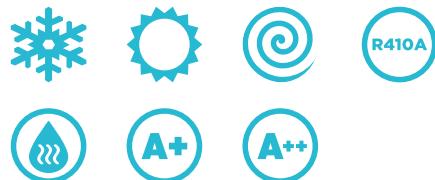




EPPY GEO

Geothermal reversible heat pump



- **High-efficiency heat pump**
- **Compact machine**
- **Optional DHW production**
- **Complete with circulation pumps**
- **Easy installation**

Eppy GEO is a reversible high efficiency water to water heat pump, sized for use in residential and tertiary application, which allows the building air conditioning and domestic hot water heating.

Eppy GEO is commonly used in combination with a domestic water vessel which is heated with hot water priority logic at any time of year, at a different temperature set than the temperature set of the water feeding the air conditioning system.

The d.h.w. management priorities belongs to the control of a three-way valve supplied as accessory, factory assembled.

The units are equipped with Class A water pumps, water flow safety devices and safety valves (3 Bar). Models 031-041-051-061 are also equipped with expansion vessels.

The heat pump Eppy GEO employ natural energies as the water or the ground source for the geothermic version.

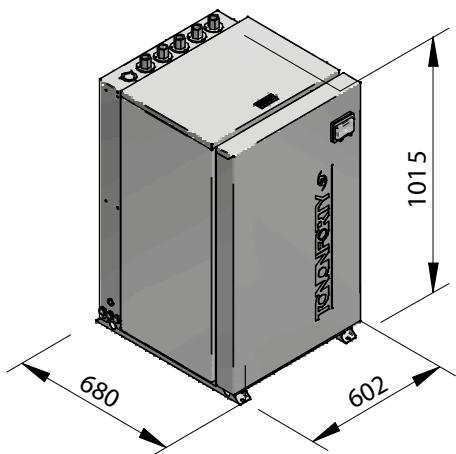
These units are studied for exploiting the ground source by means of vertical or horizontal heat exchanger and for transferring the energy by means of water.

They could work also with outdoor temperature extremely low, warranting very good output too.

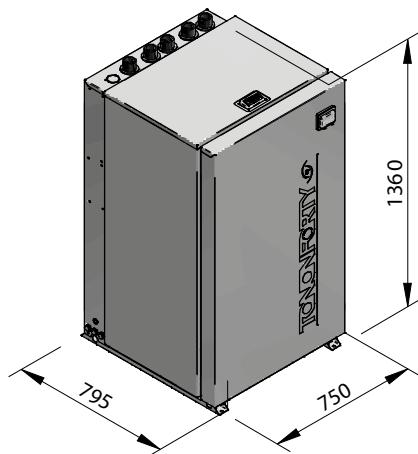
Eppy GEO is electric supplied. It do not use fossil fuels, it do not produce pollution and it do not need chimney. The totally sealed refrigerant system do not need any maintenance, which are indispensable on the traditional heating systems using boilers. No fossil fuels means no safety problems with higher environmental safety levels. Eppy GEO is the heating and cooling "generator" to which the room heating and cooling elements have to be connected. The system assembling time and costs are extremely reduced because Eppy GEO includes many parts which, normally, belong to the plumbing. All the cover panels can be easily removed to allow the access inside and let the maintenance easy.

Technical Drawings and Accessories

EPPY 031-041-051-061



EPPY 042-052-062



Refrigerants gauges

Top remote control

Anti-vibration mount feet

D.h.w. pump - heat exch. kit (type 101/111/121)

Amb. temp. Sensor (DYNAMIC SET POINT)

Soft starter compressore

Kit valve 3 ways

D.h.w. Int. el. heater

Antilegionella ctrl kit (ext. fitting)

Crankcase heater (INCLUDED)

