



enerblue
INSPIRED BY NATURE

NATURAL SOLUTIONS

PURPLE CHP WW SCROLL

eR290

PURPLE CHP WW SCROLL



Water to water heat pumps with natural refrigerant gas R290. Extended working conditions and very high performances. Equipped with hermetic scroll compressors and plates heat exchangers.

Low noise configuration is available as an option.

The machine is suitable for both internal and external (outdoor) installation.

Range

Heating capacity (W7;W55) 29 ÷ 84 kW

Cooling capacity (W35;W7) 25 ÷ 75 kW



Reversible
on water
side



Scroll
compressors

Highlights of the product



1



ATEX

The ATEX certified extraction fan runs at nominal speed for all the time required to clean the compressor box. (Option)

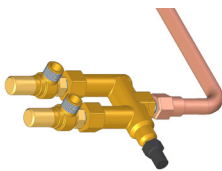
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Models from 100.2 to 170.2 are suitable FOR installation in occupied space.
Models from 200.2 to 350.2 are suitable for installation in machinery room.

3

Compliant with Ecodesign

4



Double safety valve on high pressure side. (Option)

TECHNICAL DATA

UNIT SIZE				27.2	32.2	40.2	45.4	55.4	65.4	80.4
Heating (EN 14511 values) (W7;W55)										
Nominal heating capacity (W7;W55)	(1), (7)	kW		28,8	33,4	41,7	48,0	58,4	67,1	83,8
Total Power input in heating mode	(1), (7)	kW		8,0	9,2	11,4	12,6	16,0	18,3	23,0
COP	(1), (7)			3,60	3,63	3,66	3,81	3,65	3,67	3,64
Energy Seasonal Index										
SCOP	(9)			4,30	4,46	4,51	4,57	4,44	4,55	4,54
Seasonal Energy Efficiency η_s	(9)	%		164,1	170,3	172,6	174,7	169,6	174,1	173,6
Seasonal Efficiency class	(9)			A+++	A+++	A+++	A+++	A+++	A+++	A+++ (5)
Cooling (EN 14511 values) (W35;W7)										
Nominal cooling capacity	(3), (7)	kW		25,6	29,8	37,2	43,8	52,2	59,7	74,7
Total Power input in cooling mode	(3), (7)	kW		5,9	6,6	8,3	9,5	11,9	13,2	16,5
EER	(3), (7)			4,34	4,52	4,48	4,61	4,39	4,52	4,53
Compressor										
Type				Scroll						
Quantity/Refrigerant circuits		n° / n°		2 / 1	2 / 1	2 / 1	4 / 2	4 / 2	4 / 2	4 / 2
Capacity steps		n°		2	2	2	2	2	2	4
Circuit refrigerant charge		kg		1,2	1,2	2,0	1,2	0,9	1,5	1,8
User Side exchanger Heating mode										
Type				Plate exchanger						
Water flow rate (W7/W55)	(1)	l/h		3127	3634	4531	5222	6351	7298	9116
Pressure drop (W7/W55)	(1)	kPa		11,2	10,9	14,3	7,5	10,6	9,2	8,7
Source Side exchanger Heating										
Type				Plate exchanger						
Water flow rate (W7/W55)	(1)	l/h		6002	7012	8756	10190	12200	14080	17580
Pressure drop (W7/W55)	(1)	kPa		42,9	42,5	43,8	20,8	28,6	36,8	47,6
User Side exchanger Chiller mode										
Type				Plate exchanger						
Water flow rate (W7/W55)	(3)	l/h		4407	5127	6409	7538	8980	10270	12860
Pressure drop (W7/W55)	(3)	kPa		25,2	24,8	25,6	12,4	16,9	21,4	27,8
Source Side exchanger Heating										
Type				Plate exchanger						
Water flow rate (W7/W55)	(3)	l/h		5424	6265	7818	9175	11030	12550	15700
Pressure drop (W7/W55)	(3)	kPa		32,2	30,9	40,5	22,1	30,5	26,0	24,8
Hydraulic connection										
Connection				1" 1/2	1" 1/2	1" 1/2	1" 1/2	2"	2"	2"

(1) Inlet-outlet Source water temperature 10-7°C , User water 47-55 °C
(3) Inlet-outlet Source water temperature 30-35°C , User water 12-7 °C
(4) Sound power level calculate in compliance with ISO 3744
(5) Sound pressure level calculate in compliance with ISO 3744
(7) Values calculate in compliance with EN 14511-2018
(8) Not subject to Regulation EU No. 811/2013, rated heat output > 70 kW
(9) According to European Regulation n° 813/2013 and EN14511 - EN14825 for Climat Average(Strasbourg) User Application Medium temperature (55°C)
Outlet temperature Variable Bivalente Temp. -5°C

This datasheet gives the characteristic data of the basic and standard versions of the series; for details refer to the specific documentation

PURPLE CHP WW SCROLL

High efficiency water-to-water reversible heat pumps with scroll compressors and natural refrigerant gas (R290).

