

THULE Series
Industrial Air-Cooled Chillers

High Efficiency · Flexible Configuration · Reliable Process Cooling

Thule– Air-Cooled Multiscroll Chillers for Industrial Process Cooling

EDeveloped for industrial process cooling applications, the THULE Series combines high energy efficiency with flexible configuration options and robust operating performance. With its wide capacity range and application-specific design, it delivers reliable cooling even under demanding process conditions.



High Energy Efficiency

Developed with high seasonal energy efficiency as a key design principle, the THULE Series optimizes energy consumption under variable process loads while delivering stable and high cooling performance. Its efficient operating characteristics help reduce operating costs while providing a reliable and sustainable cooling solution.

High-Efficiency Compressor Technology

The THULE Series can be configured with scroll or screw compressors according to capacity and application requirements. Compressor technology is selected to ensure high efficiency, stable capacity control, and reliable operation. This flexible configuration adapts to varying load profiles while helping optimize energy consumption and extend overall system life.

Wide cooling capacity range

The THULE Series is available in a wide cooling capacity range from 2 kW to 2000 kW, meeting the cooling requirements of diverse industrial processes. Its flexible and scalable design delivers high performance, stable operation, and reliable process cooling under varying thermal loads.

Green refrigerant option

The THULE Series can be configured with low-GWP refrigerant options such as R454B, R1234ze, and R290, in line with current environmental requirements and sustainability goals. These alternatives help reduce environmental impact while supporting high energy efficiency and reliable cooling performance.

Flexible Configuration

The THULE Series offers flexible configuration options to meet the specific cooling requirements of different industrial processes, ensuring efficient and reliable operation for every application.

Reliability

The THULE Series delivers stable, reliable, and continuous cooling performance even under demanding industrial conditions, thanks to its robust design and durable construction.

THULE Applications & Industries

The THULE Series is a versatile air-cooled chiller solution developed to meet the varying cooling requirements of industrial processes. With its wide capacity range, flexible configuration options, and process-oriented design, it can be reliably applied across industries such as plastics, food and beverage, chemicals, automotive, metal processing, and many other industrial applications.

From high-capacity process cooling to applications requiring precise temperature control, the THULE Series delivers stable operation, high energy efficiency, and reliable cooling performance. Its robust design supports effective temperature management in both continuous production lines and processes with variable load profiles.

THULE Application Examples



Metal or Plastic Processing

THULE Series provides stable and precise temperature control for metal and plastic processing applications. Its high cooling performance helps maintain optimal mold and process temperatures, reduce cycle times, and support consistent production quality.



Food & Beverage

THULE Series supports reliable process cooling across food and beverage production, helping maintain stable temperatures in processing, packaging, storage, and auxiliary cooling applications while supporting consistent product quality.



Automotive

THULE Series provides efficient and stable cooling for automotive manufacturing processes, including molding, machining, testing, and production lines where precise temperature control is essential for process continuity and product quality.



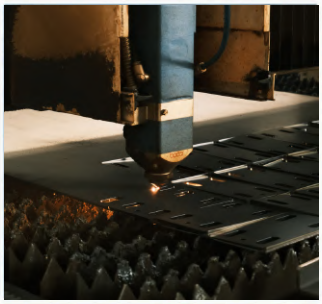
Data Centers

THULE Series delivers dependable cooling performance for data center applications, supporting stable thermal management, continuous operation, and energy-efficient cooling under varying load conditions.



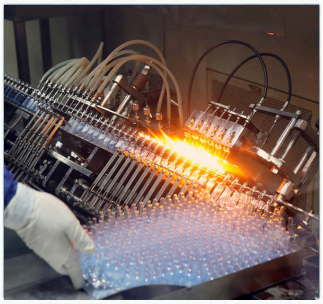
Textile

THULE Series supports stable process cooling in textile production, helping maintain consistent temperatures across machinery, process water, and production lines for reliable and continuous operation.



Industrial Equipment

THULE Series provides dependable cooling for industrial machinery and equipment, supporting the production control in hydraulic systems, machine tools, production equipment, and auxiliary processes.



Chemical Processing

THULE Series delivers precise and reliable cooling for chemical processes, helping control temperatures in reactors, production lines, and process equipment where thermal stability is critical.



Energy & Power Generation

THULE Series provides efficient cooling for power generation and energy applications, supporting stable operation of generators, inverters, electrical equipment, and auxiliary systems under varying load conditions.

Exceptional Efficiency: Designed for Lower Energy Consumption

The THULE Series is developed with an engineering approach that places energy efficiency at the core of its design. Advanced control algorithms, high-efficiency components, and optimized system design help reduce energy consumption under variable load conditions while delivering stable and high cooling performance.

