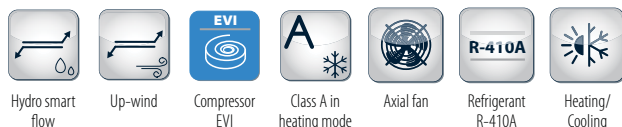


Outdoor packaged unit

Evitech 50 - 180 kW



PLUS

- » Class A in heat pump operating mode
- » Production of hot water up to 65°C
- » Operation at full load with external air temperatures down to -20 °C
- » High efficiency under part load conditions
- » Possibility to configure low-noise versions
- » Counterflow solutions in every operating mode

Evitech heat pumps are designed for heating or cooling the water to be used in air-conditioning systems for residential, commercial or industrial use.

The execution with injection steam compressors (Evitech) guarantees the production of hot water at high temperatures even in very hard outdoor conditions (up to -20°C).

Reliability and efficiency in every climatic condition

Evitech is Galletti's new high efficiency multiscroll units equipped with R410A steam injection compressor.

The range consists of 10 air-water models available as chiller and heat pump, with cooling capacities from 50 to 180 kW.

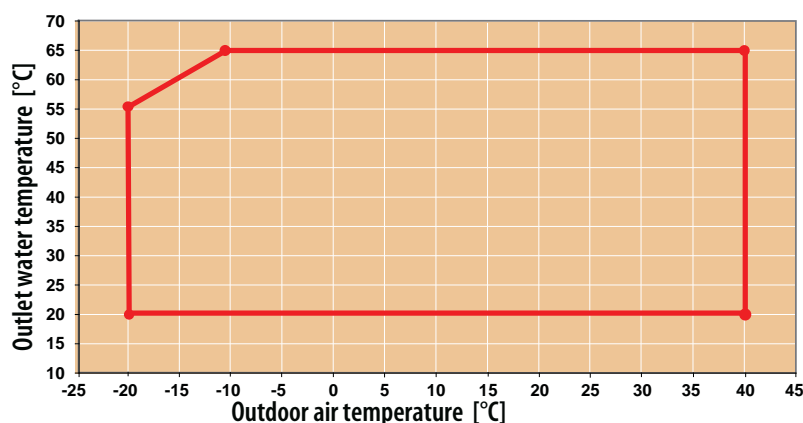
The main strongpoint of this series is the large operating field, both in terms of maximum hot water temperature (65°C with -11°C of external air temperature) and minimum air temperature at which the continuous operation is allowed (-20°C)

The range allows high configurability from an acoustic point of view, having a wide range of accessories designed to reduce noise emissions. The advanced control, always present in the whole range, allows a continuous monitoring of the operating parameters, advanced adjustment logics, and connectivity.

The modular structure with V configuration condensing coils is designed to optimize air-side heat exchange, to ensure structural strength with a reduced footprint, and to maintain maximum accessibility to the basic components.

In addition to high efficiency in terms of nominal conditions (Eurovent A-class), in order to increase the efficiency at partial loads, the whole range consists of tandem solutions (2 compressors on a single refrigerant circuit).

The configuration of units with the Hydro Smart Flow kit allows an increase of the efficiency and extends the working area of the cooling mode.



MAIN COMPONENTS

Structure

The range is designed modularly, replicating the optimized structure of V configuration condensing coils and fans. Its design ensures stability, sturdiness even during the most critical phases (such as transportation), and maximum accessibility to components in every unit.

Hydro smart flow

The HSF kit (standard for models 52 and 62) is placed on the unit's hydronic side and consists of a 4-way valve and a kit. Hydro Smart Flow, which is activated at the time of seasonal changeover, reverses the direction of the water flow over the plates to be consistent with the flow of the refrigerant. In this manner heat exchange always occurs in counterflow, this optimizing the unit's operation in the summer and winter seasons and extending the unit's operating range.

