

mCHILLER

FUGU

standard water-cooled ammonia chillers

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

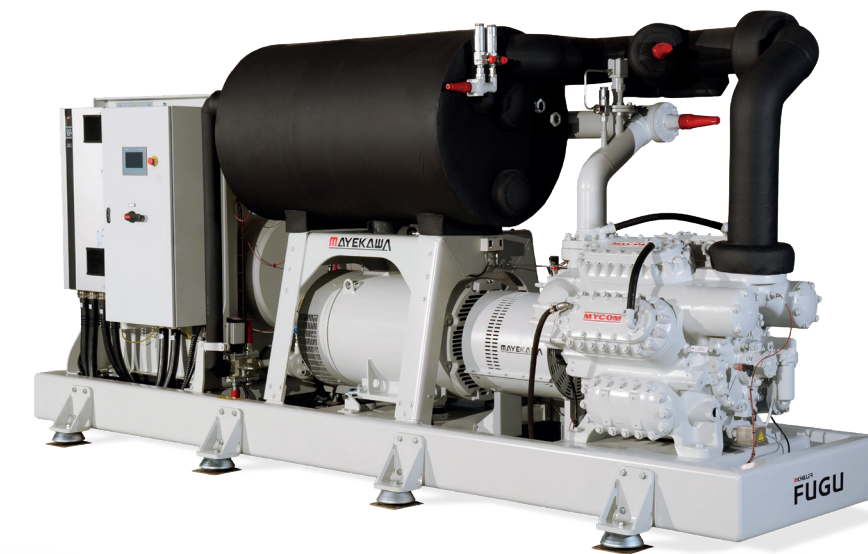
mCHILLER SERIES – Sustainable Innovation

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.

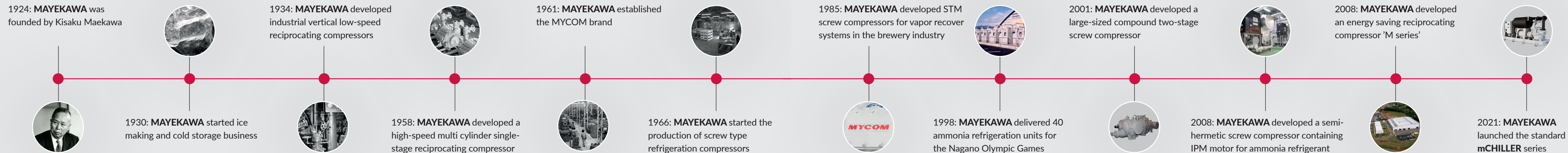
The MAYEKAWA mCHILLER series includes the water-cooled standard ammonia chiller mCHILLER FUGU and the air-cooled standard ammonia chiller mCHILLER TAKA.

mCHILLER
FUGU
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mCHILLER
TAKA
standard air-cooled ammonia chillers



