



Submittal Data Sheet

ACiQ Model#: PHP-E-90

90K BTU R32 Side-Discharge Pool Heat Pump

Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

Pool Heater Product Code: 81017553993



HEATING PERFORMANCE

Ambient Temperature: (Dry Bulb / Wet Bulb) 80.6°F / 75.7°F
Water Inlet / Outlet Temperature: 78.8°F / 82.4°F

Heating Capacity	kBtu/h	17.40 ~ 84.21
Consumed Power	kBtu/h	0.92 ~ 13.20
COP		18.89 ~ 6.38

Ambient Temperature: (Dry Bulb /Wet Bulb) 59.0°F / 53.6°F
Water Inlet Temperature: 78.8°F

Heating Capacity	kBtu/h	11.85 ~ 62.80
Consumed Power	kBtu/h	1.40 ~ 13.17
COP		8.46 ~ 4.78

COOLING PERFORMANCE

Ambient Temperature: (Dry Bulb /Wet Bulb) 95.0°F
Water Inlet Temperature: 86.0°F / 82.4°F

Cooling Capacity	kBtu/h	16.19 ~ 43.20
Consumed Power	kBtu/h	2.05 ~ 14.15
EER		7.90 ~ 3.05

OPERATIONAL SPECIFICATIONS

Operating Ambient Temperature Range	°F	5.0°F ~ 109.4°F
Heating Temperature Range	°F	59.0°F ~ 104.0°F
Cooling Temperature Range	°F	46.4°F ~ 82.4°F
*Advised Pool Volume	Gallons	14529.50 ~ 23775.50
	m³	55 ~ 90
Water Flow Volume	gpm	47.5
Water Pressure Drop	psi	8.56
Sound Pressure @ 1m	dB(A)	34 ~ 51

*Advised pool volume applies to a private pool with isothermal cover, from April to September.

ELECTRICAL SPECIFICATIONS

Power Supply	V, Hz	220-240V~/60Hz
Max. Current	A	22.3
Max. Power Input	kBtu/h	16.73

COMPRESSOR & HEAT EXCHANGER SPECIFICATIONS

Compressor Type	Rotary
Refrigerant Control	EEV
4-Way Valve	Yes
Casing Material	ABS Plastic / Galvanized Sheet
Heat Exchanger Material	Titanium in PVC

UNIT WEIGHT & DIMENSIONS

Net Weight	lb	176.4
	kg	80.01
Net Dimensions (W x D x H)	in	43.9 x 17.9 x 30.1
	mm	1115.06 x 454.66 x 764.54
Water Pipe Connection Size	in	G 1-1/2"