Upwind

Evitech is designed with an innovative technology which allows the refrigerant to get into the battery from the same direction when the cycle is inverted, with a constant counter-current exchange with air. This advanced technology considerably reduces the risk of ice generation on the finned heat exchangers.

Scroll compressors with vapour injection

The range consists of single and dual-circuit models in order to offer maximum redundancy. The distribution of load in multiple power steps and the use of tandem solutions (2 compressors on a single circuit) ensures maximum efficiency at partial loads and therefore greatly increases seasonal efficiency. Inter-cooled compression with steam injection allows a better control of the end-compression temperature, keeping it within the limits imposed by the compressor envelope, even in the most unfavorable working conditions (low evaporation pressures and high compression pressures), this results in one of the largest operating field in the market.

3-way valve

This is a smart kit able to convert Evitech heat pumps in multi-function units in order to fulfill every necessity of the hydraulic air-conditioning plant. It allows domestic hot water priority production thanks to Galletti thermal accumulators of the TP or TN series. The switching of the valve is managed by the on-board microprocessor control of the unit.

CONFIGURATOR

The models are completely configurable by selecting the version and the options. To the right is shown an example of configuration.

Version	Fields	1	2	3	4	5	6	7	8	9	10	11	12	13
EVI082HS0A		A	1	S	0	C	0	2	M	0	P	0	0	2

To verify the compatibility of the options, use the selection software or the price list.

AVAILABLE VERSIONS

Versions with reversible heat pump

EVI..HS0A	400V-3N-50Hz power supply + circuit breakers
EVI..HS1A	400V-3-50Hz power supply + transformer + circuit breakers
EVI..HS2A	400V-3N-50Hz power supply + circuit breakers

CONFIGURATION OPTIONS

1	Expansion valve	3	Fans noise reduction (AXITOP) + compressor sound blanket + compartment acoustic insulation
0	Mechanical	8	Refrigerant pipework accessories
A	Electronic	0	Absent
2	Water pump and accessories	M	Refrigerant pressure gauges
0	Absent	9	Remote control / Serial communication
1	LP pump + expansion vessel	0	Absent
2	LP run and standby double pump + expansion vessel	2	RS485 serial board (Carel / Modbus protocol)
3	HP pump + expansion vessel	B	BACNET IP / PCOWEB serial board (advanced controller required)
4	HP run and standby double pump + expansion vessel	F	BACNET MS/TP / PCONET serial board (advanced controller required)
A	LP inverter pump + expansion vessel	G	BACNET IP / PCOWEB serial board + supervision software Gweb (advanced controller required)
B	LP run and standby double inverter pump + expansion vessel	L	LON FTT10 serial board (advanced controller required)
C	HP inverter pump + expansion vessel	S	Remote simplified user panel
D	HP run and standby double inverter pump + expansion vessel	T	Touch screen remote user panel
3	Water buffer tank	X	Remote user panel for advanced controller
0	Absent	10	Special coils / Protective treatments
1	Absent: hydro smart flow only	0	Standard
H	Present + Hydro smart flow	C	Cataphoresis
S	Selected	I	Hydrophilic
4	Partial heat recovery	P	Pre-painted fins with epoxy painting
0	Absent	R	Copper-copper
D	Desuperheater with water pump free contact	11	Anti vibration shock mounts
5	Air flow modulation	0	Absent
C	Condensation control by phase-cut fans	G	Rubber anti vibration shock mounts
E	Condensation control performed by EC fans	M	Spring anti vibration shock mounts
6	Antifreezing kit	12	Coil protection grill
0	Absent	0	Absent
E	Plate exchanger	F	Outdoor finned coil heat exchanger protection filters
P	Plate exchanger and water pump	G	Selected
S	Plate exchanger, water pump and inertial tank	13	Onboard controller
7	Acoustic insulation and attenuation	1	Advanced
0	Absent	2	Advanced + touchscreen user panel + USB
1	Compressor sound blanket and compressor compartment sound proofing		
2	Fans noise reduction (AXITOP)		

