

GreenSource Si Series Model CE Residential Geothermal Heat Pump

Engineering
Submittal
Sheet



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Overview and Certifications



Standard Features, Factory Installed Options, and Field Installed Accessories

Standard Features

- ▶ **Available in Horizontal, Vertical, and Counterflow Cabinets**
 - Constructed using white pre-painted galvanized steel
 - Superior corrosion protection for units indoors
 - Standard hanging bracket kits on HZ units for suspending the unit from field supplied hanger rods
- ▶ **Two Stage Compact**
 - Up to 24.5 EER (GLHP)
 - ECM Constant CFM blower fan motors (variable speed) for all unit sizes
- ▶ **Configured as Ordered**
 - Left hand or right hand return air
 - Top, Bottom, or End Blow supply air
 - Copper or Cupro-Nickel Coaxial Coil (CuNi coax coil is recommended in conditions anticipating moderate scale formation or in brackish water)
- ▶ **1/2" Dual Density Fiber Insulation**
 - Non-combustible, non-hygroscopic and does not support fungal growth
 - Meets NFPA 90A and 90B for fire protection
 - Meets the GREENGUARD Indoor Air Quality Standard
 - All panels are insulated using 1/2" 1.5 lb./cu.ft. density micromat fiberglass insulation for both thermal insulation and noise reduction
- ▶ **Compressors**
 - Floating compressor base pan for quiet operation
 - Scroll type compressors on all sizes
- ▶ **Standard MERV 8 Filter with 4 sided Filter Rack**
- ▶ **TXV (Thermal Expansion Valve)**
 - Improves refrigerant management and efficiencies

Standard Features, Factory Installed Options, and Field Installed Accessories continued..

Standard Features Continued

- ▶ **Reliability - Durability - Serviceability**
 - Tin plated air coil
 - UPM circuit board with communicating features
 - Completely serviceable from front of unit as well as insulated bulkheads allow the unit to be serviced during operation
- ▶ **Tin Plated Evaporator Coil**
 - Tin Electro-Plated Copper Tubing Hair Pins with Aluminum fins and end plates will protect the evaporator coil from most forms of corrosive elements in the airstream
- ▶ **Electronic Circuit Board**

The electronic circuit board provides protection with:

 - Random Start of Unit
 - Anti-Short Cycling (5 minute delay)
 - Alarm communicating output
 - Low pressure switch bypass at cold water start up

It also monitors and communicates standard safety features/alerts/operation/protection:

 - Low Pressure Switch
 - High Pressure Switch
 - Evaporator Freeze Protection
 - Water Coil Freeze Protection
 - Condensate Overflow Switch

This circuit board can communicate with a Bosch thermostat that alerts the customer of adverse conditions
- ▶ **75 VA Transformer**
- ▶ **Warranty**
 - 10 year all parts limited warranty
 - 10 year labor limited warranty
 - For full warranty details: <https://www.bosch-homecomfort.com/us/en/residential/service/product-warranty-library/heat-pump-geothermal-warranty-documents/>
- ▶ **Field Configurable Horizontal Discharge Air Conversion**
 - This allows end blow to straight through conversion of discharge air, as factory installed straight through configuration for HZ units is no longer available
- ▶ **Water Connections**
 - All water connections are 3/4" or 1" FPT type fittings

Factory Installed Options

- ▶ **Heat Recovery Package (Desuperheater/HRP)**
 - This option can be added to allow for supplemental domestic water heating

Field Installed Accessories

- ▶ **Thermostats**
 - Bosch thermostats are fully customized to meet your individual needs. Bosch offers communicating thermostats that can display alert messages without having to go to the unit
- ▶ **Externally Mounted Duct Heater Kits**
- ▶ **Internally Mounted Electric Heater Kits**
 - A field installed option for back up heat. Available in 5, 10, 15, or 20 kW depending on the size of the geothermal heat pump
- ▶ **Pump/Valve Relay Kit**
 - This relay is used to energize a supply pump or solenoid valve when there is a call for compressor operation. This relay can be used to switch either high or low voltage power
- ▶ **SmartStart Assist Kit**
 - An option which provides a means of reducing inrush currents at compressor startup. Light flickering is eliminated, and a smooth start is achieved (only available on scroll compressor models)
- ▶ **Stainless Steel Hose Kits**
 - Available in various lengths and diameters depending on the need for your application
- ▶ **Flow Center Kits**

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Model Nomenclature

CE 025 - 1 VT C - F L T A T B - X G G X X X X X 5 A X X X 4 X X X X SB A
 1-2 3-5 6 7 8-9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

MODEL:
CE

NOMINAL CAPACITY:
025, 035, 049
061, 071

ELECTRICAL CONFIGURATION:
1 - 208-230/60/1

CABINET CONFIGURATION:
HZ - Horizontal
VT - Vertical
CF - Downflow (Counterflow)

COAX OPTIONS:
C - Copper
N - Cupro-nickel

WATER CONNECTIONS:
F - Front

RETURN AIR CONFIGURATION:
L - Left
R - Right

DISCHARGE AIR LOCATION:
T - Top
E - End
B - Bottom

FAN/MOTOR OPTION:
A - Constant Airflow ECM

AIR COIL:
T - Tin Plated

REVISION LEVEL:
B - Current

ELECTRIC HEAT:
X - None

CABINET CONSTRUCTION:
G - Pre-Painted Steel / 1/2" Standard 1.5LB Dual Density Fiberglass

APPLICATION:
G - Extended Range (Geothermal)

CODE STRING LEVEL:
A - Revision

STANDARD/SPECIAL:
SB - Standard Bosch

NOT USED:
X - None

NOT USED:
X - None

BLOWER PULLEY (BELT DRIVE ONLY):
X - None

MOTOR SHEAVE (BELT DRIVE ONLY)
X - None

AIR FILTRATION:
4 - MERV8 - 2" w/ 4-SIDED FILTER RACK

NOT USED:
X - None

ECONOMIZER:
X - None

WATER FLOW CONTROL OPTIONS:
X - None

CONTROLS:
X - Standard (UPM)

TRANSFORMER:
7 - 75 VA

REFRIGERATION:
X - None
D - Heat Recovery Package

ELECTRICAL OPTIONS:
X - As default for non used electrical codes

GreenSource Si Series Model CE Residential Geothermal Heat Pump



ASHRAE/AHRI/ISO Ratings (13256-1) - CE Model - ECM Motor

Model	Load	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump				Rated Airflow	Water Flow Rate (GPM)
		Cooling Capacity (Btu/hr)	EER	Heating Capacity (Btu/hr)	COP	Cooling Capacity (Btu/hr)	EER	Heating Capacity (Btu/hr)	COP	Cooling Capacity (Btu/hr)	EER	Heating Capacity (Btu/hr)	COP		
CE025	Part	18100	17.10	19500	4.90	21000	26.39	16300	3.70	20000	24.70	14100	3.80	500	6
	Full	26000	15.10	27600	5.10	29000	23.20	23400	4.50	27500	17.70	18600	3.60	800	6
CE035	Part	24000	16.20	27000	4.95	27000	27.35	22500	4.20	27000	23.10	20500	3.80	800	9
	Full	36000	14.00	43000	4.35	42000	21.25	36000	4.20	38000	15.70	28000	3.60	1200	9
CE049	Part	34000	16.00	39000	5.40	38000	24.00	32000	4.60	36000	21.80	28500	4.00	1250	12
	Full	48000	13.20	58000	4.80	54000	19.00	48000	4.20	49000	15.50	38000	3.60	1600	12
CE061 HZ -Copper	Part	42000	16.20	48000	5.05	48000	26.80	40000	4.30	45000	23.50	36500	3.80	1400	14
	Full	60000	14.60	72000	4.75	68000	21.20	61000	4.30	62000	16.80	49000	3.60	1800	14
CE061 VT - Copper	Part	42000	16.60	48000	5.00	48000	26.00	40000	4.30	45000	23.50	36500	3.85	1400	14
	Full	60000	14.00	72000	4.70	68000	19.70	61000	4.20	62000	15.70	49000	3.60	2000	14
CE061 VT/HZ/CF CuNi	Part	42000	15.60	48000	5.00	48000	26.50	40000	4.20	45000	22.30	36500	3.80	1400	14
	Full	60000	14.00	72000	4.60	68000	20.50	61000	4.20	62000	16.10	49000	3.60	2000	14
CE071	Part	51000	15.30	55000	4.40	57000	25.20	47000	4.00	56000	21.80	42000	3.70	1400	18
	Full	72000	13.50	80000	4.50	77000	19.60	68000	4.20	74000	15.60	53000	3.50	2200	18

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Physical Data						
Description	Unit	Value				
		CE025	CE035	CE049	CE061	CE071
Compressor Type (Qty 1)	—	Scroll	Scroll	Scroll	Scroll	Scroll
Max Water Working Pressure	PSIG/kPa	125/861	125/861	125/861	125/861	125/861
ECM Fan Motor & Blower						
Fan Motor Type/Speeds	—	ECM Const Air Flow	ECM Const Air Flow	ECM Const Air Flow	ECM Const Air Flow	ECM Const Air Flow
Fan Motor	HP	0.33	0.50	0.75	1.00	1.00
Blower Wheel Size	Inch (Dia. x W)	9x7	9x7	10x8	11x9	11x9
Water Connection Size						
FPT	Inch	3/4"	3/4"	1"	1"	1"
Coaxial Coil Volume	Gal	0.46	0.46	0.64	0.74	1.05
Vertical Cabinet						
Refrigeration Charge	Oz	68	68	78	90	111
Air Coil Dimensions	Inch (H x W)	24 X 21	24 X 21	24 X 27	24 X 27	32 X 27
Standard Filter - 1"	Inch (L x H)	24 X 24	24 X 24	24 X 30	24 X 30	16 X 30 (2)
Weight - Operating*	lbs	290	290	318	390	450
Weight - Shipping*	lbs	315	315	348	415	495
Horizontal Cabinet						
Refrigeration Charge	Oz	68	68	78	90	111
Air Coil Dimensions	Inch (H x W)	18 X 28	18 X 28	20 X 32.5	20 X 32.5	20 X 43
Standard Filter - 1"	Inch (L x H)	20 X 30	20 X 30	20 X 34.5	20 X 34.5	20 X 24 (2)
Weight - Operating*	lbs	290	290	318	390	450
Weight - Shipping*	lbs	315	315	348	415	495

* This data reflects standard unit weights only. Additional options may cause differences in listed weights.

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Factory Installed Option - Cupro-Nickel Coil	
Model Number with Standard Copper Coil	Model Number with Cupro-Nickel Coil (To add this option to the product, change the model number 10TH digit* to an "N")
CE025-1CFC	CE025-1CFN
CE025-1HZC	CE025-1HZN
CE025-1VTC	CE025-1VTN
N/A	CE035-1CFN
CE035-1HZC	CE035-1HZN
CE035-1VTC	CE035-1VTN
CE049-1CFC	CE049-1CFN
CE049-1HZC	CE049-1HZN
CE049-1VTC	CE049-1VTN
N/A	CE061-1CFN
CE061-1HZC	CE061-1HZN
CE061-1VTC	CE061-1VTN
N/A	CE071-1CFN
CE071-1HZC	CE071-1HZN
CE071-1VTC	CE071-1VTN

* dashes are included as a digit.

Electrical Data - ECM Constant Airflow (CFM) Blower Motor										
Model	Voltage Code	Voltage/Phase/Hz	Voltage Min/Max	Compressor			Single Point Power			
				QTY	RLA	LRA	FLA	Min Circuit Amps	MOP Calculation	Max Fuse/HACR
CE025	1	208-230/1/60	197/253	1	11.7	58.3	2.8	17.4	29.1	25
CE035	1	208-230/1/60	197/253	1	15.6	83.0	4.3	23.8	39.4	35
CE049	1	208-230/1/60	197/253	1	21.2	104.0	6.8	33.3	54.5	50
CE061	1	208-230/1/60	197/253	1	26.9	139.9	6.8	40.4	67.3	60
CE071	1	208-230/1/60	197/253	1	29.7	179.2	9.1	46.2	75.9	70

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1st Data plate for units with EH field installed kit - compressor power connection

Models	Voltage Code	Voltage/Phase/Hz	Voltage Min/Max	Dual Point Power					
				QTY	RLA	LRA	Min Circuit Amps	MOP Calculation	Max Fuse/HACR
CE025	1	208-230/1/60	197/253	1	11.7	58.3	14.6	26.3	25
CE035	1	208-230/1/60	197/253	1	15.6	83.0	19.5	35.1	35
CE049	1	208-230/1/60	197/253	1	21.2	104.0	26.5	47.7	45
CE061	1	208-230/1/60	197/253	1	26.9	139.9	33.6	60.5	60
CE071	1	208-230/1/60	197/253	1	29.7	179.2	37.1	66.8	60

2nd data plate for units with EH field installed kit - ECM Constant Airflow Blower Motor

Model	Electric Heater Rated kW	Stage	Heater Watts		Heater Amps		Motor FLA (A)	Circuit Fuses	MCA		MOCP	
			240V	208V	240V	208V			240V	208V	240V	208V
CE025	4.8	1	4,800	3,600	20.0	17.3	2.8	-	28.5	25.1	30	30
CE035	4.8	1	4,800	3,600	20.0	17.3	4.3	-	30.4	27.0	35	35
CE035	9.6	1	9,600	7,200	40.0	34.6	4.3	-	55.4	48.6	60	60
CE049	4.8	1	4,800	3,600	20.0	17.3	6.8	-	33.5	30.1	35	35
CE049	9.6	1	9,600	7,200	40.0	34.6	6.8	-	58.5	51.8	60	60
CE049	14.4	2	14,400	10,800	60	51.9	6.8	F1/F2	83.5	73.4	90	80
								F3/F4				
CE061	4.8	1	4,800	3,600	20.0	17.3	9.1	-	36.4	33.0	40	35
CE061	9.6	1	9,600	7,200	40.0	34.6	9.1	-	61.4	54.6	70	60
CE061	14.4	2	14,400	10,800	60	51.9	9.1	F1/F2	86.4	76.3	90	80
								F3/F4				
CE061	19.2	2	19,200	14,000	80	69.2	9.1	F1/F2	111.4	97.9	125	100
								F3/F4				
CE071	4.8	1	4,800	3,600	20.0	17.3	9.1	-	36.4	33.0	40	35
CE071	9.6	1	9,600	7,200	40.0	34.6	9.1	-	61.4	54.6	70	60
CE071	14.4	2	14,400	10,800	60	51.9	9.1	F1/F2	86.4	76.3	90	80
								F3/F4				
CE071	19.2	2	19,200	14,000	80	69.2	9.1	F1/F2	111.4	97.9	125	100
								F3/F4				

