ADRIATICA

CHILLERS & air-to-water HEAT PUMPS



Inverter 22-84 kW 27-88 kW

Euro 32-310 kW 40-254 kW

Multi-Scroll

Made in Spain

R410A R452B R454B

ADRIATICA *Inverter*

22-84 kW | 27-88 kW

Inverter ErP 2021

Chillers and heat pumps equipped with full inverter technology, featuring inverter compressors, an electronic expansion valve and variable-speed electronic fans to ensure optimal energy savings and comply with the ErP 2021 regulation.
The compressors, hydraulic unit and buffer tank in this range are in the airflow, making this a very compact version.

ADRIATICA *Euro*

32-310 kW | 40-254 kW

Multi-Scroll ErP 2021

Chillers and heat pumps equipped with tandem or trio multiscroll compressor technology to optimise energy savings and comply with the ErP 2021 regulation.
The compressors, hydraulic unit and buffer tank in this range are in the airflow, making this a very compact version.

Codification:

KWG | | | **MS4W**

Series | Size | Power

I - Reversible heat pump / **R** - Cooling only

Series version
M -EURO version, multiscroll compressors
V -INVER TER version, inverter technology compressors

S -Standard equipment / **P** - Version with hydraulic kit / **H** - Version with hydraulic kit and butter tank

Power supply
4 -400 V/III/50 Hz

Refrigerant
W - R410A / **B** - R452B / **C** - R454B

ADRIATICA *Inverter*

Modelo KWG Inverter (Version R)			1022	1030	2045	3052	3070	3090
COOLING ONLY VERSION (R)								
Cooling capacity	Cooling power (1)	kW	22,8	29,5	40,9	54,3	66,4	83,8
		TR	6,5	8,5	12,0	15,5	19,0	24,0
		kBTU/h	78	102	144	186	228	288
	Absorbed power (2)	kW	7,5	9,8	12,0	16,3	20,9	26,3
	EER (3)	kW/kW	3,0	3,0	3,4	3,3	3,2	3,2
		BTU/(h*W)	10,3	10,4	12,0	11,4	10,9	11,0
	SEER (4)	kWh/kWh	4,9	4,9	5,4	5,7	5,7	5,4
	ηs,c (4) (5)	%	194%	192%	211%	225%	223%	213%
	SEPR (7°C) (4) (6)	kWh/kWh	6,1	6,1	6,5	6,9	6,8	6,6
	SEPR (-8°C) (4) (6)	kWh/kWh	4,2	4,1	4,6	5,0	4,9	4,7
	IPLV (7)	kW/TR	0,59	0,60	0,53	0,48	0,49	0,52
		kBtu/kW*h	19,78	19,49	22,25	24,28	23,99	22,54
HEAT PUMP VERSION (I)								
Cooling mode	Cooling power (1)	kW	-	-	-	53,3	65,2	82,3
	Absorbed power (2)	kW	-	-	-	16,5	21,1	26,5
	EER (3)	W/W	-	-	-	3,2	3,1	3,1
	SEER (4)	kWh/kWh	-	-	-	5,6	5,6	5,3
	ηs,c (4)	%	-	-	-	221%	219%	208%
	SEPR (7°C) (4)	kWh/kWh	-	-	-	6,8	6,7	6,5
	SEPR (-8°C) (4)	kWh/kWh	-	-	-	4,9	4,8	4,5
	IPLV (7)	kW/TR	-	-	-	0,49	0,50	0,54
		kBtu/kW*h	-	-	-	23,70	23,41	21,81
Heating mode	Heating power (8)	kW	-	-	-	57,0	76,1	98,4
	Absorbed power (2)	kW	-	-	-	16,1	22,0	27,8
	COP (3)	W/W	-	-	-	3,5	3,5	3,5
	SCOP, average climate (4)	kWh/kWh	-	-	-	3,7	3,7	3,5
	ηs, h, average climate (4) (5)	%	-	-	-	146%	145%	135%
TECHNICAL FEATURES								
Power supply			400V / III / 50HZ with neutral					
Cooling circuit	Refrigerant fluid/GWP	kg CO_2	R410A / 2088					
	No. circuits/compressors		1/1	1/1	1/1	1/1	1/1	2/2
	No. power stages		25%-100%	25%-100%	25%-100%	25%-100%	25%-100%	12.5%-100%
Hydraulic circuit	Inner water flow rate	m^3/h	3,9	5,1	7,0	9,3	11,4	14,4
	Type of heat exchanger		stainless steel brazed plates					
	Ø of hydraulic connections		1 1/2"	1 1/2"	1 1/2"	2"	2"	2"
	Buffer tank capacity (H)	litres	200	200	200	200	200	200
Outdoor fan	Caudal de aire exterior con batería microcanal	m^3/h	16000	16000	16000	22000	22000	36000
	Outdoor airflow with Cu-Al coil	m^3/h	20000	20000	20000	22000	22000	39000
	Number of fans		1	1	1	1	1	2
	Ø and type of fan	mm	800 EC	800 EC	800 EC	800 EC	800 EC	800 EC
Equipment sound pressure (Lp10) (9)		dB(A)	52,8	53,8	56,4	58,9	61,0	60,3
Weights (S version)	Empty weight, R mode	kg	288	315	405	429	491	556
	In-service weight, R mode	kg	296	323	416	441	504	571
	Empty weight, I mode	kg	-	-	-	487	540	648
	In-service weight, I mode	kg	-	-	-	504	558	668

