11-16-2016

Re: Generic Electrical Control Panel Sequence of Operation

Model: ECP

COMMERCIAL KITCHEN VENTILATION SYSTEM

The Electrical Control Panel (ECP) is designed to integrate with the components of the Commercial Kitchen Ventilation (CKV) system to provide both manual and automatic control of exhaust and supply fans. Applicable components may include the following items: kitchen grease exhaust and supply fans, hood lights, hood temperature monitors, Fire Suppression Systems (FSS), SmartAire Internal Hood Fans (IHF), Electric Gas Valves (EGV), cooking appliance shunt trip devices, and building alarms.

The fan switch will close dry contacts which may be used to signal the exhaust and supply fans to operate until turned off manually. The light switch may be used to activate the hood lights.

Temperature monitors distributed throughout the hood canopies and/or in the exhaust collars will automatically activate the exhaust system to exhaust effluents, smoke, fumes, and excess heat from below the hoods upon sensing temperature rises above any one of the temperature monitors' adjustable set points.

Upon actuation of the FSS, an electrical interlock between the microswitches of the FSS and the ECP shall automatically force the ECP into Fire Mode, which will override all other active modes of operation. While in Fire Mode, the exhaust fan shall operate at 100% and power will be shunt to the IHF, EGV, and supply fans. In addition, an optional wiring connection is provided in the ECP for 120 VAC to be directed through the microswitch circuit from the ECP to the shunt trip devices to turn off all electrical appliances below the hoods. A wiring connection option is available in the ECP to automatically shunt power to the hood lights in the event of a FSS actuation. A second microswitch circuit is available to activate the building alarm.