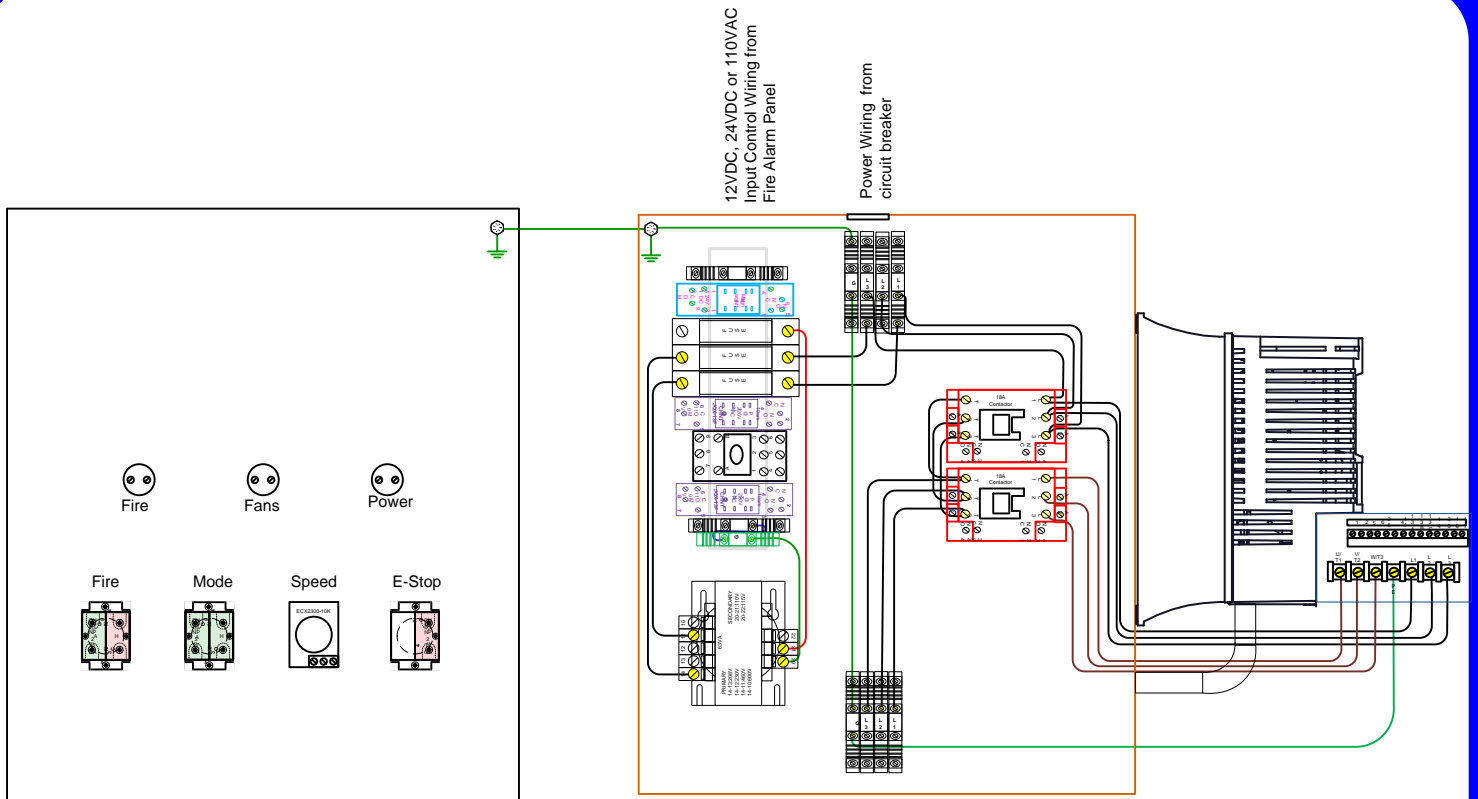


'EFC-VSC'

**Emergency & Fire Control
Variable Speed Control
No Clock**



SonicAire



The EFC-VSC enables the owner/manager to automatically turn OFF the SonicAire fans whenever the fire alarm system detects a fire.

An E-Stop push button allows any worker in the plant to turn OFF the SonicAire fans in case of an emergency.

The FIRE switch allows a manager to bypass the fire alarm system during testing or maintenance of the fire alarm system.

The MODE switch is placed in the CLEAN position for cleaning the plant with the fan at full speed.

The MODE switch enables the owner to run the fans at a reduced speed 'VSC' (with variable speed control) and to set the reduce the fan speed down to the desired level (50% minimum speed).

