

Presents

An Educational Series of Webinars to Sharpen the Skills in the Art of Geothermal System Design, Installation and Service

0

Phoenix Energy Supply is pleased to Sponsor

Trench Talk

A series of live webinars to serve the geothermal community

GeoStar Product Line

Tuesday July 12, 2022, 4 PM EDT

1

Agenda

- Why GeoStar
- Residential Products
- Commercial Products
- Featured Product - Sycamore
- Symphony
- IntelliZone2 & Other Accessories
- Q&A

2

Chris Wasko

- Territory Manager at WaterFurnace International
- HVAC Equipment Specialist at Famous Enterprises
- Air Force Veteran
- A Friend

3

Geothermal Heating, Cooling & Hot Water

4

Why **GEOSTAR** ?

- Complete product offering
 - Residential & Commercial
- Assembled in Fort Wayne, IN
- Premium geothermal product
- Innovative technologies
- Multi-level support staff
- No third-party warranties

5

GEOSTAR
AFFORDABLE. RENEWABLE. CLEAN.

FORCED AIR ALL IN ONE UNITS

SEIKO SERIES	ASTON ADVANCED SERIES	ASTON SERIES	MICHELLE PLUS SERIES
Single capacity All-in-one	Dual air-hand affordable price	One of the most affordable units	Conditioning value & performance
20000 to 30000 BTU capacity	20000 to 30000 BTU capacity	10000 to 20000 BTU capacity	20000 to 30000 BTU capacity
Efficiency AHS (SEER) 13-15	Efficiency AHS (SEER) 14-16	Efficiency AHS (SEER) 13-15	Efficiency AHS (SEER) 14-16
ENERGY STAR Yes - All sizes	Yes - All sizes	Yes - All sizes	Yes - All sizes

6

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INDOOR/OUTDOOR SPLIT UNITS

ASTON ADVANCED SERIES INDOOR SPLIT	ASTON SERIES INDOOR SPLIT	ASTON ADVANCED SERIES OUTDOOR SPLIT	ASTON SERIES OUTDOOR SPLIT
Indoor versatility & efficiency	Indoor versatility & efficiency	Outdoor versatility & efficiency	Outdoor versatility & efficiency
20000 to 30000 BTU capacity (12 sizes)	20000 to 30000 BTU capacity (12 sizes)	20000 to 30000 BTU capacity (12 sizes)	20000 to 30000 BTU capacity (12 sizes)
Efficiency AHS (SEER) 13-15	Efficiency AHS (SEER) 13-15	Efficiency AHS (SEER) 14-16	Efficiency AHS (SEER) 14-16
ENERGY STAR Yes - Most sizes	Yes - Most sizes	Yes - Most sizes	Yes - Most sizes

7

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Residential Products

FORCED AIR / HYDRONIC COMBO	SINGLE HYDRONIC UNITS	DUAL HYDRONIC UNITS
CYPRESS SERIES Single capacity & all-in-one	ASTON ADVANCED SERIES SINGLE HYDRONIC Single hydronic coil on	ASTON ADVANCED SERIES DUAL HYDRONIC Dual hydronic coil on
10000 to 20000 BTU capacity	10000 to 20000 BTU capacity	10000 to 20000 BTU capacity
Efficiency AHS (SEER) 13-15	Efficiency AHS (SEER) 14-16	Efficiency AHS (SEER) 14-16
ENERGY STAR Yes - All sizes	Yes - Most Models	Yes - Most Models

8

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Commercial products

QUICK SHIP AVAILABLE	QUICK SHIP AVAILABLE	QUICK SHIP AVAILABLE
ARBOR SERIES COMPACT (Z3)	ASTON SERIES COMPACT (G3)	ASTON SERIES XL (G2)
Vertical and horizontal models available	Vertical and horizontal models available	Vertical and horizontal models available
Style: Water to Air	Style: Water to Air	Style: Water to Air
Capacity Range (Tons): 0.5-4	Capacity Range (Tons): 0.75-6	Capacity Range (Tons): 1-10

