

Reference List

# PHARMACEUTICAL INDUSTRY



**GEOCLIMA**  
Smart HVAC Solutions

# PERFECT TEMPERATURE CONTROL IN ANY CONDITION



Control of space temperature and humidity is vitally important in this industry.

Nearly all medicines require chilled water in their manufacturing, from antibiotics to complex cardiology medications.

Clean rooms in particular must be designed with utmost care and have to be cooled reliably and efficiently.

The chiller must not only ensure continuity of the process, but must also adapt its cooling capacity output as rapidly as possible to match fluctuations in the system cooling demands, en-

suring perfect temperature control at all times and in every condition imaginable.

Our chillers are the perfect solution with their variable speed oil-free magnetic bearing compressors, total immersion evaporators, micro-channel condenser coils and over-arching intelligent controls.

It is clean technology perfectly designed for the Pharmaceuticals industry.

# UNITS

Place	Model	kW	Description	N.
Sonac - Australia	VHA 2600A	206	Air cooled chiller with scroll compressors	1
Colgate, NSW - Australia	GHA B2160A ec -34 K	422	Air cooled chiller with screw compressors	1
Mitchell Sterilization - Australia	TMA 2B700A ES EC-34	700	Air cooled chiller with oil-free centrifugal compressors and Evaporative System	1
Rohm Haas - Australia	GHH B2140 S/T-34	600	Water cooled chiller with screw compressors	1
Sunpharma - Australia	GHA B2140 EC-34K	445	Air cooled chiller with screw compressors	1
Ego Pharma - Australia	TMA 1A325A ES EC-34 K	654	Air cooled chiller with oil-free centrifugal compressors and Evaporative System	2
CSL Parkville - Australia	TMH 2C1050 WT-34	1350	Water cooled chiller with oil-free and centrifugal compressors	2
Unilever, NSW - Australia	TMH 1Z300 DC-ZE	280	Water cooled chiller with oil-free and centrifugal compressors	1
Biopharma - Italy	TMA 3B1200A EC-34 SPEC	1200	Air cooled chiller with oil-free centrifugal compressors	1
Special product line's - Italy	TMA 3B1000B ES EC FC-34 FL	2400	Air cooled chiller with oil-free centrifugal compressors and Evaporative System	2
Bracco - Italy	GHA F2110A EC-ZE HR PU LN	432	Air cooled chiller with screw compressors	1
	TMH 2Z650 WT-ZE	1300	Water cooled chiller with oil-free centrifugal compressors	2
	TMA 2W450A LN EC-ZE PU	438	Air cooled chiller with oil-free centrifugal compressors	1

Place	Model	kW	Description	N.
Inject - Italy	TMA 2A600B EC-34 CM	1200	Air cooled chiller with oil-free centrifugal compressors and cylindrical condensers	2
	TMA 2B900B EC-34 PU	900	Air cooled chiller with oil-free centrifugal compressors	1
Liquor - Armenia	TWH4P5BI	-	Air handling unit	1
	TMA 2A450A AC	450	Air cooled chiller with oil-free centrifugal compressors	1
Gedeon Richter - Russia	GHH B2125 DC-34	500	Water cooled chiller with screw compressors	2
	TMH 3A900 DC-34	900	Water cooled chiller with oil-free centrifugal compressors	1
Sphera Farm - Russia	DC 10V20F20CA ES EC	6070	Adiabatic dry coolers	7
Biomedica Foscama - Italy	TMA 3J1200A EC-ZE CM	2600	Air cooled chiller with oil-free centrifugal compressors and cylindrical condensers	2
Medicom - UK	GHA B1160A EC-34	700	Air cooled chiller with screw compressors	2
Incepta Pharma - Bangladesh	GHH B2320-04 BT ECO	1600	Low-temperature water cooled chiller with economizer, inverter and screw compressors	2

# CASE STUDY



## SPHERA FARM

### Background

Sphera Farm LLC (Russia) is a manufacturer of medical intravenous solutions. Today on the territory of the Industrial park "Vorsino", located in Borovsky district of the Kaluga region, Sphera Farm LLC is completing construction of the production building, covering a total area of 3 hectares.

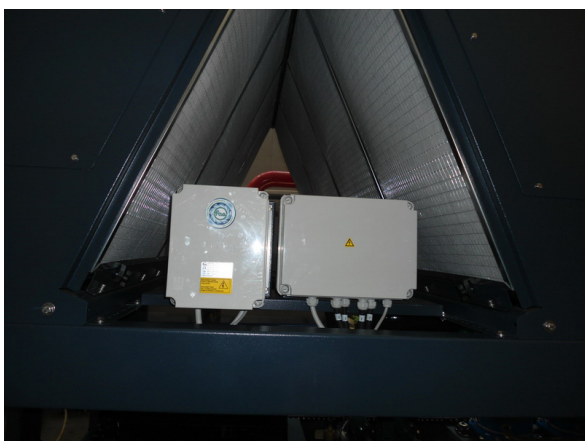
### Purposes

Geoclimate had a task from the customer to provide cooling of refrigerant (50% propylene glycol) for condensers of existing condenserless chillers. It was also necessary to take into account the customer's requirements for low power consumption and high efficiency.

### Project

At the customer's request, Geoclimate designed seven drycoolers with total cooling capacity of 6070 kW. This equipment has a special design:

- innovative system of adiabatic cooling designed by Geoclimate;
- drainage system;
- adiabatic cassettes drive system;
- system of purification and disinfection of water entering the adiabatic system by ultraviolet radiation;
- air filtration elements on the heat exchangers;
- axial fans with inverters (EC fans);
- electrical switchboard with a control and monitoring system on each machine. provide always the highest efficiency and effective cooling. will be completed.



# ABOUT US

We design and produce special units for applications in air conditioning, refrigeration and air handling systems, with low environmental impact and specifically designed to meet all specific clients' requirements in terms of size, capacity, performance and temperature. **Where the others stop, we go on.**

Our identity is founded on:



## **INNOVATION**

We use the highest technology available in order to maximize efficiency, reduce start-up costs and guarantee a satisfactory return on investment.



## **CUSTOMIZATION**

All types of machines can be provided and developed in non-standard version, thanks to the flexibility of our production system.



## **ECO-SUSTAINABILITY**

We aim to develop applications with the lowest environmental impact possible, using refrigerants with a very low GWP, such as the HFO-1234ze and the R290.

Our facilities and sales offices around the world.



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