bgr group

CRYSTAL aqua aura

The future is
with you!

ECONOMICAL
RELIABLE
COMFORTABLE

INVERTER AIR-TO-WATER
HEAT PUMP SYSTEMS

FAN COIL UNITS
slim design

aqua aura

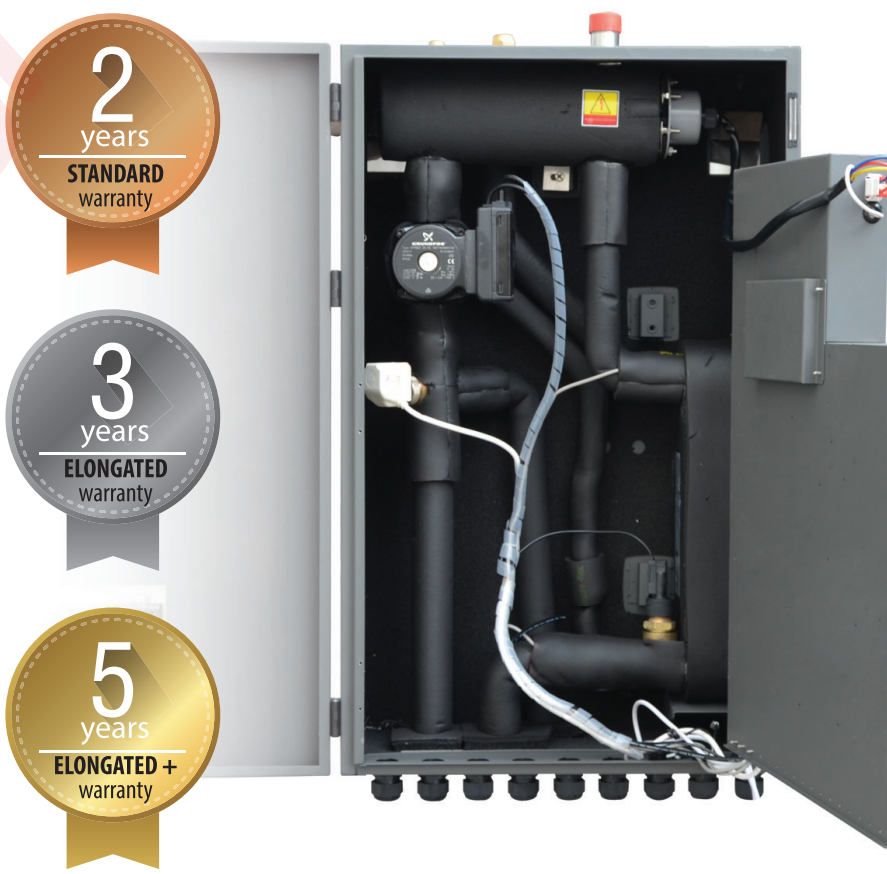
In nature, the AQUA AURA crystal combines three substances - quartz, gold, aquamarine and is believed to have mystical, healing and even magical properties. It is used to heal diseases related to stress, depression and anxiety, promotes clarity of thought, activates positive energy and balances emotions. Due to its metaphysical properties, it has a harmonizing effect, which brings out inner beauty and attracts wealth and success.

For this reason, we chose the name AQUA AURA for our heat pump model and registered it as a trademark. We are sure that it will be a useful product for people, because it provides comfort and economy in every home, and this affects both the well-being of users and the quality of our surrounding environment.

The heat pumps of the CRYSTAL-AQUA AURA brand are the result of precise development and have been improved by the experience gained from their operation in the northern countries at low outdoor temperatures. Every detail of this product line has been selected to ensure reliability in the most severe atmospheric climatic conditions. Today, these products not only have a high reputation in terms of technical parameters and precision in operation, but also provide the easiest and simplest possible access for servicing.

- **inverter technology**
- **touch screen**
- **silent mode**
- **menu in Bulgarian**

The good concept and quality of the components built into CRYSTAL AQUA AURA determine the high level of the product.