EPPY GEO		031 A-M	041 A-M	041 A-T	051 A-T	061 A-T	042 A-T	052 A-T	062 A-T
B0/W35	Unit std. energetic class	A+	A+	A+	A+	A+	A++	A++	A++
	Seasonal efficiency η_{sh} (3)	142	142	145	146	148	178	177	175
	SCOP	3,75	3,75	3,83	3,85	3,89	4,64	4,64	4,57
B0/W45	Heating capacity	kW	10,7	12,1	11,9	14,2	17,1	24,6	29,1
	External source power	kW	8,3	9,4	9,4	11,2	13,5	19,5	23,0
	Total power input (1)	kW	2,76	3,09	3,00	3,50	4,13	6,06	8,32
	COP (EN 14511-2013)		4,3	4,3	4,4	4,5	4,5	4,5	4,4
B30/W7	Heating capacity	kW	10,0	11,4	11,3	13,5	16,4	23,3	27,5
	External source power	kW	7,1	8,1	8,1	9,6	11,8	16,8	19,8
	Total power input (1)	kW	3,36	3,77	3,67	4,33	5,09	7,40	8,71
	COP (EN 14511-2013)		3,2	3,2	3,3	3,3	3,4	3,3	3,3
B30/W18	Cooling capacity	kW	10,6	12,3	12,4	14,8	18,0	24,9	29,5
	External source power	kW	13,1	15,1	15,2	18,0	21,9	30,4	36,0
	Total power input (1)	kW	2,89	3,24	3,19	3,69	4,40	6,43	7,43
	EER (EN 14511-2013)		4,2	4,3	4,4	4,5	4,5	4,4	4,4
	Cooling capacity	kW	14,5	16,8	17,1	20,1	24,5	34,1	40,3
	External source power	kW	17,1	19,8	20,0	23,5	28,6	39,9	47,1
	Total power input (1)	kW	3,00	3,41	3,35	3,87	4,64	6,76	7,81
	EER (EN 14511-2013)		5,5	5,5	5,7	5,8	5,6	5,6	5,5
	Compressori scroll	n°	1	1	1	1	1	2	2
	Refrigerant Circuits	n°	1	1	1	1	1	1	1
	Capacity steps	n°	1	1	1	1	1	2	2
	Supply voltage	V/Ph/Hz	230/1/50		400/3/50				
	Sound power Lw (2)	dB(A)	62,4	62,4	62,4	62,4	62,4	65,4	65,4
	Sound pressure Lp (2)	dB(A)	51,4	51,4	51,4	51,4	51,4	54,4	54,4
	Refrigerant		R 410A						
SIZES AND WEIGHT									
Length	mm	602	602	602	602	602	750	750	750
Depth	mm	680	680	680	680	680	795	795	795
Height	mm	1030	1030	1030	1030	1030	1360	1360	1360
Weight	Kg	144	147	147	156	158	240	241	248
Water flow user plant (B30/W7)	l/s	0,51	0,59	0,59	0,71	0,86	1,19	1,41	1,72
Mass flow external source (B30/W7)	l/s	0,65	0,75	0,75	0,89	1,09	1,51	1,79	2,17
HYDRONIC KIT STANDARD									
User plant pump	n°	1	1	1	1	1	1	1	1
Available externe pressure (B30/W7)	kPa	70	67	67	66	59	108	92	81
Power input	kW	0,14	0,14	0,14	0,14	0,14	0,31	0,31	0,31
Current input	A	1,0	1,0	1,0	1,0	1,0	1,4	1,4	1,4
Ground source pump	n°	1	1	1	1	1	1	1	1
Available externe pressure (B30/W7)	kPa	60	52	52	51	38	78	55	18
Power input	kW	0,14	0,14	0,14	0,14	0,14	0,31	0,31	0,31
Current input	A	1,0	1,0	1,0	1,0	1,0	1,4	1,4	1,4
HIGH PREVALENCE PUMPS (optional_HP version: user plant only / HP version: user plant + geothermic side)									
User plant pump	n°	-	-	-	-	-	1	1	1
Available externe pressure (B30/W7)	kPa	-	-	-	-	-	170	161	146
Power input	kW	-	-	-	-	-	0,91	0,91	0,91
Current input	A	-	-	-	-	-	4,3	4,3	4,3
Ground source pump	n°	-	-	-	-	-	1	1	1
Available externe pressure (B30/W7)	kPa	-	-	-	-	-	152	135	117
Power input	kW	-	-	-	-	-	0,91	0,91	0,91
Current input	A	-	-	-	-	-	4,3	4,3	4,3

