

# INDUSTRIAL CHILLERS

Aqua Cooler's Industrial Cooling Solutions



Your Partner In Cool.

**AQUA  
CHILLER**



## About Us

Formed in 1994 by the amalgamation of three companies specialising in chilled technology, Aqua Cooler has a proud heritage dating back to 1946 with the manufacture of packaged water chiller units. With over 50 years experience in the industry, no other Australian brand can offer the same level of attention to detail and quality.

Today, the company offers a wide range of industrial process chilling products in four ranges, providing a solution from small indoor scientific chillers in our gladiator range through to large roof top packaged units containing dual refrigeration and water circuit redundancy for mission critical process cooling.

Aqua Cooler offers a host of products and solutions to the market, in addition to a resource-packed aftermarket service. With over 50 years in refrigeration and an intimate understanding of our customer's process cooling needs allow us to provide unparalleled level of specialised aftermarket service.

Your Partner In Cool.

**AQUA**  
**COOLER**

ARCO<sup>TM</sup>tick  
CERTIFIED  
Refrigerant Trading Authorisation AU41196

## Aqua Cooler Chiller Applications

There's an Aqua Cooler process chiller to fit every application. We regularly supply industries such as medical imaging, healthcare, plastic manufacturing, mining and mineral production, pharmaceutical, farming, laser and waterjet cutting, data centres, food processors and almost any other process imaginable that requires water cooling.



Scientific Applications



Agriculture



Healthcare



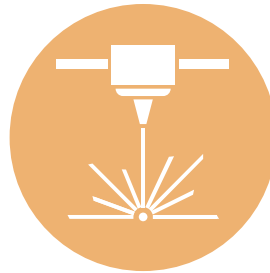
Chemical & Pharma



Machine Tools



Plastics



Laser



Food Processing

Aqua Cooler is Trusted By:



**Queensland**  
Government

**BHP**



**MONASH**  
University

**UNSW**  
THE UNIVERSITY OF NEW SOUTH WALES

# Which Aqua Cooler Range is right for me?

Aqua Cooler has a solution for a wide range of industrial cooling requirements. Our chillers are categorised into four ranges, each with their own unique features and benefits. From a small chiller suitable for indoor laboratory equipment, to a large dual redundancy Gladiator HYDRA unit suitable for critical applications, we can provide you with the best solution.

## Factors to consider with selection of models

Each Industrial Chiller range offers its own unique features and benefits, designed to deliver ultimate value to our customers. With multiple levels of technology, you only pay for what you really need.

## Additional options and bespoke solutions

Need any additional options such as an upgraded pump, remote condenser, close hysteresis or low temperature options? Our team can help. Contact us to speak with our in-house engineering and sales team to devise a customised solution to suit your chilling needs.







## Full Range Features

- Your choice of refrigerant (R134a, R407c).
- Built with world-market-leading component brands such as Emerson and Danfoss compressors.
- Hydrophilic-coated aluminium condenser fins with an upgrade e-coating option for additional corrosion protection.
- High-quality build with galvanised frames and panels forming a stylish and practical structure.
- Laden with safety features, such as phase failure protection, flow switch protection, high and low pressure protection and over-heating protection, included as a standard feature in all chillers.
- Available in both air-cooled and water-cooled configurations and open or closed loop pipework to suit the process needs.
- Various water pump options to suit high and low pressure applications.
- Multiple evaporator types available including coil-in-tank, plate heat exchanger, or shell and tube (on request).

## Full Range Benefits

- Wide operating limits means Aqua Cooler's chillers can be used in a broad range of situations, particularly important for the harsh Australian climate.
- Most models' internal buffer tanks ensure that temperature remains consistent under varying loads, we also offer closed loop versions for existing chillers.
- Simple to use PCB controller; set-and-forget reliability.
- A large selection of chiller models are available to suit a wide range of applications.
- With over 50 years in refrigeration and an intimate understanding of our customer's process cooling needs Aqua Cooler's proud history allows you to select an Aqua Cooler Chiller with confidence.



Feature				
High Quality Build Suitable for Outdoor Use	✓	✓	✓	✓
Choice of Refrigerant	R407c / R134a	R407c / R134a	R407c / R134a	R407c / R134a
Hydrophilic Blue Fin Aluminium Condenser	✓	✓	✓	✓
Optional Blygold Condenser Coating	✓	✓	✓	✓
Evaporator Options	Coil in Tank, Plate Pack	Coil in Tank, Plate Pack	Plate Pack	Pate Pack
Controller	Basic PCB	Advanced PCB	Advanced PCB	Advanced PCB
Internal Buffer Tanks	✓	✓	✓	✓
Compressor Brand	Panasonic/ Emerson/ Danfoss	Emerson/Danfoss	Emerson/Danfoss	Emerson/Danfoss
Electrical Components	Schneider	Schneider	Schneider	Schneider
Various Pump Options	✓	✓	✓	✓
BMS Connectivity	Limited, Some Models	✓	✓	✓
Internal Network Web Interface	✗	✓	✓	✓
Fan Speed Controller	Switch Only	✓	✓	✓
Closed Loop Option	✓	✓	✓	✓
Flow Protection	Switch	Meter	Meter	Meter
Pressure Sensors	Manual	Transducers	Transducers	Transducers
Phase Fail Protection	✓	✓	✓	✓
Optional Aqua Cooler Advanced Monitoring Solution	Limited	✓	✓	✓
Data Logging	✗	✓	✓	✓
Mounting Options	Castors, Skid	Castors, Skid	Skid	Skid
Redundant Refrigeration Circuit	✗	✗	✓	✓
Redundant Water Circuit	✗	✗	✗	✓
Remote Condenser Option	✓	✓	✓	✓
UPS Option (pump only)	✓	✓	✓	✓

# Chillers at a glance.

## Electrical

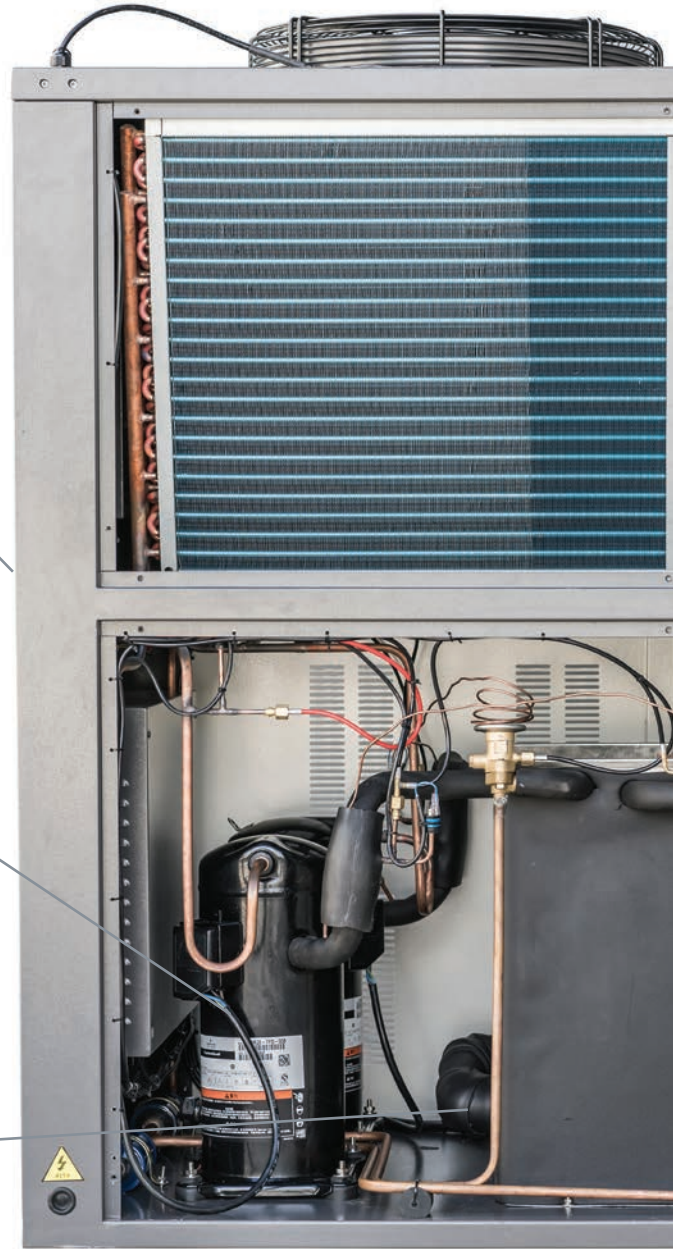
Every component in our chillers have been selected for **reliability** and **longevity**. Electrical components including breakers and relays are sourced from reputable suppliers such as Schneider. Our controllers are easy to use with "set and forget" reliability.

