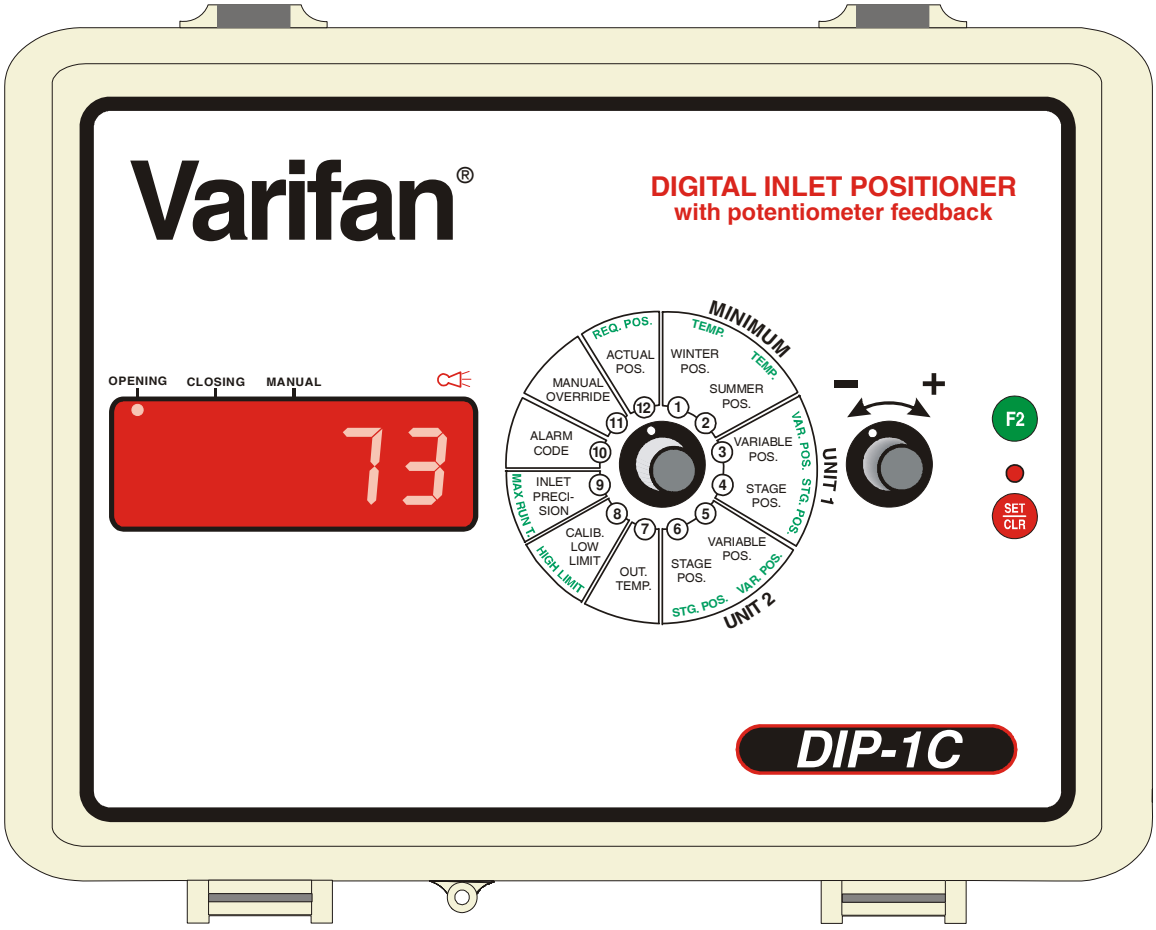
MANUAL
DIP-1C



Installation / User's Guide

ATTENTION ELECTRICIAN
SEE WIRING DETAILS ON PAGES A-3 TO A-6 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.