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Blower Performance - ECM (Standard) Constant Airflow (CFM) Blower Motor														
Model	Fan Speed	Rated Airflow	Adjust	Tap	Available External Static Pressure (in. wc. Wet coil and filter included)									
					0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
025 Part Load	Hi	600	+	A	575	575	575	575	575	575	575	575	-	-
	Med	500	Normal	A	500	500	500	500	500	500	500	500	-	-
	Low	425	-	A	425	425	425	425	425	425	425	425	-	-
025 Full Load	Hi	900	+	A	920	920	920	920	920	920	920	920	-	-
	Med	800	Normal	A	800	800	800	800	800	800	800	800	-	-
	Low	700	-	A	680	680	680	680	680	680	680	680	-	-
035 Part Load	Hi	920	+	A	920	920	920	920	920	920	920	920	920	920
	Med	800	Normal	A	800	800	800	800	800	800	800	800	800	800
	Low	680	-	A	680	680	680	680	680	680	680	680	680	680
035 Full Load	Hi	1400	+	A	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
	Med	1200	Normal	A	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
	Low	1000	-	A	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
049 Part Load	Hi	1150	+	B	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
	Med	1000	Normal	B	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250
	Low	850	-	B	1063	1063	1063	1063	1063	1063	1063	1063	1063	1063
049 Full Load	Hi	1800	+	B	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760
	Med	1600	Normal	B	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
	Low	1400	-	B	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360
061 Part Load	Hi	1470	+	A	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470
	Med	1400	Normal	A	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
	Low	1330	-	A	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330
061 Full Load	Hi	2100	+	A	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
	Med	2000	Normal	A	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Low	1900	-	A	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
071 Part Load	Hi	1850	+	A	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
	Med	1600	Normal	A	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
	Low	1360	-	A	1360	1360	1360	1360	1360	1360	1360	1360	1360	1360
071 Full Load	Hi	2300	+	A	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300
	Med	2200	Normal	A	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	Low	1900	-	A	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900

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Operating Limits - Cooling & Heating	
Description	Standard Unit
COOLING	
Minimum ambient air temperature °F	50
Maximum ambient air temperature °F	100
Minimum evaporator entering air db/wb °F	68/57
Rated air coil entering air db/wb °F	80/67
Maximum evaporator entering air db/wb °F	95/85
Minimum water coil entering fluid temperature °F	40
Water loop typical coil entering fluid range temperature °F	70/90
Maximum water coil entering fluid temperature °F	110
HEATING	
Minimum ambient air temperature °F	40
Maximum ambient air temperature °F	85
Minimum evaporator entering air db °F	50
Rated air coil entering air °F	68
Maximum evaporator entering air db °F	80
Normal water coil entering fluid range °F	25-80*
Minimum water coil entering Fluid °F	20*

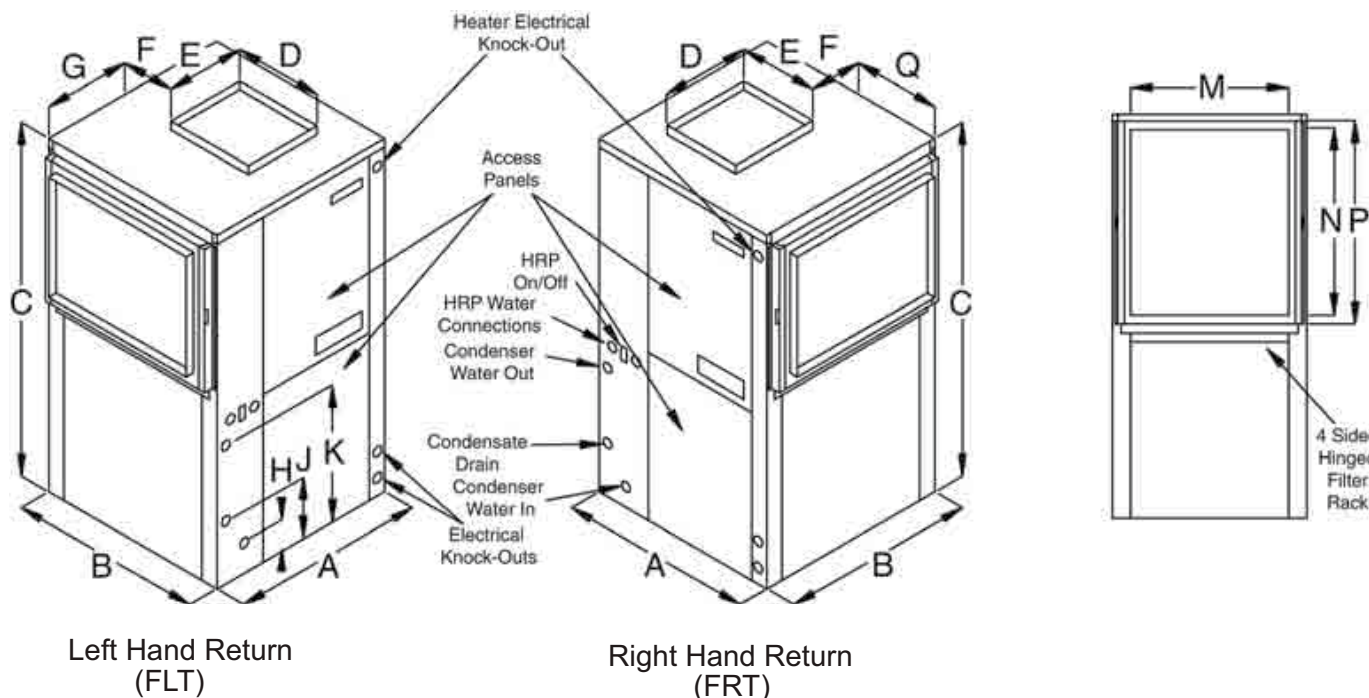
* antifreeze solution is required below 45°F entering fluid temperatures.

Greensource Si Series Model CE Residential Geothermal Heat Pump



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CE Vertical Unit Dimensions and Connections



CE - Vertical Dimensions and Connections

Model	A	B	C	D	E	F	G	H	J	K	M	N	P	Q	Condenser Water Connections	Recommended Replacement Normal Filter Size
	Width	Depth	Height	Dis-charge Depth	Dis-charge Width	Cabinet Edge to Dis-charge	Left Side to Dis-charge	Water In	Bottom to Condensate Drain	Water Out	R/A Duct Width	R/A Duct Flange Height	Filter Rack Height	Right Side to Dis-charge		
CE025	21.50	26.00	47.25	13.75	15.75	6.13	5.25	2.50	8.00	13.50	22.00	22.00	24.00	4.00	3/4" FPT	24 X 24
CE035	21.50	26.00	47.25	13.75	15.75	6.13	5.25	2.50	8.00	13.50	22.00	22.00	24.00	4.00	3/4" FPT	24 X 24
CE049	24.00	32.75	47.25	15.75	15.75	8.38	5.50	2.50	8.00	14.75	28.50	22.00	24.00	4.00	1" FPT	24 X 30
CE061	26.00	33.25	51.25	17.75	17.75	7.13	6.25	2.50	8.00	14.75	28.50	22.00	24.00	4.00	1" FPT	24 X 30
CE071	26.00	33.25	58.25	17.75	17.75	8.00	7.75	2.50	8.00	14.75	28.50	30.00	32.00	1.50	1" FPT	16 X 30 (2)



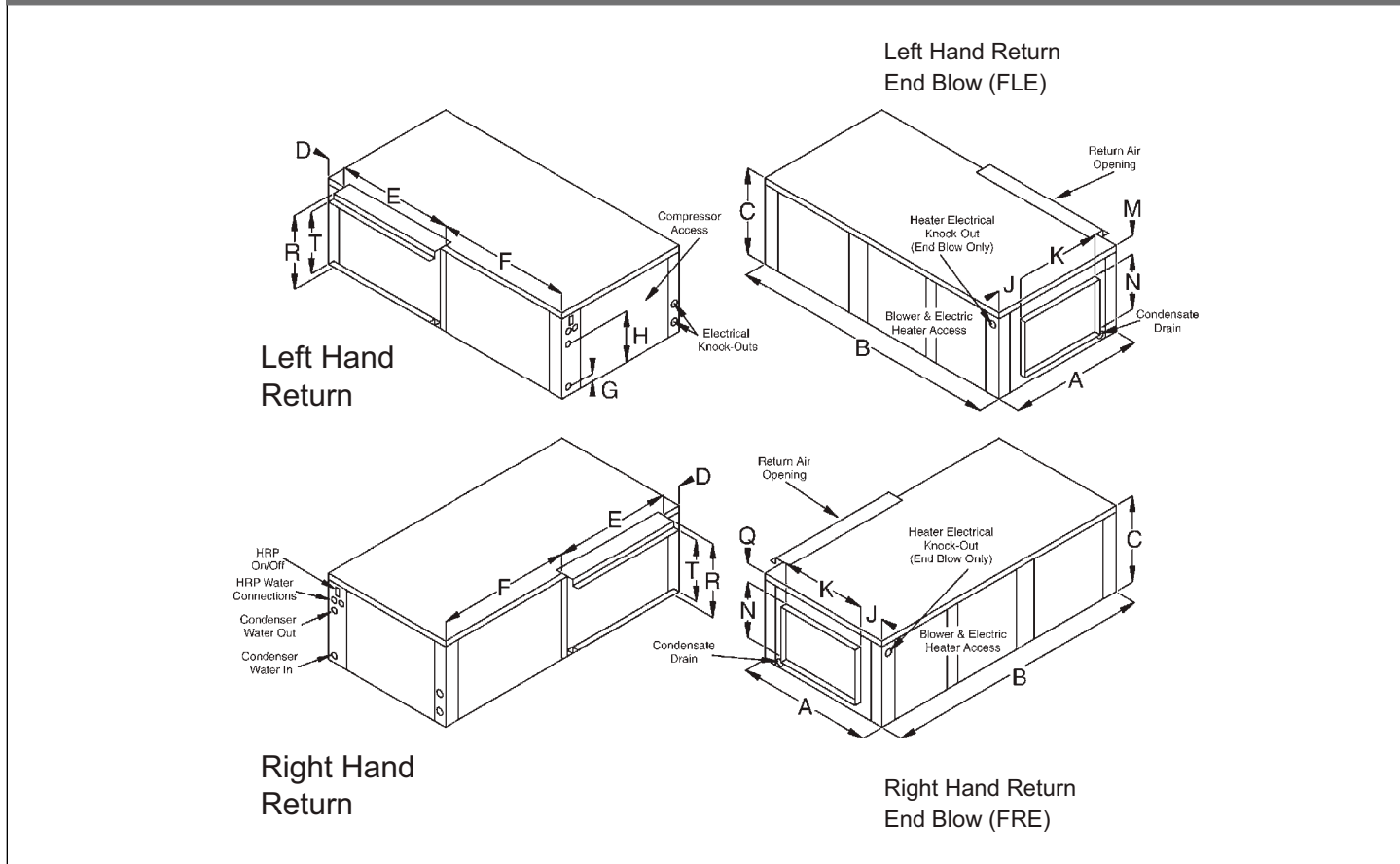
All dimensions in inches unless otherwise noted. All dimensions within +/- 0.125". Specifications subject to change without notice.

Greensource Si Series Model CE Residential Geothermal Heat Pump



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CE Horizontal Unit Dimensions and Connections



CE - Horizontal Dimensions and Connections

Model	A	B	C	D	E	F	G	H	J	K	M	N	P	Q	R	T	Condenser Water Connections	Recommended Replacement Normal Filter Size
	Width	Depth	Height	Cab End to Filter Rack	"R/A Duct Width"	Cab Front to Filter Rack	Water In	Water Out	Side to Dis-charge	Dis-charge Width	Top to Dis-charge (FLE & FRS)	Dis-charge Height	End to Dis-charge	Top to Dis-charge (FRE & FLS)	Filter Rack Height	R/A Duct Flange Height		
CE025	26.00	54.50	21.75	2.00	30.00	22.50	2.50	13.50	4.50	13.75	3.00	15.75	4.50	3.00	20.00	18.00	3/4" FPT	20 X 30
CE035	26.00	54.50	21.75	2.00	30.00	22.50	2.50	13.50	4.50	13.75	3.00	15.75	4.50	3.00	20.00	18.00	3/4" FPT	20 X 30
CE049	30.00	68.00	21.75	2.50	33.50	32.00	2.50	14.50	5.81	15.75	3.00	15.75	5.81	2.00	20.00	18.00	1" FPT	20 X 34.5
CE061	30.00	68.00	21.75	2.50	33.50	32.00	2.50	14.50	7.66	17.75	2.00	17.75	7.66	2.00	20.00	18.00	1" FPT	20 X 34.5
CE071	30.00	78.00	21.75	2.50	44.00	31.50	2.50	14.50	3.50	17.75	2.75	17.75	7.66	1.00	20.00	18.00	1" FPT	20 X 24 (2)

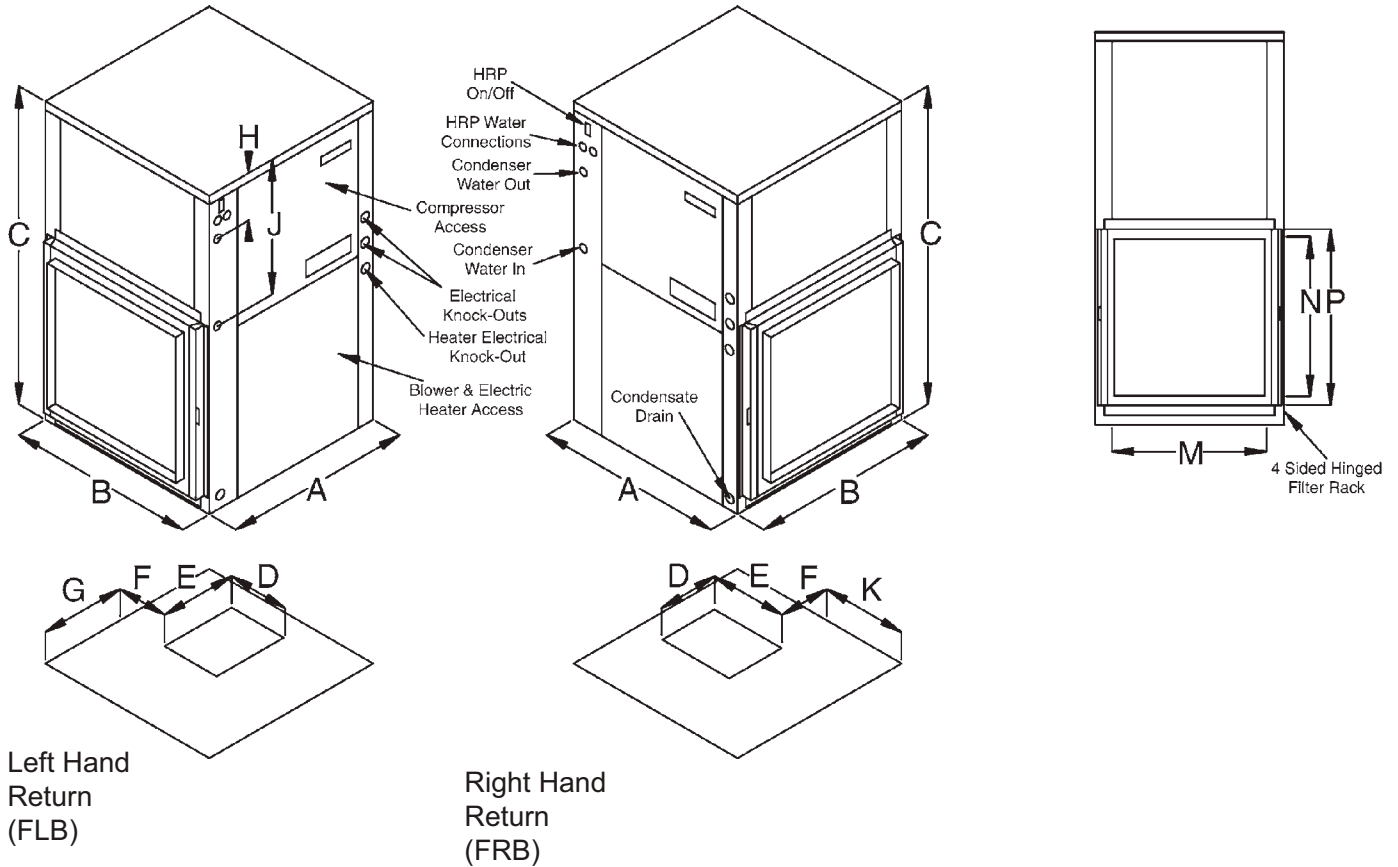


All dimensions within +/- 0.125". Specifications subject to change without notice.

