0

System Pressure
89.3

Machine Pressure
93.1

250
0



Inlet % Open

DTL

Actual

FLA

Bypass % Closed

91.4 %
Controlling To FLA

158.0 199.6 200.0

100.0 %

Running

Loaded

UNLOAD
[F8]

STOP
[F9]

NAVIGATE
[F10]

If Motor Current reaches FLA, AirLogix™ modulates to achieve maximum output while protecting the motor. [Click \[HERE\]](#)

K7

K8

K9

K10

K11

K12

7

8

9

4

5

6

1

2

3

-

0

.

←

←

←

→

SHIFT

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % C

91.4

Controlling T

Running

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In

[F2]

Close

[F10]

Loaded

[F8]

[F9]

250

Set Point

100.0

System

Pressure

89.3

Machine

Pressure

93.1

0

Bypass % Closed

100.0%

NAVIGATE

[F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

-

0

.

K11

←

←

K12

↩

→

SHIFT

ESC

CTRL

ALT



Allen-Bradley

PanelView Plus 700



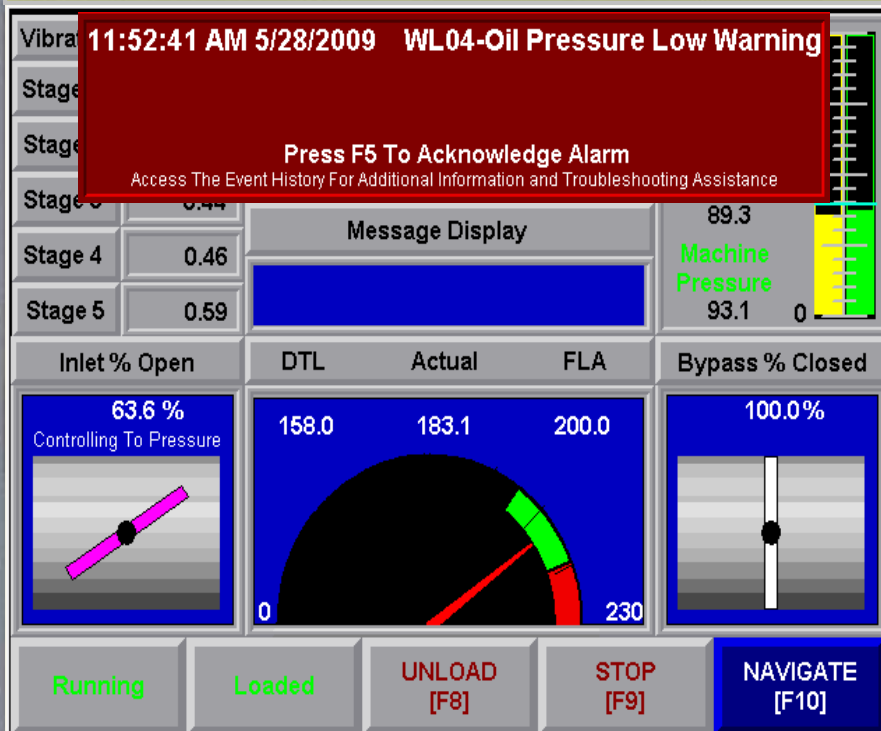
As the machine approaches minimum flow (motor amps), the inlet valve modulates to DTL to prevent surge & the bypass valve modulates to maintain pressure. [Click \[HERE\]](#) to continue.



Allen-Bradley

PanelView Plus 700

When an input travels beyond its alarm or trip set point, AirLogix™ displays a banner to alert the user of the problem. In the event of a trip, the compressor stops.



Click the alarm banner to acknowledge the alarm and continue.



Allen-Bradley

PanelView Plus 700

Stopping the compressor requires confirmation from the operator to prevent unintended stops.

Vibration	(mils)
Stage 1	0.49
Stage 2	0.54
Stage 3	0.44
Stage 4	0.46
Stage 5	0.59

4/25/2006 1:51:21 PM
Unit 1

Set Point
100.0
System Pressure
89.3
Machine Pressure
93.1

250
0

Message Display

Inlet % Open	DTL	Actual	FLA	Bypass % Closed
63.6 % Controlling To Pressure 	158.0	183.1	200.0	100.0 %

RunningLoadedUNLOAD [F8]STOP [F9]NAVIGATE [F10]

Click Stop [F9] to stop the compressor.



Allen-Bradley

PanelView Plus 700

The compressor can be stopped even when loaded. The unload sequence will be initiated before the compressor shuts down.



To stop the compressor **Click Yes [F4]**. To continue to run, **Click NO [F5]**.



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PanelView Plus 700

Vibration Screen Press Note


Stage 10.00

Stage 20.00

Stage 30.00

Stage 40.00

Stage 50.00



4/25/2006 2:03:54 PM
Unit 1


Start Permissive Display

Ready To Start

Set Point100.0

System Pressure89.3

Machine Pressure0.0



Inlet % Open

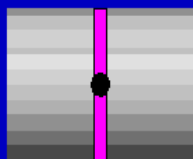
DTL

Actual

FLA

Bypass % Closed

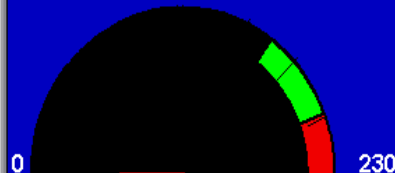
0.0 %



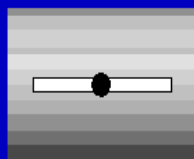
158.0

0.0

200.0



0.0 %



START [F6]

Not Ready To Load

Unloaded

Stopped

NAVIGATE [F10]

The blue button will present a menu with more screens. Click **NAVIGATE [F10]** on the screen above.

K7

7 8 9

K8

4 5 6

K9

1 2 3

K10

- 0 .

K11

← →

K12

← → SHIFT

ESC CTRL ALT



F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % O

63.6

Controlling To

Running

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In

[F2]

Close

[F10]

[F8]

[F9]

250

Set Point

100.0

System

Pressure

89.3

Machine

Pressure

93.1

0

Bypass % Closed

100.0%

NAVIGATE

[F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

-

0

.

K11

←

→

SHIFT

K12

ESC

CTRL

ALT



Allen-Bradley

PanelView Plus 700

Vibrations, pressures and temperatures are organized here and displayed by machine stage.



	Vibration (mils)	Pressure (psig)	Temp (°F)
Inlet			78.2
Stage 1	0.49	9.2	81.8
Stage 2	0.54	20.1	81.2
Stage 3	0.44	54.9	83.0
Stage 4	0.46	91.6	82.3
Stage 5	0.59		
Machine Discharge		105.3	82.2
System		101.5	

NEXT
[F8]

PREVIOUS
[F9]

NAVIGATE
[F10]

ESC

CTRL

ALT



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Main Screen
Air End Status
Oil and Water Status
Motor Status
Discrete Status
User Defined Status
Trend Select
Event History
Misc Data
AirMaster
Auto Functions
Manual Valve Control
PID Parameters
General Setup
Case Controls

Log In [F2] Close [F10]

[F8] [F9] NAVIGATE [F10]

K7

7 8 9

K8

4 5 6

K9

1 2 3

K10

- 0 .

K11

← → SHIFT

K12

ESC CTRL ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10





Oil and water readings are displayed here.



Oil and Water Status

	Pressure (psig)	Temp (°F)
Main Oil	25.6	109.9
Pre-filter Oil	28.6	
Oil Filter DP	3.0	
Bearing Oil	488.3	
Inlet Water		73.2

Prelube Pump
START [F6]

Prelube Pump
STOPPED

NEXT
[F8]

PREVIOUS
[F9]

NAVIGATE
[F10]

An authorized user can Start/Stop the Prelube or Auxiliary Oil Pump from this screen.





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Main Screen
Air End Status
Oil and Water Status
Motor Status
Discrete Status
User Defined Status
Trend Select
Event History
Misc Data
AirMaster
Auto Functions
Manual Valve Control
PID Parameters
General Setup
Case Controls

Log In [F2]
Close [F10]

Prelube Purge START [F6]
STOPPED [F8]
[F9]
NAVIGATE [F10]

7 8 9
4 5 6
1 2 3
- 0 .
← →
← → SHIFT
ESC CTRL ALT

F1 F2 F3 F4 F5
F6 F7 F8 F9 F10



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PanelView Plus 700

All Motor Data is displayed here



Motor Status

Current	FLA	Voltage	KiloWatts
183.1	200	4160	1187.3
Winding Temperature A			172.4
Winding Temperature B			171.6
Winding Temperature C			170.9
Inboard Bearing Temperature			146.5
Outboard Bearing Temperature			142.8

NEXT
[F8]

PREVIOUS
[F9]

NAVIGATE
[F10]

ESC

CTRL

ALT



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Main Screen
Air End Status
Oil and Water Status
Motor Status
Discrete Status
User Defined Status
Trend Select
Event History
Misc Data
AirMaster
Auto Functions
Manual Valve Control
PID Parameters
General Setup
Case Controls

Power Watts
1187.3
172.4
171.6
170.9
146.5
142.8

Log In [F2] Close [F10] [F8] [F9] NAVIGATE [F10]

K7 7 8 9
K8 4 5 6
K9 1 2 3
- 0 .
K10 ← →
K11 ← → SHIFT
ESC CTRL ALT
K12

F1 F2 F3 F4 F5
F6 F7 F8 F9 F10



Here is the status of all digital I/O. Yellow indicates the device should be On, Open or Running. Black indicates the device is Off, Closed or not Running. Green indicates the condition is good. Blinking Red needs attention



Discrete Input Status			
<input checked="" type="checkbox"/>	E-stop Pressed	<input checked="" type="checkbox"/>	Low Water Flow
<input type="checkbox"/>	Prelube Pump Running	<input checked="" type="checkbox"/>	Low Seal Air
<input type="checkbox"/>		<input checked="" type="checkbox"/>	High Inlet Filter DP
<input type="checkbox"/>	Compressor Motor Running	<input checked="" type="checkbox"/>	High Oil Filter DP
<input type="checkbox"/>	Compressor Loaded	<input checked="" type="checkbox"/>	Low Oil Level
<input type="checkbox"/>	Cooling Water Valve Open	<input checked="" type="checkbox"/>	High Condensate Level
<input type="checkbox"/>	Oil Heater On	<input checked="" type="checkbox"/>	High Motor Temperature
<input checked="" type="checkbox"/>	Spare1	<input checked="" type="checkbox"/>	Spare4
<input checked="" type="checkbox"/>	Spare2	<input checked="" type="checkbox"/>	Spare5
<input checked="" type="checkbox"/>	Spare3		

☐ = OFF/NO
☐ = ON/YES
☒ = OK
☐ = NOT OK

NEXT [F8]
PREVIOUS [F9]
NAVIGATE [F10]





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

▲

◀

▼

☒ E-stop

☐ Prelu

☒ Comp

☒ Comp

☒ Coolin

☐ Oil He

☒ Spare

☒ Spare

☒ Spare

☐ = OFF/

Log In
[F2]

Close
[F10]

US
[F8]

NAVIGATE
[F10]

ow

er DP

DP

ate Level

temperature

☒ = NOT OK

K7

K8

K9

K10

K11

K12

7

8

9

4

5

6

1

2

3

-

0

.

←

←

↶

↷

SHIFT

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10






Allen-Bradley

PanelView Plus 700

The User Defined Status Screen allows the user to decide what inputs they want to view. The screen can be configured to display any enabled analog input.



User Defined Status 1	Value
System Pressure	101.5
Machine Pressure	105.3
Oil Temperature	109.9
Discharge Air Temperature	82.2
Oil Pressure	25.6
Motor Current	183.1
Bearing Oil Pressure	488.3
Pre-filter Oil Pressure	28.6

Use TAB Left/Right Keys To Navigate List.
Use UP/DN Arrow Keys To Select Input.
Press Enter to display.

NEXT
[F8]

PREVIOUS
[F9]

NAVIGATE
[F10]

Click inside the green box to change the input. Click "Navigate [F10]" to skip to a particular module or return to the main screen.



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Main Screen

- Air End Status
- Oil and Water Status
- Motor Status
- Discrete Status
- User Defined Status
- Trend Select
- Event History
- Misc Data
- AirMaster
- Auto Functions
- Manual Valve Control
- PID Parameters
- General Setup
- Case Controls

Value
101.5
105.3
109.9
82.2
25.6
183.1
488.3
28.6

Log In [F2] Close [F10] NAVIGATE [F10]

Use TAB Left/Right to Select Input.
Use UP/DN Arrow Keys to Select Input.
Press Enter to display.