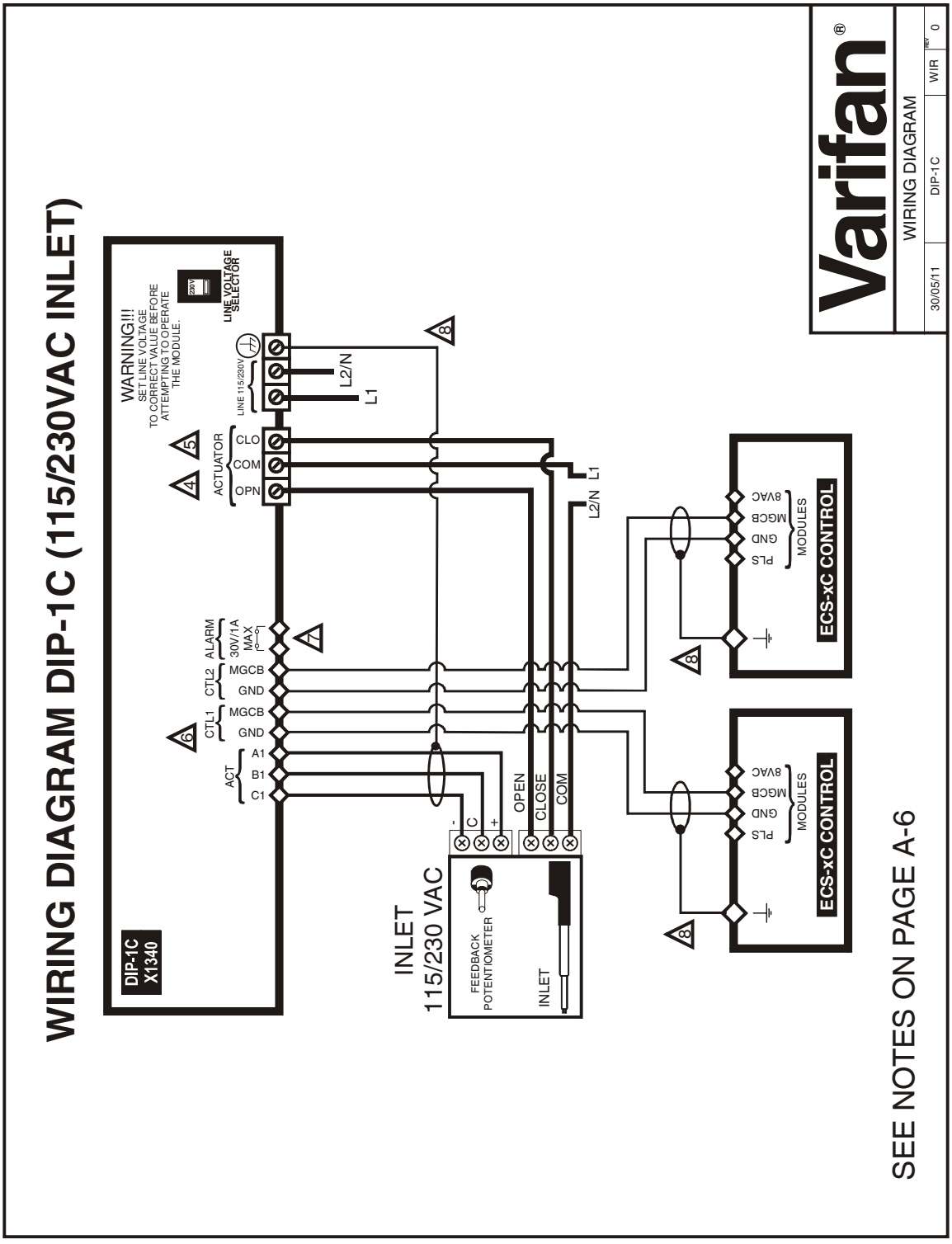
RECOMMENDATIONS

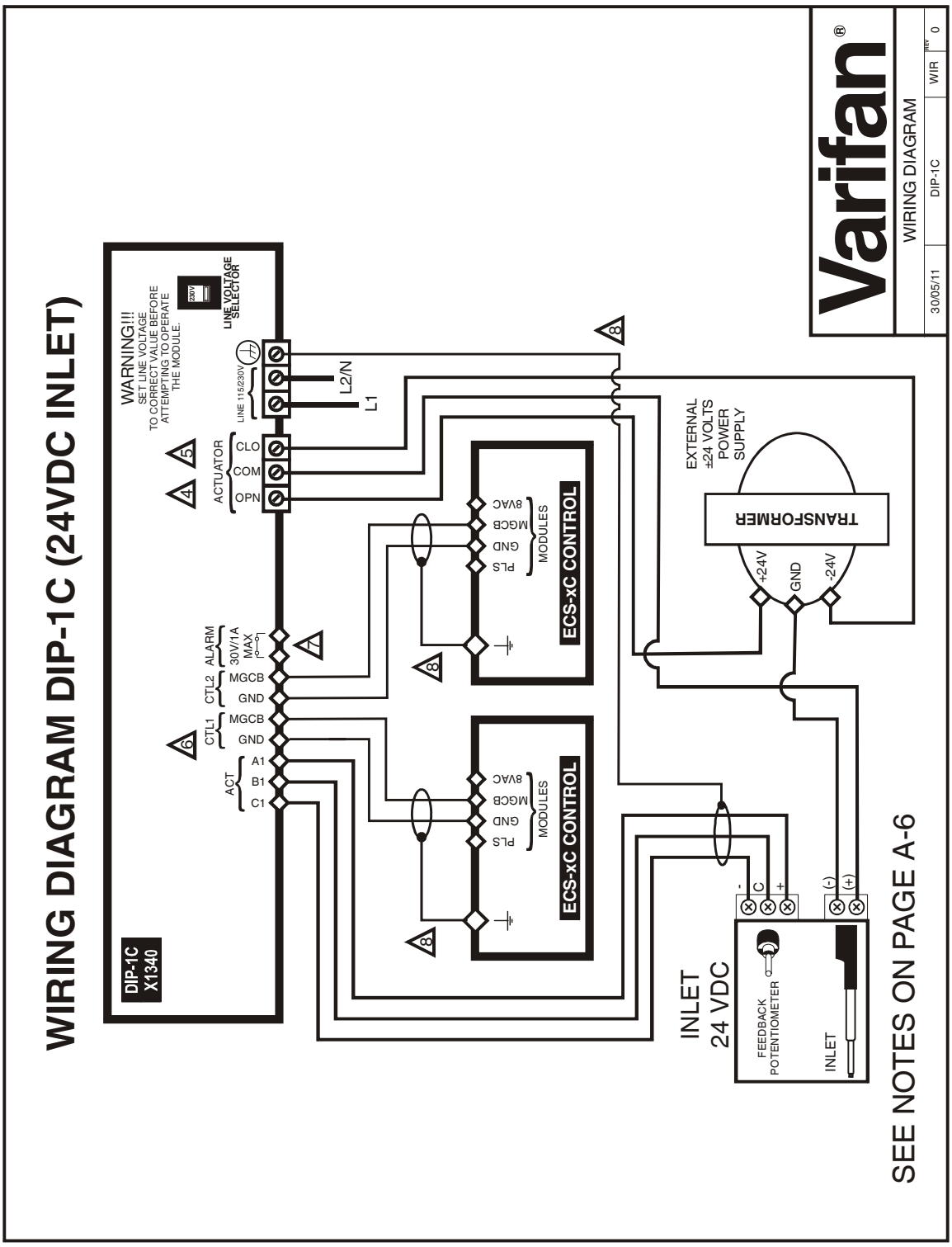
The manufacturer recommends that all installation procedures described herein be performed by a qualified electrician or installation technician. Furthermore the manufacturer recommends testing all the functions and equipment connected to the DIP-1C, including the alarm system and backup devices, after 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.