Greensource Si Series Model CE Residential Geothermal Heat Pump



CE Counterflow Unit Dimensions and Connections



CE - Counterflow Dimensions and Connections

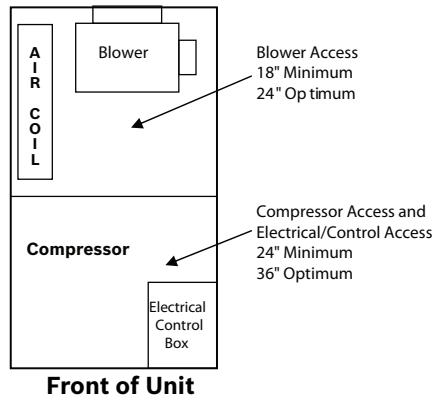
Model	A	B	C	D	E	F	G	H	J	K	M	N	P	Condenser Water Connections	Recommended Replacement Normal Filter Size
	Width	Depth	Height	Dis-charge Depth	Dis-charge Width	Cabinet Edge to Dis-charge	Left Side to Dis-charge	Water Out	Water In	Right Side to Dis-charge	"R/A Duct Width"	"R/A Duct Flange Height"	"Filter Rack Height"		
CE025	21.50	26.00	47.25	9.25	10.25	6.00	5.50	8.50	19.50	9.75	22.00	22.00	24.00	3/4" FPT	24 X 24
CE035	21.50	26.00	47.25	9.25	10.25	6.00	5.50	8.50	19.50	9.75	22.00	22.00	24.00	3/4" FPT	24 X 24
CE049	24.00	32.75	47.25	10.75	11.50	11.13	6.88	7.50	18.50	8.75	28.00	22.00	24.00	1" FPT	24 X 30
CE061	26.00	33.25	51.25	12.00	12.50	8.38	5.00	9.75	21.75	10.50	28.00	22.00	24.00	1" FPT	24 X 30
CE071	26.00	33.25	58.25	12.75	13.50	9.75	4.50	7.00	20.25	11.00	28.00	30.00	32.00	1" FPT	16 X 30 (2)



All dimensions within +/- 0.125". Specifications subject to change without notice.

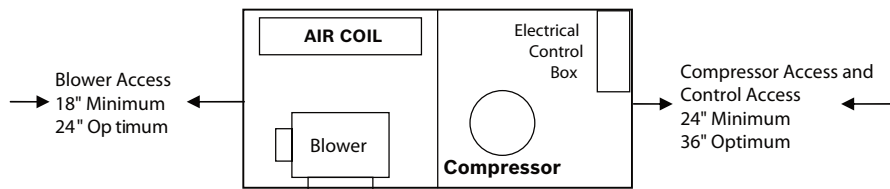
CE Service Clearances

**Vertical Unit
Service Clearances**



NOTE: The local electric codes may require 36" or more clearance at the electrical control box.

**Horizontal Unit
Service Clearances**



NOTE: The local electric codes may require 36" or more clearance at the electrical control box.

Greensource Si Series Model CE Residential Geothermal Heat Pump



Capacity Data CE025 Full Load (910 CFM)

Cooling									Heating							
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP	
50	3	0.5	75/63	27.0	21.7	31.7	1.4	19.7	30	0.6	16.9	12.9	1.4	3.54	3.54	
			80/67	28.8	22.4	33.5	1.4	20.7				12.3	1.5	3.22	3.22	
			85/71	30.6	23.1	35.4	1.4	21.6				11.6	1.7	2.85	2.85	
	4.5	1.1	75/63	27.9	22.0	32.3	1.3	21.4		1.2	17.5	13.4	1.4	3.65	3.65	
			80/67	29.7	22.7	34.2	1.3	22.6			17.2	12.6	1.5	3.26	3.26	
			85/71	31.6	23.4	36.2	1.3	23.8			17.2	12.2	1.7	2.94	2.94	
	6	1.8	75/63	28.3	22.2	32.6	1.3	22.3		1.9	18.0	13.9	1.4	3.72	3.72	
			80/67	30.2	22.9	34.6	1.3	23.6			18.0	13.2	1.6	3.37	3.37	
			85/71	32.1	23.6	36.6	1.3	25.0			17.6	12.5	1.7	2.99	2.99	
60	3	0.5	75/63	25.8	21.1	30.8	1.5	17.3	40	0.6	19.1	14.8	1.4	3.89	3.89	
			80/67	27.5	21.8	32.6	1.5	18.1				14.6	1.6	3.58	3.58	
			85/71	29.2	22.5	34.4	1.5	18.8				18.8	13.7	1.7	3.15	3.15
	4.5	1.1	75/63	26.6	21.5	31.4	1.4	18.8		1.1	20.1	15.9	1.5	4.05	4.05	
			80/67	28.4	22.1	33.2	1.4	19.8			20.0	14.7	1.6	3.67	3.67	
			85/71	30.2	22.8	35.1	1.5	20.8			19.8	14.3	1.8	3.3	3.3	
	6	1.8	75/63	27.0	21.6	31.6	1.4	19.6		1.9	20.7	16.4	1.5	4.14	4.14	
			80/67	28.8	22.4	33.5	1.4	20.7			20.4	16.2	1.6	3.71	3.71	
			85/71	30.7	23.0	35.5	1.4	21.8			20.0	14.7	1.8	3.31	3.31	
70	3	0.5	75/63	24.6	20.7	30.0	1.6	15.0	50	0.5	21.7	17.6	1.5	4.29	4.29	
			80/67	26.1	21.4	31.7	1.7	15.7				21.1	17.3	1.6	3.8	3.8
			85/71	27.7	22.1	33.5	1.7	16.3				21.3	15.8	1.8	3.47	3.47
	4.5	1.1	75/63	25.3	20.9	30.5	1.6	16.3		1.1	22.9	18.6	1.5	4.46	4.46	
			80/67	27.0	21.7	32.3	1.6	17.2			22.3	17.6	1.6	3.97	3.97	
			85/71	28.7	22.4	34.1	1.6	18.0			22.1	16.6	1.8	3.57	3.57	
	6	1.8	75/63	25.7	21.1	30.7	1.5	17.0		1.8	23.7	19.6	1.5	4.57	4.57	
			80/67	27.4	21.8	32.6	1.5	17.9			23.6	17.9	1.7	4.15	4.15	
			85/71	29.2	22.5	34.4	1.5	18.8			22.8	17.3	1.8	3.66	3.66	
80	3	1.0	75/63	23.3	20.2	29.2	1.8	12.9	60	0.5	24.7	20.6	1.5	4.71	4.71	
			80/67	24.8	20.9	30.9	1.8	13.5				24.3	19.5	1.7	4.22	4.22
			85/71	26.4	21.4	32.6	1.9	14.1				23.3	18.0	1.8	3.71	3.71
	4.5	1.0	75/63	24.0	20.4	29.6	1.7	14.0		1.1	26.2	22.6	1.6	4.89	4.89	
			80/67	25.6	21.2	31.4	1.7	14.7			25.9	20.2	1.7	4.42	4.42	
			85/71	27.2	21.8	33.1	1.8	15.5			24.6	19.0	1.9	3.85	3.85	
	6	1.7	75/63	24.3	20.6	29.8	1.7	14.6		1.8	26.8	21.7	1.6	4.98	4.98	
			80/67	26.0	21.3	31.6	1.7	15.4			26.2	21.8	1.7	4.44	4.44	
			85/71	27.7	21.9	33.4	1.7	16.2			25.2	19.8	1.9	3.91	3.91	
90	3	0.5	75/63	21.9	19.6	28.4	2.0	11.1	70	0.5	27.2	22.6	1.6	5.03	5.03	
			80/67	23.4	20.3	30.1	2.0	11.6				27.1	21.6	1.7	4.55	4.55
			85/71	24.9	21.1	31.7	2.0	12.2				26.8	21.0	1.9	4.07	4.07
	4.5	1.0	75/63	22.6	19.9	28.8	1.9	12.0		1.1	29.0	24.2	1.6	5.23	5.23	
			80/67	24.2	20.5	30.5	1.9	12.6			28.8	23.6	1.8	4.71	4.71	
			85/71	25.8	21.2	32.2	1.9	13.3			28.1	22.2	2.0	4.2	4.2	
	6	1.7	75/63	22.9	20.0	29.0	1.8	12.4		1.8	30.0	24.9	1.6	5.35	5.35	
			80/67	24.5	20.7	30.7	1.9	13.1			29.1	23.9	1.8	4.73	4.73	
			85/71	26.2	21.4	32.5	1.9	13.8			28.9	23.1	2.0	4.27	4.27	
100	3	0.5	75/63	20.6	19.1	27.8	2.2	9.5	80	1.0	31.3	25.9	1.7	5.51	5.51	
			80/67	22.1	19.8	29.3	2.2	10.0				29.9	25.0	1.8	4.8	4.8
			85/71	23.5	20.6	30.9	2.2	10.5				29.9	23.8	2.0	4.33	4.33
	4.5	1.0	75/63	21.3	19.3	28.1	2.1	10.2		1.0	32.8	28.2	1.7	5.64	5.64	
			80/67	22.8	20.0	29.7	2.1	10.8			31.9	27.1	1.9	5	5	
			85/71	24.3	20.9	31.4	2.1	11.4			30.7	24.6	2.1	4.38	4.38	
	6	1.7	75/63	21.5	19.4	28.2	2.0	10.5		1.7	33.4	28.4	1.7	5.7	5.7	
			80/67	23.0	20.3	29.9	2.1	11.2			32.9	27.9	1.9	5.09	5.09	
			85/71	24.6	21.0	31.6	2.1	11.8			32.6	25.6	2.1	4.56	4.56	
110	3	0.5	75/63	19.3	18.6	27.1	2.4	8.1	Extended Range - Anti-freeze required	0.5	21.7	17.6	1.5	4.29	4.29	
			80/67	20.6	19.4	28.6	2.4	8.5				21.1	17.3	1.6	3.8	3.8
			85/71	22.0	20.1	30.1	2.5	8.9				21.3	15.8	1.8	3.47	3.47
	4.5	1.0	75/63	19.9	18.8	27.4	2.3	8.6		1.1	22.9	18.6	1.5	4.46	4.46	
			80/67	21.3	19.6	28.9	2.3	9.2			22.3	17.6	1.6	3.97	3.97	
			85/71	22.7	20.3	30.5	2.4	9.7			22.1	16.6	1.8	3.57	3.57	
	6	1.6	75/63	20.1	18.9	27.5	2.3	8.9		1.8	23.7	19.6	1.5	4.57	4.57	
			80/67	21.6	19.7	29.1	2.3	9.4			23.6	17.9	1.7	4.15	4.15	
			85/71	23.0	20.5	30.7	2.3	10.0			22.8	17.3	1.8	3.66	3.66	

Extended Range - Anti-freeze required
 AHRI/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHRI/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.

DISCLAIMER: The performance reported herein is based on testing by FHP. Variations in the installation and operational environment may alter performance. Bosch disclaims all warranties, express and implied, that the performance will be as reported, including the warranty of merchantability and fitness for purpose. In addition, continuous research and development may result in a change to an appliances design and specifications at the time of order, which Bosch may change without notice. Before purchase, confirm the design specifications of the appliance.

Greensource Si Series Model CE Residential Geothermal Heat Pump



BOSCH

Capacity Data CE025 Part Load (750 CFM)

Cooling									Heating						
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP
50	3	0.5	75/63	20.6	17.4	23.4	0.8	25.4	30	0.6	60	12.5	9.9	1.0	3.60
			80/67	22.0	18.0	24.9	0.8	26.8			70	12.3	9.0	1.2	3.12
			85/71	23.4	18.6	26.4	0.8	28.3			80	11.9	7.9	1.3	2.65
	4.5	1.1	75/63	21.1	17.6	23.8	0.8	27.9		60	12.7	9.9	1.0	3.66	
			80/67	22.6	18.2	25.3	0.8	29.7		70	12.6	9.2	1.2	3.18	
			85/71	24.1	18.8	26.8	0.8	31.5		80	12.4	8.5	1.3	2.75	
	6	1.8	75/63	21.3	17.7	23.9	0.7	29.2		60	13.0	10.2	1.0	3.72	
			80/67	22.8	18.3	25.5	0.7	31.2		70	12.9	9.5	1.2	3.23	
			85/71	24.4	18.9	27.0	0.7	33.2		80	12.5	8.6	1.3	2.76	
60	3	0.5	75/63	19.6	17.0	22.7	0.9	21.0	40	0.6	60	14.5	11.6	1.0	4.11
			80/67	20.9	17.5	24.1	0.9	22.2			70	14.2	10.7	1.2	3.51
			85/71	22.3	18.1	25.6	1.0	23.5			80	13.8	9.9	1.3	3.01
	4.5	1.1	75/63	20.0	17.2	23.0	0.9	22.9		60	14.9	11.9	1.0	4.21	
			80/67	21.5	17.7	24.5	0.9	24.4		70	14.7	11.0	1.2	3.63	
			85/71	22.9	18.3	26.0	0.9	25.9		80	14.2	10.5	1.3	3.1	
	6	1.8	75/63	20.2	17.3	23.2	0.9	23.8		60	15.2	12.0	1.0	4.25	
			80/67	21.7	17.9	24.7	0.9	25.5		70	14.8	11.2	1.2	3.64	
			85/71	23.2	18.4	26.2	0.9	27.2		80	14.5	10.9	1.3	3.14	
70	3	0.5	75/63	18.5	16.6	22.0	1.1	17.4	50	0.5	60	16.3	13.3	1.1	4.53
			80/67	19.8	17.1	23.4	1.1	18.5			70	16.2	13.0	1.2	3.9
			85/71	21.1	17.8	24.7	1.1	19.5			80	15.9	12.0	1.4	3.41
	4.5	1.1	75/63	18.9	16.7	22.3	1.0	18.9		60	17.1	14.2	1.1	4.69	
			80/67	20.3	17.3	23.7	1.0	20.1		70	16.7	13.2	1.2	4.03	
			85/71	21.7	18.0	25.1	1.0	21.4		80	16.5	12.4	1.4	3.53	
	6	1.8	75/63	19.1	16.8	22.5	1.0	19.5		60	17.7	14.8	1.1	4.83	
			80/67	20.6	17.4	23.9	1.0	20.9		70	17.2	13.1	1.2	4.14	
			85/71	22.0	18.0	25.3	1.0	22.3		80	16.6	12.6	1.4	3.54	
80	3	1.0	75/63	17.4	16.0	21.4	1.2	14.5	60	0.5	60	18.8	15.3	1.1	5.06
			80/67	18.6	16.8	22.6	1.2	15.4			70	18.4	15.1	1.2	4.37
			85/71	19.9	17.2	24.0	1.2	16.3			80	18.0	14.2	1.4	3.77
	4.5	1.0	75/63	17.8	16.2	21.6	1.1	15.6		60	19.5	16.7	1.1	5.19	
			80/67	19.1	16.9	22.9	1.1	16.6		70	19.0	15.3	1.2	4.48	
			85/71	20.4	17.5	24.3	1.2	17.7		80	18.9	14.7	1.4	3.93	
	6	1.7	75/63	18.0	16.4	21.7	1.1	16.1		60	20.2	16.8	1.1	5.36	
			80/67	19.3	16.9	23.1	1.1	17.3		70	19.5	15.8	1.3	4.56	
			85/71	20.7	17.6	24.5	1.1	18.4		80	19.0	14.9	1.4	3.95	
90	3	0.5	75/63	16.3	15.7	20.7	1.4	12.1	70	0.5	60	21.0	18.0	1.1	5.50
			80/67	17.4	16.3	21.9	1.4	12.8			70	20.7	17.4	1.3	4.78
			85/71	18.6	16.9	23.2	1.4	13.6			80	20.0	16.0	1.4	4.11
	4.5	1.0	75/63	16.7	15.8	20.9	1.3	12.9		60	22.3	19.1	1.1	5.74	
			80/67	17.9	16.5	22.2	1.3	13.8		70	21.8	18.4	1.3	4.95	
			85/71	19.1	17.1	23.5	1.3	14.7		80	20.9	16.9	1.4	4.2	
	6	1.7	75/63	16.8	15.5	21.0	1.3	12.9		60	22.7	19.7	1.1	5.81	
			80/67	18.1	16.5	22.3	1.3	14.2		70	21.9	19.6	1.3	4.96	
			85/71	19.4	17.1	23.6	1.3	15.2		80	21.6	17.6	1.5	4.35	
100	3	0.5	75/63	15.3	15.2	20.1	1.5	10.0	80	1.0	60	23.5	20.2	1.2	5.95
			80/67	16.3	15.9	21.3	1.5	10.7			70	22.9	19.2	1.3	5.1
			85/71	17.4	16.5	22.4	1.5	11.3			80	22.6	18.3	1.5	4.51
	4.5	1.0	75/63	15.6	15.3	20.3	1.5	10.6		60	24.7	21.7	1.2	6.16	
			80/67	16.7	16.1	21.5	1.5	11.4		70	24.4	20.1	1.3	5	
			85/71	17.8	16.7	22.7	1.5	12.1		80	23.4	19.0	1.5	4.61	
	6	1.7	75/63	15.7	15.5	20.4	1.4	10.9		60	25.5	22.4	1.2	6.3	
			80/67	16.9	16.1	21.6	1.4	11.7		70	24.6	21.1	1.3	5.40	
			85/71	18.0	16.7	22.8	1.4	12.5		80	24.3	20.1	1.5	4.75	
110	3	0.5	75/63	14.5	14.5	19.9	1.7	8.5	Extended Range - Anti-freeze required	1.0	60	26.3	23.3	1.2	7.16
			80/67	15.3	15.3	20.8	1.7	9.0			70	26.0	23.0	1.3	6.41
			85/71	16.2	16.1	21.7	1.7	9.4			80	25.7	22.7	1.4	5.74
	4.5	1.0	75/63	14.7	14.7	19.9	1.7	8.9		60	27.4	24.4	1.2	7.61	
			80/67	15.5	15.5	20.9	1.7	9.4		70	27.1	24.1	1.3	6.86	
			85/71	16.6	16.2	22.0	1.7	10.0		80	26.8	23.8	1.4	6.19	
	6	1.6	75/63	14.7	14.7	19.9	1.6	8.9		60	28.1	25.1	1.2	8.01	
			80/67	15.6	15.6	20.9	1.6	9.6		70	27.8	24.8	1.3	7.26	
			85/71	16.7	16.3	22.1	1.6	10.3		80	27.5	24.5	1.4	6.59	