## Compressors

Our chiller's compressors bring you long lasting **reliability** and **durability** with exceptionally high standards of quality. Only the best of the best makes the cut, such as Emerson and Danfoss.

## Pumps

A range of pump options are available for our chiller range. All of which are sourced from highly reputable and **market leading** manufacturers. Closed loop options are available to suit external pumps or tanks.



## Optional Features



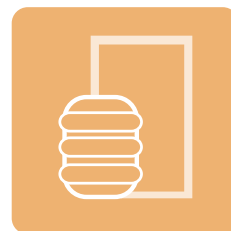
External tank



Glycol compatibility



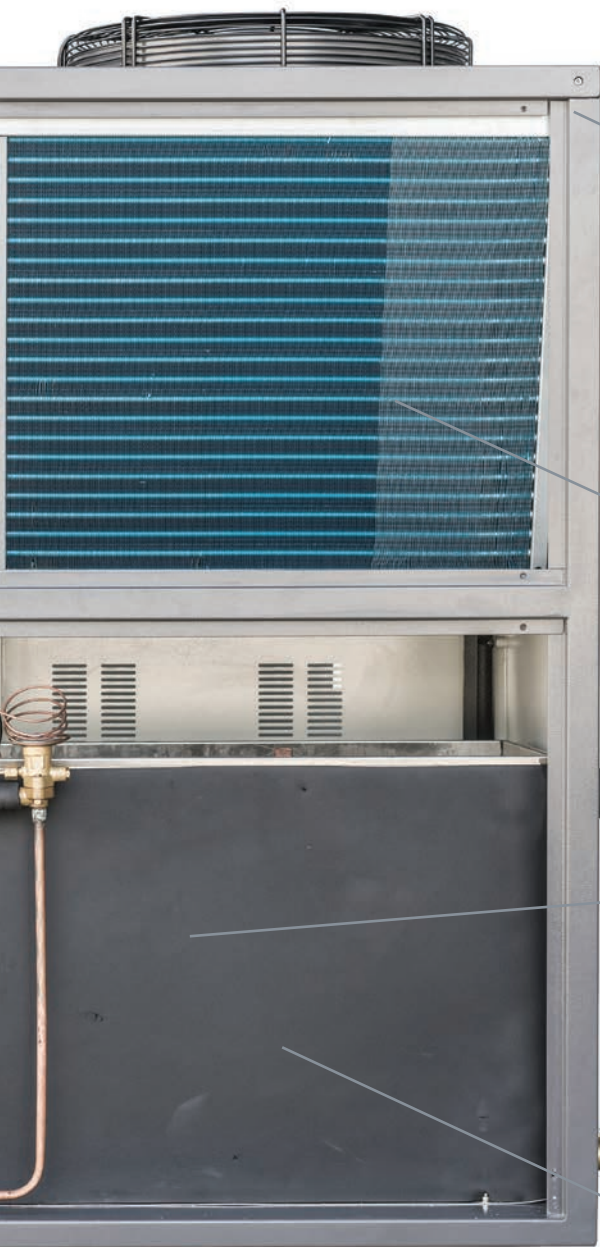
Remote condenser



External pump / tank



Pump upgrades



## Enclosure

The **stylish** and **practical** structural enclosure is robustly constructed with a rigid frame, powder coated galvanised aluminium panels and heavy-duty castors or skid channels. Our chillers are designed for indoor or outdoor installation.

## Condensers

Aqua Cooler uses a custom-designed and manufactured condensers in our chillers. An advanced **hydrophilic coating** on the condenser is included as a standard feature and an option of blygold coating exists for extreme environments.

## Evaporators

Our chillers are equipped as standard with an **efficient** coil-in-tank or shell-and-tube type (model dependant) evaporator, with the option to upgrade to an even high-performing plate-type exchanger.

## Internal Tanks

Most of our chillers are equipped with an integrated internal buffer tank to cover peak loads or in situations where a surge in demand exceeds.



Close tolerance upgrade



Fan upgrades

## Quality Assured



All Aqua Cooler chillers are tested throughout the manufacturing process followed by a substantial and comprehensive test upon completion. Coupled with the world's most trusted component brands, Aqua Cooler's products are designed and built to last.

# Advanced Chiller Monitoring Solutions

## Upgraded Remote Monitoring Option

Refrigeration trouble frequently happens when no one is looking. Let's face it, you have better things to do. But what if modern technology could be applied to your refrigeration system? What if you could automate the monitoring of the entire system and have the power to know exactly what's going on, all the time. Now you can!

Our monitoring system is designed to be your onsite refrigeration expert, so you don't have to be. Reliability Centred Maintenance (RCM) works all the time, 24 hours a day, 7 days a week, 365 days a year. Now you will know exactly what's going on.

## Move to Reliability Centred Maintenance now!

Reactive Maintenance or Breakdown Maintenance - \$18/kw/yr



Reactive Maintenance - \$15/kw/yr



Predictive Maintenance - \$9/kw/yr



RCM - \$6/kw/yr







### Save Money

Move from reactive refrigeration maintenance (breakdown maintenance) to Reliability Centred Maintenance (RCM) with monitoring and cut cost by up to 66% per year.



### Avoid Outages

Costly outages are now a thing of the past! Our monitoring system lets you know the moment your refrigeration system needs attention, well before expensive repairs, spoilage and waste occur.



### Find Leaks

Leaks happen, and are frequently found way too late. Replacing refrigerant is costly. With our monitoring system you find leaks early – before they cause real trouble.



### Works with any Aqua Chiller installation

Thanks to advances in technology, every Aqua Chiller installation, new or existing, can now be made smart.



Savings on Maintenance

66%

Elimination of Breakdowns

75%

## Monitor Vital Indicators

You can now know exactly what's happening. Follow temperature, refrigerant pressures, cycle times, cycle frequency and power consumption down to fans and compressors. View real-time data as well as historical trends. Gain the power, insight and peace of mind that SMART refrigeration delivers.



#### Chilled Fluid Temperature

Know that your chiller is doing its job. See current and historical temperature trends.



#### Flow Rate and Alarm Status

Always know the status of your chiller water pump and get alerted immediately when any issues arise.



#### Suction Pressure & Temperature

Track current and historical suction superheat levels to guard against flood-backs or compressor overheating.



#### Compressor & Fan Power

Learn when compressor or fans are working too hard or too little. Long before expensive repairs.



#### Ambient Temperature & Humidity

Is a hot or cold day affecting things? Are things too dry or too wet? Our monitoring system keeps track of that too.



#### Liquid Pressure & Temperature

Know liquid sub-cooling levels now and in the past. Keep a sharp eye out for condenser and filter-drier health.



# GLADIATOR



The Gladiator range is a value-focused, affordable and reliable option for your industrial cooling needs without sacrificing quality. The Gladiator range of process chillers from Aqua Cooler boast an impressive set of features and benefits such as world leading refrigeration components, set and forget PCB controller, and robustly constructed powder coated frame.

## Features

- Your choice of refrigerant (R134a, R407c).
- Built with world-market-leading component brands such as Emerson and Danfoss compressors.
- Hydrophilic-coated aluminium condenser fins with an upgrade e-coating option for additional corrosion protection.
- High-quality build with galvanised frames and panels forming a stylish and practical structure.
- Laden with safety features, such as phase failure protection, flow switch protection, high and low pressure protection and over-heating protection, included as a standard feature in all G Series chillers.
- Available in both air-cooled and water-cooled configurations and open or closed loop pipework to suit the process needs.
- Various water pump options to suit high and low pressure applications.
- Multiple evaporator types available including coil-in-tank, shell-and-tube or plate heat exchanger.
- Manually controlled water bypass valve to reduce water flow to suit applications.

## Quality Assured

All Gladiator Series chillers are tested throughout the manufacturing process followed by a substantial and comprehensive test upon completion. Coupled with the world's most trusted component brands, Aqua Cooler's products are designed and built to last.



## Benefits

- Wide operating limits means Aqua Cooler's Gladiator Chillers can be used in a broad range of situations, particularly important for the harsh Australian climate.
- Internal buffer tanks ensure that temperature remains consistent under varying loads.
- Simple to use PCB controller; Set-and-forget reliability.
- A large selection of Gladiator models are available to suit a wide range of applications.
- With over 50 years in refrigeration and an intimate understanding of our customer's process cooling needs, Aqua Cooler's proud history allows you to select a Gladiator Chiller with confidence.

