
mCHiLLER
TAKA
standard air-cooled ammonia chillers
MAYEKAWA
MYCOM

Story Of **MAYEKAWA**

MAYEKAWA is a family owned business founded by Kisaku Maekawa in 1924.

Since 1924, **MAYEKAWA** has grown to become a world-leading company within industrial refrigeration and employs more than 4,500 people world-wide. Since the release of our first reciprocating compressor in 1934, **MAYEKAWA** has continued to develop and improve the **MYCOM** compressor technology to become the strongest brand within industrial refrigeration.

The focus of **MAYEKAWA** has always been natural refrigerant-based solutions driven by sustainable action towards protection of our environment.

Today, **MAYEKAWA's** core business is still industrial refrigeration but **MAYEKAWA** also covers other business areas such as meat processing equipment and robotics.

Kisaku Maekawa

mCHILLER SERIES – Sustainable Innovation

The **mCHILLER** series is a **MAYEKAWA** plug-and-play compact standard solution with a strong focus on energy consumption and the perfect balance between durability and simplicity. The **mCHILLER** series is designed with ammonia, a natural refrigerant that gives the highest energy efficiency and the best sustainable solution. The **mCHILLER** series has been designed for easy and simple installation and a long lifespan.

The **MAYEKAWA mCHILLER** series includes the water-cooled standard ammonia chiller **mCHILLER FUGU** and the air-cooled standard ammonia chiller **mCHILLER TAKA**.

mCHILLER FUGU
standard water-cooled ammonia chillers

mCHILLER TAKA
standard air-cooled ammonia chillers

mCHILLER TAKA 260R

1924: **MAYEKAWA** was founded by Kisaku Maekawa

1930: **MAYEKAWA** started ice making and cold storage business

1934: **MAYEKAWA** developed industrial vertical low-speed reciprocating compressors

1958: **MAYEKAWA** developed a high-speed multi cylinder single-stage reciprocating compressor

1961: **MAYEKAWA** established the MYCOM brand

1966: **MAYEKAWA** started the production of screw type refrigeration compressors

1985: **MAYEKAWA** developed STM screw compressors for vapor recover systems in the brewery industry

1998: **MAYEKAWA** delivered 40 ammonia refrigeration units for the Nagano Olympic Games

2001: **MAYEKAWA** developed a large-sized compound two-stage screw compressor

2008: **MAYEKAWA** developed a semi-hermetic screw compressor containing IPM motor for ammonia refrigerant

2008: **MAYEKAWA** developed an energy saving reciprocating compressor 'M series'

2021: **MAYEKAWA** launched the standard **mCHILLER** series

mCHILLER

TAKA

standard air-cooled ammonia chillers

mCHILLER TAKA 260R, 195R, 130R

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

The **mCHILLER TAKA** is designed to meet the needs of semi-industrial and commercial markets such as data centers, process cooling, building facilities, HVAC, etc.

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

2022 ATMO Approved Natural Refrigerants

Characteristics

- Reciprocating MYCOM compressor
- Compact design with a focus on sound and vibration isolation
- Low-charge flooded evaporator
- Micro-channel condenser with EC fans
- Speed control for optimized part load (VSD)
- Network capabilities and remote access
- Optimized for serviceability
- Weather protecting housing

Key Features

- Standardized product lines
- Plug-and-play solutions
- High energy efficiency all year
- Low-charge natural refrigerants only
- All units are Factory Acceptance Tested

Benefits

- Future-proof refrigerant
- Convenient installation and commissioning
- Safe and reliable operation
- Competitive pricing and low operation cost
- Durable design and long lifespan

