

FEATURES

Hardware:

- “Industrial grade” controllers.
- Easy-to-read, high density, 11 character, back-lit, alpha-numeric display with thumbwheel knob for quick changes to all control parameters.
- Optional I/O.
- Optional separate relay board providing terminal connections and 6 relays.
- Keypad and RS232 terminal (or PDA) access to all functionality.
- Walker I/O Bus.
- Real time displays (columnar graphics) for setup.
- Switching power supply for high noise immunity.
- Plug and Play when tied to Walker I/O Bus products.
- Internal time schedules with 48 hour clock backup on power failure.
- Ability for complete control and monitoring by a supervising SAC over an I/O Bus network.
- On-board sensor compensated for thermal mass of circuit board.

Software:

- Complex control strategies with two or three separate PI controllers in each Easy-STAT.
- Celsius or Fahrenheit operation.
- Password protected access to all tuning parameters via keypad, knob and display, or serial port.
- Any application can be downloaded to a single hardware device.
- Adjustable minimum and maximum values for all points.
- Adjustable deadbands and predictive responses.
- Configurable password protected access to all tuning parameters via serial port.
- Setup of default parameters via serial port.
- Several strategy options for each application.

DESCRIPTION

A highly stable, multiple loop unitary controller which operates stand alone or as a fully functional component of a distributed control system. All models allow download of new Easy-STAT algorithms.

APPLICATIONS

- Multiple Zone Heating/Cooling
- Fan Coil Controller
- Humidification Control
- Heat Pump
- Rooftop
- AHU and economizer
- VAV Control

EASY-STAT VERSIONS

This product is designed to provide variable solutions for more sophisticated applications.

Communications:

The Easy-STAT26, 27 and 28 have a RS232 communication port. They also communicate as masters and slaves concurrently via Walker's IOB Protocol. The Easy-STATs also have a RS485 protocol interface that can be optionally used instead of IOB connections.

Connector options:

The Easy-STAT comes with on-board terminals, terminals on the back or terminals on an external terminal board that can be located elsewhere.

For low point counts a terminal strip on-board the Easy-STAT 26 provides the most economical connection. Use the Easy-STAT 27 when more points are needed. All inputs and outputs are on the back of the Easy-STAT27. When the installation requires the inputs and outputs to be located elsewhere use the Easy-STAT 28 with a RJ45 connection between the Easy-STAT and the terminal board.

Easy-STAT 26

For low point counts a terminal strip on-board the Easy-STAT 26 (see Figure 1) provides the most economical connection. Supports two analog outputs, one analog input, IOBus, Gruner, and RS485 communications.

Easy-STAT 27

For full input and output counts the terminal board mounts on the back of the Easy-STAT 27 (see Figure 2). Supports two analog outputs, five analog inputs, six digital outputs with relays, IOBus, Gruner, RS485 communications and RS232 terminal interface.

Easy-STAT 28

For remote location of the terminal board. RJ45 mount on back of the Easy-STAT 28 and connects to the remote terminal board via two RJ45 cables (see Figure 3). Supports two analog outputs, five analog inputs, six digital outputs with relays, IOBus, Gruner, and RS485 communications.

EASY-STAT 2X OPTIONS

The Easy-STAT 26, 27 and 28 are available with the following options:

_Blank;

This option has no display; no setpoint knob; and no keypad.

_Setpoint;

This option has no display; it has a setpoint knob in degrees Celsius and a push button with LED override indication.

_Display;

This option has a high density, 11 character, back-lit, alpha-numeric display; a 3 button keypad; and a setpoint knob.