The MODE switch can be place in the OFF position to prevent the fans from running.

START UP INSTRUCTIONS

1. Always start up the SonicAire fans with the MODE switch in the 'CLEAN' position and E-Stop button out (ON). Place Fire switch in BYPASS position if the fire alarm interface is not yet installed, otherwise place it in the ACTIVE position (the Fire ALARM light should be OFF)
2. Always start up the system with all of the LDS switches in the OFF position (red button pressed in).
 - a. Turn the fans ON at each LDS one at a time. Check for the fan motor to be running properly and the gearmotor to be running properly. Is the fan moving air and is SonicAire rotating and oscillating up and down?)
 - b. Note the rotation for the fan blades. If it is running backward (counter clockwise) then you will not feel any air coming out of the fan discharge.
 - i. If the majority of the fans are running the correct direction then you will need to change the direction of rotation for the fans running backwards by switching two of the three phase input lines to the respective LDS.
 - ii. If the majority of the fans are running backwards then you will need to change the direction of rotation for all the fans by switching two of the three phase input conductors in the INPUT terminal blocks in the control panel. Next you will need to change the direction of rotation for the fans running backwards by switching two of the three phase input lines to the respective LDS or at the fan motor junction box.
3. Once you have checked out each fan and set them all in the proper rotation it is time to check out the VSC mode of operation.
 - a. Turn the SPEED switch to 50% speed.
 - b. Turn the MODE switch to the OFF position for 5 seconds and then turn it to the VSC position.
 - i. All of the fans should slowly ramp up to the speed of 50hz and then after a few minutes they should ramp down to a speed of 30hz.
 - c. If the fan blades are rotating the wrong direction (no air flow out of the fan discharge) then you will need to switch two input conductors from the VFD to the number two contactor in the control panel.
4. If any of the LDS switches trip out when starting up a fan, then press in the E-Stop button and do not reset it until you have spoken with the factory.
5. If any of the above functions do not work properly contact the factory for assistance.

TYPICAL FIELD WIRING SCHEMATIC

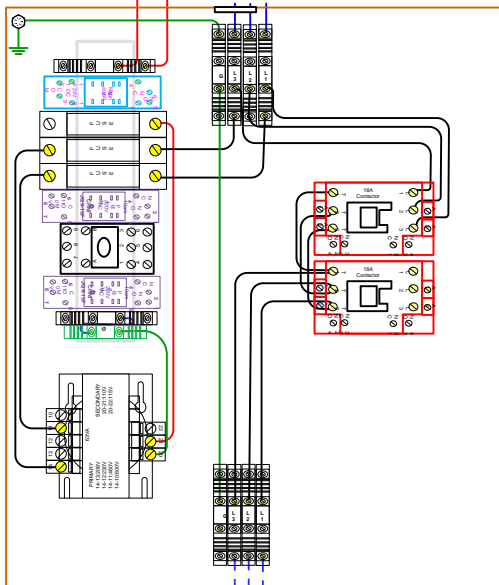
3ph / 60hz POWER FROM OWNERS CIRCUIT BREAKER

Three phase power INPUT

Wiring sized for amperage rating of owners circuit breaker.

BY OWNER

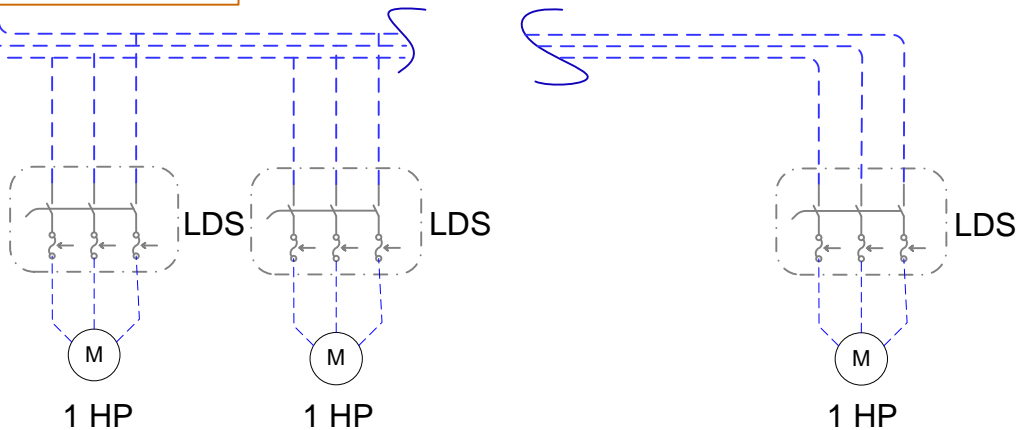
12vdc or 24vdc control input from building fire alarm panel. During fire alarm circuit is de-energized.