(1) Nominal cooling capacity for a water inlet/outlet temp. of 12/7°C and outdoor air temp. of 35°C. Capacities calculated with a fouling factor in the plate heat exchanger of 0.43·10E-4 ($m^2 \cdot K / W$)
(2) Nominal power input by compressors and outdoor fans
(3) EER and COP calculated based on standard EN: 14511-2018
(4) Seasonal Efficiency calculated based on standard EN 14825:2018. For heating, the seasonal coefficient of performance (SCOP) and seasonal energy efficiency for heating (ηs, h) are calculated for low temperature and average climate applications
(5) ηs, c values in accordance with Ecodesign Regulation EU 2016/2281 for comfort applications. ηs, h values in accordance with the ecodesign, by virtue of Regulation EU 813/2013 for heat pump applications
(6) Seasonal Energy Performance Ratio (SEPR) values for chillers for high-temperature processes (12/7°C) in line with Ecodesign Regulation EU 2016/2281. Seasonal Energy Performance Ratio (SEPR) values for chillers for medium-temperature processes (-2/-8°C) in line with Ecodesign Regulation EU 2015/1095
(7) Seasonal Energy Efficiency Ratio in line with AHRI Standards 550/590
(8) Nominal heating capacity for a water inlet/outlet temp. of 40/45°C and outdoor air temp. of 7°C DB/6°C WB. Capacities calculated with a fouling factor in the plate heat exchanger of 0.43·10E-4 (m^2-K/W)
(9) Sound pressure level in dB(A) measured in a free field at 10 m from the source and with directivity 1