IT'S THE DETAILS THAT DETERMINE THE QUALITY

6, 9, 12 kW

15, 19 kW

			Aqua Aura II 6S	Aqua Aura II 9S	Aqua Aura II 12S	Aqua Aura II 15S	Aqua Aura II 19S
Energy efficiency class - low temperature application (W35)			A+++	A+++	A+++	A+++	A+++
SCOP, temperate climate zone, (Twater=+35°C)			4,74	4,73	4,71	4,99	4,84
Seasonal heating energy efficiency (ηs,h)		%	186,7	186	185,5	196,8	190,5
Power supply		V/Hz/Ph	220-240/50/1	220-240/50/1	220-240/50/1	380-420/50/3	380-420/50/3
Heating capacity (W35°C @ A7°C)		kW	6,5	9,2	11,6	15,35	18,5
C.O.P min./max.		W/W	4.5/4.7	4.38/4.71	4.3/4.9	4.78/5.06	4.47/5.01
Heating capacity min./max. (W35°C @ A7°C)		kW	3.5/6.5	4.3/9.2	5.5/11.6	6/15.35	9.2/18.5
Power supply min./max. (W35°C @ A7°C)		kW	0.758/1.41	0.927/2.097	1.107/2.683	1.222/3.209	1.834/4.142
Heating capacity (W45°C @ A7°C)		kW	6	8,6	11,2	14,26	18,2
C.O.P min./max.		W/W	3.34/3.56	3.37 / 3.58	3.30 / 3.50	3.64 / 3.82	3.60 / 3.82
Heating power min./max.		kW	3.15/6	3.9/8.6	4.9/11.2	5.6/14.26	8.5/18.2
Supply power min./max.		kW	0.943/1.732	1.162/2.550	1.401/3.263	1.551/3.913	2.248/4.998
Cooling capacity (W18°C @ A35°C)		kW	7,45	9,5	9,8	18,57	22,5
E.E.R min./max.		W/W	4.05/4.45	4.0/4.6	3.8 / 4.0	3.78 / 5.42	3.58 / 5.12
Cooling capacity min./max.		kW	6.22/7.45	6.7/9.5	7.2 / 9.8	7.23 / 18.57	8.5 / 22.5
Supply power min./max.		kW	1.4/1.863	1.679/2.242	1.791 / 2.510	1.334/4.917	1.660 / 6.285
Cooling capacity (W7°C @ A35°C)		kW	4,5	7,2	8,5	13	16
E.E.R min./max.		W/W	2.5/2.74	2.8/3.1	2.6/3.5	2.96/3.29	2.85/3.2
Cooling capacity min./max.		kW	3.5/4.5	4.9/7.2	4.9/8.5	4.46/13	5.5.2016
Supply power min./max.		kW	1.33/1.68	1.452/2.366	1.358/2.987	2.592/4.390	2.97/5.51
Temperature range	Heating/Cooling	°C	-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43
Minimum system temperature	Heating/Cooling	°C	20/7	20/7	20/7	20/7	20/7
Compressor	Type	-	Twin DC Rotary	Twin DC Rotary	Twin DC Rotary	Twin DC Rotary	Twin DC Rotary
Fan	Number	-	1	1	1	2	2
	Debit	m3/h	2500	3150	3150	6200	7000
	Supply power	W	34	45	45	90	120
	Internal/external	dB(A)	44/52	44/53	44/52	44/59	44/59
Heat exchanger	Type	-	Plate-shaped	Plate-shaped	Plate-shaped	Plate-shaped	Plate-shaped
	Pressure drop	kPa	26	26	26	26	26
	Pipe connections	Inch	G1''	G1''	G1''	G1-1/4''	G1-1/4''
	Expansion vessel	l	5	5	5	5	5
Circulation pump	Type	-	DC, PWM	DC, PWM	DC, PWM	DC, PWM	DC, PWM
	Pressure, max.	mH2O	7,5	9	9	12,5	12,5
	Flow rate - Min./Nom./ Max.	l/s	0.21/0.29/0.35	0.26/0.43/0.52	0.34/0.57/0.68	0.43/0.71/0.85	0.55/0.92/1.1
Overall dimensions / packaging WxDxH	Indoor unit	mm	"500x300x750/ 580x350x820"	"500x300x750/ 580x350x820"	"500x300x750/ 580x350x820"	"500x300x750/ 580x350x820"	"500x300x750/ 580x350x820"
	Outdoor unit	mm	"1010x370x700/ 1075x480x870"	"1165x370x850/ 1230x480x1020"	"1165x370x850/ 1230x480x1020"	"1085x400x1450/ 1140x460x1590"	"1085x400x1450/ 1140x460x1590"
Refrigerant	Type / quantity	kg	R32 / 1.1	R32 / 1.6	R32 / 1.8	R32 / 2.6	R32 / 3.0
	Additional freon > 5m	g/m	30	30	30	30	30
	Comp. oil add.	g/m	according to guide	according to guide	according to guide	according to guide	according to guide
Pipe connections	Liquid - gas	inch	3/8'' - 5/8''	3/8'' - 5/8''	3/8'' - 5/8''	3/8'' - 3/4''	3/8'' - 3/4''
	Maximum length	m	20	20	20	20	20
Net weight	Indoor / outdoor unit	kg	37 / 65	39 / 75	39 / 79	42 /110	42 / 120

