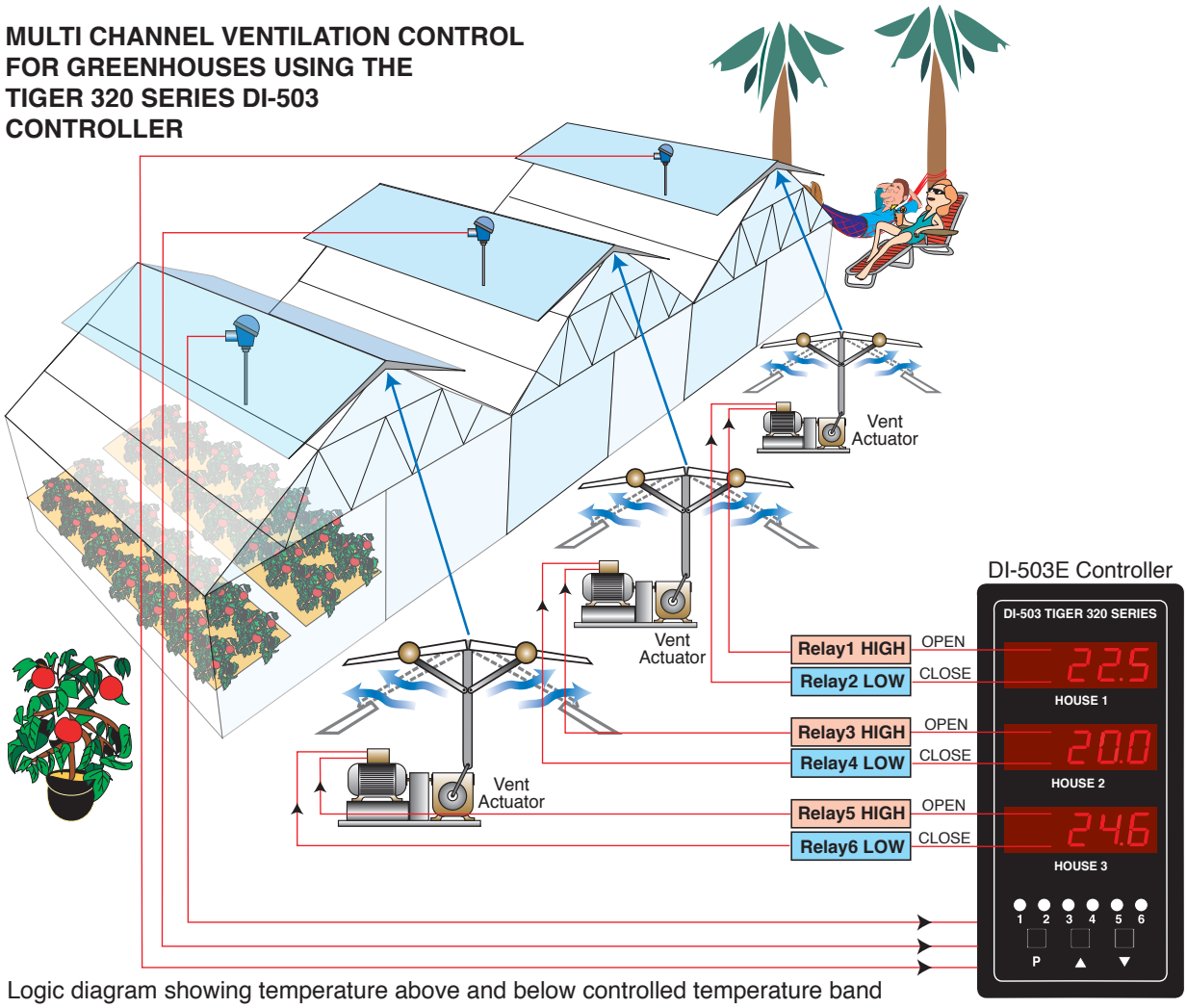
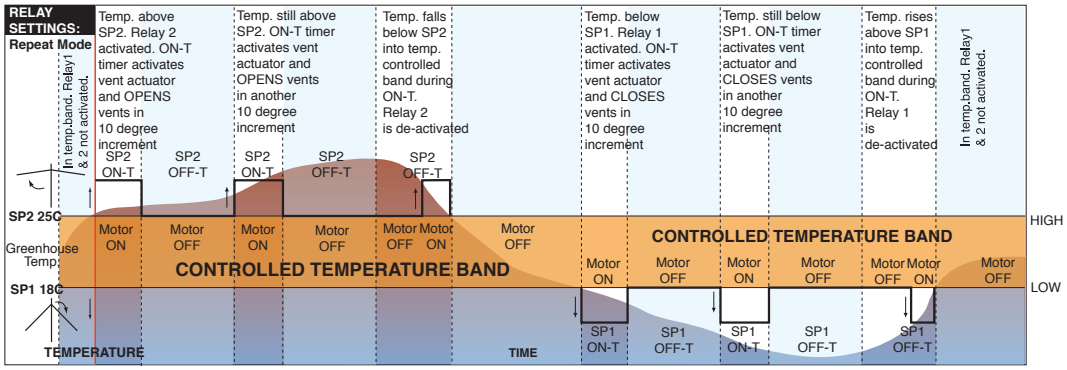
Our customer has greenhouses. The greenhouse temperatures are controlled by opening and closing the roof vents using a forward and reverse motor. When the temperature rises above the setpoint, the vent actuator motor operates for a programmed ON-time opening the vents 10 degrees.
After a programmed OFF-time, if the temperature is above the high setpoint, the vents open in 20 degree increments until the temperature falls below the high setpoint.
If the temperature in the greenhouses falls below the low setpoint, the vents progressively close keeping the greenhouse temperature within required limits.

Note:
The relays are programmed in the repeat mode (programmable ON/OFF-time).

MULTI CHANNEL VENTILATION CONTROL FOR GREENHOUSES USING THE TIGER 320 SERIES DI-503 CONTROLLER



Logic diagram showing temperature above and below controlled temperature band



Suggested Ordering Code Options for This Application

Basic Order Codes	Comments
DI-503E-RRR-PS1-ITTC-OR46	Six setpoints to control Vent actuator motor.