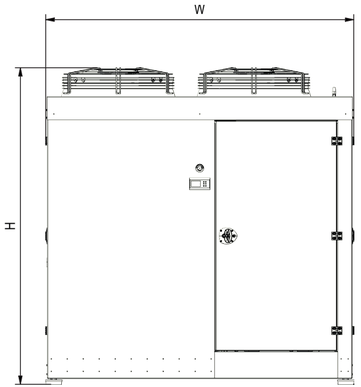
mCHILLER

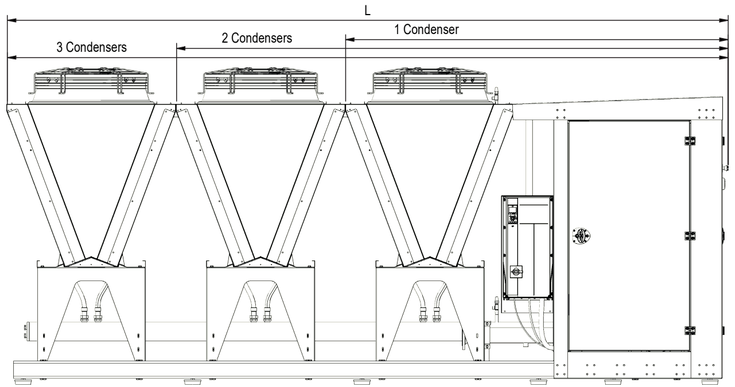
TAKA

standard air-cooled ammonia chillers

mCHILLER Model	TAKA 260R	TAKA 195R	TAKA 130R
Width	2280 mm	2280 mm	2280 mm
Height (adjustable)	2340-2400 mm	2340-2400 mm	2340-2400 mm
Length 1x condenser	2850 mm	2850 mm	2850 mm
Length 2x condenser	4100 mm	4100 mm	4100 mm
Length 3x condenser	5350 mm	5350 mm	-
Dry weight 1x condenser	3100 kg	2850 kg	2750 kg
Dry weight 2x condenser	3250 kg	3200 kg	3050 kg
Dry weight 3x condenser	3750 kg	3550 kg	-

Values are to be considered as guidance and will be finally confirmed in the quotation proces





Technical Data

General	TAKA 260R		TAKA 195R		TAKA 130R	
Package type:	Air-cooled chiller	Air-cooled chiller	Air-cooled chiller	Air-cooled chiller	Air-cooled chiller	Air-cooled chiller
Refrigerant:	NH3 / R717	NH3 / R717	NH3 / R717	NH3 / R717	NH3 / R717	NH3 / R717
Charge (NH3):	24 kg	24 kg	22 kg	22 kg	20 kg	20 kg
Capacity Range:	11.0- 100 %	11.0- 100 %	14.5- 100 %	14.5- 100 %	21.5- 100 %	21.5- 100 %
Cooling capacity:	241.6 kw	111.1 kw	181.9 kw	87.7 kw	120.9 kw	61.6 kw
Condenser capacity:	297.4 kw	151.2 kw	223.7 kw	118.5 kw	148.7 kw	82 kw
Electrical consumption (Chiller)**:**	63.4 kw	45.4 kw	48.2 kw	35.4 kw	33 kw	25.1 kw
EER (Chiller)**:**	3.8	2.4	3.8	2.5	3.7	2.5
COP (Chiller)**:**	4.7	3.3	4.6	3.3	4.5	3.3
Evaporator						
Evap Secondary media:	Water	MEG-30%	Water	MEG-30%	Water	MEG-30%
Evap Secondary inlet:	12 °C	-3 °C	12 °C	-3 °C	12 °C	-3 °C
Evap Secondary outlet:	7 °C	-8 °C	7 °C	-8 °C	7 °C	-8 °C
Secondary media flow:	45 m3/h	21 m3/h	34 m3/h	17 m3/h	23 m3/h	12 m3/h
Secondary side connection:	2x DN100	2x DN100	2x DN100	2x DN100	2x DN100	2x DN100
Condenser						
Ambient temperature:	35 °C	35 °C	35 °C	35 °C	35 °C	35 °C
No. of condenser units:	2	2	2	2	2	2
Sound pressure fan level 10 m.*:	48-60 dB(A)	48-60 dB(A)	48-60 dB(A)	48-60 dB(A)	48-60 dB(A)	48-60 dB(A)
Electrical						
System earthing:	TN-S	TN-S	TN-S	TN-S	TN-S	TN-S
Input voltage:	3x400VAC+PE	3x400VAC+PE	3x400VAC+PE	3x400VAC+PE	3x400VAC+PE	3x400VAC+PE
Rated package current:	158 A	158 A	107 A	107 A	80 A	80 A
IK Max.:	25 KA	25 KA	25 KA	25 KA	25 KA	25 KA
Maximum fuse:	200 A	200 A	125 A	125 A	100 A	100 A
Slave communication:	Modbus TCP/IP	Modbus TCP/IP	Modbus TCP/IP	Modbus TCP/IP	Modbus TCP/IP	Modbus TCP/IP

Capacity according to EN12900
* According to EN13487 free field condition and reference to ISO 3744

Global network

Headquartered in Tokyo, Japan, Mayekawa provides products and services worldwide through an extensive network of local offices and plants.
For more information, please contact your local sales office or visit www.mchillerseries.com and www.mayekawa.com