**AQUA**  
**COOLER**

# Specifications: 1-35 kW

Model	Cooling Capacity	Input Power	Power	Current Draw (A)		Refrigerant		Control method	Compressor				Type	
	kW	kW		OCD	MCC	Type	Charge (kg)		Type	Number in Chiller	Brand	Power (kW)		
GA0.6-C-CC	1.3	1.14	1PH/220V/50HZ	4.5	6.5	R407c	0.6	Capillary	Rotary	1	Panasonic	0.5	Hydrophilic Aluminium fin with low noise rotor fan	
GA0.6-C-PP	1.3	1.14		4.5	6.5	R407c	0.6		Scroll	1	Panasonic	0.5		
GA0.6-A-CC	1.6	1.04		4	4.5	R134a	0.6		Scroll	1	Hitachi	0.5		
GA0.6-A-PP	1.7	1.04		4	4.5	R134a	0.6		Rotary	1	Hitachi	0.5		
GA1-C-CC	1.9	1.36		5.5	7.5	R407c	0.7		Rotary	1	Panasonic	0.7		
GA1-C-PP	1.9	1.36		5.5	8	R407c	0.7		Scroll	1	Panasonic	0.7		
GA1-A-CC	2.8	1.8		8	17.5	R134a	1		Scroll	1	Copeland	1.1		
GA1-A-PP	3.2	1.8		8	17.5	R134a	1		Rotary	1	Copeland	1.1		
GA2-C-CC	4.5	2.1		8.5	12.5	R407c	1.2		Rotary	1	Panasonic	1.4		
GA2-C-PP	4.5	2.1		8.5	12.5	R407c	1.2		Rotary	1	Panasonic	1.4		
GA2-A-CC	4.5	2.46		11.5	26	R134a	1.2		Rotary	1	Copeland	1.7		
GA2-A-PP	5.3	2.46		11.5	26	R134a	1.2		Rotary	1	Copeland	1.6		
GA3-C-CC	6	2.75	3PH/415V/50HZ	6	10	R407c	2	Capillary	Rotary	1	Copeland	2		
GA3-A-CC	7	3.23		8	15.5	R134a	3		Scroll	1	Copeland	2.3		
GA3-C-PP	7.5	2.79		6	10	R407c	2		Scroll	1	Copeland	2		
GA3-A-PP	8.3	3.28		8.5	15.5	R134a	3		Scroll	1	Copeland	2.3		
GA5-C-CC	11	4.39		9.5	16	R407c	3.3		Rotary	1	Copeland	3.4		
GA5-A-CC	11	4.45		11.5	25	R134a	5		Scroll	1	Copeland	3.5		
GA5-A-PP	12.8	4.55		11.5	25	R134a	5		Scroll	1	Copeland	3.6		
GA6-C-CC	13	4.95		9.5	16	R407c	4.2		Expansion Valve	Rotary	1	Copeland		4
GA6-A-CC	13	4.97		12	26.5	R134a	6.6			Scroll	1	Copeland		3.9
GA5-C-PP	13.2	4.53		9.5	16	R407c	3.3		Capillary	Scroll	1	Copeland		3.6
GA6-A-PP	14.6	5.07		12	26.5	R134a	6.6			Scroll	1	Copeland		4
GA6-C-PP	15.5	5.09		10	16	R407c	4.2		Expansion Valve	Scroll	1	Copeland		4.1
GA8(D)-C-CC	17	6.89		14.5	25.5	R407c	5.2			Rotary	2	Copeland		5.6
GA8(D)-A-CC	17	6.95		11	35.5	R134a	8			Scroll	2	Copeland		5.2
GA10(D)-A-CC	20	7.57		18	37.5	R134a	10			Scroll	2	Copeland		5.9
GA8(D)-A-PP	20	4.37		11	35.5	R134a	8			Scroll	2	Copeland		2.7
GA10(D)-C-CC	21	8.59		18	31.5	R407c	6.5			Rotary	2	Copeland		6.9
GA8(D)-C-PP	21	7.03		15	25.5	R407c	5.2			Scroll	2	Copeland		5.8
GA10(D)-A-PP	22	7.69	18.5	37.5	R134a	10	Scroll	2		Copeland	6			
GA12(D)-C-CC	25	10.06	19	32	R407c	8.4	Rotary	2		Copeland	8			
GA10(D)-C-PP	26	8.87	18	31.5	R407c	6.5	Scroll	2		Copeland	7.2			
GA12(D)-A-CC	29	11.42	49	58	R134a	13.2	Scroll	2		Copeland	9.2			
GA12(D)-C-PP	31	10.34	19.5	32	R407c	8.4	Scroll	2		Copeland	8.3			
GA12(D)-A-PP	33	11.66	27	58	R134a	13.2	Scroll	2	Copeland	9.4				

## Notes

- Nominal cooling capacity is calculated with 7°C chilled-water supply and 35°C inlet cooling air temperature at system flow rate and pressure.
- Working conditions:
  - Temperature range of chilled fluid between 1°C and 23 °C for -CC models or 1°C and 17 °C for -PP models. Use of glycol recommended for set points under 3°C.
  - Temperature difference between inlet and outlet chilled fluid between 3°C and 10°C
  - We recommend the use of R134a when ambient temperatures are expected to reach 40°C+

\* Operation current draw (OCD) per phase at design point - Measure under Evaporating Temp: 2°C | Condensing Temp: 50°C | Ambient Temp: 35°C | Superheat: 5K | Subcooling: 2K

\* The flow rate is the nominal flow rate at the available lift. The actual flow rate will depend on the load requirement and the pump curve. Non-standard pump available on request.

Compressor	Evaporator		Water Pump Standard Option Stainless Steel #304 Pump / Pipes				Water Pump Upgrade Option Stainless Steel #304 Pump / Pipes				Dimensions and Weight			
	Cooling air flow (m3/h)	Type	Tank volume	Inlet/outlet pipe calibre	Avail Lift (m)	Flow Rate (L/s)	Model	Avail Lift (m)	Flow Rate (L/s)	Model	Length (mm)	Width (mm)	Height (mm)	Weight (Kg)
1000	Coil in Tank	16	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	110	
1000	Plate Pack	16	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	110	
1000	Coil in Tank	16	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	110	
1000	Plate Pack	16	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	110	
1000	Coil in Tank	16	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	120	
1000	Plate Pack	16	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	120	
1000	Coil in Tank	20	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	130	
1000	Plate Pack	16	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	130	
2000	Coil in Tank	20	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	140	
2000	Plate Pack	20	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	700	730	1140	140	
2000	Coil in Tank	50	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	980	520	1185	160	
2000	Plate Pack	16	1/2"	21	2 m3/h   0.56 l/s	CHLF2-30	35	2 m3/h   0.56 l/s	CHLF2-50	980	520	1185	160	
3000	Coil in Tank	50	1"	21	2 m3/h   0.56 l/s	CHLF2-30	42	2 m3/h   0.56 l/s	CHLF2-60	980	520	1185	160	
3000	Coil in Tank	50	1"	21	2 m3/h   0.56 l/s	CHLF2-30	42	2 m3/h   0.56 l/s	CHLF2-60	1365	560	1250	190	
3000	Plate Pack	20	1"	21	2 m3/h   0.56 l/s	CHLF2-30	42	2 m3/h   0.56 l/s	CHLF2-60	980	520	1185	160	
3000	Plate Pack	20	1"	21	2 m3/h   0.56 l/s	CHLF2-30	42	2 m3/h   0.56 l/s	CHLF2-60	1365	560	1250	190	
5000	Coil in Tank	60	1"	22	4 m3/h   1.11 l/s	CHLF4-30	38	4 m3/h   1.11 l/s	CHLF4-50	1290	560	1250	190	
5000	Coil in Tank	60	1"	22	4 m3/h   1.11 l/s	CHLF4-30	38	4 m3/h   1.11 l/s	CHLF4-50	1290	560	1250	200	
5000	Plate Pack	30	1"	22	4 m3/h   1.11 l/s	CHLF4-30	38	4 m3/h   1.11 l/s	CHLF4-50	1290	560	1250	200	
6000	Coil in Tank	75	1"	22	4 m3/h   1.11 l/s	CHLF4-30	38	4 m3/h   1.11 l/s	CHLF4-50	1290	560	1250	200	
6000	Coil in Tank	75	1"	22	4 m3/h   1.11 l/s	CHLF4-30	38	4 m3/h   1.11 l/s	CHLF4-50	1420	720	1520	350	
5000	Plate Pack	30	1"	22	4 m3/h   1.11 l/s	CHLF4-30	38	4 m3/h   1.11 l/s	CHLF4-50	1290	560	1250	190	
6000	Plate Pack	30	1"	22	4 m3/h   1.11 l/s	CHLF4-30	38	4 m3/h   1.11 l/s	CHLF4-50	1420	720	1520	350	
6000	Plate Pack	30	1"	22	4 m3/h   1.11 l/s	CHLF4-30	38	4 m3/h   1.11 l/s	CHLF4-50	1290	560	1250	200	
8000	Coil in Tank	120	1-1/2"	30	4 m3/h   1.11 l/s	CHLF4-40	42.5	8 m3/h   2.22 l/s	CHLF8-50	1420	720	1520	350	
8000	Coil in Tank	120	1-1/2"	30	4 m3/h   1.11 l/s	CHLF4-40	42.5	8 m3/h   2.22 l/s	CHLF8-50	1620	780	1640	580	
10000	Coil in Tank	200	1-1/2"	30	4 m3/h   1.11 l/s	CHLF4-40	42.5	8 m3/h   2.22 l/s	CHLF8-50	1620	780	1640	700	
8000	Plate Pack	85	1-1/2"	30	4 m3/h   1.11 l/s	CHLF4-40	42.5	8 m3/h   2.22 l/s	CHLF8-50	1620	780	1640	580	
10000	Coil in Tank	200	1-1/2"	30	4 m3/h   1.11 l/s	CHLF4-40	42.5	8 m3/h   2.22 l/s	CHLF8-50	1620	780	1640	580	
8000	Plate Pack	85	1-1/2"	30	4 m3/h   1.11 l/s	CHLF4-40	42.5	8 m3/h   2.22 l/s	CHLF8-50	1420	720	1520	350	
10000	Plate Pack	85	1-1/2"	30	4 m3/h   1.11 l/s	CHLF4-40	42.5	8 m3/h   2.22 l/s	CHLF8-50	1620	780	1640	700	
12000	Coil in Tank	200	2"	25.5	8 m3/h   2.22 l/s	CHLF8-30	42.5	8 m3/h   2.22 l/s	CHLF8-50	1620	780	1640	700	
10000	Plate Pack	85	1-1/2"	30	4 m3/h   1.11 l/s	CHLF4-40	42.5	8 m3/h   2.22 l/s	CHLF8-50	1620	780	1640	580	
12000	Coil in Tank	200	2"	25.5	8 m3/h   2.22 l/s	CHLF8-30	42.5	8 m3/h   2.22 l/s	CHLF8-50	1920	990	1780	830	
12000	Plate Pack	85	2"	25.5	8 m3/h   2.22 l/s	CHLF8-30	42.5	8 m3/h   2.22 l/s	CHLF8-50	1620	780	1640	700	
12000	Plate Pack	85	2"	25.5	8 m3/h   2.22 l/s	CHLF8-30	42.5	8 m3/h   2.22 l/s	CHLF8-50	1920	990	1780	830	

