inverECO

inverELITE V3

inverECLIPSE

inverELITE MAX

HEAT PUMP POOL HEATERS

madimack

Powered by INVERMAC TECHNOLOGY

WHAT ARE HEAT PUMPS?

Heat pumps work by transferring the heat from the air outside a heating unit to the water stored inside a heating unit via a ‘heat exchange system’, that heated water is then efficiently pumped into your pool. Heat pumps are the most energy efficient way to heat your pool, using approximately one third of the energy used by alternative pool heating systems.

Heat pump technology is quickly becoming a leading global industry, heavily weighted as a solution for ‘net-zero’ targets. Developments are burgeoning domestically and internationally, driven predominantly by governmental policy and consumer demand for “net-zero” initiatives.

Scan code to find your Pool Heater Size

In an era of rapid technological advancement, Madimack stands at the forefront, redefining product standards through its innovative proprietary technology. With a diverse range of applications, Madimack’s solutions are revolutionising industries and empowering consumers to thrive in an ever-evolving digital landscape. Through optimisation, automation, personalisation, and sustainability, Madimack’s technology delivers unparalleled efficiencies and transforms the way products are created, experienced, and consumed.

advanced sound suppression technology

Pioneered noise reduction technology, significantly reducing operational noise.

quick connect technology

Synchronised perfect pairing with Madimack Pool Heat Pumps.

ADAPTIVE FLOW
AI TECHNOLOGY

Intuitively adjusted flow rate to match capacity needs, providing significant energy savings and reduced wear and tear.

