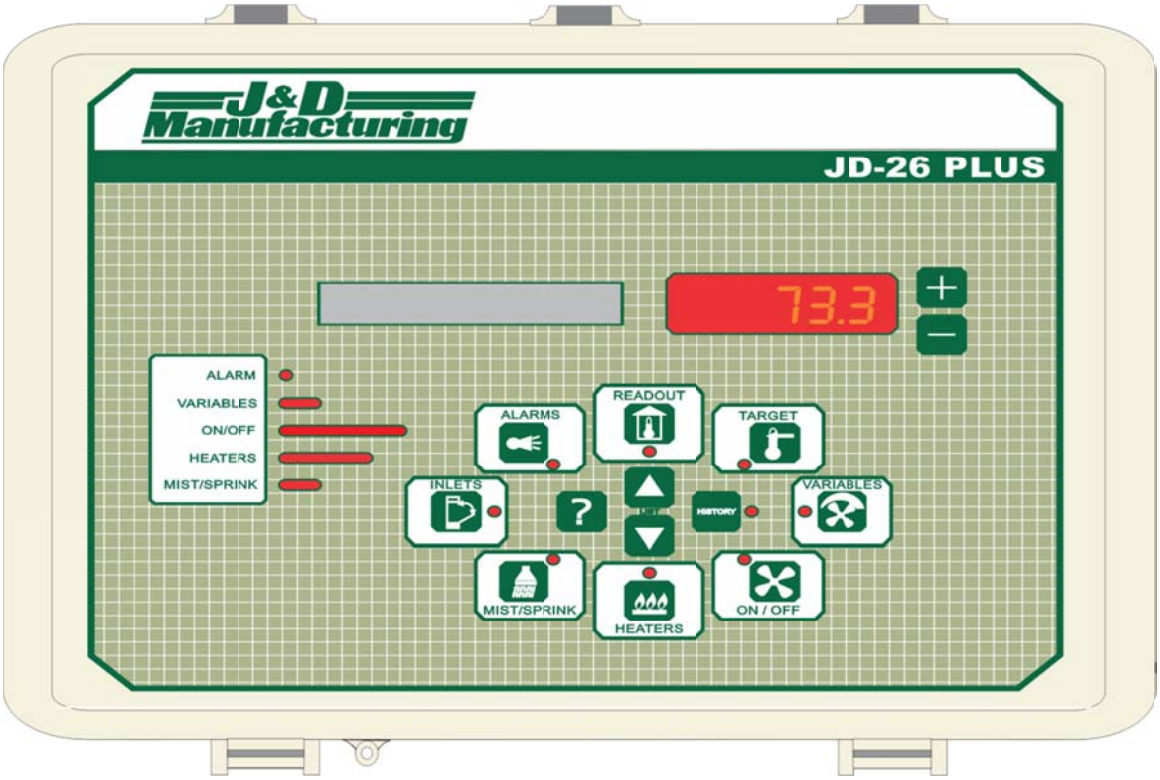
MANUAL
JD-26 PLUS



Installation / User's Guide

ATTENTION ELECTRICIAN
SEE WIRING DETAILS ON PAGES A-3 TO A-8 AND
ADDITIONAL INFORMATION IN SECTION B

WARNINGS AND PRECAUTIONS

Although the manufacturer has made every effort to ensure the accuracy of the information contained herein, this document is subject to change without notice due to ongoing product development.

WARNINGS AND PRECAUTIONS

Equipment, probe failure, blown fuses and/or tripped breakers may prove harmful to the contents of the building. Therefore it is strongly recommended to install backup devices and alarm or warning devices. Spare equipment should also be available at the owner's site. Equipment manufactured by the manufacturer is protected against normal line surges. High surges caused by thunderstorms or power supply equipment may damage this equipment. For added security against line voltage surges it is recommended that surge and noise suppression devices be installed at the electrical distribution panel. Use of shielded cable for probes is recommended for protection against lightning. These devices are available from most electrical supply distributors.

RECOMMENDATIONS

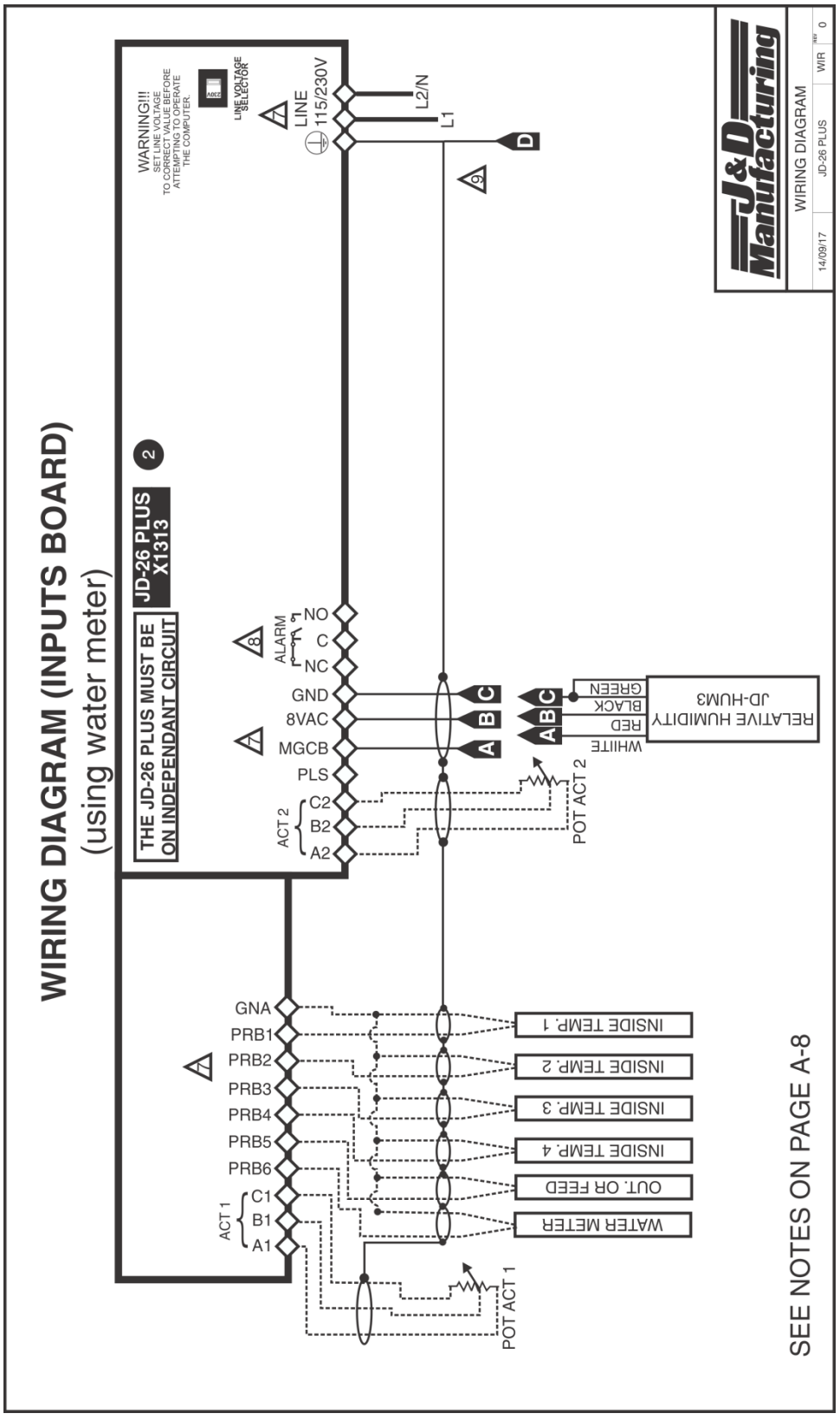
The manufacturer recommends that all installation procedures described herein be performed by a qualified electrician or installation technician. Furthermore the manufacturer recommends testing all the functions and equipment connected to the JD-26 PLUS, including the alarm system and backup devices, after installation, after changes to the installation and every month after that.

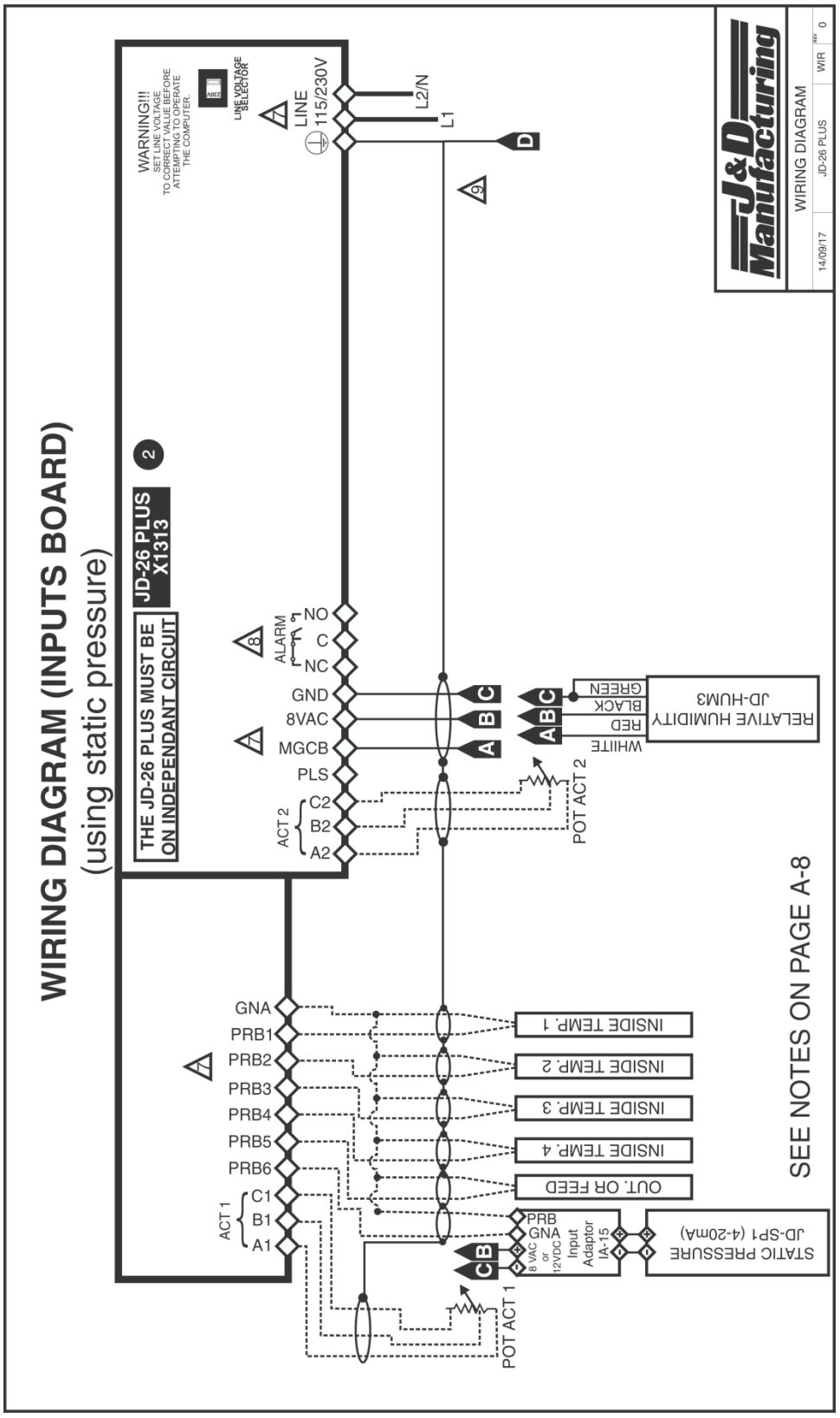
Fuse verification and replacement, as well as the proper setting of control values shall be the responsibility of the owner of this equipment.

SECTION B

WIRING DIAGRAM
JD-26 PLUS
SECTION A

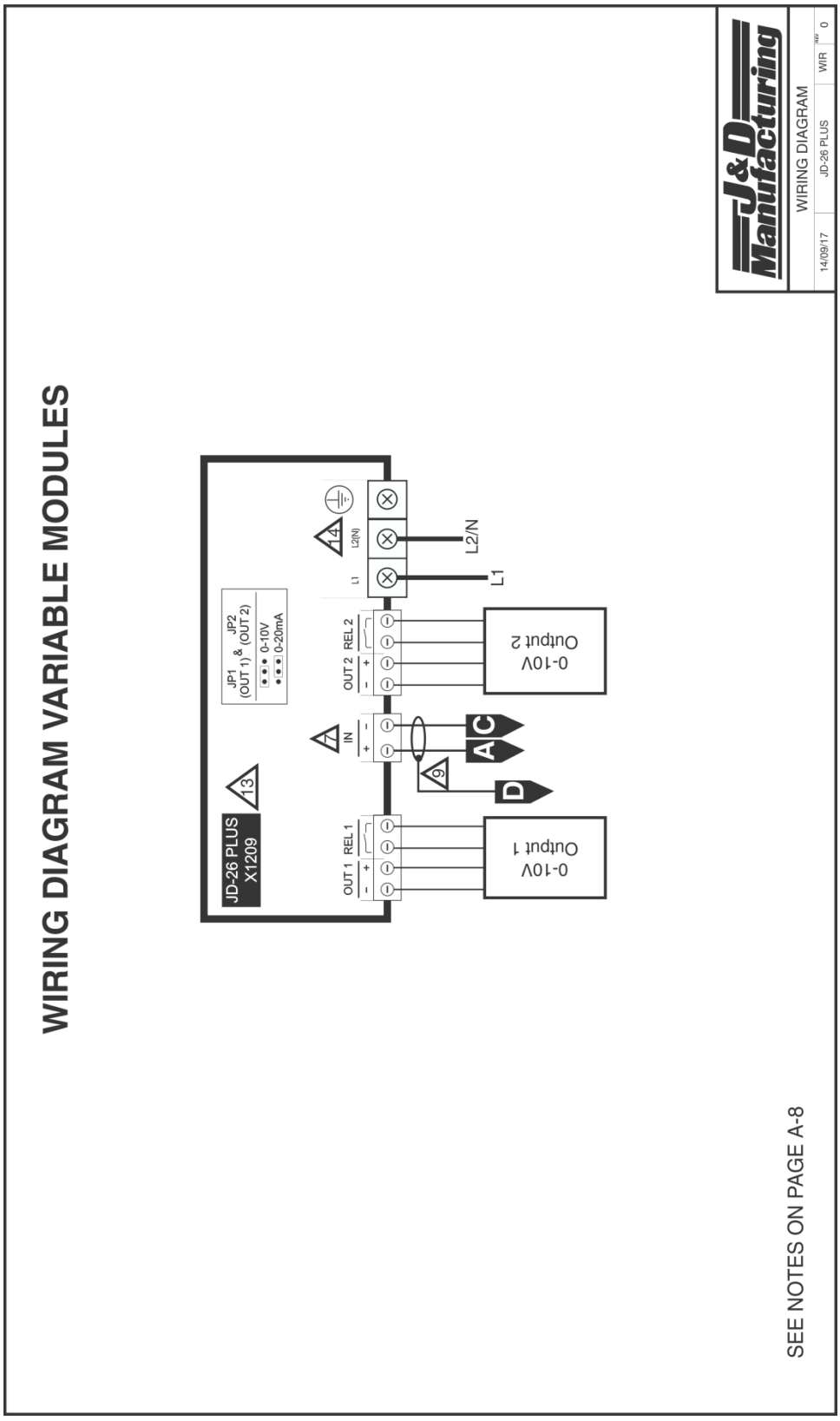
JD-26 PLUS WIRING DIAGRAM

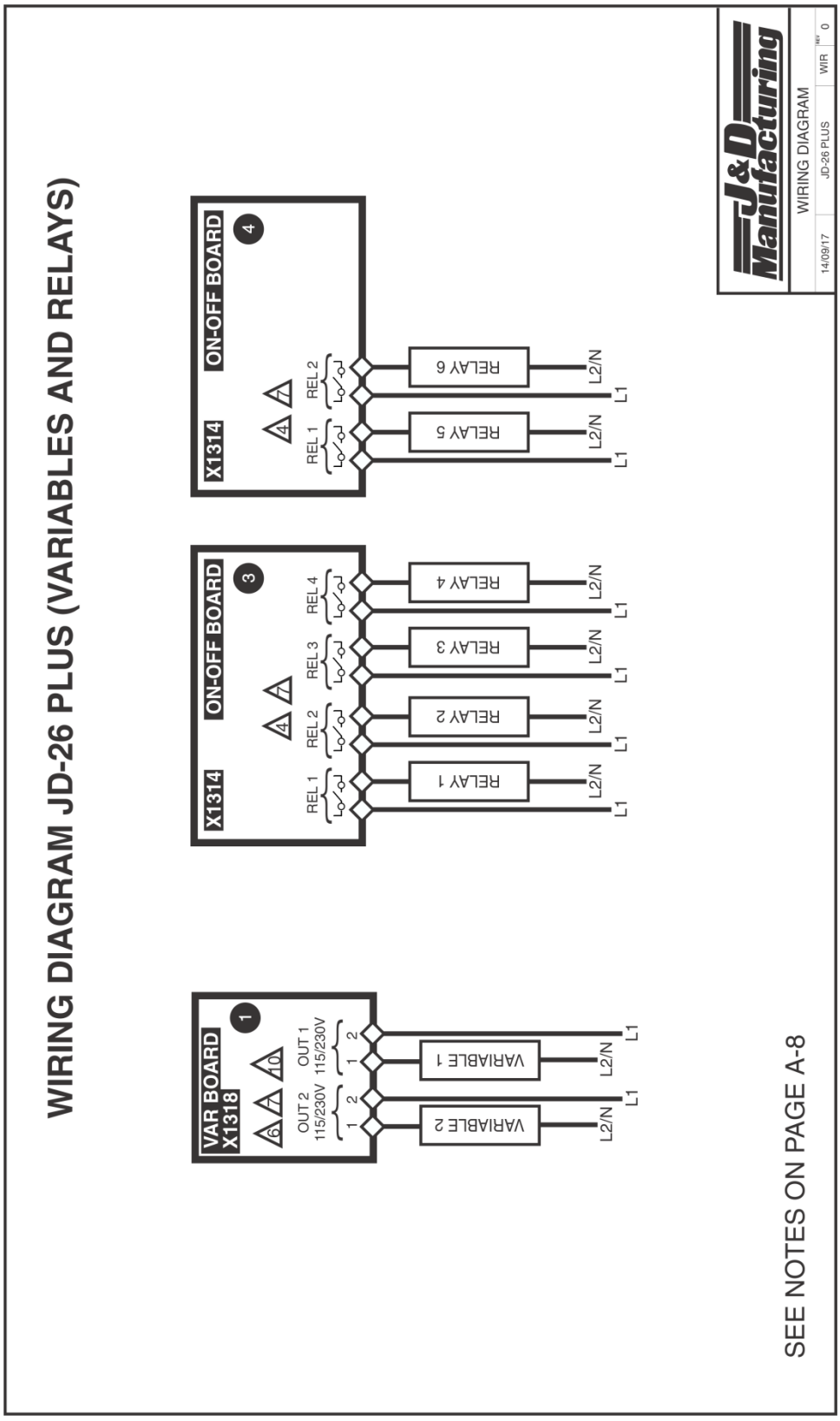



WIRING DIAGRAM (INPUTS BOARD)
(using static pressure)
THE JD-26 PLUS MUST BE ON INDEPENDANT CIRCUIT
JD-26 PLUS X1313
WARNING!!! SET LINE VOLTAGE TO CORRECT VALUE BEFORE ATTEMPTING TO OPERATE THE COMPUTER.
LINE VOLTAGE SELECTOR
LINE 115/230V
L2/N
L1
ALARM
NO
C
NC
GND
8VAC
MGCB
PLS
ACT 2
C2
B2
A2
POT ACT 2
RELATIVE HUMIDITY JD-HUM3
WHITE
RED
BLACK
GREEN
GNA
PRB1
PRB2
PRB3
PRB4
PRB5
PRB6
ACT 1
C1
B1
A1
INSIDE TEMP. 1
INSIDE TEMP. 2
INSIDE TEMP. 3
INSIDE TEMP. 4
OUT. OR FEED
STATIC PRESSURE JD-SP1 (4-20mA)
PRB
GNA
8 VAC or 12VDC
Input Adaptor IA-15
POT ACT 1
SEE NOTES ON PAGE A-8
J&D Manufacturing
WIRING DIAGRAM
14/09/17
JD-26 PLUS
WIR
REV 0

SECTION B

JD-26 PLUS WIRING DIAGRAM




WIRING DIAGRAM JD-26 PLUS (VARIABLES AND RELAYS)
VAR BOARD X1318
OUT 2 115/230V
OUT 1 115/230V
VARIABLE 2
VARIABLE 1
X1314 ON-OFF BOARD
REL 1
REL 2
REL 3
REL 4
RELAY 1
RELAY 2
RELAY 3
RELAY 4
RELAY 5
RELAY 6
L1
L2/N
SEE NOTES ON PAGE A-8
J&D Manufacturing
WIRING DIAGRAM
14/09/17
JD-26 PLUS
WIR
0

SECTION B

JD-26 PLUS

Electrician's notes

1 ---------- (PROBE WIRING) SHIELDED WIRE AWG #22 WITH 16/30 STRANDING, 500ft (150m) MAXIMUM LENGTH (Ex.: DECA 73-310).
For other probe, refer to specific probe manual for appropriate maximum length and wire size or use AWG #22, 500ft (150m) MAXIMUM LENGTH.

2 ——— (COMMUNICATION WIRING) SHIELDED LOW CAPACITANCE WIRE, (Capacitance between conductors @ 1Khz = 24pF/ft), TWISTED PAIR (8 twist/ft), AWG #22, 820ft (250m) MAX LENGTH (Ex.: BELDEN 8761).

3 ▬▬▬ HIGH VOLTAGE WIRE INSTALLED ACCORDING TO LOCAL WIRING CODE.

4 INSTALL LOW VOLTAGE WIRES (PROBES, COMPUTER LINK OR POTENTIOMETER WIRES) AT LEAST 12in. (30cm) AWAY FROM HIGH VOLTAGE WIRES (120/230VAC, 24VDC). ALWAYS CROSS HIGH AND LOW VOLTAGE WIRES AT A 90-DEGREE ANGLE.

△5 RELAYS: 10A @ 240VAC RESISTIVE, MOTOR 1HP @ 240VAC, 1/2HP @ 120VAC AT EACH OUTPUT.

△6 THE CURRENT SHALL NOT EXCEED 10A AT EACH OUTPUT (VARIABLE STAGE).

△7 1 WIRE ONLY PER GREEN TERMINAL. USE WIRE CONNECTOR IF YOU WANT TO CONNECT MORE THAN 1 WIRE, NO BIGGER THAN AWG #12, NO SMALLER THAN AWG #28.

△8 CHECK INSTALLATION GUIDE FOR ALARM WIRING.

△9 USE SHIELD FOR SHIELDING PURPOSE ONLY. CONNECT THE SHIELD TO THE CONTROL CIRCUIT COMMON END ONLY⏚. NEVER LEAVE THE SHIELD UNCONNECTED AT BOTH ENDS. NEVER CONNECT BOTH ENDS OF THE SHIELD TO COMMON⏚. THE USE OF A SHIELD FOR ALL PROBES AND POTENTIOMETERS IS **MANDATORY**.

△10 THESE MODULES MUST BE ON SAME POWER PHASE AND LINE VOLTAGE AS THE CONTROLLER.

△11 SEE SPECIFIC MANUAL FOR MORE DETAILS ON OUTPUT LOAD.

△12 COMMUNICATION WIRING SHIELDED, TWISTED PAIR (8 TWIST/ft), MAX LENGTH FOR 350pF/m CABLE: 160ft (50m), MAX LENGTH FOR 89pF/m CABLE: 650ft (200m).

△13 FOR MORE DETAILS ON JD-M010. REFER TO THE JD-M010 INSTALLATION GUIDE.

△14 MAXIMUM 2 WIRES OF SAME SIZE PER BLACK TERMINAL, NO BIGGER THAN AWG #12, NO SMALLER THAN AWG #22.

△15 JP1 – JUMPER MUST BE INSTALLED ON PIN 2-3 = 4-20mA

△16 JP1 – JUMPER MUST BE INSTALLED ON PIN 1-2 = STANDARD

INSTALLATION
JD-26 PLUS
SECTION B

JD-26 PLUS INSTALLATION

This section will inform the electrician on proper wiring and installation procedures for the JD-26 PLUS.

The manufacturer recommends that the following installation instructions to be followed as closely as possible, and that all work be performed by a certified electrician. Failure to do so may void the warranty.

Unpacking

Unpack the JD-26 PLUS and inspect contents for damage. Should the contents appear to be damaged, contact your local distributor to return the equipment.

The package should contain the following standard items:
1 JD-26 PLUS control
4 Brackets / 4 screws
1 2004-10K inside temperature probe
1 Installation / User's Guide

Mounting Hardware Required

This is the list of the mounting hardware needed, which is not included with the product:

Shielded two-wire cable, AWG #22 (to extend probes)
Shielded two-wire twisted pair cable, AWG #22 (used for communication) see electrician note for capacitance selection.
4 screws (to hang the unit onto the wall)
Screwdrivers
Soldering iron kit or approved sealed connectors
Drill and hole saw kit

General installation guidelines

JD-26 PLUS Control

- It is recommended to install the unit in a hallway to limit the JD-26 PLUS exposure to noxious gases.
- In order to avoid condensation problems inside the controller, it is recommended to install the JD-26 PLUS on an inside wall. If it is not possible, use spacers to have an air gap between the wall and the JD-26 PLUS.
- It is required to install the JD-26 PLUS side up with the cable entry holes facing down.
- The enclosure is watertight, but do not spray water or immerse the JD-26 PLUS in water. Cover it carefully with plastic when cleaning the room.
- The JD-26 PLUS should be installed in easy access location but away from damaging elements (heat, cold, water, direct sunlight, …).
- Do not drill the face, the side, the top or the rear of the control.
- Do not install the JD-26 PLUS control near high voltage equipment, power supply or transformer.