9

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Commercial products

ASTON SERIES CONSOLE (G2)	ASTON SERIES LOW SILL (G2L)	ASTON SERIES SINGLE HYDRONIC (G2SH)	ASTON SERIES DUAL HYDRONIC (G2DH)
Water to Air	Water to Air	Water to Water	Water to Water
Capacity Range (Tons): 0.75-15	Capacity Range (Tons): 0.75-15	Capacity Range (Tons): 1-4	Capacity Range (Tons): 1-15

10

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GEOSTAR products
ALL ALUMINUM COILS
Stops formicary corrosion dead in its tracks

11

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FEATURED PRODUCT
Sycamore Variable Speed Packaged Unit

<https://www.phoenixenergysupply.com/sycamore/>



12

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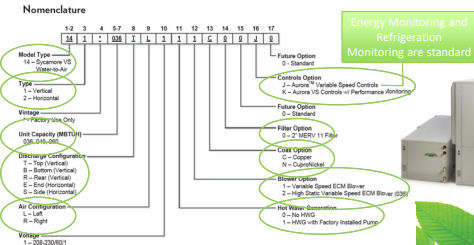

Sycamore Model & Features

Nomenclature

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

1 Model Type
2 Voltage
3 Type
4 Filter
5 Unit Capacity (MBTU/h)
6 Discharge Configuration
7 Air Configuration
8 Voltage

9 Future Option
10 Control Option
11 Filter Option
12 Coil Option
13 Blower Option
14 Fan Motor Option
15 High Static Variable Speed ECM Blower (SS)
16 Energy Monitoring and Refrigeration Monitoring are standard
17


13

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Sycamore Model & Features

Efficiency is what I was born for!!

- 20 – 100% capacity
 - Lower fan, compressor, and flow center speeds
- Up to 43.5 EER
- Up to 5.1 COP




14

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Sycamore Model & Features

- Quiet is my middle name!!
- 20 – 100% capacity
- Double isolation mounted Danfoss variable speed scroll compressor
- VS Drive soft start provides quieter start-up
- Discharge muffler reduces compressor sound level
- Lower airflow and compressor speed provides quiet operation



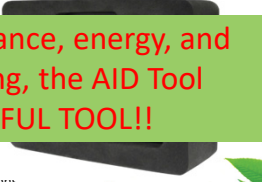
15

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Aurora Interface & Diagnostic (AID) Tool

Combined with performance, energy, and refrigeration monitoring, the AID Tool becomes a POWERFUL TOOL!!

- Current and historical faults
- Aurora system configurations and software versions



16


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Symphony™

Web Enabled WiFi Comfort System



17

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Most existing HVAC WiFi implementations have a lot of fluff, but not a lot of substance:

- Some change current set-points but no schedule changes
- No lockout information transferred from unit
- No fault notification for homeowner or dealer
- Zoning not included?
- No real data from unit

We believe the capability of our system has set the standard for all!

18

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Consumer view

19

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20

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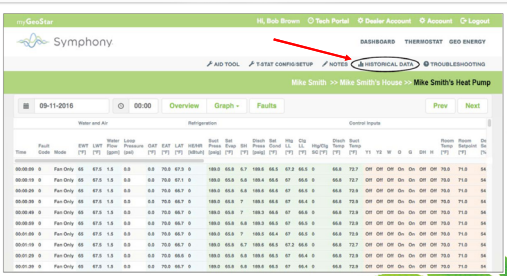
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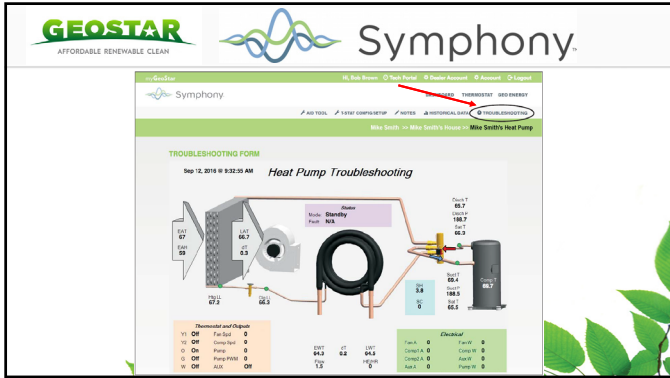
Tech view

