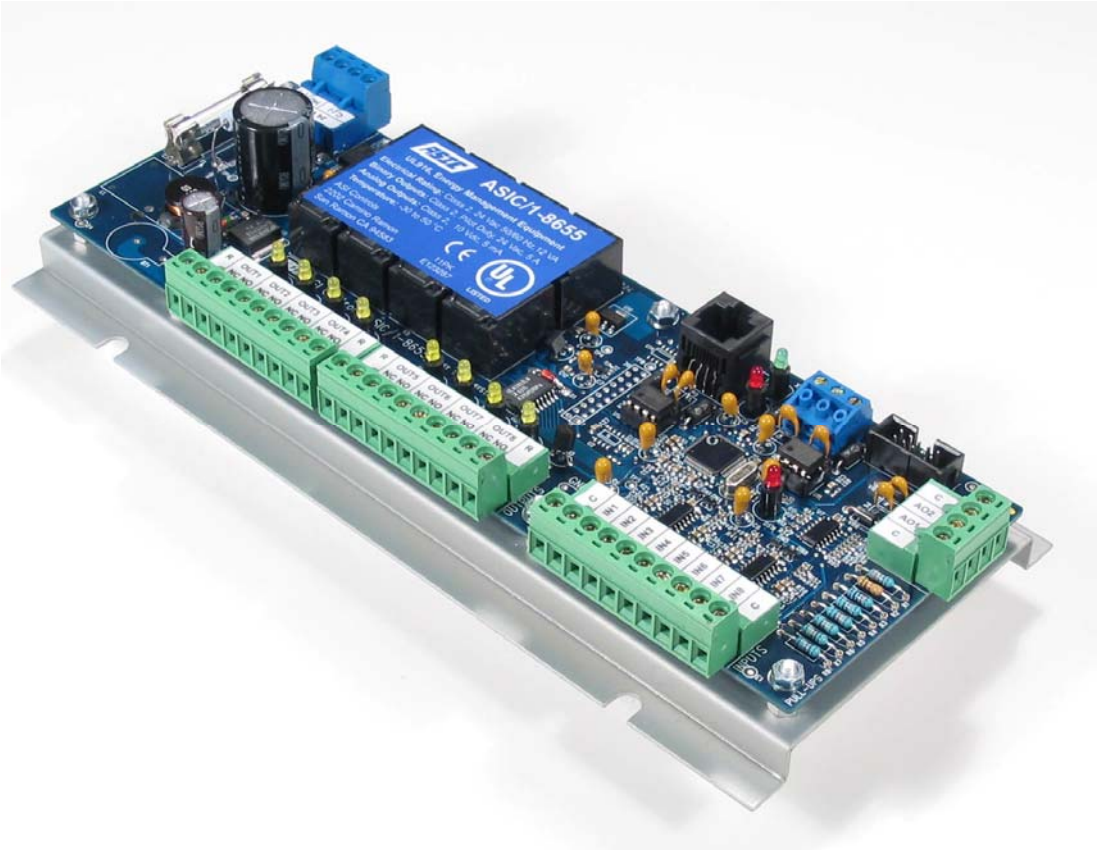
ASIC/1-8655 Introduction

ASIC/1-8655 Controller



The ASIC/1-8655 controller is programmed with standard control sequences for packaged air conditioners and heat pumps. Information such as name, address, schedules, alarm limits and setpoints is maintained in non-volatile Flash memory.

- The ASIC/1-8655 has 8 Form C Relay outputs that can switch 24 Vac/24 Vdc. Each set of 4 outputs have a common return.
- The ASIC/1-8655 has 2 analog outputs, 0-10 Vdc, 5 mA output
- The ASIC/1-8655 has 8 universal analog/binary inputs .

- Control is based on Zone Temperature. This product does not provide Discharge Air Temperature control. A Discharge Air Temperature Low Limit option is provided.
- Each ASIC/1 has a 24 hour, 8 day software clock. The clock in each controller automatically sets the appropriate operating parameters based on the schedules programmed into the controller.
- Modulating Economizer for Free Cooling based on Outdoor Air Temperature .
- Optional Half-degree F or C Setpoints for temperature control

To use schedules, the controllers must be synchronized regularly by time broadcast on the communication line by a SINC/3-3000 or other device. Two-way communications enable information to be transmitted throughout the control system providing coordination and easy maintenance access to all points.

