Heat pump systems
GEO EASY-E HT/HTR



fiorini

Water-water geothermal heat pumps
GEO EASY-E HT/HTR

High temperature geothermal heat pump

Power from 6 to 33kW



Functions

✔ Production of very hot water for the installation
✔ Production of cold water for the installation (HTR version)
✔ Production of DHW (with accessory)

Main features

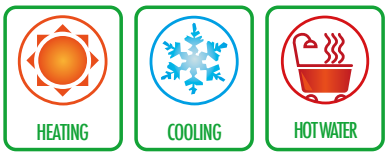
✔ High efficiency scroll-compressor
✔ On-off circulators on the three circuits as accessory to install on the outside of the device
✔ DHW production up to 65°C with kit to assembly on the outside of the device

Applications

✔ Exchange on probe (standard)
✔ Exchange on well (upon request)

Start-up: first start-up is mandatory. See page 361





Models	
GEO EASY-E HT	Heating and DHW production (accessory)
GEO EASY-E HTR	Heating-cooling and DHW production (accessory)

Compatibility

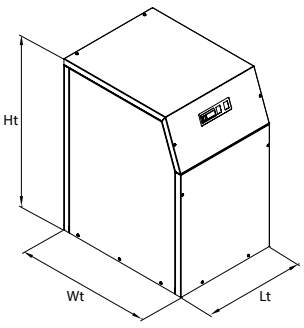
	Domestic diverter control kit	Easy diverter kit	MFREE	Control kit MFREE	Plant circulator kit	Geotherm circulator kit	Pressure switch kit	Solenoid kit	External air probe kit	Guard resistance kit	Exchangers resistance kit	Phase cut kit (1)	Compressor insulation kit
EASY-E HT geothermal probe	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	-	✔
EASY-E HT well water	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔	-	✔
EASY-E HTR geothermal probe	✔	✔	✔	✔	✔	✔	-	-	✔	✔	✔	✔	✔
EASY-E HTR well water	✔	✔	✔	✔	✔	-	✔	✔	✔	✔	✔	-	✔

Technical data
GEO EASY-E HT/HTR

Sizes		6	8	12	16	20	24	33
Energy label		A++	A++	A++	A++	A++	A++	A++
Winter functioning BO/W35								
Thermal power	kW	5,8	7,5	10,2	13,2	17,1	21,1	28,3
Compressor's absorbed power	kW	1,3	1,7	2,2	2,9	3,7	4,6	6,1
COP		4,43	4,34	4,68	4,60	4,60	4,64	4,62
Device								
Device's water flow rate	m^3/h	0,99	1,30	1,75	2,26	2,93	3,63	4,87
Exchanger pressure loss	mca	0,3	0,3	0,5	0,7	0,7	0,8	1,0
Geothermal								
Cooling power to exchange in probe	kW	4,5	6,0	8,1	10,5	13,5	16,8	22,5
Probe liquid flow rate	m^3/h	1,30	1,71	2,32	3,00	3,87	4,82	6,45
Exchanger pressure loss	mca	0,7	0,7	1,1	1,4	1,4	1,4	1,7
Domestic W5/W35								
Thermal power	kW	7,5	9,9	13,3	16,7	22,2	27,5	37,2
Compressor's absorbed power	kW	1,3	1,6	2,2	2,8	3,8	4,7	6,3
COP		5,85	6,10	6,14	6,04	5,88	5,86	5,95
Device								
Domestic water flow	m^3/h	1,27	1,67	2,24	2,82	3,75	4,64	6,28
Exchanger pressure loss	mca	0,46	0,51	0,78	1,00	1,10	1,19	1,62
Well								
Cooling power to exchange in well	kW	6,2	8,2	11,1	13,9	18,4	22,7	30,9
Well liquid flow rate	m^3/h	1,06	1,40	1,88	2,37	3,14	3,87	5,26
Exchanger's pressure loss	mca	0,3	0,4	0,6	0,7	0,7	0,9	0,9
Summer functioning B30/W18								
Cooling power	kW	9,5	12,5	16,6	20,9	27,5	34,3	43,8
Compressor's absorbed power	kW	1,3	1,5	2,1	2,8	3,8	4,9	6,7
COP		7,39	8,19	7,84	7,44	7,33	6,97	6,55
Device								
Device's water flow rate	m^3/h	1,63	2,14	2,85	3,59	4,55	5,90	7,53
Device's head pressure	mca	0,7	0,8	1,2	1,5	3,3	1,6	1,9
Geothermal								
Thermal power to exchange in probe	kW	10,7	13,9	18,6	23,6	31,0	39,0	50,5
Probe's liquid flow rate	m^3/h	3,07	2,39	3,20	4,06	5,33	6,71	8,69
Exchanger pressure loss	mca	0,9	1,0	1,5	2,0	3,4	2,4	3,0
Features								
Refrigerant		R410a	R410a	R410a	R410a	R410a	R410a	R410a
Compressor type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Number of compressors		1	1	1	1	1	1	1
Power supply	V/Ph/Hz	230/1/50 400/3/50	230/1/50 400/3/50	230/1/50 400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Hydraulic coupling		1"	1"	1"	1"	1"	1"1/4	1"1/4
Sound pressure at 1m	dB(A)	48	49	50	52	54	59	61
Weight (unpacked)	kg	112	117	127	139	172	197	215
Weight (packed)	kg	130	135	145	157	192	217	235