Keypad layout including numeric keys (7-9, 4-6, 1-3, -, 0, .), navigation keys (left, right, up, down, center), and function keys (SHIFT, CTRL, ALT, ESC, F1-F10).



A second User Defined Status Screen provides the ability to monitor up to 16 analog inputs.



User Defined Status 2	Value
Vibration Stage 1	0.5
Vibration Stage 2	0.5
Vibration Stage 3	0.4
Vibration Stage 4	0.5
Inlet Air Temperature	78.2
Discharge Air Temperature Stage 1	81.8
Discharge Air Temperature Stage 2	81.2
Discharge Air Temperature Stage 3	83.0

Use TAB Left/Right Keys To Navigate List.
Use UP/DN Arrow Keys To Select Input.
Press Enter to display.

NEXT
[F8]

PREVIOUS
[F9]

NAVIGATE
[F10]

ESC

CTRL

ALT



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

▲

◀

▼

Value
0.5
0.5
0.4
0.5
78.2
81.8
81.2
83.0

Log In [F2]

Close [F10]

US [F8]

NAVIGATE [F10]

Use TAB Left/Right To Select Input.

Use UP/DN Arrow Keys To Select Input.

Press Enter to display.





Allen-Bradley

PanelView Plus 700

The Misc Data Screen provides useful data about the compressor. The data can be used for preventative maintenance scheduling and monitoring energy usage.



Hour Meters			Power Information (est.)		
Run	16360	Hours	Actual	1185.0	kW
Loaded	15823	Hours	Today	14901.4	kWh
Fully Loaded	12146	Hours	Yesterday	25643.1	kWh
Performance Mode	41	Hours	This Month	341.6	MWh
Oil Change	495	Hours	Last Month	739.6	MWh
			This Year	4615.8	MWh

Screen Info
[F6]

VIBRATION
[F7]

MAIN
[F8]

PREVIOUS
[F9]

NAVIGATE
[F10]

The Screen Info [F6] button will navigate to a screen with further details on the information here. **Click Vibration [F7]** to view the vibration log screens.

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

-

0

.

K11

←

→

SHIFT

K12

ESC

CTRL

ALT



From this screen, you can reset the readings from the Misc Data screen back to zero.

Power Estimations:

The power data is calculated. $kW = (\text{Motor Current} \times \text{Motor Voltage} \times 1.732 \times 0.90) / 1000$
Motor Current is typically the only analog variable monitored by the AirLogix system. The motor voltage is entered on the control system configuration screen.

The MegaWatt hour (MWh) "This Month" is reset to zero on the first day of each month.
The MWh "This Year" is reset to zero on the first day of year.

Oil Change Hour Meter:

The warning set point and the reset button for the hour meter is located on the Oil System Configuration screen. The oil change hour meter increments anytime the compressor is running. When the accumulated time reaches the warning set point, an alarm banner is displayed. The warning will retrigger every 7 days until the hour meter is reset.

Resetting Hour Meters:

Logging in with an appropriate user/password will allow the resetting of individual hour meters. The Oil Change Hour Meter does not require login.

Reset Run Hrs
[F1]

Reset Full Ld Hrs
[F2]

Reset PTM Hrs
[F3]

Reset MWh Month
[F4]

CLOSE
[F10]

Reset Loaded Hrs
[F6]

Reset Bypass Hrs
[F7]

Reset Oil Hrs
[F8]

Reset MWh Year
[F9]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

-

0

.

K11

←

→

SHIFT

K12

ESC

CTRL

ALT



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Run

Loaded

Fully Loaded

Performance

Oil Change

► Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In [F2]

Close [F10]

Screen Info [F6]

Log In [F2]

Close [F10]

STATUS [F9]

NAVIGATE [F10]

Information (est.)	
1185.0	kW
14901.4	kWh
25643.1	kWh
341.6	MWh
739.6	MWh
4615.8	MWh

K7

7 8 9

K8

4 5 6

K9

1 2 3

K10

- 0 .

K11

← → SHIFT

K12

ESC CTRL ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

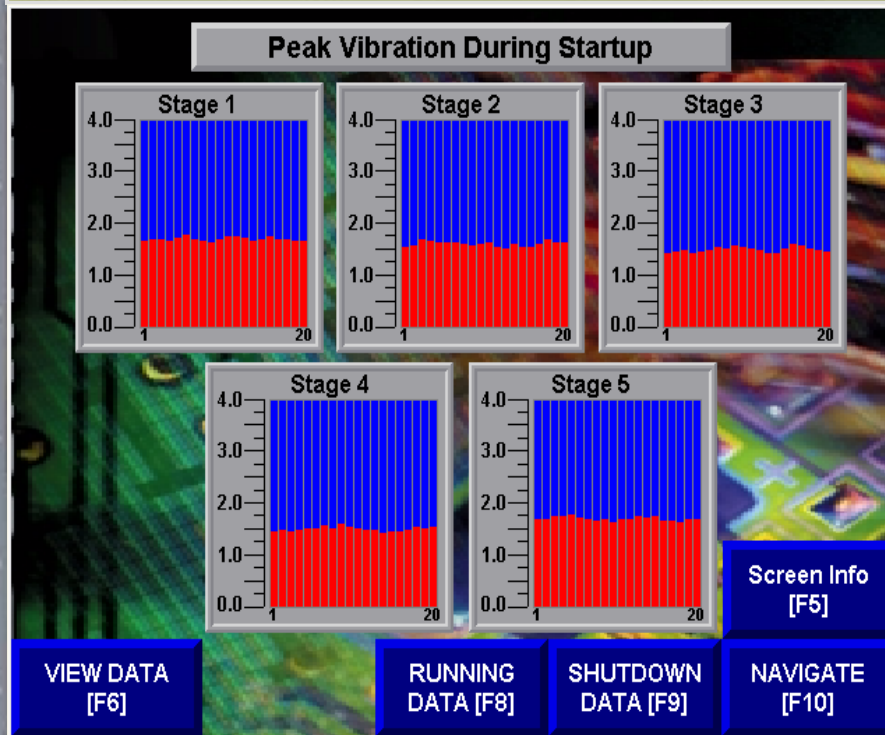




Allen-Bradley

PanelView Plus 700

Every time the compressor is started AirLogix™ captures the peak vibration during the start for each stage. The last 20 peaks are then displayed in a graph for analysis.



K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

-

0

.

K11

←

←

K12

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

4.0
3.0
2.0
1.0
0.0

1

Stage 3

120

20

VIEW DATA [F6]

Log In [F2]

Close [F10]

DOWN

NAVIGATE [F10]

Screen Info [F5]

DATA [F8]

DATA [F9]

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

789

456

123

-0.

←←→→

↩→|SHIFT

ESCCTRLALT

▲

◀▶

▼



The help screen contains detailed information on the vibration logging screens.

Peak Vibration Detection:

The AirLogix PLC is collecting peak vibration data throughout three different operational periods for the compressor. The data collected may be viewed in Bar Graph or numerical form. This selection is toggled by pressing [F6]. The most recent twenty events (1-20) are displayed. Event number 1 is the most recent and event 20 is the oldest.

Peak Vibration During Startup:

This is the peak vibration point detected after a start is initialized and the vibration inhibit timer is timing.

Peak Vibration Running:

This is the peak vibration point detected after the vibration inhibit timer is done. Also, a new peak value is created every day at 12:00 AM. For example, if a compressor runs continuously 10 days, you will have at least 10 separate peak data points, one for each day.

Peak Vibration During Coast Down:

This is the peak vibration point detected after a compressor stop is initialized and during the coast down time.

Additional Data is available not shown on the screen. Please contact Case Engineering for further information.

CLOSE
[F10]





Every time the compressor is started AirLogix™ captures the peak vibration for each stage. The last 20 peaks are entered into a table for analysis.

Peak Vibration During Startup

Stage 1	1-10	1.65	1.70	1.68	1.65	1.71	1.78	1.69	1.65	1.64	1.70
	11-20	1.75	1.74	1.73	1.65	1.68	1.75	1.69	1.69	1.65	1.67
Stage 2	1-10	1.54	1.56	1.66	1.67	1.62	1.64	1.63	1.60	1.58	1.59
	11-20	1.62	1.55	1.52	1.59	1.55	1.53	1.60	1.69	1.63	1.64
Stage 3	1-10	1.41	1.46	1.49	1.41	1.46	1.49	1.55	1.52	1.58	1.53
	11-20	1.50	1.49	1.42	1.42	1.50	1.59	1.57	1.52	1.49	1.45
Stage 4	1-10	1.46	1.48	1.46	1.49	1.50	1.52	1.58	1.51	1.59	1.54
	11-20	1.52	1.48	1.47	1.43	1.46	1.44	1.49	1.53	1.51	1.54
Stage 5	1-10	1.69	1.70	1.75	1.74	1.78	1.71	1.68	1.65	1.69	1.63
	11-20	1.68	1.70	1.74	1.71	1.75	1.67	1.65	1.64	1.68	1.69

Screen Info
[F5]

VIEW GRAPH
[F6]

RUNNING
DATA [F8]

SHUTDOWN
DATA [F9]

NAVIGATE
[F10]

ESC



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Stag

Stag

Stag

Stag

Stag

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In [F2]

Close [F10]

VIEW GRAPH [F6]

DATA [F8]

DATA [F9]

Screen Info [F5]

NAVIGATE [F10]

7 8 9

4 5 6

1 2 3

- 0 .

← →

↶ ↷ SHIFT

ESC CTRL ALT

▲

◀ ▶

▼



Allen-Bradley

PanelView Plus 700

The help screen contains detailed information on the vibration logging screens.

Peak Vibration Detection:

The AirLogix PLC is collecting peak vibration data throughout three different operational periods for the compressor. The data collected may be viewed in Bar Graph or numerical form. This selection is toggled by pressing [F6]. The most recent twenty events (1-20) are displayed. Event number 1 is the most recent and event 20 is the oldest.

Peak Vibration During Startup:

This is the peak vibration point detected after a start is initialized and the vibration inhibit timer is timing.

Peak Vibration Running:

This is the peak vibration point detected after the vibration inhibit timer is done. Also, a new peak value is created every day at 12:00 AM. For example, if a compressor runs continuously 10 days, you will have at least 10 separate peak data points, one for each day.

Peak Vibration During Coast Down:

This is the peak vibration point detected after a compressor stop is initialized and during the coast down time.

Additional Data is available not shown on the screen. Please contact Case Engineering for further information.

CLOSE
[F10]

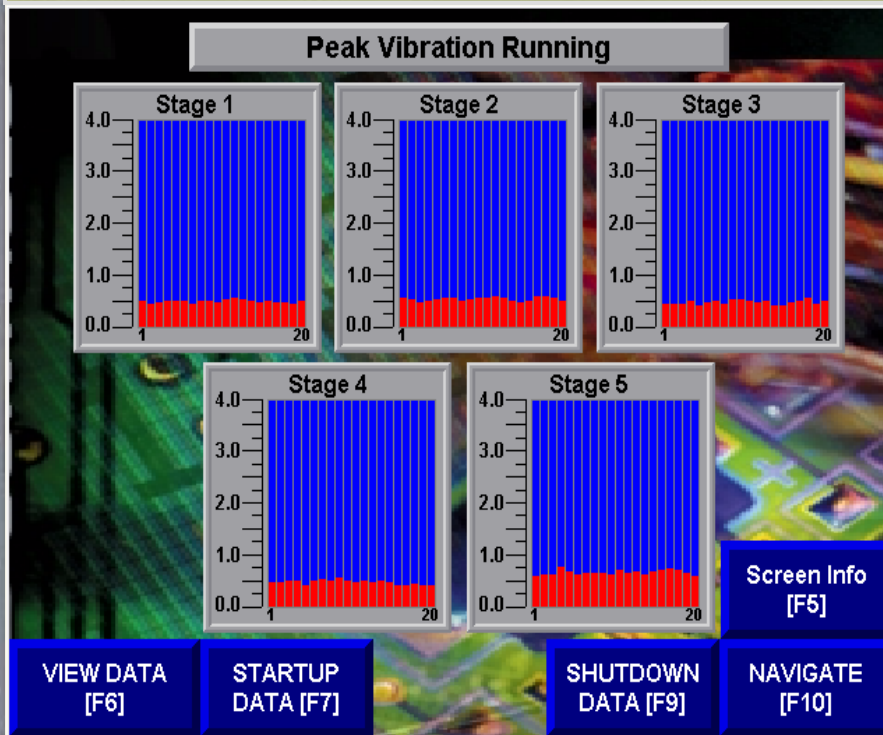




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PanelView Plus 700

AirLogix™ captures the peak vibration for each stage while the compressor is running. The last 20 peaks are then displayed in a graph for analysis.