ACCESSORIES

A	3 way valve for DHW production	G	Soft starter
B	Low temperature	H	Power factor capacitors
C	Pair of couplings Victaulic	I	Filter isolation valves kit (solenoid valve and isolation valve)
D	ON/OFF status of the compressors	M	0-10 V signal for external user pump control (on-board pump excluded)
E	Remote control for step capacity limit (advanced controller required)	N	Compressor tandem/trio isolation valves
F	Configurable digital alarm board (advanced controller required)	O	Anti-intrusion grille

Air heat pumps with wide working range Evitech

EVITECH HEAT PUMPS RATED TECHNICAL DATA

Evitech			052	062	072	082	092
Power supply		V-ph-Hz	400 - 3N - 50				
Cooling capacity	(1)(E)	kW	50,3	60,7	71,1	80,0	90,3
Total power input	(1)(E)	kW	17,9	21,4	24,2	27,0	31,3
EER	(1)(E)		2,80	2,84	2,94	2,96	2,88
SEER	(2)(E)		3,75	3,81	3,72	3,74	3,81
Water flow	(1)	l/h	8667	10472	12257	13808	15571
Water pressure drop	(1)(E)	kPa	21	30	29	37	27
Available pressure head - LP pumps	(1)	kPa	171	156	157	202	197
Heating capacity	(3)(E)	kW	59,9	70,5	83,1	92,4	105
Total power input	(3)(E)	kW	18,2	21,2	25,5	27,9	31,5
COP	(3)(E)		3,29	3,33	3,25	3,31	3,32
SCOP	(2)(E)		2,85	2,92	2,85	2,90	2,98
Heating energy efficiency class	(4)		A+				
SCOP	(2)		3,70	3,74	3,54	3,65	3,75
Heating energy efficiency class	(5)		A+				
Water flow	(3)	l/h	10351	12185	14360	15963	18116
Water pressure drop	(3)(E)	kPa	30	41	40	50	36
Available pressure head - LP pumps	(3)	kPa	154	133	128	165	157
Maximum current absorption		A	55	65	73	74	83
Star up current		A	152	179	214	215	203
Startup current with soft starter		A	111	130	153	154	144
Compressors / circuits			2/1				
Expansion vessel volume		dm ³	8	8	18	18	18
Buffer tank volume		dm ³	125	125	350	350	350
Sound power level	(6)(E)	dB(A)	82	82	83	83	83
Transport weight unit with pump and tank		kg	793	802	1081	1082	1095
Operating weight unit with pump and full tank		kg	895	904	1408	1412	1422

(1) Outdoor air temperature 35°C, water temperature 12°C / 7°C (EN14511:2013)

(2) η efficiency values for heating and cooling are respectively calculated by the following formulas: $[\eta = SCOP / 2,5 - F(1) - F(2)]$ e $[\eta = SEER / 2,5 - F(1) - F(2)]$. For further information, please refer to the technical document "ErP 2009/125/EC DIRECTIVE" in the catalogue introducing pages, or to the EN14825:2017 regulation.

(3) Outdoor air temperature dry bulb 7°C / wet bulb 6°C, water temperature 40°C / 45°C (EN14511:2013)

(4) Seasonal energy efficiency class for MEDIUM TEMPERATURE room heating under AVERAGE climatic conditions [EUROPEAN REGULATION No 811/2013]

(5) Seasonal energy efficiency class for LOW TEMPERATURE room heating under AVERAGE climatic conditions [EUROPEAN REGULATION No 811/2013]

(6) Sound power level measured according to ISO 9614

(E) EUROVENT certified data

EVITECH HEAT PUMPS RATED TECHNICAL DATA

Evitech			104	124	154	174	184
Power supply		V-ph-Hz	400 - 3N - 50				
Cooling capacity	(1)(E)	kW	104	124	150	171	181
Total power input	(1)(E)	kW	36,6	44,9	51,2	58,4	62,9
EER	(1)(E)		2,84	2,76	2,93	2,94	2,88
SEER	(2)(E)		3,78	3,88	4,02	4,23	4,20
Water flow	(1)	l/h	17887	21365	25872	29508	31240
Water pressure drop	(1)(E)	kPa	32	23	33	24	27
Available pressure head - LP pumps	(1)	kPa	145	148	174	178	173
Heating capacity	(3)(E)	kW	119	139	173	194	207
Total power input	(3)(E)	kW	34,6	40,8	51,7	56,6	60,4
COP	(3)(E)		3,43	3,40	3,35	3,43	3,42
SCOP	(2)(E)		2,94	2,96	3,00	3,11	3,14
Heating energy efficiency class	(4)		A+				
SCOP	(2)		3,73	3,80	3,88	4,05	4,08
Heating energy efficiency class	(5)		A+	A+	A++	A++	A++
Water flow	(3)	l/h	20502	24075	29940	33637	35780
Water pressure drop	(3)(E)	kPa	42	29	44	31	35
Available pressure head - LP pumps	(3)	kPa	123	125	154	160	153
Maximum current absorption		A	92	112	147	156	165
Star up current		A	189	226	288	297	296
Startup current with soft starter		A	148	177	227	237	237
Compressors / circuits			4/2				
Expansion vessel volume		dm ³	18	18	24	24	24
Buffer tank volume		dm ³	350	350	450	450	450
Sound power level	(6)(E)	dB(A)	84	87	87	87	87
Transport weight unit with pump and tank		kg	1249	1265	2064	2102	2120
Operating weight unit with pump and full tank		kg	1576	1592	2491	2529	2547

(1) Outdoor air temperature 35°C, water temperature 12°C / 7°C (EN14511:2013)

(2) η efficiency values for heating and cooling are respectively calculated by the following formulas: $[\eta = SCOP / 2,5 - F(1) - F(2)]$ e $[\eta = SEER / 2,5 - F(1) - F(2)]$. For further information, please refer to the technical document "ErP 2009/125/EC DIRECTIVE" in the catalogue introducing pages, or to the EN14825:2017 regulation.

(3) Outdoor air temperature dry bulb 7°C / wet bulb 6°C, water temperature 40°C / 45°C (EN14511:2013)

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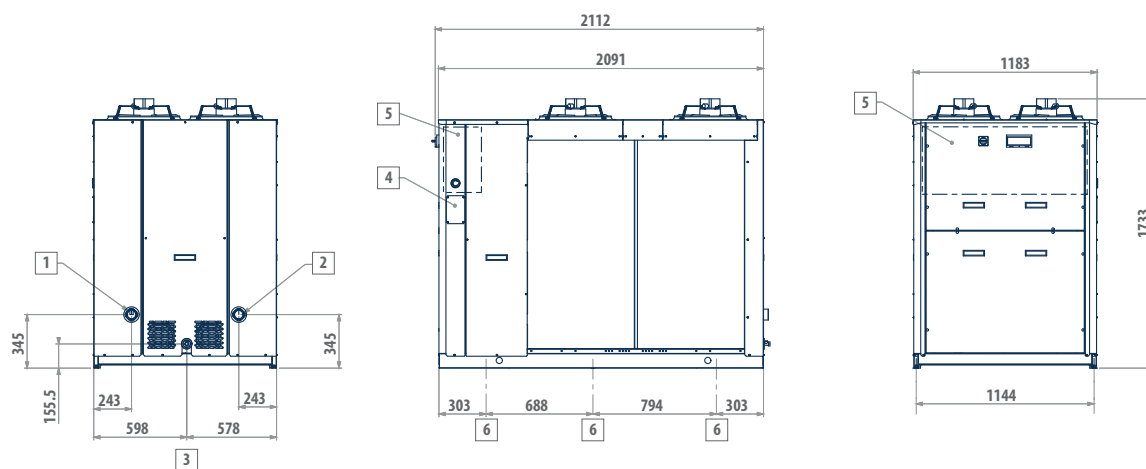
(6) Sound power level measured according to ISO 9614