mCHILLER FUGU 1280R



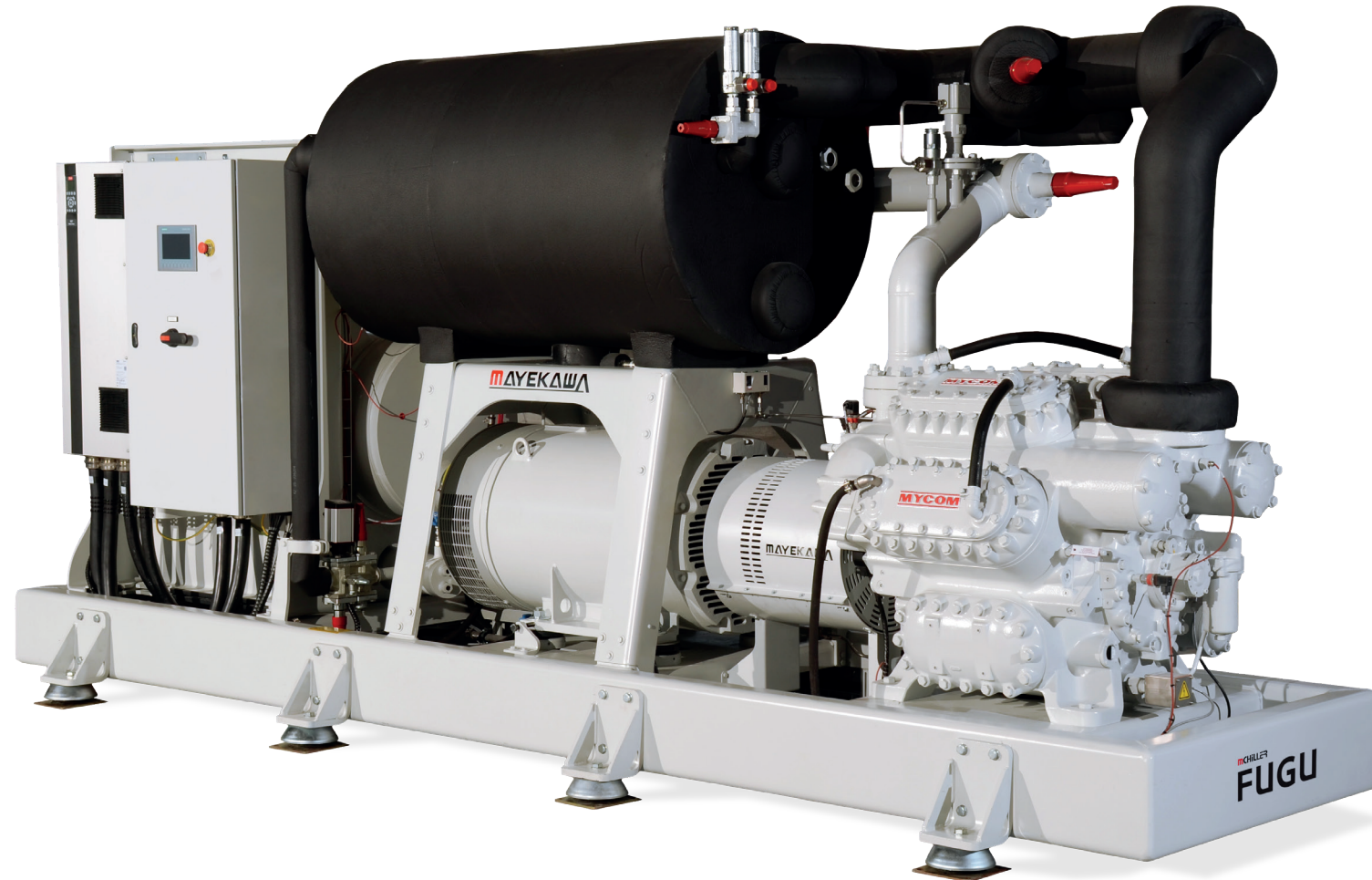
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mCHILLER FUGU 1280R, 960R, 640R

mCHILLER FUGU in the versions 1280R, 960R, and 640R is designed to meet the needs of industrial and semi-industrial markets such as breweries, industrial processes, server farms, building facilities etc.

mCHILLER FUGU 1280R, 960R and 640R has a strong industrial design, long lifespan – and can be used in a wide variety of applications.