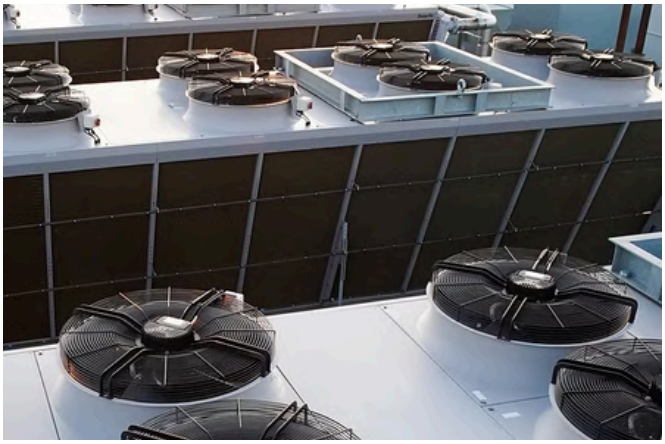


High Seasonal Energy Performance Ratio (SEPR)

The THULE Series prioritizes seasonal energy efficiency with high SEPR values. High-efficiency components, an optimized refrigeration cycle, and advanced EC fan control help reduce energy consumption under variable load conditions while maintaining high cooling performance.

Optimized Fan Control for Higher Efficiency

The advanced EC fan control used in the THULE Series continuously optimizes fan speed according to real-time cooling demand. By adapting to varying thermal loads, this control strategy reduces unnecessary energy consumption while ensuring precise temperature control and high system efficiency.





Sustainable Cooling

With its high SEPR, the THULE Series helps reduce energy consumption and operating costs while supporting environmental sustainability. High energy efficiency combined with low-GWP refrigerant options delivers reliable cooling performance with a reduced environmental impact.

Benefits & features

Discover the key benefits and technical features that make the THULE Series an efficient, reliable, and flexible solution for industrial process cooling applications.

1 Carnot C-Control

- Advanced control algorithms ensure coordinated operation of system components under varying load conditions, supporting efficient and stable performance.
- Custom operating scenarios can be configured for different industrial processes, including temperature, pump, compressor, and load control strategies.
- Integrated protection functions such as phase, pressure, and temperature safeguards help reduce operational risks and improve system reliability.
- The control panel and electrical components are designed with protective features suitable for demanding industrial operating conditions.

2 EC Axial Fan Technology

- High-efficiency EC axial fans used in the THULE Series provide stable airflow and low energy consumption through optimized blade geometry and protective grille design. Variable-speed operation allows fan performance to adapt to real-time cooling demand while also supporting low-noise operating modes.

3 Evaporator

- The THULE Series uses stainless steel shell & tube evaporators designed for high mechanical strength and long service life. Special internal turbulators enhance heat transfer, allowing high cooling capacities to be achieved with a more compact heat exchanger design. Stainless steel construction also improves corrosion resistance and operating reliability under demanding process conditions.

4 Microchannel Condenser

- The microchannel condensers used in the THULE Series are specially manufactured for Carnot applications with a high-strength design. Validated at a 45 bar test pressure, these condensers provide high heat transfer performance in a compact design, reduced refrigerant charge, high energy efficiency, easy servicing, and reliable operation.

5 Circulation pumps

- The circulation pumps used in the THULE Series are specially configured by Carnot according to the required flow rate and pressure. From standard process applications to heavy-duty operating conditions, each pump is selected and integrated to deliver high efficiency, reliable operation, and long service life.

