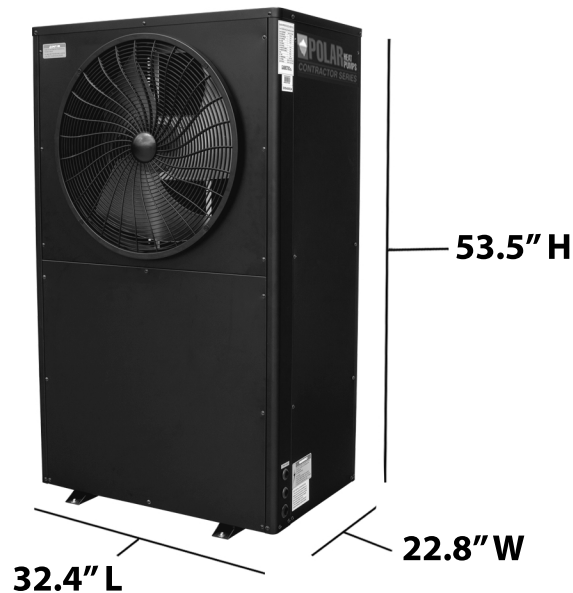


POLAR HEAT PUMPS

ENGINEERING SUBMITTAL SHEET

POLAR-HP-030ZA/(BEH2)

Cold Climate Air Source Hydronic Heatpump



SPECIFICATIONS:


Model			030ZA/(BEH2)
Power supply		V/P/Hz	208~230/1/60
Free	Heating capacity	kW	2.9~14.0
	COP range	W/W	1.5~16.0
Ambient 7°C Water outlet 75°C	Heating capacity	kW	12.4
	Power input	kW	5.1
	Current input	A	23.2
Ambient -12°C Water outlet 75°C	Heating capacity	kW	9.2
	Power input	kW	4.7
	Current input	A	21.1
Maximum power input		kW	6.5
Maximum current input		A	29.4
Maximum water outlet temperature		°C	85
Rated water flow volume		m ³ /h	2.12
Rated water pressure drop		kPa	40
Water connections (external threaded)		inch	1"
Refrigerant			R410A+R134a
Testing conditions: Heating: outdoor temperature DB/WB: 7/6°C, outlet water temperature: 75°C. Heating: outdoor temperature DB/WB: -12/-14°C, outlet water temperature: 75°C. The power/current input does not include water pump power/current input.			




030ZA/(BEH2)

COEFFICIENT OF PERFORMAMCE TABLES

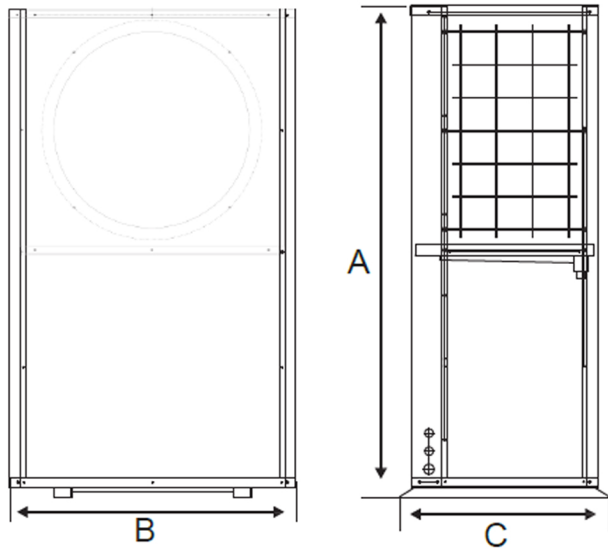
Celcius

EVI DC inverter heat pump			Ambient temperature (°C)							
POLAR 030ZA/(BEH2)			-30	-25	-20	-12	-6	0	7	20
 outlet water temperature (°C)	50	heating capacity (W)	5810	6405	7137	8246	9072	9949	10970	12002
		power input (W)	3264	3336	3516	3698	3764	3797	3890	3935
		COP (W/W)	1.78	1.92	2.03	2.23	2.41	2.62	2.82	3.05
	55	heating capacity (W)	5981	6672	7462	8254	9079	9936	10950	12014
		power input (W)	3518	3626	3827	3912	4071	4089	4086	4172
		COP (W/W)	1.70	1.84	1.95	2.11	2.23	2.43	2.68	2.88
	65	heating capacity (W)	6529	7037	7668	8710	9580	10577	11616	12721
		power input (W)	4159	4214	4357	4490	4673	4722	4922	4837
		COP (W/W)	1.57	1.67	1.76	1.94	2.05	2.24	2.36	2.63
	75	heating capacity (W)	7100	7643	7911	9151	10083	11093	12488	13606
		power input (W)	4893	5082	4929	5259	5540	5748	6092	5790
		COP (W/W)	1.45	1.50	1.60	1.74	1.82	1.93	2.05	2.35
	80	heating capacity (W)	7544	8177	8443	9362	10338	11341	12833	13817
		power input (W)	5588	5639	5518	5674	6010	6266	6719	6740
		COP (W/W)	1.35	1.45	1.53	1.65	1.72	1.81	1.91	2.05
	85	heating capacity (W)	7780	8312	8668	9611	10316	11205	12471	13566
		power input (W)	5985	5980	5937	6083	6407	6791	6967	7103
		COP (W/W)	1.30	1.39	1.46	1.58	1.61	1.65	1.79	1.91