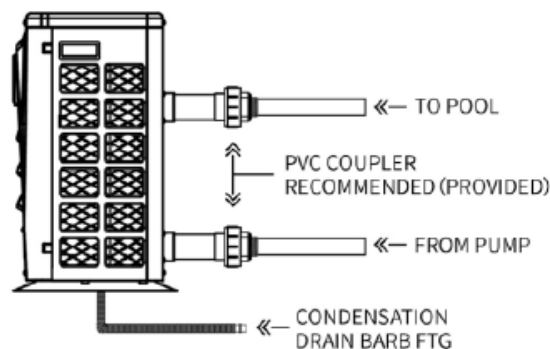
REFRIGERANT SPECIFICATIONS

Refrigerant Type		R32
Refrigerant Charge Weight	lb	3.53
	kg	1.6

FEATURES

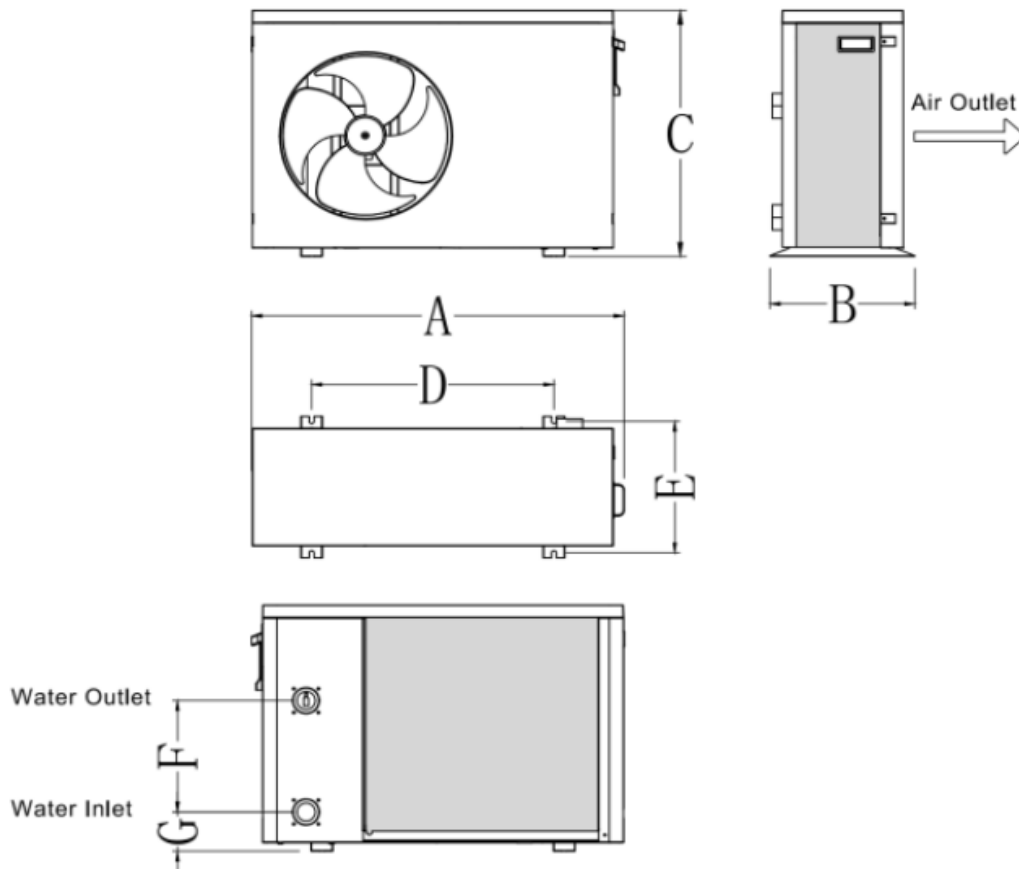
- Full DC Inverter Technology
- High energy efficiency, COP rating of 18+ capable
- Super silent operation, capable of less than 35 dB(A) at 1m
- Built-in WiFi, smart control capable with downloadable app
- Quick & Efficient heating operation with reduced energy consumption
- Environmentally-friendly R32 refrigerant

WATER INLET & OUTLET PIPING INSTALLATION INSTRUCTIONS



*The pool heat pump must be connected using hard pipes, the inlet and outlet unions cannot withstand the weight of soft pipes.

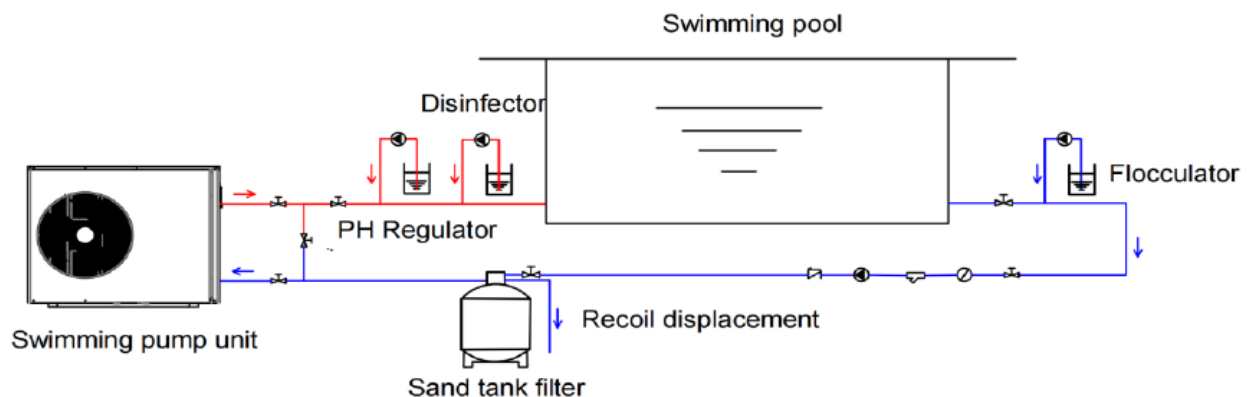
Unit Dimensions



Model	A	B	C	D	E	F	G
PHP-E-50	39.40 in (1000 mm)	15.70 in (399 mm)	25.90 in (658 mm)	23.35 in (593 mm)	14.76 in (375 mm)	15.35 in (390 mm)	3.86 in (98 mm)
PHP-E-60	39.40 in (1000 mm)	15.70 in (399 mm)	25.90 in (658 mm)	23.35 in (593 mm)	14.76 in (375 mm)	15.35 in (390 mm)	3.86 in (98 mm)
PHP-E-90	43.90 in (1115 mm)	17.90 in (455 mm)	30.10 in (765 mm)	23.31 in (592 mm)	17.32 in (440 mm)	18.50 in (470 mm)	4.29 in (109 mm)