CRYSTAL

Fan coil units

slim design

Model		BGR 200 L/R	BGR 400 L/R	BGR 600 L/R	BGR 800 L/R
(a) Full cooling capacity	kW	0.75	1.50	2.20	3.10
Apparent cooling capacity	kW	0.61	1.25	1.90	2.60
Water flow	l/h	142	302	453	573
Pressure drop	kPa	7.00	9.00	22.00	28.00
(b) Heating power	kW	0.99	2.00	3.20	4.85
Water flow	l/h	142	302	453	573
Pressure drop	kPa	6.50	7.00	18.50	24.50
(c) Heating power	kW	1.55	3.10	4.60	6.30
Water flow	l/h	162	343	471	600
Pressure drop	kPa	7.00	7.50	19.00	25.00
Water volume	l	0.48	0.85	1.15	1.48
Maximum working pressure	bar	10	10	10	10
Water connections	inches	G1/2	G1/2	G1/2	G1/2
(d) Air flow min./max.	m3/h	50/160	150/320	200/500	300/600
Power supply	V/ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
Maximum operating current	A	0.12	0.16	0.21	0.24
Maximum consumption	W	14	23	27	33
(e) Noise min./max.	dB(A)	19.8/39	18.3/40	28/42	28/43
Dimensions W / H / D	mm	694 / 580 / 129	894 / 580 / 129	1094 / 580 / 129	1294 / 580 / 129
Net/gross weight	kg	16 / 18	22 / 24	28 / 30	34 / 36

Notes:

(a) Cooling capacity at water temperature 7°C/12°C and room temperature (DB/WB) 27°C/19°C
(b) Heating capacity at water inlet temperature 50°C, flow rate as in cooling mode and room temperature 20°C
(c) Heating capacity at water temperature 70°C/60°C and room temperature 20°C
(d) Air flow rate with clean filter
(e) Sound pressure measured according to EN12102:2008 and ISO 3745:2012 and certified by Intertek

Specifications are subject to change without notice.
For the latest information, please refer to the labels on the body.

Boilers with built-in buffer tank

CRYSTAL azurite

Combination of a 150 L stainless steel boiler and a 50 L buffer tank, built into one housing. In the upper part is the boiler with two coils, designed to heat domestic water (DHW), using the water heated by the heat pump on a flow-through principle. In the lower part is the buffer tank, which serves to accumulate energy for smoother operation of the heating system and more efficient use of the heat produced. If a higher temperature of the DHW water is required, there is a possibility to activate the electric heater built into the boiler.

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