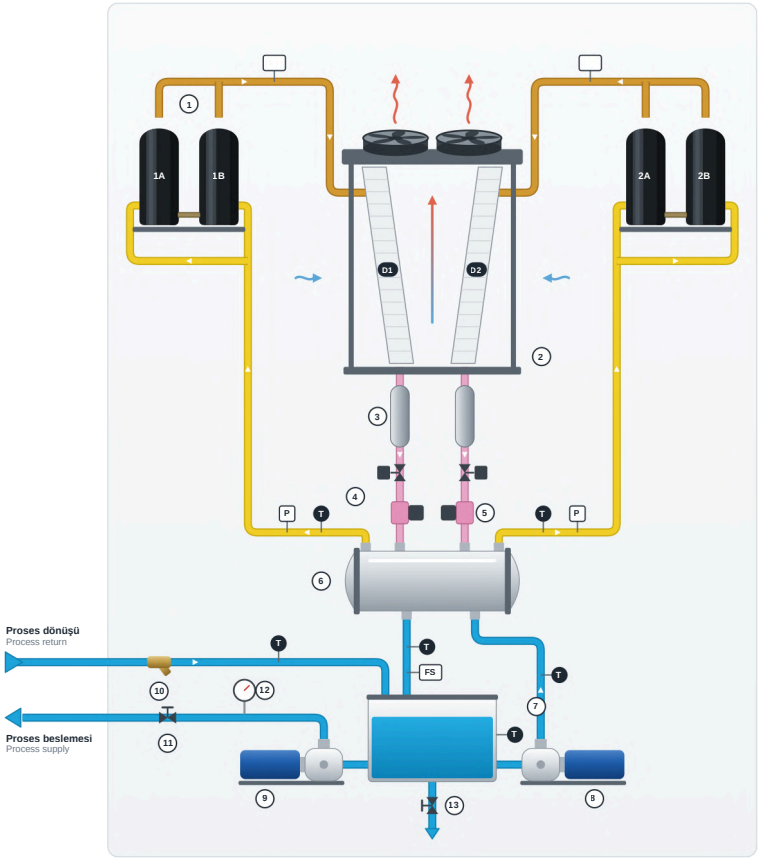
6 Integrated Water Tank

- The circulation pumps used in the THULE Series are specially configured by Carnot according to the required flow rate and pressure. From standard process applications to heavy-duty operating conditions, each pump is selected and integrated to deliver high efficiency, reliable operation, and long service life.

7 High-Efficiency Compressor Options

- The THULE Series can be configured with scroll or screw compressors according to capacity and application requirements. Danfoss and RefComp compressors are selected and integrated to provide high energy efficiency, stable capacity control, and reliable operation. This flexible configuration ensures optimal performance and long service life across varying process loads.

THULE Flowchart



BİLEŞENLER · COMPONENTS

1. **Tandem kompresörler (2 devre)** — Tandem compressors (2 circuits)
2. **V tipi hava soğutmalı kondenser** — V-type air-cooled condenser
3. **Filtre kurutucu** — Filter drier
4. **Sıvı hattı solenoid valfi** — Liquid line solenoid valve
5. **Genleşme valfi** — Expansion valve
5. **Çift devreli shell & tube evaporatör** — Dual-circuit shell & tube evaporator
7. **Su tankı** — Water tank
8. **Primer pompa (evaporatör devresi)** — Primary pump (evaporator loop)
9. **Sekonder pompa (proses devresi)** — Secondary pump (process loop)
10. **Ytipipislik tutucu** — Y-strainer
11. **Küresel vana** — Ball valve
12. **Manometre** — Pressure gauge
13. **Tahliye vanası** — Drain valve

HATLAR · LINES

- **Emme hattı** — Suction line
- **Basma hattı** — Discharge line
- **Sıvı hattı** — Liquid line
- **Su / glikol hattı** — Water / glycol line
- **Yağ dengelemehattı** — Oil equalization line

HAVA · AIR

- **Soğuk hava girişi** — Cool air in
- **Sıcak hava çıkışı** — Hot air out

SEMBOLLER · SYMBOLS

- **Sıcaklık sensörü** — Temperature sensor
- **Basınç transmitteri** — Pressure transducer
- **Yüksek basınç şalteri** — High pressure switch
- **Akış şalteri** — Flow switch
- **Devre 1 / Devre2** — Circuit 1 / Circuit 2

Air flow

In the THULE Series, airflow is optimized across the microchannel condenser surfaces to ensure high heat transfer performance. Variable-speed EC axial fans adjust airflow according to real-time cooling demand, improving energy efficiency especially under partial load conditions.

Refrigerant flow

In the THULE Series, the refrigeration cycle begins as low-pressure refrigerant absorbs heat from the process water and evaporates in the evaporator. The refrigerant vapor is then compressed to a higher pressure and temperature before releasing its heat to the ambient air in the condenser and condensing back into liquid form. After passing through the expansion device, the refrigerant pressure is reduced and the cycle continuously repeats to provide the required process cooling.

Water flow

In the THULE Series, process return water is cooled through the evaporator and directed to the integrated tank according to the system's hydraulic configuration. The chilled water is then supplied to the process through a pump group configured to meet the required flow rate and pressure, ensuring stable water temperature, reliable circulation, and flexible hydraulic operation.

Service Plans for Reliable Operation

Industrial cooling system continuity is critical to reliable production processes. Carnot after-sales services help maintain system performance and keep operating costs under control through proper maintenance planning, fast technical response, and effective spare parts management.

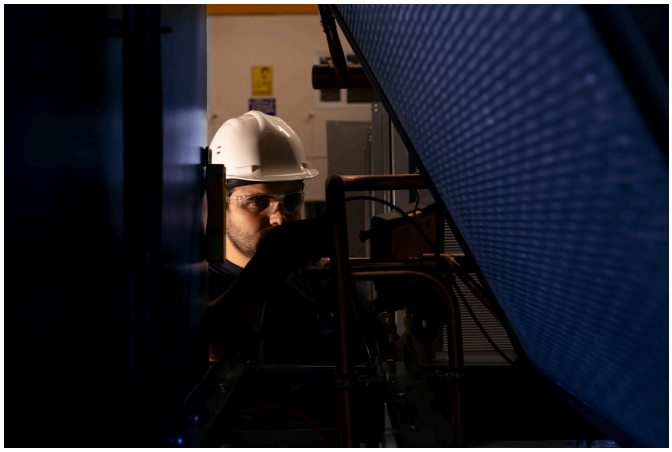


Customized Service & Spare Parts Support

Carnot service solutions are planned according to your facility's operating conditions and process priorities. Proper maintenance scheduling, fast technical coordination, and effective spare parts management help maintain equipment continuity and minimize service-related downtime.