WIRING DIAGRAM DIP-1C SECTION A

DIP-1C WIRING DIAGRAM




WIRING DIAGRAM DIP-1C (24VDC INLET)
Varifan®
WIRING DIAGRAM
30/05/11
DIP-1C
WIR
REV 0
DIP-1C
X1340
WARNING!!!
SET LINE VOLTAGE
TO CORRECT VALUE BEFORE
ATTEMPTING TO OPERATE
THE MODULE.
LINE VOLTAGE SELECTOR
230V
LINE 115/230V
L2/N
L1
ACTUATOR
CLO
COM
OPN
ALARM
30V/1A MAX
CTL2
MGCB
GND
CTL1
MGCB
GND
ACT
A1
B1
C1
MODULES
PLS
GND
MGCB
8VAC
ECS-xC CONTROL
EXTERNAL ±24 VOLTS POWER SUPPLY
TRANSFORMER
+24V
GND
-24V
INLET 24 VDC
FEEDBACK POTENTIOMETER
INLET
SEE NOTES ON PAGE A-6

DIP-1C

Electrician's notes

1 (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)

2 HIGH VOLTAGE WIRE INSTALLED ACCORDING TO LOCAL WIRING CODE.

3 INSTALL LOW VOLTAGE WIRES (POTENTIOMETER OR COMPUTER LINK 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.

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

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

6 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.

7 CHECK INSTALLATION GUIDE FOR ALARM WIRING.

8 USE SHIELD FOR SHIELDING PURPOSE ONLY. CONNECT THE SHIELD TO GROUND PLATE⏚. NEVER LEAVE THE SHIELD UNCONNECTED AT BOTH ENDS. NEVER CONNECT BOTH ENDS OF THE SHIELD TO GROUND PLATE⏚. THE USE OF A SHIELD FOR POTENTIOMETER AND ALL COMMUNICATION WIRE IS **MANDATORY**.

INSTALLATION
DIP-1C
SECTION B

DIP-1C INSTALLATION

This section will inform the electrician on proper wiring and installation procedures for the DIP-1C.

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 DIP-1C 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 DIP-1C Module
4 Brackets / 4 Screws
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 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

DIP-1C Module

- It is recommended to install the unit in a hallway to limit the DIP-1C exposure to noxious gases.
- In order to avoid condensation problems inside the module, it is recommended to install the DIP-1C on an inside wall. If it is not possible, use spacers to have an air gap between the wall and the DIP-1C.
- It is required to install the DIP-1C side up with the cable entry holes facing down.
- The enclosure is watertight, but do not spray water or immerse the DIP-1C in water. Cover it carefully with plastic when cleaning the room.
- The DIP-1C 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 module.
- Do not install the DIP-1C 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 DIP-1C power ground only, except for the cable connected to the optional PC interface and to the ventilation controllers. The shield is needed to protect the DIP-1C 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 DIP-1C.
- Use separate conduit for the low voltage cables (communication) 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.
- Communication cables must be 820’ (250m) or less.
- It is prohibited to use overhead cables outside the building.

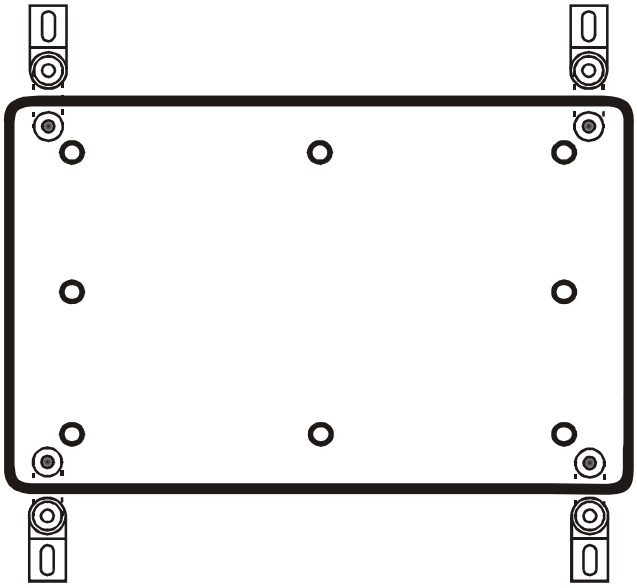
Electrical Power

- Protection from electrical surge should be included in the planning of each installation.
- It is strongly recommended to have a backup power source to ensure life-sustaining conditions in case of power failure (see figure 2).
- 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 module.
- Once you have adjusted the module position, tighten the four mounting screws.