## Safety Features

- Compressor Overheating Protection
- Over-Current Protection
- High- and Low-Pressure Protection
- Temperature Protection via High and Low Alarm
- Flow Switch Protection
- Phase Sequence or Missing Phase Protection
- Low Water Level Alarm Protection

# Specifications: 35 kW+

Model	Cooling Capacity	Input Power	Power	Current Draw (A)		Refrigerant		Control method	Compressor				Type
	kW	kW		OCD	MCC	Type	Charge (kg)		Type	Number in Chiller	Brand	Power (kW)	
GA15(D)-C-CC	35	13.46	3PH/415V/50HZ	27.5	51.5	R407c	10.5	Expansion Valve	Rotary	2	Copeland	10.8	Hydrophilic Aluminium fin with low noise rotor fan
GA15(D)-A-CC	36	14.54		32.5	69.5	R134a	16.5		Scroll	2	Danfoss	11.4	
GA15(D)-A-PP	41	16.76		32.5	69.5	R134a	16.5		Scroll	2	Danfoss	13.7	
GA15(D)-C-PP	44	13.78		27.5	51.5	R407c	10.5		Scroll	2	Copeland	11.1	
GA20(D)-C-CC	46	17.64		32.5	61	R407c	14		Rotary	2	Copeland	13.8	
GA25(D)-C-CC	57	22.4		43	78.5	R407c	17.5		Rotary	2	Copeland	17.8	
GA20(D)-C-PP	57	18.16		33	61	R407c	14		Scroll	2	Copeland	14.4	
GA20(D)-A-CC	59	23.1		47.5	107.5	R134a	22		Scroll	2	Danfoss	19.3	
GA30(D)-C-CC	67	25.36		53.5	91.5	R407c	21		Scroll	2	Copeland	21.3	
GA20(D)-A-PP	67	23.506		48	107.5	R134a	22		Scroll	2	Danfoss	19.7	
GA25(D)-C-PP	71	23.08		44	78.5	R407c	17.5		Scroll	2	Copeland	18.5	
GA25(D)-A-CC	73	28.68		60.5	146.5	R134a	27.5		Scroll	2	Danfoss	23.8	
GA30(D)-C-PP	83	26.16		30.5	91.5	R407c	21		Scroll	2	Copeland	22.1	
GA25(D)-A-PP	84	29.26		61	146.5	R134a	27.5		Scroll	2	Danfoss	24.4	
GA40(F)-C-CC	92	32.76		63.5	117.5	R407c	28		Scroll	4	Copeland	27.7	
GA30(D)-A-CC	92	33.64		64.5	168	R134a	33		Scroll	2	Danfoss	28.6	
GA30(D)-A-PP	106	34.36		65.5	168	R134a	33		Scroll	2	Danfoss	29.3	
GA50(F)-C-CC	113	42.8		83	153.5	R407c	35		Scroll	4	Copeland	35.6	
GA40(F)-C-PP	114	33.8		64.5	117.5	R407c	28		Scroll	4	Copeland	28.8	
GA40(F)-A-CC	118	43.96		91.5	210.5	R134a	44		Scroll	4	Danfoss	38.6	
GA60(F)-C-CC	134	50.28		106	181.5	R407c	42		Scroll	4	Copeland	42.6	
GA40(F)-A-PP	134	44.812		92.5	210.5	R134a	44		Scroll	4	Danfoss	39.4	
GA50(F)-C-PP	143	44.16		84.5	153.5	R407c	35		Scroll	4	Copeland	37	
GA50(F)-A-CC	147	55.32		124	286.5	R134a	55		Scroll	4	Danfoss	47.6	
GA60(F)-C-PP	167	51.88		107.5	181.5	R407c	42		Scroll	4	Copeland	44.2	
GA50(F)-A-PP	168	56.48		124.5	286.5	R134a	55		Scroll	4	Danfoss	48.8	
GA60(F)-A-CC	185	64.96		123	329.5	R134a	66		Scroll	4	Danfoss	57.2	
GA60(F)-A-PP	211	66.4		125	329.5	R134a	66		Scroll	4	Danfoss	58.7	

## Notes

- Nominal cooling capacity is calculated with 7°C chilled-water supply and 35°C inlet cooling air temperature at system flow rate and pressure.
  - Working conditions:
    - Temperature range of chilled fluid between 1°C and 23 °C for -CC models or 1°C and 17 °C for -PP models. Use of glycol recommended for set points under 3°C.
    - Temperature difference between inlet and outlet chilled fluid between 3°C and 10°C
    - We recommend the use of R134a when ambient temperatures are expected to reach 40°C+
- \* Operation current draw (OCD) per phase at design point - Measure under Evaporating Temp: 2°C | Condensing Temp: 50°C | Ambient Temp: 35°C | Superheat: 5K | Subcooling: 2K
- \* The flow rate is the nominal flow rate at the available lift. The actual flow rate will depend on the load requirement and the pump curve. Non-standard pump available on request.

