

## **Control Points List**

<ol> <li>Relie</li> </ol>	f dam	per p	osition
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2. Relief fan start DO

DO

- 3. Relief fan speed AO
- 4. Relief fan status DI
- 5. Return air damper position AO
- 6. Return air temperature AI
- 7. Economizer outdoor air damper position AO
- 8. Minimum outdoor air damper position DO
- 9. ...

## **Control Sequence Description**

The time rate of change of the damper signals is limited by a first order hold, using the sample time samplePeriod. This prevents a quick opening of the outdoor air damper, for example when the outdoor airflow setpoint has a step change. Slowing down the opening of the outdoor air damper allows the freeze protection to componensate with its dynamics that is faster than the opening of the outdoor air damper. To avoid that all dampers are closed, the return air damper has the same time rate of change limitation.

The control charts below show the input-output structure and an economizer damper modulation sequence assuming a well configured controller.

