



## ASI Controls

## Packaged Air Conditioner Controller

### ASIC/1-8355 Features

- Sequences include:  
1& 2 Stage Heat Pumps  
1& 2 Stage Air Conditioners
- Optional features include:  
Auxiliary Heating  
Auxiliary Cooling  
Lighting Control  
Variable User Adjust  
After-hours Override  
from Pushbutton  
Discharge Air Temperature  
Low Limit  
Economizer Control
- Compatible with Packaged Air  
Conditioners from many  
manufacturers
- Compatible with ASI WebLink  
& Data Server products

The ASIC/1-8355 is a pre-programmed digital controller for use in the control of Packaged Air Conditioner units. The controller contains the most frequently used Packaged Air Conditioner applications. This controller maintains the space temperature by turning on and off stages of heating or cooling. The controller has personalities for 1 and 2 stage heat pumps and air conditioning units. It also has optional auxiliary cooling and auxiliary electric or gas heat. The controller is mounted on a steel base.

The controller monitors zone temperature through the WS-0X1 Wall Sensor. It calculates the cooling or heating requirement for the space based upon comparing this temperature with the cooling and heating setpoints. Control of the indoor fan is included. Discharge Air Temperature Low Limit control is an optional feature that prevents the discharge of excessively cold air to the space.

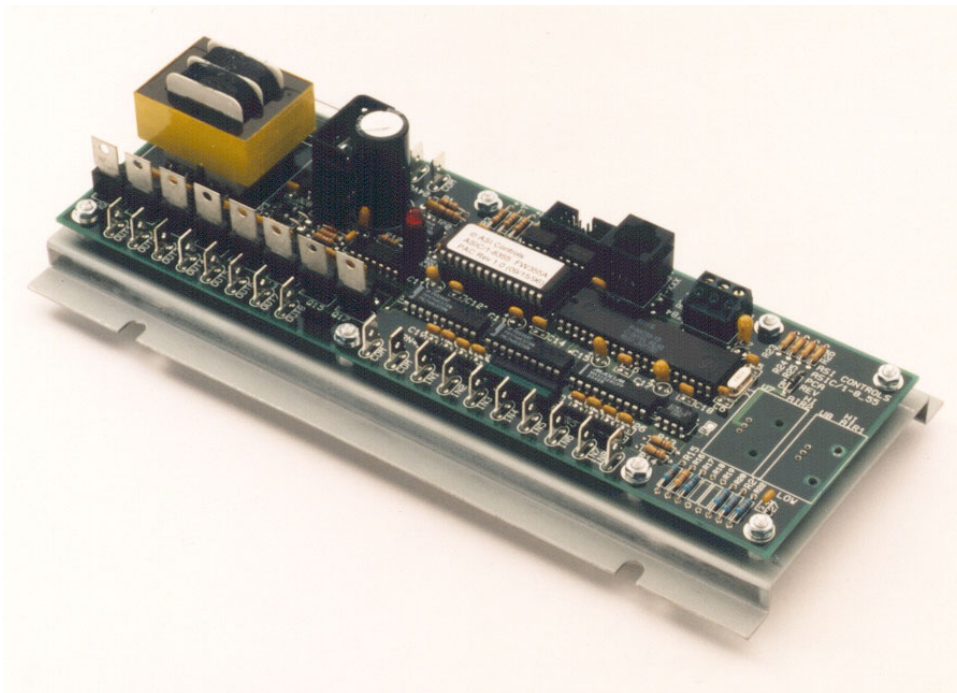
The ASIC/1-8355 controls compressors, and electric or gas heat. A three-position economizer control is also included. It is recommended that interposing relays be used to isolate the triac switching to common from the 24 Vac control signals to the unit.

The ASIC/1-8355 may be used for both new construction and retrofit applications. The pre-configured nature of the controller allows newly installed zones to be started up quickly and efficiently. A pre-tuned PI algorithm means that controllers can accurately maintain space temperature.

No user programming is necessary. To be fully operational, the operator needs only to enter a unique device address, select the correct personality for the application and verify temperature setpoints. No calibration is required.

The controllers include after-hours override, user temperature adjustment, and lighting features. Afterhours usage is automatically stored at each unit for retrieval by the building operator. Time-based features such as scheduled changes in setpoints may be used when the controller is connected in a network that can synchronize the ASIC/1 internal software clock by broadcasting a time message.

The ASIC/1-8355 can operate stand alone or as part of a larger communicating control network with other ASI controllers. Communication at speeds up to 19,200 baud means rapid access to information. This enables integrated control of the complete mechanical system to ensure optimum building performance. Temperatures, airflow, setpoints, and other controller information may be easily reported to ASI WebLink, or to any Windows based software that is a client for OLE for Process Control (OPC) or Dynamic Data Exchange (DDE).