Extended Range - Anti-freeze required
 AHRI/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHRI/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.
DISCLAIMER: The performance reported herein is based on testing by FHP. Variations in the installation and operational environment may alter performance. Bosch disclaims all warranties, express and implied, that the performance will be as reported, including the warranty of merchantability and fitness for purpose. In addition, continuous research and development may result in a change to an appliances design and specifications at the time of order, which Bosch may change without notice. Before purchase, confirm the design specifications of the appliance.

Greensource Si Series Model CE Residential Geothermal Heat Pump



BOSCH

Capacity Data CE035 Full Load (1170 CFM)															
Cooling									Heating						
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP
50	4	0.9	75/63	37.7	28.9	45.0	2.1	17.8	30	0.9	60	24.8	18.5	2.1	3.46
			80/67	40.3	29.8	47.7	2.2	18.7			70	24.6	17.2	2.3	3.12
			85/71	42.9	30.6	50.5	2.2	19.6			80	24.1	16.2	2.5	2.79
	6.5	2.1	75/63	39.1	29.4	45.8	2.0	19.8		60	26.1	19.8	2.1	3.58	
			80/67	41.8	30.3	48.7	2.0	21.0		70	25.6	18.6	2.3	3.20	
			85/71	44.7	31.1	51.7	2.0	22.1		80	25.2	17.2	2.6	2.89	
	9	3.8	75/63	39.6	29.9	46.2	1.9	20.8		60	26.9	20.4	2.2	3.66	
			80/67	42.4	30.8	49.1	1.9	22.1		70	26.2	19.2	2.4	3.26	
			85/71	45.4	31.6	52.1	1.9	23.4		80	25.9	17.6	2.6	2.94	
60	4	0.9	75/63	36.0	28.1	43.9	2.3	15.5	40	0.9	60	28.3	21.7	2.2	3.79
			80/67	38.5	29.0	46.5	2.4	16.4			70	27.8	20.5	2.4	3.39
			85/71	41.0	29.9	49.2	2.4	17.2			80	27.4	19.1	2.6	3.07
	6.5	2.1	75/63	37.3	28.6	44.7	2.2	17.1		60	30.0	23.3	2.2	3.95	
			80/67	40.0	29.5	47.5	2.2	18.2		70	29.4	22.0	2.4	3.53	
			85/71	42.7	30.4	50.3	2.2	19.3		80	28.9	20.4	2.7	3.2	
	9	3.7	75/63	37.8	28.9	45.0	2.1	17.9		60	30.9	24.2	2.2	4.02	
			80/67	40.5	30.0	47.8	2.1	19.1		70	30.2	22.7	2.5	3.59	
			85/71	43.4	30.9	50.8	2.1	20.2		80	29.4	21.4	2.7	3.21	
70	4	0.9	75/63	34.2	27.4	42.8	2.5	13.5	50	0.9	60	32.0	25.1	2.3	4.12
			80/67	36.6	28.3	45.3	2.6	14.3			70	31.5	23.7	2.5	3.7
			85/71	39.1	29.2	47.9	2.6	15.0			80	30.8	22.5	2.7	3.32
	6.5	2.0	75/63	35.4	27.9	43.5	2.4	14.8		60	34.1	27.1	2.3	4.28	
			80/67	38.0	28.8	46.2	2.4	15.8		70	33.5	25.5	2.5	3.85	
			85/71	40.6	29.8	49.0	2.4	16.7		80	32.8	24.1	2.8	3.46	
	9	3.6	75/63	35.9	28.0	43.8	2.3	15.3		60	35.2	28.3	2.4	4.38	
			80/67	38.6	29.1	46.5	2.3	16.5		70	34.4	26.7	2.6	3.93	
			85/71	41.3	30.1	49.4	2.4	17.5		80	33.7	24.9	2.8	3.52	
80	4	0.9	75/63	32.4	26.8	41.7	2.8	11.7	60	0.9	60	36.0	28.8	2.4	4.46
			80/67	34.7	27.7	44.2	2.8	12.4			70	35.3	27.5	2.6	4.01
			85/71	37.1	28.4	46.7	2.8	13.1			80	34.7	25.9	2.8	3.60
	6.5	2.0	75/63	33.6	27.1	42.4	2.6	12.8		60	38.7	31.3	2.4	4.68	
			80/67	36.0	28.0	45.0	2.6	13.6		70	37.8	29.7	2.6	4.21	
			85/71	38.5	29.1	47.6	2.7	14.5		80	37.1	28.0	2.9	3.78	
	9	3.5	75/63	33.8	26.7	42.5	2.6	12.9		60	39.9	32.8	2.5	4.77	
			80/67	36.5	28.2	45.2	2.6	14.1		70	39.1	31.0	2.7	4.30	
			85/71	39.1	29.1	48.0	2.6	15.0		80	38.3	29.1	2.9	3.87	
90	4	0.8	75/63	30.7	25.8	40.8	3.0	10.2	70	0.9	60	40.2	32.7	2.5	4.80
			80/67	32.8	26.9	43.1	3.1	10.7			70	39.5	31.2	2.7	4.33
			85/71	35.1	27.7	45.5	3.1	11.3			80	38.8	29.7	2.9	3.91
	6.5	1.9	75/63	31.7	26.3	41.3	2.9	11.0		60	43.4	35.7	2.5	5.04	
			80/67	34.0	27.4	43.7	2.9	11.7		70	42.4	34.0	2.7	4.54	
			85/71	36.4	28.4	46.3	2.9	12.5		80	41.4	32.3	3.0	4.1	
	9	3.5	75/63	32.1	26.8	41.5	2.8	11.4		60	44.9	37.4	2.6	5.14	
			80/67	34.3	26.9	44.0	2.9	11.9		70	43.9	35.4	2.8	4.64	
			85/71	36.8	27.7	46.5	2.9	12.7		80	42.8	33.6	3.0	4.17	
100	4	0.8	75/63	28.9	25.2	39.9	3.3	8.8	80	0.9	60	44.6	36.8	2.5	5.13
			80/67	31.0	26.2	42.2	3.3	9.3			70	43.8	35.2	2.8	4.6
			85/71	33.1	27.2	44.5	3.4	9.8			80	42.9	33.6	3.0	4.18
	6.5	1.9	75/63	29.8	25.6	40.3	3.2	9.4		60	48.3	40.2	2.6	5.38	
			80/67	32.0	26.7	42.7	3.2	10.0		70	47.2	38.4	2.9	5	
			85/71	34.3	27.3	45.1	3.2	10.7		80	46.1	36.5	3.1	4.36	
	9	3.4	75/63	30.0	25.5	40.5	3.1	9.6		60	50.1	42.2	2.7	5.5	
			80/67	32.4	26.9	42.9	3.1	10.4		70	49.0	40.1	2.9	4.94	
			85/71	34.7	28.0	45.4	3.1	11.1		80	47.7	38.0	3.1	4.45	
110	4	0.8	75/63	27.1	24.4	39.1	3.6	7.5	Extended Range - Anti-freeze required	0.9	60	44.6	36.8	2.5	5.13
			80/67	29.0	25.5	41.2	3.7	7.9			70	43.8	35.2	2.8	4.6
			85/71	31.1	26.5	43.5	3.7	8.4			80	42.9	33.6	3.0	4.18
	6.5	1.8	75/63	27.8	24.9	39.4	3.5	8.0		60	48.3	40.2	2.6	5.38	
			80/67	29.9	25.6	41.7	3.5	8.5		70	47.2	38.4	2.9	5	
			85/71	32.1	26.9	44.0	3.5	9.1		80	46.1	36.5	3.1	4.36	
	9	3.3	75/63	28.2	24.8	39.6	3.4	8.2		60	50.1	42.2	2.7	5.5	
			80/67	30.3	25.8	41.8	3.5	8.7		70	49.0	40.1	2.9	4.94	
			85/71	32.6	26.6	44.2	3.5	9.4		80	47.7	38.0	3.1	4.45	

Extended Range - Anti-freeze required
 AHR/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHR/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.

DISCLAIMER: The performance reported herein is based on testing by FHP. Variations in the installation and operational environment may alter performance. Bosch disclaims all warranties, express and implied, that the performance will be as reported, including the warranty of merchantability and fitness for purpose. In addition, continuous research and development may result in a change to an appliances design and specifications at the time of order, which Bosch may change without notice. Before purchase, confirm the design specifications of the appliance.

Bosch Thermotechnology Corp.
Watertown, MA • Londonderry, NH • Ft. Lauderdale, FL

Greensource Si Series Model CE Residential Geothermal Heat Pump



Capacity Data ES035 Part Load (800 CFM)																
Cooling									Heating							
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP	
50	4	0.9	75/63	27.5	20.9	31.5	1.1	24.0	30	0.9	60	16.8	13.0	1.3	3.67	
			80/67	29.6	21.6	33.7	1.2	25.1				70	16.5	12.0	1.5	3.16
			85/71	31.6	22.3	35.9	1.2	26.2				80	16.2	11.1	1.7	2.74
	6.5	2.1	75/63	28.2	21.2	32.0	1.1	26.5		60	17.6	13.8	1.4	3.77		
			80/67	30.4	22.0	34.2	1.1	27.9		70	17.1	12.8	1.6	3.24		
			85/71	32.6	22.6	36.5	1.1	29.3		80	16.8	11.7	1.8	2.81		
	9	3.8	75/63	28.5	21.3	32.2	1.0	27.6		60	18.0	14.2	1.4	3.84		
			80/67	30.7	22.1	34.5	1.1	29.2		70	17.5	13.2	1.6	3.29		
			85/71	33.0	22.8	36.8	1.1	30.7		80	17.2	12.2	1.8	2.85		
60	4	0.9	75/63	26.2	20.3	30.6	1.3	20.1	40	0.9	60	19.8	15.8	1.4	4.07	
			80/67	28.2	21.1	32.7	1.3	21.2				70	19.4	14.7	1.6	3.53
			85/71	30.2	21.7	34.9	1.4	22.2				80	19.0	13.8	1.8	3.04
	6.5	2.1	75/63	26.9	20.6	31.1	1.2	22.0		60	20.9	16.7	1.5	4.22		
			80/67	29.0	21.4	33.3	1.2	23.3		70	20.4	15.6	1.6	3.63		
			85/71	31.1	22.1	35.5	1.3	24.6		80	19.9	14.5	1.9	3.1		
	9	3.7	75/63	27.2	20.7	31.3	1.2	22.8		60	21.5	17.3	1.5	4.28		
			80/67	29.3	21.5	33.5	1.2	24.3		70	20.9	16.1	1.7	3.69		
			85/71	31.5	22.2	35.7	1.2	25.7		80	20.4	15.0	1.9	3.19		
70	4	0.9	75/63	24.9	19.7	29.8	1.5	16.9	50	0.9	60	23.1	18.7	1.5	4.47	
			80/67	26.7	20.5	31.8	1.5	17.9				70	22.7	17.6	1.7	3.9
			85/71	28.7	21.1	33.9	1.5	18.8				80	22.3	16.5	1.9	3.38
	6.5	2.0	75/63	25.5	20.0	30.2	1.4	18.4		60	24.4	20.1	1.5	4.61		
			80/67	27.5	20.8	32.3	1.4	19.5		70	23.8	18.9	1.7	3.99		
			85/71	29.5	21.4	34.4	1.4	20.7		80	23.5	17.5	2.0	3.48		
	9	3.6	75/63	25.7	20.1	30.4	1.4	19.0		60	25.1	20.7	1.6	4.70		
			80/67	27.8	20.9	32.5	1.4	20.3		70	24.5	19.5	1.8	4.05		
			85/71	29.9	21.5	34.7	1.4	21.6		80	24.0	18.0	2.0	3.54		
80	4	0.9	75/63	23.5	19.2	29.1	1.7	14.2	60	0.9	60	26.5	21.8	1.6	4.83	
			80/67	25.3	20.0	31.0	1.7	15.0				70	25.9	20.6	1.8	4.20
			85/71	27.1	20.6	32.9	1.7	15.8				80	25.5	19.4	2.0	3.66
	6.5	2.0	75/63	24.1	19.4	29.4	1.6	15.3		60	28.2	23.4	1.7	4.99		
			80/67	26.0	20.2	31.4	1.6	16.3		70	27.5	22.1	1.9	4.33		
			85/71	28.0	20.8	33.4	1.6	17.4		80	27.0	20.7	2.1	3.78		
	9	3.5	75/63	24.3	19.5	29.5	1.5	15.8		60	29.0	24.2	1.7	5.07		
			80/67	26.3	20.3	31.5	1.6	16.9		70	28.3	22.8	1.9	4.40		
			85/71	28.3	20.9	33.6	1.6	18.0		80	27.6	21.5	2.1	3.81		
90	4	0.8	75/63	22.1	18.7	28.3	1.9	11.8	70	0.9	60	30.1	25.1	1.7	5.16	
			80/67	23.9	19.5	30.2	1.9	12.6				70	29.4	23.8	1.9	4.49
			85/71	25.7	20.0	32.1	1.9	13.4				80	28.9	22.4	2.2	3.91
	6.5	1.9	75/63	22.7	18.9	28.6	1.8	12.7		60	32.2	27.0	1.8	5.37		
			80/67	24.5	19.7	30.5	1.8	13.6		70	31.4	25.5	2.0	4.66		
			85/71	26.4	20.3	32.5	1.8	14.6		80	30.6	24.0	2.2	4.0		
	9	3.5	75/63	22.7	18.5	28.7	1.8	12.6		60	33.2	28.0	1.8	5.46		
			80/67	24.7	19.8	30.7	1.8	14.0		70	32.3	26.4	2.0	4.74		
			85/71	26.7	20.6	32.7	1.8	15.1		80	31.5	24.8	2.2	4.10		
100	4	0.8	75/63	20.8	18.1	27.7	2.1	9.8	80	0.9	60	33.8	28.6	1.8	5.51	
			80/67	22.5	18.8	29.5	2.1	10.5				70	33.2	27.2	2.0	4.8
			85/71	24.2	19.6	31.4	2.2	11.2				80	32.5	25.7	2.3	4.19
	6.5	1.9	75/63	21.2	18.4	27.9	2.0	10.5		60	36.2	30.8	1.9	5.70		
			80/67	23.0	19.0	29.8	2.0	11.3		70	35.3	29.3	2.1	5		
			85/71	24.9	19.7	31.7	2.1	12.1		80	34.6	27.6	2.3	4.36		
	9	3.4	75/63	21.3	18.1	28.0	2.0	10.4		60	37.5	31.9	1.9	5.8		
			80/67	23.1	18.7	29.8	2.1	11.3		70	36.5	30.3	2.1	5.08		
			85/71	24.9	19.3	31.7	2.1	12.1		80	35.5	28.5	2.4	4.42		
110	4	0.8	75/63	19.3	17.5	27.2	2.4	8.0	Extended Range - Anti-freeze required	0.9	60	35.5	28.5	2.4	4.42	
			80/67	21.0	18.4	28.9	2.4	8.7				70	35.5	28.5	2.4	4.42
			85/71	22.6	19.1	30.7	2.4	9.3				80	35.5	28.5	2.4	4.42
	6.5	1.8	75/63	19.8	17.7	27.4	2.3	8.5		60	38.8	32.8	2.1	6.11		
			80/67	21.5	18.4	29.1	2.3	9.2		70	38.8	32.8	2.1	6.11		
			85/71	23.2	19.3	31.0	2.3	10.0		80	38.8	32.8	2.1	6.11		
	9	3.3	75/63	19.8	17.7	27.4	2.3	8.6		60	42.2	36.2	2.1	6.81		
			80/67	21.7	18.8	29.2	2.3	9.5		70	42.2	36.2	2.1	6.81		
			85/71	23.4	19.8	31.0	2.3	10.3		80	42.2	36.2	2.1	6.81		

