

Digital Steam NEMA 7/9 Control System Operating and Installation Instructions

1. All conduits entering the control enclosure will have a seal-off fitting placed in the conduit within 18" of the control panel. The seal-off's are packed and poured with compound per the manufacturers recommendations.
2. All wiring except the door switch wiring is piped in rigid conduit with 5 threads of engagement. All junction boxes are rated NEMA 7/9
3. The door switch wiring is wired to the bottom of the control panel in the right hand opening. The blue wires must be connected to the blue terminals only. This wiring is intrinsically safe and is kept separate from all other wiring, a seal-off is installed and rigid conduit is used between the seal-off fitting and the control enclosure. The wiring after the seal-off is permitted to be sealtight flex because of the intrinsic safety barrier used inside the panel.
4. Solenoid Valve and Motor wiring will be installed through the left bottom opening in the control panel using a rated tee fitting or junction box.
5. Main Power should be wired to the top right hand opening in the panel, the feeder must be rated per national electric code. It must be installed with rigid conduit and a seal off fitting must be installed and poured to complete the electrical installation.
6. A manual globe valve should be installed on the inlet to the steam coil, the two solenoid valves provided, one after the other and finally a strainer with a 60 mesh screen. This will create a series connection to the inlet side of the steam coil. The solenoid closest to the oven should be wired as the steam solenoid (wires 13 and white) and the next valve should be wired as the safety solenoid (wires 11 and white). Numbered terminal blocks are provided inside the control panel.
7. Prior to closing the control enclosure secure the area, turn on the power and program the 7 day timer (if included) and set the high temperature limit set-point HSP1. These values can only be changed with the control enclosure open. The temperature controller PID parameters have been set at the factory. The oven temperature set-point can be changed with the panel door closed by using the raise and lower buttons.
8. If the 7 day timer option has been purchased , turn the timer selector switch "Off" to run the oven continuously and "On" to run based on the preprogrammed 7 day timer. When the timer tells the oven to turn off, the temperature controller display will also turn off, however the over-temperature display will still be on.
9. If the oven goes into an over temperature condition, the red over temp light will come on and the safety valve along with the steam control valve will be closed. Once the oven cools below the high temperature set point the reset button must be pressed to allow the oven to start heating again.