FIGURE NO. 1 Mounting Position and Devices



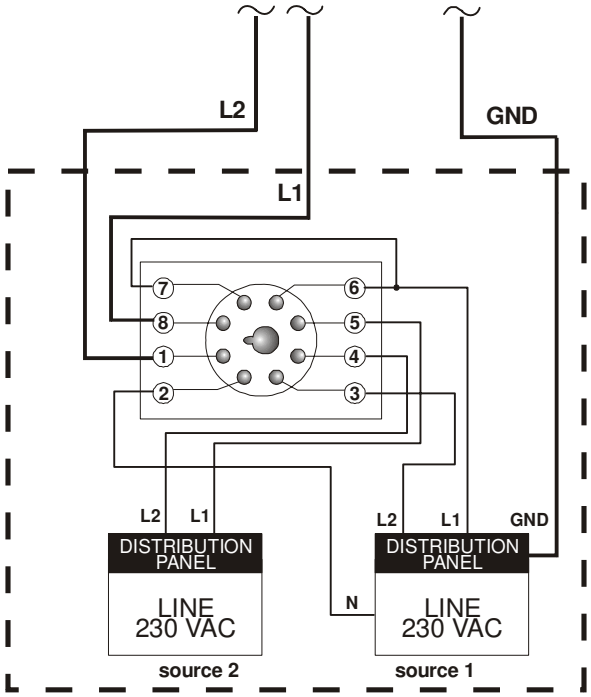
Connection Procedure

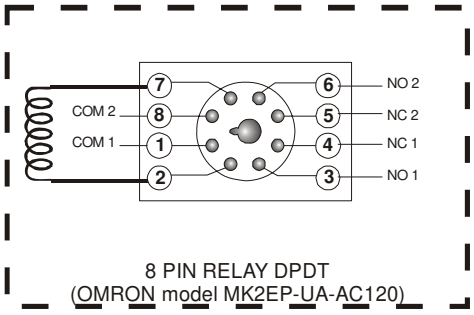
Detailed Wiring Diagrams

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. 2 Typical Power Backup Wiring





SECTION B

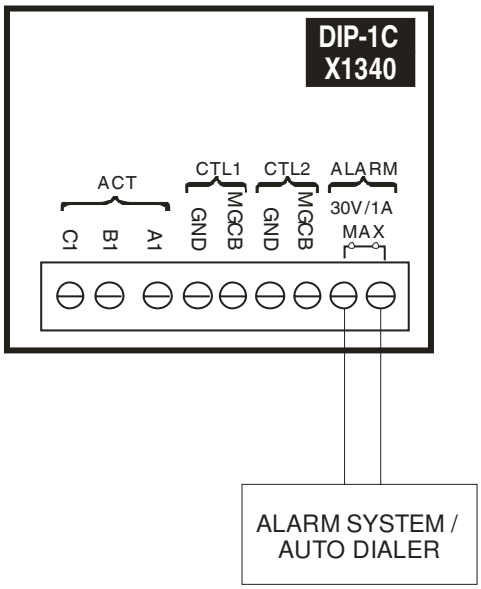
DIP-1C INSTALLATION

Typical Alarm Connection Wiring

The DIP-1C provides a normally closed dry contact to set off an alarm (potentiometer problem, power loss or other malfunctions). It may be connected to an alarm system or directly to a siren and /or auto-dialer.

The relay will activate 6-8 seconds after an alarm is triggered.

FIGURE NO. 3 Typical Alarm Connection Wiring



Powering Up Procedure

Once the DIP-1C is properly mounted on the wall and all controllers connected to the terminal block, perform the following step:

Verify all Connections

Seal all cable entry holes.

Hermetically Close the DIP-1C

Close the front panel.

Put the power on

Secure the front panel with a lock

Downloading the Configuration

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 DIP-1C.

1) Downloading by powering down.

A. Ensure the power source of the DIP-1C 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 DIP-1C starts up and executes the configuration.

2) Downloading while the DIP-1C 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 SET/CLR button. 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 DIP-1C starts up and executes the configuration.

Note: 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 DIP-1C 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 SET/CLR button. 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 DIP-1C will continue to execute the configuration.

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

DIP-1C Compatible Modules

This is the list of all compatible modules that can be connected with DIP-1C with a short description of their function.

Computer interface

- **NET-IN2 Communication Module** (Module inserted into the DIP-1C to communicate with the computer interface)
- **RF-IN Communication Module** (Module inserted into the DIP-1C 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 113°F (0°C to 45°C)
Humidity	90% maximum Non-condensing
Weight	2,4 lb (1,1 kg)
Size	9" x 7" x 4 3/4" (22.8 cm x 17.7 cm x 11.5 cm)
Protection index	IP 66
Warranty	2 years
POWER SUPPLY (LINE 230V)	
Operational voltage range	184 to 250VAC
Operational frequency range	45 to 65 Hz
Power supply circuit consumption (CPU Board)	12 VA
ACT INPUT (Inlet Potentiometer)	
Maximum wire length	500 feet (150 m)
Recommended wires	2 conductors, stranded, AWG #22
Potentiometer	0-10K ohms
ALARM RELAY	
Maximum current	1 A at 30VDC
Delay before activation	Between 6 and 8 seconds
OUTPUT RELAYS	
Maximum Current	1HP @ 240VAC, 1/2HP @ 120VAC, 10A @ 240VAC
Caution Notice	These relays are rated by UL and CSA at 1HP @ 240VAC, 1/2HP @ 120VAC. However, it is recommended not to use more than 1/2HP @ 240VAC, 1/4HP @ 120VAC per relay.
COMMUNICATIONS PORT (MGCB)	
Maximum wire length (19200 bps)	6.5 feet (2 m)
Recommended wire	2 strands, twisted pair, low capacity, shielded, AWG #22

Important Notice:

