



SOFTWARE RELEASE NOTES

MCS-MAGNUM

Version 17.21A

10/30/2015

Updates from previous versions:

New Features:

1. CPM: Add ram structures for CPM Cooling Towers.
2. CPM: Add headings for cooling tower and cooling tower groups.
3. CPM: Add new fields to pump group eeprom for cooling tower support.
4. CPM: Add definitions for cooling tower control bits.
5. CPM: Add and implement Cooling Towers.

Bug Fixes:

1. MHRC: (As per BWW) If in defrost do not allow outdoor fan to run.
2. CPM: Replace old cooling tower group eeprom with two separate cooling tower eeprom structures.
3. CPM: Fix initialization of capacity control structures.
4. CPM: Add cooling tower setpoint definitions.
5. CPM: Corrected error causing condenser valve to be erroneously turned on.
6. CPM: Force Pump Groups to wait for all chillers in pump group to stage completely off before leaving post delay.
7. CPM: Reduce number of chillers communicated to per cycle from 3 to 2.
8. CPM: Prevent infinite loops when number of towers is greater than 0.
9. CPM: Build the correct number of cooling tower rams.
10. CPM: Ensure cooling towers can be reset out of lockouts.
11. CPM: Ensure tower state loop loops correct number of times.
12. CPM: Reset actual number of cooling tower stages when entering tower state loop.
13. CPM: Increment the cooling tower ram state timer every second.
14. CPM: Turn on the cooling tower isolation valve relay when appropriate.
15. CPM: Prevent cooling tower from turning on before its isolation valve has turned on.
16. CPM: Make tower group staging take wanted stages into account.
17. CPM: Implement method to reset predelay timer when no stages are on.
18. CPM: Allow cooling towers to set the predelay satisfied flag to "false".
19. CPM: Ensure that all "forced" pumps have enough valves to open before activating a pump group.

Any questions regarding this release, contact:

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20. CPM: Do not indicate a pump group has flow unless the pump capacity control is running.
21. CPM: When waiting for valves to turn on in a pump group, attempt to turn on the valves.
22. CPM: Make sure stages wanted is set to 0 before saying target fully unloaded.
23. CPM: Only allow rotation if rotation days setpoint value is set to 0.
24. CPM: Add a 30 second stage delay when first entering cooling or heating from pump only.
25. HVAC: Ensure that compressors wanted from CPM cannot drop below 0.
26. CPM: Prevent more than one isolation valve from shutting down every two cycle.
27. CPM: Properly implement pump post delay offset.
28. CPM: Set pump capacity to minimum when pump group is in post delay.
29. CPM: Prevent chiller's chilled and condenser water valves from shutting off if any stages are still on.
30. CPM: Ensure that all active chillers are fully staged on before turning on a new chiller.
31. Capacity Control: Reduce max adjust delay to 10 to be more in line with HVAC.
32. Capacity Control: Fix issues with capacity adjustment.
33. Capacity Control: Prevent stages wanted from being set to 0 if actual stages are not at 1 stage.
34. Capacity Control: Prevent % wanted from increasing while waiting for the next stage to activate.
35. CPM: When using "Rotate when any chiller shuts off" option, only rotate when a chiller goes down to 0 wanted stages.

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