All indicated working conditions comply with the regulation EN14511

Utility circuit				
B0/W35	radiant plant	°C	30/35	In-Out
W5/W35	radiant plant	°C	30/35	In-Out
B30/W18	radiant plant	°C	23/18	In-Out
External circuit				
B0/W35	glycol water geothermal probe 20%	°C	0/-3	In-Out
W5/W35	glycol water geothermal probe 20%	°C	10/5	In-Out
B30/W18	glycol water geothermal probe 20%	°C	30/35	In-Out



Dim.	Sizes	
	6-16	20-33
Lt	500	670
Wt	660	855
Ht	885	965

Code
GEO EASY-E HT/HTR



HEATING

GEOTHERM WELL

HEATING COOLING

GEOTHERM WELL

EASY geothermal systems					
		Only hot GEO EASY-E HT		Hot/cold GEO EASY-E HTR*	
gas	model	code	price	code	price
R410a	6 M	444100001		444100012	
	6 T	444100003		444100014	
	8 M	444100004		444100015	
	8 T	444100006		444100017	
	12 M	444100009		444100018	
	12 T	444100008		444100020	
	16 T	444100010		444100021	
	20 T	444100011		444100022	
	24 T	444100023		444100025	
	33T	444100024		444100026	

*R indicated that the heat pump is reversible

Accessories
GEO EASY-E HT/HTR

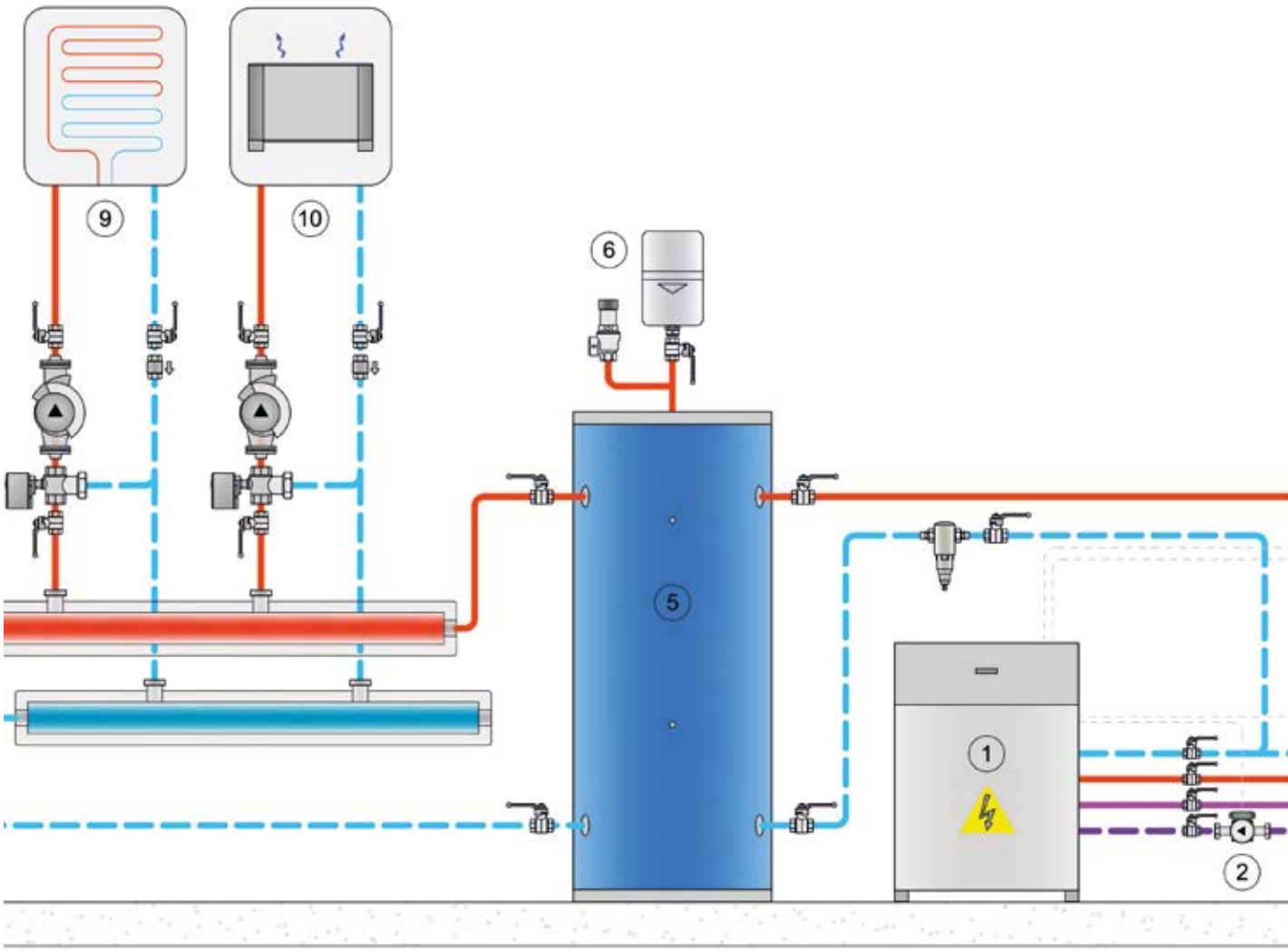
Device accessories			
code	**description**	**price**	**function**
452020028	KIT DEVIATRICE SANITARIO EASY-E		Valvola deviatrice per la produzione di ACS.
