

# ATS300PLUS

MODEL ATS300+ CENTRAL OFFICE DRYER CONTROLLER QUICK START GUIDE, REV C PART NO: 99411

**Installation:** The ATS300Plus can be installed in any location that allows the bus cables to reach the air dryers being operated by the unit. The bus cables are 25' as standard, with 12' and 50' available to custom order. The bus cables are daisy chained from unit to unit so that only the first dryer in the series must be connected to the ATS300Plus. The ATS300Plus must have a 115VAC socket located within reach of the attached power cord as its power source and a telephone jack for remote operation.

The IUC/ATS Interface panels (one for each air dryer except ST series dryers) should be attached to the back of the Dielectric dryers, and attached to the adjacent wall for other manufacturers' dryers. **Be sure to check that the interface panel you are using is correct for the dryer model and that the proper "key" is installed in the IUC. Installation of the incorrect "key" will cause damage to the ATS Controller. (Note: A "key" is not required for ATS304, ATS305, or ST dryers)**

**Before continuing with the installation switch the IUC toggles located on the interface units to the "out-of-service" position!**

Select the appropriate bus cables and attach them from the ATS300Plus to the nearest dryer and from that dryer to all additional dryers. The order of the dryers attached to the cables is not important as the address (A1, A2, etc.) is determined by the setting of the dip switches located on the IUC on each dryer. Refer to the instruction manual for the appropriate setting being careful to note that the #4 switch must be in the "ON" position to signal the last dryer in the chain. For ST dryers, the address is set in the setup >ATS bus screen. The last dryer in the chain is set with a two position jumper on the ATS/Alarm interface board.

**Case #1 – Connections to Dielectric Legacy Air Dryers:** There are two multi-strand cables leaving the Dielectric interface panels and the 8-wire cable should be connected to the ATS Interface terminal board on the dryer. The 11-wire cable is the segregated alarm cable and can be connected to the segregated alarm outputs on the dryer, as per the instruction manual, if desired. If you are monitoring the segregated alarms with another system, such as a Sparton device, you may not want to use the segregated alarm connections for the ATS300Plus. If this is the case then do not connect this cable to the air dryer.

**Case #2 – Connections to other manufacturers' Air Dryers:** The ATS304 and ATS305 Interface panels turn the air dryers on and off by the interruption of the power supply to the units. These interface panels therefore require that the dryer's power supply be routed through the interface panel and into the air dryer. This may require an additional power cord which is not supplied with the interface panels. This 4-wire, 8-gauge power cord can be ordered separately from Dielectric in desired lengths. Dielectric does supply 20' of 11-wire cable which should be used for connecting the segregated alarm outputs of the air dryers to the interface panel terminal board. In many cases the dryers may not have as many alarms as can be attached to the interface panel in which case any additional wires should remain unused.

At this time you can plug the ATS300Plus into the power supply and the unit should come on-line in a test mode which will momentarily illuminate all the LEDs and then change to the normal operation mode. In this mode the time indicated in the display is the transfer time and the days indicated by the green LEDs are the transfer days. In the "Unit Status Display" column on the right side of the ATS300Plus the lights, blinking red to indicate "out-of-service", should be illuminated to indicate the number of air dryers in your installation. If the air dryers indicated in the "Unit Status Display" column are not in sequence then reset the dip switches on the IUC for proper address configuration.

**Setting Current Date and Time:** Press the "Test/Reset" button once to bring up the current date and time on the display. The date and time will flash in the display and the day will be indicated by the illuminated LED for that day. To change the day, with the date and time in the display, you must press the left "INDEX" button until the red program LED begins to blink and the green current day indicator blinks. Press the left "SELECT" switch to move the day of the week indicator to the proper position. After the correct day is illuminated by the blinking LED you should then press the left "INDEX" switch

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to access the time and then press the left "SELECT" switch to change the hour and the right "SELECT" switch to change the minutes. Be careful to observe the AM indicator, located on the upper left corner of the display, which is illuminated to indicate AM. To change the date you simply press the left "INDEX" switch again and the real date will be displayed and you may change the month by pressing the left "SELECT" switch and the day by pressing the right "SELECT" switch. If the year needs to be adjusted then you press the left "INDEX" switch another time and the last two digits of the year appear in the display and can be changed by pressing the right "SELECT" switch. After you have set the clock you can exit the programming mode by pressing the "TEST/RESET" again.