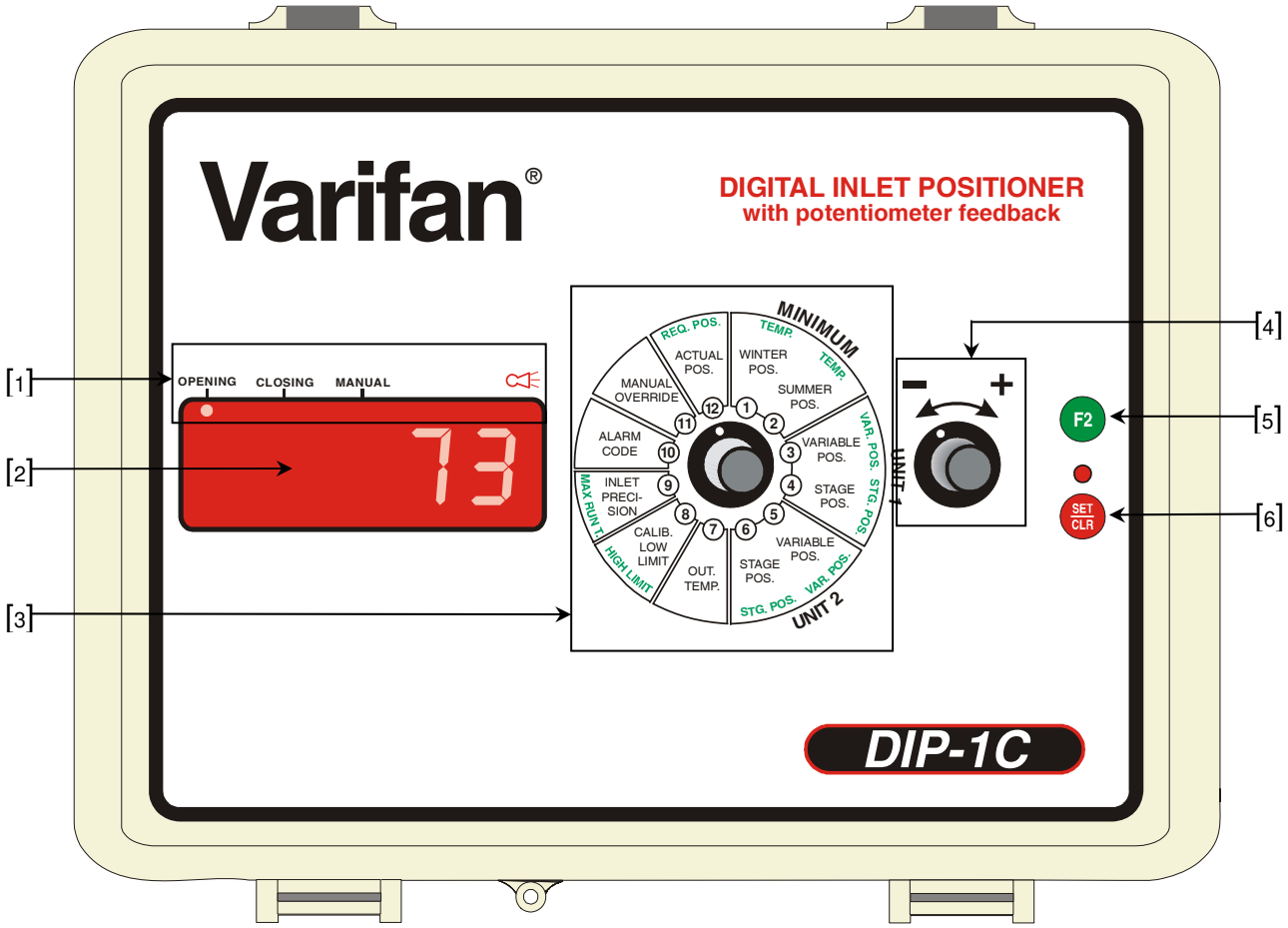
- It is important to have a backup system in case of a system failure.
- Low-voltage and high-voltage wire must be passed through different conducts at least 1 foot (30 cm) apart. If low-voltage and high-voltage conduits must be crossed, the crossing must be at a 90-degree angle.
- All wiring must be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

Troubleshooting

SYMPTOM	CAUSE	REMEDY
Display is blank	DIP-1C is not powered. Flat cable between the main and top boards of the DIP-1C is disconnected.	Make sure the control is powered. Make sure the fuse is correct. Make sure the flat cable is connected.

USER'S GUIDE
DIP-1C
SECTION C

Module Description



SECTION C

1. Output LED
Those LED indicate the status of an output. A LED comes ON whenever the respective output is active.

2. LED Status Windows
The LED status window features a 5 digit LED readout display. 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 ⊞).

3. Parameter Dial
This button is used to select parameters or parameter groups.

4. Value Setting Button
This button is used to increase or decrease the value on the LED window. Turn it clockwise to increase the value. Turn it counter clockwise to decrease the value.

5. F2 Button
This button is used to access to secondary function of a parameter group (appears in green around the parameter dial).

6. SET/CLR Button
This button is used to acknowledge a function, set a value (high and low inlet limits).

Input/Output Table

Inputs	Qty	Outputs	Qty
		Inlet	1
		Alarm	1

Equipment

Item	Description	Qty
DIP-1C	Digital Inlet Positioner	1

Configuration Versions

Version	Date	Min. Proc Version.	Modification
V0	05/05/2011	5	New.
V1	12/08/2014	5	Correction on the stage 8 visibility for the unit 2.

Ventilation System Overview

The DIP-1C is used to control an inlet according to the information received from one or two controllers. The inlet will open progressively according to the ventilation level. Some position can be influenced by the outside temperature.

When the inlet's feedback potentiometer is defective, an alarm will occur.

Normal Mode Settings

Winter Minimum Position (POS 1)

These parameters will only appear if the outside temperature is used on at least one of the units connected to the DIP-1C.