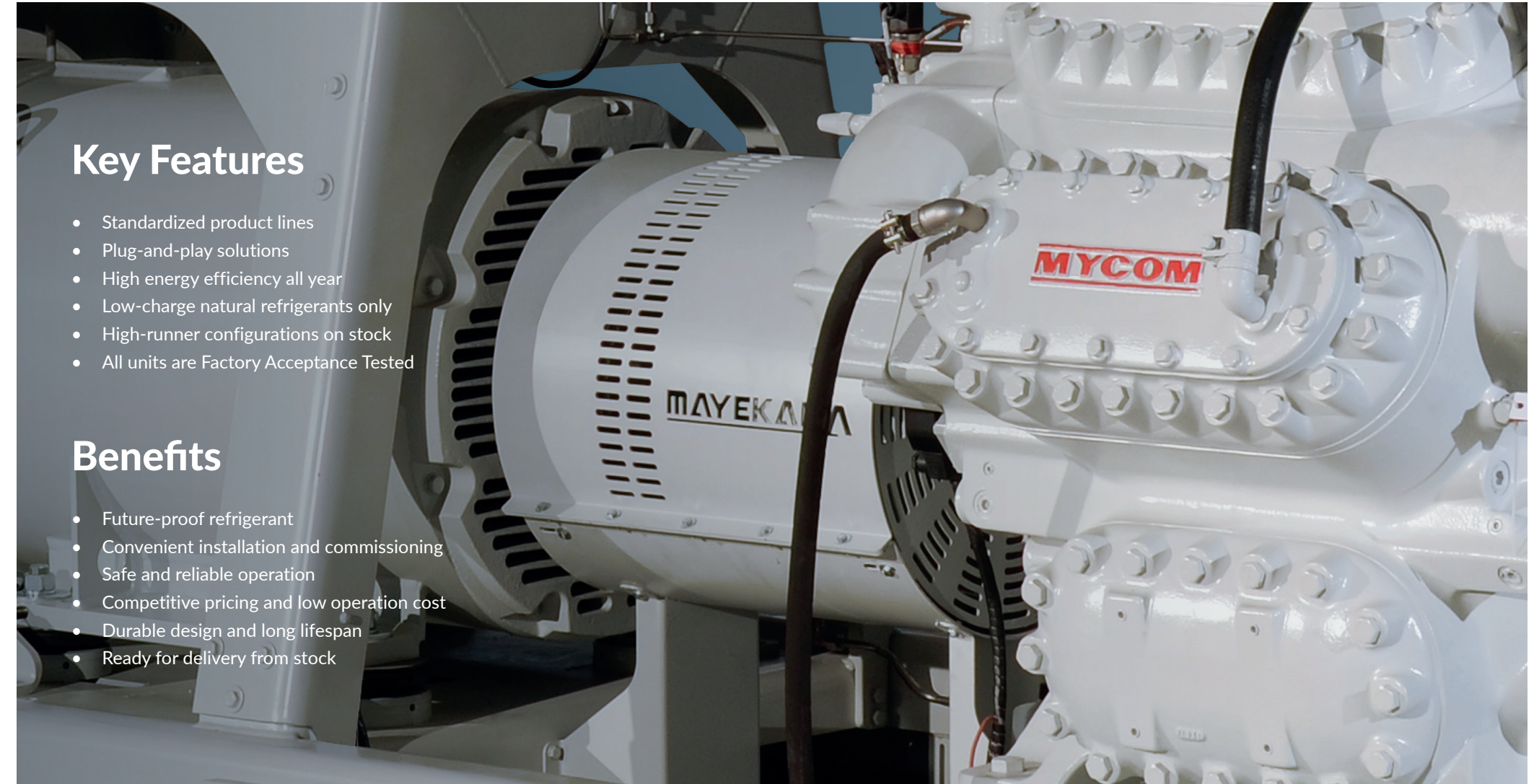


Key Features

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

Benefits

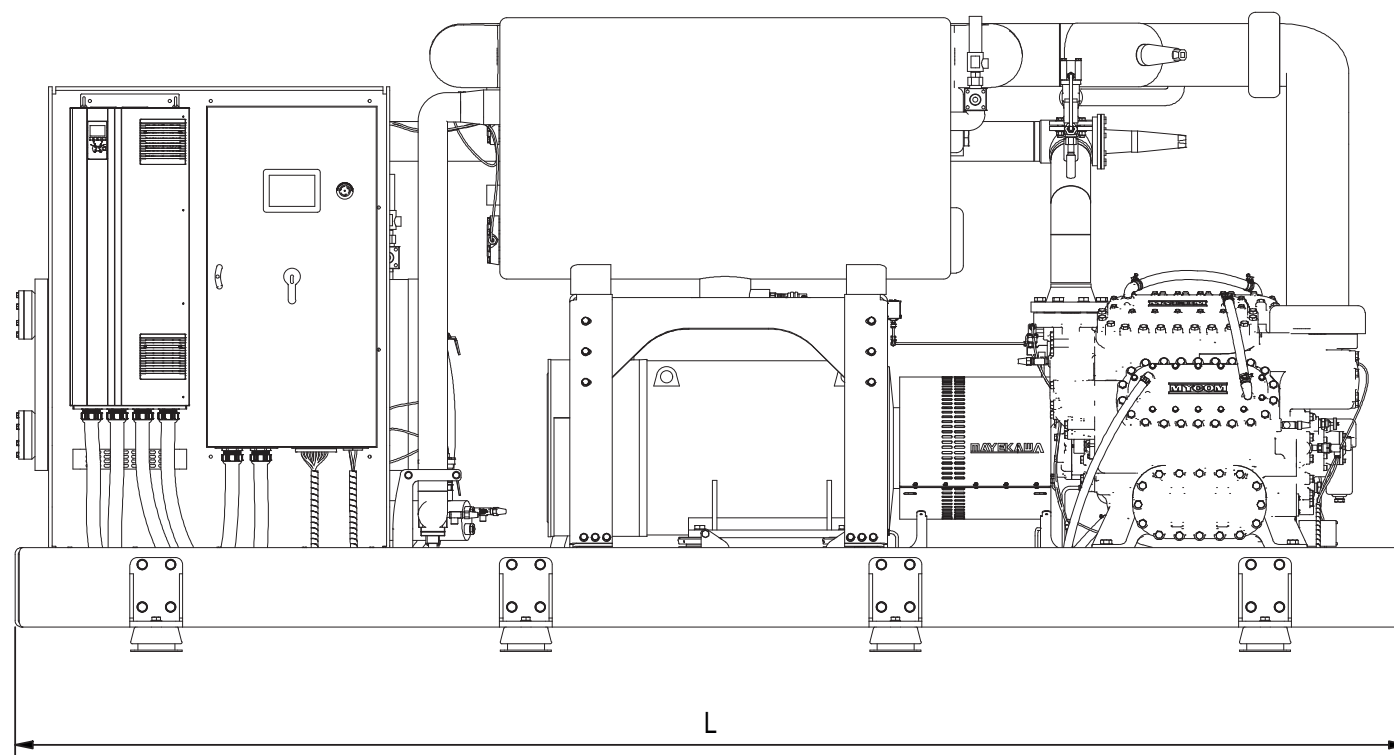
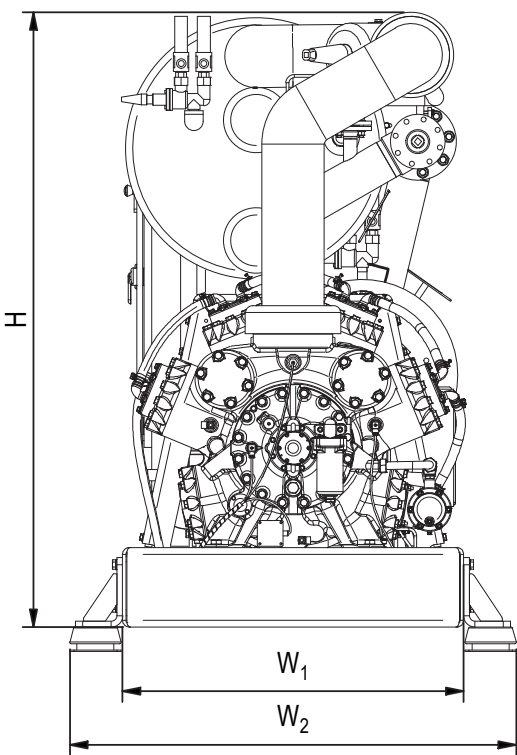
- Future-proof refrigerant
- Convenient installation and commissioning
- Safe and reliable operation
- Competitive pricing and low operation cost
- Durable design and long lifespan
- Ready for delivery from stock