Compressor	Evaporator			Water Pump Standard Option Stainless Steel #304 Pump / Pipes			Water Pump Upgrade Option Stainless Steel #304 Pump / Pipes			Dimensions and Weight			
	Cooling air flow (m3/h)	Type	Tank volume	Inlet/outlet pipe calibre	Avail Lift (m)	Flow Rate (L/s)	Model	Avail Lift (m)	Flow Rate (L/s)	Model	Length (mm)	Width (mm)	Height (mm)
15000	Coil in Tank	300	2"	25.5	8 m3/h   2.22 l/s	CHLF8-30	39.5	12 m3/h   3.33 l/s	CHLF12-40	1920	990	1780	830
15000	Coil in Tank	300	2"	25.5	8 m3/h   2.22 l/s	CHLF8-30	39.5	12 m3/h   3.33 l/s	CHLF12-40	2070	1130	1820	890
15000	Plate Pack	145	2"	25.5	8 m3/h   2.22 l/s	CHLF8-30	39.5	12 m3/h   3.33 l/s	CHLF12-40	2070	1130	1820	890
15000	Plate Pack	145	2"	25.5	8 m3/h   2.22 l/s	CHLF8-30	39.5	12 m3/h   3.33 l/s	CHLF12-40	1920	990	1780	830
20000	Coil in Tank	350	2"	30	12 m3/h   3.33 l/s	CDLF12-3	39.5	12 m3/h   3.33 l/s	CHLF12-40	2070	1130	1820	890
25000	Coil in Tank	350	2-1/2"	34.5	15m3/h   4.17	CDMF15-3	43	16 m3/h   4.44 l/s	CHLF16-40	2070	1130	1970	960
20000	Plate Pack	170	2"	30	12 m3/h   3.33 l/s	CDLF12-3	39.5	12 m3/h   3.33 l/s	CHLF12-40	2070	1130	1820	890
20000	Coil in Tank	350	2"	30	12 m3/h   3.33 l/s	CDLF12-3	39.5	12 m3/h   3.33 l/s	CHLF12-40	2070	1130	1970	960
30000	Coil in Tank	460	2-1/2"	22	16 m3/h   4.44 l/s	CDLF16-2	43	16 m3/h   4.44 l/s	CHLF16-40	2070	1480	1900	1250
20000	Plate Pack	170	2"	30	12 m3/h   3.33 l/s	CDLF12-3	39.5	12 m3/h   3.33 l/s	CHLF12-40	2070	1130	1970	960
25000	Plate Pack	170	2-1/2"	34.5	15m3/h   4.17	CDMF15-3	43	16 m3/h   4.44 l/s	CHLF16-40	2070	1130	1970	960
25000	Coil in Tank	350	2-1/2"	34.5	15m3/h   4.17	CDMF15-3	43	16 m3/h   4.44 l/s	CHLF16-40	2070	1480	1900	1250
30000	Plate Pack	220	2-1/2"	22	16 m3/h   4.44 l/s	CDLF16-2	43	16 m3/h   4.44 l/s	CHLF16-40	2070	1480	1900	1250
25000	Plate Pack	170	2-1/2"	34.5	15m3/h   4.17 l/s	CDMF15-3	43	16 m3/h   4.44 l/s	CHLF16-40	2070	1480	1900	1250
40000	Coil in Tank	580	2-1/2"	23	20 m3/h   5.55 l/s	CDLF20-2	40	32 m3/h   8.88 l/s	CDLF32-30	2170	1660	2050	1350
30000	Coil in Tank	460	2-1/2"	22	16 m3/h   4.44 l/s	CDLF16-2	43	16 m3/h   4.44 l/s	CHLF16-40	2170	1560	1980	1350
30000	Plate Pack	220	2-1/2"	22	16 m3/h   4.44 l/s	CDLF16-2	43	16 m3/h   4.44 l/s	CHLF16-40	2170	1560	1980	1350
50000	Coil in Tank	620	3"	27	32 m3/h   8.88 l/s	CDLF32-20	40	32 m3/h   8.88 l/s	CDLF32-30	2790	1760	2050	1650
40000	Plate Pack	240	2-1/2"	23	20 m3/h   5.55 l/s	CDLF20-2	40	32 m3/h   8.88 l/s	CDLF32-30	2170	1660	2050	1350
40000	Coil in Tank	580	2-1/2"	23	20 m3/h   5.55 l/s	CDLF20-2	40	32 m3/h   8.88 l/s	CDLF32-30	2790	1760	2050	1650
60000	Coil in Tank	750	3"	27	32 m3/h   8.88 l/s	CDLF32-20	40	32 m3/h   8.88 l/s	CDLF32-30	3140	2200	2000	1850
40000	Plate Pack	240	2-1/2"	23	20 m3/h   5.55 l/s	CDLF20-2	40	32 m3/h   8.88 l/s	CDLF32-30	2790	1760	2050	1650
50000	Plate Pack	345	3"	27	32 m3/h   8.88 l/s	CDLF32-20	40	32 m3/h   8.88 l/s	CDLF32-30	2790	1760	2050	1650
50000	Coil in Tank	620	3"	27	32 m3/h   8.88 l/s	CDLF32-20	40	32 m3/h   8.88 l/s	CDLF32-30	3140	2200	2000	1850
60000	Plate Pack	345	3"	27	32 m3/h   8.88 l/s	CDLF32-20	40	32 m3/h   8.88 l/s	CDLF32-30	3140	2200	2000	1850
50000	Plate Pack	345	3"	27	32 m3/h   8.88 l/s	CDLF32-20	40	32 m3/h   8.88 l/s	CDLF32-30	3140	2200	2000	1850
60000	Coil in Tank	750	3"	27	32 m3/h   8.88 l/s	CDLF32-20	40	32 m3/h   8.88 l/s	CDLF32-30	3140	2200	2000	1850
60000	Plate Pack	345	3"	27	32 m3/h   8.88 l/s	CDLF32-20	40	32 m3/h   8.88 l/s	CDLF32-30	3140	2200	2000	1850

## Safety Features

- Compressor Overheating Protection
- Over-Current Protection
- High- and Low-Pressure Protection
- Temperature Protection via High and Low Alarm
- Flow Switch Protection
- Phase Sequence or Missing Phase Protection
- Low Water Level Alarm Protection

# ThermalX





Aqua Cooler's Thermal X range contains our R Series design which has stood the test of time in the harshest Australian conditions. With over 5,500 installs worldwide, Aqua Cooler's R Series is backed by 50 years of history and experience. Each R Series includes our advanced PCB controller as a standard feature which allows advanced control including a web-based interface via IP, HLI capability via RS485, Modbus, Bacnet, and more.

## Features

- Thermal X Series industrial process chillers are Australian designed and tested.
- A high ambient temperature operation of up to 46°C with R134a.
- Advanced PCB controller with Australian designed software allows advanced control - Web page interface via IP, HLI capability RS485, Modbus, Bacnet, and more.
- Extensive parameter settings to suit a variety of applications.
- Advanced safety controls will ensure your chiller remains safe. Features such as phase protection, thermal overload, low flow protection, water freeze protection and more as a standard feature.
- Improved data logging via USB or webpage download.
- Variable speed drive options on compressors and fans ensure your Thermal X chiller is only working as hard as it needs to.
- Open or closed loop pipework options to suit the requirements of the process.
- Environmentally friendly refrigerant options of R134a or R407c.
- High efficiency scroll and screw compressors made by industry leading brands.
- Manually controlled water bypass valve to reduce water flow to suit applications.
- View critical parameters such as pressures, water flow rate, and temperatures via the PCB.

## Benefits

- Using the advanced PCB, multi-chiller control options are available that allow benefits such as redundancy control, remote start / stop and performance monitoring.
- Your Aqua Cooler R Series industrial process chiller can be tailored to your unique requirements ensuring you have the most effective and efficient solution to your project. Talk to us about any required customisations.
- Wide operating limits means Aqua Cooler's R Series can be used in a broad range of situations, particularly important for the harsh Australian climate.
- Internal buffer tanks ensure that temperature remains consistent under varying loads.
- Rely on over 50 years of industry experience and over 5,500 Thermal X chillers to be sure you're making the right investment.

**AQUA**  
**COOLER**

## Quality Assured



All Aqua Cooler chillers are tested throughout the manufacturing process followed by a substantial and comprehensive test upon completion. Coupled with the world's most trusted component brands, Aqua Cooler's products are designed and built to last.