## ASI Controls

## Packaged Air Conditioner Controller

### Specifications

#### Control Power

Supply Voltage: 24 Vac +/- 15%, 50/60 Hz

Power Consumption: 6 VA (plus loads)

#### Outputs 8

Type: 8 Binary solid state switch common to ground

Voltage rating: 24 Vac, 1 Amp

#### Inputs 8

Type: Universal Analog/Binary

Range: 0 to 5 Vdc

Resolution: 10 bit, 0.1% full scale

Accuracy: 1%

Temperature Sensor:

3 kohm at 77 °F (25 °C) thermistor

#### Communications

Format: RS-485 1/2 duplex

Protection: 1/8 A pico fuse, or 100 mA polyswitch  
500 mW-s TVS

Baud Rate: 1200, 9600 or 19,200

Repeater: ASI Converter/Repeater  
every 32 devices

#### Connections

Power and I/O: Male spades (0.25")

Communications: 3 Position screw terminals

Zone Sensor: 8 position, modular jack,  
for use with ASI cable, SCP-0XX  
or male spades (0.25")

#### Other

Microprocessor: 8 bit, P80C32

Indication: 1 LED

Dimensions: 3.25" x 9.50" x 1.50"

83 mm x 241 mm x 38 mm

Steel Base: 4.5" x 9.7" x 0.70" (WxLxH)

114 mm x 246 mm x 18 mm

with mounting holes on center

6.7" x 3.95" (170 mm x 100 mm )

Weight with base: 1.46 lb (0.66 kg)

#### Environmental

Operating: +32 to +122 °F (0 to 50 °C)

10 to 95% rh non-condensing

Storage: -35 to +180 °F

5 to 95% rh non-condensing

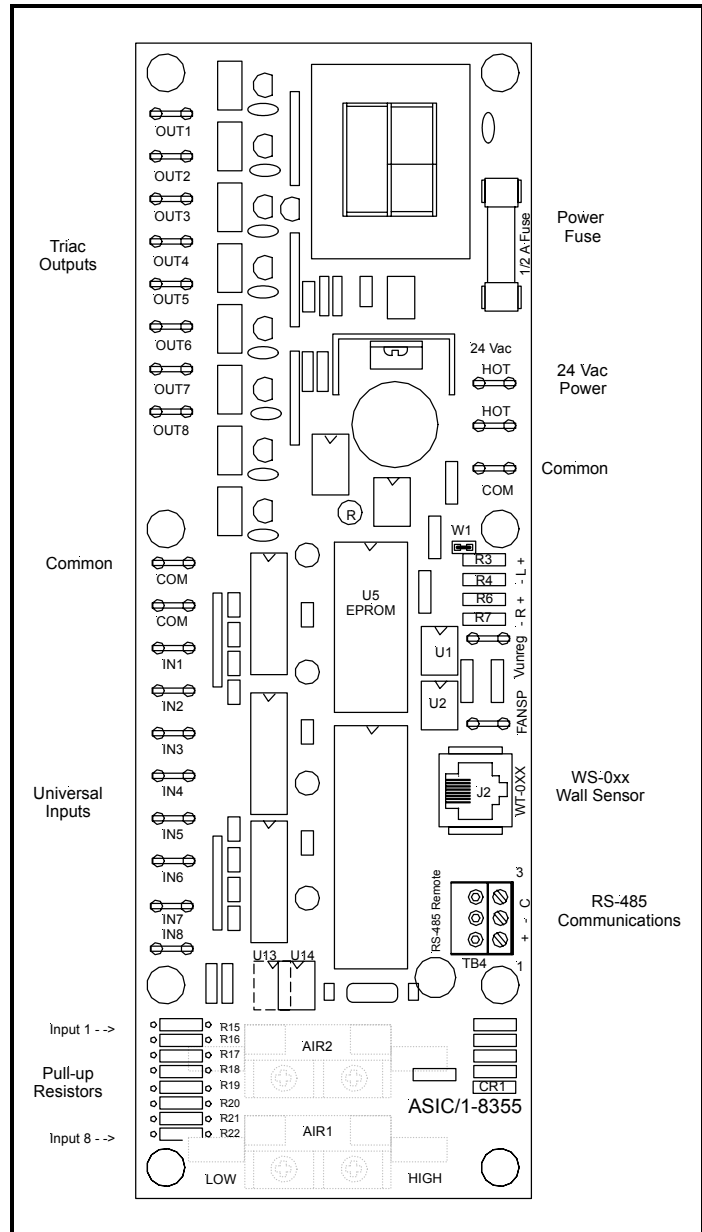
#### UL Listing

Open Energy Management Equipment



Rated as a Class 2 Device, Pilot Duty  
Includes terminal connector kit with wiring  
instructions. Use provided connectors.

Meets CE Requirements.



How to Order:	Order Number
Packaged AC Controller	ASIC/1-8355

Accessories:	Order Number
Wall Temperature Sensor	WS-0XX
Sensor Cable	SCP-0XX
Top Cover Kit	CE-055

Software & Documentation:	Order Number
ASI Expert Configuration Software	ASI Expert
ASIC/1-8355 Users' Manual	8355 Manual