

# Braeburn®

# 6425

Up to 4 Heat / 2 Cool Heat Pump  
Up to 3 Heat / 2 Cool Conventional  
**Universal Programmable Thermostat**  
with Humidification Control 



ACTUAL SIZE



**5** YEAR  
LIMITED  
WARRANTY

## Features

- 7 Day, 5-2 Day or Non-Programmable
- Large 12 sq. in. Easy-Read Touchscreen
- Auto or Manual Changeover
- Bright Blue Backlight Display
- Humidification Control
- Dehumidification Control with Overcooling
- Adjustable Over Cooling Limits
- SpeedBar® Multi-Function Button
- Residential or Commercial Modes
- Adjustable Temperature Limits
- Indoor or Outdoor Remote Sensing
- SpeedSet® Programming
- Programmable and Circulating Fan Modes
- Auxiliary Heat Fossil Fuel Option
- Hardwire or Battery Power
- Multi-Level Keypad Lockout
- Auxiliary "A" Terminal for Economizer, Fresh Air or Output Control
- Trilingual Packaging and Instruction Card with FREE Contractor Branding

**DELUXE  
SERIES**

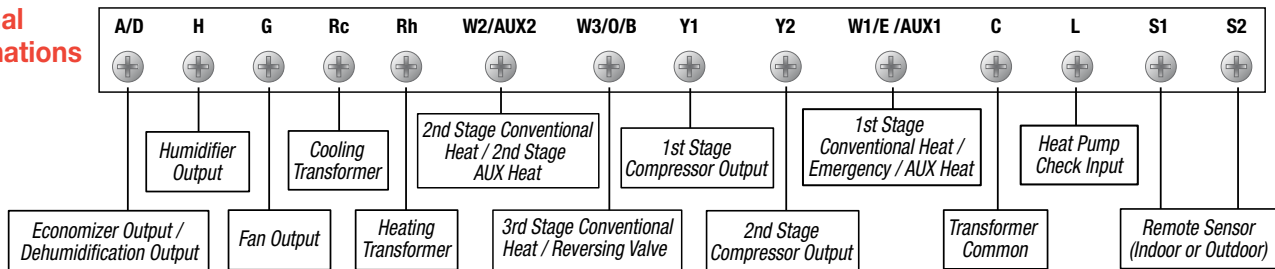
\*As a licensee in the Energy Aware Programmable Thermostat Program, Braeburn Systems LLC has determined that this product meets the NEMA Energy Aware efficiency specifications for programmable thermostats. Visit [www.getenergyaware](http://www.getenergyaware) for more information.

Touchscreen  
*hybrid*

FREE Color Contractor Branding! Visit [www.braeburnonline.com](http://www.braeburnonline.com)

# Braeburn®

## Terminal Designations



## Architectural Specifications

The universal auto changeover thermostat shall be a Braeburn®, model number 6425, 4.13" high x 6.13" wide x 1.38" deep, powered with either 24 Volt AC or with two "AA" Alkaline batteries (3.0 Volt DC). In the event of a power failure, the unit shall retain all user, installer and program settings. The thermostat shall be compatible with low voltage single stage or multi-stage gas, oil, or electric conventional heating or cooling systems, up to three stages of heating and two stages of cooling, and heat pump systems with up to four stages of heating and two stages of cooling. Also compatible with 250mv – 750mv millivolt heating only systems. The thermostat shall have a bright blue backlight display, touchscreen with SpeedBar®, separate sub-base and multi-level keypad lockout. Temperature control range shall be between 45° and 90° F (7° and 32° C), accuracy of +/- 1° F (+/- .5° C). Operating humidity range between 5% and 95% relative humidity. The thermostat shall include separate installer and user setup modes, residential or commercial setup modes, permanent non-volatile memory to retain user settings, filter, UV and humidifier pad check monitor, adaptive recovery mode (ARM™), programmable independent fan control, humidification and dehumidification control, residual cooling fan delay, indoor or outdoor remote sensor capability, auxiliary heat fossil fuel programming, and compressor power outage protection. A front reset button will return user settings to default values when pressed. Meets Energy Aware® Guidelines.

## Product Specifications

<b>Dimensions:</b>	4.13" x 6.13" x 1.38"
<b>Electric Rating:</b>	24 Volt AC (18-30 Volt AC) 1 amp maximum load per terminal 8 amp total maximum load (all terminals)
<b>AC Power:</b>	18-30 Volt AC
<b>DC Power:</b>	3.0 Volts DC (2 "AA" Alkaline batteries included)
<b>Compatibility:</b>	Heat pump systems up to 4 heat/2 cool, Conventional systems up to 3 heat/2 cool 250mv – 750mv millivolt heating systems
<b>Control Range:</b>	45° to 90° F (7° to 32° C)
<b>Display Range:</b>	40° to 99° F (5° to 37° C)
<b>Accuracy:</b>	+/- 1° F (+/- .5° C)
<b>Temperature Differential:</b>	1st Stage - .5°, 1°, or 2° F (0.2°, 0.5°, or 1° C) 2nd, 3rd and 4th Stage - 1°, 2°, 3°, 4°, 5°, or 6° F (.5°, 1°, 1.5°, 2°, 2.5°, or 3° C)
<b>Storage Temperature:</b>	14° to 140° F (-10° to 60° C)
<b>Operating Humidity:</b>	5% to 95% Relative Humidity
<b>Terminations:</b>	A/D, H, G, Rc, Rh, W2/AUX2, W3/O/B, Y1, Y2, W1/E/AUX1, C, L, S1, S2

## Shipping Information

<b>INDIVIDUAL CARTON</b>	<b>MASTER CARTON</b>
<b>Dimensions:</b> 6.8" x 4.7" x 2.0"	<b>Quantity:</b> 6
<b>Weight:</b> 1.2 lbs.	<b>Dimensions:</b> 14.3" x 6.6" x 5.4"
	<b>Cubic Feet:</b> .26
	<b>Weight:</b> 8 lbs.

## Braeburn 6425 Replaces\*

**Honeywell®** TH8320, TH8321  
**Emerson®** 1F95-1277, 1F95-1280, 1F95-1291, 1F97-1277

\*Verify specific application requirements.  
All trademarks are the property of their respective owners.

## Accessories

<b>2920</b> Vertical J-Box Adapter Wall Plate (6.5" x 5.1")	<b>5390</b> Remote Indoor Sensor
<b>2950</b> Universal Wall Plate (6.5" x 6.5")	<b>5490</b> Remote Outdoor Sensor
<b>5970</b> Universal Thermostat Guard	

## FREE Color Contractor Branding Available!

Visit our website ([www.braeburnonline.com](http://www.braeburnonline.com)) for more information, contact your local distributor or call our sales department toll-free at 866.268.5599 (U.S.), +1.630.844.1968 (Outside the U.S.).

**Date:** \_\_\_\_\_  
**Job Name:** \_\_\_\_\_  
**Location:** \_\_\_\_\_  
**Contractor:** \_\_\_\_\_

**Engineer:** \_\_\_\_\_  
**Model No.:** \_\_\_\_\_  
**Submitted By:** \_\_\_\_\_  
**Submitted For Approval:** \_\_\_\_\_ **Record:** \_\_\_\_\_

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