LVC3 TECHNICAL NOTES AND OPERATION

SYSTEM DESCRIPTION

The LVC3 is a differential temperature controller, it is housed in a plastic enclosure 100 x 100 x 70mm in depth.

One external adjustment sets the DIFFERENTIAL setting from 1oC to 8oC and also has a MANUAL ON setting to run the fan at all times.

The ambient air temperature is sensed by the plug-in sensor on the front panel whilst the crop temperature in sensed by a 2m long sensor complete with 5m lead.

Indicators on the front panel show when the fan is running and if the timer is operating. electrical power is 230Va.c.; the supply lead and the fan control lead are 3m long.

The DATA LED allows a Robydome HTM3 monitor to read crop temperature using a special infra-red sensor.

OPERATION

LVC3 checks crop temperature against ambient air temperature. When the difference exceeds the set value (1-8oC) the unit supplies 230Va.c. power, either to a small single phase fan (<750W), or to a motor control starter (230Va.c. coil) for larger or three-phase motors.

Once the controller has started the fan motor, the internal timer will not allow it to switch OFF until the timed period has elapsed and the differential is less than the set value; this is adjustable on internal switches.

On optional “FROST” setting is available where the cooling of crops such as potatoes is required. This prevents the fan running if the ambient air temperature is less than the set value, adjust on internal switches within the enclosure, -2.0oC - 5.5oC in 0.5oC increments.

Should any sensor become disconnected from the controller the two front panel indicators will flash as a warning and the system will not power the fan motor, unless set to MANUAL.