Extended Range - Anti-freeze required
 AHR/ISO 13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHR/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.

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Greensource Si Series Model CE Residential Geothermal Heat Pump



Capacity Data CE049 Full Load (1650 CFM)															
Cooling									Heating						
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP
50	6	1.0	75/63	49.4	39.4	59.3	2.9	17.0	30	1.1	60	34.4	25.2	2.7	3.67
			80/67	52.6	40.7	62.7	3.0	17.8			70	34.3	24.8	3.0	3.34
			85/71	55.9	41.8	66.2	3.0	18.6			80	34.1	23.5	3.3	3.04
	9	2.1	75/63	51.3	40.1	60.6	2.7	18.8		60	36.2	27.0	2.8	3.79	
			80/67	54.6	41.4	64.1	2.8	19.8		70	36.3	26.5	3.1	3.47	
			85/71	58.2	42.6	67.8	2.8	20.8		80	36.0	25.3	3.3	3.16	
	12	3.4	75/63	52.2	40.6	61.3	2.6	19.8		60	38.0	28.9	2.8	3.92	
			80/67	55.7	41.8	64.9	2.7	20.9		70	37.5	27.6	3.1	3.55	
			85/71	59.4	43.0	68.7	2.7	22.0		80	37.0	26.2	3.4	3.22	
60	6	1.0	75/63	47.2	38.5	57.9	3.1	15.1	40	1.0	60	38.4	29.8	2.9	3.94
			80/67	50.3	39.7	61.1	3.2	15.9			70	38.0	28.5	3.1	3.58
			85/71	53.4	40.9	64.4	3.2	16.6			80	37.7	26.9	3.4	3.27
	9	2.0	75/63	49.0	39.2	59.1	2.9	16.6		60	40.4	31.8	2.9	4.08	
			80/67	52.3	40.5	62.5	3.0	17.6		70	40.3	30.3	3.2	3.74	
			85/71	55.7	41.7	66.0	3.0	18.5		80	40.2	28.5	3.4	3.4	
	12	3.4	75/63	50.0	39.6	59.7	2.9	17.5		60	43.1	32.9	3.0	4.27	
			80/67	53.3	40.9	63.2	2.9	18.5		70	42.1	31.3	3.2	3.85	
			85/71	56.9	42.1	66.9	2.9	19.6		80	41.6	30.4	3.5	3.51	
70	6	1.0	75/63	45.0	37.6	56.4	3.4	13.4	50	1.0	60	39.6	32.9	2.9	4.03
			80/67	47.9	38.9	59.5	3.4	14.0			70	42.0	32.1	3.2	3.8
			85/71	51.0	40.0	62.8	3.5	14.7			80	41.5	30.4	3.5	3.50
	9	2.0	75/63	46.8	38.3	57.5	3.2	14.7		60	45.3	36.5	3.0	4.39	
			80/67	49.9	39.5	60.9	3.2	15.5		70	45.6	35.4	3.3	4.07	
			85/71	53.3	40.4	64.3	3.2	16.4		80	43.6	32.5	3.5	3.62	
	12	3.3	75/63	47.7	38.6	58.1	3.1	15.5		60	43.6	36.8	3.0	4.31	
			80/67	51.0	39.9	61.6	3.1	16.4		70	42.4	35.1	3.2	3.89	
			85/71	54.4	40.9	65.1	3.1	17.3		80	45.1	34.4	3.6	3.70	
80	6	1.0	75/63	42.7	36.7	55.0	3.6	11.7	60	1.0	60	48.2	38.6	3.1	4.59
			80/67	45.6	37.8	58.1	3.7	12.4			70	47.3	36.3	3.3	4.17
			85/71	48.4	39.2	61.1	3.7	13.0			80	46.7	35.0	3.6	3.80
	9	2.0	75/63	44.4	37.3	56.0	3.4	12.9		60	47.7	40.7	3.1	4.58	
			80/67	47.5	38.5	59.2	3.5	13.7		70	50.6	39.3	3.4	4.38	
			85/71	50.5	39.9	62.4	3.5	14.4		80	49.1	38.3	3.7	3.92	
	12	3.3	75/63	45.3	37.6	56.6	3.3	13.6		60	49.5	42.5	3.1	4.70	
			80/67	48.5	38.8	59.9	3.4	14.4		70	48.2	40.6	3.3	4.24	
			85/71	51.7	40.2	63.2	3.4	15.2		80	50.5	41.2	3.7	3.99	
90	6	1.0	75/63	40.4	35.7	53.7	4.0	10.2	70	1.0	60	53.6	43.9	3.2	4.92
			80/67	43.2	36.8	56.7	4.0	10.8			70	52.8	42.0	3.4	4.49
			85/71	45.8	38.4	59.6	4.1	11.3			80	51.7	40.0	3.7	4.07
	9	1.9	75/63	42.0	36.3	54.6	3.7	11.2		60	57.5	47.7	3.3	5.15	
			80/67	44.9	37.6	57.7	3.8	11.9		70	56.3	45.6	3.5	4.68	
			85/71	47.8	39.0	60.8	3.8	12.6		80	55.2	43.2	3.8	4.3	
	12	3.2	75/63	42.9	36.4	55.2	3.6	11.8		60	60.0	49.4	3.3	5.31	
			80/67	45.9	38.0	58.2	3.7	12.6		70	54.3	46.4	3.5	4.59	
			85/71	49.0	39.2	61.5	3.7	13.3		80	57.1	44.9	3.9	4.34	
100	6	0.9	75/63	38.0	34.8	52.6	4.3	8.8	80	1.0	60	59.3	49.3	3.3	5.26
			80/67	40.6	36.2	55.4	4.4	9.2			70	58.6	47.1	3.6	4.8
			85/71	43.2	37.5	58.2	4.4	9.7			80	57.3	45.2	3.9	4.35
	9	1.9	75/63	39.6	35.4	53.3	4.1	9.7		60	64.2	53.3	3.4	5.55	
			80/67	42.4	36.7	56.3	4.1	10.3		70	62.5	51.5	3.7	5	
			85/71	45.2	37.9	59.3	4.2	10.9		80	61.5	48.5	3.9	4.56	
	12	3.1	75/63	40.5	35.4	53.8	4.0	10.2		60	66.6	56.3	3.4	5.7	
			80/67	43.3	36.9	56.8	4.0	10.8		70	65.0	53.7	3.7	5.14	
			85/71	46.2	38.4	59.8	4.0	11.5		80	63.6	49.7	4.0	4.68	
110	6	0.9	75/63	35.9	33.8	51.8	4.7	7.6	Extended Range - Anti-freeze required	1.0	60	58.6	47.1	3.6	4.8
			80/67	38.4	35.0	54.5	4.8	8.0			70	57.3	45.2	3.9	4.35
			85/71	40.9	36.4	57.2	4.8	8.4			80	56.2	43.3	4.2	4.0
	9	1.8	75/63	37.2	34.4	52.2	4.5	8.3		60	64.2	53.3	3.4	5.55	
			80/67	39.7	35.9	55.0	4.5	8.8		70	62.5	51.5	3.7	5	
			85/71	42.4	37.2	57.9	4.6	9.3		80	61.5	48.5	3.9	4.56	
	12	3.0	75/63	37.9	34.6	52.5	4.4	8.7		60	66.6	56.3	3.4	5.7	
			80/67	40.5	36.1	55.4	4.4	9.2		70	65.0	53.7	3.7	5.14	
			85/71	43.3	37.5	58.3	4.4	9.8		80	63.6	49.7	4.0	4.68	

Extended Range - Anti-freeze required
 AHRI/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHRI/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.

DISCLAIMER: The performance reported herein is based on testing by FHP. Variations in the installation and operational environment may alter performance. Bosch disclaims all warranties, express and implied, that the performance will be as reported, including the warranty of merchantability and fitness for purpose. In addition, continuous research and development may result in a change to an appliances design and specifications at the time of order, which Bosch may change without notice. Before purchase, confirm the design specifications of the appliance.

Greensource Si Series Model CE Residential Geothermal Heat Pump



Capacity Data CE049 Part Load (1300 CFM)															
Cooling									Heating						
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP
50	6	1.0	75/63	37.5	30.6	43.3	1.7	22.1	30	1.1	60	26.1	20.1	2.0	3.84
			80/67	39.9	31.6	45.7	1.7	23.7			70	25.3	18.6	2.2	3.37
			85/71	42.4	32.6	48.2	1.7	25.7			80	24.6	17.1	2.4	2.96
	9.0	2.1	75/63	38.7	31.1	44.1	1.6	24.3		60	27.1	21.0	2.0	3.97	
			80/67	41.2	32.1	46.6	1.6	26.3		70	26.2	19.5	2.2	3.47	
			85/71	43.9	33.0	49.2	1.5	28.7		80	25.6	17.8	2.4	3.06	
	12	3.4	75/63	39.3	31.4	44.6	1.5	25.6		60	27.9	21.5	2.0	4.08	
			80/67	41.9	32.4	47.1	1.5	27.8		70	26.7	20.0	2.2	3.53	
			85/71	44.7	33.2	49.8	1.5	30.4		80	26.0	18.3	2.5	3.11	
60	6	1.0	75/63	35.7	29.8	42.1	1.9	18.9	40	1.0	60	29.3	23.2	2.0	4.25
			80/67	38.0	30.8	44.4	1.9	20.3			70	28.5	21.7	2.2	3.73
			85/71	40.4	31.9	46.7	1.8	21.9			80	27.8	20.2	2.5	3.28
	9.0	2.0	75/63	36.8	30.3	42.8	1.8	20.7		60	30.6	24.4	2.0	4.41	
			80/67	39.2	31.3	45.2	1.7	22.4		70	29.7	22.8	2.3	3.87	
			85/71	41.8	32.4	47.7	1.7	24.4		80	28.9	21.3	2.5	3.4	
	12	3.4	75/63	37.4	30.5	43.2	1.7	21.8		60	31.3	25.2	2.0	4.50	
			80/67	39.9	31.5	45.7	1.7	23.7		70	30.4	23.5	2.3	3.94	
			85/71	42.5	32.6	48.2	1.6	25.8		80	29.5	21.8	2.5	3.45	
70	6	1.0	75/63	33.8	29.1	40.9	2.1	16.1	50	1.0	60	32.9	26.7	2.1	4.70
			80/67	36.0	30.0	43.1	2.1	17.3			70	32.1	25.1	2.3	4.1
			85/71	38.3	31.2	45.3	2.1	18.6			80	31.4	23.5	2.5	3.64
	9.0	2.0	75/63	34.9	29.5	41.5	2.0	17.6		60	34.5	28.2	2.1	4.89	
			80/67	37.2	30.4	43.8	2.0	19.0		70	33.5	26.6	2.3	4.29	
			85/71	39.7	31.4	46.2	1.9	20.7		80	32.8	24.8	2.5	3.77	
	12	3.3	75/63	35.4	29.8	41.9	1.9	18.5		60	35.4	29.1	2.1	5.01	
			80/67	37.8	30.8	44.3	1.9	20.0		70	34.4	27.4	2.3	4.39	
			85/71	40.4	31.9	46.7	1.8	21.8		80	33.5	25.6	2.5	3.85	
80	6	1.0	75/63	31.9	28.4	39.8	2.3	13.6	60	1.0	60	36.7	30.4	2.1	5.17
			80/67	34.1	29.2	41.9	2.3	14.6			70	35.8	28.8	2.3	4.57
			85/71	36.3	30.2	44.1	2.3	15.8			80	35.2	27.2	2.6	4.04
	9.0	2.0	75/63	32.9	28.8	40.3	2.2	14.9		60	38.6	32.3	2.1	5.43	
			80/67	35.1	29.8	42.5	2.2	16.0		70	37.6	30.6	2.3	4.78	
			85/71	37.6	30.7	44.8	2.2	17.4		80	36.7	28.9	2.6	4.21	
	12	3.3	75/63	33.4	29.0	40.7	2.1	15.6		60	39.7	33.4	2.1	5.58	
			80/67	35.7	30.0	42.9	2.1	16.9		70	38.7	31.6	2.3	4.91	
			85/71	38.2	30.9	45.3	2.1	18.4		80	37.7	29.8	2.6	4.31	
90	6	1.0	75/63	30.0	27.5	38.7	2.6	11.4	70	1.0	60	40.7	34.5	2.1	5.72
			80/67	32.0	28.7	40.8	2.6	12.3			70	39.8	32.8	2.3	5.05
			85/71	34.2	29.7	42.9	2.6	13.3			80	39.0	31.1	2.6	4.46
	9.0	1.9	75/63	30.9	28.0	39.2	2.5	12.5		60	43.0	36.7	2.1	6.05	
			80/67	33.1	28.9	41.3	2.5	13.5		70	41.9	34.9	2.3	5.32	
			85/71	35.4	29.9	43.5	2.4	14.6		80	40.9	33.0	2.6	4.7	
	12	3.2	75/63	31.5	28.1	39.5	2.4	13.1		60	44.3	38.0	2.1	6.25	
			80/67	33.6	29.3	41.6	2.4	14.1		70	43.1	36.1	2.3	5.48	
			85/71	36.0	30.1	43.9	2.3	15.4		80	42.0	34.1	2.6	4.81	
100	6	0.9	75/63	28.2	26.7	37.8	2.9	9.7	80	1.0	60	44.9	38.7	2.1	6.34
			80/67	30.2	27.9	39.8	2.9	10.4			70	43.9	36.9	2.3	5.6
			85/71	32.2	29.0	41.8	2.9	11.2			80	42.9	35.1	2.6	4.92
	9.0	1.9	75/63	29.0	27.2	38.2	2.8	10.4		60	47.5	41.3	2.1	6.76	
			80/67	31.1	28.2	40.3	2.7	11.3		70	46.3	39.3	2.3	6	
			85/71	33.3	29.3	42.4	2.7	12.3		80	45.1	37.3	2.5	5.20	
	12	3.1	75/63	29.4	27.3	38.4	2.7	10.9		60	49.0	42.9	2.0	7.0	
			80/67	31.6	28.4	40.5	2.7	11.8		70	47.7	40.8	2.3	6.13	
			85/71	33.8	29.6	42.7	2.6	12.8		80	46.4	38.7	2.5	5.36	
110	6	0.9	75/63	26.2	26.0	37.0	3.3	8.1	Extended Range - Anti-freeze required	1.0	60	46.4	38.7	2.5	5.36
			80/67	28.2	27.2	38.9	3.2	8.7			70	45.3	37.6	2.7	4.78
			85/71	30.2	28.1	40.9	3.2	9.4			80	44.2	36.5	3.0	4.21
	9.0	1.8	75/63	27.1	26.3	37.4	3.1	8.7		60	49.0	42.9	2.0	7.0	
			80/67	29.1	27.4	39.3	3.1	9.5		70	47.9	41.8	2.2	6.34	
			85/71	31.2	28.7	41.3	3.0	10.3		80	46.8	40.7	2.5	5.67	
	12	3.0	75/63	27.5	26.5	37.5	3.0	9.1		60	52.0	46.0	1.8	7.9	
			80/67	29.6	27.8	39.5	3.0	9.9		70	50.9	44.9	2.0	7.2	
			85/71	31.7	28.9	41.6	3.0	10.7		80	49.8	43.8	2.3	6.53	