22

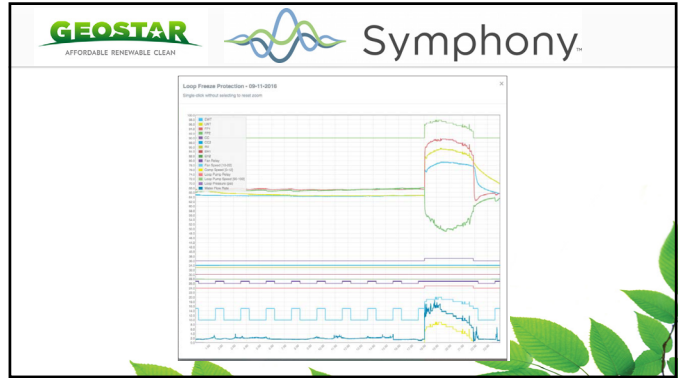
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23



24



25

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For the Homeowner

- Internet connectivity of equipment
- Accessing & adjusting thermostats remotely
- Notification of system issues via e-mail or text
- Add-on home sensors
- Energy monitoring

For the Dealer/Technician

- Remote monitoring of customers equipment
- Notification of system issues via e-mail or text
- Potential time/costs reductions in diagnostics and repairs
- Separates you from your competition

26

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IntelliZone2

Up to:

- 6 zones with Sycamore
- 4 zones with Aston dual
- 2 zones with Aston single

Full color touchscreen MasterStat with diagnostics
Eliminates bypass damper
Fully communicating with Aurora controls

27

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GeoStore Tank

Features

- 80 or 120 gallon versions
- Single 4500 W element
- 2" (R-16) insulation
- 3 sets of connections
 - 3/4" FPT domestic water connections
 - 1" FPT DSH connections
 - 1-1/2" FPT Geo Connections (factory plugged)
- Built-in temperature sensor and extra thermostat
- Chilled water approved

28

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Flow Centers and Accessories

- Pressurized Flow Center**
 - Single Speed
 - Variable Speed (A/B)
 - Single pump
 - Two pump
- Non-Pressurized**
 - Single Speed
 - Variable Speed (A/B)
 - Single pump
 - Two pump
- Large Flow Centers**
 - Single Pump
 - Two Pump
- Motorized Valve**
 - Open loop systems
- Hose Kits**
 - Pressurized
 - FPT
 - GL
 - Non-Pressurized

29

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Residential Warranties

- * Standard 5-year parts, 5-year labor allowance on refrigeration components
- 2-year parts, 2-year labor allowance on all other parts and accessories

Upgrades:

- 10-year parts, 10-year labor allowance on internal parts
- 5-year parts, 5-year labor allowance on accessories

Commercial Warranties

- * Standard 18 Months all parts from the date of shipping
- Upgrades:
 - 5 Year compressor only
 - 5 Year compressor and refrigeration components
 - 5 year all parts

**Factory Warranties.
No Third Parties.**

30

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Design Studio
Software to size equipment, loops, and pumps

31

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Website: <https://www.phoenixenergysupply.com/geostar>

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The Geostar family of water source heat pumps and accessories are the broadest of any line of heat pumps available today from the Magnolia Plus, to the Aston, to the Sycamore. These water-to-air heat pumps can meet the needs of those with a very tight budget to those with the most demanding need for control, control & efficiency. The water-to-water heat pumps with the innovative liquid heat technology can help meet the temperature requirements of existing hydronic heating systems.

Magnolia Plus Aston Sycamore

32

GEOSTAR **Symphony™**
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Web Enabled WiFi Comfort System

Live View Presentation

33

Q&A

Please complete our short evaluation Poll

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ENERGY SUPPLY The Utility City of Geothermal Design & Installation

34