



Pool heating, efficiently



Swimming Pool Heat Pump

Get more enjoyment from your pool with a Midea heat pump pool heater from Chromagen



Get the most from your lifestyle

Revel in the comfort of perfect water temperature and enjoy low running costs with an efficient Midea heat pump pool water heater. This environmentally-friendly pool heater uses renewable energy technology to harvest the plentiful free heat energy from the air, to heat and maintain the desired temperature in your pool.

Midea heat pump pool heaters are ideal for use with most common sized residential pools and will extend your swimming season, so you get much more from your lifestyle investment.

Midea heat pump pool heaters by Chromagen

Chromagen Pty Ltd is a proudly Australian owned and operated company with a mission to provide sustainable environmental solutions for Australian consumers. Founded in 1962, the Chromagen brand is now a major international player in thermal solar technology. Their world-class solar hot water systems are sold to over 35 countries and are recognised across the globe for their high quality, reliability and durability.

Today Chromagen Pty Ltd distributes a wide range of efficient water heating and solar energy solutions including the brilliant Midea Heat Pump pool heater. In Australia, Chromagen has a nation-wide presence with a network of offices, dealers and service agents across the country, so you can count on local experience, solutions and service.

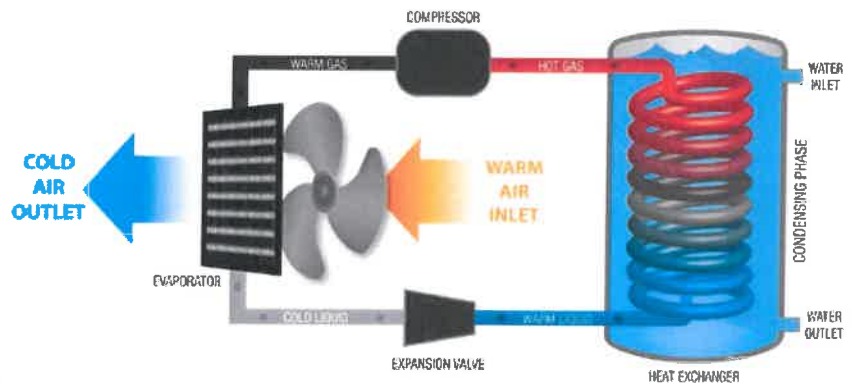
The heat pump advantages:

- Extends your swimming season by maintaining a comfortable temperature
- Heat pumps produce more heat energy than the power input making them highly efficient
- Environmentally friendly, as less fossil fuel-generated power is consumed
- Contemporary, aesthetically-pleasing design
- Compact footprint ensures installation flexibility
- Operates in any weather or at any time of day
- Inbuilt switch, only operates when pump is on

How heat pumps work:

Heat pumps are designed to transfer heat from one medium to another using only a small amount of power.

1. A fan draws in air, containing heat energy, across the evaporator
2. The cold liquid refrigerant in the evaporator absorbs the heat energy from the air and turns into a warm gas.
3. The compressor pressurises the refrigerant and turns it into a super-hot gas
4. The super-hot gas moves into the condenser where the heat is transferred to the circulating pool water via a heat exchanger
5. The refrigerant reverts back to a liquid after and continues back to the evaporator as a cold gas for the process to start again



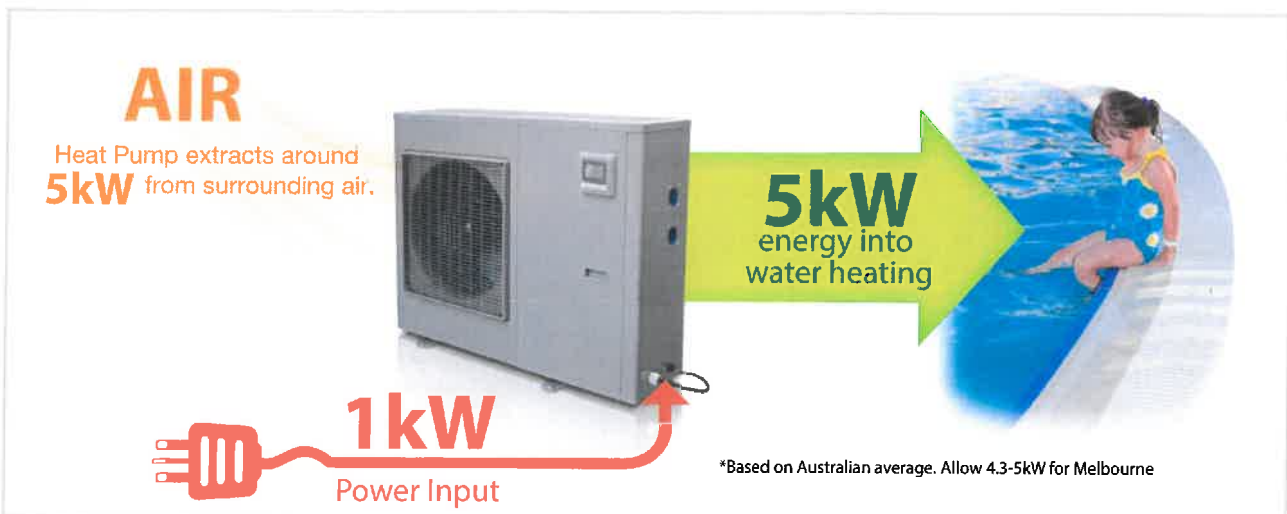
Representation of water heating process inside of heat pump unit

