



CLADE

**ALDER HYDROCARBON
WATER CHILLERS //**



ALDER HYDRO CARBON WATER CHILLERS //

The Clade Alder chiller range was developed as the next generation in chiller technology, our multi stage strategy allows the Alder range of chillers to vary capacity to meet the demands of the connected load.

With our bespoke PLC control, this range of chillers has the ability to deliver up to 6 stages of cooling capacity on one single plate heat exchanger. This allows our system to service exact duty requirement, therefore delivering significant energy benefits.

Primarily for use in retail and industrial process cooling applications, our chillers can be configured with one common or two totally independent DX circuits.

The Alder range provides one common or two totally independent fluid temperatures, each circuit having a range in capability from -6°C to +18°C delivery temperature.

All Alder chillers operate on R290 using RDM controls.



Duty range is 10-350kW. HT solutions only.



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Key benefits

- R290 refrigerant with a GWP of 3 – future proof solution
- Suitable for industrial, commercial or retail applications
- Low cost in comparison to other natural refrigeration systems
- Solution suitable for sites where ammonia is not an option
- Solution is suitable for sites where CO₂ pipework runs through the demise of another property
- Low refrigerant charge
- Heat recovery options available for heating / hot water wash down etc.
- Full safety shutdown with ATEX rated components
- Ease of maintenance
- Full design service available
- Full after sales service

Clade's medium temperature chillers, the Alder are designed to deliver a fluid temperature range from -10°C to +6°C. The capacity range is from 10 to 400kW.

Primarily used for commercial and industrial process cooling applications all Clade's chillers can be configured with one or two independent DX circuits, thus providing one common or two independent fluid temperatures, each circuit having a delivery temperature range from -6°C to +18 c.

All chillers can also be configured for retail HVAC and air conditioning applications to deliver higher flow temperatures with the Alder range being capable of delivering fluid temperatures from +7°C to +18°C up to 400 kW.

Our chillers have energy efficiency at the core of their design. Therefore all chillers are supplied with Clades' innovative multistage control using RDM TDB technology; we also supply all chillers with heat reclaim option, all HR chillers are capable of supplying a guaranteed heating fluid of 45°C.

To do this Clade has developed its bespoke innovative control strategy, incorporating variable pump capacity and modulating head pressure to guarantee the customers heating requirements.

Alder chillers delivering +12°C fluid and above can be configured with a free cooling function, this allows our chillers to take advantage of lower ambient conditions removing the requirement for mechanical cooling thus delivering huge savings should the ambient conditions allow.

Clade also recognise the importance of water quality when delivering energy efficiency, as a result we offer all our chillers with an optional factory fitted vacuum degasser, this ensures improved water quality, reduces cavitation and prolongs the life of system.

All Clade chillers operate on R290 and incorporate an independently certified safe system of operation to ensure any loss of refrigerant is safely evacuated and managed.



ALDER HYDRO CARBON WATER CHILLERS //

Based on 35°C ambient, 45°C condensing -6°C Fluid flow 0°C Fluid return

EHCM	Duty kW	Head Max	Unit Fans	Compressor Qty	Compressor Type	Dims	Pumps	Supply Voltage	Flow Rate l/s	dB(A)
EHCM40	40	6m	2	4	Scroll	2750 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	1.74	26
EHCM50	50	6m	2	5	Scroll	2750 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	2.17	32
EHCM60	60	6m	3	6	Scroll	2750 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	2.61	38
EHCM70	70	6m	3	7	Scroll	4467 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	3.04	31
EHCM80	80	6m	3	8	Scroll	4467 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	3.48	36
EHCM90	90	10m	4	9	Scroll	4467 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	3.91	41
EHCM100	100	10m	4	10	Scroll	4467 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	4.35	46
EHCM110	110	10m	4	11	Scroll	5679 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	4.78	32
EHCM120	120	10m	5	12	Scroll	6889 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	5.22	37
EHCM145	145	10m	6	4	Reciprocating	5679 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	6.31	45
EHCM170	170	10m	6	4	Reciprocating	4467 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	7.39	35
EHCM195	195	10m	6	6	Reciprocating	4467 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	8.43	39
EHCM220	220	12m	8	6	Reciprocating	5679 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	9.57	45
EHCM260	260	12m	10	6	Reciprocating	5679 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	11.31	48
EHCM310	310	12m	10	8	Reciprocating	6889 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	13.48	54