K7

7

8

9

K8

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5

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K9

1

2

3

K10

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0

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K11

←

←

K12

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Main Screen

- Air End Status
- Oil and Water Status
- Motor Status
- Discrete Status
- User Defined Status
- Trend Select
- Event History
- Misc Data
- AirMaster
- Auto Functions
- Manual Valve Control
- PID Parameters
- General Setup
- Case Controls

VIEW DAT [F6] Log In [F2] Close [F10] DOWN DATA [F9] NAVIGATE [F10]

Screen Info [F5]

Keypad buttons:

- 7, 8, 9
- 4, 5, 6
- 1, 2, 3
- , 0 , .
- ← , → (long arrows)
- ↶ , ↷ (short arrows), SHIFT
- ESC (circled in red), CTRL, ALT
- Directional pad (up, down, left, right arrows)

Function keys: F1, F2, F3, F4, F5, F6, F7, F8, F9, F10



The help screen contains detailed information on the vibration logging screens.

Peak Vibration Detection:

The AirLogix PLC is collecting peak vibration data throughout three different operational periods for the compressor. The data collected may be viewed in Bar Graph or numerical form. This selection is toggled by pressing [F6]. The most recent twenty events (1-20) are displayed. Event number 1 is the most recent and event 20 is the oldest.

Peak Vibration During Startup:

This is the peak vibration point detected after a start is initialized and the vibration inhibit timer is timing.

Peak Vibration Running:

This is the peak vibration point detected after the vibration inhibit timer is done. Also, a new peak value is created every day at 12:00 AM. For example, if a compressor runs continuously 10 days, you will have at least 10 separate peak data points, one for each day.

Peak Vibration During Coast Down:

This is the peak vibration point detected after a compressor stop is initialized and during the coast down time.

Additional Data is available not shown on the screen. Please contact Case Engineering for further information.

CLOSE
[F10]





Allen-Bradley

PanelView Plus 700

AirLogix™ captures the peak vibration for each stage while the compressor is running. The last 20 peaks are entered into a table for analysis.

Peak Vibration Running

Stage 1	1-10	0.49	0.44	0.45	0.49	0.48	0.50	0.43	0.48	0.48	0.46
	11-20	0.52	0.55	0.53	0.49	0.47	0.49	0.45	0.46	0.43	0.49
Stage 2	1-10	0.54	0.53	0.54	0.50	0.51	0.56	0.54	0.49	0.52	0.54
	11-20	0.56	0.59	0.54	0.48	0.46	0.49	0.57	0.58	0.55	0.50
Stage 3	1-10	0.44	0.43	0.44	0.49	0.41	0.45	0.48	0.42	0.51	0.53
	11-20	0.48	0.46	0.48	0.41	0.41	0.45	0.48	0.55	0.43	0.49
Stage 4	1-10	0.46	0.46	0.49	0.48	0.41	0.49	0.53	0.50	0.55	0.49
	11-20	0.47	0.50	0.45	0.49	0.46	0.41	0.40	0.42	0.41	0.49
Stage 5	1-10	0.59	0.60	0.62	0.75	0.68	0.62	0.64	0.65	0.63	0.60
	11-20	0.69	0.63	0.68	0.62	0.67	0.69	0.72	0.69	0.63	0.58

Screen Info
[F5]

VIEW GRAPH
[F6]

STARTUP
DATA [F7]

SHUTDOWN
DATA [F9]

NAVIGATE
[F10]

ESC

CTRL

ALT



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Stag

Stag

Stag

Stag

Stag

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

3 0.48 0.48 0.46

5 0.46 0.43 0.49

4 0.49 0.52 0.54

7 0.58 0.55 0.50

8 0.42 0.51 0.53

8 0.55 0.43 0.49

3 0.50 0.55 0.49

0 0.42 0.41 0.49

4 0.65 0.63 0.60

2 0.69 0.63 0.58

Log In [F2]

Close [F10]

VIEW GRAPH [F6]

DATA [F7]

DOWN DATA [F9]

Screen Info [F5]

NAVIGATE [F10]

F1 F2 F3 F4 F5
F6 F7 F8 F9 F10

7 8 9

4 5 6

1 2 3

- 0 .

← →

↩ ↪ SHIFT

ESC CTRL ALT

↑

← →

↓



The help screen contains detailed information on the vibration logging screens.

Peak Vibration Detection:

The AirLogix PLC is collecting peak vibration data throughout three different operational periods for the compressor. The data collected may be viewed in Bar Graph or numerical form. This selection is toggled by pressing [F6]. The most recent twenty events (1-20) are displayed. Event number 1 is the most recent and event 20 is the oldest.

Peak Vibration During Startup:

This is the peak vibration point detected after a start is initialized and the vibration inhibit timer is timing.

Peak Vibration Running:

This is the peak vibration point detected after the vibration inhibit timer is done. Also, a new peak value is created every day at 12:00 AM. For example, if a compressor runs continuously 10 days, you will have at least 10 separate peak data points, one for each day.

Peak Vibration During Coast Down:

This is the peak vibration point detected after a compressor stop is initialized and during the coast down time.

Additional Data is available not shown on the screen. Please contact Case Engineering for further information.

CLOSE
[F10]

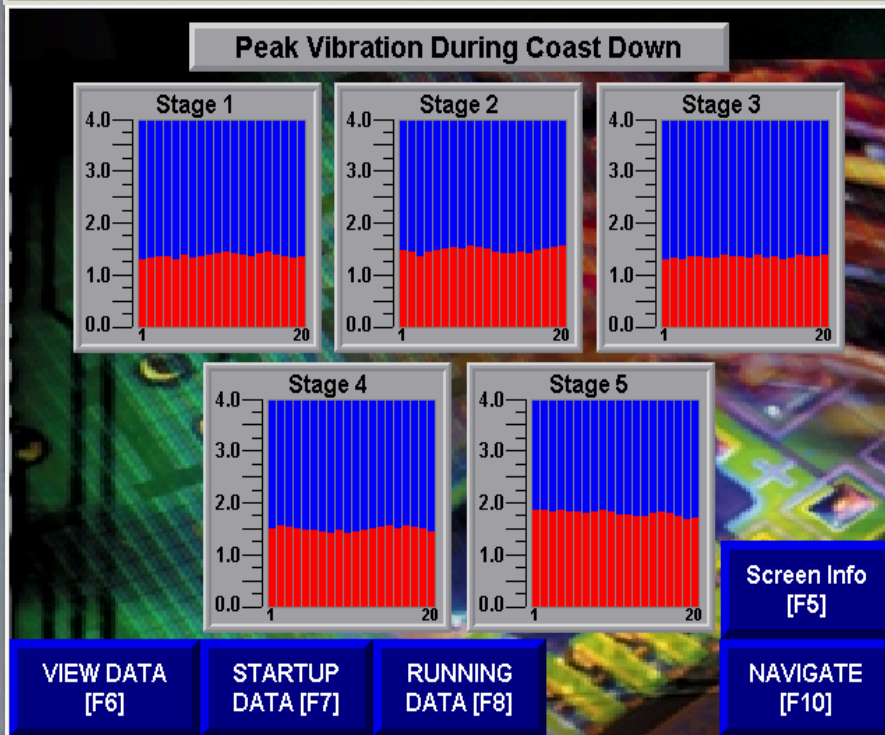




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PanelView Plus 700

Every time the compressor is stopped AirLogix™ captures the peak vibration for each stage during coast down. The last 20 peaks are then displayed in a graph for analysis.



K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

-

0

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K11

←

←

K12

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Main Screen

- Air End Status
- Oil and Water Status
- Motor Status
- Discrete Status
- User Defined Status
- Trend Select
- Event History
- Misc Data
- AirMaster
- Auto Functions
- Manual Valve Control
- PID Parameters
- General Setup
- Case Controls

VIEW DAT [F6] Log In [F2] Close [F10] Screen Info [F5] NAVIGATE [F10]

DATA [F7] DATA [F8]

Keypad layout:

- Top row: K7 (7), K8 (8), K9 (9)
- Second row: K8 (4), K9 (5), K10 (6)
- Third row: K9 (1), K10 (2), K11 (3)
- Fourth row: K10 (-), K11 (0), K12 (.)
- Fifth row: K11 (←), K12 (→), K12 (SHIFT)
- Sixth row: K12 (ESC), K12 (CTRL), K12 (ALT)
- Bottom: Directional pad (Up, Down, Left, Right)

Function keys: F1, F2, F3, F4, F5, F6, F7, F8, F9, F10



The help screen contains detailed information on the vibration logging screens.

Peak Vibration Detection:

The AirLogix PLC is collecting peak vibration data throughout three different operational periods for the compressor. The data collected may be viewed in Bar Graph or numerical form. This selection is toggled by pressing [F6]. The most recent twenty events (1-20) are displayed. Event number 1 is the most recent and event 20 is the oldest.

Peak Vibration During Startup:

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Peak Vibration Running:

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Peak Vibration During Coast Down:

This is the peak vibration point detected after a compressor stop is initialized and during the coast down time.

Additional Data is available not shown on the screen. Please contact Case Engineering for further information.

CLOSE
[F10]





Every time the compressor is stopped AirLogix™ captures the peak vibration for each stage during coast down. The last 20 peaks are entered into a table for analysis.

Peak Vibration During Coast Down

Stage 1	1-10	1.31	1.33	1.35	1.36	1.31	1.38	1.32	1.35	1.39	1.42
	11-20	1.45	1.42	1.40	1.37	1.42	1.45	1.38	1.36	1.34	1.35
Stage 2	1-10	1.49	1.46	1.45	1.46	1.49	1.52	1.55	1.52	1.56	1.53
	11-20	1.50	1.46	1.43	1.42	1.45	1.41	1.47	1.52	1.54	1.56
Stage 3	1-10	1.31	1.33	1.31	1.35	1.36	1.34	1.34	1.39	1.36	1.35
	11-20	1.34	1.38	1.34	1.36	1.31	1.33	1.39	1.37	1.36	1.39
Stage 4	1-10	1.51	1.56	1.54	1.51	1.47	1.47	1.45	1.43	1.48	1.42
	11-20	1.46	1.49	1.52	1.54	1.56	1.52	1.57	1.54	1.51	1.42
Stage 5	1-10	1.86	1.87	1.85	1.88	1.85	1.84	1.82	1.83	1.87	1.84
	11-20	1.79	1.78	1.74	1.76	1.80	1.84	1.81	1.74	1.69	1.73

Screen Info
[F5]

VIEW GRAPH
[F6]

STARTUP
DATA [F7]

RUNNING
DATA [F8]

NAVIGATE
[F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

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K8

4

5

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K9

1

2

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K10

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0

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K11

←

→

SHIFT

K12

ESC

CTRL

ALT



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Stag

Stag

Stag

Stag

Stag

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

VIEW GRAPH [F6]

Log In [F2]

DATA [F7]

DATA [F8]

Close [F10]

Screen Info [F5]

NAVIGATE [F10]

2	1.35	1.39	1.42
8	1.36	1.34	1.35
5	1.52	1.56	1.53
7	1.52	1.54	1.56
4	1.39	1.36	1.35
9	1.37	1.36	1.39
5	1.43	1.48	1.42
7	1.54	1.51	1.42
2	1.83	1.87	1.84
1	1.74	1.69	1.73

789

456

123

-0.

←↵

↶↷SHIFT

ESCCTRLALT

▲

◀▶

▼



The help screen contains detailed information on the vibration logging screens.

Peak Vibration Detection:

The AirLogix PLC is collecting peak vibration data throughout three different operational periods for the compressor. The data collected may be viewed in Bar Graph or numerical form. This selection is toggled by pressing [F6]. The most recent twenty events (1-20) are displayed. Event number 1 is the most recent and event 20 is the oldest.

Peak Vibration During Startup:

This is the peak vibration point detected after a start is initialized and the vibration inhibit timer is timing.

Peak Vibration Running:

This is the peak vibration point detected after the vibration inhibit timer is done. Also, a new peak value is created every day at 12:00 AM. For example, if a compressor runs continuously 10 days, you will have at least 10 separate peak data points, one for each day.

Peak Vibration During Coast Down:

This is the peak vibration point detected after a compressor stop is initialized and during the coast down time.

Additional Data is available not shown on the screen. Please contact Case Engineering for further information.