Winter Minimum Position

This parameter is used to adjust the minimum opening position when the **Outside Temperature** is equal to or below **Winter Temp**. When the **Outside Temperature** is between **Winter Temp** and **Summer Temp**, the minimum opening position will modulate accordingly. The calculated minimum opening is displayed at the unit 1 **Variable 1 Start Position** parameter. This parameter is adjusted in 1% increments from 0% to 100%.

Winter Temp

This parameter is used to set the temperature at which minimum opening position will be equal to **Winter Minimum Position**. When the **Outside Temperature** is between **Winter Temp** and **Summer Temp**, the minimum opening position will modulate accordingly. The calculated minimum opening is displayed at the unit 1 **Variable 1 Start Position** parameter. This parameter is adjusted in 0.1° increments from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

Summer Minimum Position (POS 2)

These parameters will only appear if the outside temperature is used on at least one of the units connected to the DIP-1C.

Summer Minimum Position

This parameter is used to adjust the minimum opening position when the **Outside Temperature** is equal to or above **Summer Temp**. When the **Outside Temperature** is between **Summer Temp** and **Winter Temp**, the minimum opening position will modulate accordingly. The calculated minimum opening is displayed at the unit 1 **Variable 1 Start Position** parameter. This parameter is adjusted in 1% increments from 0% to 100%.

Summer Temp

This parameter is used to set the temperature at which minimum opening position will be equal to **Summer Minimum Position**. When the **Outside Temperature** is between **Summer Temp** and **Winter Temp**, the minimum opening position will modulate accordingly. The calculated minimum opening is displayed at the unit 1 **Variable 1 Start Position** parameter. This parameter is adjusted in 0.1° increments from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

Unit 1 Variable Position (POS 3)

Variable 1 Start Position 1-Str

This parameter is used to establish the position the inlet will take when variable 1 of unit 1 runs at its minimum speed. When variable 1 of unit 1 runs above its minimum speed, the inlet's opening will modulate from this position to **Variable 1 End Position**. When the **Outside Temperature** is used, this parameter will not be adjustable, but will instead be calculated according to the **Outside Temperature**, **Winter Minimum Position**, **Winter Temp**, **Summer Minimum Position**, **Summer Temp**. When the **Outside Temperature** is not used, this parameter is adjusted in 1% increments from 0% to 100%.

Variable 1 End Position 1-End

This parameter is used to establish the position the inlet will take when variable 1 of unit 1 runs at its maximum speed. This parameter is adjusted in 1% increments from 0% to 100%.

Variable 2 Start Position 2-Str

This parameter is used to establish the position the inlet will take when variable 2 of unit 1 runs at its minimum speed. When variable 2 of unit 1 runs above its minimum speed, the inlet's opening will modulate from this position to **Variable 2 End Position**. This parameter is adjusted in 1% increments from 0% to 100%.

Variable 2 End Position 2-End

This parameter is used to establish the position the inlet will take when variable 2 of unit 1 runs at its maximum speed. This parameter is adjusted in 1% increments from 0% to 100%.

Unit 1 Stage Position (POS 4)

These stage positions will only appear if the corresponding stages are used as ventilation stages or as a mist stage with a 100% duty cycle.

Stage 3 Position 3-POS

This parameter is used to establish the position the inlet will take when stage 3 of unit 1 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 4 Position 4-POS

This parameter is used to establish the position the inlet will take when stage 4 of unit 1 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 5 Position 5-POS

This parameter is used to establish the position the inlet will take when stage 5 of unit 1 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 6 Position 6-POS

This parameter is used to establish the position the inlet will take when stage 6 of unit 1 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 7 Position 7-POS

This parameter is used to establish the position the inlet will take when stage 7 of unit 1 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 8 Position 8-POS

This parameter is used to establish the position the inlet will take when stage 8 of unit 1 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Unit 2 Variable Position (POS 5)

These positions will only appear if unit 2 is activated by setting DIPSW2 to ON (see DIP Switches and Slide Switches Table page 36).

Variable 1 Start Position 1-Str

This parameter is used to establish the position the inlet will take when variable 1 of unit 2 runs at its minimum speed. When variable 1 of unit 2 runs above its minimum speed, the inlet's opening will modulate from this position to **Variable 1 End Position**. This parameter is adjusted in 1% increments from 0% to 100%.

Variable 1 End Position 1-End

This parameter is used to establish the position the inlet will take when variable 1 of unit 2 runs at its maximum speed. This parameter is adjusted in 1% increments from 0% to 100%.

Variable 2 Start Position 2-Str

This parameter is used to establish the position the inlet will take when variable 2 of unit 2 runs at its minimum speed. When variable 2 of unit 2 runs above its minimum speed, the inlet's opening will modulate from this position to **Variable 2 End Position**. This parameter is adjusted in 1% increments from 0% to 100%.

Variable 2 End Position 2-End

This parameter is used to establish the position the inlet will take when variable 2 of unit 2 runs at its maximum speed. This parameter is adjusted in 1% increments from 0% to 100%.

Unit 2 Stage Position (POS 6)

These stage positions will only appear if unit 2 is activated by setting DIPSW2 to ON (see DIP Switches and Slide Switches Table page 36) and the corresponding stages are used as ventilation stages or as a mist stage with a 100% duty cycle.