(E) EUROVENT certified data

Air heat pumps with wide working range Evitech

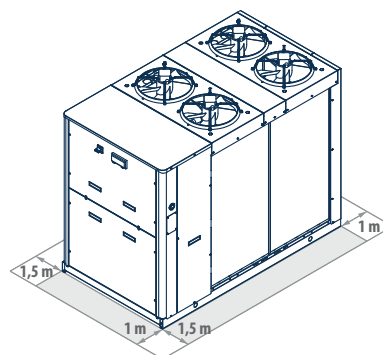
DIMENSIONAL DRAWINGS

EVITECH 52 - 62

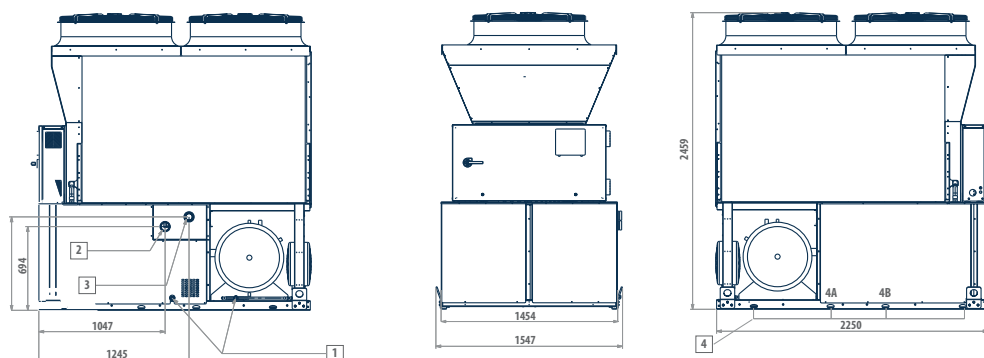


LEGEND

- | | |
|---|--|
| 1 | Water inlet 2" female |
| 2 | Water outlet 2" female |
| 3 | Water drainage 1/2" female |
| 4 | Power supply |
| 5 | Electric control board |
| 6 | Fastening points for vibration dampers |

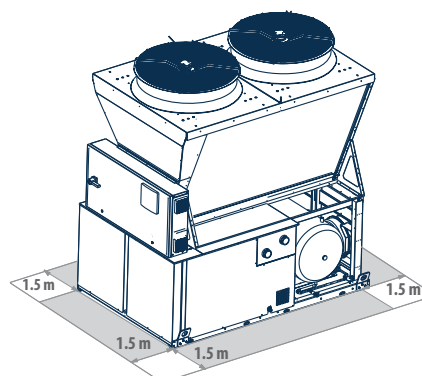


EVITECH 72 - 82 - 92



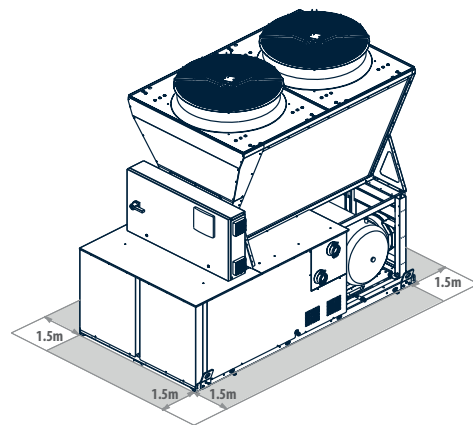
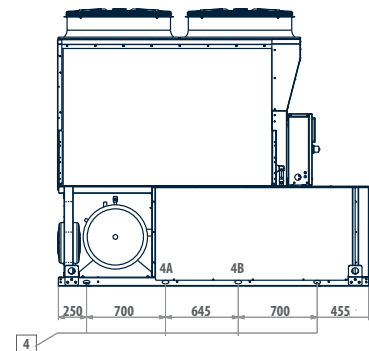
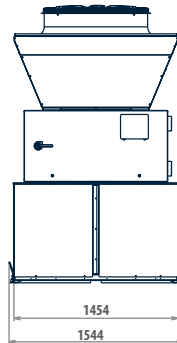
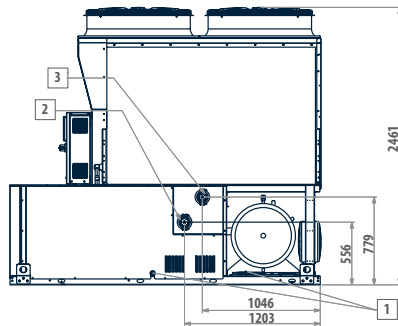
LEGEND

