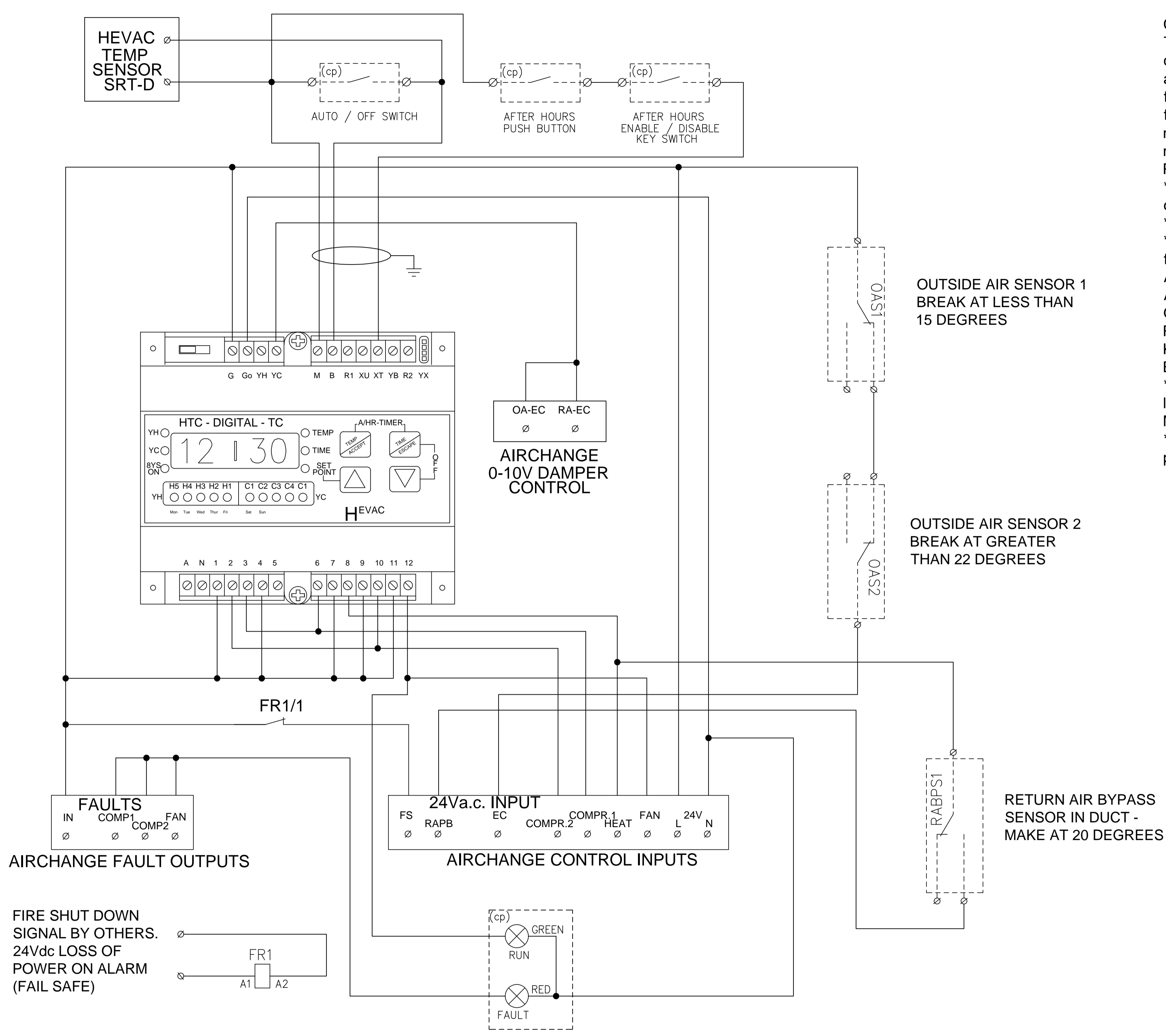


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**CONTROL FUNCTIONS AND STRATEGIES**

The following clauses indicate the general control functions only and cover the requirements considered necessary to provide the minimum satisfactory performance of the system. Provide all necessary controls functions and strategies to complete the installation and to achieve the functionality described below. The descriptions scheduled below indicate the minimum functionality of each system. Any control strategies not mentioned below are to conform to relevant codes and standards as required by legislation and be compatible with manufacturer's recommendations of the equipment served, to provide satisfactory stable operation.


- Packaged Air Conditioning Unit
- \* Provide the air conditioning unit with a Clipsal 2000 Series control panel, located as shown on the drawings.
  - \* Engrave the control panel with the air conditioning unit designation.
  - \* The control panel is to incorporate individual switches, buttons and lights and provide the following functions:  
 AUTO/OFF switch  
 AFTER HOURS push button – two hour timer  
 Green RUN light  
 Red FAULT light  
 Key operated switch incorporating two positions: 'Timer Disabled' and Timer Enabled' to override (or enable) the two hour operation.
  - \* Provide a separate stand alone thermostat for control of the air conditioning system, located as shown on the drawings, connected to proprietary "Hevac" controller or Manufacturer's proprietary controller (see controls hardware section).
  - \* Manufacturer's proprietary LCD controller is not to be located at occupied level. Locate proprietary controller (if required) within or on the plant control cubicle.

**Economy Cycle**

The air conditioning unit shall be provided with an automatically modulating economy cycle function. Provide an outdoor air temperature sensor to automatically control modulation of the economy cycle to achieve the following:

- \* Outside air temperature < 15°C db – damper closed
- \* 22°C > outside air temperature < 15°C and cooling required – damper fully open
- \* Outside air temperature > 22°C db – damper closed

When operating in economy cycle mode, the units associated outside air dampers and spill air dampers shall modulate to the fully open position, whilst return air dampers shall modulate to the fully closed position following a time delay sufficient to allow damper to open. When unit is de-energised, the associated dampers shall return to their preset position, i.e. return air damper fully open, outside air damper fully closed, and spill air damper fully closed.

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Project.	St Aloysius College	Drawn.	SF	Date.	12/8/10	Scale.	NTS
		Checked.		Designed.		Approved.	
Title	Control schematic page 1/1	Drawing No.	14019-C1	Issue.	B		
B	AS BUILT	SF	feb2011				
Title	Amendment	By	Date				