Stage 3 Position 3-POS

This parameter is used to establish the position the inlet will take when stage 3 of unit 2 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 4 Position 4-POS

This parameter is used to establish the position the inlet will take when stage 4 of unit 2 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 5 Position 5-POS

This parameter is used to establish the position the inlet will take when stage 5 of unit 2 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 6 Position 6-POS

This parameter is used to establish the position the inlet will take when stage 6 of unit 2 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 7 Position 7-POS

This parameter is used to establish the position the inlet will take when stage 7 of unit 2 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Stage 8 Position 8-POS

This parameter is used to establish the position the inlet will take when stage 8 of unit 2 is activated. This parameter is adjusted in 1% increments from 0% to 100%.

Outside Temperature (POS 7)

Outside Temperature

This parameter displays the outside temperature. This parameter will appear only if at least one of the units uses an outside probe. If two units are used and both of them have an outside probe, this temperature will be the average of the two probes. This reading may modify the inlet position when no stages are activated or when the inlet is positioning for variable 1 of unit 1. This parameter is displayed to the nearest 0.1° from -58.0°F to 140.0°F (-50.0°C to 60.0°C).

Inlet Calibration (POS 8)

Inlet Set Low Limit

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 **Manual Override**. Once the inlet is completely closed, press the SET/CLR button on the current parameter. At this point, the LED display will change to SAvEd, if the value was correctly saved, or Err, if the potentiometer reading is not valid. In the last case, calibration must be performed once the situation is corrected.

Inlet Set High Limit HI

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 **Manual Override**. Once the inlet is completely open, press the SET/CLR button on the current parameter. At this point, the LED display will change to SAvEd, if the value was correctly saved, or Err, if the potentiometer reading is not valid. In the last case, calibration must be performed once the situation is corrected.

Inlet Precision (POS 9)

Inlet Precision

This parameter is used to adjust the precision of the inlet. If the 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 Max Run Time rUn t

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. 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.

Alarm Code (POS 10)

Alarm Code

This setting displays the alarm condition. This parameter displays 0 when no errors have been detected. This indicates that the module has operated properly since it was powered up or since the **Alarm Code** was last cleared. The last alarm condition will be displayed until the **Alarm Code** is cleared. To clear the **Alarm Code**, press the SET/CLR button, CLr will appear on the LED display. This will reset the **Alarm Code** to 0 if no alarm condition is present. The alarm LED ( ) on the faceplate will be lit up if an alarm situation is actually present. The alarm code refers to the following table.

Alarm Code List:

Alarm Code	Description
1	Inlet Potentiometer Defective
2	External Memory Communication Problem
3	Units 1&2 Not Using Same Temperature Unit
101	The module has reset 10 times and each reset was less than 15 minutes apart from the last one.
102	If this alarm code appears, contact your distributor
103	If this alarm code appears, contact your distributor

Manual Override (POS 11)

Manual Override

This parameter is used manually operate the inlet without regard to the calculated demand. The manual override can be used to open or close completely the inlet to perform calibration operations. This parameter can be adjusted to AUtO, HOLd, CLOSE, 0% to 100% or OPEn.

Actual Position (POS 12)

Actual Position

This parameter displays the actual position of the inlet. If the module detects a problem with the inlet's potentiometer, this parameter will display Err. The actual position is displayed to the nearest 1% from -128% to 127%.

Requested Position rEq

This parameter displays the position actually requested by the module.

SECTION C

System Mode Settings

(POS 7)

No Stage Position Summer nOSt5

This parameter is used to set the position the inlet will take when no ventilation stages are activated and the **Outside Temperature** is equal to or above **Summer Temp**. When the **Outside Temperature** is lower than **Summer Temp**, but greater than **Winter Temp**, the position the inlet will take when no ventilation stages are activated will modulate according to this setting and ***No Stage Position Winter***. This parameter will appear only if at least one of the units connected to the DIP-1C uses an outside temperature probe. This parameter is adjusted in 1% increments from 0% to 100%.

No Stage Position nOSt9

This parameter is used to set the position the inlet will take when no ventilation stages are activated and the **Outside Temperature** is not used. This parameter will appear only if none of the units connected to the DIP-1C use an outside temperature probe. This parameter is adjusted in 1% increments from 0% to 100%.

No Stage Position Winter nOSt'

This parameter is used to set the position the inlet will take when no ventilation stages are activated and the **Outside Temperature** is equal to or below **Winter Temp**. When the **Outside Temperature** is lower than **Summer Temp**, but greater than **Winter Temp**, the position the inlet will take when no ventilation stages are activated will modulate according to this setting and ***No Stage Position Summer***. This parameter will appear only if at least one of the units connected to the DIP-1C uses an outside temperature probe. This parameter is adjusted in 1% increments from 0% to 100%.

SECTION C

(POS 8)

Inlet Alarm Option ALOPt

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.

(POS 9)

Display Language LAn9

This parameter is used to select the language used by the DIP-1C. If this parameter is set to En9, the configuration will use the English language. If this parameter is set to FrA, the configuration will use the French language.

(POS 10)

RF Channel rF CH

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, other wireless communication parameters will disappear. This parameter can be adjusted to OFF, 1 to 16.

RF Network rF nt

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 its **RF-IN** card. 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 SET/CLR button so that the parameter's first digit blinks. Modify that digit using the value setting button. Press the F2 button to select the next digit. Press the SET/CLR button once again or move the parameter dial to end parameter modification. This parameter can be adjusted to any value from 0 to 32767.

RF Address rF Ad

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

Unit ID U Id

This parameter is used to select the identification number that will be used when communicating with the remote access software. This parameter may be adjusted to any value from 1 to 250.

Tech Param Display tPdIS

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

Tech Param Result tPrES

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

(POS 11)

Configuration Version COnF

This parameter displays the version of the configuration actually used.

