

mCHILLER

TAKA

AIR-COOLED

CHILLER

MAYEKAWA
MYCOM



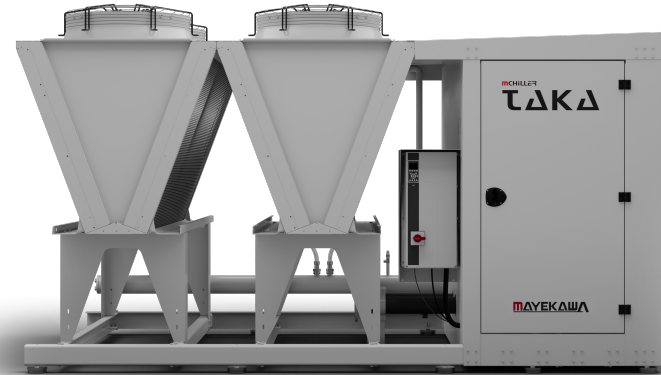


Designed to meet the need of industry

The **mCHILLER TAKA** has a strong and compact design, a long lifespan, and can be used in a wide variety of applications.

With **mCHILLER TAKA**, you are getting a **low-charge ammonia chiller engineered** as the perfect alternative to synthetic refrigerant chillers.

- ✓ Standardized product lines
- ✓ Low-charge future-proof natural refrigerant (R717)
- ✓ Plug & play solution



1924

Founded by Kisaku Maekawa in Tokyo, Japan.

1934

Began manufacturing industrial compressors.

1961

Established the MYCOM brand, recognized globally for compressor excellence.

1969

First overseas subsidiary beginning of worldwide expansion.

1990

Pioneered natural refrigerant solutions with ammonia and CO2 systems.

2021

Launched mCHILLER FUGU, standardised water-cooled ammonia chillers.

2022

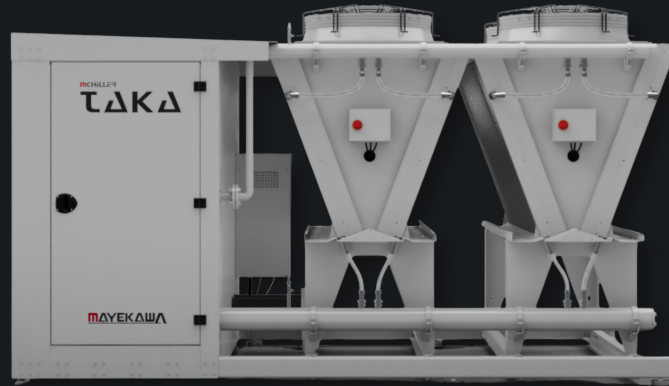
Launched mCHILLER TAKA, standardised air-cooled ammonia chillers.

2026

Launched the mHEAT series high temperature industrial heat pumps.

Technology & Innovation

Engineered for efficiency, built for the future



ULTRA-LOW AMMONIA CHARGE

Engineered as a compact, low-charge ammonia (R717) chiller, providing high-performance cooling with minimal refrigerant inventory for enhanced safety.

SEMI-HERMETIC PISTON COMPRESSOR

Equipped with a reliable MYCOM semi-hermetic reciprocating compressor, the unit guarantees a completely refrigerant-leak-free operation. Its robust design makes it an ideal, low-charge ammonia choice for commercial and semi-industrial applications.

PART LOAD EFFICIENCY

The variable speed drive and the characteristics of the reciprocating compressor ensures optimal energy consumption across both full and part-load conditions.

WATER-COOLED COMPONENTS

Features a comprehensive series system cooling solution that efficiently regulates temperatures for the key components. This advanced thermal management enhances overall system durability and performance stability.

INTEGRATED COMPRESSOR HOUSING

Designed with a robust weather compressor housing featuring insulated panels that effectively minimize operating noise and vibration. The thoughtful layout seamlessly incorporates protective elements while ensuring effortless accessibility for routine service and maintenance.

LOW NOISE EC CONDENSER FANS

Utilizes V-shaped microchannel condensers equipped with 0-100% speed-controlled EC fans for precise airflow regulation. This configuration combines high thermal rejection efficiency with reduced acoustic footprints for environmentally sensitive locations.