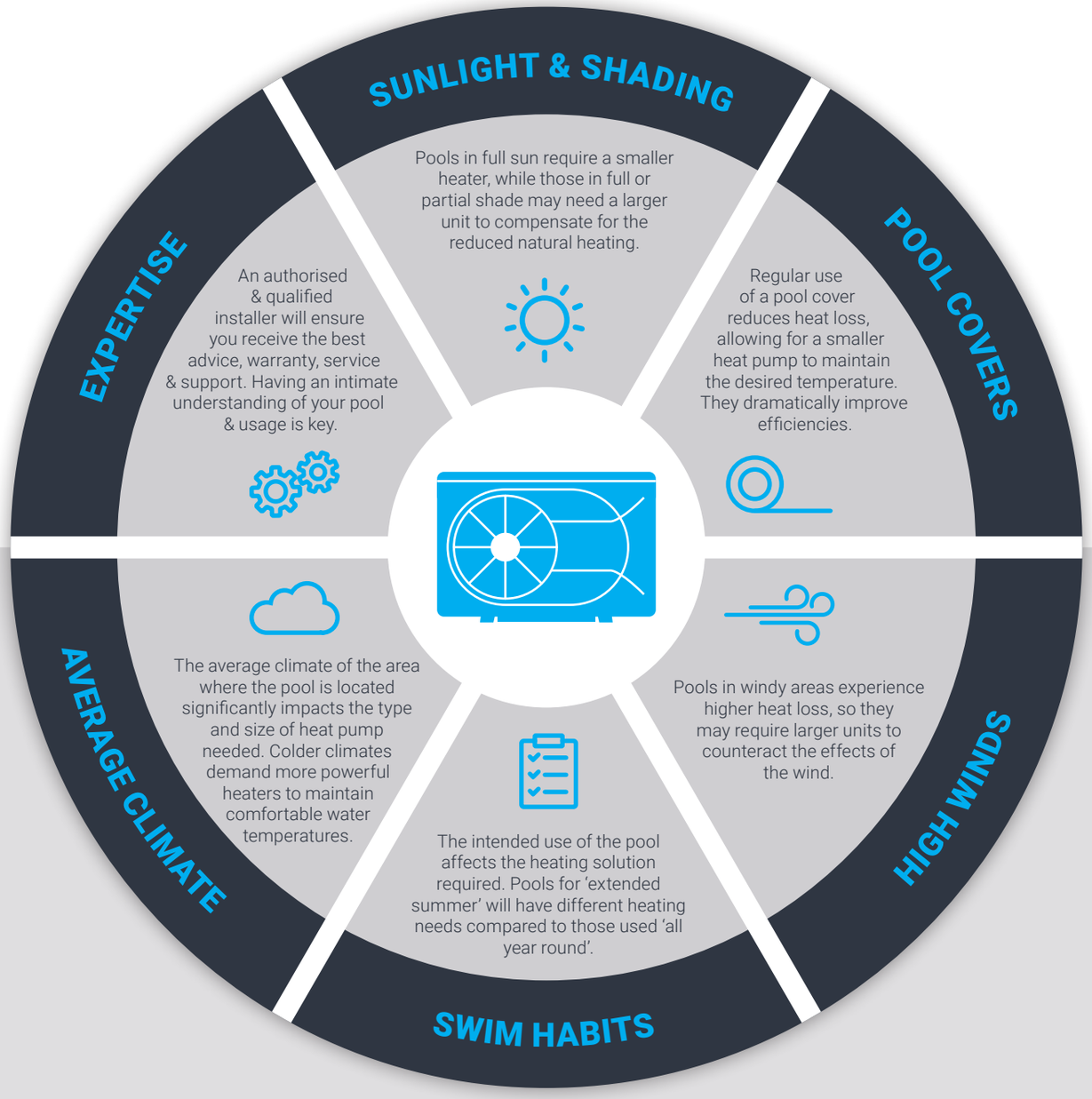
CENTRI-FLOW™ PERFORMANCE

Residential application of a centrifugal fan-optimised airflow, efficient cooling and heating and overall enhanced performance.

inverHEAT

GUIDANCE SPHERE

Choosing the right heat pump can be a daunting process. Madimack's range of advanced pool heaters cater for the variations in backyard pools and environments around the globe. Engaging a specialist to support you through the process can optimise your heating solution further. These are the factors that will impact your heating choice.



OUR HEAT PUMP TECHNOLOGY

As with all industry, leaders are identified by their ability to provide market extensions, drive innovation and advance technology. In that vein, Madimack's commitment to research and development continues to position them as the Australian authority in Heat Pump technology. Our Heat Pumps are tech-advanced making them ideal for backyards and commercial premises.

Madimack Heat Pumps are supported by advanced technologies and market leading warranties. Manufactured from the highest quality components and tested above industry requirements, they include a titanium heat exchanger combined with a corrosion resistant evaporator coil and come with a Heating Performance Guarantee. Madimack Heat Pumps are TuV certified. TuV Rheinland is an international engineering testing body that is used to satisfy performance and quality metrics to international standards. Carried out on a voluntary basis in Australia, the program tests units in random conditions to confirm they perform as promoted.

Innovation without compromise.

WHAT SETS US APART

- 10 year warranty on compressor
- TüV Rheinland tested
- Highest efficiency
- WIFI included across the range
- Patented quietest unit
- Full inverter technology
- Touchscreen easy to use controller
- Night Mode
- Built in flow switch
- Automatic defrost system
- Titanium heat exchanger
- Centrifugal fan for quieter operation
- Compatible with Solar PV
- R32 Eco friendly refrigerant
- Latest electronic expansion valve

SERVICES

- Free to use online calculator
- Online warranty portal with 24-hour response
- In depth installation and user manuals
- Contractor installation, training and advice
- Commercial energy modelling

INVERTER TECHNOLOGY

- Longer unit lifetime
- Higher efficiency than on/off units
- Night mode and quiet mode built in
- Soft start operation

inverELITE V3

ADVANCED HEAT PUMP SERIES

The InverELITE V3 has been redesigned from the ground up to bring a revolutionised pool heating system to the Australian market. In conjunction with the newest inverter technology the unit delivers better airflow, higher efficiency, quieter operation and performance. The unit exclusively delivers market leading installation requirements providing space saving options for Australian backyards. Engineered with durability in mind, the InverELITE V3 operates at optimal levels even in coldest of conditions—achieving a massive 31.8kW in a single phase. The InverELITE V3 sets the standard for all other heaters.

