# HYDROLUTION EZY

# **ALL-YEAR** ROUND RELIABILITY & EFFICIENCY HYDROLUTION EZY



# HYDROLUTION EZY

# Monobloc Air to Water Heat Pump

The Hydrolution EZY, an outdoor monobloc air-to-water heat pump unit, integrates cutting-edge technologies along with R32 refrigerant to significantly boost efficiency. It is esteemed for its adaptability and durability, this unit offers solutions for residential heating, cooling, and hot water requirements.

The Hydrolution EZY unit offers all yearround operation, providing both heating and cooling solutions to suit any season. The unit is capable of withstanding temperatures as low as -25°C in the winter and as high as 43°C in the summer. This flexibility ensures consistent and reliable functionality, making it a go-to choice for households seeking versatile climate control solutions.

In residential settings, heating and cooling are fundamental for everyday comfort. The key is having systems that are not only effective and eco-friendly but also seamlessly integrated into the surroundings. For residential use, this system is tailored to meet thermal requirements in houses and flats, offering reliability, impressively low noise levels, freedom from planning permission hassles and offers a wide range of installation possibilities.

# **Hydrolution EZY line up:**







# **System Overview:** Outdoor units: FDCM

- FDCM100VNX-W
- FDCM140VNX-W
- Indoor units:
  - All in one HMM100 Available from Spring 2024
- Controllers
  - RC-HY 20/40-W
- Hot water tanks
  - PT300/500
- Accessories

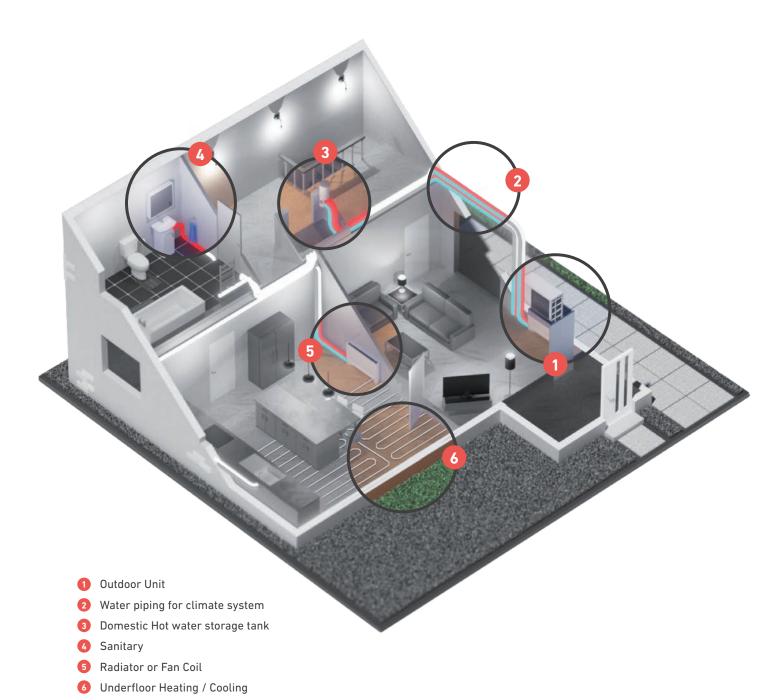








# **HYDROLUTION EZY LAYOUT**







# **YEAR-ROUND** FUNCTIONALITY

# **Hydrolution EZY Key Benefits:**

- 100% hydraulic with a water pipe connection
- Remote monitoring system via myUplink platform
- Integration with PV (photovoltaic) solar panels\*
- Can connect up to 8 outdoor units\*
- Utilises R32 Refrigerant
- Suitable for domestic applications
- Pool and solar heating\*
- Environmentally friendly with a LOT1 energy class of A+++
- Connectable to an external monitoring system - monito
- Smart Grid Ready (SG Ready)