452020123	Soundproofing Kit GEO HFE/EASY 6-8		The soundproofing kit must be installed on the compressor to attenuate the noise of the heat pump (the sound insulating panels are installed as standard). If purchased together with the heat pump, the soundproofing kit comes already installed.
452020124	Soundproofing Kit GEO HFE/EASY 12		
452020125	Soundproofing Kit GEO HFE/EASY 16		
452020126	Soundproofing Kit GEO HFE/EASY 20		
452020132	Soundproofing Kit GEO EASY 24		
452020133	Soundproofing Kit GEO EASY 33		
452020134	Soft starter kit GEO HFE/EASY 6-8-12 M		Electromechanical device installed at the factory instead of the compressor contactor on single-phase units. It reduces the maximum value of the compressor starting current by varying the supply voltage of the motor through the management of a specific starting capacitor.
452020135	Soft starter kit GEO HFE/EASY 6-8-12-16-20 T		Electronic device installed at the factory on a three-phase unit. Reduces the maximum value of the compressor starting current by using an inverter which powers the motor by varying the frequency so as to limit the inrush current
452020141	Soft starter kit GEO EASY 24-33 T		

Accessories for control and regulation			
code	**description**	**price**	**function**
452010008	External air probe kit		Makes it possible to check the outside air temperature for the EASY series with box, external assembly

