Gebwell Taurus EVIC heat pump

IoT heat pump for heating large properties

Gebwell Taurus EVIC is a tandem heat pump with two EVI compressors and an IoT controller for heating large properties.

Thanks to the EVI compressors, the output power of the heat pump is high even at high condensation temperatures. The compressor economizer recovers excess heat from the fluid line, which is then used to vaporise the refrigerant into the compressor's low pressure block. Taking advantage of the high evaporation temperature of the high temperature provides better efficiency. Economizer's performance improves at higher condensing temperatures.

The IoT controller allows the system's field data to be stored in a cloud service and used in system development.

The data being stored in the cloud service enables adjustment based on weather forecasts and learning the thermal capacity and the heating/cooling behaviour of a certain property. Future IoT services include proactive maintenance and adjustment based on weather forecasts.

Thanks to the cloud service, the controller software can be updated remotely and the system can be monitored and controlled online, using a browser-based Gebwell Smart Hub. Possible external interfaces to other property management systems are also possible.

Taurus EVIC heat pump comes in two capacities Taurus 80 EVIC and Taurus 110 EVIC. Taurus EVIC heat pump is also equipped with a de-superheater exchanger.

- · Manufactured in Finland
- · Easy to maintain and reliable
- Tandem with two EVI compressors
- · Electronic expansion valve
- Brazed plate heat exchangers
- · Top efficiency with partial loads
- · Controller with IoT features
- · Learning and evolving system
- Monitoring and control also remotely from Gebwell Smart Hub



		Taurus 80 EVIC	Taurus 110 EVIC
GTIN		6430079400564	6430079400571
Power values (according to EN 14511)			
Heating output	kW	71.4 and 74.3	93.6 and 97.8
Cooling output (0°/35° and 0°/55°)	kW	56.4 and 50.0	74.1 and 65.2
Electrical power (0°/35° 0°/55°)	kW	16.1 and 25.5	20.9 and 32.6
Rated heating output (0°/35° 0°/55°)	kW	71.4 and 74.3	93.6 and 97.8
Rated electrical power (0°/35° and 0°/55°)	kW	16.1 and 25.5	20.9 and 32.6
COP (0°/35° and 0°/55°)		4.4 and 2.9	4.5 and 3.0
SCOP (0°/35° and 0°/55°. according to EN14825)		5.2 and 4.4	5.2 and 4.5
Heating circuit rated flow	l/s	2.4	3.2
Brine		Denaturated ethanol 25-30 wt-%	Denaturated ethanol 25-30 wt-%
Brine rated flow	l/s	3.4	4.4
Maximum allowed external pressure loss at the brine rated flow	kPa	130	120
Heating system / brine circuit maximum operating pressure (consider network pressure)	bar	6/6	6/6
Heating water maximum output temperature	°C	0/+65 from condenser	0/+65 from condenser
Operational temperature. collector	°C	-5+20	-5+20
Compressor		Scroll (EVI)	Scroll (EVI)
Number of compressors		2	2
Built-in heating pump		yes (frequency controlled)	yes (frequency controlled)
Built-in source pump		yes (frequency controlled)	yes (frequency controlled)
Electrical connection		400 VAC, 3L+N+PE, 50 Hz	400 VAC, 3L+N+PE, 50 Hz
Operating current of the protective device	Α	3 x 80	3 x 80
Contains fluorinated greenhouse gases		yes	yes
Hermetically sealed		yes	yes
Refrigerant		R410A	R410A
GWP (Global Warming Potential)		2088	2088
Refrigerant charge	kg	10.4	10.4
CO2 equivalence - tonnes CO2e	ton CO ₂ kg	21.715	21.715
Sound power level	dBA	52-58	52-58
Dimensions and connections			
Outer dimensions (length x width x height)	mm	1150 x 760 x 1550	1150 x 760 x 1550
Weight	kg	680	680
Heating network		G2" it	G2" it
Collector		G2 ½" it	G2 ½" it
De-superheater		G1" it	G1" it