Comprehensive Service Support

Carnot's technical service team supports reliable and efficient operation through preventive maintenance, breakdown response, commissioning, and technical inspections. Potential issues are identified at an early stage to help reduce unplanned downtime and maintain equipment availability.





Focus on Your Core Operations

Carnot after-sales services integrate preventive maintenance planning, breakdown response, technical inspections, spare parts management, and repair processes within a unified service structure. Regular monitoring of system operating conditions and planned service interventions help identify potential issues at an early stage, reduce unplanned downtime, and improve equipment availability. This approach supports operational continuity and energy performance while enabling more effective maintenance resource management, allowing businesses to focus on their core production activities.

Green refrigerant option.

LOW GWP REFRİGERANT R454B

THULE green refrigerant option.

The THULE Series is developed to combine high cooling performance with reduced environmental impact. R1234ze, R454B, and R290 refrigerant options support the transition toward more sustainable and environmentally responsible industrial cooling solutions through their low GWP values.
R1234ze, R454B & R290 - Low-GWP refrigerant options.

LOW GWP REFRİGERANT R1234ZE

ZERO $_{GWP}$ series

Low GWP & High Efficiency

R1234ze, R454B, and R290 low-GWP refrigerant options reduce environmental impact compared to traditional high-GWP refrigerants while delivering high energy efficiency and strong cooling performance.

LOW GWP REFRİGERANT R290

C_3H_8MICH series

Camot: Your Partner in Sustainable Cooling

Cannot supports customers throughout the transition to sustainable cooling solutions with engineering, commissioning, technical service, and application support. With low-GWP refrigerant options, energy-efficient system designs, and a strong after-sales service structure, Camot helps ensure the safe and efficient implementation of next generation cooling technologies. This enables businesses to reduce environmental impact while maintaining process reliability and energy performance.

Sustainable cooling for a better world.



Energy Efficiency

Low-GWP refrigerant options such as R1234ze, R454B, and R290 deliver high energy efficiency with optimized system design, helping reduce energy consumption and operating costs.

Lower superheat

R1234ze, R454B, and R290 refrigerant options deliver high efficiency and stable performance under partial load conditions, supporting reliable system operation.

Proven technological components

R1234ze, R454B, and R290 refrigerant options deliver high efficiency and stable performance under partial load conditions, supporting reliable system operation.

THULE SERIES

Technical Features & Options

EQUIPMENT / OPTION	THULE 8–40 (1D/1K)	THULE 50–160 (2D/2K)	THULE 200–600 (2D/4K)	THULE 600V–1350 (2D/Screw)
STANDARD EQUIPMENT				
Dixell PLC controller	•	•	•	•
Phase protection relay	•	•	•	•
High-pressure safety (switch + transmitter)	•	•	•	•
Low-pressure transmitter	OPT	OPT	•	•
Flow switch	•	•	•	•
Filter drier	•	•	•	•
Software freeze protection	•	•	•	•
Stainless-steel water tank (304)	•	•	•	•
Stainless-steel centrifugal pump	•	•	•	•
Automatic water filling	•	•	•	•
Flanged connections / counter-flanges	•	•	•	•
EEV – electronic expansion valve	—	OPT	•	•
OPTIONS				
Sight glass	OPT	OPT	OPT	OPT
Crankcase heater	OPT	OPT	OPT	OPT
Modbus RTU (RS485)	OPT	OPT	OPT	OPT
Modbus TCP / Ethernet	OPT	OPT	OPT	OPT
Remote monitoring (cloud / GSM)	OPT	OPT	OPT	OPT
Standby pump	OPT	OPT	OPT	OPT
High-pressure pump options	OPT	OPT	OPT	OPT
Epoxy-coated condenser	OPT	OPT	OPT	OPT
Condenser air filter	OPT	OPT	OPT	OPT
Noise reduction package	OPT	OPT	OPT	OPT
Low-ambient kit (−20 °C)	OPT	OPT	OPT	OPT
Tropical / high-ambient version	OPT	OPT	OPT	OPT
Heat recovery	OPT	OPT	OPT	OPT
Adiabatic pre-cooling	OPT	OPT	OPT	OPT
Low-temperature / glycol (brine)	OPT	OPT	OPT	OPT
60 Hz / different voltage	OPT	OPT	OPT	OPT
Seaworthy packaging	OPT	OPT	OPT	OPT

Legend: • = standard | OPT = option | — = not available.