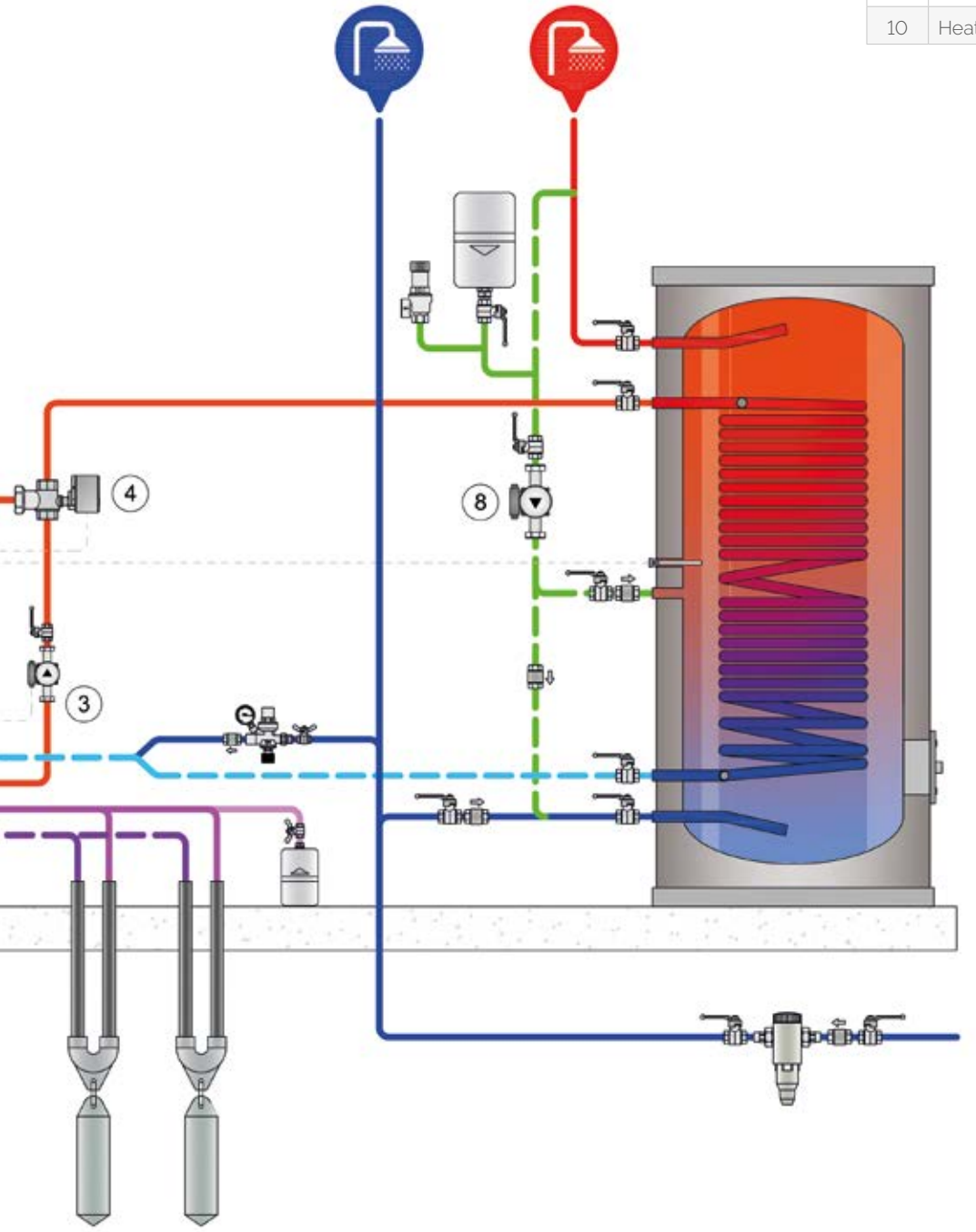
Accessori Macchina			
codice	**descrizione**	**prezzo**	**funzione**
452020097	Circ with inverter kit EASY-E 6-8-12-16 for device		Circulator with inverter for the installation (external assembly) sizes 6 to 16 kW
452020098	Circ with inverter kit EASY-E 20 for device		Circulator with inverter for the installation (external assembly) size 20 kW
452020099	Circ with inverter kit EASY-E 24 for device		Circulator with inverter for the installation (external assembly) size 24 kW
452020100	Circ with inverter kit EASY-E 33 for device		Circulator with inverter for the installation (external assembly) size 33 kW
452020101	Circ with inverter kit EASY-E 6-8 for geothermal		Circulator with inverter for the installation (external assembly) sizes 6 to 8 kW
452020102	Circ with inverter kit EASY-E 12-16 for geothermal		Circulator with inverter for the installation (external assembly) sizes 12 to 16 kW
452020103	Circ with inverter kit EASY-E 20 for device		Circulator with inverter for the installation (external assembly) size 20 kW
452020104	Circ with inverter kit EASY-E 24 for device		Circulator with inverter for the installation (external assembly) size 24 kW
452020105	Circ with inverter kit EASY-E 33 for device		Circulator with inverter for the installation (external assembly) size 33 kW

Layout
GEO EASY-E HT / HTR

Installation diagram with SMART HP water heater for DHW production.
It is also possible to make the plant with AQUAMATIC storage unit..



1	GEO EASY-E HT/HTR heat pump
2	Geothermal pump kit
3	System pump kit
4	3 way diverting valve for DHW sytem
5	Accumulator tank, VKG-HC model
6	Safety kit
7	SMART HP indirect water heater
8	DHW recirculation sytem
9	Heating system 1
10	Heating system 2





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