- Revolutionary design that redirects airflow to dramatically reduce spatial requirements
- Extremely energy efficient with a COP of up to 16.4
- Full inverter stepless compressor and fan
- Sleek design
- Six models up to 31.8kW in single phase
- Three phase 40kW model
- Patented silent design
- Marine grade anti-corrosion aluminium alloy casing
- Signature diamond touch screen and intuitive display
- WiFi with smart functions
- Marketing leading 10 year compressor warranty
- Newest most eco-friendly R32 Refrigerant
- Three coil evaporator for a more compact unit size
- TüV Rheinland certified
- Up to 40 degrees set point temperature
- Industry first centrifugal fan
- Advanced cold air performance
- Largest industry single phase unit

TECHNICAL SPECIFICATIONS

advanced sound suppression technology

DIAMOND™ ACTIVE INNOVATION

CENTRI-FLOW™ PERFORMANCE

EFFICIENCY
DESIGN
QUIETNESS

Model	ESV3-110	ESV3-140	ESV3-170	ESV3-220	ESV3-270	ESV3-320	ESV3-400
PERFORMANCE CONDITION: Air 27°C/ Water 27°C/ Humid. 80%							
Heating capacity (kW)	11.5	14	17	22.5	26.9	31.5	40.5
COP Range	16.0 ~ 7.3	16.0 ~ 7.4	16.1 ~ 7.1	16.2 ~ 7.1	16.1 ~ 7.3	16.4 ~ 7.2	16.0 ~ 7.0
PERFORMANCE CONDITION: Air 15°C/ Water 26°C/ Humid. 70%							
Heating capacity (kW)	7.7	9.3	11.5	15.0	18.0	21.8	29.0
COP Range	7.5 ~ 5.0	7.6 ~ 5.1	7.8 ~ 5.0	8.2 ~ 5.1	7.9 ~ 5.1	8.0 ~ 5.2	8.3 ~ 5.1
PERFORMANCE CONDITION: Air 35°C/ Water 26°C/ Humid. 70%							
Cooling Capacity (kW)	4.6	5.6	6.5	8.1	10.2	12.2	15.0
TECHNICAL SPECIFICATIONS							
Operating air temperature (°C)	-15 ~ 43						
Compressor	Twin-Rotary Mitsubishi DC Compressor						
Heat exchanger	Twisted Titanium Heat Exchanger						
Casing	Marine Grade Aluminium Alloy						
Power supply	230V 1Ph						400V 3Ph
Electrical connection	10A plug	15A plug	Hard wired	Hard wired	Hard wired	Hard wired	Hard wired
Rated input power (kW)	0.24 ~ 1.79	0.29 ~ 2.16	0.36 ~ 2.67	0.45 ~ 3.33	0.54 ~ 4.0	0.59 ~ 4.36	0.78 ~ 5.8
Rated input current (A)	1.04 ~ 7.78	1.09 ~ 8.34	1.57 ~ 11.63	1.96 ~ 14.48	2.35 ~ 17.39	2.56 ~ 18.96	1.13 ~ 8.41
Maximum input current (A)	9	11	13	16	18	21	10.5
Sound level at 1m dB(A)	36.3 ~ 44.5	36.5 ~ 45.9	39.3 ~ 46.7	39.5~49.8	39.8~50.2	40.3 ~ 50.8	40.6 ~ 51.3
Sound level at 10m dB(A)	16.3~24.5	16.5 ~ 25.9	19.3 ~ 26.7	19.5~29.8	19.8~30.2	20.3 ~ 30.8	20.6 ~ 31.3
Advised water flow (L/Min) ±20	65	80	100	125	150	180	230
Water connection (mm)	40						
Net weight (kg)	66	73	75	91	114	136	160
Net dimension LxWxH (mm)	750x504x656	750x504x656	839x504x656	979x504x756	1132x514x756	1029x512x1107	1139x512x1106

* The data above is only for reference. For specific data, please refer to the nameplate on the unit.
* Acoustic data is to TuV international testing conditions, site conditions may differ

inverECLIPSE

COOLING AND HEATING SERIES

Designed and engineered to meet the highest requirements for cooling and heating options, with full inverter compressor and top discharge fans for a streamlined efficient air flow; rest assured that you own the latest eco friendly technology. Enjoy new possibilities for pool heating and cooling with the space saving and slick design. Limited space is no longer a concern.