B0/W35 _Plant exchanger water (in/out): 30/35 °C - External source water temperature (in/out): 0/-3 °C

B0/W45 _Plant exchanger water (in/out): 40/45 °C - External source water temperature (in/out): 0/-3 °C

B30/W7 _Plant exchanger water (in/out): 12/7 °C - External source water temperature (in/out): 30/35 °C

B30/W18 _Plant exchanger water (in/out): 23/18 °C - External source water temperature (in/out): 30/35 °C

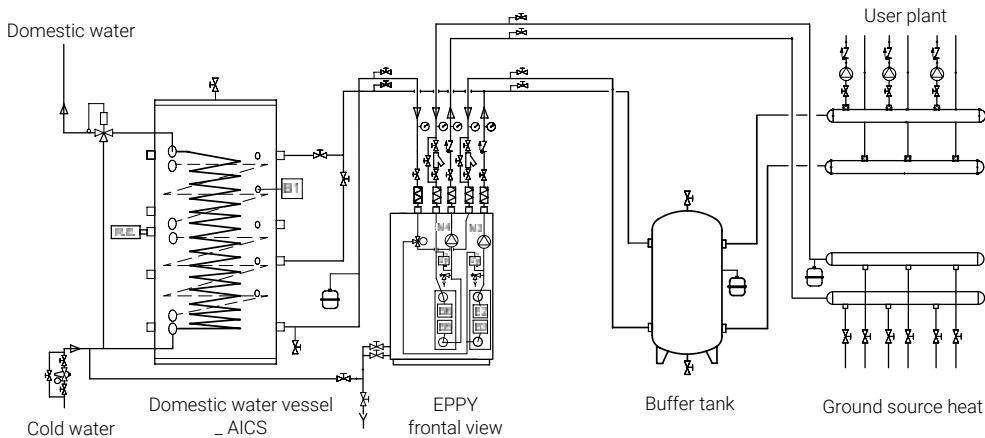
(1) Total power input incl. user plant water pump

(2) Noise power according to ISO3744 regulation / Avarage noise pressure at 1 m in a free field on a reflective surface

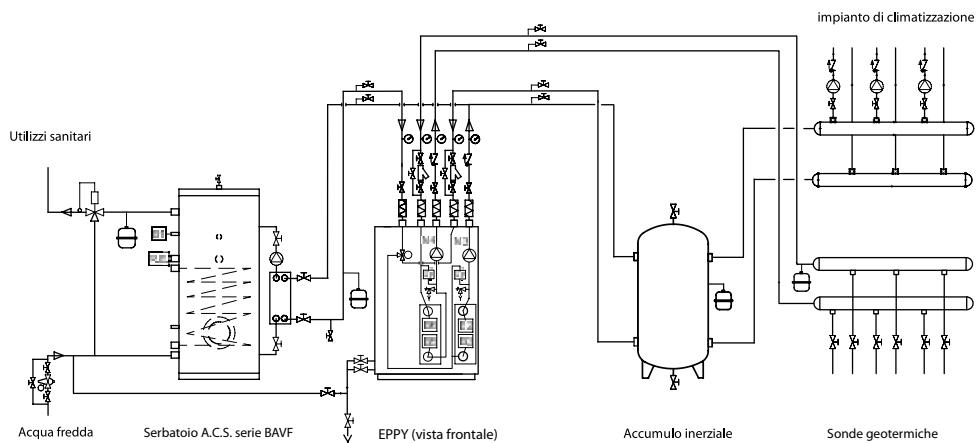
(3) In compliance with EU 811/2013 Regulation_“Avarage” climate conditions

System Configuration

EPPY GEO + AICS



EPPY GEO + BAVF



EPPY GEO + BAVY

