ecosmart™

HI-Velocity High Efficiency Hydronic Air Handler

ecosmart uses revolutionary, (patent-pending) proprietary technology to bring you high-efficiency hydronic air handlers *like you've never seen*! Loaded with features for unmatched comfort and ease of installation.

ecosmart™ HI VELOCITY
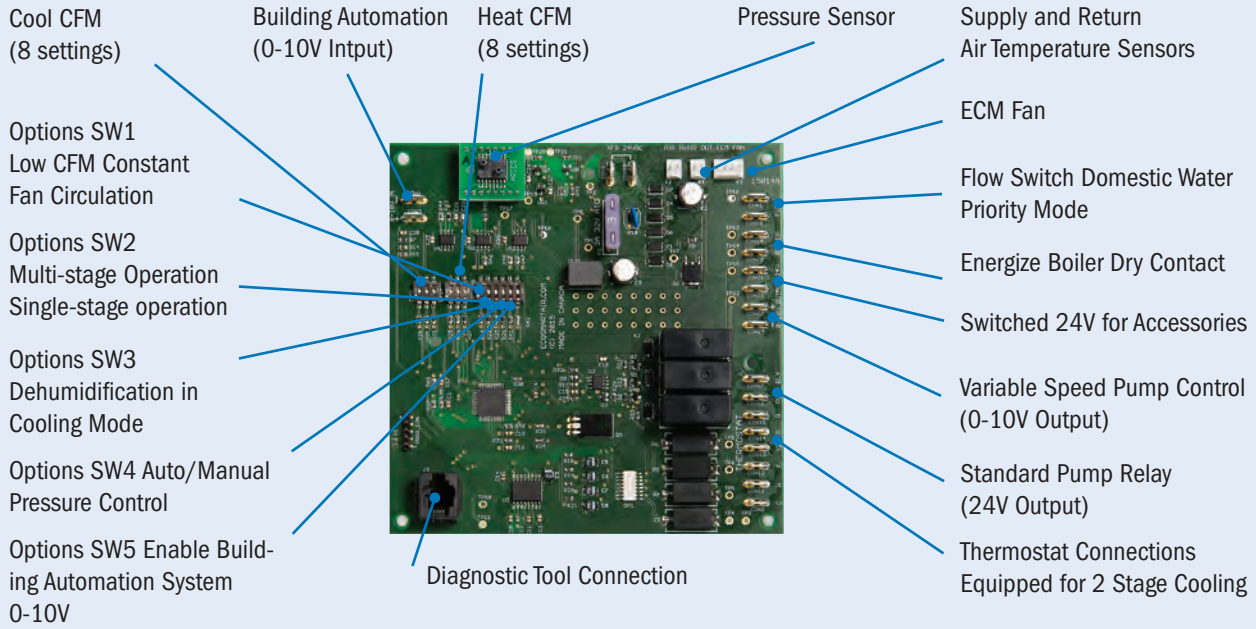
HIGH VELOCITY MODELS - ES50HVP and ES90HVP

- Revolutionary Constant Pressure Technology CPT (patent pending) dynamically adjusts fan speed to maintain a constant static pressure
- Safeguards from homeowners tampering with air flow ensuring continued quiet operation
- Independently select from up to 8 different static pressures for heating and cooling
- Delivers lasting, balanced system operation and performance
- Variable speed ECM motor
- Compatible with building automation systems
- Operates a standard pump or a variable speed pump with 0-10V input
- Domestic water priority option
- Simplified installations with game changing proprietary microcontrollers
- Soft-ramping fan technology – quiet operation in all modes of operation
- Exceptional ratings at modest flow rates of 2-5 GPM
- Front or rear water connections
- Lined with acoustic insulation
- All EcoSmart air handlers match well with boilers, water heaters, or any other hot water source
- All units are suitable for multi position installations

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Intertek

Board Specifications

Cool CFM (8 settings)

Building Automation (0-10V Intput)

Heat CFM (8 settings)

Pressure Sensor

Supply and Return Air Temperature Sensors

Options SW1 Low CFM Constant Fan Circulation

ECM Fan

Options SW2 Multi-stage Operation Single-stage operation

Flow Switch Domestic Water Priority Mode

Energize Boiler Dry Contact

Options SW3 Dehumidification in Cooling Mode

Switched 24V for Accessories

Options SW4 Auto/Manual Pressure Control

Variable Speed Pump Control (0-10V Output)

Standard Pump Relay (24V Output)

Options SW5 Enable Building Automation System 0-10V

Diagnostic Tool Connection

Thermostat Connections Equipped for 2 Stage Cooling

Specifications

Model	ES50HVP	ES90HVP	ES100HVP
Heating Performance Data @ 70°F Entering Air Temperature			
Max. BTUH @ EWT 120°F	27,112	35,950	45,550
Max. BTUH @ EWT 140°F	38,104	50,525	64,010
Max. BTUH @ EWT 160°F	49,134	65,145	82,540
Max. BTUH @ EWT 180°F	60,192	79,800	101,120
Piping Connections Copper (inches)	1/2	3/4	3/4
Flow Ratings GPM	5	7	7
CFM @ 1.5" E.S.P.	580	750	1000
DX Cooling Tons	1 - 2	2 - 2 1/2	2.5 - 3
Cabinet Size W x D x H (inches)	14 x 21 x 29	21 x 21 x 29	21 x 21 x 29
Supply Air Opening Diameter (inches)	8	8	10
Return Air Opening W x H (inches)	18 1/4 x 14 1/4	18 1/4 x 14 1/4	18 1/4 x 14 1/4
Minimum Outlets	13	14	21
Maximum Outlets	17	20	28
Unit Weight (lbs.)	85	95	100

rear piping knockouts