Technical Specifications

Standard air-cooled ammonia chiller - mCHILLER TAKA

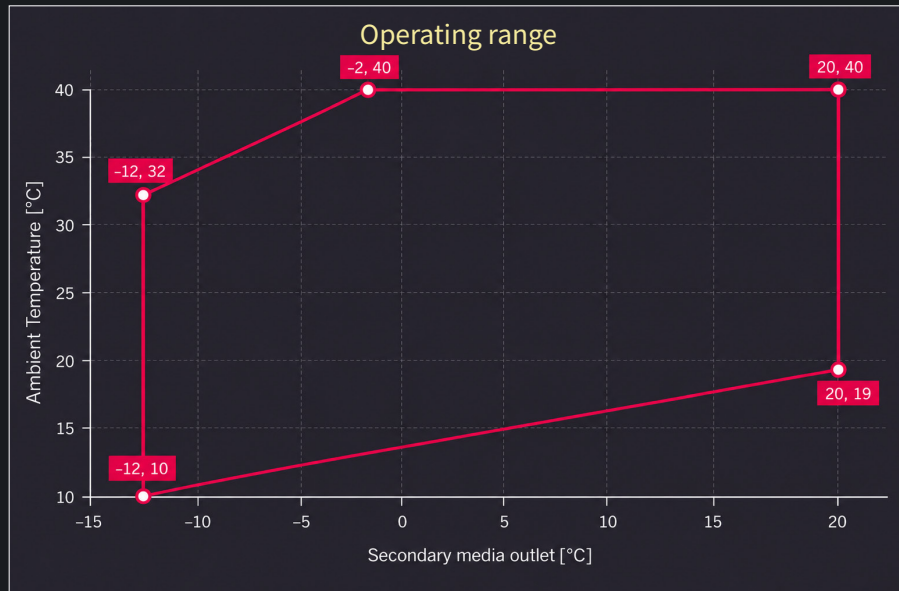
	TAKA 260R		TAKA 195R		TAKA 130R	
General						
Compressor type	Air-cooled chiller					
Charge	24 kg		22 kg		20 kg	
Capacity range	15 - 100 %		20 - 100 %		30 - 100 %	
Cooling capacity	248 kW	110 kW	186 kW	82 kW	121 kW	53 kW
Electrical consumption	62 kW	45.8kW	47.6 kW	35 kW	34 kW	24 kW
EER	4	2.4	3.9	2.3	3.6	2.2
Evaporator						
Secondary media	WATER	MEG - 30 %	WATER	MEG - 30 %	WATER	MEG - 30 %
Secondary inlet	12.0 °C	-3.0 °C	12.0 °C	-3.0 °C	12.0 °C	-3.0 °C
Secondary outlet	7.0 °C	-8.0 °C	7.0 °C	-8.0 °C	7.0 °C	-8.0 °C
Secondary media flow	42.5 m3/h	21 m3/h	32 m3/h	16 m3/h	21 m3/h	10 m3/h
Secondary side connection	2X DN100					
Condenser						
Ambient temperature	35 °C					
Sound pressure level 10m (fan)	48 - 60 dB (A)					

Electrical			
Parameter	260R	195R	130R
System earthing	TN-S		
Input voltage	3X400VAC+PE		
Rated package current	160 A	119 A	94 A
IK Max.	25 kA		
Maximum fuse	200 A	125 A	100 A
Communication	ModBus TCP/IP		

Eco design			
Parameter	260R	195R	130R
SEPR (High temperature +7)	6.77	6.89	6.82
SEPR (Medium -8)	3.7	3.59	3.56
SEPR (Comfort temperature +7)	4.6	4.54	4.49

Calculated according to EN14825: 2019, High/Comfort temp +7 Reg.2016/2281, and Medium temp -8 Reg.2015/1095

Dimensions & Application Range



DIMENSIONS AND WEIGHT

Length (L)	2850mm (1x cond.) / 4100mm (2x cond.) / 5350mm (3x cond.)
Width (W)	2280 mm
Height (H)	2340-2400 mm (adjustable)
Dry weight 1x cond.	3100 kg (260R) / 2850 kg (195R) / 2750 kg (130R)
Dry weight 2x cond.	3250 kg (260R) / 3200 kg (195R) / 3050 kg (130R)
Dry weight 3x cond.	3750 kg (260R) / 3550 kg (195R)

OPTIONS

- Flow switch
- NH3 Gas sensor
- Remote access gateway

DESIGN PARAMETERS

Design pressure - discharge side	25 bar
Design pressure - suction side	13 bar
Design temperature	-30 / 150°C
Secondary media connection	2x DN 100
Secondary media design pressure	16 bar

All components are PED 2014/68/EU compliant and approved by a notified body. Every unit is End of Line Tested (EOLT) in compliance with European Norms before shipping.

