Programming an HVAC Start-up Delay

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To accomplish a start-up delay for requirements such as sequential HVAC start-up on the IFP-2000, you would use a combination of relays and input modules along with system programming.

An addressable relay would be programmed to activate on alarm conditions. Common and Normally Closed from the relay module would wire to a contact input module. The contact input module will be programmed as a Status Point. When the fire alarm system is normal, the Status Point would be active as it is continuously shorted at the input. The Status Point would then be programmed to activate relay groups where, for example, you would program the first relay group to have a Start-up Delay of 10 seconds. The next relay group would have a Start-up Delay of 20 and so on.

When a fire alarm condition occurs, the alarm relay will open, causing the Status Point to de-activate. When a reset of the fire alarm system occurs, the relay module closes, which re-activates the Status Point input, which in turn activates each relay group. Since each group is on a staggered start up time, the start-up of the HVAC, for example, would then be staggered.