ASIC/1-8655 Release Note

APPLIES TO ASIC/1-8655

LAST REVISED 2007-01-12

ASIC/1-8655 FW655a2.0 (2007-01-04)

WHAT HAS CHANGED

- Adds Single Setpoint feature for WS-051 Digital Display.

- Fixes Analog Outputs for AO Assignment 1= CLG; 2= HTG; or 4 = Xover. When Fan is Off, Analog Output goes to AO Minimum Value.

STEPS TO COMPLETE UPGRADE

Download hex655a20-rel.zip and update FlashDev 8655 folder. The updated files are available from the ASIC/1-8655 page in the integrator center. Use FlashDev to update the firmware in the controller.

Single Setpoint Feature

If User Adjust Enable is yes, the WS-051 can be used to change the Occupied Cooling and Heating Temperature setpoints. If Single Setpoint Enable is yes, then single setpoint adjustment is supported where the Occupied Cooling Temperature Setpoint is changed and the Occupied Heating Temperature Setpoint is set 2 degrees lower. Please see the Application Bulletin 69, ASIC/1 Digital Display for further details.

Analog Outputs Fix

For Analog Output Assignment 1= CLG; 2= HTG; or 4 = Xover , the Analog Output goes to AO Minimum Value when Fan is Off. If Gas Heat Enable is set, then Fan is ignored in the heating and the Analog Output follows the heating requirement.

ASIC/1-8655 FW655a1.9 (2006-06-23)

WHAT HAS CHANGED

- Fixes Dehumidification Output Feature to ignore the status of the fan. It acts as a Humidistat.

STEPS TO COMPLETE UPGRADE

Download hex655a19-rel.zip and update FlashDev 8655 folder. The updated files are available from the ASIC/1-8655 page in the integrator center. Use FlashDev to update the firmware in the controller.

ASIC/1-8655 FW655a1.8 (2006-05-25)

WHAT HAS CHANGED

- Optional parameter for Outdoor Air Temperature. If OAT Override Enable (T6,E6,bit2) flag is set,then the economizer is controlled using a new parameter OAT Control(T18,E15 WORDs).At reset OAT Control is initialized at reset to Econo Low LimitSP*100 (T2,E21)

- Adds Dehumidification Output Feature to energize an output if the Relative Humidity exceeds a setpoint. The Relative Humidity sensor can be assigned to an unused input.

- New Soft Interlock Command, MT=0x10, M1=15 (0x0F), Set Soft Interlock. When sent to Destination Address (not group or global) it sets a soft controller interlock for 30 seconds.

- Adds Cooling Fan Delay feature to lock out fan until Compressor comes on. If Cooling Fan Delay Enable (T6,E6 bit2) is yes, the it holds fan off until compressor comes on.

- Fixes Intermittent Fan problem where fan goes off for a Fan Start Delay and comes back on until the end of the Fan Wait Time.

- Improves Trend by fixing occasional missed value bug. Corrects problem with updating Trend Day of Week when trend rolls over.

STEPS TO COMPLETE UPGRADE

Download hex655a18-rel.zip and update FlashDev 8655 folder. The updated files are available from the ASIC/1-8655 page in the integrator center. Use FlashDev to update the firmware in the controller.

Note: The size of Table 3 has changed so you will need to reload your application after upgrading the firmware.

Download and update Expert, ASIC1.mdb, the a1-8655.PVS, a1-8655.TCL files The updated files are available from the ASIC/1-8655 page in the integrator center.

REFERENCES

ASIC/1-8655 Engineering Guide

Outdoor Air Temperature Parameter

An option has been added to version 655a1.8 to allow the Outdoor Temperature to be a control parameter broadcast to the controller, freeing up Input 5 that is typically used for the Outdoor Air Temperature. If the OAT Override Enable flag is "Yes", then the Economizer and other Outdoor Air Lockout functions use the word value stored in OAT Control (T18,E15.16) for control functions. . At reset of power this parameter is loaded with the Economizer Low Limit Setpoint. You may override the value of OAT Control by broadcast on the communication line. If the OAT Override Enable flag is "No", then the controller uses the converted value of Input 5 for OAT control functions. The OAT Override Enable flag and the OAT Control parameter are displayed on the Expert "Input Config" view.

OAT Override Enable: ☑ Yes   OAT Control: 45.00

Dehumidification Output

If a new parameter Dehumidify Output Enable (T6,E6, bit 3) is Yes, then the inputs are examined to find a Relative Humidity Sensor. Any unused input may be configured for Relative Humidity. The value of the first RH sensor found is loaded into the RH Value (T18,E29.,30 Word) 0.0 to 100.0% RH. If the RH Value is greater than the RH Setpoint (T3,E48), then the Dehumidify Output is On. If the RH Value is less than the RH Setpoint minus the RH Hysteresis (T3,E49) then the Dehumidify Output is "Off". No other action is take by the controller. This sequence depends on the air conditioning unit to perform the necessary interlocks.

The Dehumidify output uses the Aux Cooling Output which is disabled if Dehumidify Output Enable is Yes. The Dehumidify Output Mask (T3,E41)must be assigned to an unused output.

The Dehumidify feature is configured on the Expert "Aux Output " view.

Dehumidify Output Enable: ☑ Yes	Dehumidify OR Action	Dehumidify Output Status: Off
DehumidifyOutputMask: OUT-8		RH Value: 53.9
RH Setpoint: 60	RH Hysteresis: 5	

The RH sensor is configured on the Expert "Input Configuration" view..

Soft Interlock Command

A new command, Set Soft Interlock (MT=0x10, M1=15 (0x0F)) has been added to version 655a1.8 . When sent to the controller, it temporarily sets a soft interlock for 30 seconds. This allows the user to bypasses hardware interlock and to change a controller address or to do a remote brain-dump. A soft Interlock Action button is now on the Expert "Configure" view.

Soft Interlock Action

> Note: Do not send this message with Group or Global command as it will set the Interlock for ALL controllers. Expert uses a special 0xB455 initialization address which is taken by any controller with the interlock set.

Cooling Fan Delay

A Cooling Fan Delay Enable (T6,E6,bit 2) flag has been added to version 655a1.8 that locks out Intermittent Fan in CLG until CLG Requirement is non-zero. This prevents unconditioned air from entering the space, before the cooling comes on. Cooling Fan Delay Enable has been added to the Expert "Fan" view.

Fixes Intermittent Fan problem

When the fan goes off because of Intermittent Fan going into deadband, the controller would improperly apply the Fan Start Timer for a Fan Start Delay to force the fan off. This has been corrected in version 655a1.8

Trend Improved

The operation of Trend has been improved. Earlier versions would occasionally miss a sample. Also the Trend Day of Week updates properly.