CLOSE
[F10]

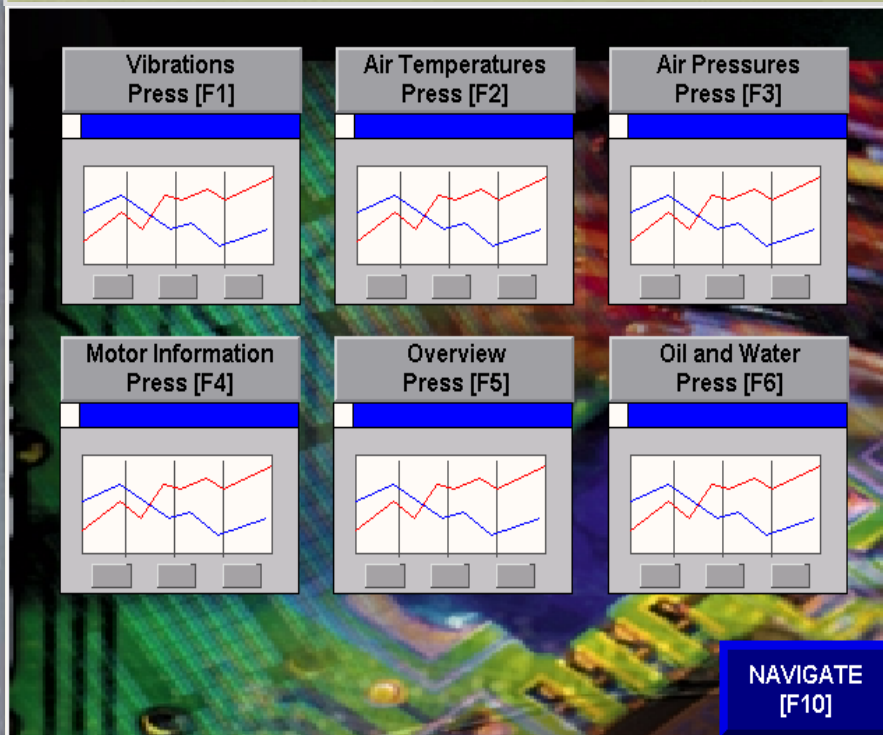




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PanelView Plus 700

Live and historical data can be trended from the front panel. **Click the "Overview" trend on the bottom middle for an illustration.**



K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

-

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K11

←

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SHIFT

K12

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

The menu is displayed over a background image of a green field with yellow flowers. The menu options are:

- Main Screen
- Air End Status
- Oil and Water Status
- Motor Status
- Discrete Status
- User Defined Status
- Trend Select
- Event History
- Misc Data
- AirMaster
- Auto Functions
- Manual Valve Control
- PID Parameters
- General Setup
- Case Controls

Navigation buttons at the bottom of the menu:

- Log In [F2]
- Close [F10]
- RETURN [F9]
- NAVIGATE [F10]

Background graphics on the left side of the menu include:

- A small window titled "Vil Pr" showing a line graph.
- A small window titled "Motor Pr" showing a line graph.
- A small window titled "Air Pressures Press [F3]" showing a line graph.
- A small window titled "Oil and Water Press [F6]" showing a line graph.

The right side of the keypad features a numeric keypad and a directional pad. The numeric keypad includes buttons for digits 0-9, a decimal point, and a minus sign. The directional pad is a circular button with four arrow keys. The ESC button is circled in red.

Buttons labeled K7 through K12 are located to the left of the numeric keypad.

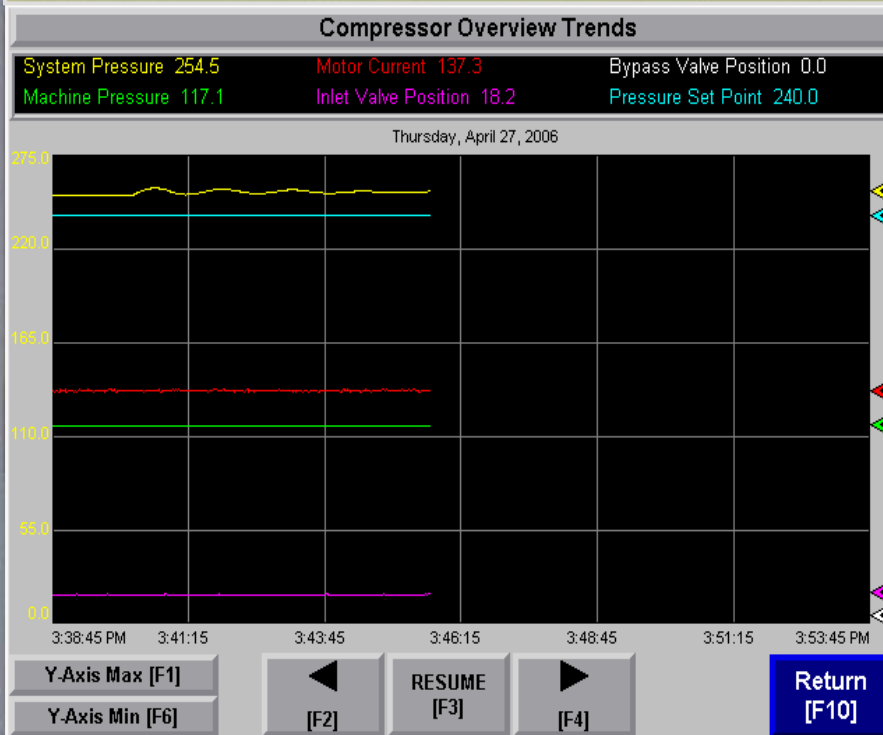
The bottom row of the keypad contains function keys F1 through F10, arranged in two rows of five.



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PanelView Plus 700

From here you can watch the machine criticals on a live trend. You can scroll back [F2] to see historical trending and you can zoom in [Y-Axis Max/Y-Axis Min] to see a close up of a particular input.





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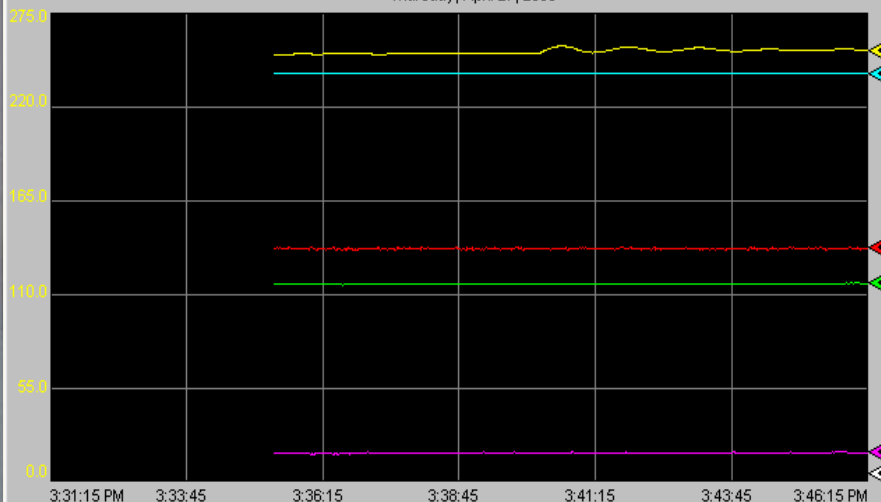
PanelView Plus 700

You can scroll back approximately 3 hours to view historical data that has been trended.

Compressor Overview Trends

System Pressure 254.0	Motor Current 137.5	Bypass Valve Position 0.0
Machine Pressure 117.0	Inlet Valve Position 17.9	Pressure Set Point 240.0

Thursday, April 27, 2006



Y-Axis Max [F1]

Y-Axis Min [F6]

[F2]

RESUME
[F3]

[F4]

Return
[F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

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0

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K11

←

←

K12

ESC

CTRL

ALT





Allen-Bradley

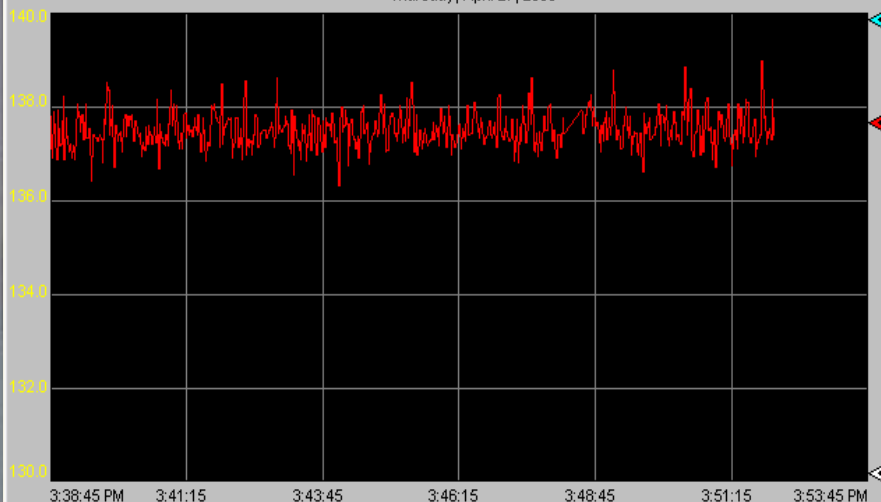
PanelView Plus 700

You can zoom into a specific range to closely analyze an input.

Compressor Overview Trends

System Pressure	253.4	Motor Current	137.7	Bypass Valve Position	0.0
Machine Pressure	117.2	Inlet Valve Position	17.6	Pressure Set Point	240.0

Thursday, April 27, 2006



Y-Axis Max [F1]

Y-Axis Min [F6]

[F2]

RESUME
[F3]

[F4]

Return
[F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

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8

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K8

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K9

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K10

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0

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K11

←

→

SHIFT

K12

ESC

CTRL

ALT



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PanelView Plus 700

The Event History shows starts, loads, unloads, set-point changes...etc, as well as the date and time of all alarms, trips and surges and the date and time of their acknowledgment.

Alarm time	Acknowledge time	Message
* 5/28/2009 11:48:59 AM	5/28/2009 11:49:04 AM	WH15-Discharge Air Temperature Stage 1 High Warning
* 5/28/2009 11:48:05 AM	5/28/2009 11:48:09 AM	WD22-PerformWnce Throttle Mode
5/28/2009 11:47:47 AM		EL02-Compressor Load Initialized (PanelView)
5/28/2009 11:46:59 AM		WD18-Non-Recoverable Surge Unload
5/28/2009 11:46:55 AM		WD17-Surge Line Indexed
* 5/28/2009 11:45:34 AM	5/28/2009 11:45:37 AM	WD31-Oil Change Needed. Reset Hour Meter After Completion.
* 5/28/2009 11:43:53 AM	5/28/2009 11:43:56 AM	WD00-Low Water Flow Warning
5/28/2009 11:43:11 AM		EL09-Compressor Load Initialized (Automatic)
5/28/2009 11:41:18 AM		EL04-Compressor Stop Initialized (PanelView)
* 5/28/2009 11:38:30 AM	5/28/2009 11:38:35 AM	TH02-Oil Temperature High Trip
* 5/28/2009 11:37:57 AM	5/28/2009 11:38:11 AM	WH02-Oil Temperature High Warning

Alarm Info/Help [F6]

Ack All Alarms [F7]

▲ [F8]

▼ [F9]

MAIN [F10]

Click the Alarm Info/Help [F6] button and AirLogix™ will help in troubleshooting your alarm and trips.



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PanelView Plus 700

The Event History Help screen allows you to find help with some of the most common problems. Simply pick out the event from the list and AirLogix™ will display an explanation and some of the most common reason for the event.

Warning/Trip Descriptions

A wide variety of warnings and trips may occur on the AirLogix system. For each warning/trip, the compressor must be running or attempting to start. The follow is a partial list of warnings and general descriptions of each. Each message is prefixed by an alphanumeric code specific to each event. When contacting Case Engineering for support, the code may be much easier to remember than the message.

WH## - High analog input warnings

WL## - Low analog inputs warnings

WD## - Discrete warnings

WR## - Analog Input Signal Range warnings

TH## - High analog input trips

TL## - Low analog input trips

TD## - Discrete trips

EL## - Event Log for starts, stops, loads, unloads, ect.

Low/High Temperature Warnings/Trips

Most instances of temperature warnings/trips lead to air or oil cooler problems. However, it is possible the problem may lie in the instrumentation. The most common instrumentation problem is a disconnected or loose wire where the RTD transmitter connects to the RTD element. An open RTD will read full scale resulting in a compressor warning/trip. A disconnected 4-20mA signal wire will read minimum scale and will issue "Input Range Warni"

▲
[F2]

Low/High Temperature Warning/Trips

Vibration Warnings/Trips

TD01.Low Seal Air Pressure Trip

TL05.Motor Current Low Trip

TH05.Motor Current High Trip

WH01.Machine Pressure High Warning

TH01.Machine Pressure High Trip

MAIN
[F6]

[F7]
▼

EVENT
HISTORY
[F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

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9

K8

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K9

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K10

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K11

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←

K12

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→

SHIFT

ESC

CTRL

ALT






Allen-Bradley

PanelView Plus 700

The AirMaster™ Compressor Overview screen shows all the pertinent compressor information including the status of each compressor, compressor priority and machine critical information.