**Setting Transfer Day and Time:** To change the transfer day or time you must access these functions by pressing the left "INDEX" switch until the red "PROGRAM" LED blinks and the "SUNDAY" LED is either a steady or blinking green. A steady green LED on a day indicated that the day is selected for transfer and blinking indicates that the day is not selected. Press the left "INDEX" to move the cursor from day to day and then press the left "SELECT" switch to either select or unselect that day. Continue to "INDEX" until time is displayed, press left "SELECT" for hours and right "SELECT" for minutes. "AM" is indicated by an LED "DOT". Press "TEST/RESET" to exit.

**Operating and Transfer Modes:** In Central Offices using dryers of similar capacities the **Auto-Rotation Mode** is the easiest and most reliable operating setup. In this mode the user can select the number of dryers that will remain on **standby** and the remaining dryers will operate. At the selected transfer day and time the ATS will start one standby unit and shut down one of the operating units. Also, if a unit does not clear alarm or has been previously shut down in alarm the ATS will automatically skip over this unit.

In cases where the user wishes to select which dryers will operate or is using dryers with different capacities (eg one 30000SE combined with two 16000Q units) the **Roster Mode** may be preferred. The **Roster Mode** allows the user to program the units that will operate and the units that will be in standby at the transfer. In addition, several rosters can be programmed to allow for several different operating configurations or a single roster can be input and the ATS will automatically start available units in the event of failures in the programmed roster (See Operation Manual for further details).

**Programming the Auto-Rotation Mode:** To setup the ATS300Plus in Auto-Rotation mode press the right "INDEX" switch until the program LED blinks red and then press the left "INDEX" switch until the LEDs for the roster status go out and a number appears in the display box. You may then press the left "SELECT" switch to change the number, remembering that you are selecting the number of dryers that will be in standby. When you are finished, press the "TEST/RESET" button to reset the display.

**Programming the Roster Mode:** If you wish to select which dryers will operate and which will be in standby, you must use the Roster Mode. To program a roster, press the left "INDEX" switch to bring the blinking green LED in the Roster Status column to the desired roster selection and then press the right "INDEX" switch until the red "PROGRAM" LED begins to blink. You can then move the red blinking LED in the Roster listing column by pressing the right "INDEX" switch and you can select or unselect the units that you want in the roster by pressing the right "SELECT" switch. Units selected to operate in the roster are indicated by a solid red LED for that unit and units that are in standby are indicated by a blinking red LED. Press the "TEST/RESET" button to reset the display and return to the operating mode.

**Bringing the Air Dryers On-Line:** After you have programmed the ATS300Plus with all the necessary information the ATS300Plus can take control of the air dryers. Until now a blinking red LED in the Unit Status Display appears next to each of the dryers connected to the ATS300Plus indicating that the dryers are in the "MANUAL CONTROL" mode. By resetting the IUC of each air dryer (for ST dryers a reset is performed using the on screen menu, for legacy dryers press each of the toggle switches to the reset position and allow them to spring back to the center position) the ATS300Plus can begin to control the dryers. A short delay might follow after which the units selected for standby will stop operating and their alarms will be disarmed to avoid nuisance alarms; and the units selected to operate will continue to run. To test the system you can bring one of the operating units into alarm and observe the transfer to the selected standby units.

For further information on installing optional 4-20mA transducers, and LAN Ethernet Card, refer to the manual; if after that you require further assistance call the factory: Radiodetection Technical Service at (877) 247-3797 between 7:00 am - 4:00 pm EST, Monday thru Friday.

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