Fahrenheit

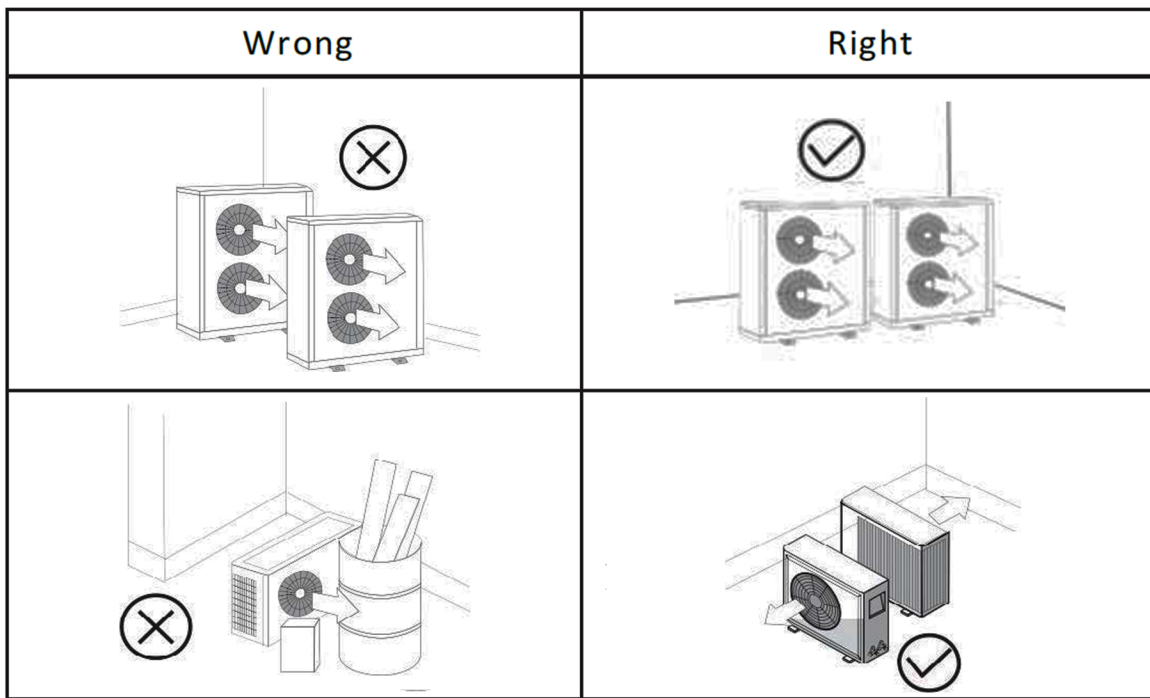
EVI DC inverter heat pump			Ambient temperature (F)							
POLAR 030ZA/(BEH2)			-22	-13	-4	10.4	21.2	32	44.6	68
 outlet water temperature (F)	122	heating capacity (W)	5810	6405	7137	8246	9072	9949	10970	12002
		power input (W)	3264	3336	3516	3698	3764	3797	3890	3935
		COP (W/W)	1.78	1.92	2.03	2.23	2.41	2.62	2.82	3.05
	131	heating capacity (W)	5981	6672	7462	8254	9079	9936	10950	12014
		power input (W)	3518	3626	3827	3912	4071	4089	4086	4172
		COP (W/W)	1.70	1.84	1.95	2.11	2.23	2.43	2.68	2.88
	149	heating capacity (W)	6529	7037	7668	8710	9580	10577	11616	12721
		power input (W)	4159	4214	4357	4490	4673	4722	4922	4837
		COP (W/W)	1.57	1.67	1.76	1.94	2.05	2.24	2.36	2.63
	167	heating capacity (W)	7100	7643	7911	9151	10083	11093	12488	13606
		power input (W)	4893	5082	4929	5259	5540	5748	6092	5790
		COP (W/W)	1.45	1.50	1.60	1.74	1.82	1.93	2.05	2.35
	176	heating capacity (W)	7544	8177	8443	9362	10338	11341	12833	13817
		power input (W)	5588	5639	5518	5674	6010	6266	6719	6740
		COP (W/W)	1.35	1.45	1.53	1.65	1.72	1.81	1.91	2.05
	185	heating capacity (W)	7780	8312	8668	9611	10316	11205	12471	13566
		power input (W)	5985	5980	5937	6083	6407	6791	6967	7103
		COP (W/W)	1.30	1.39	1.46	1.58	1.61	1.65	1.79	1.91

Product Dimensions:



Symbol		(mm)/(inches)
A	Height	1360mm/53.5"
B	Length	824mm/32.4"
C	Width	580mm/22.8"
	Weight	139kg

Installation Location:



Installation Clearances:

