

# PACKAGED HWHP

PACKAGED - AIR TO WATER / QAHV - DOMESTIC HOT WATER

NEW



Ecordan QAHV is a packaged air condensed outdoor unit for massive hot water production at high temperature.

## Technical specifications

- Water temperature: up to 90°C
- DC Scroll Inverter compressor
- Operating field: -25/+46°C
- CO<sub>2</sub> Natural Refrigerant
- GWP (global warming potential)=1
- ODP (ozone depletion potential)=0
- HIGH COP
- Power 40kW
- Cascade system up to 640kW
- M-Net compatible

## Hot water production system

Ecordan QAHV is the innovative solution by Mitsubishi Electric for high temperature hot water production, using CO<sub>2</sub> as refrigerant gas. This allows to supply hot water at high temperatures, up to 90°C and 40kW capacity. QAHV finds his application in those contexts which need continuous and steady hot water supply, such as hotels, nursing homes, wellness center and schools.

## CO<sub>2</sub> as refrigerant gas

CO<sub>2</sub> can be found in nature, it is not toxic or harmful to the environment. It does not contribute to ozone depletion (ODP=0) and its contribution to global warming is negligible (GWP=1).

## Operating field extended to -25°C

Thanks to "Flash-Injection Circuit" (same as VRF CITY MULTI ZUBADAN Y) Packaged unit QAHV can operate between -25°C and +43°C. Moreover, the unit is able to supply hot water at 90°C and 40kW capacity down to -3°C.

## High efficiency

New Packaged QAHV grants and high COP when meeting certain conditions. Water temperature difference between supply and return is fundamental for high performances.



## Technical specifications DOMESTIC HOT WATER

MODELLO			QAHV-N560YA-HPB
Power supply			3-phase 380-400-415V 50/60Hz
Nominal heating capacity * <sup>1</sup>		kW	40
	Power input	kW	10,31
	Current	A	17,8-16,9-16,3
	COP		3,88
Nominal heating capacity * <sup>2</sup>		kW	40
	Power input	kW	10,97
	Current	A	20,0-19,0-18,3
	COP		3,65
Nominal heating capacity * <sup>3</sup>		kW	40
	Power input	kW	11,6
	Current	A	20,4-19,4-18,7
	COP		3,44
Temperature range * <sup>4</sup>	Supply	°C	55~90°C
	Outdoor	°C	-25 ~ +43
Energy efficiency heating rank in warm climate * <sup>5</sup>	Rank		A
Energy efficiency for heating in warm climate * <sup>5</sup>	η <sub>wh</sub>		103%
Circulation pump			included
Circulation pump pressure		kPa (l/min)	77 kPa (17 l/min)
Water piping diameter		mm	19,05 (3/4")
		mm	19,05 (3/4")
Sound pressure level at 1 m		dB(A)	56
External dimensions		mm	1837 (1777 not including legs)x1220x760
Net weight		kg	400
Water pressure		Mpa	1
Ref. Charge R744 * <sup>6</sup> /Eq CO <sub>2</sub>		kg/Tons	6,5/0,0065

Nota:

\*<sup>1</sup> Heating nominal conditions: outdoor temperature 16°CBS/12°CBU; supply water temperature 65°C; inlet water temperature 40°C

\*<sup>2</sup> Heating nominal conditions: outdoor temperature 7°CBS/6°CBU; supply water temperature 65°C; inlet water temperature 9°C

\*<sup>3</sup> Heating nominal conditions: outdoor temperature 7°CBS/6°CBU; supply water temperature 65°C; inlet water temperature 15°C

\*<sup>4</sup> Refer to installation and instruction manual.

\*<sup>5</sup> Warm conditions: solar radiation and outdoor temperature condition of Strasburg.

\*<sup>6</sup> GWP of R744 equals to 1 according to regulation 517 / 2014

\* Do not install where wet bulb temperature exceeds 32°C

\* Comply with water quality specification as reported in technical documentation.