AIR MASTER Compressor Overview

AirMaster Pressure 96.0	Unit #1 Fully Loaded	Unit #2 Loaded	Unit #3 May Start In 60 Seconds	Unit #4 Not Found
AirMaster Enabled	Enabled	Enabled	Enabled	Not Enabled
Auto Rotation Enabled	Enabled	Enabled	Enabled	Not Enabled
AirMaster Priority	1.0	2.0	3.0	4.0
Pressure Set Point	100.0	99.0	98.0	97.0
Inlet Position	84.0	58.0	0.0	0.0
Bypass Position	100.0	100.0	0.0	0.0
Motor Current	199.6	126.8	0.0	0.0
DTL Set Point	158.0	126.0	145.6	113.0

DISABLE
AirMaster [F6]

AM Setup
[F8]

RETURN
[F9]

NAVIGATE
[F10]





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

▲

◀

▼

AirMaster Pre 96.0

AirMaster Enabl

Auto Rotation E

AirMaster Priori

Pressure Set Po

Inlet Position

Bypass Position

Motor Current

DTL Set Point

Unit #3
und

Unit #4
Not Found

bled

Not Enabled

bled

Not Enabled

3.0

4.0

98.0

97.0

0.0

0.0

0.0

0.0

0.1

0.0

98.0

113.0

Log In [F2]

Close [F10]

DISABLE AirMaster [F6]

NAVIGATE [F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

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K8

4

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K9

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K10

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K11

←

→

SHIFT

K12

ESC

CTRL


ALT



Allen-Bradley

PanelView Plus 700

The AirMaster™ Parameters screen is used to send parameters across the network to other compressors. The new parameters are entered in the "New" column. Once transmitted, they are updated in the "Current" column



Unit ID	Priority		AirMaster Parameters	New	Current
	New	Current			
Unit #1	2	2	AirMaster Pressure Set Point	105.0	105.0
Unit #2	1	1	Pressure Set Point Offset	1.0	1.0
Unit #3	3	3	Emergency Pressure	90.0	90.0
Unit #4	4	4	Low Pressure Timer (Secs)	20.0	20.0
			Unload Timer (Minutes)	5.0	5.0
			Stop Timer (Minutes)	30.0	30.0

Send AirMaster Parameters [F6]

Auto Rotation Setup [F7]

Auto Functions Setup [F8]

RETURN [F9]

NAVIGATE [F10]





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Unit ID

Unit #1

Unit #2

Unit #3

Unit #4

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

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Log In [F2]

Close [F10]

Send AirMaster Parameters [F6]

Setup [F7]

Setup [F8]

[F9]

NAVIGATE [F10]

	New	Current
	105.0	100.0
	1.0	1.0
	90.0	90.0
	20.0	20.0
	5.0	5.0
	30.0	30.0

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SHIFT

ESC

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ALT

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Allen-Bradley

PanelView Plus 700

The AirMaster™ Auto Functions screen displays the auto functions set up in AirMaster™. The Bypass Pressure Offset is used to create a separate set point used by the bypass. This allows AirMaster™ to keep the bypass valve closed and avoid bypassing air.



AirMaster Auto Functions				
Enabled	Function	Pressure	Time	
YES	[F1] Emergency Auto Start	90.0		Seconds
YES	[F2] Auto Start	100.0	60	Seconds
YES	[F3] Auto Load	100.0	5	Seconds
YES	[F4] Auto UnLoad		10	Minutes
YES	[F5] Auto Stop		30	Minutes
	Bypass Pressure Offset	2.0		

Close
[F10]



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PanelView Plus 700

The AirMaster™ Auto Rotation screen shows the auto rotate configuration. This allows automatic priority rotation so that each compressor can share time as the lead.

AIR MASTER

AirMaster Auto Rotation	
[F1] Auto Rotation	Enabled
Time Interval (Hours)	500.00
Time Remaining (Hours)	352.00
Send APR Parameters [F2]	Manual Rotation [F3]
Reset Time [F4]	

Close [F10]

K7

7

8

9

K8

4

5

6

K9

1

2

3

K10

←

←

K11

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SHIFT

K12

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8


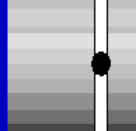
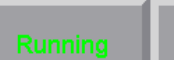
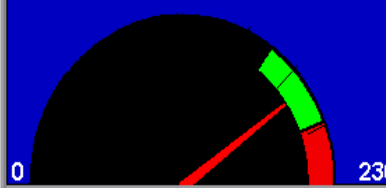

F9

F10



Here the Auto Functions can be viewed and configured. **Click on the indicator** to enable an Auto Function.

Vibration	Enabled	Function	Pressure	Time
Stage 1	YES	Auto Start [F1]	90.0	25 Seconds
Stage 2	YES	Auto Load [F2]	95.0	5 Seconds
Stage 3	YES	Auto UnLoad [F3]	105.0	5 Seconds
Stage 4	YES	Auto Stop [F4]		30 Minutes
Press [F10] To Exit				
Stage 5	0.59		93.1	0

Inlet % Open	DTL	Actual	FLA	Bypass % Closed
63.6 % Controlling To Pressure 	158.0	183.1	200.0	100.0 % 
				
Running	Loaded	UNLOAD [F8]	STOP [F9]	NAVIGATE [F10]

Navigation controls including a numeric keypad (0-9, -, 0, .), arrow keys, and function keys (ESC, CTRL, ALT, SHIFT).

Function keys F1 through F10 arranged in two rows.



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PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % C

63.6

Controlling To

Running

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In

[F2]

Close

[F10]

Seconds

Seconds

Seconds

Minutes

93.1

0

Bypass % Closed

100.0%

7

8

9

4

5

6

1

2

3

-

0

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←

→

SHIFT

ESC

CTRL

ALT

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F1

F2

F3

F4

F5

F6

F7

F8

F9

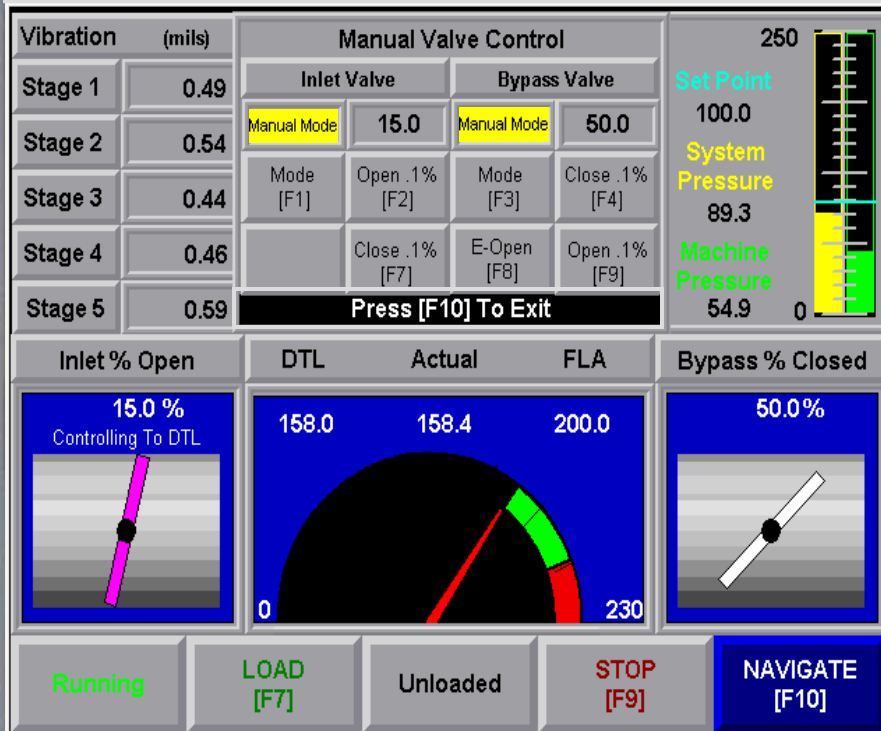
F10



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PanelView Plus 700

There are two Manual Valve Control screens. This one selected from the Navigate menu, allows you to watch the Main screen critical variables while manually controlling the machine.



ESC



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % C

15.0

Controlling T

Running

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In [F2]

Close [F10]

Unloaded [F9]

250

Set Point 100.0

System Pressure 89.3

Machine Pressure 54.9

0

Bypass % Closed

50.0%

7

8

9

4

5

6

1

2

3

-

0

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←

→

SHIFT

ESC

CTRL

ALT

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F1

F2

F3

F4

F5

F6

F7

F8

F9

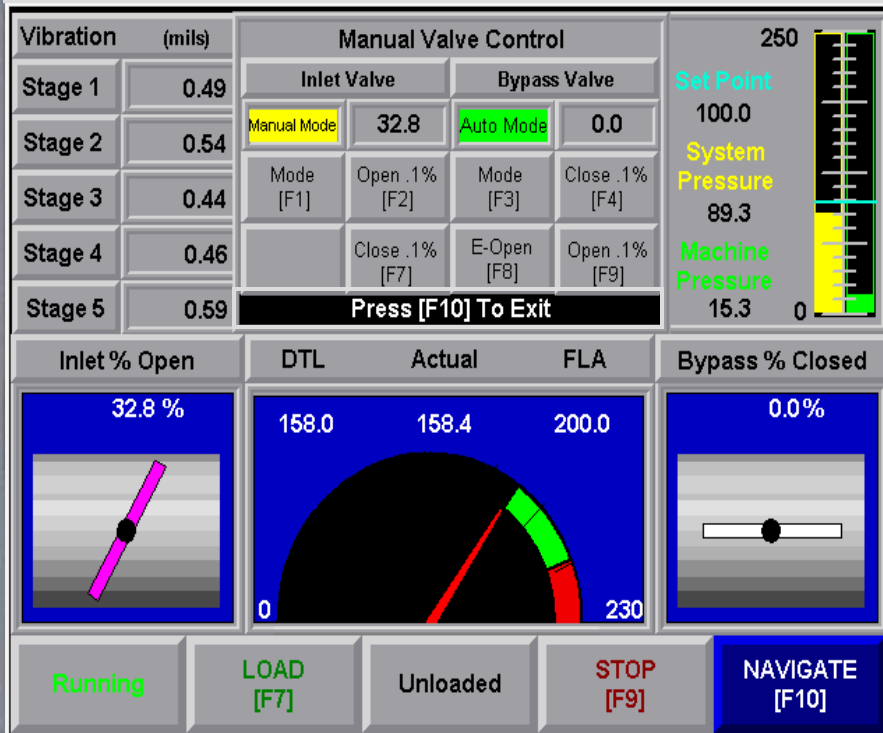
F10



Allen-Bradley

PanelView Plus 700

There are two Manual Valve Control screens. This one selected from the Navigate menu, allows you to watch the Main screen critical variables while manually controlling the machine.





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % O

32.8

Running

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In [F2]

Close [F10]

250

Set Point 100.0

System Pressure 89.3

Machine Pressure 15.3

0

Bypass % Closed

0.0%

Unloaded

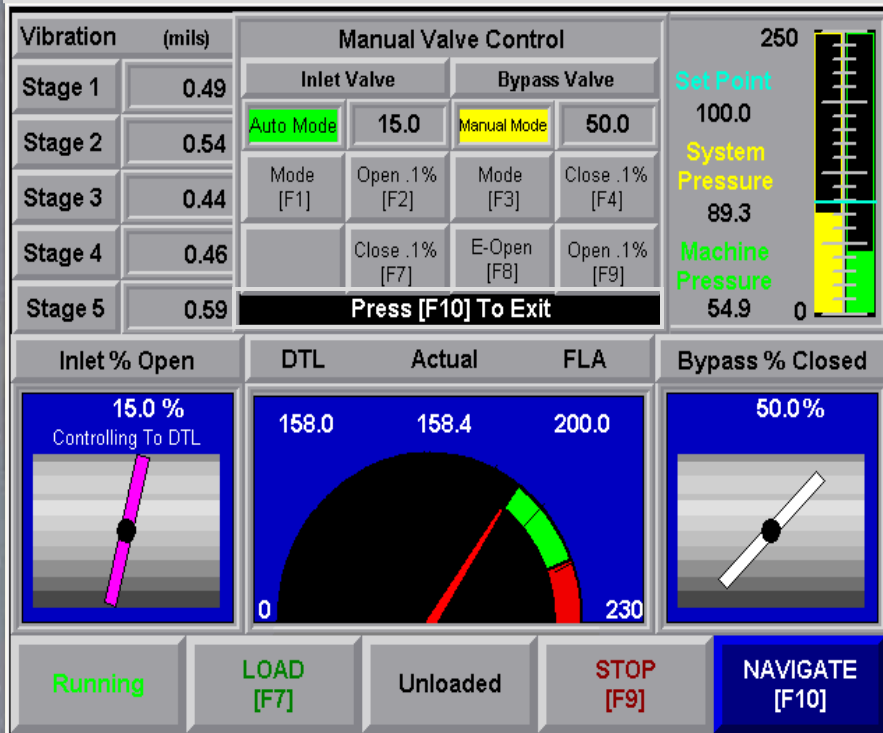




Allen-Bradley

PanelView Plus 700

There are two Manual Valve Control screens. This one selected from the Navigate menu, allows you to watch the Main screen critical variables while manually controlling the machine.





