

## EcoPart 406-417 ground-to-water heat pumps

EcoPart 400 is based on the proved design of the preceding generation of EcoPart V3 heat pumps, bringing some principal innovation and new technologies which ranks this model among the world's best heat pumps.

The heat output line involves 6, 8, 10, 12, 14 and 17 kW models. **A high COP excels among other technical parameters, reaching as much as 5.5 in low-temperature systems! Thanks to the use of the most advanced technologies, namely of a new electronic expansion valve, flow temperature can be as high as 65°C!** This temperature guarantees the utmost comfort in DHW heating.

It can work with a traditional PS thermal store and RBC HP hot water storage tanks. EcoPart 406-410 can also work with R2DC hot water storage tanks.

Heating control and communication with the heat pump is performed by IR 12 external controllers.

EcoPart heat pumps draw heat either from deep bores or from sub-surface ground collectors. The unit is placed inside a house and connected with the ground loops with 2 pipes. Its main advantage is a stable output and COP even under fierce frost. This heat pump provides very quiet operation.



\* Energy Efficiency Class for the set with controller under average climate conditions for low-temperature application

Technical Data			EcoPart 406	EcoPart 408	EcoPart 410	EcoPart 412	EcoPart 414	EcoPart 417
Primary circuit/HP flow temp. at B0/W25	Heat output	[kW]	6,1	8.5	10.4	12.3	14.63	--
	Power input	[kW]	1,20	1.72	1.87	2.23	2.79	--
	COP	[-]	5,10	4.93	5.55	5.51	5.25	--
Primary circuit/HP flow temp. at B0/W35	Heat output	[kW]	5,9	8.2	10	11.8	14.5	16.76
	Power input	[kW]	1,29	1.79	2.17	2.57	3.19	3.71
	COP	[-]	4,57	4.58	4.60	4.60	4.54	4.52
Primary circuit/HP flow temp. at B0/W55	Heat output	[kW]	5,2	7.6	9.3	11.0	13.4	15.9
	Power input	[kW]	1,88	2.54	3.12	3.72	4.54	5.17
	COP	[-]	2,76	2.99	2.98	2.96	2.95	3.07
Dimensions and weight	Width	[mm]	600	600	600	600	600	600
	Height	[mm]	760	760	760	760	760	760
	Depth	[mm]	672	672	672	672	672	672
	Weight	[kg]	138	143	148	164	168	172
Code		[-]	12647	12648	12649	12650	12651	12652

COP given according to EN 14511 incl. power input for both the circulation pumps.

### Max. flow temperature of the heat pump is 65 °C.

Each CTC Heat Pump is fitted with a max. current limiter for compressor startup.

The Heat Pump comes with integrated primary circulation pump (for deep bore / underground collector circuit).

EcoPart 406-412 Heat Pumps are supplied without circulation pumps; they are installed exclusively with CSE IR 12 pump stations – see page 21. EcoPart 414-435 Heat Pumps are equipped with circulation pumps already integrated inside.

## EcoPart 435 ground-to-water heat pump

EcoPart 435 ground-to-water heat pump is designed for space and DHW heating in large buildings of heat loss up to 44 kW. It consists of two 17 kW heat pumps connected in parallel.

Heating control and communication with the heat pump is ensured by an external IR controller.



*\*\* Energy efficiency class for a package with controller under average climate conditions for low-temperature application.*

Technical Data			EcoPart 435
Primary circuit/HP flow temp. at B0/W35	Heat output	[kW]	32.48
	Power input	[kW]	7.44
	COP	[-]	4.36
Primary circuit/HP flow temp. at B0/W45	Heat output	[kW]	32.28
	Power input	[kW]	8.94
	COP	[-]	3.61
Primary circuit/HP flow temp. at B0/W55	Heat output	[kW]	31.74
	Power input	[kW]	10.34
	COP	[-]	3.07
Dimensions and weight	Width	[mm]	596
	Height	[mm]	1760
	Depth	[mm]	680
	Weight	[kg]	359
Code		[-]	15903

COP given according to EN 14511 incl. power input for both the circulation pumps.

