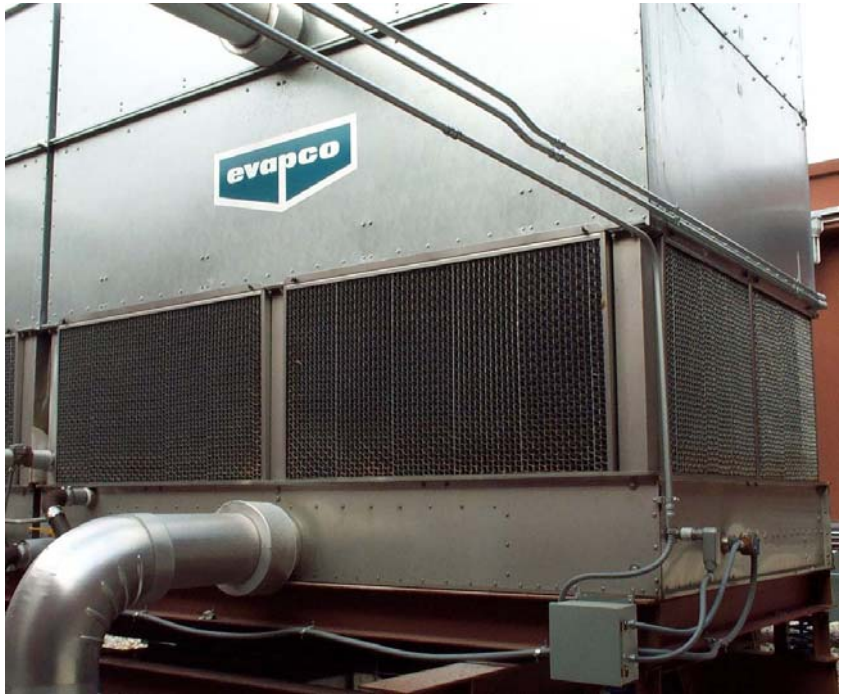
MCS-8 Loop Controller Overview



MCS LWC V9 Overview

- Provide a general loop control system
- Provide flexibility with multiple options
- Handle either water/pumps, air/fans system or damper control
- Control each loop independently
- Actual control of heating/cooling stages or provide run enable indication to other loops or systems
- Provide meaningful status of the system

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- Supports up to 5 individual loops
- Supports up to 8 pumps or fans per loop
- Supports 16 cooling/ice making and heating stages per loop
- Supports 1 VFD for pumps or fans per loop with unique control sensor
- Supports 1 VFD for heating stages per loop
- Supports 1 VFD for cooling stages per loop

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- Supports control of loops on: peak load schedules, on or off all day or based on daily schedule
- Supports 2 daily schedules per loop
- Supports separate run/stop and run override per loop
- Supports individual setpoints per loop
- Supports individual state names (status) per loop

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- Supports up to 48 Relay Outputs
- Supports up to 48 Sensors Inputs
- Supports up 6 Analog Outputs
- Supports 120 Setpoints
- Supports storage of last 60 alarms
- Supports 144 History Samples for all inputs & outputs

LWC Options (Specified by loop)

- Individual setpoints for each loop
- Individual loops controlled on:
  - Run/Stop indicator
  - Run/Stop indicator plus temperature
- Low Ambient control:
  - None
  - Loop off
  - Run only pumps
  - Enable loop to run

LWC Options (Specified by loop)

- Control of primary and backup pumps or fans with rotation

- Schedule:
  - Run loop on a day schedule
    - Always on,
    - Always off,
    - On - Off schedule
  - Do not run on peak demand hours

- Separate Control Zones with ROC control logic for cooling and heating

LWC Options

- Loop override indicator
- Ice making options, control on:
  - Temperature only
  - Ice level in the tank or
  - Both temperature and ice level
- Increase Heat Target based upon Ambient

LWC Sample Applications

- Provide pump control with heating and cooling with ice making (Edgewood School).
- Provide pump control with VFD and backup rotation.
- Provide fan control with VFD - multiple fans with backup and rotation.
- Provide pump control and turn on run enable indicator to other chiller packages.
- Provide control to an outside air system and modulate the damper, enable cooling or heating as needed.
- Provide control of units with cooling, heating and reheat functions.