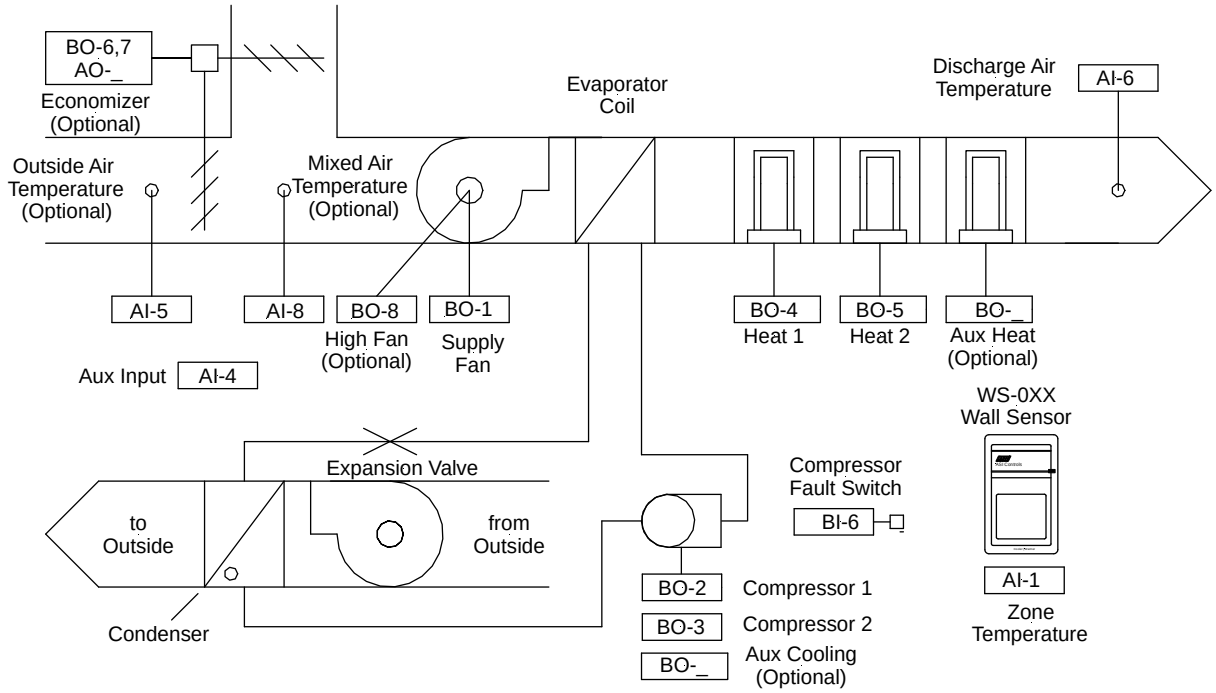
The ASIC/1-8655 communicates at up to 19,200 baud on the RS-485 bus. It is protected by self-resetting polyswitches and transient voltage suppressors.

The ASIC/1-8655 has flash programming so that the firmware may be easily upgraded.

Air Conditioner Sequences

The ASIC/1-8655 Packaged Air Condition controller has 8 air conditioner personalities for up to 2 stages of heating and two stages of cooling:

Personality 1, 1 Stage Air Conditioner with 1 Stage Heating
Personality 2, 1 Stage Air Conditioner with 2 Stage Heating
Personality 3, 2 Stage Air Conditioner with 1 Stage Heating
Personality 4, 2 Stage Air Conditioner with 2 Stage Heating
Personality 9, 3 Stage Air Conditioner with 1 Stage Heating
Personality 10, 3 Stage Air Conditioner with 2 Stage Heating
Personality 11, 4 Stage Air Conditioner with 1 Stage Heating
Personality 12, 4 Stage Air Conditioner with 2 Stage Heating

