

Aqua

The Temperature
Control People.

The Aqua Advance Range



R32
Refrigerant

Ozone Depletion
Potential (ODP)
is **zero**

This is

Advanced Capability Cooling

Our Aqua Advance chillers set a new standard when it comes to handling the challenges of the process market.

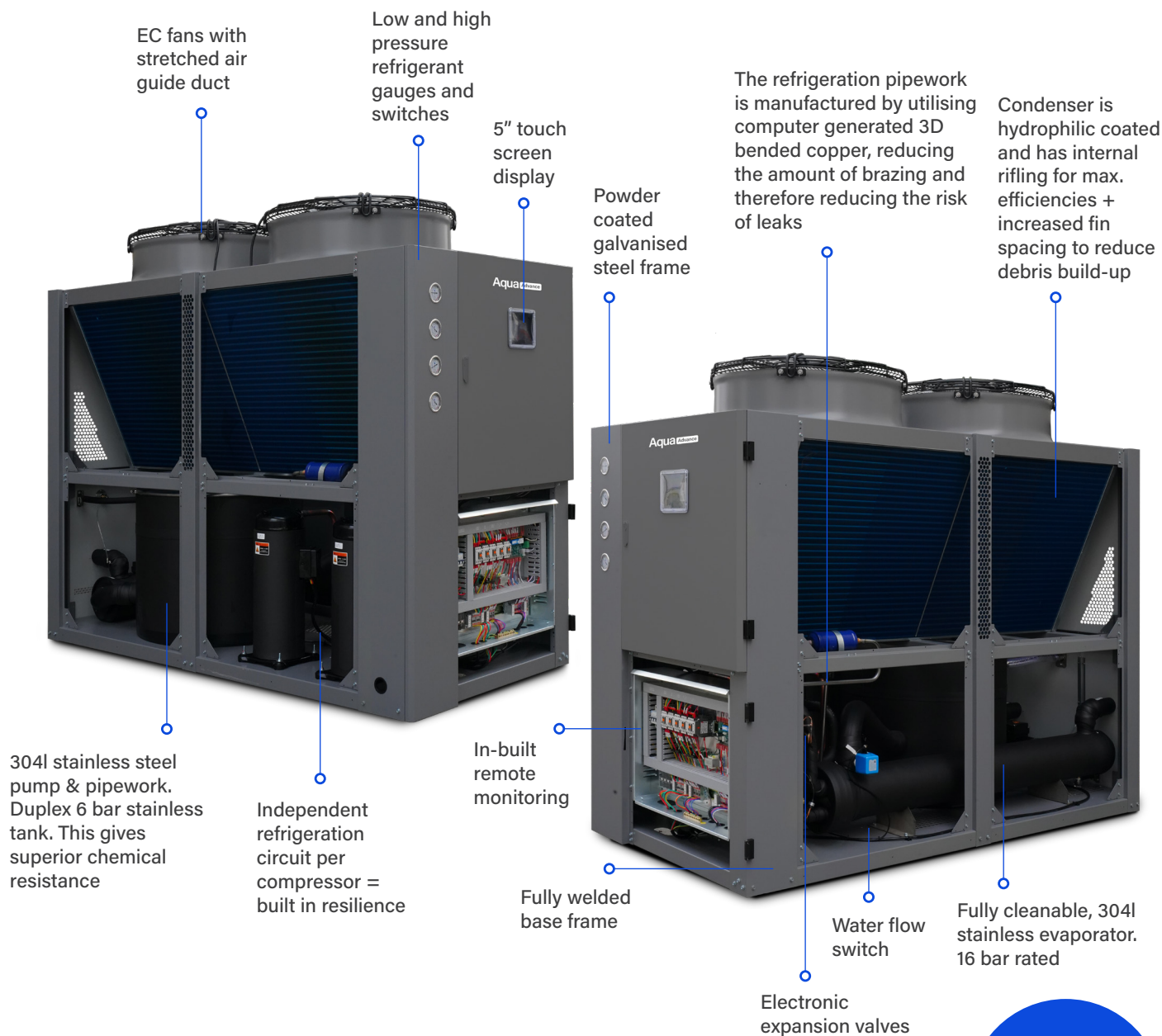
The range covers cooling capacities from 1kW to 1MW+, and works with process fluid temperatures from -35°C to +30°C.

Aqua Advance units are the **ONLY** chiller on the market with stainless steel wetted parts. They combine the latest energy saving technology alongside an intuitive user interface which results in a highly durable, sustainable and reliable solution.



Aqua Advance Aqua Advance-Free

Advanced features and benefits



Durability

All chiller main components are manufactured in stainless steel for zero risk of contamination in your process.

Ultra-strength fully welded frame and laser welded evaporators and tanks for perfect joins, with leak resistant 3D bended copper tubes.