UNIT SIZE			27.2	32.2	40.2	45.4	55.4	65.4	80.4
Sound level STD version									
Sound power value	(4), (1)	dB(A)	71	71	71	72	72	72	72
Sound pressure value	(5), (1)	dB(A)	55	55	55	56	56	56	56
Sound level LN version									
Sound power value	(4), (1)	dB(A)	69	69	69	70	70	70	70
Sound pressure value	(5), (1)	dB(A)	53	53	53	54	54	54	54
Basic unit size and weights									
Width		mm	1400	1400	1400	1400	1400	1400	1400
Depth		mm	790	790	790	790	790	790	790
Height		mm	1300	1300	1300	1300	1300	1300	1300

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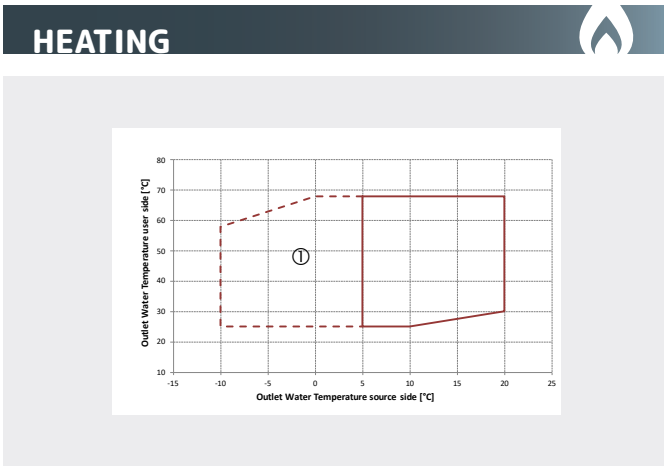
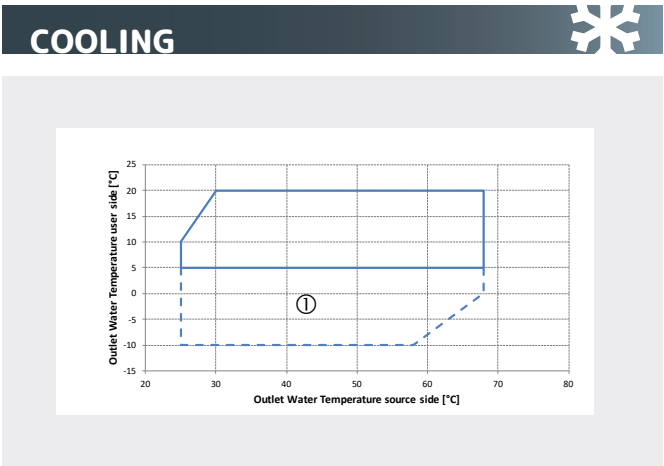
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ELECTRICAL DATA

UNIT SIZE			27.2	32.2	40.2	45.4	75	90	70
Maximum absorbed power	(1)	kW	9,8	11,5	14,4	15,5	19,7	23,0	28,9
Maximum starting current	(2)	A	72,8	84,0	114,0	84,5	90,3	104,0	138,0
Full load current	(4)	A	17,6	20,0	23,9	27,4	35,1	40,0	47,8
Power supply		V/ph/Hz	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%	400/3/50 ±5%

(1) Mains power supply to allow unit operation
(2) Maximum current before safety cut-outs stop the unit. This value is never exceeded and must be used to size the electrical supply cables and relevant safety devices (refer to electrical wiring diagram supplied with the unit).
(4) Maximum starting current calculated considering the bigger size compressor starting current plus the maximum absorbed power of the other electrical devices (pumps, ..)

OPERATING LIMITS



Notes

- The maximum thermal drop in the user side exchange must be 7 °C
- ① In this area the unit can only work with evaporator side glycoled water

AVAILABLE VERSIONS

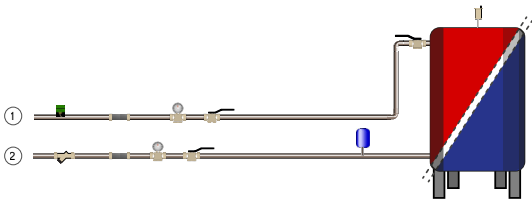
STANDARD

Reversible heat pump for 2-pipe-systems for cooling and heating up to 68°C.

WATER
temperature limits



(1/2) In/out user side



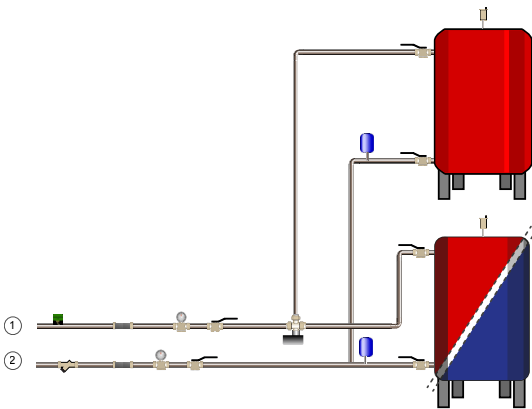
68°C
MAX heating

AUTOMATIC MANAGEMENT OF SANITARY WATER

Automatic management of sanitary water trough
3 way valve managed directly by the controller.



(1/2) In/out user side



68°C
MAX DHW

68°C
MAX heating



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