ALDER HYDRO CARBON WATER CHILLERS //

Based on 35°C ambient, 45°C condensing +12°C Fluid flow 18°C Fluid return

EHCM	Duty kW	Head Max	Unit Fans	Compressor Qty	Compressor Type	Dims	Pumps	Supply Voltage	Flow Rate l/s	dB(A)
EHCH41	41	6m	2	4	Scroll	2750 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	1.74	26
EHCH50	50	6m	2	4	Scroll	2750 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	2.17	32
EHCH58	58	6m	3	4	Scroll	2750 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	2.61	38
EHCH74	74	6m	3	4	Scroll	4467 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	3.04	31
EHCH82	82	6m	3	8	Scroll	4467 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	3.48	36
EHCH87	87	10m	4	6	Scroll	4467 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	3.91	41
EHCH100	100	10m	4	8	Scroll	4467 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	4.35	46
EHCH111	111	10m	4	6	Scroll	5679 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	4.78	32
EHCH116	116	10m	5	8	Scroll	6889 x 1205 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	5.22	37
EHCH148	148	10m	6	8	Scroll	4466 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	6.31	45
EHCH185	185	10m	6	10	Scroll	4467 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	7.39	35
EHCH200	200	10m	6	4	Reciprocating	4467 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	8.43	39
EHCH250	250	12m	8	5	Reciprocating	5679 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	9.57	45
EHCH300	300	12m	10	6	Reciprocating	6889 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	11.31	48
EHCH350	350	12m	10	7	Reciprocating	6889 x 2410 x 2333	Wlio DL Twin Head	380v-420v /3/50Hz	13.48	54



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EXU

Based on 35°C ambient, 45°C condensing -6°C Fluid flow 0c Fluid return

EXU	Duty kW	Head Max	Unit Fans	Compressor Qty	Compressor Type	Dims-mm LxDxH	Pumps	Supply Voltage	Flow Rate l/s	dB(A)
EXU10	10	6m	2	1		2147 x 860 x 1630	Wlio DL Twin Head	380v-420v /3/50Hz	0.43	32
EXU20	20	6m	2	2		2147 x 860 x 1630	Wlio DL Twin Head	380v-420v /3/50Hz	0.87	38
EXU30	30	6m	3	3		2912 x 860 x 1698	Wlio DL Twin Head	380v-420v /3/50Hz	1.35	38
EXU40	40	6m	3	4		2912 x 860 x 1698	Wlio DL Twin Head	380v-420v /3/50Hz	1.74	45

Based on 35°C ambient, 45°C condensing +12°C Fluid flow 18c Fluid return

EXU	Duty kW	Head Max	Unit Fans	Compressor Qty	Compressor Type	Dims-mm LxDxH	Pumps	Supply Voltage	Flow Rate l/s	dB(A)
EXU10	12	6m	2	1		2147 x 860 x 1630	Wlio DL Twin Head	380v-420v /3/50Hz	0.52	32
EXU20	18	6m	2	1		2147 x 860 x 1630	Wlio DL Twin Head	380v-420v /3/50Hz	0.78	32
EXU30	28	6m	3	2		2912 x 860 x 1698	Wlio DL Twin Head	380v-420v /3/50Hz	1.22	38
EXU40	42	6m	3	3		2912 x 860 x 1698	Wlio DL Twin Head	380v-420v /3/50Hz	1.83	38



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