- Full inverter stepless compressor and fan
- Titanium heat exchanger with 25-year warranty
- Advanced cold air performance
- Built-inflow switch and safety devices
- Extremely energy efficient with COP up to 16
- Wi-Fi as standard
- Cooling and heating
- Top discharge air outlet
- Built-inflow switch and safety devices
- Newest most eco-friendly R32 Refrigerant
- Enables more options to fit in space
- Easy to use controller
- 3 models up to 26kW single phase
- Marine Grade anti-corrosion aluminium alloy casing

TECHNICAL SPECIFICATIONS

Model	ETD160	ETD210	ETD260
PERFORMANCE CONDITION: Air 27°C/ Water 27°C/ Humid. 80%			
Heating capacity (kW)	16.5	21.0	26.0
COP Range	15.2 ~ 7.2	15.9 ~ 7.0	15.0 ~ 6.9
PERFORMANCE CONDITION: Air 15°C/ Water 26°C/ Humid. 70%			
Heating capacity (kW)	11.7	15.1	18.6
COP Range	7.2 ~ 5.1	7.8 ~ 5.0	7.5 ~ 4.8
PERFORMANCE CONDITION: Air 35°C/ Water 28°C/ Humid. 80%			
Cooling capacity (kW)	7.3	9.0	11.2
TECHNICAL SPECIFICATIONS			
Operating air temperature (°C)	-10 ~ 43		
Compressor	Full Stepless DC Compressor		
Casing	Marine Grade Aluminum Alloy		
Heat exchanger	Twisted Titanium Heat Exchanger		
Power supply	240V 1Ph		
Electrical connection	15A plug	Hard wired	
Rated input power (kW)	0.38 ~ 2.33	0.45 ~ 3	0.84 ~ 3.91
Rated input current (A)	1.66 ~ 10.1	1.96 ~ 13	3.65 ~ 17
Maximum input current (A)	13.5	17	20
Sound level at 1m dB(A)	41.2 ~ 54.9	42.8 ~ 54.7	41.5 ~ 55.2
Sound level at 10m dB(A)	21.2 ~ 34.9	32.8 ~ 34.7	31.5 ~ 35.2
Advised water flow (L/Min) ±20	100	125	150
Water connection (mm)	40		
Net weight (kg)	70	77	88
Net dimension L x W x H (mm)	780x710x656	780x710x656	780x710x756

* The data above is only for reference. For specific data, please refer to the nameplate on the unit.

inverECO

EFFICIENT HEAT PUMP SERIES

Built with efficiency and simplicity in mind, the quiet, long lasting and easy to use InverECO is perfect for energy conscious minds. Encased in 'state of the art' anti-corrosion ABS casing, the InverECO will keep your pool warm season after season. Madimack units include WiFi as a standard function, providing the convenience of being able to change your pool's temperature and timers from wherever your day takes you. Additional benefits include 'low energy' and 'night time' modes, enabling heating efficiency to increase by up to 20%. Madimack's InverECO pool heating system provides everything your family needs for an extended season of pool-time fun.

- Energy efficient with COP up to 11
- Full inverter compressor and inverter fan
- Five models up to 24 kW in single phase
- Quieter operation than on/off technology
- Anti-corrosion ABS casing
- Easy to use controller
- Slim design
- Wi-Fi as standard
- Titanium heat exchanger with 25-year warranty
- Front discharge air outlet
- Reverse cycle defrost
- Built-in flow switch and safety devices
- Latest most eco-friendly R32 Refrigerant
- TüV Rheinland certified
- Up to 40 degrees set point temperature

