

Electrical Control Panel Wiring Instructions

Field Connections:

The field electrician is required to wire the following:

1. **Control circuit** single phase 115VAC to terminal block H1 and neutral to N1. H1 and N1 should **NOT** be wired to a shunt trip breaker.
2. **Light circuit** single phase 115VAC to terminal blocks H2 and neutral to N2. If there are multiple light circuits then each light circuit requires independent power. (Please note the following.)
 - a. Light circuit #2-115VAC to terminal blocks H3 and neutral to N3.
 - b. Light circuit #3-115VAC to terminal blocks H4 and neutral to N4.
 - c. Light circuit #4-115VAC to terminal blocks H5 and neutral to N5.
3. **Motor power**
 - a. **Three phase** motors connect 3 phases to terminal blocks L1, L2, L3. Repeat for all other motors.
 - b. **Single phase motors 115VAC** connect to terminal blocks L1, FN1 for neutral. Repeat for all other motors.
 - c. **Single phase motors 220VAC** connect to terminal blocks L1, L2. Repeat for all other motors.
4. Wire from T1, T2, T3 on each Starter(s) to each three phase motor. See label below thermal over- load.
5. Wire from T1, T2, T3, 14 on each Contactor to each single phase motor. See label below Starter Contactor.
6. **Fire System Micro Switch** from the ANSUL or PYROCHEM Fire Suppression System connect wires to terminal blocks C1=Red (RD), NO1=Black (BK), and NC1=Brown (BR). *(Note: If the control panel is factory mounted in the fire cabinet with the fire system the Fire System Micro Switch has been factory wired.)*
7. **Fan Switch** contains an internal Red pilot Light. The blue wire from the top of the fan switch connects to terminal block H1 for 115VAC, the orange wire connects to terminal A1 on the first Exhaust fan Starter coil, and the white wire on the side of the fan switch connects to terminal block N1. *(Note: If the control panel is factory mounted in the fire cabinet with the fire system the Fan Switch has been factory wired.)*
8. **The Junction box** on top of hood contains the hood light wires. The black wire from the hood lights connects to terminal block B and the white wire connects to terminal block W in the Control Panel. *(Note: If the control panel is factory mounted in the fire cabinet with the fire system the Hood Lights has been factory wired.)*

Testing:

1. Insure the **Control** circuit, **Light** circuit and the **Fan(s)** are on at the breaker panel.
2. Insure **Fire System** is ARMED. This can be verified by checking 115VAC from terminal block NC1 to neutral. If power is present system is armed.
3. Turn on Red Lighted Fan switch. Results are the fans turn on and a red light illuminates in the fan switch.