Extended Range - Anti-freeze required
 AHRI/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHRI/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.

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Greensource Si Series Model CE Residential Geothermal Heat Pump



Capacity Data CE061 Full Load (1750 CFM)																
Cooling									Heating							
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP	
50	8	1.8	75/63	64.0	47.4	75.7	3.3	19.2	30	1.9	60	44.4	32.9	3.6	3.61	
			80/67	68.3	48.2	80.2	3.4	20.1				70	43.8	31.3	4.0	3.25
			85/71	72.5	49.6	84.7	3.5	20.9				80	43.2	29.4	4.3	2.94
	11.0	3.5	75/63	66.2	47.9	77.1	3.1	21.3		60	46.6	35.0	3.7	3.72		
			80/67	70.6	49.2	81.7	3.2	22.4		70	45.6	32.6	4.0	3.34		
			85/71	75.2	50.3	86.5	3.2	23.4		80	45.0	30.9	4.4	3.02		
	15	6.1	75/63	67.3	48.8	77.7	3.0	22.7		60	47.8	36.2	3.7	3.79		
			80/67	72.0	49.8	82.5	3.0	23.9		70	46.7	33.4	4.0	3.39		
			85/71	76.7	51.1	87.4	3.1	25.1		80	46.0	31.9	4.4	3.06		
60	8	1.8	75/63	61.3	46.2	74.1	3.7	16.8	40	1.8	60	50.3	38.4	3.8	3.92	
			80/67	65.3	47.4	78.4	3.7	17.6				70	49.4	36.3	4.1	3.52
			85/71	69.5	48.5	82.7	3.8	18.3				80	48.7	34.4	4.5	3.18
	11.0	3.5	75/63	63.3	47.1	75.3	3.4	18.5		60	53.0	40.8	3.8	4.05		
			80/67	67.7	48.0	79.8	3.5	19.5		70	51.9	38.6	4.2	3.64		
			85/71	72.0	49.4	84.4	3.5	20.5		80	51.0	36.2	4.6	3.3		
	15	6.0	75/63	64.5	47.6	76.0	3.3	19.7		60	54.6	42.3	3.9	4.13		
			80/67	69.0	48.8	80.6	3.3	20.8		70	53.5	40.0	4.2	3.71		
			85/71	73.5	50.0	85.4	3.4	21.8		80	52.4	37.6	4.6	3.34		
70	8	1.7	75/63	58.5	45.0	72.5	4.0	14.6	50	1.8	60	56.4	44.0	3.9	4.22	
			80/67	62.4	46.1	76.6	4.1	15.4				70	55.7	42.1	4.3	3.8
			85/71	66.5	47.1	80.9	4.1	16.1				80	54.9	39.9	4.7	3.44
	11.0	3.4	75/63	60.5	45.8	73.6	3.8	16.1		60	59.8	47.2	4.0	4.38		
			80/67	64.6	46.9	77.9	3.8	17.0		70	58.6	44.6	4.4	3.94		
			85/71	69.0	48.0	82.4	3.9	17.9		80	57.6	42.4	4.8	3.55		
	15	5.9	75/63	61.7	46.0	74.3	3.6	17.0		60	62.0	49.0	4.1	4.48		
			80/67	65.9	47.5	78.7	3.7	18.0		70	60.5	46.3	4.4	4.01		
			85/71	70.4	48.5	83.3	3.7	19.0		80	59.4	43.9	4.8	3.62		
80	8	1.7	75/63	55.6	43.8	70.9	4.4	12.7	60	1.8	60	63.4	50.4	4.1	4.53	
			80/67	59.5	44.7	74.9	4.4	13.4				70	62.2	48.0	4.5	4.08
			85/71	63.3	46.2	79.0	4.5	14.0				80	61.4	45.8	4.9	3.69
	11.0	3.3	75/63	57.7	44.2	72.0	4.1	14.0		60	67.3	54.0	4.2	4.70		
			80/67	61.6	45.6	76.1	4.2	14.8		70	65.8	51.2	4.6	4.22		
			85/71	65.7	46.9	80.4	4.2	15.6		80	64.7	48.8	5.0	3.82		
	15	5.8	75/63	58.8	44.6	72.6	4.0	14.7		60	70.0	56.2	4.3	4.80		
			80/67	62.7	46.3	76.8	4.0	15.6		70	68.4	53.4	4.6	4.32		
			85/71	67.1	47.4	81.3	4.1	16.5		80	66.6	50.5	5.0	3.88		
90	8	1.7	75/63	52.7	42.6	69.3	4.8	11.1	70	1.7	60	70.5	57.0	4.3	4.82	
			80/67	56.4	43.7	73.2	4.8	11.7				70	69.4	54.5	4.7	4.35
			85/71	60.0	45.1	77.2	4.9	12.2				80	68.2	51.9	5.1	3.94
	11.0	3.3	75/63	54.7	42.9	70.4	4.5	12.1		60	75.2	61.2	4.4	5.00		
			80/67	58.5	44.3	74.3	4.6	12.8		70	73.7	58.4	4.8	4.50		
			85/71	62.3	45.9	78.4	4.6	13.5		80	72.0	55.5	5.2	4.1		
	15	5.6	75/63	55.7	43.2	70.9	4.4	12.7		60	78.4	63.8	4.5	5.11		
			80/67	59.6	44.8	75.0	4.4	13.5		70	76.6	60.7	4.9	4.60		
			85/71	63.6	46.4	79.2	4.5	14.3		80	74.8	57.7	5.3	4.15		
100	8	1.6	75/63	49.9	41.1	68.0	5.2	9.6	80	1.7	60	78.0	63.9	4.5	5.09	
			80/67	53.3	42.6	71.7	5.3	10.1				70	76.7	61.2	4.9	4.6
			85/71	57.0	43.9	75.7	5.4	10.6				80	75.4	58.5	5.3	4.16
	11.0	3.2	75/63	51.6	41.7	68.8	5.0	10.4		60	83.5	68.7	4.6	5.27		
			80/67	55.3	43.0	72.7	5.0	11.0		70	81.7	65.6	5.0	5		
			85/71	58.9	44.7	76.6	5.1	11.6		80	80.0	62.6	5.5	4.29		
	15	5.5	75/63	52.5	42.0	69.2	4.8	10.9		60	87.1	71.7	4.7	5.4		
			80/67	56.3	43.5	73.2	4.9	11.6		70	85.1	68.4	5.1	4.85		
			85/71	60.1	45.2	77.2	4.9	12.3		80	83.0	65.3	5.6	4.37		
110	8	1.6	75/63	46.8	40.0	66.7	5.7	8.2	Extended Range - Anti-freeze required	1.7	60	76.7	61.2	4.9	4.6	
			80/67	50.1	41.6	70.3	5.8	8.7				70	75.4	58.5	5.3	4.16
			85/71	53.8	42.5	74.1	5.9	9.2				80	73.7	55.5	5.7	3.72
	11.0	3.1	75/63	48.3	40.6	67.3	5.5	8.9		60	83.5	68.7	4.6	5.27		
			80/67	52.0	42.0	71.2	5.5	9.4		70	81.7	65.6	5.0	5		
			85/71	55.6	43.6	75.0	5.6	10.0		80	80.0	62.6	5.5	4.29		
	15	5.4	75/63	49.2	40.9	67.7	5.3	9.3		60	87.1	71.7	4.7	5.4		
			80/67	53.0	42.4	71.7	5.4	9.9		70	85.1	68.4	5.1	4.85		
			85/71	56.8	43.8	75.6	5.4	10.5		80	83.0	65.3	5.6	4.37		

Extended Range - Anti-freeze required
 AHR/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHR/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.

DISCLAIMER: The performance reported herein is based on testing by FHP. Variations in the installation and operational environment may alter performance. Bosch disclaims all warranties, express and implied, that the performance will be as reported, including the warranty of merchantability and fitness for purpose. In addition, continuous research and development may result in a change to an appliances design and specifications at the time of order, which Bosch may change without notice. Before purchase, confirm the design specifications of the appliance.

Greensource Si Series Model CE Residential Geothermal Heat Pump



BOSCH

Capacity Data CE061 Part Load (1320 CFM)																
Cooling									Heating							
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP	
50	8	1.8	75/63	49.0	36.1	55.1	1.7	28.3	30	1.9	60	34.1	26.1	2.7	3.71	
			80/67	52.4	37.1	58.5	1.7	30.2			70	34.0	24.3	3.1	3.26	
			85/71	55.8	38.0	61.9	1.7	32.1			80	33.7	22.9	3.5	2.86	
	11.0	3.5	75/63	50.2	36.6	55.8	1.6	31.5		60	35.4	27.1	2.7	3.84		
			80/67	53.7	37.7	59.3	1.6	33.7		70	35.1	25.3	3.1	3.34		
			85/71	57.3	38.6	63.0	1.6	36.0		80	34.8	23.8	3.5	2.93		
	15	6.1	75/63	50.9	36.9	56.3	1.5	33.5		60	36.2	27.9	2.7	3.91		
			80/67	54.5	38.0	59.9	1.5	36.1		70	35.6	26.5	3.1	3.39		
			85/71	58.2	38.9	63.6	1.5	38.6		80	35.4	24.4	3.5	2.98		
60	8	1.8	75/63	46.9	35.3	53.7	2.0	23.8	40	1.8	60	38.6	30.3	2.7	4.13	
			80/67	50.2	36.2	57.0	2.0	25.5			70	38.3	28.6	3.1	3.62	
			85/71	53.5	37.0	60.3	2.0	27.2			80	38.0	27.0	3.5	3.19	
	11.0	3.5	75/63	48.1	35.8	54.5	1.8	26.2		60	40.3	31.7	2.8	4.28		
			80/67	51.5	36.7	57.9	1.8	28.1		70	39.7	30.1	3.1	3.74		
			85/71	55.0	37.6	61.3	1.8	30.1		80	39.3	28.3	3.5	3.3		
	15	6.0	75/63	48.7	36.1	54.9	1.8	27.7		60	41.3	32.7	2.8	4.38		
			80/67	52.2	37.0	58.4	1.7	29.9		70	40.6	31.0	3.1	3.83		
			85/71	55.8	37.9	61.9	1.7	32.1		80	40.3	28.9	3.5	3.37		
70	8	1.7	75/63	44.8	34.1	52.4	2.2	20.1	50	1.8	60	43.6	35.0	2.8	4.59	
			80/67	47.8	35.4	55.5	2.2	21.6			70	43.0	33.2	3.1	4.0	
			85/71	51.1	36.2	58.7	2.2	23.1			80	42.4	31.6	3.5	3.53	
	11.0	3.4	75/63	45.9	34.6	53.1	2.1	22.0		60	45.6	36.9	2.8	4.77		
			80/67	49.1	35.9	56.3	2.1	23.7		70	44.8	34.9	3.1	4.18		
			85/71	52.5	36.7	59.7	2.1	25.4		80	44.2	33.1	3.5	3.67		
	15	5.9	75/63	46.6	35.0	53.5	2.0	23.1		60	46.9	38.1	2.8	4.88		
			80/67	49.9	36.2	56.8	2.0	25.0		70	46.0	36.0	3.2	4.27		
			85/71	53.3	37.2	60.2	2.0	26.9		80	45.2	34.1	3.5	3.74		
80	8	1.7	75/63	42.5	33.4	51.1	2.5	17.0	60	1.8	60	48.8	40.2	2.8	5.06	
			80/67	45.6	34.3	54.1	2.5	18.3			70	48.1	38.3	3.2	4.43	
			85/71	48.5	35.5	57.1	2.5	19.6			80	47.5	36.3	3.6	3.91	
	11.0	3.3	75/63	43.6	33.8	51.7	2.4	18.4		60	51.3	42.4	2.9	5.27		
			80/67	46.8	34.8	54.9	2.3	20.0		70	50.3	40.4	3.2	4.62		
			85/71	49.9	36.0	58.0	2.3	21.5		80	49.5	38.3	3.6	4.05		
	15	5.8	75/63	44.3	34.1	52.1	2.3	19.4		60	52.8	44.0	2.9	5.40		
			80/67	47.5	35.1	55.3	2.3	21.0		70	51.8	41.7	3.2	4.73		
			85/71	50.8	36.3	58.5	2.2	22.7		80	50.7	39.6	3.6	4.13		
90	8	1.7	75/63	40.4	32.3	50.0	2.8	14.3	70	1.7	60	54.4	45.6	2.9	5.53	
			80/67	43.2	33.4	52.8	2.8	15.4			70	53.4	43.5	3.2	4.86	
			85/71	46.1	34.4	55.7	2.8	16.5			80	52.7	41.4	3.6	4.28	
	11.0	3.3	75/63	41.4	32.8	50.5	2.7	15.5		60	57.2	48.5	2.9	5.76		
			80/67	44.3	34.0	53.4	2.6	16.7		70	56.1	46.0	3.2	5.06		
			85/71	47.4	35.1	56.4	2.6	18.1		80	55.1	43.7	3.6	4.4		
	15	5.6	75/63	42.0	33.0	50.8	2.6	16.2		60	59.1	50.2	2.9	5.91		
			80/67	45.0	34.3	53.8	2.6	17.6		70	57.8	47.6	3.3	5.19		
			85/71	48.2	35.1	56.9	2.5	19.1		80	56.5	45.2	3.6	4.54		
100	8	1.6	75/63	38.1	31.4	48.9	3.2	11.9	80	1.7	60	60.2	51.2	2.9	6.00	
			80/67	40.8	32.7	51.5	3.2	12.9			70	59.0	49.0	3.3	5.3	
			85/71	43.6	33.5	54.3	3.1	13.9			80	58.0	46.7	3.7	4.65	
	11.0	3.2	75/63	39.0	31.9	49.3	3.0	12.9		60	63.5	54.6	3.0	6.25		
			80/67	41.9	33.1	52.1	3.0	14.0		70	62.1	52.0	3.3	5		
			85/71	44.8	34.2	54.9	3.0	15.1		80	60.8	49.4	3.7	4.84		
	15	5.5	75/63	39.6	32.1	49.6	2.9	13.5		60	65.6	56.6	3.0	6.4		
			80/67	42.5	33.3	52.4	2.9	14.7		70	64.1	53.9	3.3	5.63		
			85/71	45.5	34.4	55.3	2.9	15.9		80	62.6	51.1	3.7	4.95		
110	8	1.6	75/63	35.9	30.6	48.0	3.6	10.0	Extended Range - Anti-freeze required	1.7	60	62.6	51.1	3.7	4.95	
			80/67	38.5	31.6	50.5	3.6	10.8								
			85/71	41.1	32.6	53.1	3.5	11.6								
	11.0	3.1	75/63	36.8	30.8	48.3	3.4	10.7		AHR/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.	3.3	60	63.5	54.6	3.0	6.25
			80/67	39.4	31.9	50.9	3.4	11.6				70	62.1	52.0	3.3	5
			85/71	42.2	33.0	53.6	3.4	12.6				80	60.8	49.4	3.7	4.84
	15	5.4	75/63	37.2	31.0	48.5	3.3	11.1		60	65.6	56.6	3.0	6.4		
			80/67	40.0	32.1	51.2	3.3	12.1		70	64.1	53.9	3.3	5.63		
			85/71	42.8	33.5	53.9	3.2	13.2		80	62.6	51.1	3.7	4.95		