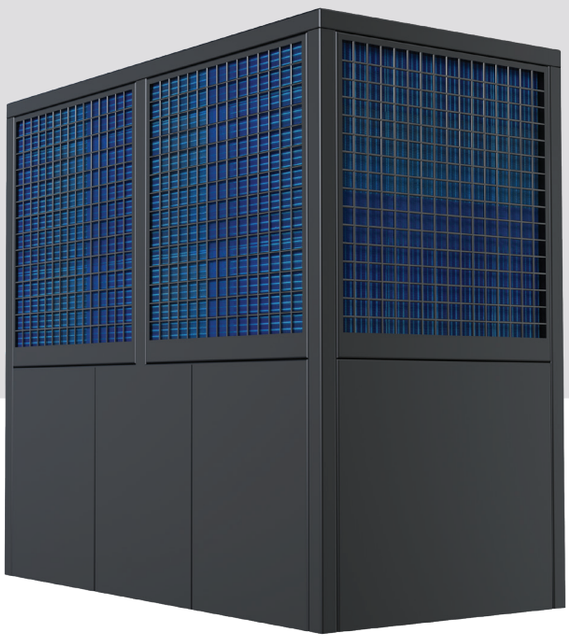
TECHNICAL SPECIFICATIONS

Model	ECO90	ECO130	ECO160	ECO200	ECO240
PERFORMANCE CONDITION: Air 27°C/ Water 27°C/ Humid. 80%					
Heating capacity (kW)	9	13	16	20.2	24.2
COP Range	10.5 ~ 6.2	10.8 ~ 6.3	10.7 ~ 6.2	10.9 ~ 6.3	10.8 ~ 6.3
PERFORMANCE CONDITION: Air 15°C/ Water 26°C/ Humid. 70%					
Heating capacity (kW)	6.5	9	11	14	16
COP Range	6.5 ~ 4.2	6.2 ~ 4.5	6.6 ~ 4.3	6.4 ~ 4.3	6.6 ~ 4.5
TECHNICAL SPECIFICATIONS					
Operating air temperature (°C)	-0°C ~ 43				
Compressor	Full Stepless DC Compressor				
Casing	ABS Anti Corrosion Case				
Heat exchanger	Twisted Titanium Heat Exchanger				
Power supply	230V/1Ph/50Hz				
Electrical connection	10A plug	15A plug	Hard wired		
Rated input power (kW)	0.28 ~ 1.55	0.41 ~ 2.01	0.50 ~ 2.56	0.60 ~ 3.26	0.72 ~ 3.81
Rated input current (A)	1.21 ~ 6.73	1.76 ~ 8.70	2.17 ~ 11.12	2.61 ~ 14.16	3.13 ~ 16.56
Maximum input current (A)	8	12.5	17	19.2	20
Sound level at 1m dB(A)	41.6 ~ 53.5	43.9 ~ 54.0	46.2 ~ 57.3	46.3 ~ 58.1	46.9 ~ 58.7
Sound level at 10m dB(A)	21.6 ~ 33.5	23.9 ~ 34.0	26.2 ~ 37.3	26.3 ~ 38.1	26.9 ~ 38.7
Advised water flow (L/Min) ±20	50	75	90	120	150
Water connection (mm)	40				
Net weight	46	49	60	68	68
Net dimension L x W x H (mm)	903x349x654	903x349x654	991x349x654	991x349x754	991x420x757

* The data above is only for reference. For specific data, please refer to the nameplate on the unit.

inverELITE MAX

COMMERCIAL HEAT PUMP SERIES



These powerful commercial heaters have the capacity to cope with the demands of any aquatic facility. Built with cutting edge technology and climate adaptive features, the Madimack commercial range keeps up all year round while reducing energy bills significantly. Of particular note is Madimack's InverELITE Max—with market leading size to power ratio, providing optimised performance and ventilation. Madimack's commercial units offer WIFI as standard.

MAIN BENEFITS

- Extremely energy efficient with C.O.P up to 16
- Full stepless inverter compressor and fan
- Dual Defrost
- Marine grade aluminium & stainless steel option
- RS485 connectivity ready
- Titanium heat exchanger with 25 year warranty
- Top discharge air outlet
- Reverse cycle defrost down to -10°C
- Industry leading physical size to performance ratio
- Up to 40 degrees set point temperature

COMMERCIAL RANGE SERVICES

- Bespoke system designs
- Energy modelling
- Full HVAC system
- Heat recovery
- Dehumidification
- Ventilation controls
- Integrated energy systems
- Servicing and maintenance
- Potable hot water generation
- Smart controls