Wiring sized for amperage rating of number of fans.

BY OWNER

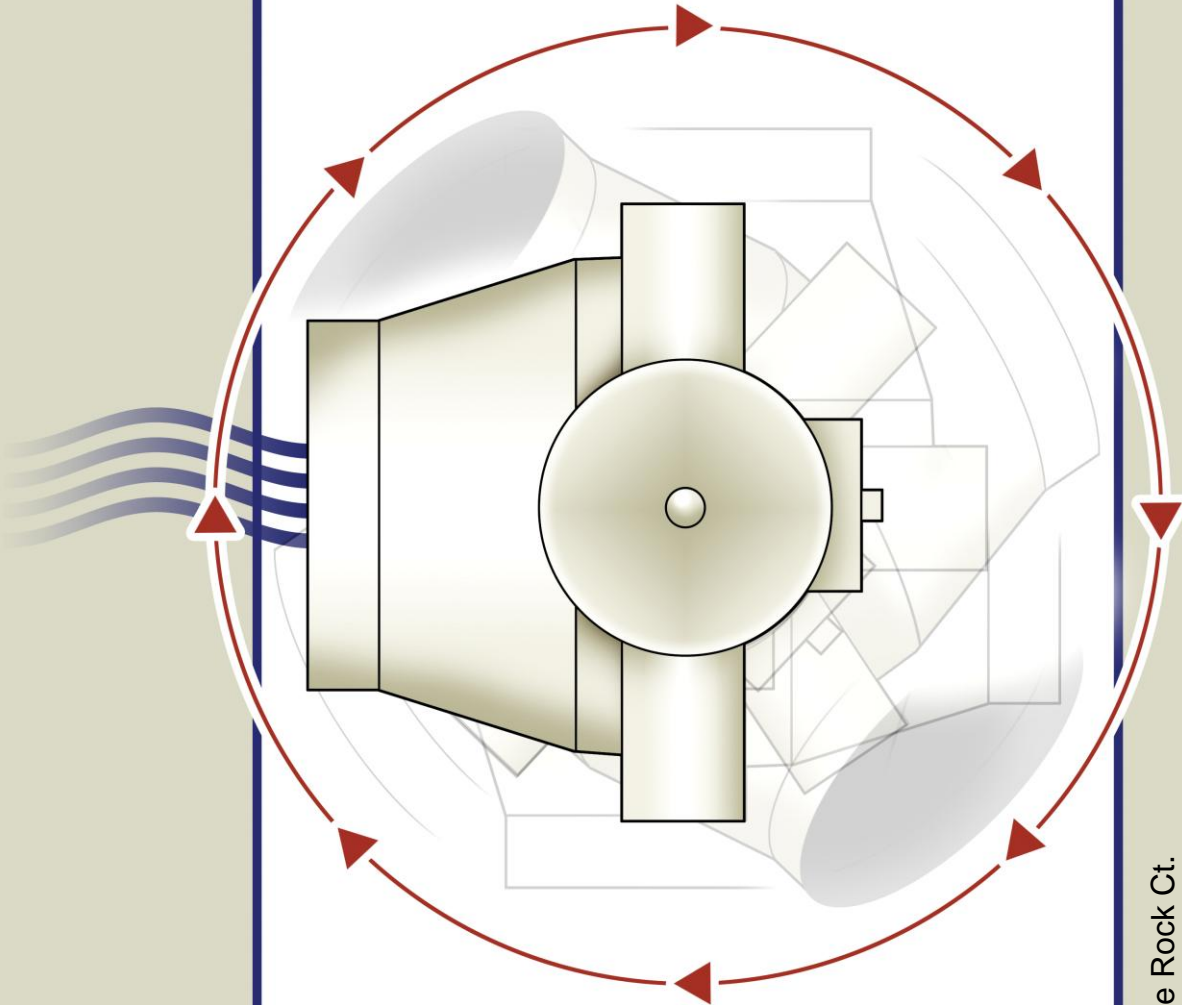
LOCAL DISCONNECT SWITCH WITH CIRCUIT AND OVERLOAD PROTECTION





INTEGRATED
ENVIRONMENTAL
SOLUTIONS

Clean just got cool.™



v.1

top view illustration

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