# Specifications: 1-17 kW

Model	Cooling Capacity		Input Power		Current Draw (A)		Refrigerant		Control method	Type	Compressor		
	kW	kW	Power	OCD	MCC	Type	Charge (kg)	Number in Chiller			Brand	Power (kW)	
R150A1-A-CC	1.6	1.8	1PH~220V/50HZ	7.5	10.5	R134a	1	Expansion Valve	Rotary	1	Tecumseh	0.9	
R150A1-C-CC	1.8	1.7		5.5	8.5	R407c	0.9			1	Panasonic	0.8	
R150A1-A-PP	2	1.8		7.5	10.5	R134a	1			1	Tecumseh	0.9	
R150A1-C-PP	2.5	1.7		6	8.5	R407c	0.9			1	Panasonic	0.8	
R180A1-A-CC	2.3	1.9		8.5	18	R134a	1.4			1	Emerson	1	
R180A1-C-CC	2	2.0		7.5	12	R407c	1.6			1	Danfoss	1	
R180A1-A-PP	3.5	2.0		6.5	18	R134a	1.4			1	Emerson	1	
R180A1-C-PP	3.8	2.2		8	12	R407c	1.6			1	Danfoss	1.3	
R230A1-A-CC	2.7	2.2		8	20	R134a	2.1			1	Emerson	1.3	
R230A1-C-CC	2.9	2.3		8.5	17	R407c	2			1	Danfoss	1.4	
R230A1-A-PP	3.8	2.3		8.5	20	R134a	2.1			1	Emerson	1.4	
R230A1-C-PP	4.7	2.6		9.5	17	R407c	2			1	Danfoss	1.7	
R300A3-A-CC	3.8	2.6		3PH~415V/50HZ	6.5	13	R134a			2.6	Expansion Valve	Scroll	1
R300A3-C-CC	3.5	2.7	6		9.5	R407c	2.6		1	Danfoss			1.8
R300A3-A-PP	5	2.7	6.5		13	R134a	2.6		1	Danfoss			1.7
R300A3-C-PP	5.7	3.0	6		9.5	R407c	2.6		1	Danfoss			2.1
R330A3-A-CC	4.5	3.0	6.5		13	R134a	3		1	Emerson			2.1
R330A3-C-CC	4	3.2	7		11	R407c	3.2		1	Danfoss			2.2
R330A3-A-PP	6	3.2	6.5		13	R134a	3		1	Emerson			2.3
R330A3-C-PP	7	3.8	7.5		11	R407c	3.2		1	Danfoss			2.9
R420A3-A-CC	6	4.2	10		18	R134a	3.1		1	Emerson			2.2
R420A3-C-CC	6	4.4	8		13	R407c	4.2		1	Emerson			2.4
R420A3-A-PP	8	4.3	10		18	R134a	3.1		1	Emerson			2.2
R420A3-C-PP	9	4.4	8		13	R407c	4.2		1	Emerson			2.4
R540A3-A-CC	8	4.5	11.5		18.5	R134a	3.5		1	Danfoss			2.5
R540A3-C-CC	8	4.7	8.5		14	R407c	3.2		1	Emerson			2.7
R540A3-A-PP	10	4.5	11.5		18.5	R134a	3.5		1	Danfoss			2.5
R540A3-C-PP	11	4.7	8.5		14	R407c	3.2		1	Emerson			2.7
R670A3-A-CC	9	5.1	13		21	R134a	4.2	1	Danfoss	3.1			
R670A3-C-CC	11	5.9	9.5		17.5	R407c	5.5	1	Danfoss	3.9			
R670A3-A-PP	11	5.2	13		21	R134a	4.2	1	Danfoss	3.1			
R670A3-C-PP	15	6.2	12		17.5	R407c	5.5	1	Danfoss	4.2			
R830A3-A-CC	12	5.9	15.5	28	R134a	4.8	1	Danfoss	3.9				
R830A3-C-CC	14	6.5	12	19	R407c	5.9	1	Danfoss	4.5				
R830A3-A-PP	14	6.0	15.5	28	R134a	4.8	1	Danfoss	4				
R830A3-C-PP	17	6.5	12	19	R407c	5.9	1	Danfoss	4.5				

## Notes

- Nominal cooling capacity is calculated with 7°C chilled-water supply and 35°C inlet cooling air temperature at system flow rate and pressure.
  - Working conditions:
    - Temperature range of chilled fluid between 1°C and 23 °C for -CC models or 1°C and 17 °C for -PP models. Use of glycol recommended for set points under 3°C.
    - Temperature difference between inlet and outlet chilled fluid between 3°C and 10°C
    - We recommend the use of R134a when ambient temperatures are expected to reach 40°C+
- \* Operation current draw (OCD) per phase at design point - Measure under Evaporating Temp: 2°C | Condensing Temp: 50°C | Ambient Temp: 35°C | Superheat: 5K | Subcooling: 2K
- \* The flow rate is the nominal flow rate at the available lift. The actual flow rate will depend on the load requirement and the pump curve. Non-standard pump available on request.

Condenser		Evaporator			Water Pump Standard Option Stainless Steel #304 Pump / Pipes			Upgraded Pump Options	Dimensions and Weight			
Type	Cooling air flow (m <sup>3</sup> /h)	Type	Tank volume	Inlet/outlet pipe calibre	Avail Lift (m)	Flow Rate (L/s)	Model		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
Hydrophilic Aluminium fin with low noise rotor fan	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60	Contact us for specialised pumping requirements	1170	640	1335	150
	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	150
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	150
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	150
	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	160
	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	160
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	160
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	160
	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	170
	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	170
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	170
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	170
	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	180
	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	180
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	180
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	180
	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	190
	2736	Tank with coil	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	190
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	190
	2736	Plate Pack	80	1"	42	2 m <sup>3</sup> /h   0.56 l/s	CHLF2-60		1170	640	1335	190
	16500	Tank with coil	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	350
	16500	Tank with coil	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	350
	16500	Plate Pack	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	350
	16500	Plate Pack	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	350
	16500	Tank with coil	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	380
	16500	Tank with coil	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	380
	16500	Plate Pack	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	380
	16500	Plate Pack	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	380
	16500	Tank with coil	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	410
	16500	Tank with coil	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	410
	16500	Plate Pack	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	410
	16500	Plate Pack	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60		1685	810	1600	410
16500	Tank with coil	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60	1685	810	1600	440		
16500	Tank with coil	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60	1685	810	1600	440		
16500	Plate Pack	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60	1685	810	1600	440		
16500	Plate Pack	180	1"	45	4 m <sup>3</sup> /h   1.11 l/s	CHLF4-60	1685	810	1600	440		

## Safety Features

- Phase Sequence or Missing Phase Protection
- Low Water Flow Protection
- High Pressure Protection
- Low Pressure Protection
- Thermal Overload Protection
- High and Low CHW Supply Temperature Warning and Alarms
- High and Low CHW Return Temperature Warning and Alarms
- High Ambient Alarms
- Low Water Tank Alarm

# Specifications: 18-112 kW

Model	Cooling Capacity		Input Power		Current Draw (A)		Refrigerant			Compressor		
	kW	kW	Power	OCD	MCC	Type	Charge (kg)	Control method	Type	Number in Chiller	Brand	Power (kW)
R1000A3-C-CC	18	7.5	3PH~415V/50HZ	14.5	25	R407c	7.9	Expansion Valve	Scroll	1	Danfoss	5.5
R1000A3-A-CC	16	7.1		19.5	40	R134a	6.4			1	Danfoss	5.1
R1000A3-A-PP	19	8.4		20	40	R134a	6.4			1	Danfoss	6.4
R1000A3-C-PP	21	7.6		14.5	25	R407c	7.9			1	Danfoss	5.6
R1200A3-A-CC	17	8.5		22	40	R134a	7			1	Danfoss	6.5
R1200A3-C-CC	21	9.0		16	40	R407c	9.2			1	Danfoss	6.9
R1200A3-A-PP	20	8.9		22	40	R134a	7			1	Danfoss	6.9
R1200A3-C-PP	26	9.6		16	40	R407c	9.2			1	Danfoss	7.6
R1330A3-A-CC	20	9.7		24	39	R134a	8.4			1	Danfoss	7.6
R1330A3-C-CC	23	10.5		19	31	R407c	10.4			1	Danfoss	8.5
R1330A3-A-PP	23	9.9		24	39	R134a	8.4			1	Danfoss	7.8
R1330A3-C-PP	27	11.1		19.5	31	R407c	10.4			1	Danfoss	9.1
R1500A3-A-CC	24	10.9		27.5	49.5	R134a	8.9			1	Emerson	6.9
R1500A3-C-CC	29	11.9		18	38.5	R407c	12.4			1	Emerson	7.9
R1500A3-A-PP	27	11.1		27.5	49.5	R134a	8.9			1	Emerson	7.1
R1500A3-C-PP	34	12.0		18.5	38.5	R407c	12.4			1	Emerson	8.1
R2000A3-A-CC	36	16.2		32.5	65.5	R134a	14.2			1	Emerson	12.2
R2000A3-C-CC	35	15.0		26	47.5	R407c	16.3			1	Emerson	11
R2000A3-A-PP	38	16.3		32.5	65.5	R134a	14.2			1	Emerson	12.3
R2000A3-C-PP	41	15.3		26	49.5	R407c	16.3			1	Emerson	11.3
R2500A3-A-CC	44	19.5	35	83.5	R134a	17.7	1	Emerson	15.5			
R2500A3-C-CC	45	19.0	27	52.5	R407c	22.3	1	Emerson	15			
R2500A3-A-PP	48	19.9	35.5	83.5	R134a	17.7	1	Emerson	15.9			
R2500A3-C-PP	54	19.7	27	52.5	R407c	22.3	1	Emerson	15.7			

## Notes

- Nominal cooling capacity is calculated with 7°C chilled-water supply and 35°C inlet cooling air temperature at system flow rate and pressure.
  - Working conditions:
    - Temperature range of chilled fluid between 1°C and 23 °C for -CC models or 1°C and 17 °C for -PP models. Use of glycol recommended for set points under 3°C.
    - Temperature difference between inlet and outlet chilled fluid between 3°C and 10°C
    - We recommend the use of R134a when ambient temperatures are expected to reach 40°C+
- \* Operation current draw (OCD) per phase at design point - Measure under Evaporating Temp: 2°C | Condensing Temp: 50°C | Ambient Temp: 35°C | Superheat: 5K | Subcooling: 2K
- \* The flow rate is the nominal flow rate at the available lift. The actual flow rate will depend on the load requirement and the pump curve. Non-standard pump available on request.