Electrical Cables

- All electrical cables must be installed according to local wiring codes.
- All cable shields must be connected to the JD-26 PLUS power ground only, except for the cable connected to the potentiometer / probe of the air inlet module and the optional PC interface. The shield is needed to protect the JD-26 PLUS and the modules against any electromagnetic interference generated by lightning or nearby operating machinery.
- Never use the shield as a conductor.
- Connect only one end of the shield to the ground of the JD-26 PLUS.
- Use separate conduit for the low voltage cables (communication, potentiometer and probes) and the high voltage cables. There must be at least 1 foot (30 cm) between low voltage and high voltage conduits.
- If a low-voltage cable has to cross over a high voltage cable, make this crossing at 90°.
- All cable connections must be soldered or done with approved sealed connectors.
- Probe cables must be 500’ (150m) or less.
- Communication cables must be 820’ (250m) or less.
- It is prohibited to use overhead cables outside the building.

Electrical Power

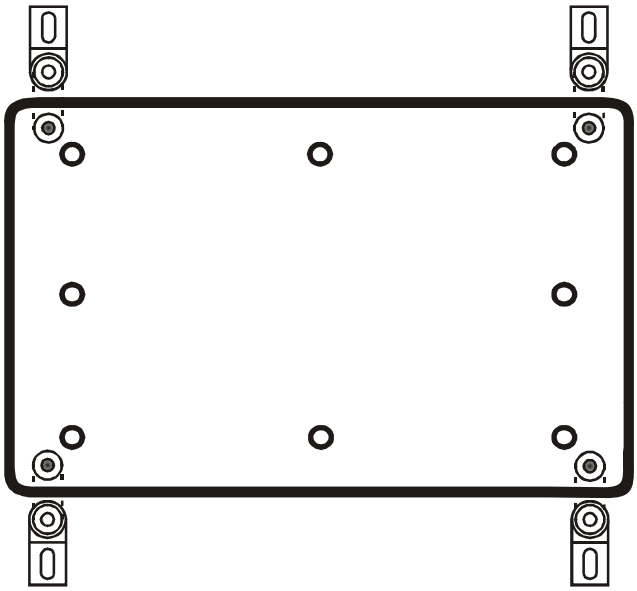
- Protection from electrical surge should be included in the planning of each installation.
- Every module should have a separate breaker to avoid unwanted consequences.
- The OUT1 and OUT2 outputs require the same phase and same voltage as the JD-26 PLUS to operate.

- The JD-V2 and JD-V1 modules require the same phase and same voltage as the JD-26 PLUS to operate.
- It is strongly recommended to have a backup power source to ensure life-sustaining conditions in case of power failure (see figure 8).
- It is also strongly recommended to put a backup thermostat to sufficient fan and heating system parallel to the JD-26 PLUS module output (see figures 9 and 10).
- The backup system and alarm must be thoroughly tested and verified as working properly before using the ventilation system.

Mounting

- The enclosure must be mounted in a location that will allow the cover to be completely opened right up against the wall.
- Fasten the four brackets to the four mounting holes on the back of the enclosure, using the four screws provided with the brackets.
- Then mount the enclosure on the wall by inserting screws through the brackets' adjustment slots, into the wall. Make sure to position the enclosure so that all wires extend out of the bottom section of the enclosure.
- The bracket slots also serve to adjust the position of the controller.
- Once you have adjusted the controller position, tighten the four mounting screws.

FIGURE NO. 1 Mounting Position and Devices



Connection Procedure

Detailed Wiring Diagrams

Typical Sensor Wiring for Probes

The inside temperature sensor should be located in the area which gives the most accurate temperature reading to achieve optimum ventilation. The sensor should also be connected to the JD-26 PLUS with a shielded two-wire cable. It should be located in an area protected from operating machinery, animal bites, personnel or anything that could damage the sensor. See also “General installation guidelines”.

The outside temperature sensor should be installed in a location which is not influenced by heat generated from inside the building or direct sunlight. It should also be protected from physical damage.

FIGURE NO. 2 Typical Temperature Probe Wiring

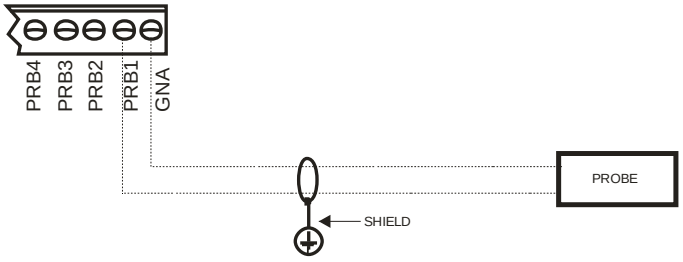
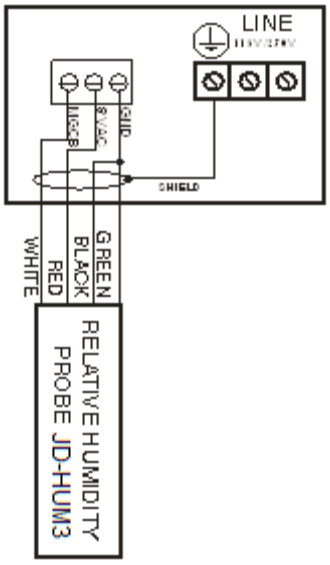


FIGURE NO. 3 Typical Humidity Probe Wiring

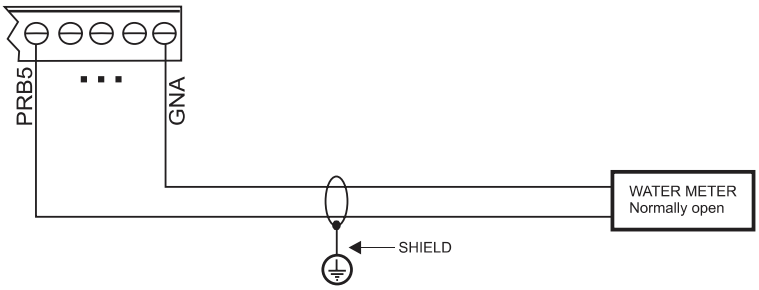


SECTION B

Typical water meter wiring

This function allows the user to measure the amount of consumed water measured in pulses by the water meter (Example: Kent model C-700 water meter with B-Pulser interface). The water meter interface must have a N.O. contact.

FIGURE NO. 4 Typical Water Meter Wiring



Typical Feed Sensor Wiring

Feed sensors (ex.: CSD-1 Current Switch Detector) should be mounted inside the controller enclosure with the feeder power wire running through the sensor loop. If a single sensor monitors multiple feeder circuit, run the wires from all feeder groups the same direction through the sensor loop.

The best use for a single feed sensor is monitoring your silo auger motor. This provides a clear indication of all feed entering the building and it provides an alarm when the feed silo is empty.

FIGURE NO. 5 Typical Feed Counter Wiring

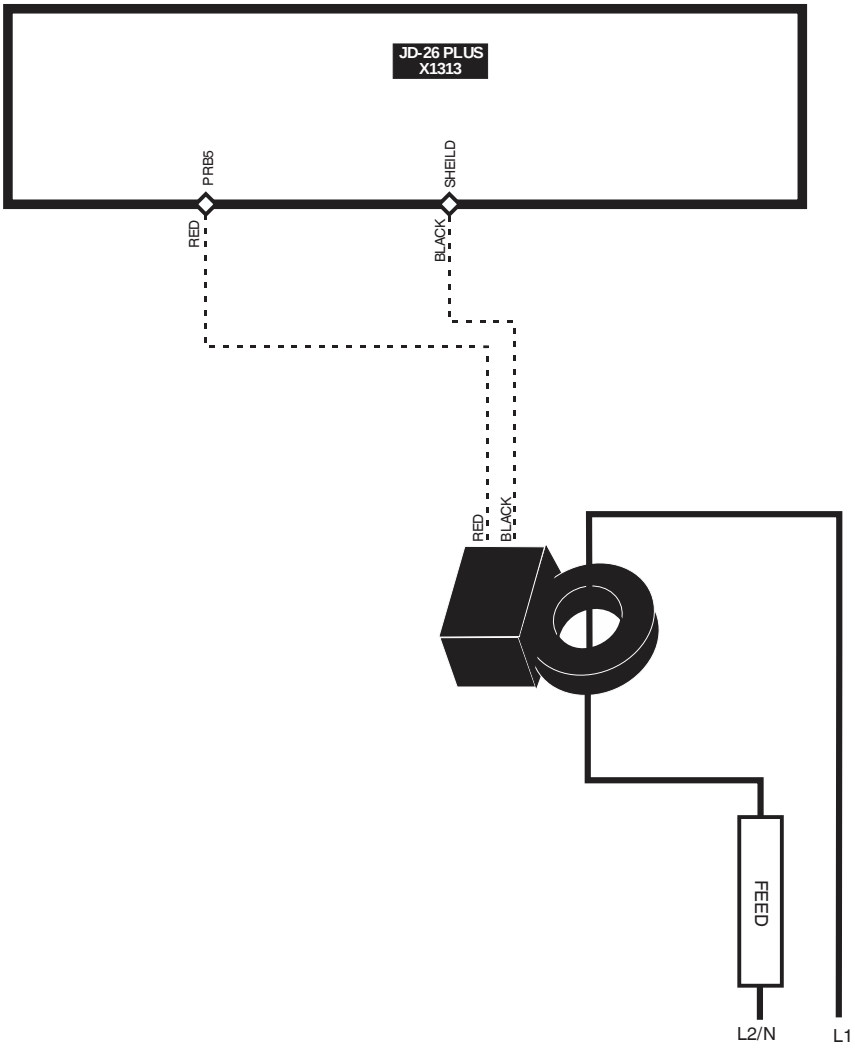
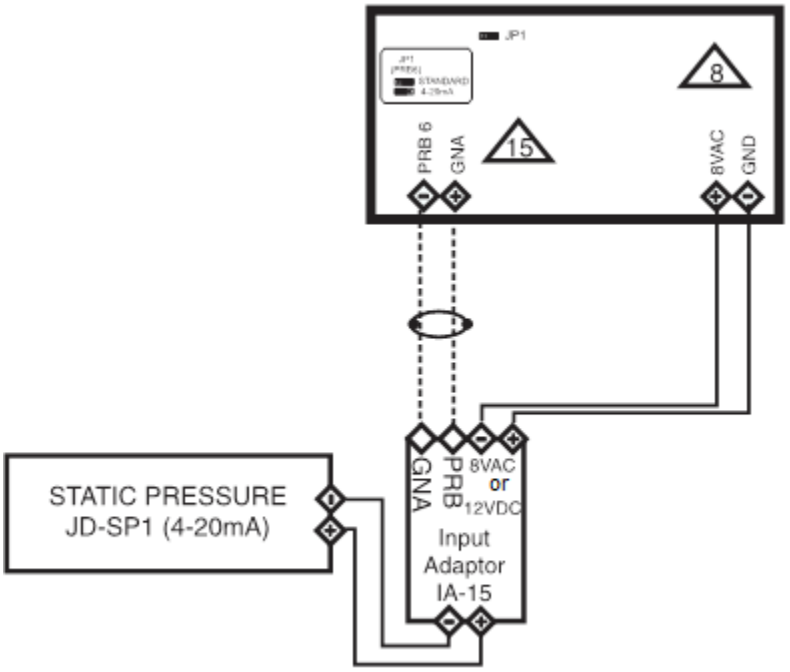


FIGURE NO. 6 Typical Static Pressure Probe Wiring

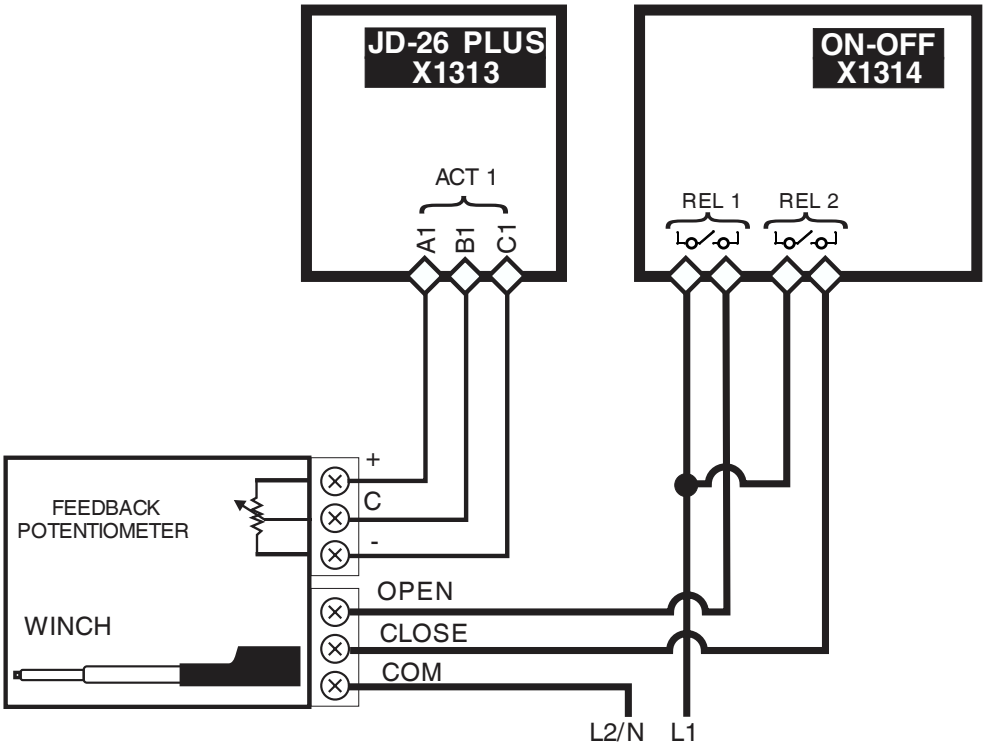


(Jumper 1 (JP1) must be correctly place in order to use the JD-SP1 (4-20mA) static pressure probe.)

Typical Actuator Wiring

Follow the calibration procedure in the installation manual (see Inlet Calibration section), otherwise the actuator positioning will be erratic.

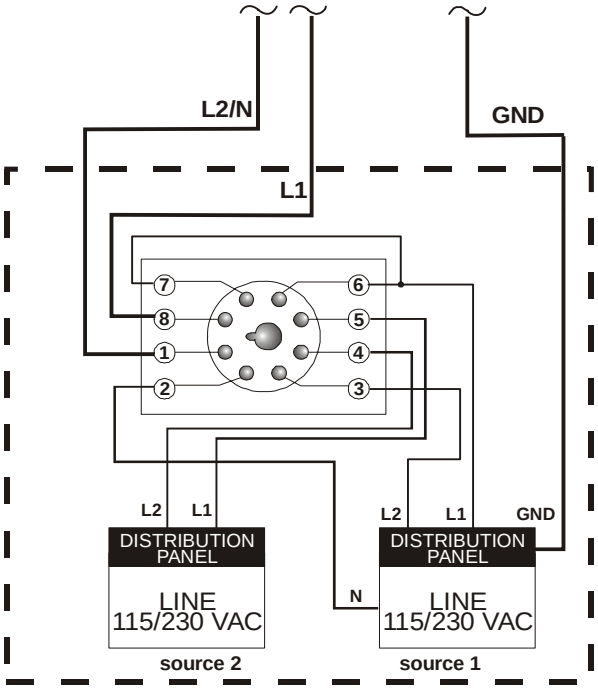
FIGURE NO. 7 Typical Actuator Wiring 115V

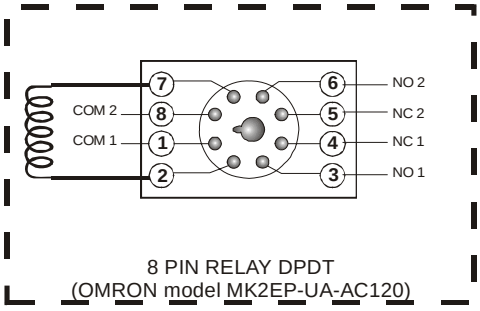


Typical Power Backup Wiring

A backup relay (DPDT) connects to the power source 1 in normal operation but will switch to the power source 2 if source 1 is disabled. The backup relay should be selected to ensure it is able to support the required power load.

FIGURE NO. 8 Typical Power Backup Wiring





Typical Thermostat Backup Wiring

If the Control or a module fails, the backup thermostats will activate the dedicated fan or heater as soon as temperature reaches the set point of the thermostat. The thermostat must be accessible for adjustment and must be set at 3 to 5 degrees above the fan's relative set point or 3 to 5 degrees under the heater relative set point.

FIGURE NO. 9 Typical Thermostat Backup Wiring on Relay

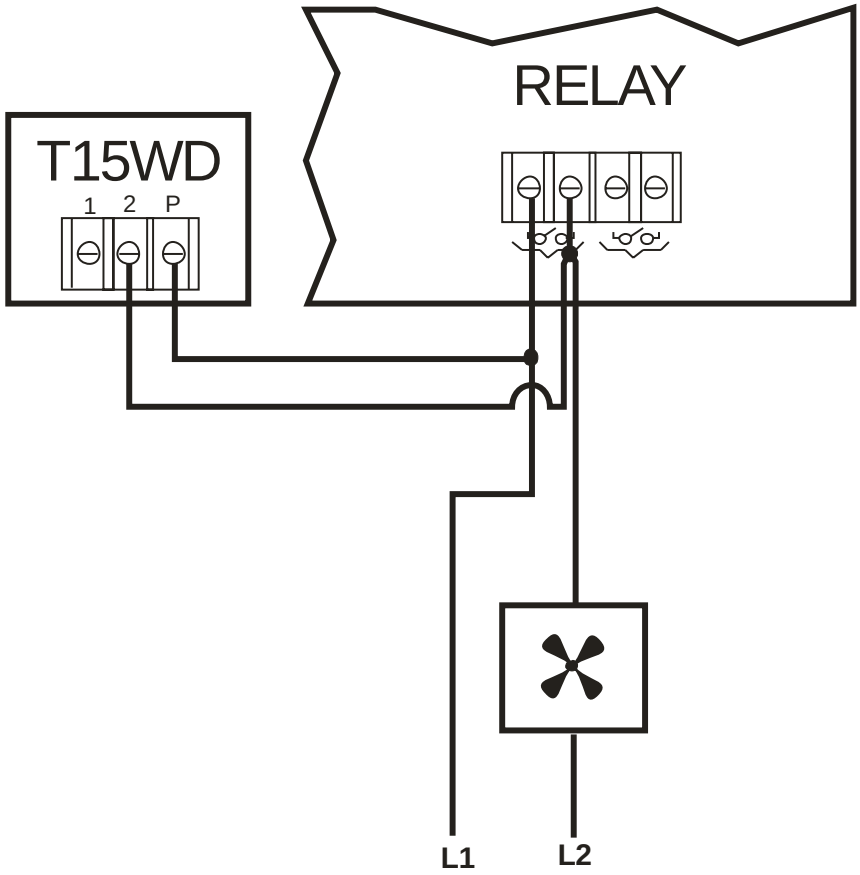
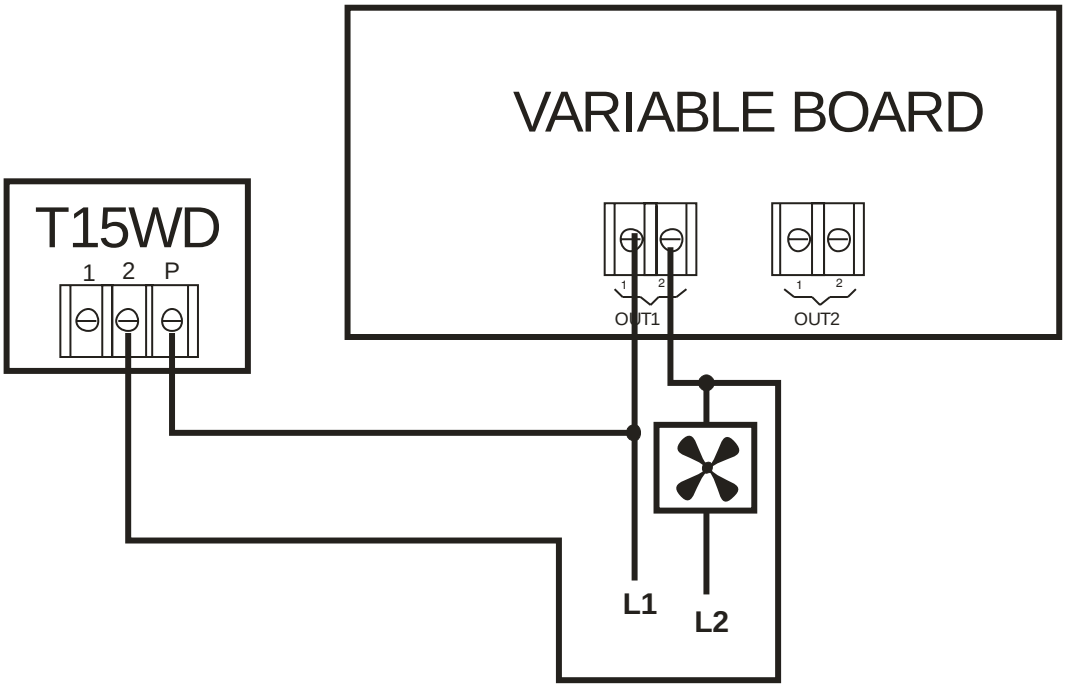


FIGURE NO. 10 Typical Thermostat Backup Wiring on Variable Stage



Typical Alarm Connection Wiring

The JD-26 PLUS provides a normally open and normally closed dry contact to set off an alarm in case low or high temperature condition occurs. Moreover, this same contact can be used to signal a power failure or other malfunctions. It may be connected to an alarm system or directly to a siren and /or auto-dialer.

Make the normally closed (NC) or normally open (NO) connections as indicated in figures 11 and 12.

The relay will activate 15-25 seconds after an alarm is triggered.

FIGURE NO. 11 Typical Alarm Connection Wiring

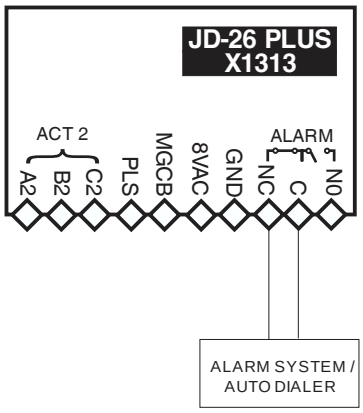
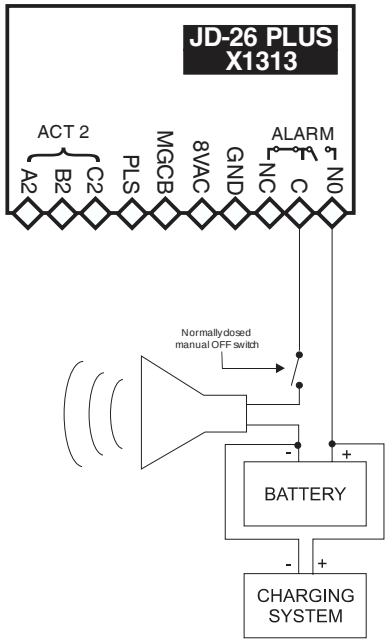


FIGURE NO. 12 Typical Siren Connection Wiring



Powering Up Procedure

Once the JD-26 PLUS is properly mounted on the wall and all modules and sensors connected to the terminal block, perform the following step:

Verify all Connections

Seal all cable entry holes.

Hermetically Close the JD-26 PLUS

Close the front panel and the lower access cover.

Put the power on

Secure the front panel with a lock

Download the Configuration (if necessary)

When upgrading your system with a new configuration, you will have to download the configuration.

There are two ways to download a configuration in the JD-26 PLUS controller.

1) Downloading by powering down.

A. Ensure the power source of the JD-26 PLUS is OFF (flip the circuit breaker on the distribution panel).
B. Remove the faceplate screws and lift up the cover.
C. Insert the configuration chip (MMX) into the socket of the main board.
D. Switch on the power source. The display on the front panel should indicate dnLd for approximately 15 seconds. If dnLd is not displayed, try one more time. If dnLd is still not displayed, remove and replace the configuration chip (MMX).
E. When the downloading procedure is complete, remove the configuration chip (MMX) and place it in the bottom part of the enclosure or in another safe location. Once the MMX Chip is removed, the JD-26 PLUS starts up and executes the configuration.

2) Downloading while the JD-26 PLUS is powered up.

A. Remove the faceplate screws and lift up the cover.
B. Place the MMX chip into the socket of the main board. At this moment, the *MMX DETECTED* parameter will appear.
C. Adjust the *MMX DETECTED* parameter to DNLD and press the [+] and [–] buttons for two seconds. The display on the front panel should indicate [dnLd] for approximately 15 seconds. If [dnLd] is not displayed, try one more time. If [dnLd] is still not displayed, remove and replace the configuration chip (MMX).
D. When the downloading procedure is complete, remove the configuration chip (MMX) and place it in the bottom part of the enclosure or in another safe location. Once the MMX Chip is removed, the JD-26 PLUS starts up and executes the configuration.

WARNING: During this procedure, some components are live and can be dangerous if touched.

Uploading the Configuration

It is possible to upload a configuration into a configuration chip (MMX) in order to save parameters and setup or to backup the configuration.

Here's the procedure to upload a configuration.

A. Make sure that the JD-26 PLUS is powered up.
B. Remove the faceplate screws and lift up the cover.
C. Place the MMX chip into the socket of the main board. At this moment, the **MMX Detected** parameter will appear.
D. Adjust the **MMX Detected** parameter to [UPLd] and press the [+] and [–] buttons for two seconds. The display on the front panel should indicate [UPLd] for approximately 15 seconds. If [UPLd] is not displayed, try one more time. If [UPLd] is still not displayed, remove and replace the configuration chip (MMX).
E. When the uploading procedure is complete, remove the configuration chip (MMX) and place it in the bottom part of the enclosure or in another safe location. Once the MMX Chip is removed, the JD-26 PLUS will continue to execute the configuration.

WARNING: During this procedure, some components are live and can be dangerous if touched.

Inlet Calibration (Position and Natural Potentiometer Mode)

A. A calibration must be performed on an air inlet for it to operate properly.
B. The calibration allows the controller to know the minimum and maximum positions of the air inlet.
C. The calibration can be performed in three easy steps:
    1. Select the ALARMS group to get the parameters that are needed for the inlet calibration.
    2. Close the inlet completely using *INLET (1-2) MANUAL OVERRIDE*. Once the inlet is completely closed, select the INLET (1-2) SET LOW LIMIT parameter and press the [+] and [–] buttons for two seconds. At this point, the text displayed on the LCD will change to "Low Limit Saved", if the value was correctly saved, or "Cannot Save Check Inlet Potentiometer" if the potentiometer reading is not valid. In the last case, calibration must be performed once the situation is corrected.
    3. Open the inlet completely using *INLET (1-2) MANUAL OVERRIDE*. Once the inlet is completely open, select the INLET (1-2) SET HIGH LIMIT parameter and press the [+] and [–] buttons for two seconds. At this point, the text displayed on the LCD will change to "High Limit Saved" and the LED display will show "Saved", if the value was correctly saved, or "Cannot Save Check Inlet Potentiometer" and the LED display will show "Err" if the potentiometer reading is not valid. In the last case, calibration must be performed once the situation is corrected.