# **SPECIFICATIONS**

Model			FDCM100VNX-W	FDCM140VNX-W
Power source			1 phase 230V 50 Hz	
Heating nominal capacity*	Condition 1	kW	10.0	14.5
	Condition 2	kW	10.0	14.0
СОР	Condition 1		3.45	3.40
	Condition 2		4.29	4.50
Cooling nominal capacity*	Condition 1	kW	8.50	12.5
	Condition 2	kW	11.0	16.5
EER	Condition 1		2.85	2.90
	Condition 2		3.70	3.80
Seasonal Space Heating			A+++/A++	A+++/A++
Seasonal Space Heating Energy efficiency (W35/W55)		%	191/136	181/133
Seasonal Space Heating Energy Efficiency Class of package (W35/W55)			A+++/A++	A+++/A++
Seasonal Space Heating Energy efficiency of package (W35/W55)		%	195/140	185/137
Operation range (Ambient temperature)	Heating		-25°C-43°C	
	Cooling		15°C-43°C	
Operation range (Water temperature)	Heating		25-60	
	Cooling		7-25	
Max Current		A	21	28
Sound power level		db(A)	60	63
Sound pressure level		db(A)	45	48
Refrigerant			R32	
Refrigerant amount (kg)			2.0	2.9
Dimensions (H × W × D)			1120 x 1160 x 440	
Weight			104	118
Water pipe connection			G1" external thread	

Test conditions		Water Temperature	Ambient Temperature	
Heating	Condition 1	45°C out / 40°C in	7°C DB / 6°C WB	
	Condition 2	35°C out / 30°C in	/ CDB/ 6 CWB	
Cooling	Condition 1	7°C out / 12°C in	35°C DB	
	Condition 2	18°C out / 23°C in	35 C DB	

<sup>\*</sup>Accessory required.



# STAY IN CONTROL WITH myUplink

# The Ultimate App for Remote Monitoring

The Hydrolution EZY air-to-water unit seamlessly interfaces with an independent remote monitoring system via the myUplink platform, a dedicated application tailored for users.



# **DOWNLOAD** THE APP TODAY



<sup>\*</sup>App Store logo are trademarks of Apple Inc.

Independent Remote Monitoring System: This sophisticated system empowers users to remotely oversee and control the Hydrolution EZY unit, enabling real-time monitoring of its performance, identification of maintenance requirements, and ensuring optimal efficiency.

# Experience enhanced control and monitoring with myUplink:

Status Overview: Get a quick and comprehensive view of your heat pump's status.

Heating Level Control: Easily manage and adjust the heating and hot water production to your desired comfort level.

Instant Notifications: Receive push notifications and emails if your system is impacted, ensuring you're always in the know and can take prompt action.

# myUplink Key Benefits:

- · Real time monitoring and control of heating, hot water, pool, solar and heat pump operation
- Real time alarm information
- Cloud based software update
- · Clear and intuitive heating and hot water temperature monitoring
- Easy-to-use control system for maximum comfort, no matter where you are - Weather forecast compensation

<sup>\*</sup>Google Play and the Google Play logo are trademarks of Google LLC.

# **ACCESSORIES**



#### ECS40M/ECS41M

Extra mixing valve set, including a room sensor, for adjusting temperature in several climate systems. (e.g. A radiator system and an underfloor heating)

#### **Contents**

1 x Shunt motor

4 x Cable ties 1 x Kit for accessory card 2 x Replacement gasket 1 x Circulation pump 2 x Heating pipe paste 2 x Temperature sensor

2 x Aluminium tape

1 x 3-way valve 1 x Insulation tape

ECS40M for maximum 80m<sup>2</sup> floor heating

ECS41M for 80-250 m<sup>2</sup> floor heating

RC-HY40-W HMM100

1 x Room sensor



#### RTS40M

Room sensor

RC-HY40 and HMA include one sensor

RC-HY20-W

RC-HY40-W

HMM100



## **AXC30M**

Accessory card

RC-HY40-W

HMM100



#### RMU40M

Room sensor/controller with multicolour display

RC-HY40-W

HMM100



# VST05M / VST11M / VST20M

Reversing valve for using hot water accessories and prioritising hot water demand.