Condenser		Evaporator			Water Pump Standard Option Stainless Steel #304 Pump / Pipes			Dimensions and Weight				
Type	Cooling air flow (m3/h)	Type	Tank volume	Inlet/outlet pipe calibre	Avail Lift (m)	Flow Rate (L/s)	Model	Upgraded Pump Options	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
Hydrophilic Aluminium fin with low noise rotor fan	16500	Tank with coil	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60	Contact us for specialised pumping requirements	1685	810	1600	470
	16500	Tank with coil	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	470
	16500	Plate Pack	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	470
	16500	Plate Pack	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	470
	16500	Tank with coil	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	500
	16500	Tank with coil	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	500
	16500	Plate Pack	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	500
	16500	Plate Pack	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	500
	16500	Tank with coil	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	530
	16500	Tank with coil	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	530
	16500	Plate Pack	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	530
	16500	Plate Pack	180	1"	45	4 m3/h   1.11 l/s	CHLF4-60		1685	810	1600	530
	27000	Tank with coil	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	700
	27000	Tank with coil	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	700
	27000	Plate Pack	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	700
	27000	Plate Pack	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	700
	27000	Tank with coil	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	750
	27000	Tank with coil	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	750
	27000	Plate Pack	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	750
	27000	Plate Pack	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	750
	27000	Tank with coil	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	850
	27000	Tank with coil	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	850
	27000	Plate Pack	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	850
	27000	Plate Pack	495	1½"	39	12 m3/h   3.33 l/s	CHLF12-40		2615	1000	1830	850

## Safety Features

- Phase Sequence or Missing Phase Protection
- Low Water Flow Protection
- High Pressure Protection
- Low Pressure Protection
- Thermal Overload Protection
- High and Low CHW Supply Temperature Warning and Alarms
- High and Low CHW Return Temperature Warning and Alarms
- High Ambient Alarms
- Low Water Tank Alarm

# GLADIATOR TITAN



For applications requiring an extra level of redundancy, the Gladiator Titan specification builds on the exceptional performance of our Gladiator range by introducing refrigeration circuit redundancy. The Titan specification is powered by our Advanced PCB controller which allows advanced control including a web-based interface via IP, HLI capability via RS485, Modbus, Bacnet, and more.

## Features

- A high ambient temperature operation of up to 46°C with R134a (R407c is also available).
- Advanced PCB controller with Australian designed software allows advanced control - Web page interface via IP, HLI capability RS485, Modbus, Bacnet, and more.
- Extensive parameter settings to suit a variety of applications.
- Advanced safety controls will ensure your chiller remains safe. Features such as phase protection, thermal overload, low flow protection, water freeze protection and more as standard chiller features.
- Improved data logging via USB or webpage download.
- Variable speed drive options ensure your Gladiator Plus chiller is only working as hard as it needs to.
- Open or closed loop pipework options to suit the requirements of the process.
- Environmentally friendly refrigerant options of R134a or R407c.
- High efficiency scroll compressors made by industry leading brands.
- Dual compressors for redundancy.
- Manually controlled water bypass valve to reduce water flow to suit applications.
- View critical parameters such as pressures, water flow rate, and temperatures via the PCB.

## Quality Assured

All Aqua Cooler chillers are tested throughout the manufacturing process followed by a substantial and comprehensive test upon completion. Coupled with the world's most trusted component brands, Aqua Cooler's products are designed and built to last.



## Benefits

- Using the advanced PCB, multi-chiller control options are available that allow benefits such as redundancy control, remote start / stop and performance monitoring.
- Your Aqua Cooler Gladiator Titan Series industrial process chiller can be tailored to your unique requirements ensuring you have the most effective and efficient solution to your project. Talk to us about any required customisations.
- Wide operating limits means Aqua Cooler's Gladiator Titan Series can be used in a broad range of situations, particularly important for the harsh Australian climate.
- Internal buffer tanks ensure that temperature remains more consistent under varying loads.
- Dual redundant compressors to soften impact of any service interventions required.
- Rely on over 50 years of industry experience to be sure you're making the right investment.

**AQUA**  
**COOLER**

# Specifications: 24-106 kW

## Gladiator Titan

Model	Cooling Capacity		Input Power		Current Draw (A)		Refrigerant		Compressor			
	kW	kW	Power	OCD	MCC	Type	Charge (kg)	Control method	Type	Number in Chiller	Brand	Power (kW)
GA10(D)-A-PP-TTN	24	8.72	3PH/415V/50HZ	20.5	40.5	R134A	7.2	Expansion Valve	Scroll	2	Danfoss	3.42
GA10(D)-C-PP-TTN	27	8.98		17	33.5	R407c	6			2	Danfoss	3.55
GA15(D)-A-PP-TTN	34	12.5		29	63.5	R134A	12			2	Danfoss	4.7
GA15(D)-C-PP-TTN	37	12.68		24.5	39	R407c	10			2	Danfoss	5
GA18(D)-A-PP-TTN	41	16.58		36.5	73	R134A	12			2	Danfoss	5.84
GA18(D)-C-PP-TTN	47	17.08		33	52.5	R407c	10			2	Danfoss	6.3
GA20(D)-A-PP-TTN	51	19.14		41	79	R134A	15			2	Danfoss	7.12
GA20(D)-C-PP-TTN	55	19.46		38	67	R407c	12			2	Danfoss	7.28
GA25(D)-A-PP-TTN	67	26.3		57	112.5	R134A	18			2	Danfoss	9.87
GA25(D)-C-PP-TTN	66	21.14		41	67	R407c	15			2	Danfoss	8.12
GA30(D)-A-PP-TTN	84	31.36		65	151	R134A	24			2	Danfoss	12.2
GA30(D)-C-PP-TTN	82	28.68		54	68.5	R407c	18			2	Danfoss	11.06
GA35(D)-A-PP-TTN	106	36.32		68.5	171	R134A	24			2	Danfoss	14.68

## Notes

- Nominal cooling capacity is calculated with 7°C chilled-water supply and 35°C inlet cooling air temperature at system flow rate and pressure.
  - Working conditions:
    - Temperature range of chilled fluid between 1°C and 23 °C for -CC models or 1°C and 17 °C for -PP models. Use of glycol recommended for set points under 3°C.
    - Temperature difference between inlet and outlet chilled fluid between 3°C and 10°C
    - We recommend the use of R134a when ambient temperatures are expected to reach 40°C+
- \* Operation current draw (OCD) per phase at design point - Measure under Evaporating Temp: 2°C | Condensing Temp: 50°C | Ambient Temp: 35°C | Superheat: 5K | Subcooling: 2K
- \* The flow rate is the nominal flow rate at the available lift. The actual flow rate will depend on the load requirement and the pump curve. Non-standard pump available on request.