JD-26 PLUS Compatible Probes

This is the list of all compatible probes that can be connected with JD-26 PLUS control with a short description of their function.

Temperature probe 2004-10K (black cap)
Temperature probe with a temperature range of -58 to 140 °F (-50 to 60 °C).

Relative humidity probe JD-HUM 3
Relative humidity probe with a measuring range of 0 to 100 RH% (red connector).

Static pressure probe JD-SP1
Static pressure probe with a measuring range of -0.500WC" to 0.500WC".

JD-26 PLUS Compatible Modules

Actuator and air inlet modules
- **AIRIN-1** (1-Curtain/air inlet module working in potentiometer mode)
- **AIRIN-2** (2-Curtain/air inlet module working in potentiometer mode)

Variable speed module
- **JD-V1** (1 variable stage)
- **JD-V2** (2 variable stages)

0-10Volts module
- **JD-M010** (2 variable heaters)

JD computer interface
- **Communication card** (X1264 card inserted into the JD controller to communicate with the computer interface)
- **RF-IN Communication Module** (Module inserted into the controller for a wireless communication with the computer interface)

Specifications

Storage temperature	-4°F to 131°F (-20°C to 55°C)
Operating temperature	32°F to 122°F (0°C to 50°C)
Humidity	90% maximum Non-condensing
Weight	7,4 lb (3,4 kg)
Size	12 1/4" x 11" x 4 3/4" (32 cm x 28.8 cm x 11.5 cm)
Protection index	IP 66
Warranty	2 years
POWER SUPPLY	
Operational voltage range (SW1 @ 115V)	92 to 125VAC
Operational voltage range (SW1 @ 230V)	184 to 250VAC
Operational frequency range	45 to 65 Hz
Power supply circuit consumption (CPU Board)	20 W maximum
Fuse	250mA, 250VAC
SOURCE 8 VAC	
Voltage range	6.5 to 13VAC
Maximum current allowed	50mA
PROBE INPUTS	
Temperature probe	2004-10K
Maximum wire length	500 feet (150 m)
Recommended wires	2 strands, shielded, AWG #22
ALARM RELAY	
Maximum current	1 A at 30VDC
Delay before switching	15 to 25 seconds
Fuse	1A 250VAC
COMMUNICATIONS PORT (P1)	
Maximum wire length (2400 bps)	820 feet (250 m)
Recommended wire	2 strands, twisted pair, low capacity, shielded, AWG #22
OUTPUT RELAYS	
Maximum Current	1HP @ 240VAC, 1/2HP @ 120VAC, 10A@240VAC resistive
Caution Notice	These relays are rated by UL and CSA at 15A or 1HP. However, for outputs requiring frequent activation (ex: minimum ventilation fans working on a timer) it is recommended not to use more than 1/2 HP per relay (at 250 VAC)
VAR 1 OUTPUT	
Recommended wire	Communication wiring shielded, twisted pair (8 twist /ft), max length for 350pF/m cable : 160ft (50m), max length for 89Pf/m cable : 650ft (200m).
VARIABLE OUTPUTS (OUT1 and OUT2)	
Maximum Allowable Current (Fuse value)	15A, 250VAC
Recommended maximum current for incandescent lighting / heating	13,5A, 120 / 208 / 240VAC
Recommended maximum current for fans	12A, 120 / 208 / 240VAC
Minimum load	300mA @ 230VAC 150mA @ 115VAC

AIRIN-1 and AIRIN-2 inlet boards

Warranty	2 years
Board Dimension	4 11/16" x 2 7/8" (11,8cm x 7,3cm)
RELAYS	
Maximum Current	1/2HP @ 230VAC, 1/4 HP @ 115VAC
POTENTIOMETER	
Potentiometer	0-10K ohms

Important Notice:

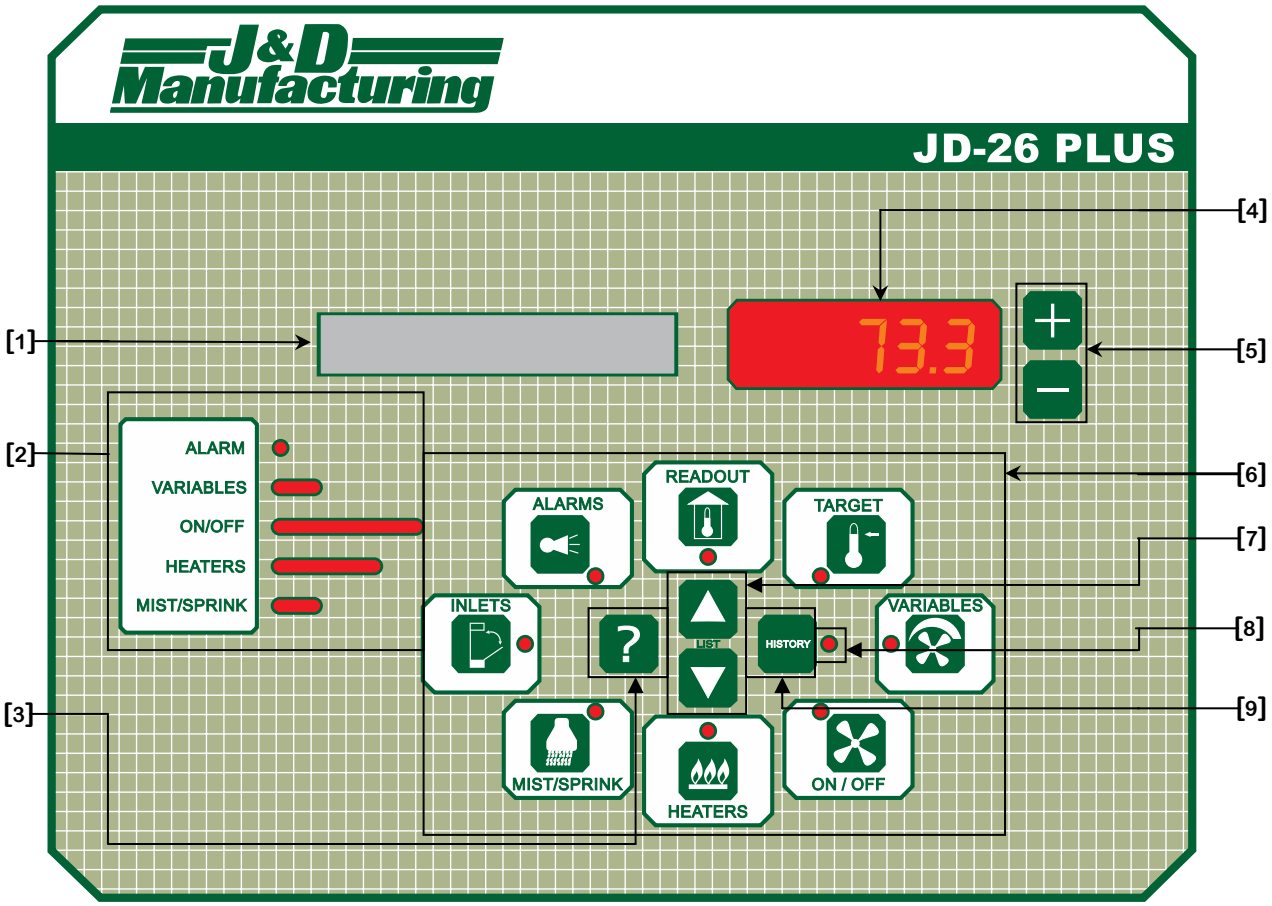
- It is important to have a backup system in case of a system failure.
- Low-voltage and high-voltage wire must be passed through different conducts at least 1 foot (30 cm) apart. If low-voltage and high-voltage conduits must be crossed, the crossing must be at a 90-degree angle.
- All wiring must be made by a certified electrician and conform to local electrical regulations.

Troubleshooting

SYMPTOM	CAUSE	REMEDY
Temperature probe reads *LO*	Temperature is below -58.0°F (-50.0°C). Probe is disconnected or defective.	Check all connections. If the problem persists, and the temperature is within normal range, replace the probe.
Temperature probe reads *HI*	Temperature is above 140.0°F (60.0°C). Probe is short circuited or defective.	Check all connections. If the problem persists, and the temperature is within normal range, replace the probe.
Displays are blank	JD-26 PLUS is not powered. Flat cable between the main and top boards of the JD-26 PLUS is disconnected.	Make sure the control is powered. Make sure the fuse is correct. Make sure the flat cable is connected.

USER'S GUIDE
JD-26 PLUS
SECTION C

Control Description



SECTION C

1. LCD Display
The LCD display is a user-friendly device which allows users to visualize and modify settings rapidly and efficiently.

2. Outputs List With LED
On the left-hand side of the faceplate appears a list of multi-purpose outputs vertically aligned, next to which is a LED list. A LED comes ON whenever the respective output is active or in alarm. A LED will flash when an output is activated manually by the configuration or when the alarm relay is deactivated.

3. Help Button
This button gives information about the selected parameter.

4. LED Status Windows
The LED status window features a 5 digit LED readout display of temperature in Fahrenheit or Celsius, or other programmable settings. After a setting is selected, its value appears on the LED display. If the value is flashing, it can be changed with the value setting buttons (⊟ and ⊞).

5. Value Setting Buttons (⊟ and ⊞)
The value buttons appear as 2 squares with a + and - sign on them. They are used to increase or decrease the value on the LED window. Press the button once and release it to increase or decrease the value by one increment. The value may be changed quickly by keeping your finger on either button.

6. Settings Group List
On the center of the faceplate appear 8 parameter groups. The LED that is list indicates which parameter group is selected.

7. Parameter Buttons (⇩and ⇧)
The parameter buttons are represented by 2 squares with arrows on them. Pressing the upper (⇧) or down arrow (⇩) will move up or down the parameter list as indicated by the LCD display.

8. History LED
The history LED light up when the current setting offers history options.

9. History Button
The history button allows you to see historical values of history up to 90 days.

Glossary

Throughout this document, the following terminology is used.

MSP Main Set Point. This is the Temperature goal for the room and it is also the reference temperature for all relative settings. Note that the MSP is affected by the growth curve function.

RSP Number of degrees relative to the MSP where a function begins.

Differential Number of degree changed before stopping the output. For example, with a differential = 1°F, the control turns on a fan at 70.0°F when temperature increases, but it will shut it off only at 69.0°F when the room is cooling down. The differential is necessary to avoid oscillations.

Bandwidth Number of degrees a variable speed fan takes to reach its full speed.

Expressions in *ITALICS* are user's parameters. Expressions in CAPITALS represent non-adjustable readings.

Input/Output Table

Inputs	Qty	Outputs	Qty
Inside Temperature	1 to 4	Variable Fan Stage	Up to 2
Outside Temperature	Up to 1	Variable Stir Fan Stage	Up to 2
Relative Humidity	Up to 1	ON/OFF Fan Stage	Up to 6
Water Meter	Up to 1	Stir Fan	Up to 4
Feeder Counter	Up to 1	Heater	Up to 4
Static Pressure	Up to 1	Heat Pad	Up to 1
		Inlet	Up to 2
		Mist/Sprinkler	Up to 1
		Timer Output	Up to 2
		Alarm	1

Equipment

Item	Description	Qty
JD-26 PLUS	Control, 2 variable / 6 On/Off outputs	1
2004-10k	Temperature Sensor (-58°F to 140°F) (-50°C to 60°C)	1 to 4
JD-HUM3	Humidity Sensor – Red Connector (0RH% to 100RH%)	Up to 1
JD-SP1	Static Pressure Probe (-0.500"WC to 0.500"WC)	Up to 1
JD-M010	2-0-10Volts Module	Up to 1

Configuration Versions

Version	Date	Minimum Processor Version	Modification
V0	08/31/2016	6	- New.
V1	09/06/2017	6	- Changed maximum value of temperatures relative to main set point to 120.0°F - Added relative set point for variable 1 opening temperature.

Ventilation system overview

This configuration is used to control up to 2 variable fan stages, up to 2 variable stir fan stages, up to 6 on/off fan stages, up to 4 on/off stir fans, up to 2 timer outputs, up to 4 heaters, up to 2 heat pad outputs, up to 2 variable heaters, one mist/sprinkler output and up to 2 inlets. Variable stir fans, heaters, heat pads, variable heaters and inlets will follow temperature of probes that are assigned to them. All other outputs will follow the average temperature. The system may use the natural ventilation or tunnel ventilation modes which can shutoff ventilation stages, when natural inlets open sufficiently or the tunnel start stage RSP has been reached by the average temperature. An alarm check will be made to check for high and low temperatures, defective probes and defective inlet potentiometers.

Parameter description

PARAMETER GROUP # 1: READINGS

Probes that are not used will not appear in this group. See the ALARMS group for details. Inside temperature probes not used in *AVERAGE PROBE SELECT* or for an output will not appear in this group.

AVERAGE TEMPERATURE READOUT (History Available)
This parameter displays the actual average temperature. The average is made from the inside temperature probes selected in *AVERAGE PROBE SELECT*. The AVERAGE TEMPERATURE READOUT is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

PROBE (1-4) READOUT (History Available)
This parameter displays the actual probe (1-4) temperature. The PROBE (1-4) READOUT is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

OUTSIDE PROBE READOUT (History Available)
This parameter displays the actual outside probe temperature. This reading may affect the high alarm threshold. The OUTSIDE PROBE READOUT is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

HUMIDITY PROBE READOUT (History Available)
This parameter displays the actual humidity probe reading. This parameter will display ERR if the JD-HUM3 has not communicated with the JD-26 PLUS controller for 5 minutes. The HUMIDITY PROBE READOUT is displayed to the nearest 1RH% from 0RH% to 100RH%.

STATIC PRESSURE (History Available)
This parameter displays the actual static pressure probe reading. The STATIC PRESSURE is displayed to the nearest 0.001"WC from -0.500"WC to 0.500"WC.

AVERAGE TEMPERATURE LOW (History Available)
This parameter displays the lowest value reached by the AVERAGE TEMPERATURE READOUT since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual AVERAGE TEMPERATURE READOUT, press the [+] and [–] buttons simultaneously for two seconds. The AVERAGE TEMPERATURE LOW is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

PROBE (1-4) LOW (History Available)
This parameter displays the lowest value reached by the PROBE (1-4) READOUT since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual PROBE (1-4) READOUT, press the [+] and [–] buttons simultaneously for two seconds. The PROBE (1-4) LOW is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

PARAMETER GROUP # 1: READINGS (CONTINUED…)

OUTSIDE PROBE LOW (History Available)
This parameter displays the lowest value reached by the OUTSIDE PROBE READOUT since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual OUTSIDE PROBE READOUT, press the [+] and [–] buttons simultaneously for two seconds. The OUTSIDE PROBE LOW is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

HUMIDITY PROBE LOW (History Available)
This parameter displays the lowest value reached by the HUMIDITY PROBE READOUT since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual HUMIDITY PROBE READOUT, press the [+] and [–] buttons simultaneously for two seconds. The HUMIDITY PROBE LOW is displayed to the nearest 1RH% from 0RH% to 100RH%.

STATIC PRESSURE LOW (History Available)
This parameter displays the lowest value reached by the STATIC PRESSURE since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual STATIC PRESSURE, press the [+] and [–] buttons simultaneously for two seconds. The STATIC PRESSURE LOW is displayed to the nearest 0.001"WC from -0.500"WC to 0.500"WC.

AVERAGE TEMPERATURE HIGH (History Available)
This parameter displays the highest value reached by the AVERAGE TEMPERATURE READOUT since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual AVERAGE TEMPERATURE READOUT, press the [+] and [–] buttons simultaneously for two seconds. The AVERAGE TEMPERATURE HIGH is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

PROBE (1-4) HIGH (History Available)
This parameter displays the highest value reached by the PROBE (1-4) READOUT since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual PROBE (1-4) READOUT, press the [+] and [–] buttons simultaneously for two seconds. The PROBE (1-4) HIGH is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

OUTSIDE PROBE HIGH (History Available)
This parameter displays the highest value reached by the OUTSIDE PROBE READOUT since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual OUTSIDE PROBE READOUT, press the [+] and [–] buttons simultaneously for two seconds. The OUTSIDE PROBE HIGH is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

HUMIDITY PROBE HIGH (History Available)
This parameter displays the highest value reached by the HUMIDITY PROBE READOUT since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual HUMIDITY PROBE READOUT, press the [+] and [–] buttons simultaneously for two seconds. The HUMIDITY PROBE HIGH is displayed to the nearest 1RH% from 0RH% to 100RH%.

PARAMETER GROUP # 1: READINGS (CONTINUED…)

STATIC PRESSURE HIGH (History Available)
This parameter displays the highest value reached by the STATIC PRESSURE since the JD-26 PLUS was powered up or since this parameter was last cleared. To reset this value to the actual STATIC PRESSURE, press the [+] and [–] buttons simultaneously for two seconds. The STATIC PRESSURE HIGH is displayed to the nearest 0.001"WC from -0.500"WC to 0.500"WC.

WATER METER (History Available)
This parameter displays the amount of water units (gallons or litres) counted by the water meter input for the current day. The WATER METER is displayed to the nearest unit (gallon or litre) from 0 to 20000 units (gallons or litres).

WATER METER LAST 24 HOURS (History Available)
This parameter displays the amount of water units (gallons or litres) counted by the water meter input in the last 24 hours. The WATER METER LAST 24 HOURS is displayed to the nearest unit (gallon or litre) from 0 to 20000 units (gallons or litres).

FEEDER COUNTER (History Available)
This parameter displays the time counted by the feeder counter input. The FEEDER COUNTER is displayed to the nearest minute from 0 to 1440 minutes.

***MORTALITIES* (History Available)**
This parameter displays and is used to modify the amount of mortalities. This parameter is adjusted in 1-animal increments, from 0 to 30000 animals. To reset this value to 0, press the [+] and [–] buttons simultaneously for two seconds.

PARAMETER GROUP # 2: SETTINGS

MAIN SET POINT (MSP)

This is the temperature goal for the room, the activation temperature for variable stage 1 and the reference temperature for all relative settings. A fixed differential of 0.4°F (0.2°C) is used with variable stage 1 activation temperature. The *MSP* will follow its growth curve when the *GROWTH DAY* is not OFF. The growth curve is composed of six day-points and six temperature-points. To adjust these points, press the [+] and [–] buttons simultaneously. Then select the point to adjust using the [↑] and [↓] buttons and adjust it with the [+] and [–] buttons. See the parameters section for more information on the growth curve. The *MSP* is adjusted in 0.1° increments from 32.0°F to 120.0°F (0.0°C to 40.0°C).

GROWTH DAY

This parameter is used to adjust the growth day of the JD-26 PLUS controller. If this day is not set to OFF, it will determine the value of the *MSP* according to the day and temperature points of the growth curve. The *GROWTH DAY* is adjusted in 1-day increments from OFF, day -10 to day 365.

NIGHT SET POINT OPTION

This parameter is used to activate or deactivate the night compensation. If this parameter is set to No, the *MAIN SET POINT* will be the value used anytime. If this parameter is set to Yes, when the *NIGHT SET POINT TIME BEGIN*, the ACTUAL MAIN SET POINT will modulate from *MAIN SET POINT* to reach *NIGHT SET POINT TEMPERATURE* when the *NIGHT SET POINT TRANSITION* delay is done. When time reaches *NIGHT SET POINT TIME END – NIGHT SET POINT TRANSITION TIME*, the ACTUAL MAIN SET POINT will modulate to reach *MAIN SET POINT* when time reaches *NIGHT SET POINT TIME END*.

ACTUAL MAIN SET POINT

This parameter displays the **MSP** actually used by the controller. This value can be either *MAIN SET POINT*, the *NIGHT SET POINT* or, while a transition delay, a value between these two set points. This set point is displayed the nearest 0.1° from 0.0°C to 40.0°C (0.0°F to 120.0°F).

NIGHT SET POINT TEMPERATURE

This parameter is used to adjust the night set point. This value sets the temperature goal during the night period. This setting is relative to the *MAIN SET POINT*. The night set point is adjusted in 0.1° increments from *MAIN SET POINT* - 40.0°F to *MAIN SET POINT* + 40.0°F (*MAIN SET POINT* - 22.2°C to *MAIN SET POINT* + 22.2°C).

NIGHT SET POINT TIME BEGIN

This parameter is used to adjust the time at which the night period will begin. When this time is reached, the ACTUAL MAIN SET POINT will begin to modulate towards the *NIGHT SET POINT TEMPERATURE* if *NIGHT SET POINT ACTIVE* is set to Yes.

NIGHT SET POINT TIME END

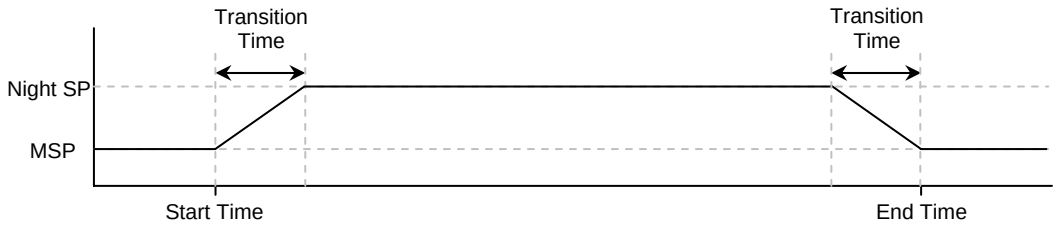
This parameter is used to adjust the time at which the day period will end. When this time reaches *NIGHT SET POINT TIME BEGIN*, the ACTUAL MAIN SET POINT will have modulated to the *MAIN SET POINT* if it had been modified for night compensation.

PARAMETER GROUP # 2: SETTINGS (CONTINUED…)

NIGHT SET POINT TRANSITION TIME

This parameter is used to adjust the time the ACTUAL MAIN SET POINT will take to go from the *MAIN SET POINT* to the *NIGHT SET POINT TEMPERATURE* or vice versa. The transition time is adjusted in 1 minute increments from 0 to 60 minutes.

Example of night compensation:



TUNNEL MODE ALLOWED

This parameter is used to set if the tunnel mode is allowed. When this parameter is set to "YES" and the temperature of the probes selected in *AVERAGE PROBE SELECT* reaches the *STAGE # RSP* selected at the parameter TUNNEL START STAGE, a 2-minute transition delay will activate. Once this delay is elapsed, ventilation stages whose option is set to shutoff in tunnel mode will then be deactivated. When this parameter is set to "NO", the tunnel mode will not be allowed.

PARAMETER GROUP # 3: VARIABLES

Variable stages that are not used will not appear in this group. See the ALARMS group for details.

VARIABLE 1 ACTUAL SPEED (History Available)
This parameter displays the actual speed of variable stage 1. This parameter is displayed to the nearest 1% from OFF, 0% to 100%.

***VARIABLE 1 RSP* (History Available)**
This parameter is used to establish the temperature RSP at which variable stage 1 will activate. When the AVERAGE TEMPERATURE READOUT reaches *MSP + VARIABLE 1 RSP*, variable stage 1 will activate at *VARIABLE 1 MINIMUM SPEED*. A fixed differential of 0.4°F (0.2°C) is used with this RSP. This parameter is adjusted in 0.1° increments from 0.5°F to 120.0°F (0.3°C to 48.9°C).

***VARIABLE 1 MINIMUM SPEED* (History Available)**
This parameter is used to establish the minimum speed of variable stage 1. Variable stage 1 will be activated at this speed when AVERAGE TEMPERATURE READOUT is equal to the *MSP*, when variable stage 1 is activated by its timer and is the value to which *VARIABLE 1 RH SPEED COMPENSATION* will be added for dehumidification. This parameter is adjusted in 1% increments from 0% to 100%.

***VARIABLE 1 MAXIMUM SPEED* (History Available)**
This parameter is used to establish the maximum speed of variable stage 1. Variable stage 1 will be activated at this speed when AVERAGE TEMPERATURE READOUT is equal to the *MSP + VARIABLE 1 BANDWIDTH*. This parameter is adjusted in 1% increments from 0% to 100%.

***VARIABLE 1 BANDWIDTH* (History Available)**
This parameter is used to establish the range of temperature within which variable stage 1 speeds up as the AVERAGE TEMPERATURE READOUT increases. Variable stage 1 increases its speed from the *VARIABLE 1 MINIMUM SPEED,* when AVERAGE TEMPERATURE READOUT is equal to *MSP,* to reach its maximum speed (100%) when AVERAGE TEMPERATURE READOUT reaches *MSP + VARIABLE 1 BANDWIDTH*. This parameter is adjusted in 0.1° increments from 0.5°F to 20.0°F (0.3°C to 11.1°C).

***VARIABLE 1 MINIMUM VENTILATION ON TIME* (History Available)**
This parameter is used to establish the duration of the run time for the variable stage 1 minimum ventilation timer. When the AVERAGE TEMPERATURE READOUT is below *MSP*, variable stage 1 will be activated for this amount of time and deactivated for *VARIABLE 1 MINIMUM VENTILATION OFF TIME*. Variable stage 2 will also use this timer if *VARIABLE 2 MINIMUM VENTILATION TIMER* is set to ON. This parameter is adjusted in 1-second increments from 0 to 900 seconds.

PARAMETER GROUP # 3: VARIABLES (CONTINUED…)

VARIABLE 1 MINIMUM VENTILATION OFF TIME **(History Available)**
This parameter is used to establish the duration of the idle time for the variable stage 1 minimum ventilation timer. When the AVERAGE TEMPERATURE READOUT is below *MSP*, variable stage 1 will be activated for *VARIABLE 1 MINIMUM VENTILATION ON TIME* and deactivated for this amount of time. Variable stage 2 will also use this timer if *VARIABLE 2 MINIMUM VENTILATION TIMER* is set to ON. This parameter is adjusted in 1-second increments from 0 to 900 seconds.

