

i-32V5H Midi

Inverter monoblock heat pump

21 kW ÷ 32 kW

Compressor

DC inverter compressor are of the hermetic rotary type, expressly designed for operation with R32, equipped with thermal protection and mounted on rubber vibration dampers.

User-Side Heat Exchanger

Grade AISI 304 stainless steel brazed plate heat exchanger coated with black closed-cell flexible elastomeric foam.

Structure

Structure suitable for outdoor installation consisting of high-thickness profiles made of hop-dip galvanised steel sheets coated with polyester powder, coated with RAL 7035 bush-hammered finish resistant to weathering.



Source-Side Heat Exchanger

The air-cooled heat exchangers are made with copper pipes and aluminium fins.

Electrical Panel And Control

Entirely made and wired in conformity to the IEC 60335-2-40.

Fan

Axial-type fans are mounted, featuring aerofoil blades. They are statically and dynamically balanced and supplied with a protection grille and air inlet and outlet nozzle with double-flared profile, specially shaped to boost efficiency and reduce noise. The electric motor is modulated with EC brushless motor, directly coupled, and equipped with an integrated thermal protection device. The motor has an IP 54 protection rating in accordance with the CEI

EN 60529 standard.

Standard Components

- Electronic circulator
- EEV - electronic expansion valve
- Liquid indicator
- Water side safety valve
- Drain cock
- Flow switch (flow presence signal)
- Remote on / off dry contact
- Dynamic set point
- Three-phase relay for sequence / lack monitoring
- Fan speed regulator (ECM fans)
- 2nd set point

Accessories

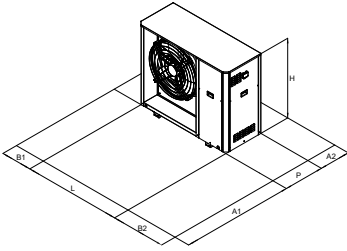
CM	Modbus communication module	KA	Plate heat exchanger + basement electrical heaters
DS	Desuperheater partial heat recovery unit	RP	Metallic guards for condenser
DSFR	Sequence control device, phase failure + Minimum and Maximum voltage relay	TR2	Cu / Al coil with Silver Line anti-corrosion treatment
GI	Internal hardware extension module	SL	Silenced version
IM	Protection switches		

Loose accessories

e-Pro	Wi-Fi wall remote control	VDIS3	probe
e-Lite	Multifunctional remote control system	FD	Three-wires diverting valve
Hi-TV415	Remote Touch Screen Display	FY	Dirt separator filter
CONNECT BOX	Gateway Heat Pump Communication and Maxa Connect	ACT	Y-strainer
i-CR	Remote wall controller	TR2C4	Outdoor water buffer (view page.28)
AG	Anti-vibration kit		Cu/Al battery with anti-corrosion and metal panels treatment
SAS	Remote plant probe - Sanitary storage		

Versions

i-32V5H Midi	Standard version reversible heat pump	i-32V5H-BT Midi	BT version reversible heat pump (for low water temperatures)
i-32V5H-DS Midi	Reversible heat pump with desuperheater		



Spaces of respect	0121-0126	0128-0132
A1	mm 1500	1500
A2	mm 400	400
B1	mm 400	400
B2	mm 700	700

Dimensions		0121	0126	0128	0132
L	mm	1600	1600	1600	1600
P	mm	640	640	640	640
H	mm	1315	1315	1315	1315

i-32V5H Midi		0121	0126	0128	0132
Cooling					
Cooling capacity (1)	kW	18,0* / 17,7	22,7* / 18,7	25,0* / 24,2	27,5* / 26,0
Power input (1)	kW	5,9	6,2	8,0	8,7
EER (1)	W/W	3,0	3,0	3,0	3,0
Cooling capacity (2)	kW	25,1* / 22,0	27,7* / 25,8	30,8* / 29,0	32,7* / 31,4
Power input (2)	kW	4,4	5,5	6,4	7,1
EER (2)	W/W	5,0	4,7	4,6	4,4
SEER (3)	W/W	4,4	4,6	4,8	4,8
Water flow (1)	L/s	0,8	0,9	1,2	1,2
Hydronic circuit side load losses (1)	kPa	32,5	34,5	31,2	34,2
Heating					
Heating capacity (3)	kW	25,2* / 21,3	27,3* / 26,0	31,4* / 28,0	33,9* / 32,1
Power input (3)	kW	4,9	6,4	6,4	7,9
COP (3)	W/W	4,3	4,0	4,4	4,1
Heating capacity (4)	kW	25,2* / 21,2	27,6* / 25,8	30,7* / 28,3	34,5* / 32,7
Power input (4)	kW	6,4	7,9	8,2	9,9
COP (4)	W/W	3,3	3,3	3,5	3,3
SCOP (6)	W/W	4,2	4,0	4,3	4,0
Water flow (1)	L/s	1,0	1,2	1,4	1,6
Use side heat exchanger load losses (4)	kPa	37,9	53,1	41,4	50,6
Energy efficiency (Water 35°C / 55°C)	Class	A++/A++	A++/A++	A++/A++	A++/A++
Compressor					
Type	Twin Rotary DC Inverter				
Compressors	n°	1	1	1	1
Refrigerant circuits	n°	1	1	1	1
Refrigerant (R32)	kg	4,3	4,3	5,1	5,1
Cooling quantity in tonnes of CO2 equivalent	ton	2,90	2,90	3,44	3,44
Fan					
Type	DC Brushless				
Number	N°	1	1	1	1
Nominal air flow (1)	m³/h	10769	10847	12209	13202
Hydronic heat exchanger					
Type	Plate				
Number	N°	1	1	1	1
Hydraulic circuit					
Water connections	inch	1"	1"	1 1/4"	1 1/4"
Water quantity	L	2,4	2,4	3,4	3,4
Minimum water volume	L	110	110	110	110
Sound level					
Sound power (7)	dB(A)	65	65	67	67
Electrical data					
Power supply	400V/3P+N+T/50Hz				
Max. power input	kW	12,3	12,3	14,7	14,7
Max. current input	A	22,9	22,9	26,8	26,8
Weight					
Gross weight	kg	250	250	265	265
Net weight (*)	kg	240	240	255	255

Performance referred to the following conditions:

- (1) Cooling: outdoor air temperature 35 °C; water temperature in / out 12/7 °C.
 (2) Cooling: outdoor air temperature 35 °C; water temperature in / out 23/18 °C
 (3) Heating: external air temperature 7 °C d.b. 6 °C b.u. ; in / out water temp. 30/35 °C.

- (4) Heating: external air temperature 7 °C d.b. 6 °C b.u. ; in / out water temp. 40/45 °C
 (5) Cooling: inlet / outlet water temperature 12/7 °C.

- (6) Heating: average climatic conditions; T_{biv} = -7 °C; in / out water temp. 30/35 °C.
 (7) Sound power: heating mode according to EN 12102:2022; value determined on the basis of measurements made in accordance with UNI EN ISO 9614-1, in compliance with Eurotest certification requirements.

(*) by activating the maximum Hz function