Sustainability

All units operate on low GWP R32 refrigerant with zero ODP, an environmentally friendly alternative to traditional refrigerants that can be easily reused and recycled.

Units over 10kW have EC fans with electronic expansion valve/s and stretched air guide ducts.



Reliability

Chillers with multiple compressors come with independent refrigeration circuits to ensure chiller performance can be sustained in the event of compressor maintenance.

In-built remote monitoring enables 24/7 performance tracking and fault notification. Get ahead of problems and reduce downtime.

Free cooling is available in units as small as 20kW.

Integrated Free Cooling

Our Advance Free units incorporate a built-in free cooling coil, enabling free cooling at higher ambient temperatures than with any other chiller brand on the market. This achieves total free cooling within 7°C of ambient air temperature (20kW units upwards) creating energy savings of 80+%.

This method of cooling reduces energy bills & maintenance costs, helping to drive impressive year on year cost savings and return on investment, and improves the sustainability of your operations.

Save energy, save money, save the planet.



24/7 Support

At Aqua we are with you every step of the way. Once we have commissioned, designed and installed your equipment, we provide 24hr maintenance support, wherever you are.

This includes nationwide Aqua breakdown cover with emergency repair and genuine replacement spare parts.

**7 Year
Warranty**

7 year Extended Warranty

Every Aqua Advance chiller comes with our market leading 7-year warranty when supplied with a Planned Preventative Maintenance agreement. This gives you complete peace of mind with fixed maintenance costs and safeguards the lifespan of your chiller, saving you further over the longer term.



Design Flexibility

An Aqua Advance chiller is highly configurable and can be fully customised for the intricacies of your specific process requirements. For example, we can add ATEX rated Duplex stainless steel pumps if you're operating within a hazardous environment.

We also have in-house design and mechanical services teams, who can take your requirement from conceptual design stage right through to installation and commissioning.

Technical Specification

Aqua Advance

	Aqua Model	M10	M20	M50	051	081	101	121	161	252	352	382	603	704	904
Cooling capacity	kW	3.6	5.6	9.7	15	23	30.5	35.5	44	61	71	88	110	142	176
	kcal/hr	3096	4816	8342	12900	19800	26230	30530	37810	52460	61060	75680	94600	122120	151360
Voltage	V/Ph/Hz	230/1/50			400/3/50										
Total power input	kW	1.4	2.1	3.8	5.6	7.7	11.2	12.4	14.9	21.7	24.1	29	37.1	47.6	57.7
Rated current	Amps	6.97	11.34	17.34	10.8	14.9	21.3	22.7	27.4	41.5	44.3	52.9	67	81.3	104.3
Full load current	Amps	7.8	12	21	15	24.5	26	28.5	35	55	59	68	89	118	136
Maximum starting current	Amps	24.5	38.3	73.3	42.4	62.1	89.7	95.9	116	110	117.5	142	140	155	194
Compressor	Type	Rotary type			Scroll										
	kW	0.97	1.5	3.1	4.45	6.35	9	10.2	12.3	18	20.4	24.6	30.6	40.8	49.2
	Number of refrigerant circuits	1	1	1	1	1	1	1	1	2	2	2	3	4	4
Condenser	Material	Copper tube/aluminium fins Hydrophilic coated													
Condenser	Type	AC two speed axial	AC two speed axial	AC two speed axial	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC
Fan Number		1	1	1	2	2	2	2	2	2	2	2	2	3	3
Fan Input power	kW	0.15	0.19	0.19	0.3x2	0.3x2	0.52x2	0.52x2	0.72x2	0.75x2	0.75x2	1.1x2	1.5x2	1.1x3	1.5x3
Air Volume	m ³ /hr	1800	2600	3200	8400	8400	12800	12800	20000	25000	25000	34000	41000	51000	60000
Evaporator	Material	304 Stainless steel													
	Type	Coil in tank			Shell & tube										
	Circuits	1	1	1	1	1	1	1	1	2	2	2	3	4	4
Evaporator capacity	l	N/A	N/A	N/A	10.5	13	17.5	17.5	23	31	38	49	75	85	95
Refrigerant	Type	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32
Pump	Material	304 Stainless steel													
	Type	Magnetic drive			Centrifugal										
	kW	0.25	0.45	0.55	0.55	0.75	1.2	1.2	1.2	2.2	2.2	2.2	3.5	3.5	4
Flow rate	m ³ /hr	0.67	0.96	1.7	2.6	4	5	6	7.6	10	12.2	15.1	20	24.3	28.9
Pressure	Bar	3.3	4.1	3.4	2.8	3	3	2.9	2.7	2.7	2.6	2.5	3.4	2.9	2.9
Tank	Material	304 Stainless steel			Duplex Steel 2205										
Capacity	l	25	35	60	70	100	135	135	155	230	230	230	300	300	300
	Type	Open	Open	Open	Closed/Open										
Water pipe size	DN	15	20	25	25	25	40	40	40	50	50	50	50	65	65
Noise	dBa at 10M	44	44	48	54	53	55	55	57	55	55	55	56	56	57
Weight	Kg	90	115	160	240	290	370	400	460	950	1050	1150	1300	1450	1550
Running weight	Kg	100	132	180	265	320	420	450	500	1050	1150	1320	1450	1630	1700
Dimensions Length Width Height	mm	600	680	750	1350	1510	1770	1770	1770	2500	2500	2500	3000	3400	3600
		600	680	750	680	750	915	915	915	1200	1200	1200	1200	1200	1200
		1240	1360	1480	1360	1480	1672	1672	1745	2220	2220	2220	2220	2220	2220
Package dimensions	mm	650	700	880	1550	1850	1940	1940	1940	2730	2730	2730	3380	3780	3980
		700	770	780	810	900	1020	1020	1020	1300	1300	1300	1300	1300	1300
		1380	1490	1630	1490	1630	1820	1820	1920	2400	2400	2400	2400	2400	2400
Gross weight	Kg	100	132	180	265	320	420	450	500	1050	1150	1320	1450	1630	1700