VARIABLE 1 HUMIDITY SET POINT **(History Available)**
This parameter is used to set the humidity level at which variable stage 1 dehumidification will begin. When the HUMIDITY PROBE READOUT reaches this set point, variable stage 1 will be activated continuously and its minimum speed will be increased by *VARIABLE 1 RH SPEED COMPENSATION*. A fixed differential of 3RH% is used with this set point. Setting this parameter to OFF will deactivate variable stage 1 dehumidification. This parameter is adjusted in 1RH% increments from 0RH% to 99RH%, OFF.

VARIABLE 1 RH SPEED COMPENSATION **(History Available)**
This parameter is used to set the speed that will be added to *VARIABLE 1 MINIMUM SPEED* during variable stage 1 dehumidification. When HUMIDITY PROBE READOUT is equal to or above *VARIABLE 1 HUMIDITY SET POINT*. The minimum speed used by variable stage 1 will be *VARIABLE 1 MINIMUM SPEED + VARIABLE 1 RH SPEED COMPENSATION*. This parameter is adjusted in 1% increments from 0% to 100%.

VARIABLE 1 STOP RH INFLUENCE ON TEMP. START **(History Available)**
This parameter is used to activate or deactivate dehumidification cancellation when the AVERAGE TEMPERATURE reaches the *MSP* and a position mode inlet is used. If this option is set to ON, variable stage 1 dehumidification will cease to activate for dehumidification when the MSP is reached and will wait for the *VARIABLE 1 DELAY RH INFLUENCE ON TIMER* before considering dehumidification once again. If this parameter is set to OFF, dehumidification will always be considered.

VARIABLE 1 DELAY RH INFLUENCE ON TIMER **(History Available)**
This parameter is used to set the time for which dehumidification will be cancelled when the AVERAGE TEMPERATURE reaches the *MSP* and a position mode inlet is used. When the AVERAGE TEMPERATURE reaches the *MSP*, dehumidification will be cancelled. When the AVERAGE TEMPERATURE drops to *MSP* - 0.4°F (0.2°C), dehumidification will continue to be ignored as long as this delay has not expired. Once this delay has elapsed, dehumidification will be performed once again. This parameter is adjusted in 1-minute increments from 0 to 120 minutes.

PARAMETER GROUP # 3: VARIABLES (CONTINUED…)

***VARIABLE 1 IDLE BACK* (History Available)**
This parameter is used to adjust the idle back speed of variable stage 1. The speed of the variable stage can be modified when variable stage 2 is activated by temperature demand. When AVERAGE TEMPERATURE READOUT reaches *MSP + VARIABLE 2 RSP*, variable stage 1 will reduce its speed to this parameter's value. Variable stage 1 will then modulate according to *VARIABLE 2 BANDWIDTH* to reach 100% when AVERAGE TEMPERATURE READOUT has reached *MSP + VARIABLE 2 RSP + VARIABLE 2 BANDWIDTH*. Setting this parameter to OFF will deactivate the idle back logic. Setting this parameter to 0% will deactivate variable stage 1 when variable stage 2 is activated by temperature demand. This parameter is adjusted in 1% increments from OFF, Stop, 0% to 100%.

VARIABLE 2 ACTUAL SPEED (History Available)
This parameter displays the actual speed of variable stage 2. This parameter is displayed to the nearest 1% from OFF, 0% to 100%.

***VARIABLE 2 RSP* (History Available)**
This parameter is used to establish the temperature RSP at which variable stage 2 will activate. When the AVERAGE TEMPERATURE READOUT reaches *MSP + VARIABLE 2 RSP*, variable stage 2 will activate at *VARIABLE 2 MINIMUM SPEED*. A fixed differential of 0.4°F (0.2°C) is used with this RSP. This parameter is adjusted in 0.1° increments from 0.5°F to 120.0°F (0.3°C to 48.9°C).

***VARIABLE 2 MINIMUM SPEED* (History Available)**
This parameter is used to establish the minimum speed of variable stage 2. Variable stage 2 will be activated at this speed when AVERAGE TEMPERATURE READOUT is equal to the *MSP + VARIABLE 2 RSP*. This parameter is adjusted in 1% increments from 0% to 100%.

***VARIABLE 2 MAXIMUM SPEED* (History Available)**
This parameter is used to establish the maximum speed of variable stage 2. Variable stage 2 will be activated at this speed when AVERAGE TEMPERATURE READOUT is equal to the *MSP + VARIABLE 2 RSP + VARIABLE 2 BANDWIDTH* . This parameter is adjusted in 1% increments from 0% to 100%.

***VARIABLE 2 BANDWIDTH* (History Available)**
This parameter is used to establish the range of temperature within which variable stage 2 speeds up as the AVERAGE TEMPERATURE READOUT increases. Variable stage 2 increases its speed from *VARIABLE 2 MINIMUM SPEED,* when AVERAGE TEMPERATURE READOUT is equal to *MSP + VARIABLE 2 RSP*, to reach its maximum speed (100%) when AVERAGE TEMPERATURE READOUT reaches *MSP + VARIABLE 2 RSP + VARIABLE 2 BANDWIDTH*. This parameter is adjusted in 0.1° increments from 0.5°F to 20.0°F (0.3°C to 11.1°C).

PARAMETER GROUP # 3: VARIABLES (CONTINUED…)

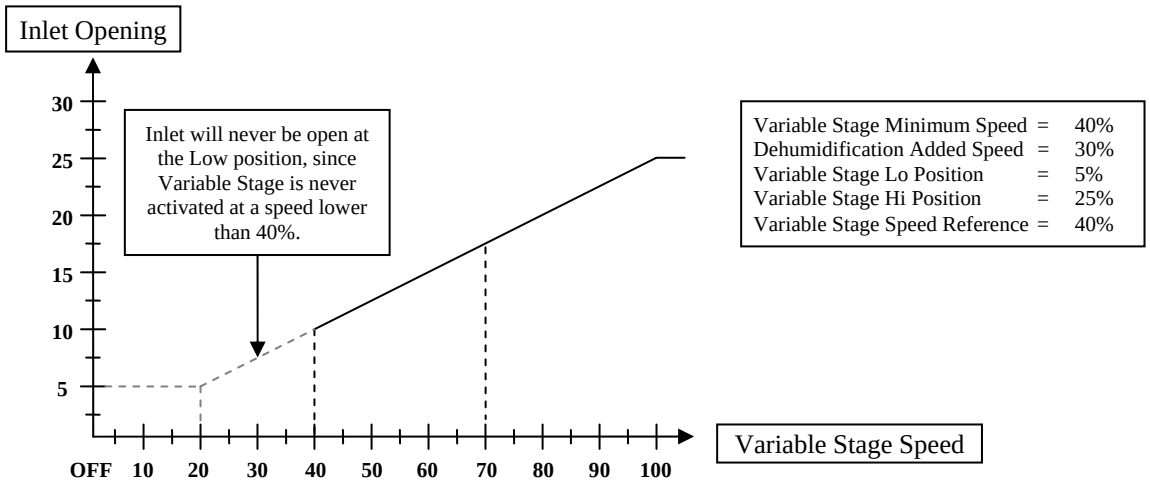
VARIABLE 2 MINIMUM VENTILATION TIMER **(History Available)**
This parameter is used to determine if variable stage 2 will follow the variable stage 1 minimum ventilation timer. If this parameter is set to ON, variable stage 2 will activate according to the variable stage 1 minimum ventilation timer when the AVERAGE TEMPERATURE READOUT is below *MSP + VARIABLE 2 RSP*.

VARIABLE 2 IDLE BACK **(History Available)**
This parameter is used to adjust the idle back speed of variable stage 2. The speed of the variable stage can be modified when the next ventilation stage is activated by temperature demand. When AVERAGE TEMPERATURE READOUT reaches *MSP + STAGE (3-5) RSP*, variable stage 2 will reduce its speed to this parameter's value. Variable stage will then modulate according to its own bandwidth if the net stage is an on/off stage. Setting this parameter to OFF will deactivate the idle back logic. Setting this parameter to 0% will deactivate the respective variable stage when stage 3 is activated by temperature demand. This parameter is adjusted in 1% increments from OFF, Stop, 0%, to 100%.

VARIABLE (1-2) MINIMUM SPEED AFFECTS INLETS **(History Available)**
These parameters are used to activate or deactivate the *VARIABLE (1-2) INLET SPEED REFERENCE* influence on the position mode inlets. If this option is set to YES, the position mode inlets will associate *VARIABLE (1-2) INLET SPEED REFERENCE* to the corresponding inlet positioning. If this option is set to NO, the position mode inlets will associate *VARIABLE (1-2) MINIMUM SPEED* to the corresponding inlet positioning

VARIABLE (1-2) INLET SPEED REFERENCE **(History Available)**
These parameters are used to set the reference speed that will be used to consider the inlet's position when *VARIABLE (1-2) MINIMUM SPEED AFFECTS INLETS* are set to YES. These parameters are adjusted in 1% increments from 0 to 100%.

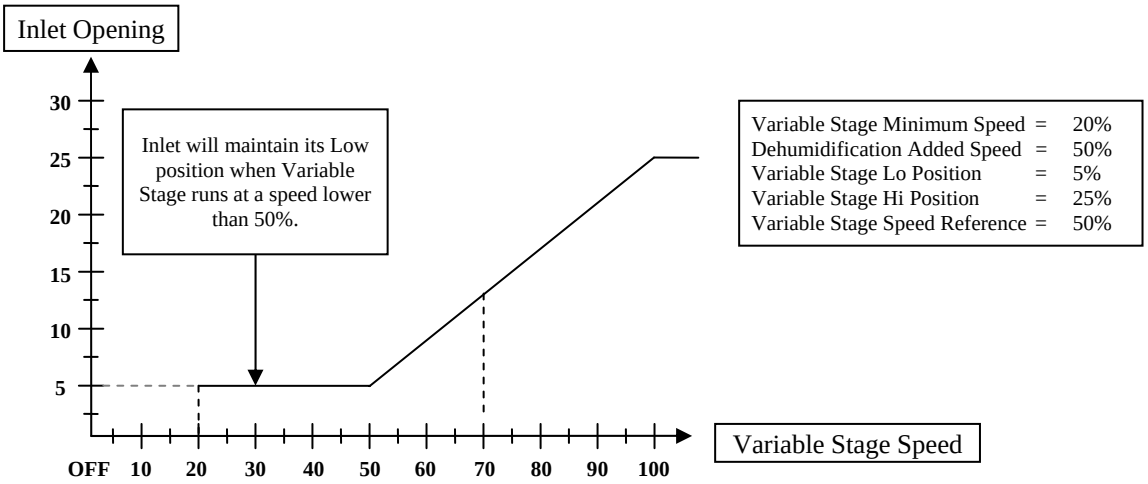
Inlet opening according to low speed reference



SECTION C

PARAMETER GROUP # 3: VARIABLES (CONTINUED…)

Inlet opening according to high speed reference



VARIABLE (1-2) MANUAL OVERRIDE **(History Available)**
This parameter is used to operate the respective variable output manually. If this parameter is set to AUTO, the variable output will be activated according to the configuration's calculated speed. If this parameter is set to OFF, the variable output will be deactivated. If this parameter is set to any other value, the variable output will be activated at the adjusted speed.

VARIABLE STIR FAN (1-2) ACTUAL SPEED (History Available)
This parameter displays the actual speed of variable stir fan (1-2). This parameter is displayed to the nearest 1% from OFF, 0% to 100%.

VARIABLE STIR FAN (1-2) SP **(History Available)**
This parameter is used to establish the temperature at which variable stir fan (1-2) will activate. When the temperature of the probes selected in *VARIABLE STIR FAN (1-2) PROBE SELECT* reaches the *VARIABLE STIR FAN (1-2) SP*, variable stir fan (1-2) will activate at *VARIABLE STIR FAN (1-2) MINIMUM SPEED*. A fixed differential of 0.4°F (0.2°C) is used with this SP. This parameter is adjusted in 0.1° increments from 0.0°F to 100.0°F (-17.7°C to 37.8°C).

VARIABLE STIR FAN (1-2) MINIMUM SPEED **(History Available)**
This parameter is used to establish the minimum speed of variable stir fan (1-2). Variable stir fan (1-2) will be activated at this speed when the temperature of the probes selected in *VARIABLE STIR FAN (1-2) PROBE SELECT* is equal to *VARIABLE STIR FAN (1-2) SP*. This parameter is adjusted in 1% increments from 0% to 100%.

PARAMETER GROUP # 3: VARIABLES (CONTINUED…)

VARIABLE STIR FAN (1-2) MAXIMUM SPEED **(History Available)**
This parameter is used to establish the maximum speed of variable stir fan (1-2). Variable stir fan (1-2) will be activated at this speed when the temperature of the probes selected in *VARIABLE STIR FAN (1-2) PROBE SELECT* is equal to *VARIABLE STIR FAN (1-2) SP + VARIABLE STIR FAN (1-2) BANDWIDTH*. This parameter is adjusted in 1% increments from 0% to 100%.

VARIABLE STIR FAN (1-2) BANDWIDTH **(History Available)**
This parameter is used to establish the range of temperature within which variable stir fan (1-2) speeds up as the temperature of the probes selected in *VARIABLE STIR FAN (1-2) PROBE SELECT* increases. Variable stir fan (1-2) increases its speed from *VARIABLE STIR FAN (1-2) MINIMUM SPEED,* when the temperature of the probes selected in *VARIABLE STIR FAN (1-2) PROBE SELECT* is equal to *VARIABLE STIR FAN (1-2) SP*, to reach its maximum speed (100%) when the temperature of the probes selected in *VARIABLE STIR FAN (1-2) PROBE SELECT* reaches *VARIABLE STIR FAN (1-2) SP + VARIABLE STIR FAN (1-2) BANDWIDTH*. This parameter is adjusted in 0.1° increments from 0.5°F to 20.0°F (0.3°C to 11.1°C).

VARIABLE STIR FAN (1-2) MANUAL OVERRIDE **(History Available)**
This parameter is used to operate the respective variable stir fan manually. If this parameter is set to AUTO, the variable stir fan will be activated according to the configuration's calculated speed. If this parameter is set to OFF, the variable stir fan will be deactivated. If this parameter is set to any other value, the variable stir fan will be activated at the adjusted speed.

PARAMETER GROUP # 4: ON/OFF

On/off stages and stir fans that are not used will not appear in this group. See the ALARMS group for details.

***STAGE (3-8) RSP* (History Available)**

This parameter is used to set the on/off STAGE (3-8) activation temperature RSP. On/off STAGE (3-8) will activate when AVERAGE TEMPERATURE READOUT is equal to or above *MSP + STAGE (3-8) RSP*. On/off STAGE (3-8) will deactivate when AVERAGE TEMPERATURE READOUT is equal to or below *MSP + STAGE (3-8) RSP - ON/OFF STAGE DIFFERENTIAL*. This parameter is adjusted in 0.1° increments from 0.5°F to 120.0°F (0.3°C to 48.9°C).

***STAGE (3-8) MANUAL OVERRIDE* (History Available)**

This parameter is used to operate the respective on/off stage manually. If this parameter is set to AUTO, the on/off stage will be activated according to the configuration's calculated demand. If this parameter is set to OFF, the on/off stage will be deactivated. If this parameter is set to ON, the on/off stage will be activated.

***STIR FAN (3-6) RSP* (History Available)**

This parameter is used to set the stir fan (3-6) activation temperature RSP. Stir fan (3-6) will activate when AVERAGE TEMPERATURE READOUT is equal to or above *MSP + STIR FAN (3-6) RSP*. Stir fan (3-6) will deactivate when AVERAGE TEMPERATURE READOUT is equal to or below *MSP + STIR FAN (3-6) RSP - ON/OFF STAGE DIFFERENTIAL*. This parameter is adjusted in 0.1° increments from 0.5°F to 120.0°F (0.3°C to 48.9°C).

***STIR FAN (3-6) MANUAL OVERRIDE* (History Available)**

This parameter is used to operate the respective stir fan manually. If this parameter is set to AUTO, the stir fan will be activated according to the configuration's calculated demand. If this parameter is set to OFF, the stir fan will be deactivated. If this parameter is set to ON, the stir fan will be activated.

ON/OFF STAGE DIFFERENTIAL

This parameter is used to set the differential that will be used with all on/off stage/stir fan RSP. An on/off stage will deactivate when AVERAGE TEMPERATURE READOUT is equal to or below *MSP + STAGE (3-8) RSP - ON/OFF STAGE DIFFERENTIAL*. A stir fan will deactivate when AVERAGE TEMPERATURE READOUT is equal to or below *MSP + STIR FAN (3-6) RSP - ON/OFF STAGE DIFFERENTIAL*. This parameter is adjusted in 0.1° increments from 0.5°F to 120.0°F (0.3°C to 48.9°C).

PARAMETER GROUP # 5: HEATERS

Heaters that are not used will not appear in this group. See the ALARMS group for details.

***HEATER (1-4) RSP* (History Available)**
This parameter is used to set the heater (1-4) activation temperature RSP. Heater (1-4) will activate when the temperature of the probes selected in *HEATER (1-4) PROBE SELECT* is equal to or below *MSP + HEATER (1-4) RSP*. Heater (1-4) will deactivate when the temperature of the probes selected in *HEATER (1-4) PROBE SELECT* is equal to or above *MSP + HEATER (1-4) RSP + HEATER (1-4) DIFFERENTIAL*. This parameter is adjusted in 0.1° increments from -30.0°F to 120.0°F (-16.7°C to 48.9°C).

***HEATER (1-4) DIFFERENTIAL* (History Available)**
This parameter is used to set the differential that will be used with *HEATER (1-4) RSP*. Heater (1-4) will deactivate when the temperature of the probes selected in *HEATER (1-4) PROBE SELECT* is equal to or above *MSP + HEATER (1-4) RSP + HEATER (1-4) DIFFERENTIAL*. This parameter is adjusted in 0.1° increments from 0.5°F to 20.0°F (0.3°C to 11.1°C).

***HEATER (1-4) MANUAL OVERRIDE* (History Available)**
This parameter is used to operate the respective heater manually. If this parameter is set to AUTO, the heater will be activated according to the configuration's calculated demand. If this parameter is set to OFF, the heater will be deactivated. If this parameter is set to ON, the heater will be activated.

***HEAT PAD (1-2) SET POINT* (History Available)**
This parameter is used to set the heat pad (1-2) activation temperature set point. Heat pad (1-2) will activate when the temperature of the probes selected in *HEAT PAD (1-2) PROBE SELECT* is equal to or below *HEAT PAD (1-2) SET POINT*. Heat pad (1-2) will deactivate when the temperature of the probes selected in *HEAT PAD (1-2) PROBE SELECT* is equal to or above *HEAT PAD (1-2) SET POINT + HEAT PAD (1-2) DIFFERENTIAL*. This parameter is adjusted in 0.1° increments from 0.0°F to 120.0°F (-17.8°C to 48.9°C).

***HEAT PAD (1-2) DIFFERENTIAL* (History Available)**
This parameter is used to set the differential that will be used with *HEAT PAD (1-2) SET POINT*. Heat pad (1-2) will deactivate when the temperature of the probes selected in *HEAT PAD (1-2) PROBE SELECT* is equal to or above *HEAT PAD (1-2) SET POINT + HEAT PAD (1-2) DIFFERENTIAL*. This parameter is adjusted in 0.1° increments from 0.5°F to 20.0°F (0.3°C to 11.1°C).

***HEAT PAD (1-2) ON TIME* (History Available)**
This parameter is used to set the active portion of the heat pad (1-2) timer. Heat pad (1-2) output will activate for this amount of time and deactivate for *HEAT PAD (1-2) OFF TIME* when the temperature of the probes selected in *HEAT PAD (1-2) PROBE SELECT* is equal to or below *HEAT PAD (1-2) SET POINT*. This parameter is adjusted in 1-second increments from 0 seconds to 999 seconds.

PARAMETER GROUP # 5: HEATERS (CONTINUED…)

HEAT PAD (1-2) OFF TIME **(History Available)**
This parameter is used to set the inactive portion of the heat pad (1-2) timer. Heat pad (1-2) output will activate for *HEAT PAD (1-2) ON TIME* and deactivate for this amount of time when the temperature of the probes selected in *HEAT PAD (1-2) PROBE SELECT* is equal to or below *HEAT PAD (1-2) SET POINT*. This parameter is adjusted in 1-second increments from 0 seconds to 999 seconds.

HEAT PAD (1-2) MANUAL OVERRIDE **(History Available)**
This parameter is used to operate the heat pad (1-2) manually. If this parameter is set to AUTO, the heat pad (1-2) will be activated according to the configuration's calculated demand. If this parameter is set to OFF, the heat pad (1-2) will be deactivated. If this parameter is set to ON, the heat pad will be activated.

HEAT PAD (1-2) STATUS **(History Available)**
This parameter displays the heat pad (1-2) output status. This parameter will display ON if the heat pad (1-2) output is activated, otherwise it will display OFF.

VARIABLE HEATER (1-2) RSP **(History Available)**
This parameter is used to set the temperature at which the variable heater (1-2) will activate at *VARIABLE HEATER (1-2) MINIMUM INTENSITY*. When the variable heater (1-2) temperature is equal to this set point, the variable heater (1-2) will activate at *VARIABLE HEATER (1-2) MINIMUM INTENSITY*. When the variable heater (1-2) temperature is below this set point, the variable heater (1-2) intensity will increase to reach *VARIABLE HEATER (1-2) MAXIMUM INTENSITY* when the temperature reaches *VARIABLE HEATER (1-2) MAXIMUM TEMPERATURE*. A fixed differential of 0.4°F (0.2°C) is used with this RSP. This parameter is adjusted in 0.1° increments from -30.0°F to 120.0°F (-16.7°C to 48.9°C).

VARIABLE HEATER (1-2) MAXIMUM TEMPERATURE **(History Available)**
This parameter is used to set the temperature at which the variable heater (1-2) will be activated at *VARIABLE HEATER (1-2) MAXIMUM INTENSITY*. When the variable heater (1-2) temperature drops and reaches this set point, the variable heater (1-2) will be activated at *VARIABLE HEATER (1-2) MAXIMUM INTENSITY*. This parameter is adjusted in 0.1° increments from -20.0°F to -0.5°F (-11.1°C to -0.3°C).

VARIABLE HEATER (1-2) MINIMUM INTENSITY **(History Available)**
This parameter is used to set the intensity that will take the variable heater (1-2) when its temperature is equal to *VARIABLE HEATER (1-2) RSP*. This parameter is adjusted in 1% increments from 0% to 100%.

VARIABLE HEATER (1-2) MAXIMUM INTENSITY **(History Available)**
This parameter is used to set the intensity that will take the variable heater (1-2) when its temperature is equal to *VARIABLE HEATER (1-2) MAXIMUM TEMPERATURE*. This parameter is adjusted in 1% increments from 0% to 100%.

PARAMETER GROUP # 5: HEATERS (CONTINUED…)

VARIABLE HEATER (1-2) MANUAL OVERRIDE **(History Available)**

This parameter is used to operate the respective variable heater manually. If this parameter is set to AUTO, the variable heater (1-2) will be activated according to the configuration's calculated demand. If this parameter is set to any other value, the variable heater (1-2) output will be activated at the adjusted intensity.

PARAMETER GROUP # 6: MIST/SPRINKLER

Some parameters will not appear in this group if the corresponding option is not activated. See the ALARMS group for details.

***MIST/SPRINKLER LEVEL 1 SP* (History Available)**
This parameter is used to set the mist/sprinkler level 1 activation temperature SP. Mist/sprinkler output will activate according to the level 1 timer when AVERAGE TEMPERATURE READOUT is equal to or above *MIST/SPRINKLER LEVEL 1 SP* and below *MIST/SPRINKLER LEVEL 2 SP*. This parameter is adjusted in 0.1° increments from 0.0°F to 100.0°F (-17.7°C to 37.8°C).

***MIST/SPRINKLER LEVEL 1 ON TIME* (History Available)**
This parameter is used to set the mist/sprinkler level 1 timer run time. Mist/sprinkler output will activate for this amount of time and deactivate for *MIST/SPRINKLER LEVEL 1 OFF TIME* when AVERAGE TEMPERATURE READOUT is equal to or above *MIST/SPRINKLER LEVEL 1 SP* and below *MIST/SPRINKLER LEVEL 2 SP*. This parameter is adjusted in 1-second increments from 0 seconds to 900 seconds.

***MIST/SPRINKLER LEVEL 1 OFF TIME* (History Available)**
This parameter is used to set the mist/sprinkler level 1 timer idle time. Mist/sprinkler output will activate for *MIST/SPRINKLER LEVEL 1 ON TIME* and deactivate for this amount of time when AVERAGE TEMPERATURE READOUT is equal to or above *MIST/SPRINKLER LEVEL 1 SP* and below *MIST/SPRINKLER LEVEL 2 SP*. This parameter is adjusted in 1-minute increments from 0 minutes to 20 minutes.

***MIST/SPRINKLER LEVEL 2 SP* (History Available)**
This parameter is used to set the mist/sprinkler level 2 activation temperature SP. Mist/sprinkler output will activate according to the level 2 timer when AVERAGE TEMPERATURE READOUT is equal to or above *MIST/SPRINKLER LEVEL 2 SP*. The level 2 timer will override the level 1 timer. This parameter is adjusted in 0.1° increments from 0.0°F to 100.0°F (-17.7°C to 37.8°C).

***MIST/SPRINKLER LEVEL 2 ON TIME* (History Available)**
This parameter is used to set the mist/sprinkler level 2 timer run time. Mist/sprinkler output will activate for this amount of time and deactivate for *MIST/SPRINKLER LEVEL 2 OFF TIME* when AVERAGE TEMPERATURE READOUT is equal to or above *MIST/SPRINKLER LEVEL 2 SP*. This parameter is adjusted in 1-second increments from 0 seconds to 900 seconds.

***MIST/SPRINKLER LEVEL 2 OFF TIME* (History Available)**
This parameter is used to set the mist/sprinkler level 2 timer idle time. Mist/sprinkler output will activate for *MIST/SPRINKLER LEVEL 2 ON TIME* and deactivate for this amount of time when AVERAGE TEMPERATURE READOUT is equal to or above *MIST/SPRINKLER LEVEL 2 SP*. This parameter is adjusted in 1-minute increments from 0 minutes to 20 minutes.