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % C

15.0

Controlling T

Running

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In [F2]

Close [F10]

250

Set Point

100.0

System Pressure

89.3

Machine Pressure

54.9

0

Bypass % Closed

50.0%

NAVIGATE [F10]

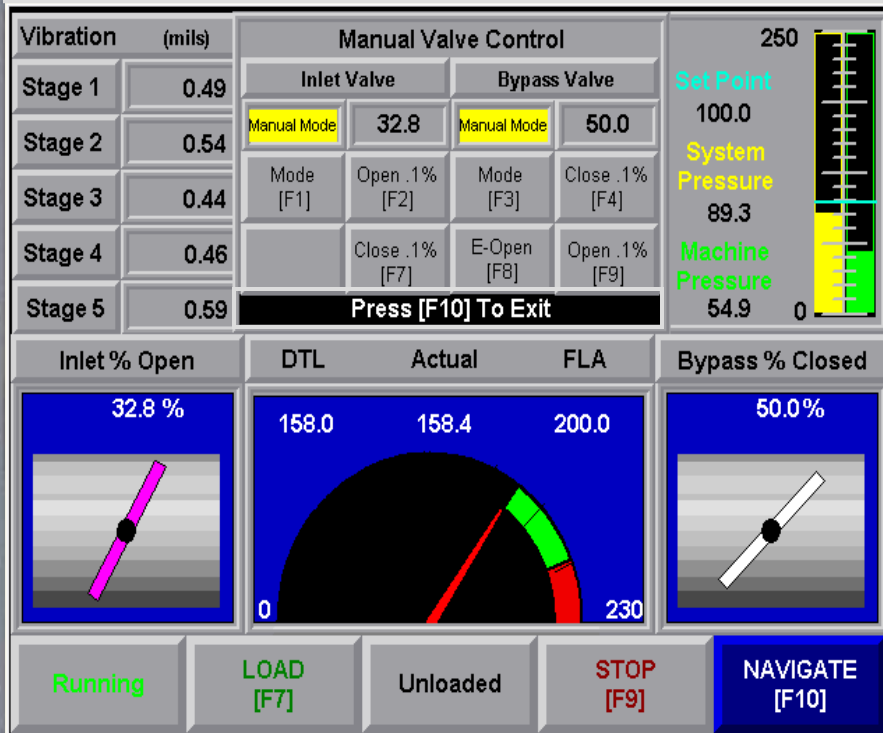




Allen-Bradley

PanelView Plus 700

There are two Manual Valve Control screens. This one selected from the Navigate menu, allows you to watch the Main screen critical variables while manually controlling the machine.





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % O

32.8

Running

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In

[F2]

Unloaded

[F9]

Close

[F10]

250

Set Point

100.0

System

Pressure

89.3

Machine

Pressure

54.9

0

Bypass % Closed

50.0%

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SHIFT

ESC

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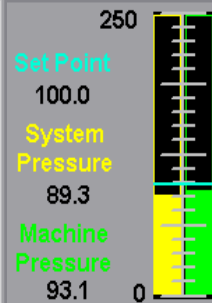
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←

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The PID loop screen will appear in the Main screen allowing you to monitor the machine's critical variables while tuning the PID loops.



ESC CTRL ALT



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Vibration

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

Inlet % C

32.8

Controlling T

Running

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In

[F2]

Loading

Unloaded

[F9]

Close

[F10]

NAVIGATE

[F10]

250

Set Point

100.0

System

Pressure

89.3

Machine

Pressure

93.1

0

Bypass % Closed

69.2%

Controlling To Pressure

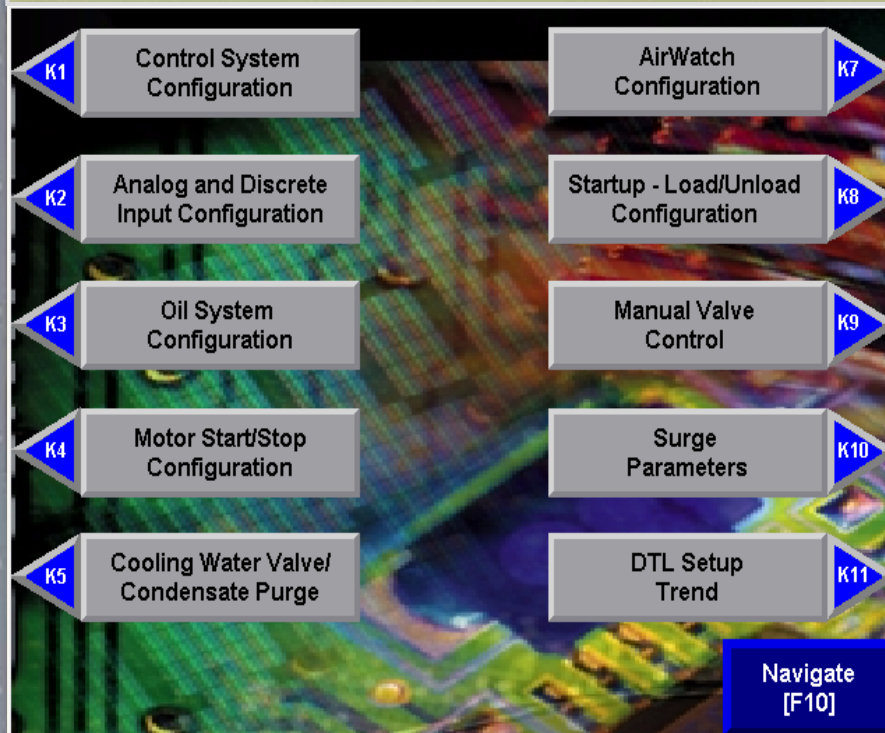




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PanelView Plus 700

Below is a menu of configuration and set-up screens. These are primarily used by set-up personnel. **Click any box** to see the screen.



K1	Control System Configuration	AirWatch Configuration	K7
K2	Analog and Discrete Input Configuration	Startup - Load/Unload Configuration	K8
K3	Oil System Configuration	Manual Valve Control	K9
K4	Motor Start/Stop Configuration	Surge Parameters	K10
K5	Cooling Water Valve/Condensate Purge	DTL Setup Trend	K11
		Navigate [F10]	

K7

7

8

9

K8

4

5

6

K9

1

2

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K10

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0

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K11

←

←

K12

↩

→

SHIFT

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or click **Close [F10]** to close the menu.

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In
[F2]

Close
[F10]

Navigate
[F10]

ESC

CTRL

ALT

SHIFT



This screen contains basic compressor set-up information. From here the name of the compressor can be changed.

Compressor Information and Setup	
Control System Selection [F1]	AirLogix
Inlet Valve Control [F2]	Analog
Bypass Valve Control [F3]	Analog
Compressor Manufacturer [F4]	IR Centac
ID/Name	Unit 1
Number Of Stages	5
Design Capacity (SCFM)	2000
Design Pressure (PSIG)	130
Motor Nameplate FLA	200
Motor Voltage	4160
Motor Horse Power	500
Units of Measure [F5]	Pressure (psig) Temperature (°F) Vibration (mils)
Press [F10] To Exit	

This screen is also used to setup the valve configuration. You can also change the type of compressor.



All inputs are fully configurable. All set points can be enabled, disabled and changed. The inputs, with the exception of the machine criticals, can even be renamed. **Click the Low Water Flow input** to see a detailed input configuration.

Try This One Low Water Flow

Input	Status	Label
Input 0 [F1] ✓	Enabled	Low Seal Air
Input 1 [F2] ✓	Enabled	High Oil Filter DP
Input 2 [F3] ✓	Enabled	High Oil Filter DP
Input 3 [F4] ✓	Enabled	High Condensate Level
Input 4 [F5] ✓	Enabled	Spare1
Input 5 [F6] ✓	Enabled	Spare3
Input 6 [F7] ✓	Enabled	Spare5
Input 7 [F8] ✓	Enabled	Remote Stop
Input 8 [K1] ✓	Enabled	Remote Load
Input 9 [K2] ✓	Enabled	
Input 10 [K3] ✓	Enabled	
Input 11 [K4] ✓	Enabled	
Input 12 [K5] ✓	Enabled	
Input 13 [K6] ✗	Disabled	
Input 14 [K7] ✗	Disabled	
Input 15 [K8] ✗	Disabled	

DI00-DI15

High Inlet Filter DP

Low Oil Level

High Motor Temperature

Spare2

Spare4

E-stop Pressed

Remote Start

Input Enabled

Input Disabled

NEXT [F9] AI00-AI07

NAVIGATE [F10]

Click "Next [F9] AI00-AI07" to view other modules and their associated inputs. Click "Navigate [F10]" to skip to a particular module or return to the Main screen.





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **Clicking on the Topic** or **Click Close** to close the menu.

Try This One

Low Water

High Inlet F

Low O

High Motor Temp

Spare4

E-stop Pressed

Remote Start

DI00-DI15

Real Air

Oil Filter DP

Condensate Level

Input 9 [K2] ✓ Spare3

Input 11 [K4] ✓ Spare5

Input 13 [K6] ✗ Remote Stop

Input 15 [K8] ✗ Remote Load

Log In [F2]

Log Out [F3]

Close [F10]

Input 10 [K3] ✓

Input 12 [K5] ✓

Input 14 [K7] ✗

Input 9 [K2] ✓

Input 11 [K4] ✓

Input 13 [K6] ✗

Input 15 [K8] ✗

✓ Input Enabled

✗ Input Disabled

NEXT [F9]
AI00-AI07

NAVIGATE [F10]

7 8 9

4 5 6

1 2 3

- 0 .

← →

← → SHIFT

ESC CTRL ALT

▲

◀ ▶

▼



Allen-Bradley

PanelView Plus 700

Here you can completely configure the operation of the individual input. Click the **[F1] to Enable** to enable the input. Once the input is enabled, it can be configured.

Input Enable		Input Identification			Actual
[F1] to Enable		Low Water Flow			NO
N/O N/C	Start Permissive	Warning	Warning Time Dly	Trip	Trip Time Dly
[F2]	[F3]	[F4]	3	[F5]	3
N/O	Disabled	Disabled		Disabled	

Green indicates the desired position and red indicates undesired condition. For example, there is "NO" Low Water Flow.

This allows for the input to be configured as normally open or normally closed

These timers determine how long the input must be in the undesired position before the Warning/Trip is issued.

RETURN
[F9]

NAVIGATE
[F10]

ESC

CTRL

ALT



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PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Input
[F1] to
N/O
N/C
[F2]
N/O

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Actual

NO

Trip Time Dly

3

Log In [F2]

Close [F10]

Return [F9]

NAVIGATE [F10]





From this screen, High/Low Start Permissives, Warnings and Trips can be enabled/disabled now that the input is enabled,

Input Enable		Input Identification			Actual
[F1] to Disable		Low Water Flow			NO
N/O N/C	Start Permissive	Warning	Warning Time Dly	Trip	Trip Time Dly
[F2]	[F3]	[F4]	3	[F5]	3
N/C	Enabled	Disabled		Enabled	

RETURN
[F9]

NAVIGATE
[F10]

ESC

CTRL

ALT



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PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Input

[F1]

Dis

N/O

N/C

[F2]

N/O

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Actual

NO

Trip

Time Dly

3

Log In

[F2]

Close

[F10]

Return

[F9]

NAVIGATE

[F10]

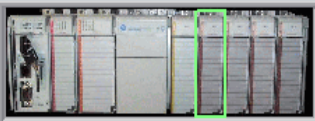




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Notice the graphic of the PLC rack and highlighted module below. It indicates the analog I/O module selected for configuration. **Click the Oil Temperature input** to see a detailed input configuration.