Aqua Advance-Free

	Aqua Model	081	101	121	161	252	352	382	603	704	904
Cooling capacity	kW	23	30.5	35.5	44	61	71	88	110	142	176
	kcal/hr	19800	26230	30530	37810	52460	61060	75680	94600	122120	151360
Max. Freecooling saving	%	75	67	70	70	71	73	76	73	80	80
Voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Total power input	kW	8.5	13.4	14.6	17.5	25.4	27.8	32.6	41.7	51.9	61.3
Rated current	Amps	18	26.8	29.5	38	51	56	65	84	89	123
Full load current	Amps	21.6	32.2	36.5	47	64	68	78	100	106	147
Maximum starting current	Amps	69	90	103	127	120	130	154	157	162	212
Compressor	Type	Scroll									
	kW	6.35	9	10.2	12.3	18	20.4	24.6	30.6	40.8	49.2
	Number of refrigerant circuits	1	1	1	1	2	2	2	3	4	4
Condenser	Material	Copper tube/aluminium fins. Hydrophilic coated									
Condenser fan	Type	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC
Fan Number		2	2	2	2	2	2	3	3	3	3
Fan Input power	kW	0.52x2	1.1x2	1.1x2	1.5x2	2.2x2	2.2x2	1.5x3	2.2x3	2.2x3	2.2x3
Air Volume	m³/hr	10200	20400	20400	41000	47000	50000	54600	70500	75000	75000
Evaporator	Material	304 Stainless steel									
	Type	Shell & tube									
	Circuits	1	1	1	1	2	2	2	3	4	4
Evaporator capacity	l	13	17.5	17.5	23	31	38	49	75	85	95
Refrigerant	Type	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32
Pump	Material	304 Stainless steel									
	Type	Centrifugal									
	kW	1.1	2.2	2.2	2.2	3	3	3	4.5	4.5	5.5
Flow rate	m³/hr	4	5	6	7.6	10	12.2	15.1	20	24.3	28.9
Pressure	Bar	3.9	4.3	4.2	4.1	3.9	3.8	3.5	4.2	3.9	3
Tank	Material	Duplex Steel 2205									
Capacity	l	100	135	135	155	230	230	230	300	300	300
	Type	Closed/Open									
Water pipe size	DN	25	40	40	40	50	50	50	50	50	65
Noise	dBA at 10M	61	61	61	62	56	56	56	58	68	68
Weight	Kg	320	390	450	900	1050	1250	1450	1550	1900	1900
Running weight	Kg	380	425	500	1000	1200	1380	1600	1700	2100	2100
Dimensions Length Width Height	mm	1770 915 1745	1770 915 1745	2500 1200 2222	2500 1200 2210	3000 1200 2175	3400 1200 2222	3800 1200 2222	3800 1200 2222	4455 1480 2560	4455 1480 2560
Package dimensions	mm	1940 1020 1910	1940 1020 1910	1940 1020 2400	2730 1300 2400	2730 1300 2380	2730 1300 2400	3780 1300 2400	3660 1300 2400	4800 1580 2700	4800 1580 2700
Gross weight	Kg	390	415	500	1050	1200	1510	1600	1700	2100	2100

Free cooling point	°C (based on 20/15°C)	8	8	8	8	8	8	8	8	8	8
Free cooling input power	kW	2.2	4.4	4.4	5.2	7.4	7.4	7.5	11.1	10.1	12.1



Advanced Capability Temperature Control. Always by your side.

From day one we collaborate closely with our customers to ensure every step of the journey, from planning, to design and install, exceeds expectations.

There are important decisions to make at every stage, and our team of experts are always on hand to advise on and explore all potential avenues and outcomes to ensure you get a temperature control solution that is fit for purpose and creates an advantage for your business.



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