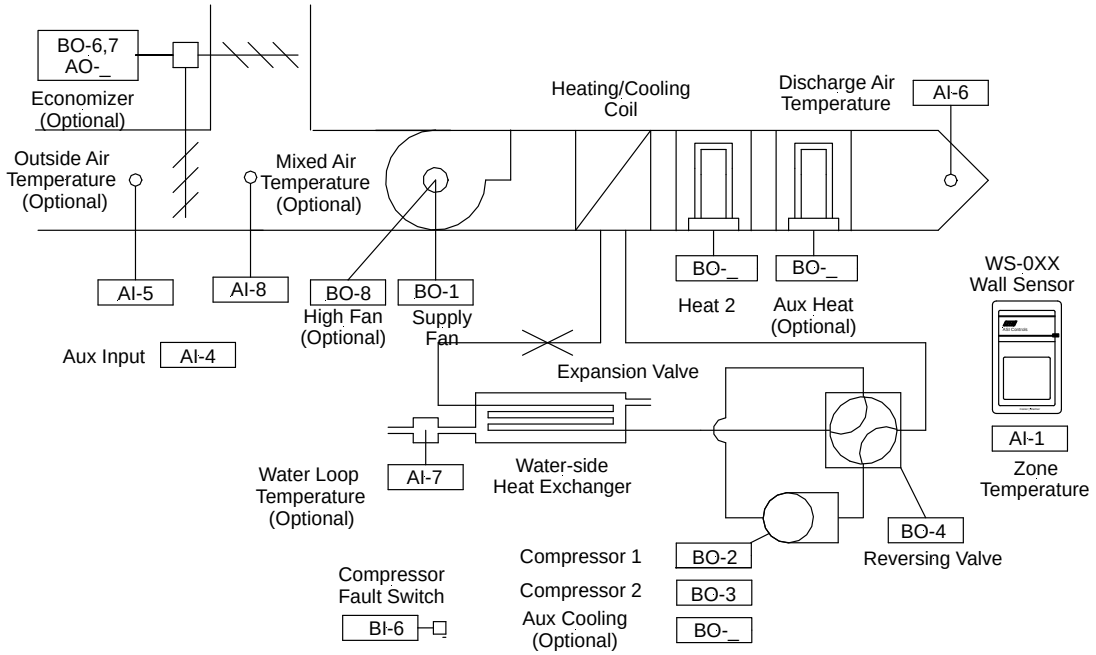


Please see the Application Bulletin 651, Packaged Air Conditioners, for further details.

Water Source Heat Pump Sequences

The ASIC/1-8355 Packaged Air Condition controller has 4 water source heat pump personalities for up to 2 stages of compression heating and cooling, and up to 1 additional heating stage.

Personality 5, 1 Stage Water Source Heat Pump
Personality 6, 1 Stage Water Source Heat Pump with 1 Stage Heating
Personality 7, 2 Stage Water Source Heat Pump
Personality 8, 2 Stage Water Source Heat Pump with 1 Stage Heating



Please see the Application Bulletin 652, Packaged Heat Pumps, for further details.

ASIC/1 WS-051 Digital Display

The ASIC/1-6000 supports the WS-051 Digital Display Wall Sensor. The Digital Display has a zone temperature sensor that is read by the ASIC/1 controller. The Digital Display is connected to the ASIC/1-6000 using the standard SCP-0xx wall sensor cable. A jumper must be set on the controller and Digital Display Enable must be set to yes using ASI Expert software. You can talk to the controller through the wall sensor using a SINC/1-1030 Portable Mini-SINC.

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.

If Afterhours Enable is yes, the WS-051 can be used to start afterhours operation.

If Half Degree Enable is yes, then the temperature setpoints are maintained in 0.5 deg increments in the controller

If the Input 1 Type is Zone Temp deg C, then the temperature reading and setpoints are in Celsius units. If the Input 1 Type is Zone Temp deg F, then the temperature reading and setpoints are in Fahrenheit units.

Please see the Application Bulletin 69, ASIC/1 Digital Display for further details.

ASIC/1 Occupancy Sensor

With firmware 600a1.3 the ASIC/1-6000 supports an occupancy sensor on Input 5.If the Occupancy Sensor Enable is set, the control state is determined by the daily event schedule or by the switch attached to input 5. The switch can be sense a voltage threshold or may be two-position normally open or normally closed switch.

In the Occupied State the sensor or switch forces the controller to the Unoccupied State using the unoccupied setpoints and sequence.

In the Night Setback or Unoccupied States if Occupancy Afterhours Enable is yes, the Occupancy Sensor can initiate afterhours operation when the sensor indicates that the room is occupied.

Please see the Application Bulletin 66, ASIC/1 Occupancy Sensor for further details.

About this Document

This manual was produced using *Doc-To-Help*®, by Component One, LCC. This manual, ASIC/1-8655 Application Bulletins, DOC-1567 and Windows™ help system was last revised on 2010-04-13. ASI Controls is always working to improve our products. Should you have any questions, or suggestions that would help our products better meet your needs, or that would help us serve you better, please call, write, or e-mail to:

ASI Controls
2202 Camino Ramon
San Ramon, CA 94583
Phone: (925) 866-8808
FAX: (925) 866-1369

Customer Support: sales@asicontrols.com

Technical Support: techsupport@asicontrols.com

Visit our Web site at http://www.asicontrols.com