VST05M (Ø 22mm, Max.electric charge output: 11kW)

VST11M (Ø 28mm, Max.electric charge output: 17kW)

VST20M (DN32, (11/4"), Max.electric charge output: 40kW)

RC-HY20-W

RC-HY40-W



# **POOL40M**

Enables pool heating with the heat pump.

Max. output - 17 kW

RC-HY40-W

HMM100



## EME20M

Enables communication and control between the inverter for solar cells and heat pump/indoor module/control module.

RC-HY20-W

RC-HY40-W

HMM100



# SOLAR42M

Enables solar heating with the heat pump.

RC-HY40-W

HMM100

# **ACCESSORIES**



# VCC05M / VCC11M

Reversing valve for changing operation of cooling and heating.

VCC05M (Ø 22mm) VCC11M (Ø 28mm)



RC-HY40-W



# Anode M300 /Anode M500

Magnesium anode chain

Anode M300 for PT300 (Ø26 x 8 pieces (G1"))

Anode M500 for PT500 (Ø33 x 5 pieces (G11/4"))

PT300

PT500



# **ME1030M**

Immersion heater designed to heat up domestic hot water installations. (3kW, G11/2', 230V)

PT300

PT500



#### MODBUS40M

Control and monitor the heat pump system by external Modbus-equipped equipment.

RC-HY40-W

HMM100



# Anode T300/Anode T500

Anode titanium complete

Anode T300 for PT300 (Length: 200mm, G3/4", 230V)

Anode T500 for PT500 (Length: 400mm, G3/4"230V)

PT300

PT500



# CPD11-25M/65 / CPD11-25M/75

DC Motor controlled water pump.

- CPD11-25M/65: FDCM100VNX-W

- CPD11-25M/75: FDCM140VNX-W



## **EMK300M / EMK500M**

Energy measurement kit for measuring the flow and temperature differences in the charge circuit. Information can be shown on RC-HY40's display.

EMK300M (Measurement range 5.0-85 l/min) EMK500M (Measurement range 9.0-150 l/min)

RC-HY40-W

HMM100



# HR10M

Relay for ME1030M

Used to control external 1 to 3phase loads such as oil burners, immersion heaters and pumps.

PT300

PT500



## ELK9M1

Immersion heater that can be used to supplement the heating capacity of heat pumps.

Power source: 1~230V 50Hz or

3~400V 50Hz

Output: 4.5 or 9 kW

# Before use

In order to benefit from our Hydrolution EZY unit, read the user manual thoroughly.

# Places

Do not install in places where combustible gas could leak or where there are sparks. Keep away from places where combustible gas could be generated, flow or accumulate, or locations containing carbon fibres, otherwise there is a danger of fire.

## Installation

Installation must be carried out in accordance with current norms and directives.

Current regulations require the inspection of installation before commissioning. The inspection must be carried out by a suitable qualified operative and this should also be documented. Improper installation will lead to refrigerant leakage, electric shocks, fires and other serious complications.

Make sure the indoor unit and the outdoor unit are installed correctly and fixed on a stable base.

Mitsubishi Heavy Industries Air Conditioning Europe Ltd 5 The Square, Stockley Park, Uxbridge, UB11 1ET http://www.mhiae.com

#### ISO9001

Our Air-Conditioning & Refrigeration Division is an ISO9001 approved factory for residential air conditioners and commercial-use air conditioners (including heat pumps).



MITSUBISHI HEAVY INDUSTRIES-IAHAJAK AIR CONDITIONERS CO., LTI Centiled ISO 8001 Certificate Number: 44 100 980813

#### ISO14001

Our Air-Conditioning & Refrigeration Division has been assessed and found to comply with the requirements of ISO14001.





MITSUBISHI HEAVY INDUSTRIES-MAHAJAK AIR CONDITIONERS CO.,LTD



Edited in England: 11-2023