Communication Port:
Insert an "Enabler" Card to use the A-BOX System.

Module Port:
Insert a Comlink-1 card into the MODULE port
if an external module is connected to the controller.

CAUTION
THE CONTROL'S POWER SUPPLY MUST BE CONNECTED TO A **15A BREAKER**.

EXPERT SERIES II BASIC

CONTROL POWER SUPPLY 85 to 250 VAC
L1
GND
L2 (N)

PC
MODULE

SENSOR INPUTS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
POT + + +
14VDC 0-10V + - 1 2
PC 1 2
MODULES 1 3 2 4

INSIDE PROBE 1
INSIDE PROBE 2 (OPT.)
INSIDE PROBE 3 (OPT.)
INSIDE PROBE 4 (OPT.)
INSIDE PROBE 5 (OPT.)
INSIDE PROBE 6 (OPT.)
INSIDE PROBE 7 (OPT.)
INSIDE PROBE 8 (OPT.)
OUTSIDE PROBE 1 (OPT.)
OUTSIDE PROBE 2 (OPT.)
WATER METER (OPT.)
WHISKER SWITCH 1 (OPT.)
WHISKER SWITCH 2 (OPT.)
FEEDER 1 (OPT.)
FEEDER 2 (OPT.)

ALARM NC C NO
+ - ZC
- + ZC

2 1 G
L1 OUT1 L1 OUT2

VARIABLE
GND
L2(N)
L1
VARIABLE OUTPUT 2 POWER SUPPLY
230VAC, 10A, 1.5HP (230VAC) / 0.5HP (115VAC)

VARIABLE
GND
L2(N)
L1
Variable Fan Output 1 Power supply
230VAC, 10A, 1.5HP (230VAC) / 0.5HP (115VAC)

Aux 1
AUXILIARY OUTPUT 1

Aux 2
AUXILIARY OUTPUT 2

ALARM POWER SUPPLY

Inlet 1 potentiometer
1, 5 or 10 KOhms, 10 turns
Refer to the color legend below

1 *To input 11 "-"*
2 *To input 11 "+"*
3 *To POT "+"*

To input 13 "-"
To input 13 "+"
To 14VDC "-" terminal
To 14VDC "+" terminal

Inside humidity probe (optional)
GND OUT GND PWR
4-20mA POWER

WHITE: Not used
GREEN: To input 14 "+"
BLACK : To 14VDC "-" terminal
RED : To 14VDC "+" terminal

Outside humidity probe (optional)

Static pressure sensor Dwyer Gauge (optional)
I
+
To input 15 "+"
To 14VDC "+" terminal

WME-8 (Water meter module)
COM 1 2
To "Module 1" terminal
To "Module 2" terminal
ADDRESS
ON OFF 1 2 3 4 5 6 7 8
ID # 2

0-10V Load 1
0-10V LOAD 1
To 0-10V 1 "+" output
To 0-10V 1 "-" output

0-10V Load 2
0-10V LOAD 2
To 0-10V 2 "+" output
To 0-10V 2 "-" output

A-BOX System
(Optional)

A-BOX
Connector A
A
SureLink Module
EOL*
1 2 3
A B GND
A B GND
EOL = NO*
1 2 3
A B GND
A B GND
Red
Black
Shield

To "PC 1" input
To "PC 2" input
To 14VDC "-" terminal

** Refer to the Surelink's user manual to set the end of line jumpers properly.*

GREEN *To 14VDC "-" terminal*
BLACK *To "Module 2" terminal*
RED *To "Module 1" terminal*
WHITE *To 14VDC "+" terminal*
1 2 3 4 SH

ADDRESS
ON OFF 1 2 3 4 5 6 7 8
ID # 1

Relay Panel

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20

THERMOSTAT BACKUP
(NOT INCLUDED)

On/Off Load
L2 (N)
L1
LOAD 20 POWER SUPPLY

NOTES
1. Installation of a good quality alarm system is strongly suggested to warn of power failures and high/low temperatures.

2. Provide a surge protection (including lightning protection) from the power supply to the controller and from the control to the sensors. Consult a certified electrician if required.

3. Same phases must be used to power the variable fans and the controls on 3 phases power.

4. Install low voltage wires (probes & whisker switch) at least 12 inches (300 mm) away from high voltage wires (230-120VAC,24VDC). Always cross low and high voltage wires at a 90° angle.

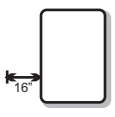
WATER METER:
The water meter output should be a dry contact and should not pulse faster than 60 times a second (60Hz).

A 22/12 AWG gauge cable no longer than 2000 feet (0.6 km) can be used to connect the water meter. Do not use a cable longer than 2000 feet even if a larger cable is used.

Do not run the meter cable outside the building!!

CABLE ENTRY
Drill holes at the bottom of the enclosure to allow wires to be introduced in the controller. Do not drill the top or side panels of the enclosure.

MOUNTING THE ENCLOSURE ON THE WALL
Leave a clearance of at least 16" to the left of controller box to allow the cover to be removed for maintenance.



POTENTIOMETER'S COLOR LEGEND

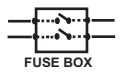
	COMMANDER ACTUATOR	VON WEISE ACTUATOR
1	WHITE	RED
2	RED	BLACK
3	BLACK	WHITE

RELAYS
Dry contact
15 A RES, 50/60 Hz
16 FLA @ 120 VAC (1HP, 746 W)
12 FLA @ 240 VAC (2HP, 1490 W)

LOAD SUPPLIES
120-240 VAC,
50-60 HZ 12-24 VDC

BACKUP THERMOSTATS
The backup thermostats are shown for illustration purposes only. Sufficient backup thermostats must be used to ensure ventilation if the controller loses power.

FUSE BOX
We recommend installing a fuse box on each stage



WIRING DIAGRAM	
EXPERT SERIES II BASIC	
891-00395	Rev.05