

ALS "E"

Air Cooled Screw Chiller



HFC 134a

ecological refrigerant

- Cooling capacity 553 ÷ 1920 kW
- HFC 134a refrigerant
- Super quiet version down to 65 dBA a 1 mt



Your climate. We're there

Air Cooled Screw Chiller ALS "E"



General features



- **Cooling Capacity 553 ÷ 1920 kW**
- **HFC 134a ecological refrigerant**
- **McQuay "Frame 4" single screw compressor**
- **Stepless capacity control**
- **Electronic expansion valve**
- **Low noise and super quiet version down to 65 dBA at 1 meter**
- **High efficiency "XE" version availability "XE"**

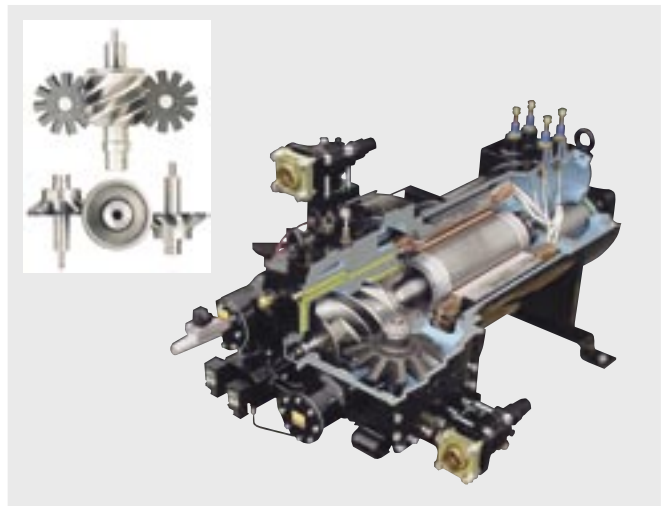
McQuay new single screw compressor

Design philosophy takes great advantages in performances and reliability.

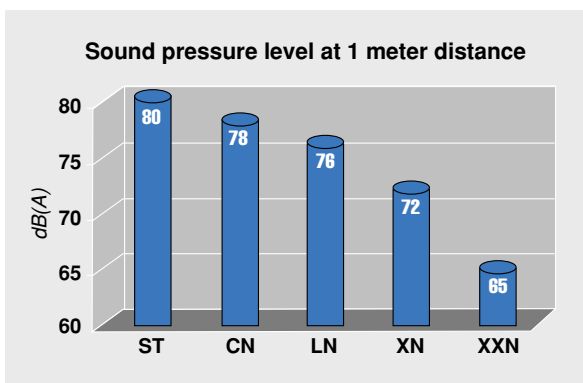
Single screw compressor has a balanced compression mechanism which eliminates the screw rotor load in both the radial and axial directions, and results in bearing life 3-4 times greater than twin screw compressor.

At the same time, noise and vibrations are the lowest in the market.

Oil injection is used to improve Cop at high condensing pressure.



A record: 65 dBA at 1 meter distance



ALS "E" chiller line includes 5 different noise level versions : ST - CN - LN - XN - XXN.

Single screw compressor technology, high quality soundproof cabinets, variable speed fans, flexible pipes and a great assembly accuracy, allow to reach extremely low noise levels down to 65 dBA at 1 meter distance, according to ISO 3744.

Critical noise requirements can be satisfied using ALS "E" chiller line, without any needs to install heavy and expensive additional sound barrier around the units.

Air Cooled Screw Chiller ALS "E"



HFC 134a Ecological Refrigerant



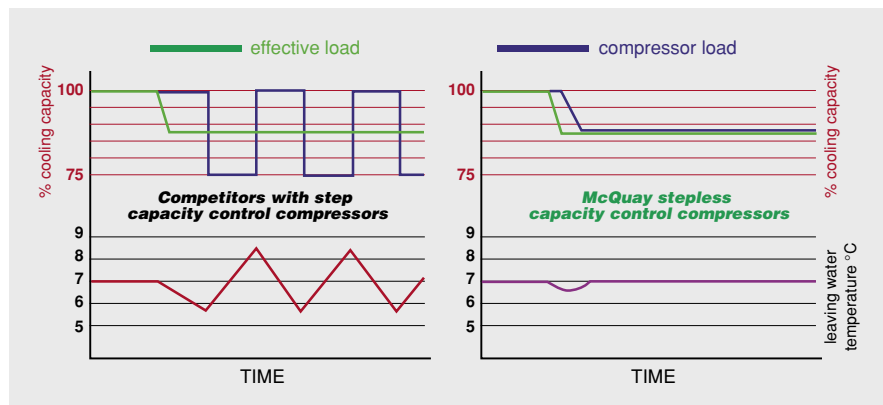
McQuay's tradition has always been very sensitive to the "environment protection" and beside our objective to prove reliable and efficient units, we have decided to drive our choice of HFC 134a refrigerant, with a low impact on the global warming potential but able to offer:

- **No impact on Ozone layer (ODP=0)**
- **Reduced TEWI with a minor global warming potential value**
- **Certified high thermodynamic efficiency**
- **No problem in handling and using this refrigerant**

Perfect water temperature control for total thermal comfort

Perfect water temperature control is only achievable by compressor with stepless capacity control.