PARAMETER GROUP # 6: MIST/SPRINKLER (CONTINUED…)

***MIST/SPRINKLER DIFFERENTIAL* (History Available)**
This parameter is used to set the differential that will be used with *MIST/SPRINKLER LEVEL 1 SP* and *MIST/SPRINKLER LEVEL 2 SP*. The mist/sprinkler output will cease using level (1-2) timer when AVERAGE TEMPERATURE READOUT is equal to or below *MIST/SPRINKLER LEVEL (1-2) SP - MIST/SPRINKLER DIFFERENTIAL*. This parameter is adjusted in 0.1° increments from 0.5°F to 20.0°F (0.3°C to 11.1°C).

***MIST/SPRINKLER HUMIDITY OFF* (History Available)**
This parameter is used to set the humidity level at which the mist/sprinkler output will no longer be allowed to activate. When the HUMIDITY PROBE READOUT reaches this set point, the mist/sprinkler will deactivate or be prevented from activating regardless of the AVERAGE TEMPERATURE READOUT. Adjusting this parameter to OFF will disable this logic. This parameter is adjusted in 1RH% increments from 0RH% to 99RH%, OFF.

***MIST/SPRINKLER SOAK CYCLE* (History Available)**
This parameter is used to activate or deactivate the mist soak cycle. When this parameter is set to ON, the soak cycle will begin, overriding both mist timer logics. The soak cycle will remain active throughout the adjusted *MIST/SPRINKLER SOAK RUN TIME*. This option will automatically return to OFF once the *MIST/SPRINKLER SOAK RUN TIME* has expired. The soak cycle can also be cancelled by manually setting this parameter to OFF.

***MIST/SPRINKLER SOAK RUN TIME* (History Available)**
This parameter is used to adjust the time for which a soak cycle will last when it is activated. During this run time, the mist output will be activated according to the soak timer. This parameter is adjusted in 1-minute increments from 00:01 hour to 99:59 hours.

***MIST/SPRINKLER SOAK ON TIME* (History Available)**
This parameter is used to set the ON time of the soak cycle timer. When the soak cycle is used, the mist output will be activated for this amount of time and deactivated for *MIST/SPRINKLER SOAK OFF TIME*. This parameter is adjusted in 1-second increments from 00:01 minute to 99:59 minutes.

***MIST/SPRINKLER SOAK OFF TIME* (History Available)**
This parameter is used to set the OFF time of the soak cycle timer. When the soak cycle is used, the mist output will be deactivated for this amount of time and activated for *MIST/SPRINKLER SOAK ON TIME*. This parameter is adjusted in 1-second increments from 00:01 minute to 99:59 minutes.

***MIST/SPRINKLER SOAK TIME LEFT* (History Available)**
This parameter displays the remaining time of the soak cycle. During this remaining time, the mist output will be activated according to the soak timer. This parameter is displayed in 1-minute increments from 00:00 hours to 99:59 hours.

PARAMETER GROUP # 6: MIST/SPRINKLER (CONTINUED…)

MIST/SPRINKLER ACTIVATION PERIOD START **(History Available)**
This parameter is used to set the beginning of the sprinkler activation period. When the time of day reaches the time set here, the sprinkler output will be allowed to activate according to temperature. Setting this value to the same value as the *MIST/SPRINKLER ACTIVATION PERIOD END* will cancel the deactivation period. This parameter can be set to any value from 12:00A to 11:59P (0:00 to 23:59).

MIST/SPRINKLER ACTIVATION PERIOD END **(History Available)**
This parameter is used to set the end of the sprinkler activation period. When the time of day reaches the time set here, the sprinkler output will no longer be allowed to activate according to temperature. Setting this value to the same value as the *MIST/SPRINKLER ACTIVATION PERIOD START* will cancel the deactivation period. This parameter can be set to any value from 12:00A to 11:59P (0:00 to 23:59).

MIST/SPRINKLER MANUAL OVERRIDE **(History Available)**
This parameter is used to operate the sprinkler manually. If this parameter is set to AUTO, the sprinkler will be activated according to the configuration's calculated demand. If this parameter is set to OFF, the sprinkler will be deactivated. If this parameter is set to ON, the sprinkler will be activated.

TIMER (1-2) CYCLE (1-6) ON **(History Available)**
This parameter is used to set the time at which a timer output cycle will activate. When the CLOCK reaches the time set here, the timer (1-2) output will activate until the CLOCK reaches the corresponding *TIMER (1-2) CYCLE (1-6) OFF*. If this parameter and the corresponding *TIMER (1-2) CYCLE (1-6) OFF* are set to the same time, the timer (1-2) output cycle will never activate. This parameter is adjusted in 1-minute increments from 12:00AM to 11:59PM.

TIMER (1-2) CYCLE (1-6) OFF **(History Available)**
This parameter is used to set the time at which timer (1-2) output cycle will deactivate. When the CLOCK reaches the time set here, the timer (1-2) output will deactivate until the CLOCK reaches *TIMER (1-2) CYCLE (1-6) ON*. If this parameter and the corresponding *TIMER (1-2) CYCLE (1-6) ON* are set to the same time, the timer (1-2) output cycle will never activate. This parameter is adjusted in 1-minute increments from 12:00AM to 11:59PM.

TIMER (1-2) MANUAL OVERRIDE **(History Available)**
This parameter is used to operate the timer (1-2) manually. If this parameter is set to AUTO, the timer (1-2) will be activated according to the configuration's calculated demand. If this parameter is set to OFF, the timer (1-2) will be deactivated. If this parameter is set to ON, the timer (1-2) will be activated.

PARAMETER GROUP # 7: INLETS

Some parameters will not appear in this group if the corresponding option is not activated. See the ALARMS group for details.

INLET (1-2) ACTUAL POSITION (Position and Natural Potentiometer Mode)
This parameter displays the actual position of inlet (1-2). The actual position is displayed to the nearest 1% from -128% to 127%. However, if the controller cannot read the inlet's position, this parameter will display ERR and natural mode condition will not be filled for a natural potentiometer mode inlet.

INLET (1-2) MINIMUM OPENING **(Position Mode)**
This parameter is used to establish the minimum opening of the inlet. INLET (1-2) will be at this position when the temperature of the AVERAGE TEMPERATURE is below all ventilation stage activation temperatures. This parameter is adjusted in 1% increments from 0% to 100%.

INLET (1-2) VAR 1 LO POSITION **(Position Mode)**
This parameter is used to establish the position the inlet will take when the AVERAGE TEMPERATURE is equal to the *MSP*. This position can also be taken when variable stage 1 is activated by its minimum ventilation timer. The inlet will also position itself according to variable stage 1 speed when it is activated for dehumidification. This parameter is adjusted in 1% increments from 0% to 100%.

INLET (1-2) VAR 1 HI POSITION **(Position Mode)**
This parameter is used to establish the position the inlet will take when AVERAGE TEMPERATURE is equal to the *MSP + VARIABLE 1 BANDWIDTH*. The inlet will also position itself according to variable stage 1 speed when it is activated for dehumidification. This parameter is adjusted in 1% increments from 0% to 100%.

INLET (1-2) VAR 2 LO POSITION **(Position Mode)**
This parameter is used to establish the position the inlet will take when the AVERAGE TEMPERATURE is equal to the *MSP + VARIABLE 2 RSP*. This position can also be taken when variable stage 2 is activated by the variable stage minimum ventilation timer. This parameter is adjusted in 1% increments from 0% to 100%.

INLET (1-2) VAR 2 HI POSITION **(Position Mode)**
This parameter is used to establish the position the inlet will take when the AVERAGE TEMPERATURE is equal to the *MSP+ VARIABLE 2 RSP + VARIABLE 2 BANDWIDTH*. This parameter is adjusted in 1% increments from 0% to 100%.

INLET (1-2) STAGE (3-8) POSITION **(Position Mode)**
This parameter is used to establish the position the inlet will take when the AVERAGE TEMPERATURE is equal to or higher than the *MSP + STAGE (3-8) RSP*. This parameter is adjusted in 1% increments from 0% to 100%.

INLET (1-2) AFTER STAGE (3-5) POSITION **(Position Mode)**
This parameter is used to establish the position the inlet will take when idle back between a variable stage and the mentioned on/off stage is used and the AVERAGE TEMPERATURE reaches *MSP + STAGE (3-5) RSP + VARIABLE 2 BANDWIDTH*. This parameter is adjusted in 1% increments from 0% to 100%.

PARAMETER GROUP # 7: INLETS (CONTINUED…)

***INLET (1-2) MAXIMUM OPENING* (Position Mode)**
This parameter is used to establish the position the inlet will take when the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is equal to or above *INLET (1-2) MAX OPEN TEMP*. Adjusting this parameter to OFF will deactivate the maximum opening logic. This parameter is adjusted in 1% increments from 0% to 100%, OFF.

***INLET (1-2) MAX OPEN TEMP* (Position Mode)**
This parameter is used to establish the temperature set point at which the position mode inlet will position itself at *INLET (1-2) MAXIMUM OPENING*. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is equal to or above this set point, the inlet will position itself at *INLET (1-2) MAXIMUM OPENING*. A fixed differential of 0.4°F (0.2°C) is used with this set point. This parameter will not appear if *INLET (1-2) MAXIMUM OPENING* is set to OFF. This parameter is adjusted in 0.1° increments from 0.0°F to 120.0°F (-17.7°C to 48.9°C).

***INLET (1-2) WINTER POSITION INFLUENCE* (Position Mode)**
This parameter is used to set the influence that will be applied to inlet positioning in winter. When the OUTSIDE TEMPERATURE is equal to or below *INLET INFLUENCE WINTER TEMPERATURE* the inlet requested opening will be reduced to this percentage of the original calculated demand. Above *INLET INFLUENCE WINTER TEMPERATURE*, the compensation will modulate between *INLET (1-2) WINTER POSITION INFLUENCE* and the next active compensation. Adjusting this parameter to OFF deactivates winter compensation. This parameter is adjusted in 1% increments from 0% to 100%, OFF.

***INLET (1-2) SPRING/FALL POSITION INFLUENCE* (Position Mode)**
This parameter is used to set the influence that will be applied to inlet positioning in spring and fall. When the OUTSIDE TEMPERATURE is equal to *INLET INFLUENCE SPRING/FALL TEMPERATURE* the inlet requested opening will be reduced to this percentage of the original calculated demand. Above *INLET INFLUENCE SPRING/FALL TEMPERATURE*, the compensation will modulate between the value adjusted here and 100% (no compensation). Below *INLET INFLUENCE SPRING/FALL TEMPERATURE*, the compensation will modulate between the value adjusted here and *INLET (1-2) WINTER POSITION INFLUENCE*. Adjusting this parameter to OFF deactivates spring/fall compensation. This parameter is adjusted in 1% increments from 0% to 100%, OFF.

PARAMETER GROUP # 7: INLETS (CONTINUED…)

***INLET (1-2) TEMPERATURE COMPENSATION* (Mode Position)**
This parameter is used to adjust the compensation that will be applied to the inlet for each degree of difference between its temperature and the **Average Temperature**. When the inlet's temperature is greater than the **Average Temperature**, the inlet's opening will be increased by this value for every degree of difference. When the inlet's temperature is less than the **Average Temperature**, the inlet's opening will be decreased by this value for every degree of difference. This compensation will be applied only if at least one ventilation stage is activated. This parameter is adjusted in 1% increments from 0% to 99%.

***INLET (1-2) STATIC PRESSURE COMPENSATION* (Mode Position)**
This parameter is used to activate or deactivate the static pressure compensation on the inlet. If this option is set to ON, the static pressure will modify the inlet's position according to the static pressure reading and the adjustments made in the ALARMS group. If this option is set to OFF, the static pressure will not affect the inlet's opening.

***INLET (1-2) OPEN TEMP RSP* (Natural Potentiometer Mode)**
This parameter is used to establish the temperature **RSP** at which the natural potentiometer mode inlet will position itself at *INLET (1-2) MINIMUM OPENING*. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is equal to *MSP + INLET (1-2) OPEN TEMP RSP*, the inlet will position itself at *INLET (1-2) MINIMUM OPENING*. A fixed differential of 0.4°F (0.2°C) is used with this set point. This parameter is adjusted in 0.1° increments from 0.5°F to 120.0°F (0.3°C to 48.9°C).

***INLET (1-2) BANDWIDTH* (Natural Potentiometer Mode)**
This parameter is used to establish the temperature range within which the natural potentiometer mode inlet's opening will go from *INLET 1 MINIMUM OPENING* to *INLET 1 MAXIMUM OPENING*. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is equal to *MSP + INLET (1-2) OPEN TEMP RSP*, the inlet will position itself at *INLET (1-2) MINIMUM OPENING*. The opening will increase gradually as temperature rises to reach *INLET (1-2) MAXIMUM OPENING* when *MSP + INLET (1-2) OPEN TEMPRSP + INLET (1-2) BANDWIDTH* is reached. This parameter is adjusted in 0.1° increments from 0.5°F to 20.0°F (0.3°C to 11.1°C).

***INLET (1-2) MINIMUM OPENING* (Natural Potentiometer Mode)**
This parameter is used to establish the opening the natural potentiometer mode inlet will take when the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is equal to *MSP + INLET (1-2) OPEN TEMP RSP*. This parameter is adjusted in 1% increments from 0% to 100%.

***INLET (1-2) MAXIMUM OPENING* (Natural Potentiometer Mode)**
This parameter is used to establish the opening the natural potentiometer mode inlet will take when the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is equal to or above *MSP + INLET (1-2) OPEN TEMP RSP + INLET (1-2) BANDWIDTH*. This parameter is adjusted in 1% increments from 0% to 100%.

PARAMETER GROUP # 7: INLETS (CONTINUED…)

***INLET (1-2) POSITION FOR NATURAL MODE* (Natural Potentiometer Mode)**
This parameter is used to set the opening at which natural ventilation mode condition for this inlet will be filled. When all natural potentiometer or natural time mode inlet's natural ventilation mode condition is filled, the natural mode will activate. Natural mode will deactivated when all natural potentiometer or natural time mode inlet's natural ventilation mode condition is not filled. The inlet's natural ventilation mode condition will no more be filled when its position drops to *INLET (1-2) POSITION FOR NATURAL MODE - INLET (1-2) DIFFERENTIAL FOR NATURAL MODE*. Outside temperature may prevent natural mode from activating. Furthermore, when a defective potentiometer error occurs, this will also end the natural ventilation mode condition for the respective inlet. In natural mode, all ventilation stages set to shutoff in natural mode will deactivate and position mode inlets set to close in natural mode will close completely. This parameter is adjusted in 1% increments from 0% to 100%.

***INLET (1-2) DIFFERENTIAL FOR NATURAL MODE* (Nat Potentiometer Mode)**
This parameter is used to set the **Differential** for natural mode condition. Natural ventilation mode condition will be filled when the inlet's position reaches *INLET (1-2) POSITION FOR NATURAL MODE* and will no more be filled when its position drops to *INLET (1-2) POSITION FOR NATURAL MODE - INLET (1-2) DIFFERENTIAL FOR NATURAL MODE*. This parameter is adjusted in 1% increments from 0% to 100%.

INLET (1-2) ACTUAL STATE (Natural Time Mode)
This parameter displays the actual state of the respective inlet. During the active portion of the opening timer, this parameter will display OPEN. During the active portion of the closing timer, this parameter will display CLOSE. When both opening and closing timers are not active or during idle portion of one of these timers, this parameter will display HOLD.

***INLET (1-2) OPEN TEMP RSP* (Natural Time Mode)**
This parameter is used to establish the temperature **RSP** at which the inlet will begin to open according to its opening timer. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is equal to *MSP + INLET (1-2) OPEN TEMP RSP*, the ON portion of the opening timer will be equal to *INLET (1-2) MINIMUM OPEN*. As temperature increases, the opening time will increase proportionally to reach *INLET (1-2) MAXIMUM OPEN* time when assigned temperature reaches the *INLET (1-2) OPEN PROGRESSIVE* temperature. After a number of consecutive opening cycles equal to *# OPENING CYCLE FOR NATURAL SHUTOFF* while having an opening demand, the natural ventilation mode condition will be filled for the respective inlet. When all natural potentiometer or natural time mode inlet's natural ventilation mode condition is filled, the natural mode will activate. If an inlet's natural ventilation mode condition is filled, as soon as the second inlet in natural time mode have an opening demand, its natural ventilation mode condition will immediately be filled. Natural mode will deactivated when all natural potentiometer or natural time mode inlet's natural ventilation mode condition is not filled. This parameter is adjusted in 0.1° increments from -20.0°F to 120.0°F (-11.1°C to 48.9°C).

PARAMETER GROUP # 7: INLETS (CONTINUED…)

***INLET (1-2) OPEN PROGRESSIVE* (Natural Time Mode)**
This parameter is used to establish the temperature range at which the ON portion of the opening timer will be equal to *INLET (1-2) MAXIMUM OPEN* parameter. This parameter is adjusted in 0.1° increments from 0.0°F to 20.0°F (0.0°C to 11.1°C).

***INLET (1-2) CLOSE TEMP RSP* (Natural Time Mode)**
This parameter is used to establish the temperature **RSP** at which inlet will begin to close according to its closing timer. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is equal to *MSP + INLET (1-2) CLOSE TEMP RSP*, the ON portion of the closing timer will be equal to *INLET (1-2) MINIMUM CLOSE* parameter. As temperature decreases, the closing time will increase proportionally to reach *INLET (1-2) MAXIMUM CLOSE* time when assigned temperature drops to *INLET (1-2) CLOSE PROGRESSIVE* temperature. After a number of consecutive closing cycles equal to *# CLOSING CYCLE TO GET OUT OF NATURAL* while having a closing demand, the natural ventilation mode condition will cease to be filled for the respective inlet. Natural mode will deactivated when all natural potentiometer or natural time mode inlet's natural ventilation mode condition is not filled. This parameter is adjusted in 0.1° increments from -20.0°F to 120.0°F (-11.1°C to 48.9°C).

***INLET (1-2) CLOSE PROGRESSIVE* (Natural Time Mode)**
This parameter is used to establish the temperature range at which the ON portion of the closing timer will be equal to *INLET (1-2) MAXIMUM CLOSE* parameter. This parameter is adjusted in 0.1° increments from -20.0°F to 0.0°F (-11.1°C to 0.0°C).

***INLET (1-2) DIFFERENTIAL* (Natural Time Mode)**
This parameter is used to establish the **Differential** used on both the opening and closing set points. Once a movement temperature (*INLET (1-2) OPEN TEMP RSP* or *INLET (1-2) CLOSE TEMP RSP*) is reached, the respective timer will only be deactivated when *INLET (1-2) OPEN TEMP RSP - INLET (1-2) DIFFERENTIAL* or *INLET (1-2) CLOSE TEMP RSP + INLET (1-2) DIFFERENTIAL* is reached. This parameter is adjusted in 0.1° increments from 0.5°F to 10.0°F (0.3°C to 5.6°C).

***INLET (1-2) CYCLE TIME* (Natural Time Mode)**
This parameter is used to set the total period of both the opening and the closing timers. The inactive portion of the opening or closing timer will be equal to this parameter minus the actual calculated opening or closing time. If the calculated opening or closing time is equal to or greater than this parameter, the inlet will continuously be in motion. This parameter is adjusted in 1-minute increments from 1 to 15 minutes.

***INLET (1-2) MINIMUM OPEN* (Natural Time Mode)**
This parameter is used to set the minimum active portion of the opening timer. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* reaches the *INLET (1-2) OPEN TEMP RSP*, the ON portion of the opening timer will be equal to this value. This parameter is adjusted in 1-second increments from 1 to 999 seconds.

PARAMETER GROUP # 7: INLETS (CONTINUED…)

***INLET (1-2) MAXIMUM OPEN* (Natural Time Mode)**
This parameter is used to set the maximum active portion of the opening timer. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* reaches the *INLET (1-2) OPEN PROGRESSIVE*, the ON portion of the opening timer will be equal to this value. This parameter is adjusted in 1-second increments from 1 to 999 seconds.

***INLET (1-2) MINIMUM CLOSE* (Natural Time Mode)**
This parameter is used to set the minimum active portion of the closing timer. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* reaches the *INLET (1-2) CLOSE TEMP RSP*, the ON portion of the closing timer will be equal to this value. This parameter is adjusted in 1-second increments from 1 to 999 seconds.

***INLET (1-2) MAXIMUM CLOSE* (Natural Time Mode)**
This parameter is used to set the maximum active portion of the closing timer. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* reaches the *INLET (1-2) CLOSE PROGRESSIVE*, the ON portion of the closing timer will be equal to this value. This parameter is adjusted in 1-second increments from 1 to 999 seconds.

INLET (1-2) ACTUAL STATE (Time Mode)
This parameter displays the actual state of the respective inlet. When the inlet performs an opening movement, this parameter will display OPEN. When the inlet performs a closing movement, this parameter will display CLOSE. When the inlet is not performing a movement, this parameter will display HOLD.

***INLET (1-2) CALIB CLOSE TIME* (Time Mode)**
This parameter is used to set the calibration time during which the INLET (1-2) will continuously close before positioning itself to a total opening run time of *INLET (1-2) NO VENT RUN TIME* when the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is below all ventilation stage's activation set point. This delay starts when INLET (1-2) is considered to be closed. This parameter is adjusted in 1-second increments from OFF, 1 to 999 seconds.

***INLET (1-2) NO VENT RUN TIME* (Time Mode)**
This parameter is used to set the total opening run time when the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is below all ventilation stage's activation set point. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* is below all ventilation stage's activation set point, inlet will position itself to a total opening run time equal to this parameter. If *INLET (1-2) CALIB CLOSE TIME* is not set to OFF, before INLET (1-2) position itself to *INLET (1-2) NO VENT RUN TIME*, INLET (1-2) completely closes. Once the INLET (1-2) is considered to be closed, INLET (1-2) will continuously close during a delay equal to *INLET (1-2) CALIB CLOSE TIME* before positioning itself to *INLET (1-2) NO VENT RUN TIME*. This parameter is adjusted in 1-second increments from 0 to 999 seconds.

PARAMETER GROUP # 7: INLETS (CONTINUED…)

***INLET (1-2) VAR (1-2) RUN TIME* (Time Mode)**
This parameter is used to set the run time added to the total opening run time for each of the respective variable stages. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* reaches the *MSP* (for variable stage 1) or *VARIABLE 2 RSP*, the total opening run time will increase by the respective value. The total opening run time will be decreased by the respective value when the temperature of the probes selected in *INLET (1-2) PROBE SELECT* drops to the respective variable stage activation set point minus its fixed 0.4°F (0.2°C) differential. This parameter is adjusted in 1-second increments from 0 to 999 seconds.

***INLET (1-2) STAGE (3-8) RUN TIME* (Time Mode)**
This parameter is used to set the run time added to the total opening run time for each of the respective on/off stages. When the temperature of the probes selected in *INLET (1-2) PROBE SELECT* reaches the *STAGE (3-8) RSP*, the total opening run time will increase by the respective value. The total opening run time will be decreased by the respective value when the temperature of the probes selected in *INLET (1-2) PROBE SELECT* drops to the respective stage activation set point minus *ON/OFF STAGE DIFFERENTIAL*. This parameter is adjusted in 1-second increments from 0 to 999 seconds.

***INLET (1-2) TUNNEL INLET* (Time Mode)**
This parameter is used to determine if the time mode inlet will be used as a tunnel inlet. If an inlet is used as tunnel inlet and *TUNNEL START STAGE* is not set to OFF, *INLET (1-2) PROBE SELECT* will be equal to *AVERAGE PROBE SELECT* and will not be adjustable. This parameter can be either set to ON or OFF.

INLET (1-2) MANUAL OVERRIDE
This parameter is used to manually operate inlet (1-2). The manual override can be used to open or close completely the inlet to perform calibration operations. When this parameter is set to AUTO, the inlet will position itself to the position calculated according to its settings and the temperature of its selected probes. When this parameter is set to HOLD, the inlet will not move. When this parameter is set to CLOSE, the inlet closes continuously. When this parameter is set to OPEN, the inlet opens continuously.

PARAMETER GROUP # 8: ALARMS (AND SETUP)

Some parameters will not appear in this group if the corresponding option is not activated.

LOW ALARM RSP

This parameter is used to establish the temperature RSP at which a low temperature alarm condition will occur. When AVERAGE TEMPERATURE READOUT is below the *MSP + LOW ALARM RSP*, a low temperature alarm condition will occur. This parameter is adjusted in 0.1° increments from -40.0°F to 120.0°F (-22.2°C to 48.9°C).

HIGH ALARM RSP

This parameter is used to establish the temperature RSP at which a high temperature alarm condition will occur when the OUTSIDE PROBE READOUT is not above the *MSP*. When the *OUTSIDE TEMPERATURE OFFSET ALARM* is OFF or OUTSIDE PROBE READOUT is not above the *MSP* and the AVERAGE TEMPERATURE READOUT is above the *MSP + HIGH ALARM RSP*, a high temperature alarm condition will occur. This parameter is adjusted in 0.1° increments from 0.5°F to 120.0°F (0.3°C to 48.9°C).

CRITICAL TEMPERATURE HIGH ALARM

This parameter is used to establish the temperature set point at which a high temperature alarm condition will occur regardless of the OUTSIDE PROBE READOUT. When the AVERAGE TEMPERATURE READOUT is above this parameter, a high temperature alarm condition will occur. Setting this parameter to OFF will deactivate the critical high alarm check. This parameter is adjusted in 0.1° increments from -40.0°F to 119.9°F (-40.0°C to 48.9°C), OFF.

OUTSIDE TEMPERATURE OFFSET ALARM

This parameter is used to establish the temperature that will be added to the OUTSIDE PROBE READOUT to create the high alarm threshold. When the OUTSIDE PROBE READOUT is above the *MSP*, the high alarm condition will occur if the AVERAGE TEMPERATURE READOUT is above OUTSIDE PROBE READOUT + *OUTSIDE TEMPERATURE OFFSET ALARM*. This will override the *HIGH ALARM RSP*. If this parameter is set to OFF, the high alarm threshold will not be affected by the OUTSIDE PROBE READOUT. This parameter is adjusted in 0.1° increments from 0.5°F to 40.0°F (0.2°C to 22.2°C), OFF.

WATER METER HIGH LIMIT

This parameter is used to establish the maximum amount of water units (gallons or litres) that may be counted within the *WATER METER HIGH LIMIT CHECK RATE* without triggering the alarm. When this limit is exceeded, the overflow water alarm will activate. Setting this parameter to OFF will deactivate the overflow water alarm. This parameter is adjusted in 1-unit (gallon or litre) increments from OFF, 1 to 999 units (gallons or litres).