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mCHILLER model	FUGU 1280R	FUGU 960R	FUGU 640R
Cooling side connections	2/4x DN100	2/4x DN100	2/4x DN80
Heat rejection side connections	2/4x DN100	2/4x DN100	2/4x DN80
Length (L)	4895 mm	4895 mm	4895 mm
Width (W)	1200 mm	1200 mm	1200 mm
Height (H)	2150 mm	2150 mm	1970 mm
Dry weight	8750 kg	8250 kg	6900 kg

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



Technical Data

General	FUGU 1280R		FUGU 960R		FUGU 640R	
Package type:	Water-cooled chiller	Water-cooled chiller	Water-cooled chiller	Water-cooled chiller	Water-cooled chiller	Water-cooled chiller
Refrigerant/charge:	R717 / 80 kg	R717 / 80 kg	R717 / 80 kg	R717 / 80 kg	R717 / 55 kg	R717 / 55 kg
Capacity Range:	11.0-100 %	11.0-100 %	14.5-100 %	14.5-100 %	21.5-100 %	21.5-100 %
Cooling capacity:	1364 kW	822 kW	1031 kW	616 kW	684 kW	398 kW
Condenser capacity:	1595 kW	1025 kW	1203 kW	769 kW	799 kW	499 kW
Shaft power:	230.7 kW	203.0 kW	171.3 kW	153.0 kW	115.0 kW	101.0 kW
EER (Chiller):	5.57 (-)	3.81 (-)	5.67 (-)	3.79 (-)	5.60 (-)	3.71 (-)
COP (Chiller):	6.92 (-)	5.05 (-)	7.02 (-)	5.03 (-)	6.95 (-)	4.94 (-)
Evaporator						
Secondary media:	WATER	MEG-30.0 %	WATER	MEG-30.0 %	WATER	MEG-30.0 %
Secondary inlet:	12.0 °C	0.0 °C	12.0 °C	0.0 °C	12.0 °C	0.0 °C
Secondary outlet:	7.0 °C	-5.0 °C	7.0 °C	-5.0 °C	7.0 °C	-5.0 °C
Secondary flow:	234 m3/h	155 m3/h	177 m3/h	116 m3/h	117 m3/h	75 m3/h
Condenser						
Secondary media:	WATER	WATER	WATER	WATER	WATER	WATER
Secondary inlet:	30.0 °C	30.0 °C	30.0 °C	30.0 °C	30.0 °C	30.0 °C
Secondary outlet:	35.0 °C	35.0 °C	35.0 °C	35.0 °C	35.0 °C	35.0 °C
Secondary flow:	276 m3/h	177 m3/h	208 m3/h	133 m3/h	138 m3/h	86 m3/h
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:	603A	495A	406A	406A	325A	325A
IK Max.:	20kA	20kA	20kA	20kA	20kA	20kA
Maximum fuse:	800A	630A	500A	500A	400A	400A
Slave communication type:	MODBUS TCP/IP, PROFINET	MODBUS TCP/IP, PROFINET	MODBUS TCP/IP, PROFINET	MODBUS TCP/IP, PROFINET	MODBUS TCP/IP, PROFINET	MODBUS TCP/IP, PROFINET

Capacity according to EN12900

Eco Design	FUGU 1280R	FUGU 960R	FUGU 640R
SEPR (High temp +7)	12.05	12.75	13.85
SEPR (Medium temp -8)	5.89	6.01	6.41
SEER (Comfort temp +7)	9.36	9.74	10.48

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



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