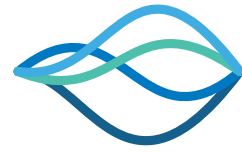




Tecumseh



INFINEE®

ECO-FRIENDLY WATER CHILLER OPTIMIZED FOR REFRIGERATION

Cooling capacity from 7.4 to 20.5 kW
(Outside Air temperature 35°C, Entering/leaving temperature -4/-8°C)



R290 Propane
natural refrigerant (GWP=3)



Water temperature
down to -8°C



100% Inverter
driven



Plug and play

Cooling for a Better Tomorrow™



INFINEE® is the latest Water chiller generation : a solution for today and tomorrow refrigeration.

When a chiller makes sense

- **Consumption reduction** : reducing indirect CO2 emission during operation,
- **Low GWP Refrigerant** : minimizing the consequences of leakage to global warming.

Propane is natural and efficient. It uses the same technology as with chemical refrigerants, which is real advantage in term of skill training and tooling. However, it is too flammable to be used on large installations directly.

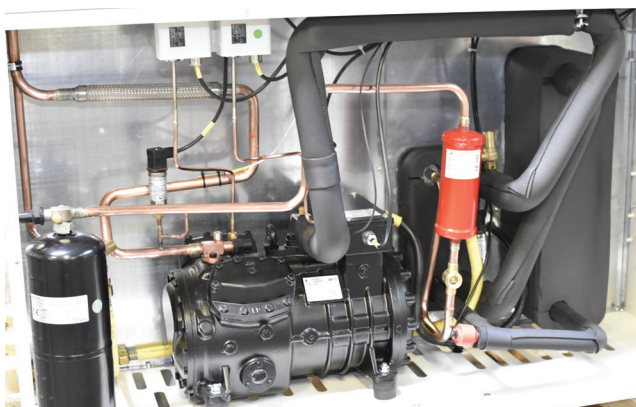


NATURAL REFRIGERANT Safe and long-term solution

Leakage safety is of course a top of mind. Tecumseh chooses a passive safety:

- Air-cooled design for external location,
- Open panels for natural elimination,
- 3 isolated sections (Refrigeration, Hydraulic, electronic),
- Ducted relief valves for fire protection.

Limited refrigeration work will have to be performed as the unit is delivered with its refrigerant charge.



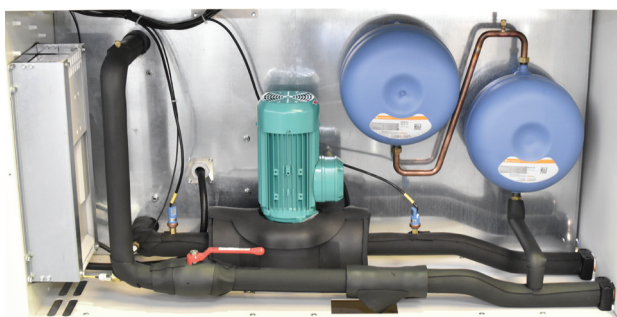
Main Components	Qty
Semi-Hermetic compressor	1
Electronic commutation fans	2
Brased plate evaporator	1
Brased plate economizer	1
Thermostatic expansion valves	1
Temperature sensors	2
Pressure sensors	2
Ductable relief valve	2
Refrigerant receiver	1
Air cooled condenser	1



WATER AS A COOLANT Easy, reliable, long-term solution

Water is natural and will be the only fluid substance entering the building. Water circuit has been used for centuries, its principles are quite basic. In case of leakage, it is possible to fix it without turning off the chiller.

Fully equipped hydraulic module



Main Components	Qty
Variable speed pump	1
Temperature sensors	2
Pressure sensors	3
Brased plate evaporator	1
Isolating valves	3
Water strainer	1
Thermal isolator	1
Expansion Vessel 8 liters	1

During its lifetime most of the work on the product will be to clean the strainer and add some water with glycol when necessary.