Processor Version PrOC

This parameter displays the version of the processor actually used.

SECTION C

(POS 12)

System Parameters SYSTm

This parameter indicates that the DIP-1C is in system parameter mode.

Communication Filter FILTr

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

Parameter Table

Note: Some parameters will not be visible depending on certain settings. See Normal Mode Settings and System Mode Settings sections for more details

User Settings DIP-1C (Accessible when SW2 is set to OFF)

	Parameters	Default	Range
(POS 12) ACTUAL POSITION	Actual Position	—	-128 to 127%
	[F2] – rEQ – Requested Position	—	0 to 100%
(POS 1) WINTER MINIMUM POSITION	Winter Minimum Position (Variable 1 Start Position)	0%	0 to 100%
	[F2] – tEmP – Winter Temp.	32.0°F (0.0°C)	-58.0 to 140.0°F (-50.0 to 60.0°C)
(POS 2) SUMMER MINIMUM POSITION	Summer Minimum Position (Variable 1 Start Position)	10%	0 to 100%
	[F2] – tEmP – Summer Temp.	59.0°F (15.0°C)	-58.0 to 140.0°F (-50.0 to 60.0°C)
(POS 3) UNIT 1 VARIABLE POSITION	1-Str – Variable 1 Start Position (Adjust at Summer and Winter Minimum Position)	—	0 to 100%
	[F2] – 1-End – Variable 1 End Position	15%	0 to 100%
	[F2] – 2-Str – Variable 2 Start Position	35%	0 to 100%
	[F2] – 2-End – Variable 2 End Position	45%	0 to 100%
(POS 4) UNIT 1 STAGE POSITION	3-POS – Stage 3 Position	70%	0 to 100%
	[F2] – 4-POS – Stage 4 Position	80%	0 to 100%
	[F2] – 5-POS – Stage 5 Position	90%	0 to 100%
	[F2] – 6-POS – Stage 6 Position	100%	0 to 100%
	[F2] – 7-POS – Stage 7 Position	100%	0 to 100%
	[F2] – 8-POS – Stage 8 Position	100%	0 to 100%
(POS 5) UNIT 2 VARIABLE POSITION	1-Str – Variable 1 Start Position	20%	0 to 100%
	[F2] – 1-End – Variable 1 End Position	30%	0 to 100%
	[F2] – 2-Str – Variable 2 Start Position	50%	0 to 100%
	[F2] – 2-End – Variable 2 End Position	60%	0 to 100%

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(POS 6) UNIT 2 STAGE POSITION	3-POS – Stage 3 Position	75%	0 to 100%
	[F2] – 4-POS – Stage 4 Position	85%	0 to 100%
	[F2] – 5-POS – Stage 5 Position	95%	0 to 100%
	[F2] – 6-POS – Stage 6 Position	100%	0 to 100%
	[F2] – 7-POS – Stage 7 Position	100%	0 to 100%
	[F2] – 8-POS – Stage 8 Position	100%	0 to 100%
(POS 7) OUTSIDE TEMPERATURE	Outside Temperature	—	-58.0 to 140.0°F (-50.0 to 60.0°C)
(POS 8) INLET CALIBRATION	Inlet Set Low Limit	—	—
	[F2] – HI – Inlet Set High Limit	—	—
(POS 9) INLET PRECISION	Inlet Precision	1%	1 to 20%
	[F2] – rUn t – Inlet Max Run Time	OFF	1 to 9, OFF
(POS 10) ALARM	Alarm Code	—	—
(POS 11) MANUAL OVERRIDE	Manual Override	AUTO	AUTO, HOLD,CLOSE, 0 to 100%, OPEN

System Settings DIP-1C (Accessible when SW2 is set to ON)

	Parameters	Default	Range
(POS 1)	—	—	—
(POS 2)	—	—	—
(POS 3)	—	—	—
(POS 4)	—	—	—
(POS 5)	—	—	—
(POS 6)	—	—	—
(POS 7)	nOStS – No Stage Position Summer	0%	0 to 100%
	nOSt9 – No Stage Position	0%	0 to 100%
	[F2] – nOSt.! – No Stage Position Winter	0%	0 to 100%
(POS 8)	ALOPt – Inlet Alarm Option	ON	ON/OFF
(POS 9)	LAn9 – Display Language	Eng	Eng, Fra
(POS 10)	rF CH – RF Channel	OFF	OFF, 1 to 16
	[F2] – rF nt – RF Network	0	0 to 32767
	[F2] – rF Ad – RF Address	—	0 to 32767
	[F2] – U Id – Unit ID	1	1 to 250
	[F2] – tPdI5 – Tech Param Display	1	OFF, 1 to 25
	[F2] – tPrES – Tech Param Result	—	—
(POS 11)	CONF – Configuration Version	—	—
	[F2] – PrOC – Processor Version	—	—
(POS 12)	SYStn – System Parameters	—	—
	[F2] – FILtr – Communication Filter	300 sec	0 to 300 sec

SECTION C

DIP Switches and Slide Switches Table

	Switches	Default	Settings
SLIDE SWITCHES	**(SW1)** – Parameters Locked	OFF	ON/OFF
	(SW2) – System Parameters	OFF	ON/OFF
DIP SWITCHES	**(DIPSW1)** – Future Use	—	—
	(DIPSW2) – # Unit Connected	OFF (1 Unit)	OFF = 1 Unit / ON = 2 Units
	(DIPSW3) – Future Use	—	—
	(DIPSW4) – Future Use	—	—

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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 defense 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.

DIP-1C_EN VER: 1.1
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