Extended Range - Anti-freeze required
 AHR/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHR/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.

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Greensource Si Series Model CE Residential Geothermal Heat Pump



Capacity Data CE071 Full Load (2350 CFM)															
Cooling									Heating						
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP
50	9	1.6	75/63	64.0	47.4	75.7	3.3	19.2	30	1.6	60	50.5	36.7	4.2	3.49
			80/67	68.3	48.2	80.2	3.4	20.1			70	49.8	34.7	4.6	3.16
			85/71	72.5	49.6	84.7	3.5	20.9			80	49.0	32.8	5.0	2.87
	13.0	3.0	75/63	66.2	47.9	77.1	3.1	21.3			60	52.5	38.6	4.3	3.58
			80/67	70.6	49.2	81.7	3.2	22.4			70	51.7	36.2	4.7	3.25
			85/71	75.2	50.3	86.5	3.2	23.4			80	50.7	34.3	5.0	2.95
	18	5.3	75/63	67.3	48.8	77.7	3.0	22.7			60	53.9	39.9	4.3	3.65
			80/67	72.0	49.8	82.5	3.0	23.9			70	52.5	37.2	4.7	3.28
			85/71	76.7	51.1	87.4	3.1	25.1			80	51.9	35.3	5.1	3.00
60	9	1.5	75/63	61.3	46.2	74.1	3.7	16.8	40	1.6	60	56.8	42.5	4.4	3.79
			80/67	65.3	47.4	78.4	3.7	17.6			70	55.9	40.5	4.8	3.44
			85/71	69.5	48.5	82.7	3.8	18.3			80	55.1	38.3	5.1	3.14
	13.0	2.9	75/63	63.3	47.1	75.3	3.4	18.5			60	59.4	44.9	4.5	3.91
			80/67	67.7	48.0	79.8	3.5	19.5			70	58.3	42.6	4.8	3.55
			85/71	72.0	49.4	84.4	3.5	20.5			80	57.1	40.2	5.2	3.2
	18	5.2	75/63	64.5	47.6	76.0	3.3	19.7			60	61.2	46.6	4.5	3.99
			80/67	69.0	48.8	80.6	3.3	20.8			70	60.0	44.2	4.8	3.63
			85/71	73.5	50.0	85.4	3.4	21.8			80	58.6	41.4	5.2	3.29
70	9	1.5	75/63	58.5	45.0	72.5	4.0	14.6	50	1.6	60	63.7	49.1	4.5	4.11
			80/67	62.4	46.1	76.6	4.1	15.4			70	62.5	46.8	4.9	3.7
			85/71	66.5	47.1	80.9	4.1	16.1			80	61.7	44.5	5.3	3.42
	13.0	2.9	75/63	60.5	45.8	73.6	3.8	16.1			60	66.8	51.9	4.6	4.26
			80/67	64.6	46.9	77.9	3.8	17.0			70	65.6	49.5	5.0	3.88
			85/71	69.0	48.0	82.4	3.9	17.9			80	64.4	47.0	5.3	3.53
	18	5.1	75/63	61.7	46.0	74.3	3.6	17.0			60	69.2	54.1	4.6	4.37
			80/67	65.9	47.5	78.7	3.7	18.0			70	67.7	51.4	5.0	3.97
			85/71	70.4	48.5	83.3	3.7	19.0			80	66.4	48.7	5.4	3.61
80	9	1.5	75/63	55.6	43.8	70.9	4.4	12.7	60	1.5	60	71.2	56.1	4.7	4.45
			80/67	59.5	44.7	74.9	4.4	13.4			70	69.8	53.6	5.1	4.05
			85/71	63.3	46.2	79.0	4.5	14.0			80	68.9	51.1	5.4	3.71
	13.0	2.8	75/63	57.7	44.2	72.0	4.1	14.0			60	75.1	59.7	4.8	4.62
			80/67	61.6	45.6	76.1	4.2	14.8			70	73.6	56.9	5.1	4.21
			85/71	65.7	46.9	80.4	4.2	15.6			80	72.2	54.1	5.5	3.83
	18	5.0	75/63	58.8	44.6	72.6	4.0	14.7			60	78.0	62.2	4.8	4.74
			80/67	62.7	46.3	76.8	4.0	15.6			70	76.3	59.3	5.2	4.31
			85/71	67.1	47.4	81.3	4.1	16.5			80	74.6	56.3	5.6	3.92
90	9	1.4	75/63	52.7	42.6	69.3	4.8	11.1	70	1.5	60	79.1	63.6	4.8	4.79
			80/67	56.4	43.7	73.2	4.8	11.7			70	77.7	61.0	5.2	4.37
			85/71	60.0	45.1	77.2	4.9	12.2			80	76.3	58.2	5.6	3.98
	13.0	2.8	75/63	54.7	42.9	70.4	4.5	12.1			60	83.8	67.8	4.9	4.98
			80/67	58.5	44.3	74.3	4.6	12.8			70	82.1	64.8	5.3	4.53
			85/71	62.3	45.9	78.4	4.6	13.5			80	80.4	61.8	5.7	4.1
	18	4.9	75/63	55.7	43.2	70.9	4.4	12.7			60	87.2	70.9	5.0	5.11
			80/67	59.6	44.8	75.0	4.4	13.5			70	85.3	67.6	5.4	4.65
			85/71	63.6	46.4	79.2	4.5	14.3			80	83.3	64.4	5.8	4.23
100	9	1.4	75/63	49.9	41.1	68.0	5.2	9.6	80	1.5	60	87.5	71.4	5.0	5.12
			80/67	53.3	42.6	71.7	5.3	10.1			70	85.9	68.6	5.4	4.7
			85/71	57.0	43.9	75.7	5.4	10.6			80	84.3	65.7	5.8	4.26
	13.0	2.7	75/63	51.6	41.7	68.8	5.0	10.4			60	92.9	76.3	5.1	5.31
			80/67	55.3	43.0	72.7	5.0	11.0			70	91.0	73.1	5.5	5
			85/71	58.9	44.7	76.6	5.1	11.6			80	89.1	69.8	5.9	4.41
	18	4.8	75/63	52.5	42.0	69.2	4.8	10.9			60	96.9	80.0	5.2	5.5
			80/67	56.3	43.5	73.2	4.9	11.6			70	94.7	76.3	5.6	4.97
			85/71	60.1	45.2	77.2	4.9	12.3			80	92.5	72.8	6.0	4.52
110	9	1.4	75/63	46.8	40.0	66.7	5.7	8.2	Extended Range - Anti-freeze required	5.0	60	102.5	86.6	5.3	5.81
			80/67	50.1	41.6	70.3	5.8	8.7			70	100.6	83.3	5.7	5.36
			85/71	53.8	42.5	74.1	5.9	9.2			80	98.7	80.0	6.1	4.91
	13.0	2.7	75/63	48.3	40.6	67.3	5.5	8.9			60	108.8	92.8	5.4	6.31
			80/67	52.0	42.0	71.2	5.5	9.4			70	106.9	89.5	5.8	5.86
			85/71	55.6	43.6	75.0	5.6	10.0			80	105.0	86.2	6.2	5.41
	18	4.7	75/63	49.2	40.9	67.7	5.3	9.3			60	116.9	100.0	5.7	6.71
			80/67	53.0	42.4	71.7	5.4	9.9			70	115.0	96.7	6.1	6.26
			85/71	56.8	43.8	75.6	5.4	10.5			80	113.1	93.4	6.5	5.81

Extended Range - Anti-freeze required
 AHR/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHR/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.

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Greensource Si Series Model CE Residential Geothermal Heat Pump



Capacity Data CE071 Part Load (1850 CFM)

Cooling									Heating						
Entering Water Temp (°F)	Water flow (GPM)	Pressure Drop PSI (FOH)	Entering Air Temp DB/WB (°F)	Total Capacity (MBTUH)	Sensible Capacity (MBTUH)	Heat of Rejection (MBTUH)	Power (kW)	EER	Entering Fluid Temp (°F)	Pressure Drop PSI (FOH)	Entering Air Temp (°F)	Total Capacity (MBTUH)	Heat of Absorption (MBTUH)	Power Input (kW)	COP
50	9	1.6	75/63	55.0	44.1	63.9	2.6	21.2	30	1.6	60	37.2	27.4	3.2	3.45
			80/67	58.8	45.5	67.8	2.6	22.7			70	36.9	25.8	3.5	3.05
			85/71	62.7	46.9	71.7	2.6	24.1			80	36.7	24.0	4.0	2.71
	13.0	3.0	75/63	56.3	44.6	64.7	2.4	23.1			60	38.5	28.4	3.2	3.57
			80/67	60.3	46.0	68.7	2.4	24.8			70	37.9	26.9	3.6	3.13
			85/71	64.3	47.4	72.8	2.4	26.4			80	37.9	25.0	4.0	2.79
	18	5.3	75/63	57.1	45.1	65.2	2.3	24.5			60	39.4	29.2	3.2	3.64
			80/67	61.2	46.4	69.3	2.3	26.3			70	38.7	27.5	3.6	3.19
			85/71	65.4	47.8	73.5	2.3	28.2			80	38.4	25.6	4.0	2.83
60	9	1.5	75/63	52.5	43.1	62.5	2.9	18.1	40	1.6	60	42.4	32.3	3.2	3.89
			80/67	56.2	44.5	66.1	2.9	19.4			70	41.8	30.5	3.6	3.43
			85/71	59.8	46.1	69.9	2.9	20.7			80	41.7	28.6	4.0	3.06
	13.0	2.9	75/63	53.7	43.8	63.2	2.7	19.6			60	44.0	33.7	3.2	4.03
			80/67	57.5	45.2	66.9	2.7	21.0			70	43.3	31.8	3.6	3.55
			85/71	61.4	46.7	70.9	2.7	22.5			80	42.6	30.2	4.0	3.1
	18	5.2	75/63	54.6	43.9	63.7	2.6	20.6			60	45.1	34.8	3.2	4.12
			80/67	58.4	45.6	67.5	2.6	22.2			70	44.3	32.9	3.6	3.62
			85/71	62.6	46.8	71.6	2.6	23.9			80	43.6	30.9	4.0	3.19
70	9	1.5	75/63	50.0	42.2	61.0	3.2	15.5	50	1.6	60	47.9	37.7	3.2	4.35
			80/67	53.5	43.7	64.5	3.2	16.6			70	47.3	35.7	3.6	3.8
			85/71	57.1	45.2	68.1	3.2	17.8			80	46.7	33.7	4.0	3.41
	13.0	2.9	75/63	51.2	42.5	61.7	3.1	16.7			60	49.8	39.9	3.2	4.50
			80/67	54.9	44.0	65.3	3.1	18.0			70	49.1	37.4	3.6	3.99
			85/71	58.6	45.7	69.1	3.0	19.3			80	48.4	35.4	4.0	3.54
	18	5.1	75/63	52.0	42.8	62.1	3.0	17.5			60	51.3	41.0	3.3	4.61
			80/67	55.7	44.3	65.8	2.9	18.9			70	50.4	38.6	3.6	4.09
			85/71	59.6	46.1	69.7	2.9	20.4			80	49.6	36.6	4.0	3.63
80	9	1.5	75/63	47.4	41.2	59.6	3.6	13.2	60	1.5	60	53.9	43.5	3.3	4.83
			80/67	50.8	42.4	63.0	3.6	14.2			70	53.0	41.5	3.6	4.29
			85/71	54.2	44.2	66.4	3.6	15.3			80	52.3	39.3	4.0	3.82
	13.0	2.8	75/63	48.6	41.6	60.2	3.4	14.2			60	56.3	46.0	3.3	5.04
			80/67	52.2	43.0	63.7	3.4	15.4			70	55.2	43.7	3.6	4.46
			85/71	55.8	44.4	67.3	3.4	16.5			80	54.3	41.3	4.0	3.96
	18	5.0	75/63	49.3	41.9	60.6	3.3	14.9			60	58.0	47.7	3.3	5.18
			80/67	52.9	43.5	64.2	3.3	16.1			70	56.8	45.3	3.6	4.58
			85/71	56.7	44.8	67.9	3.3	17.4			80	55.7	42.8	4.0	4.06
90	9	1.4	75/63	44.8	39.9	58.3	4.0	11.2	70	1.5	60	60.3	49.8	3.3	5.36
			80/67	48.1	41.4	61.5	4.0	12.1			70	59.1	47.5	3.6	4.76
			85/71	51.4	42.9	64.8	3.9	13.0			80	58.1	45.2	4.0	4.23
	13.0	2.8	75/63	45.9	40.5	58.8	3.8	12.0			60	63.1	52.6	3.3	5.59
			80/67	49.3	41.9	62.1	3.8	13.0			70	61.8	50.2	3.7	4.96
			85/71	52.7	43.7	65.5	3.8	14.1			80	60.5	47.6	4.0	4.4
	18	4.9	75/63	46.6	40.8	59.2	3.7	12.6			60	65.2	54.7	3.3	5.76
			80/67	50.1	42.2	62.6	3.7	13.7			70	63.7	52.1	3.7	5.10
			85/71	53.7	44.0	66.1	3.6	14.8			80	62.3	49.3	4.0	4.52
100	9	1.4	75/63	42.1	39.0	57.1	4.5	9.4	80	1.5	60	66.9	56.3	3.3	5.89
			80/67	45.2	40.6	60.1	4.4	10.2			70	65.6	53.9	3.7	5.2
			85/71	48.4	42.0	63.3	4.4	11.0			80	64.3	51.3	4.0	4.66
	13.0	2.7	75/63	43.1	39.4	57.5	4.3	10.1			60	70.3	59.7	3.3	6.15
			80/67	46.4	40.9	60.7	4.2	11.0			70	68.7	57.0	3.7	5
			85/71	49.7	42.6	63.9	4.2	11.9			80	67.2	54.2	4.1	4.86
	18	4.8	75/63	43.8	39.7	57.8	4.2	10.6			60	72.8	62.1	3.4	6.3
			80/67	47.1	41.4	61.0	4.1	11.5			70	70.9	59.2	3.7	5.63
			85/71	50.6	42.6	64.4	4.1	12.5			80	69.2	56.1	4.1	4.99
110	9	1.4	75/63	39.6	37.7	56.2	5.0	8.0	Extended Range - Anti-freeze required	5.0	60	79.2	69.2	3.7	7.59
			80/67	42.5	39.5	59.0	4.9	8.6			70	77.5	66.5	4.0	6.96
			85/71	45.4	41.2	61.9	4.9	9.3			80	75.8	63.8	4.4	6.33
	13.0	2.7	75/63	40.5	38.3	56.5	4.8	8.5			60	83.1	73.1	3.4	8.03
			80/67	43.5	39.8	59.5	4.7	9.2			70	81.4	70.4	3.7	7.4
			85/71	46.6	41.5	62.5	4.7	10.0			80	79.7	67.7	4.0	6.77
	18	4.7	75/63	41.1	38.6	56.7	4.7	8.8			60	87.4	77.4	3.1	8.63
			80/67	44.2	40.3	59.7	4.6	9.6			70	85.7	74.7	3.4	8.0
			85/71	47.4	41.9	62.8	4.5	10.4			80	84.0	72.0	3.7	7.37