Energy efficiency

Heat pumps utilise an ingenious technology to extract the heat energy from the surrounding air for use in heating your pool water. This reverse-cycle air conditioning technology significantly lowers the consumption of fossil fuel-generated electricity making it an environmentally-friendly alternative to direct electric or gas water heating.

An energy efficient pool heater such as a heat pump is a great way for pool owners to make substantial reductions in their energy consumption and minimise the impact of rising power prices.

A heat pump pool heater is like an energy multiplier. From 1 kW of power consumed, it can create up to 5 kW of water heating energy. That's a performance efficiency of a remarkable 500%.



Environmentally-friendly pool heating & cooling:

Heating & Cooling Modes:

- The Midea heat pump water heater features heating and cooling modes making it a versatile system for maintaining the perfect water temperature all over Australia including locations such as Cairns and Darwin

In heating mode the Midea heat pump water heater has a Coefficient Of Performance (COP) of 4-6* and a COP of 3.5* in cooling mode. (*Depending on geographic location)

The Midea heat pump works effectively even at low ambient temperatures such as -

- Heating Mode Working Range: -7°C~38°C
 - Cooling Mode Working Range: 15°C~43°C
- Midea utilises only ozone-friendly R410a refrigerant to minimise pollution and depletion of the Ozone layer

Long service life:

Titanium heat exchanger with Hydrophilic fin coil coating:

- Provides high corrosion-resistance against aggressive pool water

Temperature management & convenience:

Advanced user interface:

- With a Midea Heat Pump, set up and operation monitoring is made simple thanks to an amazing, user-friendly interface with clear Liquid Crystal Display
- Features include temperature and time setting, pool pump indication and fault alarm plus backlighting for easier reading



Heat pump controller

Safety:

Automatic defrosting function:

- Allows system to warm up prior to normal operation to de-ice and therefore protect vital components whilst also ensuring highest operational efficiency

Self-protect function:

- The compressor features a self-protect function



Swimming pool heat pump product specification

Model		14kW	28kW (2 x 14kW units)
Power supply (Ph / V / Hz)		1Ph / 230V / 50Hz	
Heating mode	Water outlet temp (°C)	Default 28, 20 ~ 35	
Cooling mode	Water outlet temp (°C)	Default 28, 10 ~ 30	
Max. current (A)		16.0	32.0
Hot water yield (m³/h)		6.0	12.0
Rated max input (kW)		3.5	7.0
Heating	Capacity (kW)	14.0	28.0
	Input (kW)	2.55	5.10
	Outdoor ambient temp (°C)	-7 ~ 38	
	COP (kW)*	5.49	5.49
Cooling	Capacity (kW)	10.4	20.8
	Input (kW)	2.9	5.8
	Outdoor ambient temp (°C)	15 ~ 43	
	COP (kW)*	4	4
Outdoor noise level (dB(A))		58	
Refrigerant type/Quantity (A / kg)		R410 / 1.85	R410 / 3.7
Maximum pressure (MPa)		0.4	
Water inlet pipe diameter (mm)		DN40	
Water outlet pipe diameter (mm)		DN40	
Drain pipe diameter (mm)		DN25	
Outdoor resistance class		IP24	

