

Installation and Operation

SM420 – Condenser
Fan Controller



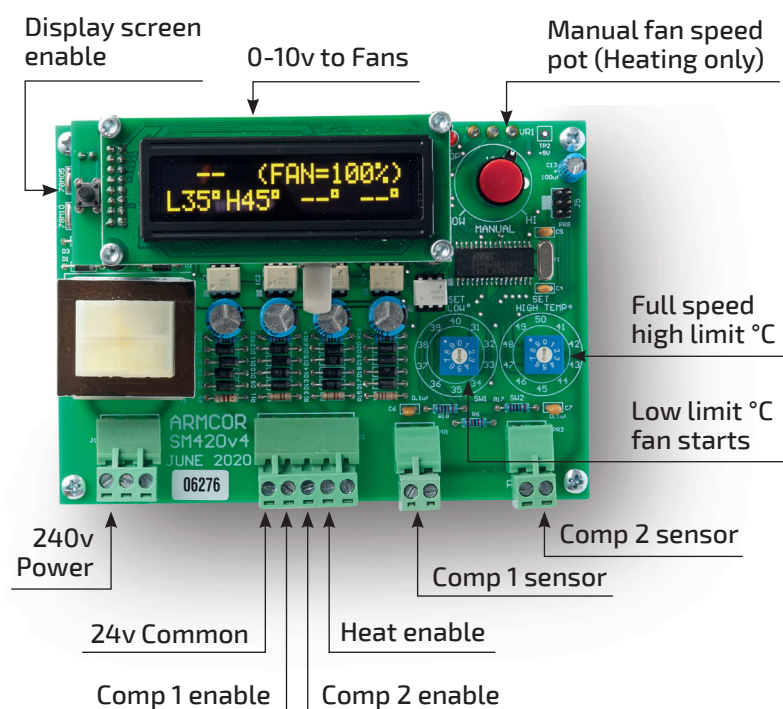
The SM420 module, designed by Armcor for control of EC condenser fans which is regulated by the temperature probes on the liquid line.

Operation Description

Once the controller makes a call for cooling, a 24v signal is sent to the SM420 which starts the condenser fan at 70% fan speed for one minute. After one minute of operation and the refrigeration circuit has stabilized, the controller will sense from the temperature probe on the liquid line. Once the temperature of the liquid line is above the low limit the fan will then modulate through the 0-10v dc output until it reaches the full speed temperature limit. The temperature dials for the start low temperature and the full speed high temperature are adjustable using a small screwdriver for finetuning during commissioning.

If compressor two is called for, the SM420 operates from sensor two which is connected to the liquid line of compressor two.

When the heating is enabled, the SM420 switches to heating mode and the fan will operate from the speed pot where the fan will run at a fixed speed. Adjustment of this speed pot should be made at commissioning with gauges attached to the refrigeration circuit to maintain the bests possible refrigeration pressures during the heating cycle. The manual pot is set at commissioning in our factory and should not require adjustment on site.



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