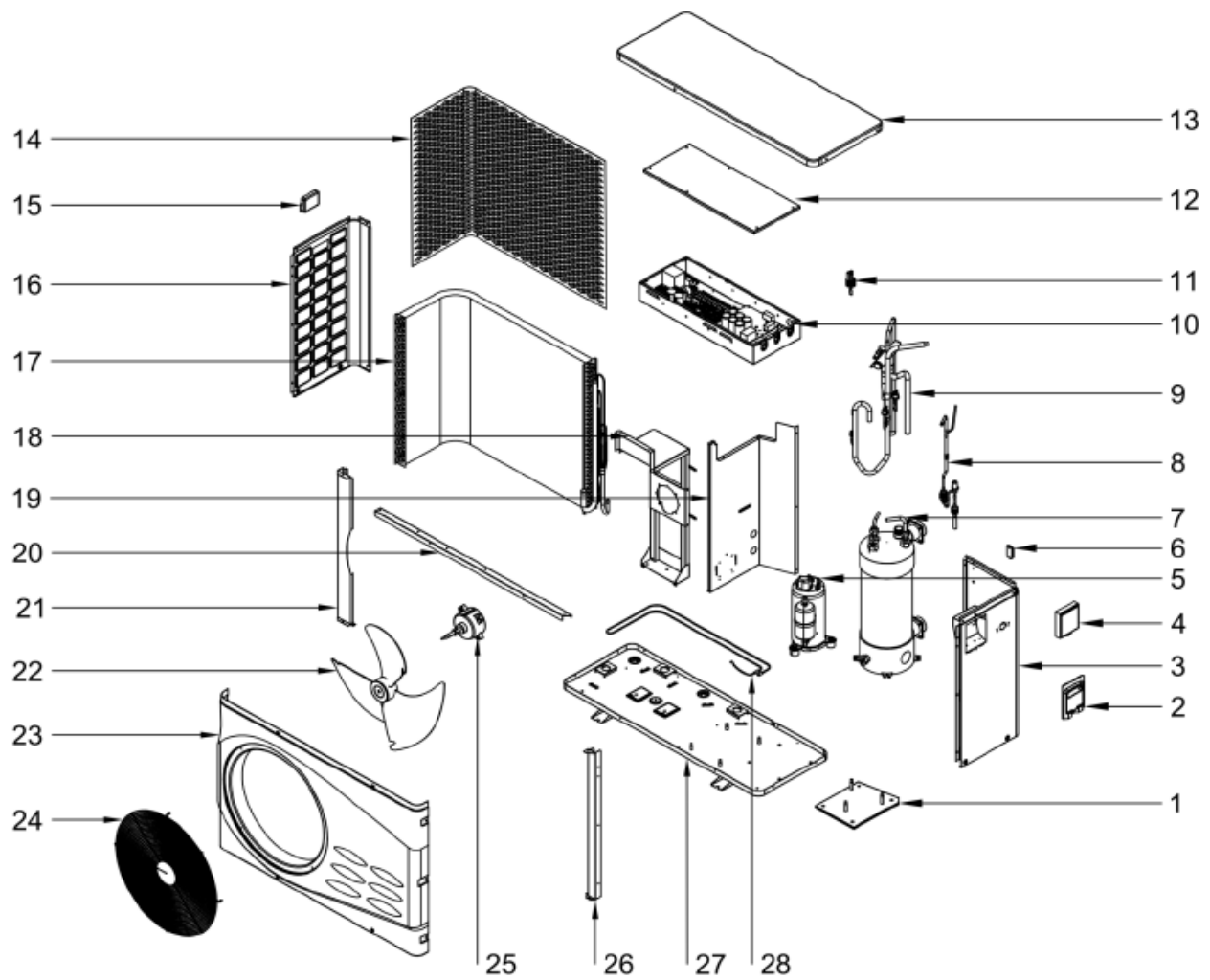
Units: Inch (Millimeter)

Unit Installation Diagram



- Y-type filter
- One-way valve
- Circulating water pump/Metering pump
- Hair collector
- Stop valve

Unit Main Parts Diagram



1	Compressor Fixing Plate	11	Water Flow Switch	21	Left Column
2	Right Handle	12	Electrical Box Cover	22	Fan Blade
3	Right Plate	13	Top Cover	23	Front Plate
4	Wire Controller	14	Back Net	24	Grille Cover
5	Compressor	15	Left Handle	25	Fan Motor
6	Ambient Temp. Sensor	16	Left Plate	26	Right Column
7	Titanium Tube Heat Exchanger	17	Finned Heat Exchanger	27	Chassis
8	Throttle Device Assembly	18	Motor Support	28	Chassis Heating Belt
9	Four-Way Valve Assembly	19	Middle Partition		
10	Electrical Box	20	Crossbeam		