

# R-32 AIR-TO-WATER HEAT PUMP

Polar EVI air to water heat pumps are efficient and reliable hydronic heating and cooling devices specifically designed for North America. They are industry leading in their ability to produce high BTU output and maintain a high COP rating in cold outdoor temperatures. Our heat pumps combine advanced technologies that make them the most efficient, reliable, and quietest air to water heat pumps available.



## 3 MODELS:

035ZA/BE-R32  
-30000 BTU-

050ZA/BE-R32  
-48000 BTU-

060ZA/BE-R32  
-60000 BTU-



## FEATURES:

- Panasonic EVI (Enhanced Vapor Injection) DC variable speed compressor
- Ability to operate as low as -22 °F (-30 °C)
- Multi-heat pump staging
- R32 refrigerant
- No refrigeration lines required
- Reversible operation for heating and chilling
- Automatic integration of backup/emergency heat
- Intelligent defrost based on ambient temperature
- Ultra-quiet DC motor fans
- Bluefin technology - Evaporator and condenser fins epoxy coated for a high degree of corrosion resistance
- Wi-Fi enabled for full remote control and adjustability

## SPECIFICATIONS:

	035ZA/BE-R32	050ZA/BE-R32	060ZA/BE-R32
Power Supply	220-240/1/60	220-240/1/60	220-240/1/60
Maximum Water Temperature (Heating) °C/°F	50 / 122	50 / 122	50 / 122
Minimum Water Temperature (Cooling) °C/°F	5 / 41	5 / 41	5 / 41
Ambient Temp Limit 18in/50°F	-25 / -13	-25 / -13	-25 / -13
Ambient Temp High Limit °C/°F	43 / 109	43 / 109	43 / 109
Rated Heating Capacity	Ambient Temp 8.33°C	Water Outlet 40.56°C	
Heating Capacity KW/BTU	10 / 34121	15 / 51182	18 / 61418
Heating Power Input KW	2.7	4.05	4.86
Heating Current Input A	11.7	17.6	21.1
COP	3.7	3.7	3.7
Rated Heating Capacity	Ambient Temp -8.33°C	Water Outlet 40.56°C	
Heating Capacity KW/BTU	7 / 23884	11 / 37533	13 / 44357
Heating Power Input KW	2.5	3.6	4.5
Heating Current Input A	10.9	17.1	20.2
COP	2.8	3.0	2.8
Rated Heating Capacity	Ambient Temp -20°C	Water Outlet 40.56°C	
Heating Capacity KW/BTU	6 / 20472	10 / 34121	12 / 40945
Heating Power Input KW	2.95	5.13	6.32
Heating Current Input A	13	21.3	26.5
COP	2	1.9	1.9
Rated Cooling Capacity	Ambient Temp 35°C	Water Outlet 6.67°C	
Cooling Capacity KW/BTU	7.1 / 24226	10.5 / 35827	12.2 / 41628
Cooling Power Input KW	1.32	4.16	4.96
Cooling Current Input A	13.9	18.1	21.6
COP	5.4	2.52	2.46
Total Load AMPS	23.1	34.1	36.7
Breaker Sizing AMPS	30	45	50
Nominal Water Flow Volume GPM/m³/h	7.57 / 1.72	11.36 / 2.58	13.65 / 3.1
Water Side Pressure Drop Ft of Head/kPa	13.39 / 40.9	16.73 / 50	26.77 / 80
Water Inlet/Outlet (External Threads) Inch	1"	1"	1"
Compressor Type	Twin-Rotary	Twin-Rotary	Twin-Rotary
Speed Range Hz	30-100	30-100	30-100
Brand	Panasonic	Panasonic	Panasonic
Refrigerant	R32	R32	R32
Refrigerant Amount oz/kg	52.91 / 1.5	70.55 / 2.0	70.55 / 2.0
Sound Level (1 Meter Distance) dB(A)	53	54	55
IP Rating	IPX4	IPX4	IPX4
Net Weight kg/lb	84 / 185	117 / 258	119 / 262
Unit Dimensions (LxWxH) mm	1020x440x880	1000x440x1395	1000x440x1395
Unit Dimensions (LxWxH) in	40.2"x17.3"x34.6"	39.4"x17.3"x54.9"	39.4"x17.3"x54.9"