WATER METER HIGH LIMIT CHECK RATE

This parameter is used to establish the time span within which the overflow water alarm is verified. If the amount of water units (gallons or litres) counted within this period exceeds *WATER METER HIGH LIMIT* the overflow water alarm will activate. This parameter is adjusted in 1-minute increments from OFF, 1 to 999 minutes.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

WATER METER NO PULSE CHECK RATE

This parameter is used to establish the time span within which the no pulse water alarm is verified. If no water units (gallons or litres) are counted within this period, the no pulse water alarm will activate. Setting this parameter to OFF will deactivate the no pulse water alarm. This parameter is adjusted in 1-minute increments from OFF, 1 to 999 minutes.

MAXIMUM LIMIT TIME PERIOD WATER ALARM

This parameter is used to establish the maximum amount of water units (gallons or litres) that may be counted within *START TIME PERIOD WATER ALARM* and *END TIME PERIOD WATER ALARM* without triggering the alarm. When this limit is exceeded within the defined time period, the overflow water alarm will activate. Setting this parameter to OFF will deactivate the overflow water alarm. The *MAXIMUM LIMIT TIME PERIOD WATER ALARM* will follow its growth curve when the *GROWTH DAY* is not OFF. The growth curve is composed of six day-points and six value-points. To adjust these points, press the [+] and [–] buttons simultaneously. Then select the point to adjust using the [↑] and [↓] buttons and adjust it with the [+] and [–] buttons. See the parameters section for more information on the growth curve. This parameter is adjusted in 1-unit (gallon or litre) increments from OFF, 1 to 20000 units (gallons or litres).

START TIME PERIOD WATER ALARM

This parameter is used to establish the time at which *MAXIMUM LIMIT TIME PERIOD WATER ALARM* will start to be counted. If the amount of water counted between this time and *END TIME PERIOD WATER ALARM* exceeds *MAXIMUM LIMIT TIME PERIOD WATER ALARM*, the overflow water alarm will activate. This parameter is adjusted in 1- increments from 12:00A to 11:59P.

END TIME PERIOD WATER ALARM

This parameter is used to establish the time at which *MAXIMUM LIMIT TIME PERIOD WATER ALARM* will no longer to be counted. If the amount of water counted between *END TIME PERIOD WATER ALARM* and this time exceeds *MAXIMUM LIMIT TIME PERIOD WATER ALARM*, the overflow water alarm will activate. This parameter is adjusted in 1- increments from 12:00A to 11:59P.

REINITIALIZE WATER ALARM

This parameter is used to reinitialize all water alarm conditions. Pressing the [+] and [–] buttons for two seconds will clear all water alarm conditions and reset all current water alarm counts.

WATER METER CALIBRATION

This parameter is used to calibrate the water meter by setting the number of units (gallons or litres) that are counted each time a pulse is read by the water meter input. This setting must be adjusted to match the water meter's specifications. This parameter is adjusted in 1-unit increments from 1 to 99 units (gallons or litres).

WATER METER UNIT

This parameter is used to select the water meter unit. The unit may be the gallon or the litre.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

LOW STATIC PRESSURE ALARM

This parameter is used to set the low static pressure alarm set point. When static pressure drops below this set point, the *STATIC PRESSURE ALARM DELAY* will be activated. If static pressure remains below this set point throughout the *STATIC PRESSURE ALARM DELAY*, a low static pressure alarm will occur. This parameter is adjusted in 0.001WC" increments from -0.500WC" to 0.500WC".

HIGH STATIC PRESSURE ALARM

This parameter is used to set the high static pressure alarm set point. When static pressure rises above this set point, the *STATIC PRESSURE ALARM DELAY* will be activated. If static pressure remains above this set point throughout the *STATIC PRESSURE ALARM DELAY*, a high static pressure alarm will occur. This parameter is adjusted in 0.001WC" increments from -0.500WC" to 0.500WC".

STATIC PRESSURE ALARM DELAY

This parameter is used to set the amount of time for which the static pressure must remain outside the *LOW STATIC PRESSURE ALARM* and *HIGH STATIC PRESSURE ALARM* limits before activating the alarm. This parameter is adjusted in 1-second increments from 0 to 999 seconds.

REINITIALIZE STATIC PRESSURE ALARM

This parameter is used to reinitialize all static pressure alarm conditions. Pressing the + and – buttons for two seconds will clear all water alarm conditions and reset all current static pressure alarm delays.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

LAST ALARM CODE

This parameter displays the last alarm that occurred since the last reset. The code refers to the following table:

Alarm Code	Description
----	No alarm
1	0-10V P1 ID1 Module not responding
2	0-10V P1 ID2 Module not responding
3	Wrong Module on P1
4	Potentiometer 1 Defective
5	Potentiometer 2 Defective
6	Outside Probe Defective
7	High Limit Water Alarm
8	No Pulse Water Alarm
9	Probe 1 Too High
10	Probe 2 Too High
11	Probe 3 Too High
12	Probe 4 Too High
13	Probe 1 Too Low
14	Probe 2 Too Low
15	Probe 3 Too Low
16	Probe 4 Too Low
17	Static Pressure Too Low
18	Static Pressure Too High
19	Probe 1 Defective
20	Probe 2 Defective
21	Probe 3 Defective
22	Probe 4 Defective
23	Error Code 1
24	Error Code 3
25	Error Code 4

ALARM RELAY

This parameter is used to activate or to deactivate the alarm relay. If this parameter is set to OFF, the alarm relay will not activate when an alarm condition occurs. A warning message will appear on the LCD display to remind the user that the alarm relay is not allowed to activate.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

TEST MODE
This parameter is used to activate or to deactivate the test mode as well as to adjust the test mode temperature. The test mode may be activated or deactivated by pressing the [+] and [–] buttons simultaneously for two seconds. All inside temperature probe readings will be replaced by the test mode value and a warning message will blink on the LCD display. Each time the test mode is activated, it will take the value of the *MSP*. The test mode will automatically be reset to OFF if the test mode temperature has not changed for 10 minutes. The test mode is adjusted in 0.1° increments from -3.8°F to 130.8°F (-19.9°C to 54.9°C).

TEMPERATURE UNIT
This parameter is used to select the temperature unit used throughout the configuration. The temperature unit can be set to Fahrenheit or Celsius.

AVERAGE PROBE SELECT
This parameter is used to select the probes that will be used to calculate the AVERAGE TEMPERATURE READOUT. Any probe combination may be selected in this parameter.

TEMPERATURE ALARM PROBE SELECT
This parameter is used to select the probes that can trigger the alarm. When a probe is selected at this parameter and is below *MSP + LOW ALARM RSP* or above *MSP + LOW ALARM RSP*, the alarm will trigger. When a probe is not selected here, it will not trigger the alarm. Any probe combination may be selected in this parameter.

PROBE 5 OPTION
This parameter selects which input will be used by probe 5 input. If an input type is not selected, all its associated parameters will disappear and all its logics will be deactivated. This parameter can be set to OFF, OUT or FEED.

PROBE 6 OPTION
This parameter selects which input will be used by probe 6 input. If an input type is not selected, all its associated parameters will disappear and all its logics will be deactivated. This parameter can be set to OFF, WATER or PRESS.

PROBE (1-4) CALIBRATION
This parameter is used to adjust the value that will be added to the inside probe's reading to match an external reference. This parameter is adjusted in 0.1° increments from -20.0°F to 20.0°F (-11.1°C to 11.1°C).

OUTSIDE PROBE CALIBRATION
This parameter is used to adjust the value that will be added to the outside probe's reading to match an external reference. This parameter is adjusted in 0.1° increments from -20.0°F to 20.0°F (-11.1°C to 11.1°C).

HUMIDITY PROBE CALIBRATION
This parameter is used to adjust the value that will be added to the outside probe's reading to match an external reference. This parameter is adjusted in 1RH% increments from -20RH% to 20RH%.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

STATIC PRESSURE CALIBRATION

This parameter is used to adjust the value that will be added to the static pressure's reading to match an external reference. This parameter is adjusted in 0.001WC" increments from -0.500WC" to 0.500WC".

PORT P1 OPTION

This parameter is used to assign a module to be used with the communication port P1. If this parameter is not set to RH, all humidity parameters will disappear and all humidity logics will be deactivated. If this parameter is not set to 0-10, all variable heater (1-2) parameters will disappear and all of their logics will be deactivated. This parameter can be adjusted to None, RH or 0-10.

0-10 VOLT OUT (1-2) LOGIC

This parameter is used to select the logic that will determine the state of the 0-10V module outputs. The 0-10 Volt Out(1-2) will follow the parameters associated to the type of output selected. This parameter can be adjusted to None, Var1, Var2, Stir1, Stir2, Heat1 and Heat2.

VARIABLE (1-2) MOTOR CURVE

This parameter is used to modify the motor curve of the respective variable stage. The relation between the voltage supplied to a motor and its operation speed is defined by the motor curve. This curve may vary according to the brand and the capacity of the motor. The motors available in the industry have been regrouped in categories and a different curve has been programmed in the controller for each category. The appropriate curve must be chosen for each motor to ensure a correct relation between the voltage supplied and the desired speed. Refer to the curve table in the attachment section for the list of different motor curves and their associated fans. These parameters may be set to any value from 1 to 9.

VARIABLE STIR FAN (1-2) MOTOR CURVE

This parameter is used to modify the motor curve of the respective variable stir fan. The relation between the voltage supplied to a motor and its operation speed is defined by the motor curve. This curve may vary according to the brand and the capacity of the motor. The motors available in the industry have been regrouped in categories and a different curve has been programmed in the controller for each category. The appropriate curve must be chosen for each motor to ensure a correct relation between the voltage supplied and the desired speed. Refer to the **Motor curve** table in the attachment section for the list of different motor curves and their associated fans. These parameters may be set to any value from 1 to 9.

VARIABLE STIR FAN (1-2) PROBE SELECT

This parameter is used to select the probes that will be used to determine temperature variable stir fan (1-2) will follow. Any probe combination may be selected in this parameter.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

 # INLET ACTIVE

This parameter is used to select the amount of inlets used with the JD-26 PLUS controller. All parameters associated to a deactivated inlet will disappear and its logics will be deactivated. This parameter will be adjustable from 0 to 2.

INLET (1-2) PROBE SELECT

This parameter is used to select the probes that will be used to determine temperature INLET (1-2) will follow. If an inlet is used in tunnel mode and *TUNNEL START STAGE* is not set to OFF, this parameter will be equal to *AVERAGE PROBE SELECT* and will not be adjustable. Any probe combination may be selected in this parameter.

INLET (1-2) MODE

This parameter is used to select the mode in which the inlet will operate. If this parameter is set to POS, the inlet will position itself according to ventilation stage activation and other position mode settings. If this parameter is set to NAT P, the inlet will open according to the natural potentiometer mode settings. If this parameter is set to NAT T, the inlet will open according to the natural time mode settings. If this parameter is set to TIME, the inlet will open according to the time mode settings. **A natural mode inlet may activate the natural mode ventilation, which can considerably change system behaviour.**

INLET (1-2) MIN VENT POSITION MODE

This parameter is used to select the position the inlet will take in minimum ventilation. If this parameter is set to VAR 1, when any ventilation stage is activated by minimum ventilation and no ventilation stage is activated by temperature, the inlet will position itself at *INLET (1-2) VAR 1 LO POSITION*. If this parameter is set to STG, the inlet will position itself according to the highest ventilation stage activated by temperature or minimum ventilation. If this parameter is set to any value from 0 to 100%, the inlet will position itself to the set value when any ventilation stage is activated by minimum ventilation and no ventilation stage is activated by temperature.

INLET (1-2) SET LOW LIMIT (Position and Natural Potentiometer Mode)

This parameter is used to set the low potentiometer limit for inlet calibration. This will effectively define the lowest possible value for the inlet's potentiometer. To obtain this value, close the inlet completely using *INLET (1-2) MANUAL OVERRIDE*. Once the inlet is completely closed, press the [+] and [–] buttons for two seconds while on the current parameter. At this point, the text displayed on the LCD will change to "Low Limit Saved", if the value was correctly saved, or "Cannot Save Check Inlet Potentiometer" and the LED display will show ERR if the potentiometer reading is not valid. In the last case, calibration must be performed once the situation is corrected.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

INLET (1-2) SET HIGH LIMIT (Position and Natural Potentiometer Mode)
This parameter is used to set the high potentiometer limit for inlet calibration. This will effectively define the highest possible value for the inlet's potentiometer. To obtain this value, open the inlet completely using *INLET (1-2) MANUAL OVERRIDE*. Once the inlet is completely open, press the [+] and [–] buttons for two seconds while on the current parameter. At this point, the text displayed on the LCD will change to "High Limit Saved" and the LED display will show "Saved", if the value was correctly saved, or "Cannot Save Check Inlet Potentiometer" and the LED display will show ERR if the potentiometer reading is not valid. In the last case, calibration must be performed once the situation is corrected.

INLET (1-2) REQUESTED OPENING (Position and Natural Potentiometer Mode)
This parameter displays the position actually requested by the JD-26 PLUS controller.

INLET (1-2) REQUESTED STATE (Natural Time Mode)
This parameter displays the state actually requested by the JD-26 PLUS controller.

***INLET (1-2) TEMPERATURE POSITION DELAY* (Position and Natural Potentiometer Mode)**
This parameter sets the amount of time for which the inlet will wait before changing its position. For a position mode inlet, at least one ventilation stage must be activated according to temperature or humidity in order to use this delay. The inlet will evaluate its position each time this delay has expired. Once the inlet has moved, it will wait for this amount of time once more before moving again. This delay does not prevent manual override and does not prevent the inlet from closing in natural or tunnel mode if it is set to do so. This delay will not affect a position mode inlet when its temperature is below all ventilation stage activation temperatures when working with the minimum ventilation timer. This delay will not affect a natural potentiometer inlet when it closes completely nor on its first opening move. Setting this parameter to OFF will deactivate this delay. This parameter is adjusted in 1-minute increments from OFF, 1 minute to 20 minutes.

***INLET (1-2) PRECISION* (Position and Natural Potentiometer Mode)**
This parameter is used to adjust the precision of the inlet. If an inlet moves too often, increase this setting. When this is done, the inlet will then require a greater difference between its actual position and the requested one before moving. The precision of the inlet is adjusted in 1% increments from 1% to 20%.

***INLET (1-2) MAX RUN TIME* (Position and Natural Potentiometer Mode)**
This parameter is used to set the maximum run time of the inlet within a ten-minute period. When an inlet has moved for a time greater than the value of this parameter within a ten-minute period, the module will not activate the open or close relays until the inlet has had time to cool down and a message will appear on the LCD display. This value should be set according to the manufacturer's specifications. Setting this value to OFF will deactivate the module cool down function. This parameter is adjusted in 1-minute increments from 1 minute to 9 minutes, OFF.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

***INLET (1-2) ALARM OPTION* (Position and Natural Potentiometer Mode)**
This parameter is used to determine if the alarm relay will activate when the inlet's potentiometer is defective. If this parameter is set to ON, the alarm relay will activate when the inlet's potentiometer is defective. If this parameter is set to OFF, the alarm relay will not activate when the inlet's potentiometer is defective. In both cases, a message will blink on the LCD display when the inlet's potentiometer is defective.

***INLET (1-2) CLOSE IN NATURAL* (Position Mode, Time Mode)**
This parameter is used to determine if the position mode inlet will close completely when natural mode is activated. If this option is set to ON, the position mode inlet will close completely when a natural mode inlet fills its entering natural mode condition. If this option is set to OFF, the position mode inlet will continue to follow ventilation stage temperatures and positions.

***INLET (1-2) FOLLOW NATURAL POTENTIOMETER INLET* (Position Mode)**
This parameter is used to determine if the position mode inlet will follow a natural potentiometer inlet in natural mode. If this parameter is set to a value other than OFF, the position mode inlet will take the same position as the selected natural potentiometer inlet when in natural mode. This parameter can be adjusted from OFF, 1 to 2.

INLET (1-2) CLOSE IN TUNNEL
This parameter is used to determine if the non-tunnel mode inlet will close completely when tunnel mode is activated. If this option is set to ON, the inlet will close completely after a 2-minute delay when a tunnel mode inlet temperature reaches the RSP of the stage selected in *TUNNEL START STAGE*. If this option is set to OFF, the inlet will continue to follow its positioning conditions.

***INLET (1-2) AUTO-CALIBRATION OPTION* (Time Mode)**
This parameter is used to activate or deactivate the auto-calibration. This parameter has priority over all operations but *INLET (1-2) MANUAL OVERRIDE*. This parameter can be either set to ON or OFF.

***INLET (1-2) AUTO-CALIBRATION TIME* (Time Mode)**
This parameter is used to set the time at which inlet will perform an auto-calibration. When the CLOCK reaches the time set here, the inlet will continuously close for an amount of time equal to *INLET (1-2) AUTO-CALIBRATION TIME.* This parameter is adjusted in 1-minute increments from 12:00AM to 11:59PM.

***INLET (1-2) AUTO-CALIBRATION DURATION* (Time Mode)**
This parameter is used to set the auto-calibration time at which the INLET (1-2) will continuously close before positioning itself according to stages' position. This parameter is adjusted in 1-second increments from 0 to 999 seconds.

***INLET (1-2) AUTO-CALIBRATION FREQUENCY* (Time Mode)**
This parameter is used to set the frequency at which auto-calibration will be performed. This parameter is adjusted in 1-day increments from 1 to 20 days.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

OUTSIDE TEMPERATURE FOR NATURAL **(Natural Potentiometer and Natural Time Mode)**
This parameter is used to set the temperature at which natural mode inlets will be allowed to open. When the OUTSIDE PROBE READOUT is equal to or above this temperature, natural mode inlets will be allowed to open. When the OUTSIDE PROBE READOUT is below this temperature, natural mode inlets will close completely. A fixed differential of 0.4°F (0.2°C) is used with this temperature. This parameter is adjusted in 0.1° increments from 0.0°F to 120.0°F (-17.8°C to 48.9°C).

TEMPERATURE OVERRIDE FOR NATURAL SHUTOFF **(Natural Mode)**
This parameter is used to set the temperature at which outputs that are deactivated due to natural mode will reactivate. When the AVERAGE TEMPERATURE READOUT is equal to or above this temperature, ventilation stages that were shutoff by natural mode will reactivate. A fixed differential of 0.4°F (0.2°C) is used with this temperature. This parameter is adjusted in 0.1° increments from 0.0°F to 120.0°F (-17.8°C to 48.9°C).

 # OPENING CYCLE FOR NATURAL SHUTOFF **(Natural Time Mode)**
This parameter is used to set the number of consecutive opening cycles to fill the natural condition for the respective inlet. After a number of consecutive opening cycles equal to *# OPENING CYCLE FOR NATURAL SHUTOFF* while having an opening demand, the natural ventilation mode condition will be filled for the respective inlet. This parameter is adjusted in 1 opening cycle increments from 0 to 10 opening cycles.

 # CLOSING CYCLE TO GET OUT OF NATURAL **(Natural Time Mode)**
This parameter is used to set the number of consecutive closing cycles to remove the natural condition for the respective inlet. After a number of consecutive closing cycles equal to *# CLOSING CYCLE TO GET OUT OF NATURAL* while having a closing demand, the natural ventilation mode condition will cease to be filled for the respective inlet. This parameter is adjusted in 1 closing cycle increments from 0 to 10 closing cycles.

INLET INFLUENCE WINTER TEMPERATURE **(Position Mode)**
This parameter is used to set the temperature at which winter compensation will be applied to position mode inlet openings. When the OUTSIDE TEMPERATURE is equal to or below this temperature, the inlet requested opening will be reduced to *INLET (1-2) WINTER POSITION INFLUENCE* of the original calculated demand. Above this temperature, the compensation will modulate between *INLET (1-2) WINTER POSITION INFLUENCE* and the next active compensation. Adjusting this parameter to OFF deactivates winter compensation. This parameter is adjusted in 0.1° increments from 0.0°F to 120.0°F (-17.8°C to 48.9°C).

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

***INLET INFLUENCE SPRING/FALL TEMPERATURE* (Position Mode)**
This parameter is used to set the temperature at which spring/fall compensation will be applied to position mode inlet openings. When the OUTSIDE TEMPERATURE is equal to this temperature, the inlet requested opening will be reduced to *INLET (1-2) SPRING/FALL POSITION INFLUENCE* of the original calculated demand. Above this temperature, the compensation will modulate between *INLET (1-2) SPRING/FALL POSITION INFLUENCE* and 100% (no compensation). Below this temperature, the compensation will modulate between the value adjusted here and *INLET (1-2) WINTER POSITION INFLUENCE*. Adjusting this parameter to OFF deactivates spring/fall compensation. This parameter is adjusted in 0.1° increments from 0.0°F to 120.0°F (-17.8°C to 48.9°C).

***INLET INFLUENCE SUMMER TEMPERATURE* (Position Mode)**
This parameter is used to set the temperature at which outside temperature compensation will no longer be applied to position mode inlet openings. When the OUTSIDE TEMPERATURE is equal to or above this temperature, the inlet requested opening will not be reduced. Below this temperature, the compensation will modulate between the value adjusted here and *INLET (1-2) SPRING/FALL POSITION INFLUENCE*. Adjusting this parameter to OFF deactivates spring/fall compensation. This parameter is adjusted in 0.1° increments from 0.0°F to 120.0°F (-17.8°C to 48.9°C).

***INLET ACTUAL STATIC PRESSURE COMPENSATION* (Position Mode)**
This parameter displays the actual static pressure compensation applied on all inlets using static pressure compensation. The compensation is displayed to the nearest 1% from -100% to 100%.

***INLET STATIC PRESSURE COMPENSATION VALUE* (Position Mode)**
This parameter is used to adjust the compensation that will be applied to the inlet each time the static pressure is not between and *INLET COMPENSATION LOW STATIC PRESSURE* or *INLET COMPENSATION HIGH STATIC PRESSURE* for *INLET STATIC PRESSURE COMPENSATION DELAY*. When the static pressure is greater than *INLET COMPENSATION HIGH STATIC PRESSURE*, the inlet's opening will be increased by this value. When the static pressure is less than *INLET COMPENSATION LOW STATIC PRESSURE*, the inlet's opening will be decreased by this value. The inlet's opening will be modified every time the static pressure is not within the two limits for *INLET STATIC PRESSURE COMPENSATION DELAY*. This parameter is adjusted in 1% increments from 0% to 99%.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

***INLET COMPENSATION LOW STATIC PRESSURE* (Position Mode)**
This parameter is used to adjust the value at which inlet static pressure compensation will begin to reduce the inlet's opening. When the static pressure is less than this parameter, the inlet's opening will be decreased by *INLET STATIC PRESSURE COMPENSATION VALUE* every time the *INLET STATIC PRESSURE COMPENSATION DELAY* delay expires. Static pressure compensation will be applied only when the inlet is using the position of a stage whose corresponding *VARIABLE (1-2)/STAGE (3-8) AFFECTS STATIC PRESSURE COMPENSATION* option is set to ON. This parameter is adjusted in 0.001"WC increments from -0.500"WC to 0.500"WC.

***INLET COMPENSATION HIGH STATIC PRESSURE* (Position Mode)**
This parameter is used to adjust the value at which inlet static pressure compensation will begin to increase the inlet's opening. When the static pressure is greater than this parameter, the inlet's opening will be increased by *INLET STATIC PRESSURE COMPENSATION VALUE* every time the *INLET STATIC PRESSURE COMPENSATION DELAY* delay expires. Static pressure compensation will be applied only when the inlet is using the position of a stage whose corresponding *VARIABLE (1-2)/STAGE (3-8) AFFECTS STATIC PRESSURE COMPENSATION* option is set to ON. This parameter is adjusted in 0.001"WC increments from -0.500"WC to 0.500"WC.

***INLET STATIC PRESSURE COMPENSATION DELAY* (Position Mode)**
This parameter is used to adjust the time after which static pressure will be checked to evaluate static pressure compensation on the inlet's position. When the static pressure is not within *INLET COMPENSATION LOW STATIC PRESSURE* and *INLET COMPENSATION HIGH STATIC PRESSURE,* this delay will start. Once the delay has expired, the compensation will be evaluated and applied. Once the compensation is evaluated, the delay starts once again and compensation will be evaluated and applied again when the delay expires once more. This cycle continues as long as the static pressure is outside the *INLET COMPENSATION LOW STATIC PRESSURE* and *INLET COMPENSATION HIGH STATIC PRESSURE* limits. Static pressure compensation will be applied only when the inlet is using the position of a stage whose corresponding *VARIABLE (1-2)/STAGE (3-8) AFFECTS STATIC PRESSURE COMPENSATION* option is set to ON.

***INLET STATIC PRESSURE COMPENSATION LIMIT* (Position Mode)**
This parameter is used to adjust the maximum modification that will be applied to the inlet's opening for static pressure compensation. No more than this amount can be added or subtracted from the inlet's opening. This parameter is adjusted in 1% increments from 0% to 100%.

***VARIABLE (1-2) AFFECTS STATIC PRESSURE COMPENSATION* (Position Mode)**
This parameter is used to activate or deactivate static pressure compensation for the respective variable stage's position. If one of these parameters is set to OFF, static pressure compensation will not be applied for that variable stage's position.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

STAGE (3-8) AFFECTS STATIC PRESSURE COMPENSATION **(Position Mode)**
This parameter is used to activate or deactivate static pressure compensation for the respective variable stage's position. If one of these parameters is set to OFF, static pressure compensation will not be applied for that variable stage's position.

INLET STATIC PRESSURE COMPENSATION ON TIMER **(Position Mode)**
This parameter is used to activate or deactivate static pressure compensation when a ventilation timer is used. If this parameter is set to OFF, static pressure compensation will not be applied as long as a variable stage uses a ventilation timer.

VARIABLE (1-2) NATURAL SHUTOFF **(Natural Mode)**
This parameter is used to determine if a variable output will shutoff in natural mode. If this parameter is set to ON, the variable output will deactivate when a natural mode inlet fills its entering natural mode condition. If this parameter is set to OFF, the variable output will not be affected by natural mode.

VARIABLE STIR FAN (1-2) NATURAL SHUTOFF **(Natural Mode)**
This parameter is used to determine if a variable stir fan will shutoff in natural mode. If this parameter is set to ON, the variable stir fan will deactivate when a natural mode inlet fills its entering natural mode condition. If this parameter is set to OFF, the stir fan will not be affected by natural mode.

