



# SOFTWARE RELEASE NOTES

## MCS-CONNECT Version 18.00D 10/05/2016

### Updates from previous versions:

#### New Features:

1. Add Code for SKM to change the Supervisory Mode using the Keypad. This feature will allow the user to switch between HAND/AUTO/OFF using the Keypad
2. Add code to initialize the implementation of a Heatwheel Fault SI.
3. Add new Auxiliary Heat Fault SI, this SI will shut down only the Auxiliary Heat not the heat pump. This Fault SI will not work for the MOD Gas Auxiliary Heat because it has its own Fault SI. Include a separator vapor and liquid PT chart for those refrigerants that have a glide. When finding the saturated temperature in Evaporator use the vapor chart and when finding the saturated temperature in condenser use the liquid chart.
4. Implement the Auxiliary Heat Fault by adding Primary Aux Heat and Emergency Aux Heat.
5. Allow to maintain the Condenser Start minimum % Value when the compressor is off by setting STPT\_CONDENSER\_START\_PERCENTAGE trip\_delay >0. This minimum Condenser Start Value will not be active if the CMP state is in Low Ambient or if the Run/Stop is in Stop Mode
6. Add a Process Pump on RTU\_EEPROM\_TYPEDEF Byte 119, this pump will be on when the system is on and will not follow the chiller pump relay logic.

#### Bug Fixes:

1. Bacnet wasn't displaying the name of the SIs, ROs and AOs, changing sprintf() function for copy\_from\_eds() fix this bug.
2. The EXV logic was trying to modulate and adjust the EXV even when the EXV logic is not used. By checking if the EXV AO exist solved this issue.

Any questions regarding this release, contact:  
[support@mcscontrols.com](mailto:support@mcscontrols.com)

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3. During heating the condenser logic was not turning on the ROs because was following the condenser cooling logic. Resolution: add code to look for the heating to be active to set the ROs in heating mode.
4. When the Setpoint STPT\_PUMP\_DOWN was unused still setting the LLS RO base on PSI, by looking if the STPT is use before enter the logic solve this issue.
5. The ERW fault was doing a lockout. change to set the RO to off instead of the lockout.
6. When a Condenser Fault was triggered the modulation was stop and the next stage was never activated because the condenser\_lockout\_flag was preventing to enter the logic to stage the next condenser on the circuit
7. When the condenser fault 1 is set all condenser RO are turn off, when the condenser fault 2 is set no RO is turn off. this change fix the problem for the fault SI turning off the correct RO, but need more work
8. Condenser logic Fault: if all condenser Fault ROs are tripped the condenser state will go into lockout.
9. Condenser logic Fault RO was driving the Fan AO to 0% when the Fault occurs on a different fan than the Fan AO, by pointing to each individual Fan to the corresponding Fault RO fix this bug.
10. The economizer and the Compressors were running at the same time because the Compressors was less then ambient temp and the economizer was less than or equal to. by adding the equal sing to the Compressors fix this bug.
11. When the run/stop switch is disengaged the unit will stay in Stop mode because the next state was set to network run/stop. By removing this line solve this bug
12. In BACnet the alarms where not displaying the sensor number because the BACNET\_MSV\_MAX\_ALARMS was not defined to read SI16 and RO10s by incrementing BACNET\_MSV\_MAX\_ALARMS to 227 solve this bug.
13. Recover some of the code that was remove from the chiller logic because the compressor wasn't turning off.
14. In the function psi\_to\_temp() the psi\_temp array was passing the incorrect value and the pressure was exceeding the limit, by releasing REFRIG\_TEMP\_POINTS with 28 solve this bug.
15. The Reheat number\_of\_control\_stages was expected from reheat\_numb\_ROs by changed to be received from numb\_cooling\_stages fix the Reheat staging.
16. During reheat the second valve wasn't modulating because wasn't a logic supporting an increment on the stages active, Also, add the bit to display Reheat status on connect.
17. The pump timer for chiller is not displaying the time in mode on MCS-Connect. add the chiller check to ensure that the roc calculation start the counter.

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18. When MicroMag have an invalid config, the keypad give the option to change the communication parameters, wish should not be allow, by blocking the keys for make the change, if the config is invalid.
- 19.

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