- | | |
|---|-------------------------------|
| 1 | Water drainage 1/2" female |
| 2 | Water inlet Victaulic 2 1/2" |
| 3 | Water outlet Victaulic 2 1/2" |
| 4 | Vibration dampers |



DIMENSIONAL DRAWINGS

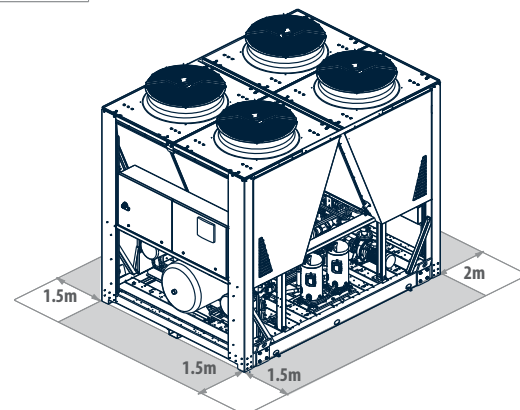
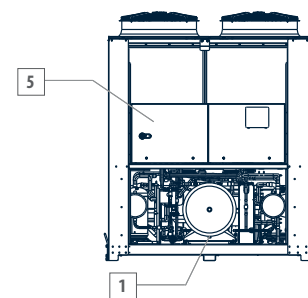
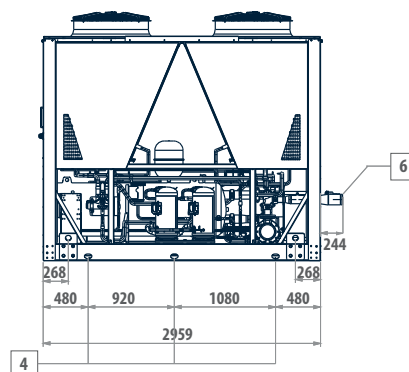
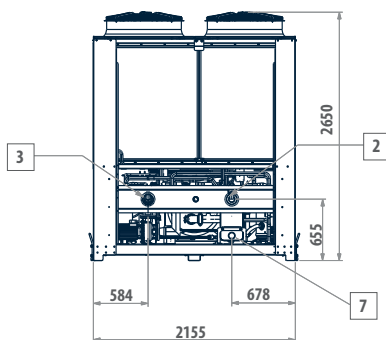
EVITECH 114 - 124



LEGEND

- | | |
|---|-------------------------------|
| 1 | Water drainage 1/2" female |
| 2 | Water inlet Victaulic 2 1/2" |
| 3 | Water outlet Victaulic 2 1/2" |
| 4 | Vibration dumpers |

EVITECH 154 - 174 - 184



LEGEND

- | | |
|---|---|
| 1 | Water drainage 1/2" female |
| 2 | Water inlet Victaulic 4" |
| 3 | Water outlet Victaulic 4" |
| 4 | Vibration dumpers |
| 5 | Electric control board |
| 6 | Victaulic adapter from 4" to 3" to be mounted on-site |
| 7 | Water outlet, evaporator only |