REFRİGERANT OPTİONS

R410A	R1234ze	R290	R454B
GWP: 2088	ZERO $_{GWP}$ series GWP: 7	C_3H_8MICH series GWP: 3	GWP: 467

Technical specifications THULE R410A

	THULE 8	THULE 10	THULE 15	THULE 25	THULE 30	THULE 40
Refrigerant type / GWP	**R410A / 2088**	R410A / 2088	R410A / 2088	R410A / 2088	R410A / 2088	R410A / 2088
Cooling capacity (kW/RT)	9.8 / 2.8	10.8 / 3.1	15.8 / 4.5	24.6 / 7.0	29.4 / 8.4	39.3 / 11.2
Power consumption (kW)	2.2	2.3	3.2	5.7	6.2	8
COP	4.49	4.78	4.87	4.36	4.76	4.94
Compressor type	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll
Compressor for each circuit	1	1	1	1	1	1
Expansion valve type	Thermostatic	Thermostatic	Thermostatic	Thermostatic	Thermostatic	Thermostatic
Condenser type	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel
Number of fans	1	1	1	1	1	1
Fan control	EC Brushless	EC Brushless	EC Brushless	EC Brushless	EC Brushless	EC Brushless
Fan nominal power (each) (kW)	0.24	0.24	0.48	0.75	0.75	0.75
Min/max ambient temperature (°C/°F)	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F
Evaporator type	Brazed plate heat exchanger	Brazed plate heat exchanger	Brazed plate heat exchanger	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube
Water flow rate (m³/h / gpm)	1.7 / 7.4	1.9 / 8.2	2.7 / 12.0	4.2 / 18.6	5.1 / 22.3	6.8 / 29.8
Hydraulic connection - in/out	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"
Pump quantity	1 · Stainless steel centrifugal	1 · Stainless steel centrifugal	1 · Stainless steel centrifugal	1 · Stainless steel centrifugal	1 · Stainless steel centrifugal	1 · Stainless steel centrifugal
Internal circulation pump	0.37 kW / 2.7 bar / 1.2 m³/h	0.37 kW / 5 bar / 3 m³/h	0.37 kW / 2 bar / 5 m³/h	1.1 kW / 3.4 bar / 5 m³/h	1.1 kW / 3.4 bar / 5 m³/h	1.5 kW / 3.5 bar / 8 m³/h
Power supply	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz
IP rating	IP54	IP54	IP54	IP54	IP54	IP54
Length (mm/in)	870 / 34.3	870 / 34.3	870 / 34.3	1700 / 66.9	1700 / 66.9	1700 / 66.9
Width (mm/in)	700 / 27.6	700 / 27.6	700 / 27.6	830 / 32.7	830 / 32.7	830 / 32.7
Height (mm/in)	1162 / 45.7	1162 / 45.7	1162 / 45.7	1300 / 51.2	1300 / 51.2	1300 / 51.2
Net weight (kg/lbs)	200 / 441	200 / 441	200 / 441	425 / 937	435 / 959	435 / 959

	THULE 50	THULE 60	THULE 80	THULE 100	THULE 120	THULE 160
Refrigerant type / GWP	R410A / 2088	R410A / 2088	R410A / 2088	R410A / 2088	R410A / 2088	R410A / 2088
Cooling capacity (kW/RT)	49.3 / 14.0	58.7 / 16.7	78.6 / 22.3	102.0 / 29.0	114.6 / 32.6	154.0 / 43.8
Power consumption (kW)	10.2	11.2	14.7	18.3	23.8	29.9
COP	4.83	5.23	5.34	5.57	4.82	5.15
Compressor type	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll
Compressor for each circuit	1/1	1/1	1/1	1/1	1/1	1/1
Expansion valve type	Thermostatic / EEV (opt.)	Thermostatic / EEV (opt.)	Thermostatic / EEV (opt.)	Thermostatic / EEV (opt.)	Thermostatic / EEV (opt.)	Thermostatic / EEV (opt.)
Condenser type	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel
Number of fans	2	2	1	1	2	2
Fan control	EC Brushless	EC Brushless	EC Brushless	EC Brushless	EC Brushless	EC Brushless
Fan nominal power (each) (kW)	0.75	0.75	1.8	1.8	1.8	1.8
Min/max ambient temperature (°C/°F)	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F
Evaporator type	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube
Water flow rate (m³/h / gpm)	8.5 / 37.3	10.1 / 44.5	13.5 / 59.5	17.5 / 77.2	19.7 / 86.8	26.5 / 116.6
Hydraulic connection - in/out	2	2	2"	2	2 1/2"	2 1/2"
Pump quantity	2 (1 internal + 1 external) ·	2 (1 internal + 1 external) ·	2 (1 internal + 1 external) ·	2 (1 internal + 1 external) ·	2 (1 internal + 1 external) ·	2 (1 internal + 1 external) ·
Internal circulation pump	1.1 kW / 1.6 bar / 12 m³/h	1.1 kW / 1.4 bar / 12 m³/h	1.5 kW / 1.6 bar / 20 m³/h	1.5 kW / 14 bar / 25 m³/h	3 kW / 1.6 bar / 30 m³/h	3 kW / 15 bar / 35 m³/h
External circulation pump	1.5 kW / — bar / — m³/h	1.5 kW / — bar / — m³/h	1.5 kW / — bar / — m³/h	1.5 kW / — bar / — m³/h	2.4 kW / — bar / — m³/h	2.4 kW / — bar / — m³/h
Power supply	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz
IP rating	IP54	IP54	IP54	IP54	IP54	IP54
Length (mm/in)	1950 / 76.8	1950 / 76.8	2050 / 80.7	2050 / 80.7	2600 / 102.4	2600 / 102.4
Width (mm/in)	1000 / 39.4	1000 / 39.4	1200 / 47.2	1200 / 47.2	1200 / 47.2	1200 / 47.2
Height (mm/in)	1750 / 68.9	1750 / 68.9	1950 / 76.8	2150 / 84.6	2200 / 86.6	2200 / 86.6
Net weight (kg/lbs)	800 / 1764	850 / 1874	920 / 2028	980 / 2161	1730 / 3814	1730 / 3814