System Pressure	✓ Input 0 101.5	[F1]	AI00-AI07
[F2]	✓ Input 1 105.3	Machine Pressure	
Try This One	✓ Input 2 109.9	[F3]	
[F4]	✓ Input 3 82.2	Discharge Air Temperature	
Oil Pressure	✓ Input 4 25.6	[F5]	
[F6]	✓ Input 5 183.1	Motor Current	
Bearing Oil Pressure	✓ Input 6 488.3	[F7]	
[F8]	✓ Input 7 28.6	Pre-filter Oil Pressure	
		<div>✓ Input Enabled ✗ Input Disabled</div> <div>NEXT [F9] AI10-AI17</div> <div>NAVIGATE [F10]</div>	

K7

7

8

9

K2

4

5

6

K3

1

2

3

K4

-

0

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K5

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←

K12

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



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PanelView Plus 700

Select the screens you wish to view by **Clicking on the Topic** or **Click Close** to close the menu.

▶ Main Screen

Discrete Inputs 00-15

Analog Inputs 00-07

Analog Inputs 10-17

Analog Inputs 20-27

Analog Inputs 30-37

General Setup

Log In

[F2]

Log Out

[F3]

Close

[F10]

AI00-AI07

Try This One

[F6]

✓ Input 5
183.1

Motor Current

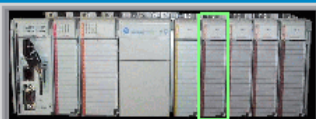
Bearing Oil Pressure

[F8]

✓ Input 7
28.6

✓ Input 6
488.3 [F7]

Pre-filter Oil Pressure



✓ Input Enabled
✗ Input Disabled

NEXT [F9]
AI10-AI17

NAVIGATE
[F10]

ESC

CTRL

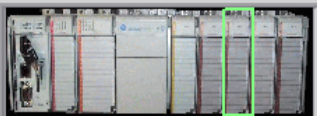
ALT



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PanelView Plus 700

Notice the layout of the inputs on the screen. This layout imitates the wiring at the AirLogix™ PLC module.

Vibration Stage 1	✓ Input 0 0.49	[F1]	AI10-AI17
[F2]	✓ Input 1 0.54	Vibration Stage 2	
Vibration Stage 3	✓ Input 2 0.44	[F3]	
[F4]	✓ Input 3 0.46	Vibration Stage 4	
Inlet Air Temperature	✓ Input 4 78.2	[F5]	
[F6]	✓ Input 5 81.8	Discharge Air Temperature Stage 1	
Discharge Air Temperature Stage 2	✓ Input 6 81.2	[F7]	
[F8]	✓ Input 7 83.0	Discharge Air Temperature Stage 3	
	✓ Input Enabled ✗ Input Disabled	NEXT [F9] AI20-AI27	NAVIGATE [F10]

Navigation controls including a numeric keypad (0-9, -, 0, .), arrow keys, and function keys (ESC, CTRL, ALT, SHIFT).

Function keys F1 through F10 arranged in two rows.



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PanelView Plus 700

Select the screens you wish to view by **Clicking on the Topic** or **Click Close** to close the menu.

▶ Main Screen

Discrete Inputs 00-15

Analog Inputs 00-07

Analog Inputs 10-17

Analog Inputs 20-27

Analog Inputs 30-37

General Setup

Log In
[F2]

Log Out
[F3]

Close
[F10]

AI10-AI17

Inlet Air Temperature

78.2

[F6]

✓ Input 5
81.8

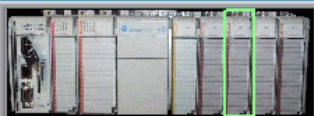
Discharge Air Temperature Stage 1

Discharge Air Temperature Stage 2

[F8]

✓ Input 7
83.0

Discharge Air Temperature Stage 3



✓ Input Enabled
✗ Input Disabled

NEXT [F9]
AI20-AI27

NAVIGATE
[F10]

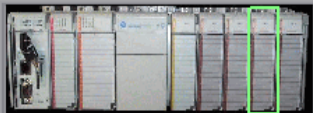
ESC

CTRL

ALT



AirLogix™ modules can be added or taken away to meet the number of inputs required.

Discharge Air Pressure Stage 1	✓ Input 0 9.2	[F1]	AI20-AI27
[F2]	✓ Input 1 20.1	Discharge Air Pressure Stage 2	
Discharge Air Pressure Stage 3	✓ Input 2 54.9	[F3]	
[F4]	✓ Input 3 172.4	Winding Temperature A	
Winding Temperature B	✓ Input 4 171.6	[F5]	
[F6]	✓ Input 5 170.9	Winding Temperature C	
Inlet Water Temperature	✓ Input 6 73.2	[F7]	
[F8]	✓ Input 7 0.0	Bullgear Vibration	
		<div>✓ Input Enabled ✗ Input Disabled</div> <div>NEXT [F9] AI30-AI37</div> <div>NAVIGATE [F10]</div>	

789

456

123

-0.

←↵

↶↷SHIFT

ESCCTRLALT

↑

←→

↓

F1F2F3F4F5

F6F7F8F9F10



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PanelView Plus 700

Select the screens you wish to view by **Clicking on the Topic** or **Click Close** to close the menu.

▶ Main Screen

Discrete Inputs 00-15

Analog Inputs 00-07

Analog Inputs 10-17

Analog Inputs 20-27

Analog Inputs 30-37

General Setup

Log In
[F2]

Log Out
[F3]

Close
[F10]

AI20-AI27

Pressure Stage 2

Temperature A

Winding Temperature B

171.6

[F6]

✓ Input 5
170.9

Winding Temperature C

Inlet Water Temperature

[F8]

✓ Input 7
0.0

[F7]

Bullgear Vibration



✓ Input Enabled
✗ Input Disabled

NEXT [F9]
AI30-AI37

NAVIGATE
[F10]

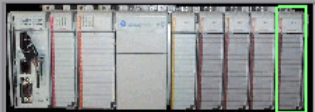
ESC

CTRL

ALT



A typical AirLogix™ system can have up to 32 analog inputs and 16 discrete inputs.

K1	Vibration Stage 5	✓ Input 0 0.59	[F1]	AI30-AI37
	[F2]	✓ Input 1 82.3		Discharge Air Temperature Stage 4
K2	Discharge Air Pressure Stage 4	✓ Input 2 91.6	[F3]	
K3	[F4]	✓ Input 3 146.5		Inboard Bearing Temperature
K4	Outboard Bearing Temperature	✓ Input 4 142.8	[F5]	
K5	[F6]	✓ Input 5 0.0		Machine Air Flow
K6	Spare1	✗ Input 6	[F7]	
	[F8]	✗ Input 7		Spare 2
		✓ Input Enabled ✗ Input Disabled	NEXT [F9] DI00-DI15	NAVIGATE [F10]

K7

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8

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K8

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K9

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K10

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0

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K11

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K12

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SHIFT

ESC

CTRL

ALT

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10



Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **Clicking on the Topic** or **Click Close** to close the menu.

▶ Main Screen

Discrete Inputs 00-15

Analog Inputs 00-07

Analog Inputs 10-17

Analog Inputs 20-27

Analog Inputs 30-37

General Setup

Log In
[F2]

Log Out
[F3]

Close
[F10]

AI30-AI37

Temperature Stage 4

Temperature

Outboard Bearing Temperature

142.8

[F6]

✓ Input 5
0.0

Machine Air Flow

Spare1

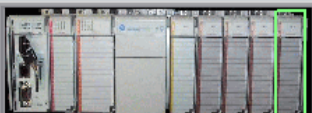
✗ Input 6

[F7]

[F8]

✗ Input 7

Spare 2



✓ Input Enabled
✗ Input Disabled

NEXT [F9]
DI00-DI15

NAVIGATE
[F10]

ESC

CTRL

ALT



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PanelView Plus 700

Here you can completely configure the operation of the individual input selected. Click **[F1] to Enable** to enable the input. Once the input is enabled, it can be configured.

Input Enable		Input Identification				Actual
[F1] to Enable		Oil Temperature				Disabled
	Input Scale	Start Permissive	Warning Set Point	Warning Time Dly	Trip Set Point	Trip Time Dly
High	400.0	130.0	130.0	3.0	140.0	3.0
		[F2]	[F3]		[F4]	
		Disabled	Disabled		Disabled	
Low	0.0	75.0	75.0	3.0	60.0	3.0
Pos. 25	IO MAP [K3]	[F5]	[F6]		[F7]	
		Disabled	Disabled		Disabled	

Press K1 to Change Input Signal Type. Input Module Jumper MUST be moved. 4-20mA is Selected

RETURN [F9] NAVIGATE [F10]

Here the input is scaled according to the transmitter associated with the input.

These timers determine how long the input must be in the undesired position before the Warning/Trip is issued.



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PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Input Error	Actual
[F1] to Error	Disabled
Trip Set Point	Trip Time Delay
140.0	3.0
[F4]	Disabled
60.0	3.0
[F7]	Disabled

Press K1 to Change

Log In [F2] Close [F10]

RETURN [F9] NAVIGATE [F10]

4-20mA is Selected





From this screen, High/Low Start Permissives, Warnings and Trips can be enabled/disabled and configured now that the input is enabled.

Input Enable		Input Identification				Actual
[F1] to Disable		Oil Temperature				0.0
	Input Scale	Start Permissive	Warning Set Point	Warning Time Dly	Trip Set Point	Trip Time Dly
High	400.0	130.0	130.0	3.0	140.0	3.0
		[F2]	[F3]		[F4]	
		Enabled	Enabled		Enabled	
Low	0.0	75.0	75.0	3.0	60.0	3.0
Pos. 25	IO MAP [K3]	[F5]	[F6]		[F7]	
		Enabled	Enabled		Enabled	

Press K1 to Change Input Signal Type. Input Module Jumper MUST be moved. 4-20mA is Selected

RETURN
[F9]

NAVIGATE
[F10]

Click IO Map [K3] to view the IO Map. AirLogix™ allows you to customize your own layout. Using this IO map you can place your analog inputs on the desired status screen.



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PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Input Error
[F1] to Di

High

Low

Pos. 25

IO M [K

Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

▲

◀

▼

Actual

0.0

Trip Set Point

140.0

[F4]

Enabled

60.0

[F7]

Enabled

4-20mA is Selected

Log In [F2]

Close [F10]

RETURN [F9]

NAVIGATE [F10]

7 8 9

4 5 6

1 2 3

- 0 .

← →

↶ ↷ SHIFT

ESC CTRL ALT

▲

◀ ▶

▼



The IO Map is used as a reference to place the analog inputs in the desired location on the desired status screen.

Air End	Vibration	Pressure	Temp
Inlet		5	12
Stage 1	0	6	13
Stage 2	1	7	14
Stage 3	2	8	15
Stage 4	3	9	16
Stage 5	4		
Machine Discharge		10	17
System		11	18

Oil and Water Status	Pressure	Temp
Main Oil	19	25
Pre-filter Oil	20	26
Oil Filter DP	21	27
Bearing Oil	22	28
Inlet Water	23	29
Outlet Water	24	30

Motor Status			
Current	FLA	Voltage	KiloWatts
	200	4160	1185.0
Winding Temperature A			31
Winding Temperature B			32
Winding Temperature C			33
Inboard Bearing Temperature			34
Outboard Bearing Temperature			35

CLOSE
[F10]





This screen is used to configure the system's oil pumps, oil heaters and maintenance timers.

Oil System Configuration			
	Electric Main Oil Pump [F1]		NO
	Air Driven Auxiliary Oil Pump [F2]		NO
	Prelube Oil Pump [F3]		YES
	Prelube Off Timer (Seconds)		20
	Prelube Recovery Pressure		0
	Oil Heater Enabled [F4]		YES
	Oil Heater On Temperature		90
	Oil Heater Off Temperature		110
	Oil Change Hour Meter	Reset [F5]	495
	Oil Change Warning Enable [F6]	Warning SP	2500
Press [F10] To Exit			

Navigate [F10]

The Prelube Recovery Pressure is a safety feature that will turn on the prelube/auxiliary oil pump in the event of a main oil pump failure.





This screen is used for main motor configuration. Here the start circuit can be configured for different types of start circuits.. Also the Run Hours on the motor can be entered.

Motor Configuration			
Start/Stop Input Signal Configuration [F1]			
Momentary Start [F2]	YES	5	Seconds
Momentary Stop [F3]	YES	10	Seconds
Wye-Delta [F4]	NO	25	Seconds
Main Motor Coastdown		180	Seconds
Allow	3	Motor Starts In	60 Minutes
Run Hours		16362	Hours
Press [F10] To Exit			

Navigate
[F10]

ESC CTRL ALT



This screen allows you to configure different sources for the start/stop signals, such as a SCADA system or remote switch.