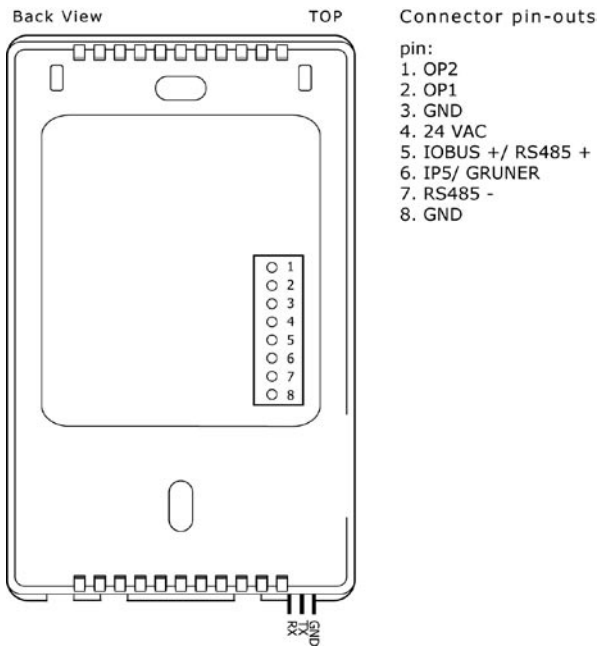


Figure 1: Easy-STAT 26 with terminal strip suited for use with Gruner motor

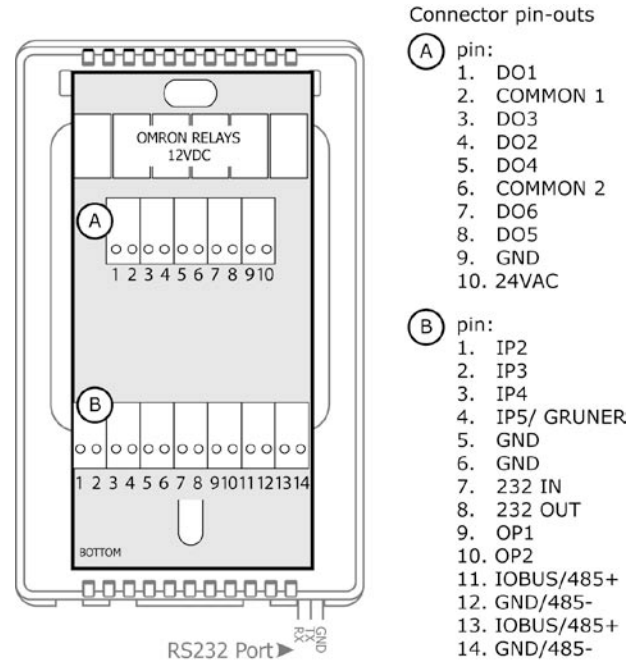


Figure 2: Easy-STAT 27 with terminal board with all inputs and outputs mounted on the back.

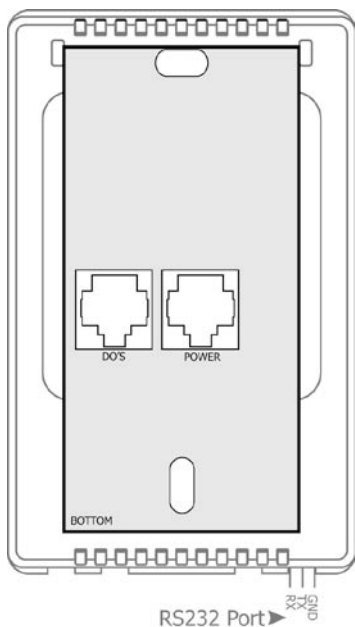
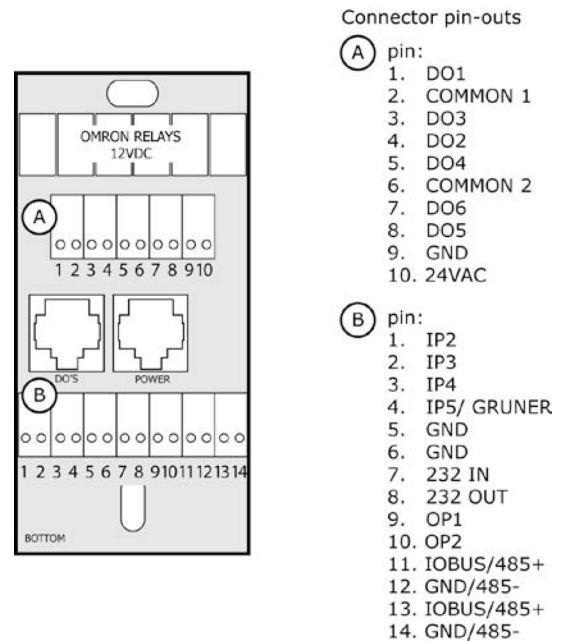


Figure 3: Easy-STAT 28 with RJ45 connectors mounted on the back to connect to terminal board.



Terminal board with RJ45 connectors and all inputs and outputs can be mounted elsewhere.

TECHNICAL SPECIFICATIONS

I/O POINT QUANTITIES

EASY-STAT 2X	
Inputs	base Easy-STAT 2x has 0, selecting the <code>_I</code> option provides 4 inputs
Outputs	base Easy-STAT 2x has 0, selecting the <code>_O</code> option provides 8 outputs: 6 digital relay drive outputs, 2 analog outputs.

INPUTS

TYPE	USAGE	DEVICES
0-5Vdc with 3k 1% pull-up	Voltage (0-5Vdc)	Standard 0-5Vdc Devices
	Digital	Contact Closure
	Temperature	3k NTC Thermistor
Internal Sensor	Room Temp	3k NTC Thermistor ($\pm 0.2^{\circ}\text{C}$, $\pm 0.36^{\circ}\text{F}$)

OUTPUTS

TYPE	USAGE	RANGES	CAPACITY
Analog	Voltage	0-10Vdc	20mA
		2-10Vdc	20mA
Digital (20mA contact closure to ground)	On-board Relay* Contact Closure	AC Switching	1A at 30Vac
		DC Switching	1A at 24Vdc

*Relay is OMRON G5V-1 12VDC

COMMUNICATION PORTS

TYPE	QUANTITY	USAGE	BAUD RATE
I/O-Bus	Jumper Selectable *	Walker I/O-Bus Protocol	9.6kbps
RS485	Jumper Selectable *	RS485 Protocol	
RS232	1	3pin Access of Real Time Displays for Setup	9.6kbps

* Jumper selectable for either Walker I/O-Bus or RS485

ELECTRICAL

TRANSFORMER	LOADED VA RATING	LOADED VA WITH GRUNER MOTOR (sharing transformer)
24Vac	5 VA	10VA

CPU & MEMORY

CPU	MHz	BITS
Atmel Mega16	16	8

MECHANICAL

CASE DIMENSIONS in mm (inches)
See image