Performance ratings are based on 25 °C ambient air temperature and 15 °C leaving chilled water temperature.

Technical specifications THULE R410A

	THULE 600	THULE 750	THULE 900	THULE 1100	THULE 1350
Refrigerant type / GWP	R407C / 1774	R407C / 1774	R407C / 1774	R407C / 1774	R407C / 1774
Cooling capacity (kW/RT)	578.4 / 164.5	791.4 / 225.0	1020.4 / 290.1	1140.0 / 324.1	1396.6 / 397.1
Power consumption (kW)	111.4	146.8	185	205.6	247
COP	5.19	5.39	5.52	5.54	5.65
Compressor type	Screw	Screw	Screw	Screw	Screw
Compressor for each circuit	1/1	1/1	1/1	1/1	1/1
Expansion valve type	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)
Condenser type	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel
Number of fans	8	12	14	16	20
Fan control	EC Brushless	EC Brushless	EC Brushless	EC Brushless	EC Brushless
Fan nominal power (each) (kW)	1.8	1.8	1.8	1.8	1.8
Min/max ambient temperature (°C/°F)	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F
Evaporator type	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube
Water flow rate (m³/h / gpm)	99.5 / 438.0	136.1 / 599.3	175.5 / 772.7	196.1 / 863.3	240.2 / 1057.6
Hydraulic connection - in/out	4"	6"	4"	8"	12"
Pump quantity	Optional · External pump	Optional · External pump	Optional · External pump	Optional · External pump	Optional · External pump
Power supply	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz
IP rating	IP54	IP54	IP54	IP54	IP54
Length (mm/in)	6400 / 252.0	7610 / 299.6	8000 / 315.0	10050 / 395.7	12490 / 491.7
Width (mm/in)	2215 / 87.2	2215 / 87.2	2215 / 87.2	2215 / 87.2	2215 / 87.2
Height (mm/in)	2400 / 94.5	2400 / 94.5	2400 / 94.5	2400 / 94.5	2400 / 94.5
Net weight (kg/lbs)	3600 / 7937	5000 / 11023	5000 / 11023	6400 / 14110	8200 / 18078

	THULE 600	THULE 750	THULE 900	THULE 1100	THULE 1350
Refrigerant type / GWP	R407C / 1774	R407C / 1774	R407C / 1774	R407C / 1774	R407C / 1774
Cooling capacity (kW/RT)	578.4 / 164.5	791.4 / 225.0	1020.4 / 290.1	1140.0 / 324.1	1396.6 / 397.1
Power consumption (kW)	111.4	146.8	185	205.6	247
COP	5.19	5.39	5.52	5.54	5.65
Compressor type	Screw	Screw	Screw	Screw	Screw
Compressor for each circuit	1/1	1/1	1/1	1/1	1/1
Expansion valve type	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)
Condenser type	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel
Number of fans	8	12	14	16	20
Fan control	EC Brushless	EC Brushless	EC Brushless	EC Brushless	EC Brushless
Fan nominal power (each) (kW)	1.8	1.8	1.8	1.8	1.8
Min/max ambient temperature (°C/°F)	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F
Evaporator type	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube
Water flow rate (m³/h / gpm)	99.5 / 438.0	136.1 / 599.3	175.5 / 772.7	196.1 / 863.3	240.2 / 1057.6
Hydraulic connection - in/out	4"	6"	4"	8"	12"
Pump quantity	Optional · External pump	Optional · External pump	Optional · External pump	Optional · External pump	Optional · External pump
Power supply	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz
IP rating	IP54	IP54	IP54	IP54	IP54
Length (mm/in)	6400 / 252.0	7610 / 299.6	8000 / 315.0	10050 / 395.7	12490 / 491.7
Width (mm/in)	2215 / 87.2	2215 / 87.2	2215 / 87.2	2215 / 87.2	2215 / 87.2
Height (mm/in)	2400 / 94.5	2400 / 94.5	2400 / 94.5	2400 / 94.5	2400 / 94.5
Net weight (kg/lbs)	3600 / 7937	5000 / 11023	5000 / 11023	6400 / 14110	8200 / 18078

