



AXIMA REFRIGERATION

Screw Compression Units
AX and AW series

EASY TO USE
EASY MAINTENANCE
EUROPE-WIDE SERVICE



AXIMA
REFRIGERATION

Fields of application

Food processing, pharmaceuticals and chemicals, warehouses, retail stores, ice sports facilities



Uses

Refrigeration for industrial processes, warehouses, freezing lines etc.

AX AND AW COMPRESSION UNITS

The result of our extensive experience as fitters

Specifications

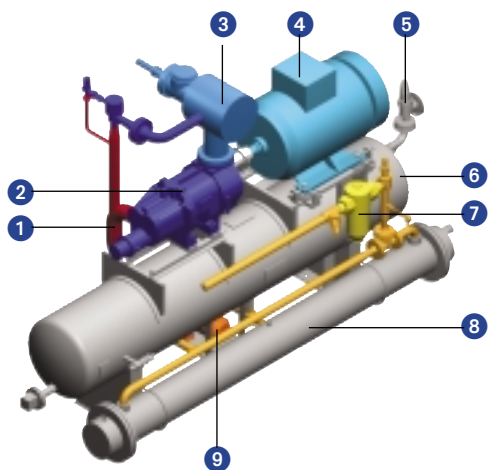
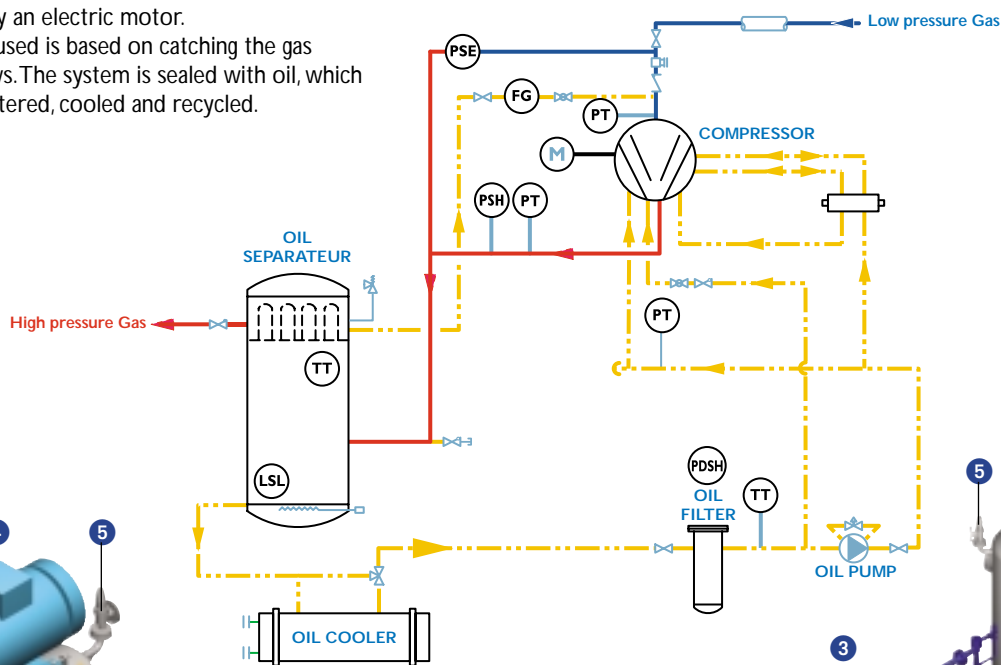
Capacity (NH₃ -10/+35°C)
150 to 1500 kW
293 to 2358 m³/h
Compliant with PED 97 / 23

Benefits

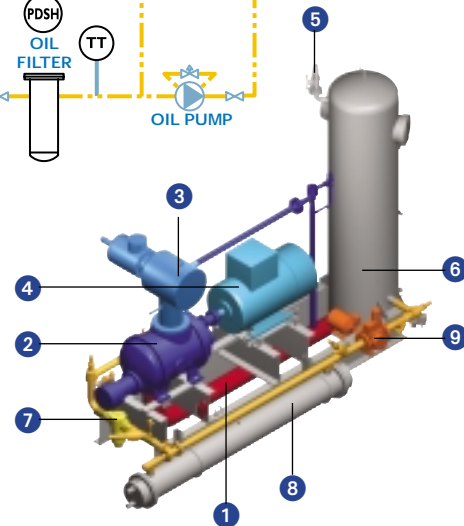
Compression of all refrigerant (NH₃, HFC, natural fluids etc.)
Easy start up
Proven reliability
Adaptable to the user's requirements (see optional features)

Operating principle

The compressor is driven by an electric motor. The compression principle used is based on catching the gas between two rotating screws. The system is sealed with oil, which is separated from the gas, filtered, cooled and recycled.