Extended Range - Anti-freeze required
 AHRI/ISO13256-1 certified performance is rated at entering air conditions of 80.6°F DB and 66.2°F WB in cooling and 68°F DB in heating.
 Tabulated unit performance does not include fan or pump power corrections required for AHRI/ISO standard performance ratings.
 Unit performance may be interpolated. Extrapolation is not allowed.
 For conditions other than rating conditions provided, consult the BST selection software.
 Ratings below 40°F are with a methanol solution.

DISCLAIMER: The performance reported herein is based on testing by FHP. Variations in the installation and operational environment may alter performance. Bosch disclaims all warranties, express and implied, that the performance will be as reported, including the warranty of merchantability and fitness for purpose. In addition, continuous research and development may result in a change to an appliances design and specifications at the time of order, which Bosch may change without notice. Before purchase, confirm the design specifications of the appliance.

GreenSource Si Series Model CE
Residential Geothermal Heat Pump



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Antifreeze Correction							
Antifreeze Type	Antifreeze Volume %	Cooling			Heating		WPD Correction Factor EWT 30 °F
		EWT 90 Deg.F			EWT 30 Deg. F		
		Total Cap.	Sens. Cap	Power	Htg. Cap	Power	
Water	0	1.000	1.000	1.000	1.000	1.000	1.000
Propylene Glycol	5	0.997	0.997	1.004	0.989	0.997	1.060
	10	0.994	0.994	1.006	0.986	0.995	1.125
	15	0.990	0.990	1.009	0.978	0.988	1.190
	25	0.983	0.983	1.016	0.960	0.979	1.300
Methanol	5	0.997	0.997	1.003	0.990	0.997	1.060
	10	0.996	0.996	1.005	0.979	0.993	1.100
	15	0.994	0.994	1.008	0.970	0.990	1.140
Ethanol	5	0.998	0.998	1.002	0.981	0.994	1.160
	10	0.996	0.996	1.004	0.960	0.988	1.230
	15	0.992	0.992	1.006	0.944	0.983	1.280
	25	0.986	0.986	1.009	0.917	0.974	1.400
Ethylene Glycol	5	0.997	0.997	1.003	0.993	0.998	1.060
	10	0.995	0.995	1.004	0.986	0.996	1.120
	15	0.992	0.992	1.005	0.980	0.993	1.190
	25	0.988	0.988	1.009	0.970	0.990	1.330
	30	0.985	0.985	1.012	0.965	0.987	1.400

GreenSource Si Series Model CE Residential Geothermal Heat Pump



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WARNING:
These electric heaters can only be installed in factory default blower configuration only.

Field Install Accessory - Internally Mounted Electric Heat Kits

Part Number	Kilowatt Heater - 208/230V	Availability per Unit				
		CE025	CE035	CE041	CE061	CE071
8733960682	Electric Heat - 3.6/4.8 kW (5 kW)	●	●	●	●	●
8733960683	Electric Heat - 7.8/9.6 kW (10 kW)	●	●	●	●	●
8733960684	Electric Heat - 10.8/14.4 kW (15 kW)		●	●	●	●
8733960685	Electric Heat - 14.4/19.2 kW (20 kW)			●	●	●



It is recommended to use a seven (7) conductor cable for thermostat interface.

Field Install Option - Pump/Valve Relay

Part Number	CE025		CE035		CE041		CE061		CE071	
	VT	HZ	VT	HZ	VT	HZ	VT	HZ	VT	HZ
8733951906	●	●	●	●	●	●	●	●	●	●

Field Install Accessory - Duct Mounted Electric Heaters 208/230V

Nominal BTUH	Order #				Nominal CFM	Duct Flange Connection in Inches	Nominal Dimension in Inches
	5 kW	10 kW	15 kW	20 kW			
18000	7738002745	N/A	N/A	N/A	600	13.75 x 13.75	14 x 14
24000	7738002746	7738002747	N/A	N/A	800	13.75 x 13.75	14 x 14
30000	7738002748	7738002749	N/A	N/A	1000	15.75 x 15.75	16 x 16
36000	7738002748	7738002749	N/A	N/A	1200	15.75 x 15.75	16 x 16
42000	7738002747	7738002751	7738002752	N/A	1400	17.75 x 17.75	18 x 18
48000	7738002747	7738002751	7738002752	N/A	1600	17.75 x 17.75	18 x 18
60000	7738002747	7738002751	7738002752	7738002753	2000	17.75 x 17.75	18 x 18
70000	7738002747	7738002751	7738002752	7738002753	2200	17.75 x 17.75	18 x 18



Duct mounted heaters are only available in single phase 208/230 V. Please refer to Manufacturer's Installation and Operation Manual for proper installation and guidelines. It is recommended to use a seven (7) conductor cables for thermostat interface. It is required for the duct mounted heater to have an independent power supply. In fiberglass duct systems, a metal sleeve MUST be used as an insert and support to the heater.

Greensource Si Series Model CE Residential Geothermal Heat Pump



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Field Install Accessory - SmartStart Assist Kit										
Part Number	CE025		CE035		CE049		CE061		CE071	
	VT	HZ	VT	HZ	VT	HZ	VT	HZ	VT	HZ
8733957159	•	•	•	•						
8733957160					•	•	•	•	•	•

Field Install Accessory - Stainless Steel Hose Kits						
Options	Option 1	Option 2	Option 3**	Option 4**,***	Option 5**,***	Option 6**,***
Hose Size (Length, Diameter)	Hoses Only with Swivel	Hose Kit Hoses with Ported Ball Valves, Swivel and One P/T*	Hose Kit with Automatic Flow Valve (AFV)*	Hose kit with AFV, Y-Strainer & Blow Down Valve*	Hose Kit with AFV and Electric Valve*	Hose Kit with AFV, Y-Strainer, BDV and Electric Valve*
	Part #	Part #	Part #	Part #	Part #	Part #
12 Inch						
1/2" L	T111H02121	T111H02122	T111H02123	T111H02124	T111H02125	T111H02126
24 Inch						
3/4" S	T111H03241	T111H03242	T111H03243	T111H03244	T111H03245	T111H03246
1" L	T111H04241	T111H04242	T111H04243	T111H04244	T111H04245	T111H04246
1" S	T111H04241	T111H04242	T111H04247	T111H04248	T111H04249	T111H04240
1 - 1/4" S	T111H05241	T111H05242	T111H05243	T111H05244	T111H05245	T111H05246
1 - 1/2" L	T111H06241	T111H06242	T111H06243	T111H06244	T111H06245	T111H06246
1 - 1/2" S	T111H06241	T111H06242	T111H06247	T111H06248	T111H06249	T111H06240
2" S	T111H08241	T111H08242	T111H08243	T111H08244	T111H08245	T111H08246
36 Inch						
3/4" S	T111H03361	T111H03362	T111H03363	T111H03364	T111H03365	T111H03366
1" L	T111H04361	T111H04362	T111H04363	T111H04364	T111H04365	T111H04366
1" S	T111H04361	T111H04362	T111H04367	T111H04368	T111H04369	T111H04360
1 - 1/4" S	T111H05361	T111H05362	T111H05363	T111H05364	T111H05365	T111H05366
1 - 1/2" L	T111H06361	T111H06362	T111H06363	T111H06364	T111H06365	T111H06366
1 - 1/2" S	T111H06361	T111H06362	T111H06367	T111H06368	T111H06369	T111H06360
2" S	T111H08361	T111H08362	T111H08363	T111H08364	T111H08365	T111H08366

* All Hose Kits include S/R ported ball valves with swivel and P/T port.

** 'L' and 'S' only apply to kit options 3 through 6

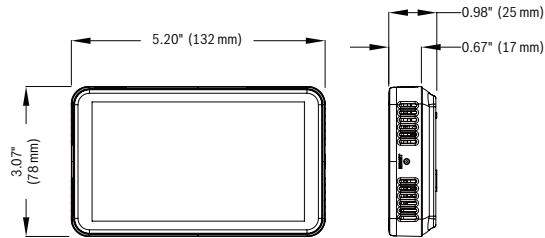
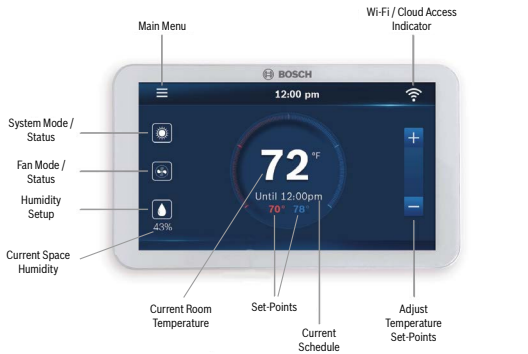
*** GMP's are required for hose kits in options 3-6

Hose Kit Flow Rates by Size
Please see Technical Service Bulletin: Heat Pump Hose Kits – Water Flow Rates. This document is located at https://www.bosch-homecomfort.com/us/media/country_pool/documents/service-bulletins/hp_hose_kits_water_flow_rates_bulletin_us.pdf .

Greensource Si Series Model CE Residential Geothermal Heat Pump



Field Install Accessory - Bosch Connected Control Wi-Fi Thermostat



Description	Part Number	Heat	Cool	Humidity
Bosch Connected Control (BCC100)	8-733-948-009	4	2	Yes

Specifications

- 5 Inch Touch Screen 854 x 480 Pixels
- 7 Relay Outputs (Terminals) G, Y1, Y2, W1, W2, O/B, H/dH
- 1 Data Input (Alarm pulse signals from Bosch WSHP)
- Displays Bosch Water Source Heat Pump Fault Messages
- Wi-Fi (802.11a/b/g/n) 2.4GHz (not compatible with 5GHz)
- FCC and IC Certification
- 5 Year Limited Warranty (see website for details: <https://www.bosch-homecomfort.com/us/en/residential/service/product-warranty-library/thermostats-controls-warranty-documents/>)

Compatibility

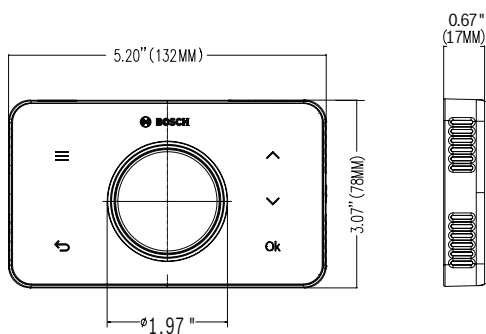
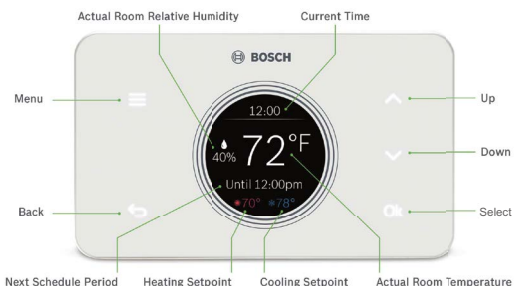
- Conventional (Gas, Oil, Electric): Up to 2 Heat / 2 Cool
- Heat Pump (O/B to energize reversing valve in cool/heat): Up to 4 Heat / 2 Cool
- Supports up to 1 Accessory Unit: Humidifier or Dehumidifier (not provided by Bosch)
- Unit Modes: Heat, Cool, Auto, Off, Emergency Heat (Heat Pump & Dual Fuel only)
- Fan Modes: Auto, On, Circulate
- Supports 2 Transformer Systems (Rh and Rc)
- C-Wire Required for Installation
- Supports Active and Passive Dehumidification without the need for external relays, such as Bosch Water Source Heat Pump products equipped with a Hot Gas Reheat Coil and/or ECM motor

GreenSource Si Series Model CE Residential Geothermal Heat Pump



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Field Installed Accessory - Bosch Connected Control Wi-Fi Thermostat



Description

Bosch Connected Control (BCC50)

Part Number

8-733-952-994

Heat

3

Cool

2

Humidity

Yes

Specifications

- 2.8 Inch Non-Touch LCD Screen 240 x 320 Pixels
- 5 Back-lit Touch Buttons
- 6 Relay Terminals: G, Y1, Y2, W/E/AUX, O/B/W2, H/DH
- Wi-Fi (802.11b/g/n) 2.4GHz (not compatible with 5GHz)
- FCC and IC Certification
- 3 Year Limited Warranty (see <https://www.bosch-homecomfort.com/us/en/residential/service/product-warranty-library/thermostats-controls-warranty-documents/> for details)

Compatibility

- Conventional (Gas, Oil, Electric): Up to 2 Heat / 2 Cool
- Heat Pump (O/B/W2 to energize reversing valve in cool/heat): Up to 3 Heat / 2 Cool
- Supports up to 1 Accessory Unit: Humidifier or Dehumidifier (not provided by Bosch)
- Unit Modes: Heat, Cool, Auto, Em Heat (Heat Pump & Dual Fuel only), Off
- Fan Modes: Auto, On, Circulate
- Supports 2 Transformer Systems (Rh and Rc)
- C-Wire Required for Installation
- Supports Active and Passive Dehumidification without the need for external relays, such as Bosch Water Source Heat Pump products equipped with a Hot Gas Reheat Coil and/or ECM motor