Interklima® GEO 8-100

GEOTHERMICAL HEAT PUMPS
COOLING/HEATING
INDOOR/OUTDOOR INSTALLATION

Cooling capacity : 7.8 kW - 100.4 kW
Heating capacity : 8.6 kW - 113.0 kW

Interklima GEO series are packaged water-water heat pumps for geothermical applications. They are available in 10 models with nominal capacities ranging from 7.8 kW to 100.4 kW in cooling and 8.6 kW up to 113.0 kW in heating.

This series is ideal in combination with Interklima fan coils or air handling units for residences, offices, hotels, hospitals, shopping malls, restaurants, etc., or for supplying water for industrial applications.

Features

- **Optimized design for R410a refrigerant**
- **Casing:** galvanized steel plate with polyesteric coating
- **Assembly:** Fully bolted/welding free
- **Compressor:** Hermetically sealed Scroll type optimised for heat pumps
- **Water heat exchanger:** plate heat exchanger type
- **Electronic expansion valve** to increase energy efficiency
- **Safety and functional devices:**
  - high/low pressure switches
  - service valves
  - phase sequence - phase failure - reverse phase and voltage - monitoring device

- Options
  - heat exchanger for domestic hot water
  - Hydronic module with pumps (up to 75°C) and all necessary devices.
  - Bus module interface kit for Modbus connections
  - Remote keyboard

Technical specifications

Type		GEO 8	GEO 10	GEO 15	GEO 20	GEO 30	GEO 40	GEO 60	GEO 80	GEO 90	GEO 100
Nominal cooling capacity[1]	kw	**7,8**	**10,8**	**15,2**	**20,6**	**31**	**39,1**	**62**	**78,2**	**91,6**	**100,4**
	RT	2,2	3,1	4,3	5,9	8,8	11,1	17,6	22,2	26,0	28,5
	Btu/h	26.591	36.818	51.818	70.227	105.682	133.295	211.364	266.591	312.273	342.273
Nominal heating capacity[2]	kw	**8,6**	**12,7**	**16,9**	**22,7**	**33,6**	**42,4**	**67,2**	**84,8**	**100,8**	**113,0**
Construction	Material/Color	Galvanized steel / Light grey-beige (RAL 9002)									
Compressor		scroll									
Quantity		1						2 tandem			
Capacity steps		0-100%						0-50-100%			
Absorbed power	kw	1,6	2,1	3,1	4,1	5,8	7,5	11,6	15	18	19
Nominal operating current	A	3,36	3,79	5,95	8,7	12	14,9	24	29,8	38,8	40,8
Maximum operating current	A	6,5	8,0	11,8	15,0	22,0	31,0	44,0	62,0	68,0	68,0
Sourse exchanger		Plate heat exchanger									
Quantity		1									
Max. Operating pressure	Water side bar	25									
	Refrigerant side bar	45									
Connections		1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	2"	2"	2"
Nominal water flow	lt/h	1,516	2,067	2,997	4,031	6,029	7,631	12,059	15,263	17,984	18,884
Evaporator		Plate heat exchanger									
Quantity		1									
Max. Operating pressure	Water side bar	25									
	Refrigerant side bar	45									
Connections		1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	2"	2"	2"
Nominal water flow	lt/h	1,342	1,858	2,614	3,543	5,332	6,725	10,664	13,450	15,755	17,269
Electrical characteristics		400V/3Ph/50Hz									
Total absorbed power	kw	1,6	2,1	3,1	4,1	5,8	7,5	11,6	15,0	18,0	19,0
Nominal operating current	A	3,4	3,8	6,0	8,7	12,0	14,9	24,0	29,8	38,8	40,8
Compressor carter resistance power	W	90	90	90	90	90	90	180	180	180	180
Voltage operating limits	V	360-440V									
Refrigerant circuit											
Number of circuits		1									
Expansion device		electronic expansion valve									
Refrigerant type		R410A									
Dimensions	Width mm	600	600	600	600	600	600	990	990	990	990
	Length mm	600	600	600	600	600	600	990	990	990	990

NOTES

1 Nominal cooling capacities are given for the following operational conditions:Sourse water temperature inlet 20°C,Entering/Leaving chilled water temperature 12/7°C

2 Nominal heating capacities are given for the following operational conditions:Sourse water temperature inlet 10°C,Entering/Leaving water temperature

Interklima units comply with the European regulations that guarantee the safety of the product.

Products are manufactured in ISO 9001:2000 certified factories. ISO 9001:2000 pertains to quality assurance regarding design, development, manufacturing and installation of products as well as to services related to the product.

Interklima®

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