Condenser		Evaporator		Water Pump Standard Option Stainless Steel #304 Pump / Pipes				Upgraded Pump Options	Dimensions and Weight			
Type	Cooling air flow (m3/h)	Type	Tank volume	Inlet/outlet pipe calibre	Avail Lift (m)	Flow Rate (L/s)	Model		Length (mm)	Width (mm)	Height (mm)	Weight (kg)
Hydrophilic Aluminium fin with low noise rotor fan	2300	Plate Pack	85	1-1/2"	34	2.23	CHLF8-40	Contact us for specialised pumping requirements	1140	1120	1050	450
	2300	Plate Pack	85	1-1/2"	34	2.23	CHLF8-40		1140	1120	1050	400
	4500	Plate Pack	145	1-1/2"	43	2.78	CDMF10-5		1530	1560	1600	1000
	3200	Plate Pack	145	1-1/2"	43	2.78	CDMF10-5		1300	1440	1500	700
	4500	Plate Pack	170	2"	47	4.17	CDMF15-4		1530	1560	1600	1100
	3200	Plate Pack	170	2"	47	4.17	CDMF15-4		1300	1440	1500	800
	4500	Plate Pack	170	2"	47	4.17	CDMF15-4		1530	1560	1600	1150
	4500	Plate Pack	170	2"	47	4.17	CDMF15-4		1530	1560	1600	900
	4800	Plate Pack	170	2"	47	4.17	CDMF15-4		1850	1980	2000	1500
	4500	Plate Pack	170	2"	47	4.17	CDMF15-4		1530	1560	1600	1200
	6500	Plate Pack	220	2"	47	5.56	CDMF20-4		2000	2260	2000	1650
	4800	Plate Pack	220	2"	47	5.56	CDMF20-4		1850	1980	2000	1400
	6500	Plate Pack	240	2"	47	5.56	CDMF20-4		2000	2260	2000	1700

## Safety Features

- Phase Sequence or Missing Phase Protection
- Low Water Flow Protection
- High Pressure Protection
- Low Pressure Protection
- Thermal Overload Protection
- High and Low CHW Supply Temperature Warning and Alarms
- High and Low CHW Return Temperature Warning and Alarms
- High Ambient Alarms
- Low Water Tank Alarm



GLADIATOR  
**HYDRA**



The Gladiator Hydra specification provides ultimate level of protection for processes that are mission critical. Utilising both refrigeration and water circuit redundancy, Hydra specification makes sure you are protected when you need it the most. The Hydra specification is powered by our Advanced PCB controller, allowing advanced control including a web-based interface via IP, HLI capability via RS485, Modbus, Bacnet, and more.

## Features

- A high ambient temperature operation of up to 46°C with R134a (R407c also available).
- Advanced PCB controller with Australian designed software allows advanced control - Web page interface via IP, HLI capability RS485, Modbus, Bacnet, and more.
- Extensive parameter settings to suit a variety of applications.
- Advanced safety controls will ensure your chiller remains safe. Features such as phase protection, thermal overload, low flow protection, water freeze protection and more as standard chiller features.
- Improved data logging via USB or webpage download.
- Variable speed drive options are available to ensure your Gladiator Hydra chiller is only working as hard as it needs to.
- Open or closed loop pipework options to suit the requirements of the process.
- Environmentally friendly refrigerant options of R134a or R407c.
- High efficiency scroll made by industry leading brands.
- Dual compressor for redundancy of refrigeration circuit.
- Dual pumps for redundancy of water circuit.
- Manually controlled water bypass valve to reduce water flow to suit applications.
- View critical parameters such as pressures, water flow rate, and temperatures via the PCB.

## Benefits

- Using the advanced PCB, multi-chiller control options are available that allow benefits such as redundancy control, remote start / stop and performance monitoring.
- Your Aqua Cooler Gladiator Hydra Series industrial process chiller can be tailored to your unique requirements ensuring you have the most effective and efficient solution to your project. Talk to us about any required customisations.
- Wide operating limits means Aqua Chiller's Gladiator Hydra Series can be used in a broad range of situations, particularly important for the harsh Australian climate.
- Internal buffer tanks ensure that temperature remains consistent under varying loads.
- Dual redundant compressors and pumps to soften impact of any service interventions required.

**AQUA**  
**COOLER**

## Quality Assured



All Hydra chillers are tested throughout the manufacturing process followed by a substantial and comprehensive test upon completion. Coupled with the world's most trusted component brands, Aqua Cooler's products are designed and built to last.

# Specifications: 25-100 kW

## Gladiator Hydra

Model	Cooling Capacity		Input Power		Current Draw (A)		Refrigerant		Compressor			
	kW	kW	Power	OCD	MCC	Type	Charge (kg)	Control method	Type	Number in Chiller	Brand	Power (kW)
GA10(D)-A-PP-HYD	25	10.5	3PH/415V/50HZ	23	43.5	R134A	7.2	Expansion Valve	Scroll	2	Danfoss	3.42
GA10(D)-C-PP-HYD	27	10.5		19.5	36.5	R407c	6			2	Danfoss	3.55
GA15(D)-A-PP-HYD	34	15		33	67.5	R134A	12			2	Danfoss	4.7
GA15(D)-C-PP-HYD	37	15		28.5	43	R407c	10			2	Danfoss	5
GA18(D)-A-PP-HYD	41	21		43	80	R134A	12			2	Danfoss	5.84
GA18(D)-C-PP-HYD	47	21.5		40	59	R407c	10			2	Danfoss	6.3
GA20(D)-A-PP-HYD	51	23.5		48	86	R134A	15			2	Danfoss	7.12
GA20(D)-C-PP-HYD	55	23.5		44.5	74	R407c	12			2	Danfoss	7.28
GA25(D)-A-PP-HYD	68	32		66.5	122	R134A	18			2	Danfoss	9.87
GA25(D)-C-PP-HYD	67	25.5		48	74	R407c	15			2	Danfoss	8.12
GA30(D)-A-PP-HYD	85	37		74.5	160.5	R134A	24			2	Danfoss	12.2
GA30(D)-C-PP-HYD	83	34.5		63.5	78	R407c	18			2	Danfoss	11.06
GA35(D)-A-PP-HYD	106	42		78	180.5	R134A	24			2	Danfoss	14.68

## Notes

- Nominal cooling capacity is calculated with 7°C chilled-water supply and 35°C inlet cooling air temperature at system flow rate and pressure.
  - Working conditions:
    - Temperature range of chilled fluid between 1°C and 23 °C for -CC models or 1°C and 17 °C for -PP models. Use of glycol recommended for set points under 3°C.
    - Temperature difference between inlet and outlet chilled fluid between 3°C and 10°C
    - We recommend the use of R134a when ambient temperatures are expected to reach 40°C+
- \* Operation current draw (OCD) per phase at design point - Measure under Evaporating Temp: 2°C | Condensing Temp: 50°C | Ambient Temp: 35°C | Superheat: 5K | Subcooling: 2K
- \* The flow rate is the nominal flow rate at the available lift. The actual flow rate will depend on the load requirement and the pump curve. Non-standard pump available on request.

Condenser		Evaporator			Water Pump Standard Option Stainless Steel #304 Pump / Pipes			Dimensions and Weight			
Type	Cooling air flow (m <sup>3</sup> /h)	Type	Tank volume	Inlet/outlet pipe calibre	Avail Lift (m)	Flow Rate (L/s)	Model	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
Hydrophilic Aluminium fin with low noise rotor fan	2300	Plate Pack	85	1-1/2"	34	2.23	CHLF8-40*2	1140	1120	1050	470
	2300	Plate Pack	85	1-1/2"	34	2.23	CHLF8-40*2	1140	1120	1050	420
	4500	Plate Pack	145	1-1/2"	43	2.78	CDMF10-5*2	1530	1560	1600	1020
	3200	Plate Pack	145	1-1/2"	43	2.78	CDMF10-5*2	1300	1440	1500	720
	4500	Plate Pack	170	2"	47	4.17	CDMF15-4*2	1530	1560	1600	1120
	3200	Plate Pack	170	2"	47	4.17	CDMF15-4*2	1300	1440	1500	820
	4500	Plate Pack	170	2"	47	4.17	CDMF15-4*2	1530	1560	1600	1170
	4500	Plate Pack	170	2"	47	4.17	CDMF15-4*2	1530	1560	1600	920
	4800	Plate Pack	170	2"	47	4.17	CDMF15-4*2	1850	1980	2000	1520
	4500	Plate Pack	170	2"	47	4.17	CDMF15-4*2	1530	1560	1600	1220
	6500	Plate Pack	220	2"	47	5.56	CDMF20-4*2	2000	2260	2000	1670
	4800	Plate Pack	220	2"	47	5.56	CDMF20-4*2	1850	1980	2000	1420
	6500	Plate Pack	240	2"	47	5.56	CDMF20-4*2	2000	2260	2000	1720

## Safety Features

- Phase Sequence or Missing Phase Protection
- Low Water Flow Protection
- High Pressure Protection
- Low Pressure Protection
- Thermal Overload Protection
- High and Low CHW Supply Temperature Warning and Alarms
- High and Low CHW Return Temperature Warning and Alarms
- High Ambient Alarms
- Low Water Tank Alarm



Your Partner in Cool.



**Internet**

[www.aquacooler.com.au](http://www.aquacooler.com.au)  
[info@aquacooler.com.au](mailto:info@aquacooler.com.au)

**Address**

U14, 2-12 Knobel Court  
Shailer Park Qld 4128

**Phone Numbers**

Sales: 1300 278 226  
Service: 1800 278 226

Your Partner in Cool.



Refrigerant Trading Authorisation: AU41196

**AQUA**  
**COOLER**

Aqua Cooler is an Imaging Solutions  
Group company | [www.imagingsol.com.au](http://www.imagingsol.com.au)