STAGE (3-8) NATURAL SHUTOFF **(Natural Mode)**
This parameter is used to determine if the on/off stage will shutoff in natural mode. If this parameter is set to ON, the on/off stage will deactivate when a natural mode inlet fills its entering natural mode condition. If this parameter is set to OFF, the on/off stage will not be affected by natural mode.

STIR FAN (3-6) NATURAL SHUTOFF **(Natural Mode)**
This parameter is used to determine if the stir fan will shutoff in natural mode. If this parameter is set to ON, the stir fan will deactivate when a natural mode inlet fills its entering natural mode condition. If this parameter is set to OFF, the stir fan will not be affected by natural mode.

TUNNEL START STAGE **(Tunnel Mode)**
This parameter is used to set the on/off stage whose activation set point will activate the tunnel mode ventilation. When the temperature of the probes selected in *AVERAGE PROBE SELECT* reaches the *STAGE # RSP* selected in this parameter, a 2-minute transition delay will activate. Once this delay is elapsed, ventilation stages whose option is set to shutoff in tunnel mode will then be deactivated. This parameter is adjusted in 1-stage increments from OFF, 3 to 8.

TEMPERATURE OVERRIDE FOR TUNNEL SHUTOFF **(Tunnel Mode)**
This parameter is used to set the temperature at which outputs that are deactivated due to tunnel mode will reactivate. When the AVERAGE TEMPERATURE READOUT is equal to or above this temperature, ventilation stages that were shutoff by tunnel mode will reactivate. A fixed differential of 0.4°F (0.2°C) is used with this temperature. This parameter is adjusted in 0.1° increments from 0.0°F to 120.0°F (-17.8°C to 48.9°C).

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

DELAY TO GET OUT OF TUNNEL **(Tunnel Mode)**
This parameter is used to set the transition delay when exiting tunnel mode. During this delay, ventilation stages for which their option is set to shutoff in tunnel mode will stay deactivated, inlets will position itself according to their demand except for natural time mode inlet which will continuously open if its temperature, of the probes selected in *INLET (1-2) PROBE SELECT*, have reached the corresponding *INLET (1-2) OPEN TEMP RSP*. This parameter is adjusted in 1-minute increments from 0 minutes to 15 minutes.

VARIABLE (1-2) TUNNEL SHUTOFF **(Tunnel Mode)**
This parameter is used to determine if a variable output will shutoff in tunnel mode. If this parameter is set to ON, the variable output will deactivate when entering the tunnel mode. If this parameter is set to OFF, the variable output will not be affected by tunnel mode.

VARIABLE STIR FAN (1-2) TUNNEL SHUTOFF **(Tunnel Mode)**
This parameter is used to determine if a variable stir fan will shutoff in tunnel mode. If this parameter is set to ON, the variable stir fan will deactivate when entering the tunnel mode. If this parameter is set to OFF, the variable stir fan will not be affected by tunnel mode.

STAGE (3-8) TUNNEL SHUTOFF **(Tunnel Mode)**
This parameter is used to determine if the on/off stage will shutoff in tunnel mode. If this parameter is set to ON, the on/off stage will deactivate when entering tunnel mode. If this parameter is set to OFF, the on/off stage will not be affected by tunnel mode.

STIR FAN (3-6) TUNNEL SHUTOFF **(Tunnel Mode)**
This parameter is used to determine if the stir fan will shutoff in tunnel mode. If this parameter is set to ON, the stir fan will deactivate when entering tunnel mode. If this parameter is set to OFF, the stir fan will not be affected by tunnel mode.

HEATER (1-4) PROBE SELECT
This parameter is used to select the probes that will be used to determine temperature heater (1-4) will follow. Any probe combination may be selected in this parameter.

HEAT PAD (1-2) PROBE SELECT
This parameter is used to select the probes that will be used to determine temperature heat pad (1-2) will follow. Any probe combination may be selected in this parameter.

VARIABLE HEATER (1-2) PROBE SELECT
This parameter is used to select the probes that will be used to determine temperature variable heater (1-2) will follow. Any probe combination may be selected in this parameter.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

ADDITIONAL HEATER HISTORY FORMAT

This parameter is used to select the additional history format that will be recorded for heaters. If this parameter is set to OFF, there will be no additional history unit. If this parameter is set to BTU (British Thermal Unit) or M3H (Cubic Meters per Hour), the heater consumption will be recorded according to *HEATER (1-4) CONSUMPTION* and the activation time of the respective heater. The additional history data is accessible only via remote access software.

RELAY (1-6) SETUP

This parameter is used to select the type of output that relay (1-6) will be. Available choices for a relay are Stg3-Stg8 (On/Off Stages 3-8), Stir3-Str6 (Stir fans 3-6), Heat1-Heat4 (Heaters 1-4), Sprin (Mist/Sprinkler), HtP 1- HtP 2 (Heat pad 1-2) and Tim 1-2 (Timer 1-2).

LOAD DELAY

This parameter is used to set the load delay that will be used by all On/Off stages, Stir Fans 3-6, Mist/Sprinkler and Timers outputs. The load delay prevents any two cooling stages from activating at the same time. The amount of time adjusted for the load delay will separate the activation of two or more cooling relay stages. This delay is applied at all times, even when outputs are operated manually. This parameter is adjusted in 1-second increments from OFF, 1 to 60 seconds.

LANGUAGE DISPLAY

This parameter is used to select the language used by the JD-26 PLUS. If this parameter is set to ENG, the configuration will use the English language. If this parameter is set to FRA, the configuration will use the French language.

COMMUNICATION FILTER

This parameter is reserved for the manufacturer's technical support personnel.

CLOCK

This parameter gives the time of day in format AM/PM. To adjust the time of day, simultaneously press the [+] and [–] buttons for two seconds. At this moment, the minutes will be adjustable. Press the [↑] or [↓] buttons to toggle between hour and minute adjustments.

RF CHANNEL

This parameter is used to select one of the 16 frequencies of the WiFarm network or deactivates wireless communication mode. If this parameter is set to [OFF] (Off), other wireless communication parameters will disappear. This parameter can be adjusted to OFF, 1 to 16.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

RF NETWORK
This parameter is used to identify a WiFarm network. A WiFarm network is formed when the *RF NETWORK* is set to the same value as the RF ADDRESS of the RF communication card of the controller designated as the network master (ex. WebGate in most installations). Other controllers can join the existing network by adjusting *RF NETWORK* to the RF ADDRESS of that same network. This parameter is adjusted digit-by-digit, allowing faster modification for very high numbers. Press the [+] and [–] buttons for two seconds so that the parameter's first digit blinks. Modify that digit using the [+] and [–] buttons. Press the [↑] or [↓] buttons to navigate through the different digits. Press the [+] and [–] buttons for two seconds once again or press any parameter button to end parameter modification. This parameter can be adjusted to any value from 0 to 32767.

RF ADDRESS
This parameter displays the number (address) associated to RF card inserted in the controller. A unique number is given to each RF card of the WiFarm network. There is a unique RF ADDRESS associated to each RF card. The RF ADDRESS also appears on the sticker present on the RF card. The address can be any value from 0 to 32767.

UNIT ID
This parameter is used to select the identification number that will be used when communicating with the remote access software. Each controller must have a unique identification number. This parameter may be adjusted to any value from 1 to 250.

TECH PARAM DISPLAY
This parameter is reserved for the manufacturer's technical support personnel.

TECH PARAM RESULT
This parameter is reserved for the manufacturer's technical support personnel.

CONFIGURATION VERSION
This parameter displays the version of the configuration actually used.

PROCESSOR VERSION
This parameter displays the version of the processor actually used.

SUPERVISOR CODE
This parameter is used to activate or deactivate the supervisor lock. The supervisor lock may prevent modification of any parameters, except the *MSP*, when it is activated. To modify the supervisor lock's state, enter the code's value and press the [+] and [–] buttons for two seconds. If the correct value was entered, the message "Parameters Locked" or "Parameters Unlocked" will appear on the LCD display to indicate the new state of the supervisor lock.

MODIFY SUPERVISOR CODE
This parameter is used to display or hide supervisor code modification parameters. If this parameter is set to ON, *ACTUAL SUPERVISOR CODE, NEW SUPERVISOR CODE* and *CONFIRM NEW SUPERVISOR CODE* parameters will appear.

PARAMETER GROUP # 8: ALARMS (AND SETUP) (CONTINUED…)

ACTUAL SUPERVISOR CODE

This parameter is one of the three parameters used to modify the supervisor code. Enter the actual supervisor code here, the new supervisor code at *NEW SUPERVISOR CODE* and at *CONFIRM NEW SUPERVISOR CODE*, then press the + and – buttons for two seconds to modify the supervisor code.

NEW SUPERVISOR CODE

This parameter is one of the three parameters used to modify the supervisor code. Enter the actual supervisor code at *ACTUAL SUPERVISOR CODE*, the new supervisor code here and at *CONFIRM NEW SUPERVISOR CODE*, then press the + and – buttons for two seconds to modify the supervisor code.

CONFIRM NEW SUPERVISOR CODE

This parameter is one of the three parameters used to modify the supervisor code. Enter the actual supervisor code at *ACTUAL SUPERVISOR CODE*, the new supervisor code at *NEW SUPERVISOR CODE* and here, then press the + and – buttons for two seconds to modify the supervisor code.

Parameter Table

	Parameters ↑↓	Factory Setting	Range of Values
READINGS (with 90 day history for average Temp, Individual probes, Outside Temp, Humidity, Water Meter, Static Pressure, Feeder Counter and Mortalities) 	Average Temp. Readout	—	-58.0 to 140.0°F (-50.0 to 60.0°C)
	Probe 1 Readout		
	Probe 2 Readout		
	Probe 3 Readout		
	Probe 4 Readout		
	Outside Probe Readout		
	Humidity Probe Readout		0 to 100 RH%
	Static Pressure		-0.500 to 0.500''WC
	Average Temperature Low		-58.0 to 140.0°F (-50.0 to 60.0°C)
	Probe 1 Low		
	Probe 2 Low		
	Probe 3 Low		
	Probe 4 Low		
	Outside Probe Low		
	Humidity Probe Low		0 to 100 RH%
	Static Pressure Low		-0.500 to 0.500''WC
	Average Temperature High		-58.0 to 140.0°F (-50.0 to 60.0°C)
	Probe 1 High		
	Probe 2 High		
	Probe 3 High		
	Probe 4 High		
	Outside Probe High		
	Humidity High		0 to 100 RH%
	Static Pressure High		-0.500 to 0.500''WC
	Water Meter		0 to 20000 (Gallons / Litres)
	Water Meter Last 24 Hours		
	Feeder Counter		0 to 1440 minutes
	Mortalities	0	0 to 30000 animals
SETTINGS 	Main Set Point (6 pts ramping)	67.0°F (19.4°C)	-40.0 to 100.0°F (-40.0 to 37.8°C)
	Growth Day	OFF	OFF, -10 to 365
	Night Set Point Option	OFF	ON/OFF
	Actual Main Set Point	19.4°C (67.0°F)	-58.0 to 140.0°F (-50.0 à 60.0°C)
	Night Set Point Temperature	20.0°C (68.0°F)	*MSP* - 40.0°F to *MSP* + 40.0°F (*MSP* - 22.2°C to *MSP* + 22.2°C).
	Night Set Point Time Begin	6:00PM	12:00AM to 11:59PM
	Night Set Point Time End	6:00AM	
	Night Set Point Transition Time	20 minutes	0 to 60 minutes
	Tunnel Mode Allowed	Yes	Yes/No

SECTION C

VARIABLES (with 90 day history for variable 1-2 and variable stir fan 1-2) 	Variable 1 Actual Speed	—	OFF, 0 to 100%
	Variable 1 RSP	2.0°F (1.1°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Variable 1 Minimum Speed	40	0 to 100%
	Variable 1 Maximum Speed	100	
	Variable 1 Bandwidth	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Variable 1 Min. Vent. On Time	15	0 to 900 seconds
	Variable 1 Min. Vent. Off Time	0	
	Variable 1 Humidity Set Point	65	0 to 99 RH%, OFF
	Variable 1 RH Speed Compensation	50	0 to 100%
	Variable 1 Stop RH Influence on Temp. Start	OFF	ON/OFF
	Variable 1 Delay RH Influence on Timer	10	0 to 120 min
	Variable 1 Idle Back	50	OFF, Stop, 0 to 100%
	Variable 1 Minimum Speed affects Inlets	NO	YES/NO
	Variable 1 Inlet Speed Reference	20	0% à 100%
	Variable 1 Manual Override	AUTO	AUTO, OFF, 0 to 100%
	Variable 2 Actual Speed	—	OFF, 0 to 100%
	Variable 2 RSP	2.0°F (1.1°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Variable 2 Minimum Speed	40	0 to 100%
	Variable 2 Maximum Speed	100	
	Variable 2 Bandwidth	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Variable 2 Min. Vent. Timer	ON	ON/OFF
	Variable 2 Idle Back	50	OFF, Stop, 0 to 100%
	Variable 2 Minimum Speed affects Inlets	NO	YES/NO
	Variable 2 Inlet Speed Reference	20	0% à 100%
	Variable 2 Manual Override	AUTO	AUTO, OFF, 0 to 100%
	Variable Stir Fan 1 Actual Speed	—	OFF, 0 to 100%
	Variable Stir Fan 1 SP	74.0°F (23.3°C)	0.0°F to 100.0°F (-17.7°C to 37.8°C)
	Variable Stir Fan 1 Minimum Speed	40	0 to 100%
	Variable Stir Fan 1 Maximum Speed	100	
	Variable Stir Fan 1 Bandwidth	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Variable Stir Fan 1 Manual Override	AUTO	AUTO, OFF, 12 to 100%
	Variable Stir Fan 2 Actual Speed	—	OFF, 0 to 100%
	Variable Stir Fan 2 SP	74.0°F (23.3°C)	0.0°F to 100.0°F (-17.7°C to 37.8°C)
	Variable Stir Fan 2 Minimum Speed	40	0 to 100%
	Variable Stir Fan 2 Maximum Speed	100	
	Variable Stir Fan 2 Bandwidth	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Variable Stir Fan 2 Manual Override	AUTO	AUTO, OFF, 0 to 100%

ON/OFF (with 90 day history for stages 3-8 and stir fan 3-6) 	Stage 3 RSP	5.0°F (2.8°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stage 3 Manual Override	AUTO	AUTO, OFF, ON
	Stage 4 RSP	6.0°F (3.3°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stage 4 Manual Override	AUTO	AUTO, OFF, ON
	Stage 5 RSP	7.0°F (3.9°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stage 5 Manual Override	AUTO	AUTO, OFF, ON
	Stage 6 RSP	8.0°F (4.4°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stage 6 Manual Override	AUTO	AUTO, OFF, ON
	Stage 7 RSP	9.0°F (5.0°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stage 7 Manual Override	AUTO	AUTO, OFF, ON
	Stage 8 RSP	10.0°F (5.6°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stage 8 Manual Override	AUTO	AUTO, OFF, ON
	Stir Fan 3 RSP	5.0°F (2.8°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stir Fan 3 Manual Override	AUTO	AUTO, OFF, ON
	Stir Fan 4 RSP	6.0°F (3.3°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stir Fan 4 Manual Override	AUTO	AUTO, OFF, ON
	Stir Fan 5 RSP	7.0°F (3.9°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stir Fan 5 Manual Override	AUTO	AUTO, OFF, ON
	Stir Fan 6 RSP	8.0°F (4.4°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Stir Fan 6 Manual Override	AUTO	AUTO, OFF, ON
	On/Off Stage Differential	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
HEATERS (with 90 day history per heater for heaters 1-4, heat pad 1-2 and Variable Heater 1-2. For on/off heaters, history can be in BTUx1000, M3H as well as in time) 	Heater 1 RSP	-3.0°F (-1.7°C)	-30.0 to 120.0°F (-16.7 to 48.9°C)
	Heater 1 Differential	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Heater 1 Manual Override	AUTO	AUTO, OFF, ON
	Heater 2 RSP	-3.0°F (-1.7°C)	-30.0 to 120.0°F (-16.7 to 48.9°C)
	Heater 2 Differential	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Heater 2 Manual Override	AUTO	AUTO, OFF, ON
	Heater 3 RSP	-3.0°F (-1.7°C)	-30.0 to 120.0°F (-16.7 to 48.9°C)
	Heater 3 Differential	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Heater 3 Manual Override	AUTO	AUTO, OFF, ON
	Heater 4 RSP	-3.0°F (-1.7°C)	-30.0 to 120.0°F (-16.7 to 48.9°C)
	Heater 4 Differential	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Heater 4 Manual Override	AUTO	AUTO, OFF, ON
	Heat Pad 1 Set Point	67.0°F (19.4°C)	0.0 to 120.0°F (-17.8 to 48.9°C)
	Heat Pad 1 Differential	1.0°F (0.6°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Heat Pad 1 On Time	60	0 to 999 seconds
	Heat Pad 1 Off Time		
	Heat Pad 1 Manual Override	AUTO	AUTO, OFF, ON
	Heat Pad 1 Status	—	OFF or ON
	Heat Pad 2 Set Point	67.0°F (19.4°C)	0.0 to 120.0°F (-17.8 to 48.9°C)
	Heat Pad 2 Differential	1.0°F (0.6°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Heat Pad 2 On Time	60	0 to 999 seconds
	Heat Pad 2 Off Time		
	Heat Pad 2 Manual Override	AUTO	AUTO, OFF, ON
	Heat Pad 2 Status	—	OFF or ON

SECTION C

HEATERS (with 90 day history per heater for heaters 1-4, heat pad 1-2 and Variable Heater 1-2. For on/off heaters, history can be in BTUx1000, M3H as well as in time) 	Variable Heater 1 RSP	-3.0°F (-1.7°C)	-30.0 to 120.0°F (-16.7 to 48.9°C)
	Variable Heater 1 Maximum Temp.	-2.0°F (-1.1°C)	-20.0 to -0.5°F (-11.1 to -0.3°C)
	Variable Heater 1 Minimum Intensity	10	0 to 100%
	Variable Heater 1 Maximum Intensity	80	
	Variable Heater 1 Manual Override	AUTO	AUTO, 0 to 100%
	Variable Heater 2 RSP	-3.0°F (-1.7°C)	-30.0 to 120.0°F (-16.7 to 48.9°C)
	Variable Heater 2 Maximum Temp.	-2.0°F (-1.1°C)	-20.0 to -0.5°F (-11.1 to -0.3°C)
	Variable Heater 2 Minimum Intensity	10	0 to 100%
	Variable Heater 2 Maximum Intensity	80	
	Variable Heater 2 Manual Override	AUTO	AUTO, 0 to 100%
MIST / SPRINKLER (with 90 day history per heater for Mist/Sprinkler and Timer2) 	Mist/Sprinkler Level 1 SP	78.0°F (25.6°C)	0.0°F to 100.0°F (-17.7°C to 37.8°C)
	Mist/Sprinkler Level 1 On Time	60	0 to 900 seconds
	Mist/Sprinkler Level 1 Off Time	6	0 to 20 minutes
	Mist/Sprinkler Level 2 SP	80.0°F (26.7°C)	0.0°F to 100.0°F (-17.7°C to 37.8°C)
	Mist/Sprinkler Level 2 On Time	120	0 to 900 seconds
	Mist/Sprinkler Level 2 Off Time	4	0 to 20 minutes
	Mist/Sprinkler Differential	2.0°F (1.1°C)	0.5 to 20.0°F (0.3 to 11.1°C)
	Mist/Sprinkler Humidity Off	75	0 to 99 RH%, OFF
	Mist/Sprinkler Soak Cycle	ON	ON/OFF
	Mist/Sprinkler Soak Run Time	1:00	0:01 to 99:59 hours
	Mist/Sprinkler Soak On Time		0:00 to 99:59 minutes
	Mist/Sprinkler Soak Off Time		
	Mist/Sprinkler Soak Time Left	—	0:00 to 99:59 hours
	Mist/Sprinkler Activation Period Start	00:00AM	00:00AM to 11:59PM
	Mist/Sprinkler Activation Period End		
	Mist/Sprinkler Manual Override	AUTO	AUTO, OFF, ON
	Timer 1 Cycle 1 On	12:00AM	12:00AM to 11:59PM
	Timer 1 Cycle 1 Off		
	Timer 1 Cycle 2 On		
	Timer 1 Cycle 2 Off		
	Timer 1 Cycle 3 On		
	Timer 1 Cycle 3 Off		
	Timer 1 Cycle 4 On		
	Timer 1 Cycle 4 Off		
	Timer 1 Cycle 5 On		
	Timer 1 Cycle 5 Off		
	Timer 1 Cycle 6 On		
	Timer 1 Cycle 6 Off		
	Timer 1 Manual Override	AUTO	AUTO, OFF, ON
	Timer 2 Cycle 1 On	12:00AM	12:00AM to 11:59PM
	Timer 2 Cycle 1 Off		
	Timer 2 Cycle 2 On		
	Timer 2 Cycle 2 Off		
	Timer 2 Cycle 3 On		
	Timer 2 Cycle 3 Off		

SECTION C

MIST / SPRINKLER (with 90 day history per heater for Mist/Sprinkler and Timer) 		Timer 2 Cycle 4 On	12:00AM	12:00AM to 11:59PM
		Timer 2 Cycle 4 Off		
		Timer 2 Cycle 5 On		
		Timer 2 Cycle 5 Off		
		Timer 2 Cycle 6 On		
		Timer 2 Cycle 6 Off		
		Timer 2 Manual Override	AUTO	AUTO, OFF, ON
INLETS 	Position	Inlet 1 Actual Position	*****	-128 to 127%, ERR
		Inlet 1 Minimum Position	5	0 to 100%
		Inlet 1 Var 1 Lo Position	10	
		Inlet 1 Var 1 Hi Position	15	
		Inlet 1 Var 2 Lo Position	20	
		Inlet 1 Var 2 Hi Position	25	
		Inlet 1 Stage 3 Pos	50	
		Inlet 1 After Stage 3 Pos	50	
		Inlet 1 Stage 4 Pos	55	
		Inlet 1 After Stage 4 Pos	50	
		Inlet 1 Stage 5 Pos	60	
		Inlet 1 After Stage 5 Pos	50	
		Inlet 1 Stage 6 Pos	65	
		Inlet 1 Stage 7 Pos	70	
		Inlet 1 Stage 8 Pos	75	
		Inlet 1 Maximum Opening	100	0 to 100%, OFF
		Inlet 1 Max Open Temp.	85.0°F (29.4°C)	0.0 to 120.0°F (-17.8 to 48.9°C)
		Inlet 1 Winter Position Influence	50%	0 to 100%, OFF
		Inlet 1 Spring/Fall Position Influence	80%	0 to 100%, OFF
		Inlet 1 Temperature Compensation	5%/deg.	0 to 99%/deg.
		Inlet 1 Static Pressure Compensation	OFF	ON/OFF
		Inlet 1 Manual Override	AUTO	AUTO, HOLD, CLOSE, HOLD, OPEN
	Natural Pot	Inlet 1 Actual Position	*****	-128 to 127%, ERR
		Inlet 1 Open Temp. RSP	2.0°F (1.1°C)	0.5 to 120.0°F (0.3 to 48.9°C)
		Inlet 1 Bandwidth		
		Inlet 1 Minimum Opening	5	0 to 100%
		Inlet 1 Maximum Opening	100	
		Inlet 1 Position For Natural	20	
		Inlet 1 Pos Differential For Nat	2	
		Inlet 1 Manual Override	AUTO	AUTO, HOLD, CLOSE, HOLD, OPEN
	Natural Time	Inlet 1 Actual State	*****	HOLD , CLOSE or OPEN
		Inlet 1 Open Temp. RSP	2.0°F (1.1°C)	-20.0 to 120.0°F (-11.1 to 48.9°C)

SECTION C

INLETS 	Natural Time	Inlet 1 Open Progressive	8.0°F (4.4°C)	0.0 to 20.0°F (0.0 to 11.1°C)
		Inlet 1 Close Temp. RSP	-2.0°F (-1.1°C)	-20.0 to 120.0°F (-11.1 to 48.9°C)
		Inlet 1 Close Progressive	-8.0°F (-4.4°C)	-20.0 to 0.0°F (-11.1 to 0.0°C)
		Inlet 1 Differential	1.0°F (0.6°C)	0.5 to 10.0°F (0.3 to 5.6°C)
		Inlet 1 Cycle Time	5	1 to 15 minutes
		Inlet 1 Min Open	10	1 to 999 seconds
		Inlet 1 Max Open	80	
		Inlet 1 Min Close	10	
		Inlet 1 Max Close	60	
		Inlet 1 Manual Override	AUTO	AUTO, HOLD, CLOSE, HOLD, OPEN
	Time	Inlet 1 Actual State	*****	HOLD , CLOSE or OPEN
		Inlet 1 Calib Close Time	OFF	OFF, 1 to 999 seconds
		Inlet 1 No Vent Run Time	0	0 to 999 seconds
		Inlet 1 Var 1 Run Time	10	
		Inlet 1 Var 2 Run Time		
		Inlet 1 Stage 3 Run Time		
		Inlet 1 Stage 4 Run Time		
		Inlet 1 Stage 5 Run Time		
		Inlet 1 Stage 6 Run Time		
		Inlet 1 Stage 7 Run Time		
		Inlet 1 Stage 8 Run Time		
		Inlet 1 Tunnel Inlet	OFF	ON/OFF
		Inlet 1 Manual Override	AUTO	AUTO, HOLD, CLOSE, HOLD, OPEN
	Position	Inlet 2 Actual Position	*****	-128 to 127%, ERR
		Inlet 2 Minimum Position	5	0 to 100%
		Inlet 2 Var 1 Lo Position	10	
		Inlet 2 Var 1 Hi Position	15	
		Inlet 2 Var 2 Lo Position	20	
		Inlet 2 Var 2 Hi Position	25	
		Inlet 2 Stage 3 Pos	50	
		Inlet 2 After Stage 3 Pos	50	
		Inlet 2 Stage 4 Pos	55	
		Inlet 2 After Stage 4 Pos	55	
		Inlet 2 Stage 5 Pos	60	
		Inlet 2 After Stage 5 Pos	60	
		Inlet 2 Stage 6 Pos	65	
		Inlet 2 Stage 7 Pos	70	
		Inlet 2 Stage 8 Pos	75	
		Inlet 2 Maximum Opening	100	0 to 100%, OFF
		Inlet 2 Max Open Temp.	85.0°F (29.4°C)	0.0 to 120.0°F (-17.8 to 48.9°C)
		Inlet 2 Winter Position Influence	50%	0 to 100%, OFF
		Inlet 2 Spring/Fall Position Influence	80%	0 to 100%, OFF
		Inlet 2 Temperature Compensation	5%/deg.	0 to 99%/deg.