Applications

The chiller principle

The mCHILLER TAKA is built around Mayekawa's MYCOM semi-hermetic reciprocating compressor—a proven platform refined across decades of industrial ammonia service. Driven by electrical energy, the unit runs a closed thermodynamic refrigeration cycle to extract heat from a secondary media loop on the evaporator side, delivering chilled water or glycol to meet the cooling demand. The extracted heat is efficiently rejected through low-noise, V-shaped microchannel air-cooled condensers.

Versatile cooling applications

Designed as a compact, low-charge natural refrigerant solution, the mCHILLER TAKA is ideal for a broad range of commercial and semi-industrial duties, including:

- Process cooling in food, beverage, and manufacturing facilities
- Continuous chilled water production for data center infrastructure
- Comfort cooling and HVAC for large commercial building facilities
- Cold storage, distribution centers, and ice-making applications

Engineered for efficiency & compact safety

The mCHILLER TAKA delivers chilled secondary media across a wide operating envelope while maintaining an ultra-low ammonia charge for maximum safety. At its core, the MYCOM KHM reciprocating compressor paired with a Danfoss VLT variable speed drive ensures outstanding seasonal performance and part-load efficiency. An integrated series cooling loop recovers internal motor and oil heat, while low-noise EC fans optimize air rejection. The result is a robust, plug-and-play air-cooled chiller engineered for high reliability, minimal environmental impact, and seamless service access.



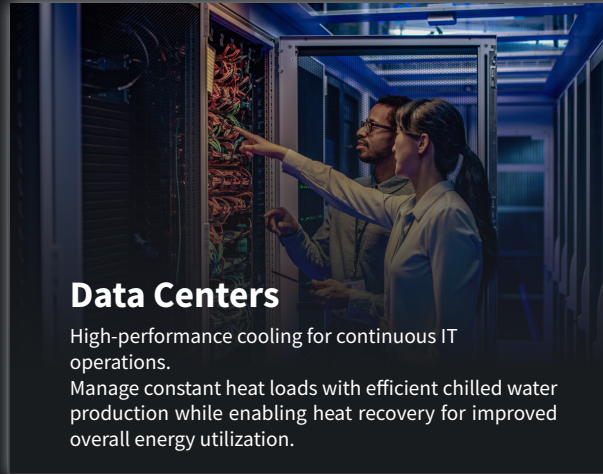
Applications

Sustainable, low-charge ammonia cooling tailored for commercial and semi-industrial applications.



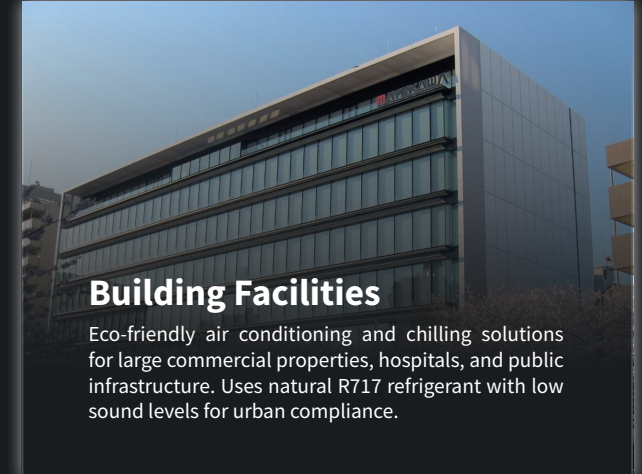
Process Cooling

Reliable, precise temperature control tailored for food production, beverage processing, and industrial applications. Efficient secondary media cooling ensures optimal product quality and consistent process safety.



Data Centers

High-performance cooling for continuous IT operations. Manage constant heat loads with efficient chilled water production while enabling heat recovery for improved overall energy utilization.



Building Facilities

Eco-friendly air conditioning and chilling solutions for large commercial properties, hospitals, and public infrastructure. Uses natural R717 refrigerant with low sound levels for urban compliance.



HVAC Cooling

Energy-efficient comfort cooling integrated with central hydronic systems. Variable-speed operation dynamically adapts to shifting indoor thermal loads while keeping energy footprint low.



Cold Storage & Logistics

Robust chilling capacity designed for distribution centers, cold stores, and logistics hubs. Delivers low-temperature secondary cooling with zero ozone depletion and ultra-low GWP.



Ice Rinks & Ice Storage

High-efficiency brine cooling designed for winter sports facilities and ice-thermal energy storage systems. Operates smoothly under varying load demands with low maintenance needs.

Global Network

MAYEKAWA operates in over 50 countries with a worldwide network of sales, engineering, and service offices — ensuring local support wherever you are.



50+
Countries

100+
Offices Worldwide

100+
Years of Excellence

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