



## TAC 3000

### Electrical Control Panel

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#### ADVANTAGES

The TAC-3000 is a solid state, state-of-the-art control panel which provides the ultimate controlled internal cleaning system for the water wash ventilation hoods. User friendly programming via the four line, liquid crystal display allows the operator to program on and off times for supply and exhaust fans, create up to 5 wash zones, and to select fan operation during a fire condition. Optional programming features provide control of the shunt trip breaker, the building alarm system and the electric gas valve. Door mounted indicator lights show the status of supply and exhaust fans, fire condition, water valve and AC power.

The TAC-3000 is equipped with three modes of operation: PROGRAM, AUTOMATIC and MANUAL. A key switch is used to select the mode of operation and denies access to unauthorized users. The key pad is touch sensitive, providing exceptional durability and longevity. It consists of five keys, up and down arrows; a tab arrow, select and prior menu. When a key is selected, a tone is generated to provide feedback while programming.

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#### FEATURES

##### PROGRAMMING FEATURES:

- User friendly, menu driven programming.
- Memory held by internal RAM battery, so in case of extended power outage or external battery failure, memory is held indefinitely.
- Program key switch prevents non-authorized users changing the program.
- Manual mode is able to override programming and toggle fans, wash zones, and auxiliary outputs "ON" and "OFF" on demand.
- User selected fan control in a fire condition, exhaust fan on, both fans on, or both fans off.

##### OPERATING FEATURES:

- Capable of controlling 24 hour 7 day program of up to 5 wash zones independent of each other with user programmable wash, soak, and rinse duration's, and delay times between each wash.
- 24 hour 7 day programmable fan control, capable of multiple "ON" and "OFF" times.
- A programmable Holiday schedule which turns off the program for the user programmed holiday. Up to 12 holidays can be programmed.
- Audible alarm, indicating light, and displayed message for fire indication.
- Shunt trip breaker output.
- A building fire panel contact for building alarm systems.

## HARDWARE FEATURES:

- Plug in solid state relays with output indication lights.
- On-board Circuit Breakers instead of fuses.
- Liquid Crystal Display.
- PIEZO Electronic key pad, no moving parts to fail.
- Plug-in connectors.
- Indicating lights on front panel to indicate fire, exhaust and supply fan, zone water valves, and power outage.
- Manual override switches to control the fans if CPU fails.
- Maintenance switch to prevent fire signal tripping when maintenance is being performed.
- A manual lighted push button mounted on the front door used to send the panel into a fire condition if needed.

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## OPERATING MODES

### PROGRAM MODE:

In the program mode all function can be programmed by the operator. The program menu consists of the following control lines:

- **Set date and time:** allows the operator to change the date and time
- **Fan cycles:** sets multiple on and off times per day for the connected exhaust/supply fans.
- **Wash cycles:** sets multiple on and off times per day for each zone independently.
- **Wash duration:** sets the length of each wash from 1 to 14 minutes.
- **Soak duration:** sets the length of each soak from 1 to 14 minutes.
- **Rinse duration:** sets the length of each rinse from 1 to 14 minutes.
- **AUX 1:** sets multiple on and off times per day for user defined item.
- **AUX 2:** sets multiple on and off times per day for user defined item.
- **AUX 3:** sets multiple on and off times per day for user defined item.
- **Fire condition:** operator selects which fans are ON or OFF in a fire condition.
- **Holiday:** operator specifies up to 12 holidays during which the system will not run the programmed schedule.

### AUTOMATIC MODE:

- In Automatic mode the system runs the programming and the screen displays the date, time, and status of the system.

### MANUAL MODE:

- Manual mode is used to override programming and give the operator immediate control of the system. The operator controls the system through the on-screen menu which prompts the user to toggle the fans ON and OFF, Start, Pause or Stop each of the 5 wash zones, and toggle the Auxiliary outputs ON and OFF.

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## BATTERY BACK-UP

The system is battery backed up to prevent false alarms. The program is backed up with an internal battery which will hold the program indefinitely upon loss of AC and DC power.

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## FIRE CONDITION

The fire trip signal is triggered through the fire protection system switch or the thermoswitch located in the hood duct collar or the door mounted manual fire button. If the fire system discharges or the thermoswitch opens or the manual fire button is pressed, the TAC-3000 will be sent into a fire condition, a red fire light will illuminate on the front panel, the panel mounted alarm will sound, and the display will indicate FIRE. The TAC-3000 will set the fans to the programmed state, open water valves for all zones, trip the shunt trip breaker, shut off the gas valve, and signal the building alarm system. Once the signal is restored, the TAC-3000 is reset by pressing any one of the 5 keys.

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## MANUAL FIRE MODE SWITCH

In the event of CPU failure, a toggle switch labeled "Manual Fire Mode Switch" on the rear board can be selected to "ON" to arm the manual fan switch and set the fire condition so that in the event of fire, the exhaust fans will be ON, supply fans will be OFF and the water valves will be OPEN. The manual "Fans On" switch is used to turn the fans ON and OFF. This switch is used until a CPU board replacement is obtained.

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### MAINTENANCE AND UPGRADE

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The TAC-3000 is easy to maintain. All relays have built-in indicator lights for status and diagnosis of problems; relays can easily be removed and replaced as well. Both circuit boards are equipped with quick disconnect plugs for easy removal and replacement - simply unplug the faulty board and plug in the new board. Each TAC-3000 is custom designed and built for individual applications. However, an additional zone control or another option can be added by installing a control relay in the field; there is no need to replace the entire panel.

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### OPTIONS

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- **Gas valve control:** User selected power interruption delay of 2.5, 5, 7.5, or 10 seconds. Lighted gas reset button mounted on the front panel.
- **Auxiliary output:** 3 independent programmable outputs for multiple on and off times used to control user defined items (for example: secondary fans, power receptacles, lights, or any item needing a programmable ON and OFF output). These outputs are used to control a power relay which in turn controls the device. The auxiliary (Aux.) outputs turn off in a fire condition.
- **Low Soap Level Indicator**
- **Cold Water Mist**

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### HOT WATER LINE SIZE REQUIREMENTS

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Hood Length	Hot Water Line Size @ 20 psi.	Water Consumption (Gallons per min.)
3' - 16'	3/4" I.P.S.	up to 17 G.P.M.
16' 1" - 32' 0"	1" I.P.S.	17 to 34 G.P.M.
32' 1" - 48' 0"	1-1/2" I.P.S.	34 to 51 G.P.M.

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### CERTIFICATIONS

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The TAC-3000 Model has been certified by ITS. This certification mark indicates that the product has been tested to and has met the minimum requirements of a widely recognized (consensus) U.S. and Canadian products safety standard, that the manufacturing site has been audited, and that the applicant has agreed to a program of periodic factory follow-up inspections to verify continued performance.



Models TAC-3000 are ETL Listed under file number 3054731-001 and complies with UL508A Standards and CSA C22.2, No. 14-M95 and CSA C22.2, No. 73-1953 Standards.