INLETS 	Position	Inlet 2 Static Pressure Compensation	OFF	ON/OFF
		Inlet 2 Manual Override	AUTO	AUTO, HOLD, CLOSE, HOLD, OPEN
	Natural Pot	Inlet 2 Actual Position	*****	-128 to 127%, ERR
		Inlet 2 Open Temp. RSP	2.0°F (1.1°C)	0.5 to 120.0°F (0.3 to 48.9°C)
		Inlet 2 Bandwidth		
		Inlet 2 Minimum Opening	5	0 to 100%
		Inlet 2 Maximum Opening	100	
		Inlet 2 Position For Natural	20	
		Inlet 2 Pos Differential For Nat	2	
		Inlet 2 Manual Override	AUTO	AUTO, HOLD, CLOSE, HOLD, OPEN
	Natural Time	Inlet 2 Actual State	*****	HOLD , CLOSE or OPEN
		Inlet 2 Open Temp. RSP	2.0°F (-1.1°C)	-20.0 to 120.0°F (-11.1 to 48.9°C)
		Inlet 2 Open Progressive	8.0°F (4.4°C)	0.0 to 20.0°F (0.0 to 11.1°C)
		Inlet 2Close Temp. RSP	-2.0°F (-1.1°C)	-20.0 to 120.0°F (-11.1 to 48.9°C)
		Inlet 2 Close Progressive	-8.0°F (-4.4°C)	-20.0 to 0.0°F (-11.1 to 0.0°C)
		Inlet 2 Differential	1.0°F (0.6°C)	0.5 to 10.0°F (0.3 to 5.6°C)
		Inlet 2 Cycle Time	5	1 to 15 minutes
		Inlet 2 Min Open	10	1 to 999 seconds
		Inlet 2 Max Open	80	
		Inlet 2 Min Close	10	
		Inlet 2 Max Close	60	
		Inlet 2 Manual Override	AUTO	AUTO, HOLD, CLOSE, HOLD, OPEN
	Time	Inlet 2 Actual State	*****	HOLD , CLOSE or OPEN
		Inlet 2 Calib Close Time	OFF	OFF, 1 to 999 seconds
		Inlet 2 No Vent Run Time	0	0 to 999 seconds
		Inlet 2 Var 1 Run Time	10	
		Inlet 2 Var 2 Run Time		
		Inlet 2 Stage 3 Run Time		
		Inlet 2 Stage 4 Run Time		
		Inlet 2 Stage 5 Run Time		
		Inlet 2 Stage 6 Run Time		
		Inlet 2 Stage 7 Run Time		
		Inlet 2 Stage 8 Run Time		
		Inlet 2 Tunnel Inlet	OFF	ON/OFF
		Inlet 2 Manual Override	AUTO	AUTO, HOLD, CLOSE, HOLD, OPEN

ALARMS 	Low Alarm RSP	-10.0°F (-5.6°C)	-40.0 to 120.0°F (-22.2 to 48.9°C)
	High Alarm RSP	12.0°F (6.7°C)	0.5 to 120.0°F (0.3 to 48.9°C)
	Critical Temperature High Alarm	95.0°F (35.0°C)	-40.0 to 119.9°F, OFF (-40.0 to 48.8°C, OFF)
	Outside Temperature Offset Alarm	OFF	0.5 to 40.0°F, OFF (0.3 to 22.2°C), OFF
	Water Meter High Limit	20	OFF, 1 to 999 (gallons / litres)
	Water Meter High Limit Check Rate	10	OFF, 1 to 999 minutes
	Water Meter No Pulse Check Rate		OFF, 1 to 999 minutes
	Maximum Limit Time Period Water Alarm (6 pts ramping)	500	OFF, 1 to 20000 (Gallons / Litres)
	Start Time Period Water Alarm	6:00AM	12:00AM to 11:59PM
	End Time Period Water Alarm	6:00PM	
	Reinitialize Water Alarm	*****	*****
	Water Meter Calibration	1	1 to 99 (gallons / litres)
	Water Meter Unit	gallon	gallon or litre
	Low Static Pressure Alarm	0.010	-0.500 to 0.500"WC
	High Static Pressure Alarm	0.100	-0.500 to 0.500"WC
	Static Pressure Alarm Delay	300	0 to 999 seconds
	Reinitialize Static Pressure Alarm	*****	*****
	Last Alarm Code	----	----, 1 to 25
	Alarm Relay	ON	ON/OFF
	Test Mode	OFF	OFF, -3.8 to 130.8°F (OFF, -19.9 to 54.9°C)
	Temperature Unit	˚F	˚F or ˚C
	Average Probe Select	1 2 3 4	Any probe combination
	Temperature Alarm Probe Select	1 2 3 4	Any probe combination
	Probe 5 Option	Out	OFF, Out or Feed
	Probe 6 Option	OFF	OFF, WATER or PRESS
	Probe 1 Calibration	0.0	-20.0 to 20.0°F (-11.1 to 11.1°C)
	Probe 2 Calibration		
	Probe 3 Calibration		
	Probe 4 Calibration		
	Outside Probe Calibration		
	Water Meter Option	ON	ON/OFF
	Humidity Calibration	0	-20RH% to 20RH%
	Static Pressure Calibration	0.000	-0.500 to 0.500"WC
	Port P1 Option	None	None, RH or 0-10
	0-10 Volt Out1 Logic		None, Var1, Var2, Stir1, Stir2, Heat1, Heat2
	0-10 Volt Out2 Logic		

ALARMS 	Variable 1 Motor Curve	7	1 to 9
	Variable 2 Motor Curve		
	Variable Stir Fan 1 Motor Curve		
	Variable Stir Fan 2 Motor Curve		
	Variable Stir Fan 1 Probe Select	1 2 3 4	Any probe combination
	Variable Stir Fan 2 Probe Select		
	# Inlet Active	0	0 to 2
	Inlet 1 Probe Select	1 2 3 4	Any probe combination
	Inlet 1 Mode	POS	POS, NAT P, NAT T or TIME
	Inlet 1 Min Vent Position Mode	VAR 1	VAR 1, STG, 0 to 100%
	Inlet 1 Set Low Limit	CLR	*****
	Inlet 1 Set High Limit		
	Inlet 1 Requested Opening	*****	0 to 100%
	Inlet 1 Requested State		HOLD , CLOSE or OPEN
	Inlet 1 Temperature Position Delay	OFF	OFF, 1 to 20 minutes
	Inlet 1 Precision	1%	1 to 20%
	Inlet 1 Max Run Time	OFF	1 to 9, OFF
	Inlet 1 Alarm Option	ON	ON/OFF
	Inlet 1 Close In Natural		
	Inlet 1 Follow Natural Potentiometer Inlet	OFF	OFF, 1 to 2
	Inlet 1 Auto-Calibration Option	OFF	ON/OFF
	Inlet 1 Auto-Calibration Time	12:00AM	12:00AM to 11:59PM
	Inlet 1 Auto-Calibration Frequency	1	1 to 20 days
	Inlet 1 Auto-Calibration Duration	60	20 to 999 seconds
	Inlet 1 Close In Tunnel	ON	ON/OFF
	Inlet 2 Probe Select	1 2 3 4	Any probe combination
	Inlet 2 Mode	POS	POS, NAT P, NAT T or TIME
	Inlet 2 Min Vent Position Mode	VAR 1	VAR 1, STG, 0 to 100%
	Inlet 2 Set Low Limit	CLR	*****
	Inlet 2 Set High Limit		
	Inlet 2 Requested Opening	*****	0 to 100%
	Inlet 2 Requested State		HOLD , CLOSE or OPEN
	Inlet 2 Temperature Position Delay	OFF	OFF, 1 to 20 minutes
	Inlet 2 Precision	1%	1 to 20%
	Inlet 2 Max Run Time	OFF	1 to 9, OFF
	Inlet 2 Alarm Option	ON	ON/OFF
	Inlet 2 Close In Natural		
	Inlet 2 Follow Natural Potentiometer Inlet	OFF	OFF, 1 to 2
	Inlet 2 Close In Tunnel	ON	ON/OFF
	Inlet 2 Auto-Calibration Option	OFF	ON/OFF
	Inlet 2 Auto-Calibration Time	12:00AM	12:00AM to 11:59PM
	Inlet 2 Auto-Calibration Frequency	1	1 to 20 days
	Inlet 2 Auto-Calibration Duration	60	20 to 999 seconds
	Outside Temperature for Natural	85.0°F (29.4°C)	0.0 to 120.0°F (-17.8 to 48.9°C)
	Temperature Override for Natural Shutoff	85.0°F (29.4°C)	0.0 to 120.0°F (-17.8 to 48.9°C)
	# Opening Cycle for Natural Shutoff	2	0 to 10
	# Closing Cycle to Get Out of Natural		

SECTION C

ALARMS 	Inlet Influence Spring/Fall Temperature	45°F (7.2°C)	0.0°F to 120.0°F (-17.8°C to 48.9°C)
	Inlet Influence Winter Temperature	32.0°F (0.0°C)	0.0 to 120.0°F (-17.8 to 48.9°C)
	Inlet Influence Summer Temperature	50.0°F (10.0°C)	
	Inlet Actual Static Pressure Compensation	*****	-100 to 100%
	Inlet Static Pressure Compensation	5%	0 to 100%
	Inlet Compensation Low Static Pressure	0.030"WC	-0.500"WC to 0.500"WC
	Inlet Compensation High Static Pressure	0.100"WC	
	Inlet Static Pressure Compensation Delay	30 seconds	0 to 999 seconds
	Inlet Static Pressure Compensation Limit	25%	0 to 100%
	Variable 1 Affects Static Pressure Compensation	ON	ON/OFF
	Variable 2 Affects Static Pressure Compensation		
	Stage 3 Affects Static Pressure Compensation		
	Stage 4 Affects Static Pressure Compensation		
	Stage 5 Affects Static Pressure Compensation		
	Stage 6 Affects Static Pressure Compensation		
	Stage 7 Affects Static Pressure Compensation		
	Stage 8 Affects Static Pressure Compensation		
	Var 1 Natural Shutoff		
	Var 2 Natural Shutoff		
	Variable Stir Fan 1 Natural Shutoff		
	Variable Stir Fan 2 Natural Shutoff		
	Stage 3 Natural Shutoff		
	Stage 4 Natural Shutoff		
	Stage 5 Natural Shutoff		
	Stage 6 Natural Shutoff		
	Stage 7 Natural Shutoff		
	Stage 8 Natural Shutoff		
	Stir Fan 3 Natural Shutoff		
	Stir Fan 4 Natural Shutoff		
	Stir Fan 5 Natural Shutoff		
	Stir Fan 6 Natural Shutoff		
	Tunnel Start Stage	OFF	OFF, 3 to 8
	Temperature Override for Tunnel Shutoff	85.0°F (29.4°C)	0.0 to 120.0°F (-17.8 to 48.9°C)
	Delay to Get Out of Tunnel	3	0 to 15 min
	Var 1 Tunnel Shutoff	ON	ON/OFF
	Var 2 Tunnel Shutoff		
	Variable Stir Fan 1 Tunnel Shutoff		
	Variable Stir Fan 2 Tunnel Shutoff		
	Stage 3 Tunnel Shutoff		

ALARMS 	Stage 4 Tunnel Shutoff	ON	ON/OFF
	Stage 5 Tunnel Shutoff		
	Stage 6 Tunnel Shutoff		
	Stage 7 Tunnel Shutoff		
	Stage 8 Tunnel Shutoff		
	Stir Fan 3 Tunnel Shutoff		
	Stir Fan 4 Tunnel Shutoff		
	Stir Fan 5 Tunnel Shutoff		
	Stir Fan 6 Tunnel Shutoff		
	Heater 1 Probe Select	1 - - -	Any probe combination
	Heater 2 Probe Select	- 2 - -	
	Heater 3 Probe Select	- - 3 -	
	Heater 4 Probe Select	- - - 4	
	Heat Pad 1 Probe Select	- - - 4	
	Heat Pad 2 Probe Select		
	Variable Heater 1 Probe Select	1234	
	Variable Heater 2 Probe Select		
	Additional Heater History Format (x1000)	OFF	OFF, BTU, M3H
	Heater 1 Consumption	40x1000BTU (0.40 M3H)	0 to 999x1000 BTU (0.00 to 99.99 M3H)
	Heater 2 Consumption		
	Heater 3 Consumption		
	Heater 4 Consumption	40x1000BTU (0.40 M3H)	0 to 999x1000 BTU (0.00 to 99.99 M3H)
	Relay 1 Setup	Stg 3	None, Stg3-8, Stir3-6, Heat1-4, Sprin, HtP 1-2 or Tim 1-2
	Relay 2 Setup	Stg 4	
	Relay 3 Setup	Stg 5	
	Relay 4 Setup	Stg 6	
	Relay 5 Setup	Stg 7	
	Relay 6 Setup	Stg 8	
	Load Delay	OFF	OFF, 1 to 60 seconds
	Language Display	Eng	Eng, Fra
	Communication Filter	300	0 to 300
	Clock	*****	****
	RF Channel	OFF	OFF, 1 to 16
	RF Network	0	0 to 32767
	RF Address	*****	
	Unit ID	1	1 to 250
	Tech Param Display	OFF	OFF, 1 to 64
	Tech Param Result	*****	*****
	Configuration Version		
	Processor Version		
	Supervisor Code		
	Modify Supervisor Code	OFF	ON/OFF
	Actual Supervisor Code	*****	*****
	New Supervisor Code		
	Confirm New Supervisor Code		

Alarms

The alarm relay is normally activated, but it will deactivate 15 to 25 seconds of a power failure or after an alarm condition occurs.

Situational Alarm Message List

These alarms will activate the alarm relay and light up the alarm LED when the condition is present. When the situation is corrected, will deactivate the alarm relay and the alarm LED.

Message	Cause
Probe (1-4) Temperature Too High	- The PROBE (1-4) READOUT is greater than *MSP + HIGH ALARM RSP* and the OUTSIDE TEMPERATURE is equal to or below the *MSP*. - The PROBE (1-4) READOUT is greater than OUTSIDE TEMPERATURE + *OUTSIDE OFFSET ALARM* and the OUTSIDE TEMPERATURE is above the *MSP*. - The PROBE (1-4) READOUT exceeds the limit *CRITICAL HIGH ALARM*.
Probe (1-4)Too Low	- The PROBE (1-4) READOUT is lower than *MSP + LOW ALARM RSP*.
Inside Probe # Defective	- An inside sensor used by the configuration becomes short or open circuit.
Outside Probe Defective	- The outside probe is used by the configuration becomes short or open circuit.
Inlet # Potentiometer Defective	- An inlet sets in position or natural potentiometer mode and used by the configuration has a defective potentiometer and the respective *INLET (1-2) ALARM OPTION* is set to ON.
Error Code 1	- The JD controller has reset 10 times and each reset was less than 15 minutes apart from the last one.
0-10V ID1 Not Responding	- 0-10V ID 1 chip is missing. - Output board is defective or unplugged.
0-10V ID2 Not Responding	- 0-10V ID 2 chip is missing. - Output board is defective or unplugged.

Continuous Alarm Message List

These alarms will activate the alarm relay and light up the alarm LED when the condition is present and when the situation is corrected. The alarm must be reinitialized to deactivate the alarm relay and alarm LED.

Message	Cause
High Limit Water Alarm	- The amount of water units (litres or gallons) counted has exceeded *WATER METER HIGH LIMIT* within the *WATER METER HIGH LIMIT CHECK RATE*.
No Pulse Water Alarm	- No water units (litres or gallons) have been counted throughout the *WATER METER NO PULSE CHECK RATE*.
Static Pressure Too Low	- Static pressure has remained below *LOW STATIC PRESSURE ALARM* throughout the *STATIC PRESSURE ALARM DELAY*.
Static Pressure Too High	- Static pressure has remained above *HIGH STATIC PRESSURE ALARM* throughout the *STATIC PRESSURE ALARM DELAY*.
Error Code 3-4	- If one or more of these error codes appear, contact your distributor.

Event Message List

These messages are not alarms, but events or conditions that are signified to the user.

Message	Cause
JD-HUM 3 Probe Not Responding	- The humidity probe is activated and has not communicated with the controller for 5 minutes.
Wrong Module on P1	- The module connected to the P1 communication port does not correspond to the choice made in the *PORT P1 OPTION* parameter.
Inlet # Potentiometer Defective	- An inlet sets in position or natural potentiometer mode and used by the configuration has a defective potentiometer and the respective *INLET (1-2) ALARM OPTION* is set to OFF.
Inlet # Cool Down Activated	- The respective inlet's cool down function has activated.
Alarm Relay Deactivated	- The *ALARM RELAY* is set to OFF.
Test Mode Activated	- All inside temperature readings are replaced by the *TEST MODE* parameter because it is not OFF.

Motor curve

TYPE OF MOTOR				
CURVE	**BRAND**	**MODEL**	**VOLTAGE**	**HEIGHT**
1	Multifan	4E40	230 V.	16"
2	Flex	FM0025	230 V.	18"
2	Multifan	2E20	230 V.	8"
2	Multifan	4E35	230 V.	14"
2	Multifan	4E50	230 V.	20"
2	Multifan	AF24M'E	230 V.	24"
2	Multifan	6E63	230 V.	24"
2	Multifan	6E71	230 V.	28"
2	Multifan	8E92	230 V.	36"
2	Ziehl		230 V.	
3	Flex	FM0024	230 V.	14"
3	Flex	FM0024	230 V.	16"
3	Flex	FM0026	230 V.	24"
3	Multifan	2E30	230 V.	12"
3	Multifan	4E45	230 V.	18"
3	Multifan	6E56	230 V.	22"
3	Multifan/AF	AF36M	230 V.	36"
3	Aerotech-F	AT242	230 V.	24"
4	Multifan	2E25	230 V.	10"
4	Marathon 1/4HP		230 V.	16"
4	Marathon 1/3HP		230 V.	18"
5	JD Motor	5KCP39…	230 V.	12"
5	Leeson 1/4HP	AF12L	230 V.	12"
5	JD Motor	5KCP39…	230 V.	14"
5	Emerson	K55HXJ…	230 V.	14"
6	Oversized motors			
7	Flex	FM0024	230 V.	12"
7	Flex	FM0026	230 V.	20"
7	Multifan	4E30	230 V.	12"
7	Multifan	2E35	230 V.	14"
8	Multifan	4E25	230 V.	10"

Additional information on parameters

The following is a more detailed description of general-purpose parameters.

Time of Day (time clock)

The JD-26 PLUS comes with its own integrated time clock. This feature is appreciated by users who want to know the current time of day. Note that if a power failure occurs, the clock will not run and will start back at the time the power failure occurred. However, the time clock's main purpose is to allow ramping to operate.

The following instructions show how to change the time of day on the control:

The time is displayed in HH:MM format and does not flash. Press the [+] and [–] buttons to access clock adjustment mode. At this moment, the minutes will flash and be adjustable. Press the [↑] or [↓] buttons to toggle between hour and minute adjustments. Press the [+] and [–] buttons or any menu button to exit the clock adjustment mode.

Growth Day

The Growth Day plays an active part in the ramping settings. With this parameter, users can program the growth day of a growth curve. Day by day, the growth calendar's value will increase by increment of 1, from a minimum setting of -10 to a maximum setting of 365.

Ramping

The ramping parameter automatically will calculate and change its value every hour. The amount by which the parameter is changed is determined by the ramping curve.

Before the first point, the parameter takes the value entered for the first point. For example, point 1 is at 80°F at day #10. From day #1 to day #10, the value will be 80°F.

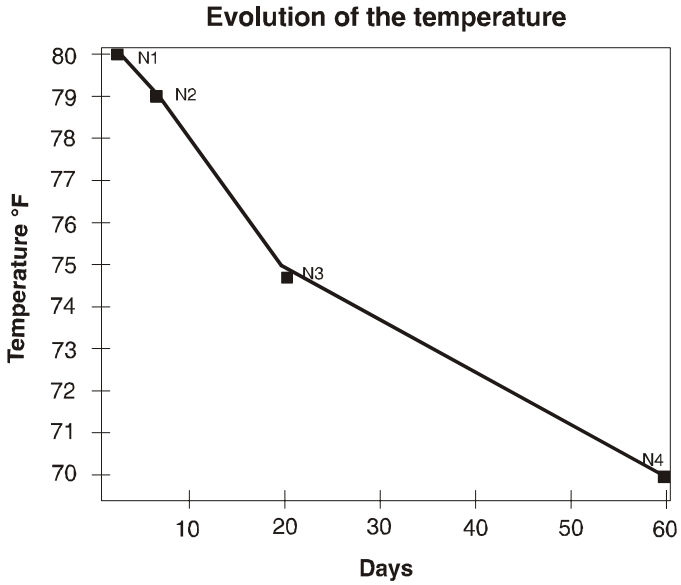
After the last point, the curve remains operational. While it continues to count days, the set point does not flash and cannot be changed. For example, the last point (day #40) is set at 70°F. After day #40 the parameter remains at 70°F, until ramping is deactivated, by setting the Growth Day to OFF.

The following instructions indicate how to set the Growth Day of a ramping curve:

Select the ramping parameter (ex: Main Set Point, Minimum speed, etc.). Make sure the Growth day is set to OFF. Press the [+] and [–] buttons simultaneously for two seconds. At this moment, the first day of the growth curve will be displayed.

When a day is displayed, pressing the [↓] button will display the associated value, whereas pressing the [↑] button will display the preceding value. When a value is displayed, pressing the [↓] button will display the next day, whereas pressing the [↑] button will display the associated day.

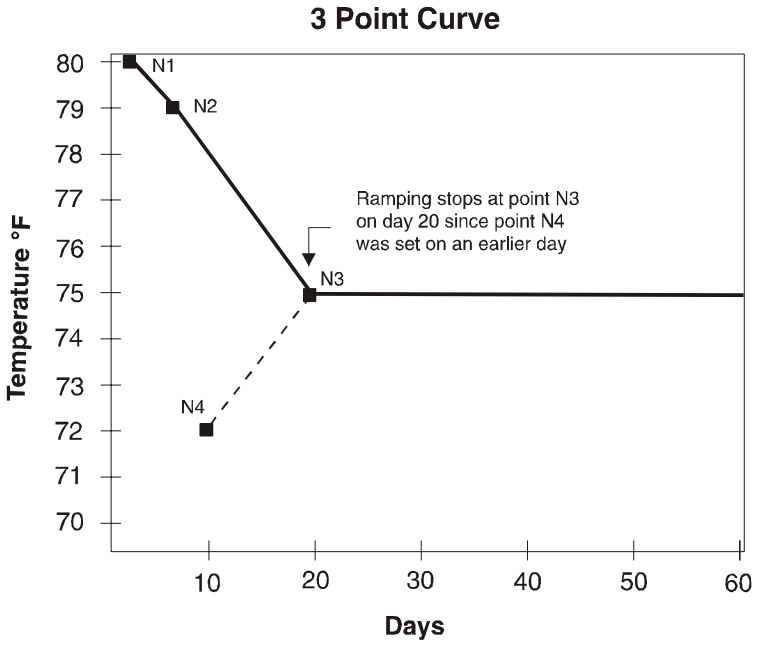
The following graph shows a typical ramping curve for the temperature.



This six points curve may be entered as follows:

1. Make sure the Growth Day is OFF.
2. Select the Ramping parameter with the parameter buttons and the [↑] and [↓] buttons.
3. The value on the LED display should be flashing.
4. Press the [+] and [–] buttons for two seconds. At this moment, the LCD display will show "Adjust (parameter name) Curve Day Point 1 (the first of the day point of the curve).
5. Set this value to 1 using the [+] and [–] buttons.
6. Press the [↓] button. The LCD display will show "Adjust (parameter name) Curve Value Point 1 (the first of the value point of the curve).
7. You may now enter the first temperature value for curve (80°F) using the [+] and [–] buttons.
8. Press the [↓] button. At this moment, the next day will be displayed and adjustable.
9. Repeat steps 5 to 8 for the rest of the curve points. In this example, the days are 1, 8, 20 and 60 and the value points are 80°F, 79°F, 75°F and 70°F.
10. Once the last value point is entered, press the [+] and [–] buttons for two seconds. You should now be back to a point where the LED display is flashing a temperature value.
11. The whole ramping curve is now set. To enable temperature ramping, simply set the Growth Day to any day value and the JD-26 PLUS will follow the curve.

Ramping is interrupted when days fail to respect a chronological order or when to consecutive points have the same day. This characteristic may be useful to users unwilling to use all 4 "preset" ramping points. The following illustration shows how users can stop the curve without entering the last point.



INDEX / WARRANTY JD-26 PLUS SECTION D

TABLE OF CONTENTS

Section A

TABLE OF CONTENTS

Section B

SECTION D

TABLE OF FIGURES

TABLE OF CONTENTS

Section C

TABLE OF CONTENTS

Section D

SECTION D

Limited Warranty

The manufactured equipment and supplied components have gone through rigorous inspection to assure optimal quality of product and reliability. Individual controls are factory tested under load, however the possibility of equipment failure and/or malfunction may still exist.

For service, contact your local retailer or supplier. The warranty period shall be for two years from manufacturing date. Proof of purchase is required for warranty validation.

In all cases, the warranty shall apply only to defects in workmanship and specifically exclude any damage caused by over-voltage, short circuit, misuse, acts of vandalism, lightning, fortuitous events, acts of God, flood, fire, hail or any other natural disaster. Any unauthorized work, modification or repair on this product automatically voids the warranty and disclaims the manufacturer from all responsibility.

The manufacturer assumes only those obligations set forth herein, excluding all other warranties or obligations. This warranty stipulates that in all cases the manufacturer shall be liable only for the supply of replacement parts or goods and shall not be liable for any personal injury, damages, loss of profits, interrupted operations, fines for infringement of the law or damages to the production of the PURCHASER and the PURCHASER shall take up the defence and hold the manufacturer faultless regarding any legal or extra legal proceedings, notice, or claim by the customer or by a third party, and regarding any legal and extra legal expenses and fees brought forward on by such damages.

JD-26 PLUS VER: 1.2
September 14, 2017