* Based on ambient temperature of 27°C

Initial heat up period

Location	Pool type Pool volume (L)	Heat up period guide (hrs)			
		Spa 3,000	Swimming pool		
			30,000	50,000	70,000
Adelaide		4.5	28	42	60
Brisbane		3.5	11	17	24
Canberra		4.8	29	48	68
Hobart		5.5	38	72	118
Melbourne		5.0	30	50	70
Perth		4.1	21	34	48
Sydney		4.4	22	35	50

Based on the following conditions:

- Heat up month - October
- Typical incoming cold temp (Adelaide = 17°C / Brisbane = 20.5°C / Canberra = 15°C / Hobart = 13°C / Melbourne = 14.5°C / Perth = 18°C / Sydney = 17.6°C)
- Final pool temp = 27°C; Final spa temperature = 35°C
- 1 x 14kW unit. (Using 2 x 14kW units will reduce the heat up time by approximately 50%)
- Pool/spa covered during heat up period

Energy requirements

Season	% of pool cover use	Estimated energy consumption (kW)							
		Mode	Adelaide	Brisbane	Canberra	Hobart	Melbourne	Perth	Sydney
All Year	90	Running	4522	445	5617	8411	5790	2590	4273
		Heat up	126	78	143	162	134	106	112
Extended Summer Season (Oct - Mar)	60	Running	1960	N/A*	1534	4024	2187	1204	1593
		Heat up	84	N/A*	78	118	87	67	64

Based on the following conditions:

- 35,000 litre pool at 27°C pool temperature
- Excludes circulation pump energy requirements

* Due to high ambient temperature energy consumption is negligible.

Chromagen recommends the use of a pool cover as often as possible to ensure system efficiency and to reduce energy use.

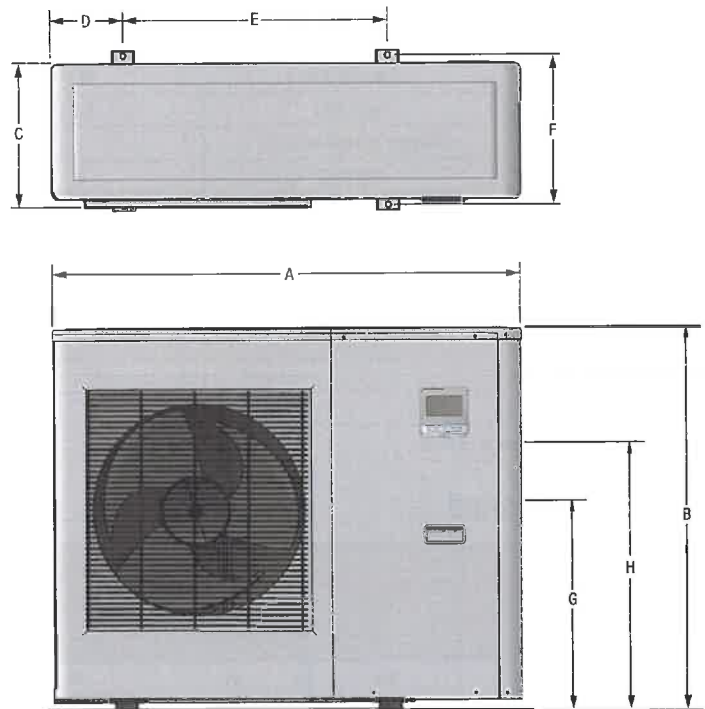


solar & energy solutions

Swimming pool heat pump product specification

Description	Dimension
A - Unit Width	1050mm
B - Unit Height	855mm
C - Unit Depth	315mm
D - Mounting Holes	165mm
E - Mounting Holes	590mm
F - Mounting Holes	333mm
G - Water Outlet Position	495mm
H - Water Inlet Position	615mm
Unit Weight	75kg

Residential Warranty
3 Years Compressor & Electronics
10 Years Heat Exchanger
1 Year Parts & Labour



Why choose Chromagen?

- Chromagen Pty Ltd is Australian owned and operated
- National sales & service network
- A wide range of efficient hot water solutions to suit your lifestyle
- Committed to quality, innovation & energy-efficient solutions

Other efficient living products from Chromagen:

Solar Hot Water Systems | Heat Pump Hot Water | Eternity Continuous Flow Gas Hot Water | Solar Power Systems



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VICTORIA | NEW SOUTH WALES | QUEENSLAND | NORTHERN TERRITORY | WESTERN AUSTRALIA | SOUTH AUSTRALIA

This revision supersedes all previous versions. All details in this document are accurate at time of publishing. Product specifications may change without notice. For the latest product details and specifications, please visit our website - www.chromagen.com.au