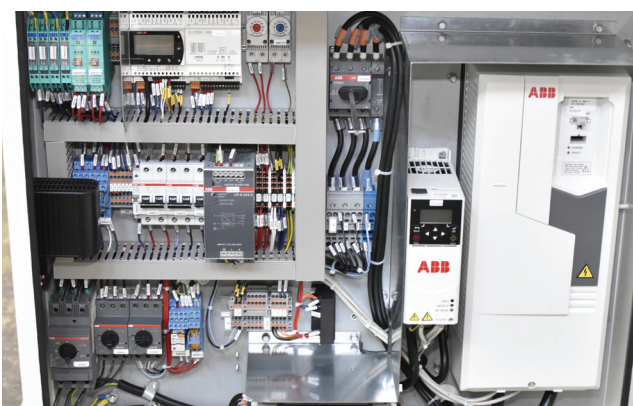


FULL INVERTER DRIVEN Versatile, efficient, constant ΔT

The unit is designed and calculated for full load. However, it will run most of the time at part load. That's why the unit is inverter driven, on the compressor, on the pump and uses electronically commutated fans.

Control

Control is state of the art and Tecumseh Software will focus on reducing energy consumptions on compressor and pump. INFINEE® is able to operate at constant delta T doing savings on the pump at the same time as the compressor.



Main Components	Qty
Compressor Inverter	1
Control CPU	1
EMC filter	1
Pump inverter	1
Heat relief fan and filter	1
Main Switch interlock	1
Control display: outside of the cabinet	1
Heater (cold climates)	1

Communication

INFINEE® communicates in ModBus, which is compatible with almost all existing BMS systems.



PLUG AND PLAY

INFINEE® is fitted with everything necessary.

Basically, the unit will have to be placed on a solid ground, connected on the hydraulic, plugged to the electricity and it is ready to go.

With very low GWP and low power consumption, INFINEE® helps fighting global warming and running costs. INFINEE® is a long-lasting solution for today and tomorrow refrigeration.





Tecumseh



INFINEE®

GENERAL FEATURES

WEIGHT	
Unit filled with water weight	400 kg
REFRIGERATION	
Operating pressure (valves) HP/BP	24 bar HP / 18 bar BP
Test pressure	26.4 bar
EVAPORATOR	
Type	Plate
REFRIGERANT	
Type	R290 propane
Propane load	4 kg
Oil type	PAG 68
Oil load	1.6 l
CONDENSER	
Type	Copper tube and aluminium fins
Surface	0.884 m ²
FAN	
Type	Helicoid
Maximum total airflow	6225 m ³ /h
Maximum rotation speed	970 rpm
HYDRAULIC	
Nominal flow	4.47 m ³ /h
Expansion vessel maximum pressure	10 bar
Hydraulic connection	Connector 40/49
ELECTRICITY	
Rated voltage	380-420 V 3~N/PE 50 Hz
Maximum current (MRA)	40.8 A
EMC class	Class B (residential)
EMC (Emissions)	Class B NF EN 61000-6-3 (residential)
EMC (immunity)	Class B NF EN 61000-6-2 (industrial)

SOUND LEVEL

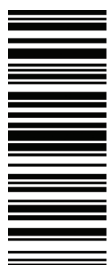
	Compressor frequency	
	50 Hz	85 Hz
Sound power level (L _w dBA)	79.2	88.1
Pressure level at 10 m (L _p dBA)	51.2	60.1

COOLING CAPACITY

Ambient Temp. (°C)	Compressor Freq. (Hertz)	Output Temp. (°C)	Inlet temp. (°C)	Cooling capacity (kW)	COP refrigeration	Water + glycol flow (m ³ /h)	Cop Machine
35	25	-8	-4	7.42	2.64	1.71	1.92
35	30	-8	-4	8.69	2.60	2.01	1.98
35	35	-8	-4	9.94	2.55	2.29	2.01
35	40	-8	-4	11.1	2.50	2.57	2.02
35	45	-8	-4	12.3	2.44	2.84	2.02
35	50	-8	-4	13.5	2.39	3.11	2.01
35	55	-8	-4	14.6	2.33	3.36	1.99
35	60	-8	-4	15.6	2.27	3.61	1.97
35	65	-8	-4	16.7	2.22	3.85	1.94
35	70	-8	-4	17.7	2.16	4.08	1.91
35	75	-8	-4	18.6	2.10	4.30	1.88
35	80	-8	-4	19.6	2.05	4.52	1.85
35	85	-8	-4	20.5	2.00	4.72	1.81

DIMENSIONS

Height	1 572 mm
Depth with feet	924 mm
Depth	836 mm
Length	1 518 mm



NWD0256