



POLAR HEAT PUMPS

CONTRACTOR SERIES

COLD CLIMATE AIR-TO-WATER



POLAR EVI HEAT PUMPS

Polar EVI heat pumps are hydronic heating and cooling devices specifically designed for Canadian winters. They are industry leading in their ability to produce high BTU and maintain high COP ratings in cold outdoor temperatures. Air to water heat pumps offer nearly the same benefits as Geothermal, only at a fraction of the installed cost.

MODELS:

EQ035ZA/BE
-29000 BTU-

EQ050ZA/BE
-48000 BTU-

EQ060ZA/BE
-60000 BTU-

SPECIFICATIONS:

Model		POLAR	EQ035ZA(BE)	EQ050ZA(BE)	EQ060ZA(BE)
Power Supply		V/Phz	220-240/1/60	220-240/1/60	220-240/1/60
Rated Cooling Capacity		kW	7.1	10.5	12.2
Cooling Power Input	Ambient Temp 35°C	kW	2.90	4.16	4.97
	Water	A	13.2	18.9	22.6
Cooling Current Input	Outlet 7°C				
		COP	2.4	2.5	2.5
Rated Heating Capacity		kW	8.3	14.0	17.0
Heating Power Input	Ambient Temp 7°C	kW	2.72	4.40	5.40
	Water	A	12.4	20.0	24.5
Heating Current Input	Outlet 45°C				
		COP	3.3	3.2	3.1
Rated Heating Capacity		kW	7.0	11.5	13.5
Heating Power Input	Ambient Temp -7°C	kW	2.21	3.68	4.34
	Water	A	10.0	16.7	19.7
Heating Current Input	Outlet 45°C				
		COP	3.2	3.1	3.1
Rated Heating Capacity		kW	5.5	8.3	9.7
Heating Power Input	Ambient Temp -20°C	kW	3.18	4.68	5.58
	Water	A	14.5	21.3	25.4
Heating Current Input	Outlet 45°C				
		COP	1.7	1.8	1.7
Total Load		A	17.40	27.60	27.60
Breaker Sizing		A	30.0	40.0	40.0
Nominal Water Flow Volume		GPM	6.50	11.00	13.00
AC Side Water Pressure Drop		PSI/Feet	4.35/10	4.93/11.4	5.1/11.8
Water Inlet/Outlet (External Threaded)		inch	1"	1"	1"
Refrigerant			R410A	R410A	R410A
Refrigerant Amount		OZ	70.5	105.8	105.8
Sound Level		dB(A)	53	55	56
IP Rating			IPX4	IPX4	IPX4
Net Weight		KG/LBS	92/203	128/282	131/289
Unit Dimensions(L/W/H)		mm	1145/470/883	1195/470/1285	1195/470/1285
Unit Dimensions(L/W/H)		inches	45"/18.5"/33"	47"/18.5"/50"	47"/18.5"/50"
Certification					

FEATURES:

- Panasonic EVI (Enhanced Vapor Injection) DC variable speed compressor
- Ability to operate as low as -22 °F (-30 °C)
- Precise temperature control
- Multi-heat pump staging
- Mono-block design
- R410a 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
- Blue Fin technology - Evaporator and condenser fins epoxy coated for a high degree of corrosion resistance
- Wi-Fi enabled for full remote control and adjustability
- TUV certified for USA and Canada