McQuay International has introduced infinitely variable capacity control technology on all single screw compressors range, to follow perfectly the cooling load and ensure a constant evaporator leaving water temperature (EWLT), without any fluctuations from the required set-point value for total thermal confort.



Microtech II C Plus Control



- **Display of all functioning parameters**
- **Limiting device to avoid current absorption exceeding the contract**
- **Soft Load function able to prevent from unnecessary stress during the unit start up**

Air Cooled Screw Chiller ALS "E"



Technical Data

UNIT "SE" (Standard Efficiency) ST		163.2	178.2	196.2	212.2	229.2	241.2	279.3	296.3	312.3	327.3	344.3	358.3	426.4	460.4	495.4
Cooling Capacity ¹	kW	584	640	700	761	817	886	988	1057	1109	1166	1226	1322	1520	1641	1772
COP		3.00	3.03	3.12	3.12	3.11	3.15	3.05	3.15	3.11	3.11	3.11	3.14	3.11	3.12	3.15
McQuay Screw Compressor	No.	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4
Refrigerant Circuits	No.	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4
Min Capacity Reduction	%	12.5	12.5	12.5	12.5	12.5	12.5	8.3	8.3	8.3	8.3	8.3	8.3	6.25	6.25	6.25
Unit Length	mm	5310	5310	5310	6210	6210	6210	7400	8270	8270	9200	9200	9200	11000	11900	11900
Unit Width	mm	2230	2230	2230	2230	2230	2230	2230	2230	2230	2230	2230	2230	2230	2230	2230
Unit Height	mm	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520

UNIT "XE" (High Efficiency) ST		163.2	178.2	196.2	212.2	229.2	241.2	258.2	273.2	279.3	296.3
Cooling Capacity ¹	kW	616	678	737	808	864	903	926	974	1043	1103
COP		3.24	3.32	3.39	3.42	3.40	3.37	3.57	3.65	3.34	3.40
McQuay Screw Compressor	No.	2	2	2	2	2	2	2	2	3	3
Refrigerant Circuits	No.	2	2	2	2	2	2	2	2	3	3
Min Capacity Reduction	%	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	8,3	8,3
Unit Length	mm	5310	6210	6210	7110	7110	7110	8300	8300	9200	9200
Unit Width	mm	2230	2230	2230	2230	2230	2230	2230	2230	2230	2230
Unit Height	mm	2520	2520	2520	2520	2520	2520	2520	2520	2520	2520

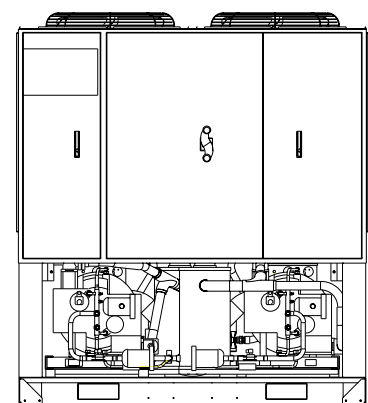
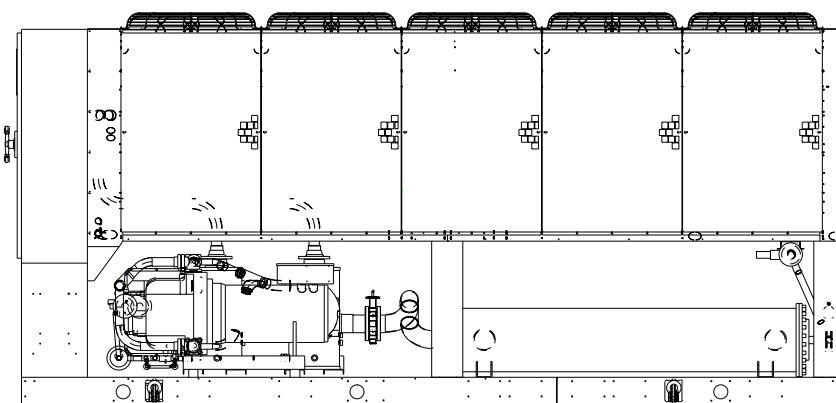
UNIT "XE" (High Efficiency) ST		312.3	327.3	344.3	358.3	392.3	426.4	460.4	495.4	520.4
Cooling Capacity ¹	kW	1188	1250	1266	1354	1430	1605	1736	1806	1920
COP		3.46	3.42	3.41	3.42	3.70	3.41	3.40	3.37	3.46
McQuay Screw Compressor	No.	3	3	3	3	3	4	4	4	4
Refrigerant Circuits	No.	3	3	3	3	3	4	4	4	4
Min Capacity Reduction	%	8.3	8.3	8.3	8.3	8.3	6.25	6.25	6.25	6.25
Unit Length	mm	10100	10100	11000	11000	12800	12800	13670	13670	13670
Unit Width	mm	2230	2230	2230	2230	2230	2230	2230	2230	2230
Unit Height	mm	2520	2520	2520	2520	2520	2520	2520	2520	2520

NOTES

(1) Nominal cooling capacity and power input are based on: 12/7°C entering/leaving evaporator water temperature; 35°C ambient temperature.

Power input is referred to compressors only.

McQuay reserves the right to change design and specifications without prior notice.



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Air Conditioning