Motor Start/Stop Signal Configuration					
		Start		Stop	
PanelView	[F1]	YES	[F6]	YES	
Communication	[F2]	YES	[F7]	YES	
Discrete Input	[F3]	NO	[F8]	NO	
Automatic	[F4]	YES	[F9]	YES	
Auto Function		Pressure	Time		
Auto Start		90.0	25	Seconds	
Auto Stop			30	Minutes	
Press [F10] To Exit					

Navigate [F10]





Here you can completely configure the operation of the cooling water valve and condensate traps.

Cooling Water Valve Configuration		
Cooling Water Valve [F1]		YES
Energize Output To [F2]		OPEN
Post Shutdown Timer (Minutes)		20
Auto Mode [F3]		Auto
Close Water Valve [F4]	Valve Currently	Open
Condensate Purge Configuration		
Condensate Purge [F5]		NO
Purge Interval (Minutes)		5
Purge Duration (Seconds)		5
Manual Purge [F6]		
Press [F10] To Exit		

Navigate [F10]





This screen contains basic system timers and set points that are setup during commissioning. The vibration multiplier allows for higher vibrations seen during startup and coast down of a compressor.

Startup - Load/Unload Configuration	
Load/Unload Input Signal Configuration [F1]	
General Start Override (Seconds)	5
Motor Current Start Override (Seconds)	20
Vibration Start Override (Seconds)	15
Vibration Multiplier	[F2] to Disable 3.0
Ready To Load (Seconds)	10
Set Point Ramp Up Rate (Pressure)	0.1
Set Point Ramp Down Rate (Pressure)	2.0
Set Point Ramp Time (Seconds)	5.0
Press [F10] To Exit	

Navigate [F10]





This screen allows you to configure different sources for the load/unload signals, such as a SCADA system or remote switch.

Load/Unload Signal Configuration					
		Load		Unload	
PanelView	[F1]	YES	[F6]	YES	
Communication	[F2]	YES	[F7]	YES	
Discrete Input	[F3]	NO	[F8]	NO	
Automatic	[F4]	YES	[F9]	YES	

Press [F10] To Exit

Navigate [F10]



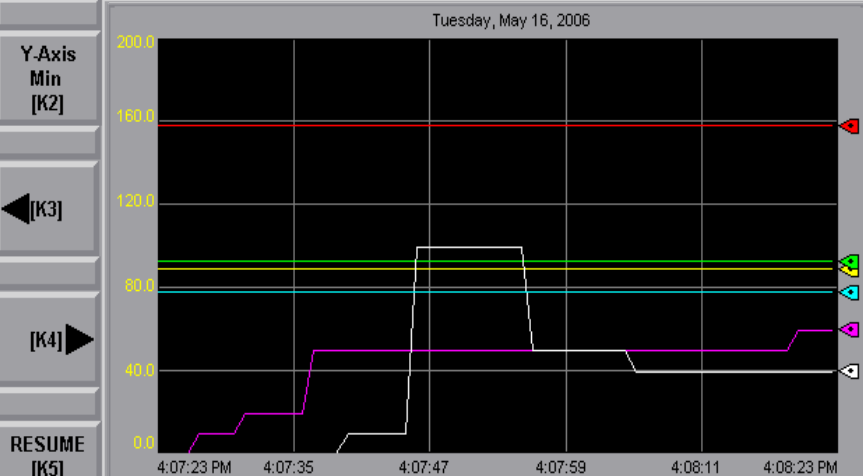


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There are two Manual Valve control screens. This one selected from the General Set-up menu, allows you to graphically monitor critical variables while manually controlling the machine.

Y-Axis Max [K1] System Pressure 89.3 Motor Current 158.4 Bypass Valve Position 40.0
Y-Axis Min [K2] Machine Pressure 93.1 Inlet Valve Position 60.0 Inlet Temperature 78.2



Inlet Valve	60.0	Bypass Valve	40.0	Start Pos.	32.8
Manual Mode	Open .1% [F2]	Manual Mode	Close .1% [F4]	E-Open [F5]	
Inlet Mode [F6]	Close .1% [F7]	Bypass Mode [F8]	Open .1% [F9]	NAVIGATE [F10]	

The indicators show the mode in auto to manual. **Click the E-Open [F5] button to open the bypass.**

F1 F2 F3 F4 F5
F6 F7 F8 F9 F10





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PanelView Plus 700

Once the E-Open button is pressed, the bypass valves opens. This is used to quickly recover from a surge.

Y-Axis
Max
[K1]

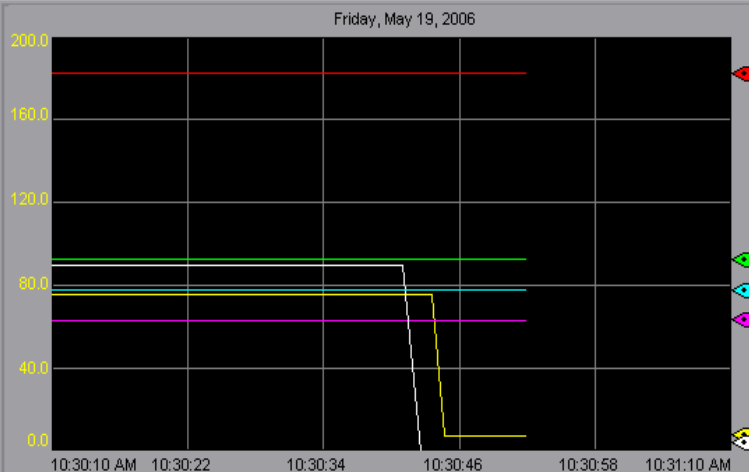
System Pressure 7.6 Motor Current 183.1 Bypass Valve Position 0.0
Machine Pressure 93.1 Inlet Valve Position 63.6 Inlet Temperature 78.2

Y-Axis
Min
[K2]

[K3]

[K4]

RESUME
[K5]



Inlet Valve

63.6

Bypass Valve

0.0

Start Pos.

15.0

Manual Mode

Open .1% [F2]

Manual Mode

Close .1% [F4]

E-Open [F5]

Inlet Mode [F6]

Close .1% [F7]

Bypass Mode [F8]

Open .1% [F9]

NAVIGATE [F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

9

K8

4

5

6

K9

1

2

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K10

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0

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K11

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K12

ESC

CTRL

ALT





Allen-Bradley

PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Y-Axis
Max
[K1]

Y-Axis
Min
[K2]

[K3]

[K4]

RESUME
[K5]

Inlet Valve

Auto Mode

Inlet Mode [F6]

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In
[F2]

Close
[F10]

Bypass Valve Position 40.0

Set Temperature 78.2

4:08:11 4:08:23 PM

40.0 Start Pos. 32.8

[F4] E-Open [F5]

Inlet Mode [F6] Close .1% [F7] Bypass Mode [F8] Open .1% [F9] NAVIGATE [F10]

F1

F2

F3

F4

F5

F6

F7

F8

F9

F10

K7

7

8

9

K8

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K9

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K10

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0

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K11

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SHIFT

K12

ESC

CTRL

ALT

Setup personnel will perform two throttle surges during commissioning. The results are entered on this screen and determine the operating parameters for the compressor. Surge detection is also configured on this screen.

Surge Parameters	Surge Pressure	Surge Amps	Amps w/Offset	Amps Indexed	
High Pressure Surge	110.00	160.0	171.2	171.2	
Low Pressure Surge	90.00	120.0	131.2	131.2	
Surge Line Offset (%)	7.0	NOTE: Enter the actual Motor Current and Pressure data retrieved from the throttle surges. Surge protection is calculated automatically based on the actual surge data and the offset %. The calculated values are shown in the Amps w/Offset Column. Press [F6] to Reset the DTL. Press [F9] to View Collected Surge Data			
Inlet Temperature	86.0				
Motor Amp Index Per Surge	1.0				
Max. Motor Amps (FLA)	200.0				
Surge Detect Time (Seconds)	2.0				
Radical Motor Current	23.0				
Radical Discharge Pressure	20.00				
Allow	3	Surges In	60	Minutes	
Reset DTL [F6]		Calculator [F8]		Surge Data [F9]	
				Close [F10]	

ESC CTRL ALT



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PanelView Plus 700

This window displays pertinent information about the last two throttle surges. It helps setup personnel collect the necessary data to enter on this screen.

Surge Parameters	Surge Pressure	Surge Amps	Amps w/Offset	Amps Indexed
High Pressure Surge	110.00	160.0	171.2	171.2
Low Pressure Surge	90.00	120.0	131.2	131.2
Surge Line Offset (%)				
Inlet Temperature				
Motor Amp Index Per Surge				
Max. Motor Amps (FLA)				
Surge Detect Time (Seconds)				
Radical Motor Current				
Radical Discharge Pressure				
Allow	3	Surges In	60	

Throttle Surge Data		
	Newest	Oldest
Pressure	92.60	105.70
Motor Current	125.20	151.40
Inlet Temperature	84.43	84.43
Current Change	0.04	0.00
Pressure Change	0.00	0.00

Press [F10] To Exit

Reset DTL
[F6]

Calculator
[F8]

Surge Data
[F9]

Close
[F10]





This window displays pertinent information about the last two throttle surges. It helps setup personnel collect the necessary data to enter on this screen.

Surge Parameters	Surge Pressure	Surge Amps	Amps w/Offset	Amps Indexed
High Pressure Surge	110.00	160.0	171.2	171.2
Low Pressure Surge	90.00	120.0	131.2	131.2
Surge Line Offset (%)				
Inlet Temperature				
Motor Amp Index Per Surge				
Max. Motor Amps (FLA)				
Surge Detect Time (Seconds)				
Radical Motor Current				
Radical Discharge Pressure				
Allow	3	Surges In	60	

Reset DTL
[F6]

Calculator
[F8]

Surge Data
[F9]

Close
[F10]

Surge Data Calculator		
Enter Data From Throttle Surge Results		
	Pressure	Amps
High Surge Data	105.70	151.4
Low Surge Data	92.60	125.2
Calculated Amp Set Points Based on Pressure Entries		
	Pressure	Amps
New High Pressure	110.00	160.0
New Low Pressure	90.00	120.0
Press [F10] To Exit		

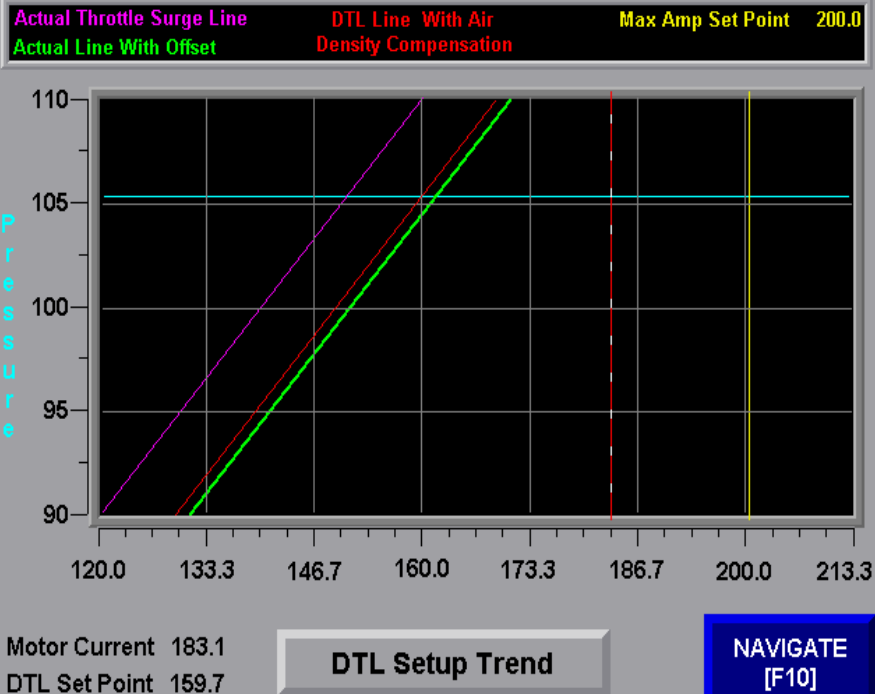




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PanelView Plus 700

This screen is a graphical interface displaying such information as the surge line, throttle line and where the compressor is running in relation to each.





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PanelView Plus 700

Select the screens you wish to view by **clicking on the topic** or **click Close [F10]** to close the menu.

Actual Throttling
Actual Line W

Pressure

110
105
100
95
90
120.0

▶ Main Screen

Air End Status

Oil and Water Status

Motor Status

Discrete Status

User Defined Status

Trend Select

Event History

Misc Data

AirMaster

Auto Functions

Manual Valve Control

PID Parameters

General Setup

Case Controls

Log In
[F2]

Close
[F10]

Motor Current
DTL Set Point 159.7

DTL Setup Trend

Max Amp Set Point 200.0

200.0

213.3

NAVIGATE
[F10]



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