TECHNICAL SPECIFICATIONS

Model	EM600	EM1200	EM2500
PERFORMANCE CONDITION: Air 27°C/ Water 27°C/ Humid. 80%			
Heating capacity (kW)	60	117	252
COP Range	6.2 ~ 16.0	6.3 ~ 16.0	6.3 ~ 16.0
PERFORMANCE CONDITION: Air 15°C/ Water 26°C/ Humid. 70%			
Heating capacity (kW)	40.1	85	185
COP Range	4.7 ~ 7.7	4.8 ~ 8	4.8 ~ 8
PERFORMANCE CONDITION: Air 35°C/ Water 28°C/ Humid. 80%			
Cooling capacity (kW)	24	45	110
TECHNICAL SPECIFICATIONS			
Operating air temperature (°C)	-10 ~ 43		
Compressor	DC Inverter Compressor		
Casing	Aluminium Alloy		Stainless steel
Heat exchanger	Twisted Titanium Heat Exchanger		
Fan direction	Vertical		
Power supply	415V 3Ph/50Hz		
Rated input power (kW)	2.13 ~ 8.53	4.43 ~ 17.7	5.7 ~ 35.8
Rated input current (A)	3.08 ~ 12.36	6.42 ~ 25.65	8.3 ~ 51.9
Sound level at 1m dB(A)	53.0 ~ 61.0	55.0 ~ 64.0	58.0 ~ 72.0
Sound level at 10m dB(A)	33.0 ~ 41.0	35.0 ~ 44.0	38.0 ~ 52.0
Advised water flow (L/Min) ±20	280 ~ 500	500 ~ 800	800 ~ 1200
Water connection (mm)	75	110	110
Net dimension L x W x H (mm)	1000x1110x1260	2100x1090x1280	2601x1051x2069

* The data above is only for reference. For specific data, please refer to the nameplate on the unit.

HEAT PUMP SIZES
WITHOUT POOL COVER

Estimated unit size for pools **without a cover being used** and heated up to 28 degrees and max running times of approximately 10 hours

Volume of water in litres	Season	Townsville	Brisbane	Sydney	Perth	Adelaide	Melbourne	Canberra
20000	Nov-Mar	9	9	9	9	9	13	16
	Oct-April	9	9	13	13	13	20	22
	Sept-May	9	16	20	20	20	24	32
	All-year	13	20	24	24	27	32	40
30000	Nov-Mar	9	9	9	13	13	20	24
	Oct-April	9	13	20	20	20	27	40
	Sept-May	9	22	32	32	22	40	48
	All-year	16	27	40	40	40	48	60
40000	Nov-Mar	9	9	13	13	20	32	32
	Oct-April	9	20	24	24	24	40	48
	Sept-May	9	32	40	40	40	48	60
	All-year	20	40	48	48	60	60	80
50000	Nov-Mar	9	9	16	16	22	32	40
	Oct-April	9	22	32	32	32	48	60
	Sept-May	13	40	48	48	40	60	80
	All-year	24	48	69	60	72	80	120
60000	Nov-Mar	9	22	20	20	27	40	48
	Oct-April	9	40	40	40	40	69	80
	Sept-May	16	60	60	60	60	72	86
	All-year	26	40	72	72	80	96	115

Heater sizes indicated above are selected from our wide range of heat pumps and some may require multiple units to match the KW required. Average pool dimensions used.
Pools with greater surface area will suffer greater heat loss and may require larger unit.
Average temperature, humidity and wind speed used for calculations, heat pump sizing in each location may vary on exact location. A thermal pool cover has been used for calculations in 'when a cover is used' table, other types may change requirement.
At start-up from cold the heat pump will need to run for a longer period to reach the set temperature.
Please see Madimack FAQ for more information.
This table is to be used as a guide, please consult your installer. Madimack accepts no responsibility for incorrect sizing based on this table.

HEAT PUMP SIZES
WITH POOL COVER

Estimated unit size for pools **with a cover being used** and heated up to 28 degrees and max running times of approximately 10 hours

Volume of water in litres	Season	Townsville	Brisbane	Sydney	Perth	Adelaide	Melbourne	Canberra
20000	Nov-Mar		9	9	9	9	9	16
	Oct-April		9	9	9	9	13	22
	Sept-May		9	13	9	13	16	32
	All-year		13	13	13	14	20	40
30000	Nov-Mar		9	9	9	9	13	24
	Oct-April		13	9	9	14	20	40
	Sept-May		14	14	13	20	22	48
	All-year		20	20	20	22	27	60
40000	Nov-Mar		9	9	9	13	16	32
	Oct-April		13	13	13	20	22	48
	Sept-May		20	20	16	24	32	60
	All-year		24	24	27	32	40	80
50000	Nov-Mar		9	9	13	16	20	40
	Oct-April		16	16	16	22	27	60
	Sept-May		24	24	20	32	40	80
	All-year		32	32	32	40	48	120
60000	Nov-Mar		13	9	13	20	22	48
	Oct-April		20	20	20	27	40	80
	Sept-May		27	32	22	40	48	86
	All-year		27	40	40	40	48	60

Scan code to find your Pool Heater Size

madimack