AX series
Horizontal oil separator



AW series
Vertical oil separator

- 1 Discharge
- 2 Compressor
- 3 Suction filter
- 4 Motor
- 5 Safety valve
- 6 Oil separator
- 7 Oil filter
- 8 Oil cooler
- 9 Oil pump

Know-how of Axima Refrigeration

Axima Refrigeration is a subsidiary of Suez that has been specialising in the design, assembly and installation of compression type refrigeration units for over 100 years.


AX and AW compression units are the result of the know-how of several European companies that make up the Axima Refrigeration division:

FROID BRENOT , G.F.P. , GRENCOBEL , GTI KOUDETECHNIEK , JACQUIN S.A. ,
P.H.F.I. , QUIRI REFRIGERATION , SULZER ESCHER WYSS , SULZER FRIOTHERM 





Standard equipment


The compressors are from HOWDEN and are fitted with the following devices as standard:

- ▶ Valve and suction filter
- ▶ Suction valve
- ▶ 15 –100% regulation system
- ▶ Oil injection and lubrication system
- ▶ HP/LP by-pass 
- ▶ Direct coupling with standard coupling guard



Oil separator :

- ▶ Electrical heater with internal regulation
- ▶ Oil indicator 
- ▶ Safety valve
- ▶ Discharge valve
- ▶ Low oil level check 
- ▶ Service valves
- ▶ Oil filter
- ▶ With or without oil pump depending on the model
- ▶ Water/oil refrigerant (other types optional)

Logic instrumentation:

- ▶ High Pressure switch 


Analog instrumentation:

- ▶ Temperature transmitters on discharge line and oil circuit 
- ▶ Oil pressure transmitters 

The circuit is tested under pressure in the workshop

Compression unit according to PED 97/23 (Pressure Equipment Directive) and ready for integration according to Machine Directive ED 98/37.

Optional

- ▶ Possibility to use all refrigerants and hydrocarbons
- ▶ Three pressure gauges – HP, LP, oil
- ▶ Oil filter fouling pressure switch 
- ▶ Oil temperature regulation valve
- ▶ Double oil filter
- ▶ Oil load
- ▶ Fine oil separation
- ▶ Oil cooled by thermosiphon or by liquid injection
- ▶ Start-up pump for AX series
- ▶ Discharge pressure control valve for AX series
- ▶ Adjustable pin
- ▶ PLC cabinet
- ▶ Pre-wired with junction boxes
- ▶ Electrical driver
- ▶ Equipment manufactured in conformity with ATEX (European Directive 94/9)
- ▶ Noise level reducing devices
- ▶ Coating according to customer's specifications
- ▶ Seaworthy packing
- ▶ Condensation or cooling units
- ▶ Possibility to extend the range for higher capacities
- ▶ Other construction codes

Performance and dimensions

Type	Swept volume m ³ /h 2950 rpm	Cooling duty kW	Abs. power kW	Oil cooling duty kW	Cooling duty kW	Abs. power kW	Oil cooling duty kW
		Operating range NH ₃ -10°C / +35°C *			Operating range NH ₃ -33°C / +35°C **		
AX 127A	293	155	46	25			
AX 127B	397	218	64	30	90	54	36
AX 127C	489	273	79	36	115	67	43
AX 127D	576	326	95	39	138	80	49
AX 163A	710	397	113	52	168	97	64
AX 204A	812	474	137	69	210	113	77
AX 204B	1070	659	174	76	292	145	91
AX 204C	1219	727	198	88	322	165	104
AX 204D	1348	805	216	97	356	181	113
AW 204E	814	489	137	71	202	108	75
AW 204F	1097	665	184	92	278	148	101
AW 204G	1221	734	197	94	309	159	105
AW 204H	1343	826	221	106	360	181	118
AW 255A	1590	974	259	124	418	219	14
AW 255B	1756	1090	290	140	481	236	145
AW 255C	2157	1320	363	174	569	306	204
AM 255D	2400	1460	387	176	628	326	211

* single stage

** economiser

Dimensions for guidance of AX series compression units

- length 3 to 3.4 m
- width ≈ 1.5 m
- height 2.2 to 2.4 m

Dimensions for guidance of AW series compression unit

- length 5.5 to 6.4 m
- width 1.7 to 1.9 m
- height ≈ 3.2 m



Your contact:



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