Performance ratings are based on 25 °C ambient air temperature and 15 °C leaving chilled water temperature.

Technical specifications THULE C_3H_8MIC series

	THULE C_3H_8MIC 25	THULE C_3H_8MIC 35	THULE C_3H_8MIC 40	THULE C_3H_8MIC 55	THULE C_3H_8MIC 70	THULE C_3H_8MIC 85
Refrigerant type / GWP	R290 / 3	R290 / 3	R290 / 3	R290 / 3	R290 / 3	R290 / 3
Cooling capacity (kW/RT)	27.6 / 7.8	34.8 / 9.9	41.9 / 11.9	55.2 / 15.7	69.7 / 19.8	83.9 / 23.9
Power consumption (kW)	8.4	9.9	11.9	15.5	20.4	23.7
COP	3.3	3.53	3.54	3.56	3.42	3.54
Compressor type	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll
Compressor for each circuit	1	1	1	1/1	1/1	1/1
Expansion valve type	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)
Condenser type	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel
Number of fans	2	2	1	1	2	2
Fan control	AC Inverter	AC Inverter	AC Inverter	AC Inverter	AC Inverter	AC Inverter
Fan power range (kW)	0.14–1.5	0.14–1.5	0.3–1.8	0.3–1.8	0.6–3.6	0.6–3.6
Min/max ambient temperature (°C/ °F)	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F
Evaporator type	Shell & Tube	Shell & Tube	Shell & Tube	Shell & Tube	Shell & Tube	Shell & Tube
Hydraulic connection - in/out	2"	2"	2"	2"	2 1/2"	2 1/2"
Pump quantity	2 · Centrifugal pumps	2 · Centrifugal pumps	2 · Centrifugal pumps	2 · Centrifugal pumps	2 · Centrifugal pumps	2 · Centrifugal pumps
Internal circulation pump	1.1 kW / 1.6 bar / 12 m^3/h	1.1 kW / 1.6 bar / 12 m^3/h	1.5 kW / 1.6 bar / 20 m^3/h	1.5 kW / 14 bar / 25 m^3/h	3 kW / 15 bar / 35 m^3/h	3 kW / 15 bar / 35 m^3/h
External circulation pump	1.5 kW / — bar / — m^3/h	1.5 kW / — bar / — m^3/h	1.5 kW / — bar / — m^3/h	1.5 kW / — bar / — m^3/h	2.4 kW / — bar / — m^3/h	2.4 kW / — bar / — m^3/h
Power supply	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz
IP rating	IP54	IP54	IP54	IP54	IP54	IP54
Length (mm/in)	1950 / 76.8	1950 / 76.8	2050 / 80.7	2050 / 80.7	2600 / 102.4	2600 / 102.4
Width (mm/in)	1000 / 39.4	1000 / 39.4	1200 / 47.2	1200 / 47.2	1200 / 47.2	1200 / 47.2
Height (mm/in)	1750 / 68.9	1750 / 68.9	1950 / 76.8	2150 / 84.6	2200 / 86.6	2200 / 86.6
Net weight (kg/lbs)	850 / 1874	850 / 1874	920 / 2028	980 / 2161	1730 / 3814	1730 / 3814

Performance ratings are based on 35 °C ambient air temperature and 10 °C leaving chilled water temperature.

Technical specifications THULE C_3H_8MIC series

	THULE C_3H_8MIC 110	THULE C_3H_8MIC 140	THULE C_3H_8MIC 165
Refrigerant type / GWP	R290 / 3	R290 / 3	R290 / 3
Cooling capacity (kW/RT)	110.4 / 31.4	139.4 / 39.6	167.8 / 47.7
Power consumption (kW)	31.4	37.5	44.2
COP	3.52	3.72	3.8
Compressor type	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll
Compressor for each circuit	2/2	2/2	2/2
Expansion valve type	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)
Condenser type	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel
Number of fans	4	4	4
Fan control	AC Inverter	AC Inverter	AC Inverter
Fan power range (kW)	0.68–3.92	0.68–3.92	0.68–3.92
Min/max ambient temperature (°C/°F)	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F
Evaporator type	Shell & Tube	Shell & Tube	Shell & Tube
Hydraulic connection - in/out	2 1/2"	2 1/2"	2 1/2"
Power supply	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz
IP rating	IP54	IP54	IP54
Length (mm/in)	2735 / 107.7	2735 / 107.7	2735 / 107.7
Width (mm/in)	1915 / 75.4	1915 / 75.4	1915 / 75.4
Height (mm/in)	2160 / 85.0	2160 / 85.0	2160 / 85.0
Net weight (kg/lbs)	1780 / 3924	1780 / 3924	1780 / 3924

Performance ratings are based on 35 °C ambient air temperature and 10 °C leaving chilled water temperature.

Technical specifications THULE ZERO GWP series

	THULE ZeroGWP 160	THULE ZeroGWP 200	THULE ZeroGWP 300	THULE ZeroGWP 400	THULE ZeroGWP 500
Refrigerant type / GWP	R1234ze / 7	R1234ze / 7	R1234ze / 7	R1234ze / 7	R1234ze / 7
Cooling capacity (kW/RT)	116.7 / 33.2	143.1 / 40.7	233.3 / 66.3	286.3 / 81.4	351.0 / 99.8
Power consumption (kW)	31.5	38.4	63.1	79.8	94.2
COP	3.7	3.73	3.7	3.59	3.73
Compressor type	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll	Hermetic Scroll
Compressor for each circuit	1/1	2/2	2/2	2/2	2/2
Expansion valve type	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)
Condenser type	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel
Number of fans	2	4	4	6	8
Fan control	AC Inverter	AC Inverter	AC Inverter	AC Inverter	AC Inverter
Fan nominal power (each) (kW)	1.8	0.98	1.8	1.8	0.98
Min/max ambient temperature (°C/°F)	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F
Evaporator type	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube
Hydraulic connection - in/out	2 1/2"	2 1/2"	2 1/2"	4"	4"
Power supply	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz
IP rating	IP54	IP54	IP54	IP54	IP54
Length (mm/in)	2600 / 102.4	2735 / 107.7	2735 / 107.7	4000 / 157.5	5180 / 203.9
Width (mm/in)	1200 / 47.2	1915 / 75.4	2215 / 87.2	2215 / 87.2	1915 / 75.4
Height (mm/in)	2200 / 86.6	2160 / 85.0	2400 / 94.5	2400 / 94.5	2160 / 85.0
Net weight (kg/lbs)	1730 / 3814	1780 / 3924	2100 / 4630	3000 / 6614	2500 / 5512

Performance ratings are based on 35 °C ambient air temperature and 10 °C leaving chilled water temperature.

Technical specifications THULE ZERO GWP series

	THULE ZeroGWP 600	THULE ZeroGWP 650	THULE ZeroGWP 750	THULE ZeroGWP 1000	THULE ZeroGWP 1350
Refrigerant type / GWP	R1234ze / 7	R1234ze / 7	R1234ze / 7	R1234ze / 7	R1234ze / 7
Cooling capacity (kW/RT)	437.2 / 124.3	556.0 / 158.1	676.8 / 192.4	936.4 / 266.2	1180.8 / 335.7
Power consumption (kW)	119	175.8	213.8	295.6	370.4
COP	3.67	3.16	3.17	3.17	3.19
Compressor type	Hermetic Scroll	Screw	Screw	Screw	Screw
Compressor for each circuit	2/2	1/1	1/1	1/1	1/1
Expansion valve type	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)	Electronic (EEV)
Condenser type	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel	Aluminum microchannel
Number of fans	8	10	12	16	20
Fan control	AC Inverter	AC Inverter	AC Inverter	AC Inverter	AC Inverter
Fan nominal power (each) (kW)	1.8	1.8	1.8	1.8	1.8
Min/max ambient temperature (°C/°F)	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F	-20/+55 °C, -4/+131 °F
Evaporator type	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube	Stainless steel shell & tube
Hydraulic connection - in/out	4"	4"	6"	8"	12"
Power supply	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz	380–415 V / 3~ / 50 Hz
IP rating	IP54	IP54	IP54	IP54	IP54
Length (mm/in)	5180 / 203.9	6400 / 252.0	7610 / 299.6	10050 / 395.7	12490 / 491.7
Width (mm/in)	2215 / 87.2	2215 / 87.2	2215 / 87.2	2215 / 87.2	2215 / 87.2
Height (mm/in)	2400 / 94.5	2400 / 94.5	2400 / 94.5	2400 / 94.5	2400 / 94.5
Net weight (kg/lbs)	3200 / 7055	3600 / 7937	5000 / 11023	5600 / 12346	8200 / 18078

Performance ratings are based on 35 °C ambient air temperature and 10 °C leaving chilled water temperature.

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