ADRIATICA *Euro*

KWG Euro model (Version R)			2035	2039	2045	3052	3060	3070	3080	3090	3100
COOLING ONLY VERSION (R)											
Cooling capacity	Cooling power (1)	kW	32,3	37,2	42,3	50,8	56,4	63,4	74,1	80,2	89,2
		TR	9,5	11,0	12,5	14,5	16,5	18,5	21,5	23,0	25,5
		kBTU/h	114	132	150	174	198	222	258	276	306
	Absorbed power (2)	kW	11,3	12,2	13,4	16,8	17,7	21,3	23,1	27,9	31,9
	EER (3)	kW/kW	2,9	3,0	3,2	3,0	3,2	3,0	3,2	2,9	2,8
		BTU/(h*W)	10,1	10,8	11,2	10,4	11,2	10,4	11,2	9,9	9,6
	SEER (4)	kWh/kWh	4,2	4,2	4,2	4,7	4,8	4,7	4,7	4,4	4,5
	ηs,c (4) (5)	%	166%	164%	164%	186%	188%	185%	186%	173%	178%
	SEPR (7°C) (4) (6)	kWh/kWh	5,2	5,2	5,2	5,7	5,8	5,7	5,7	5,4	5,5
	SEPR (-8°C) (4) (6)	kWh/kWh	3,3	3,2	3,2	3,8	3,8	3,8	3,8	3,5	3,6
	IPLV (7)	kW/TR	0,74	0,76	0,76	0,63	0,62	0,63	0,63	0,70	0,67
		kBtu/kW*h	15,72	15,43	15,43	18,62	18,91	18,48	18,62	16,74	17,46
HEAT PUMP VERSION (I)											
Cooling mode	Cooling power (1)	kW	-	-	-	49,9	55,4	62,2	72,8	78,9	88,2
	Absorbed power (2)	kW	-	-	-	17,0	17,8	21,6	23,3	28,2	32,0
	EER (3)	W/W	-	-	-	2,9	3,1	2,9	3,1	2,8	2,8
	SEER (4)	kWh/kWh	-	-	-	4,6	4,6	4,6	4,7	4,3	4,5
	ηs,c (4)	%	-	-	-	179%	182%	181%	184%	170%	176%
	SEPR (7°C) (4)	kWh/kWh	-	-	-	5,5	5,6	5,6	5,7	5,3	5,5
	SEPR (-8°C) (4)	kWh/kWh	-	-	-	3,6	3,7	3,7	3,7	3,4	3,5
	IPLV (7)	kW/TR	-	-	-	0,66	0,65	0,65	0,64	0,72	0,68
		kBtu/kW*h	-	-	-	17,61	18,04	17,90	18,33	16,30	17,17
Heating mode	Heating power (8)	kW	-	-	-	55,7	66,4	74,3	83,9	92,2	105,2
	Absorbed power (2)	kW	-	-	-	16,5	19,3	21,7	25,5	29,2	31,8
	COP (3)	W/W	-	-	-	3,4	3,4	3,4	3,3	3,2	3,3
	SCOP, average climate (4)	kWh/kWh	-	-	-	3,4	3,4	3,3	3,3	3,2	3,3
	ηs,h, average climate (4) (5)	%	-	-	-	134%	131%	130%	129%	126%	128%
TECHNICAL FEATURES											
Power supply			400V / III / 50HZ with neutral								
Cooling circuit	Inner water flow rate	kg CO_2	R410A / 2088								
	No. circuits/compressors		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/3
	No. power stages		2	2	2	2	2	2	2	2	3
Hydraulic circuit	Inner water flow rate	m^3/h	5,6	6,4	7,3	8,8	9,7	10,9	12,8	13,8	15,4
	Type of heat exchanger		stainless steel brazed plates								
	Ø hydraulic connections		1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2"	2 1/2"
	Buffer tank capacity (H)	litres	200	200	200	200	200	200	200	200	200
Outdoor fan	Outdoor airflow with microchannel coil	m^3/h	14000	14000	14000	19500	19500	19500	32000	32000	32000
	Outdoor airflow with Cu-Al coil	m^3/h	14000	18500	18500	19500	19500	19500	35000	35000	35000
	Number of fans		1	1	1	1	1	1	2	2	2
	Ø and type of fan	mm	800-6 AC	800-6 AC	800-6 AC	800-6 AC	800-6 AC	800-6 AC	800-6 AC	800-6 AC	800-6 AC
	Fan speed	rpm	900/700	900/700	900/700	900/700	900/700	900/700	900/700	900/700	900/700
Equipment sound pressure (Lp10) (9)		dB(A)	55,2	57,6	58,1	60,6	61,6	62,6	61,6	62,0	62,3
Weights (S version)	Empty weight (R mode)	kg	359	365	380	430	432	446	470	483	581
	In-service weight (R mode)	kg	369	376	392	442	445	459	483	498	599
	Empty weight (I mode)	kg	-	-	-	471	473	487	511	524	622
	In-service weight (I mode)	kg	-	-	-	488	491	505	529	544	647

(1) Nominal cooling power for a water inlet/outlet temp. of 12/7°C and outdoor air temp. of 35°C. Capacities calculated with a fouling factor in the plate heat exchanger of 0.43·10E-4 (m2 · K / W)
(2) Nominal power input by compressors and outdoor fans
(3) EER and COP calculated based on standard EN: 14511-2018
(4) Seasonal Efficiency calculated based on standard EN 14825:2018. For heating, the seasonal coefficient of performance (SCOP) and seasonal energy efficiency for heating (Γ)s, h) are calculated for low temperature and average climate applications
(5) Γ)s, c values in accordance with Ecodesign Regulation EU 2016/2281 for comfort applications. Γ)s, h values in accordance with the ecodesign, by virtue of Regulation EU 813/2013 for heat pump applications

Dimensions Versions S & P (mm)	Series 1	Series 2	Series 3	Series 4
L	1235	1350	2235	2525
W	1050	1100	1050	2100
H	1620	2025	1695	1695

ADRIATICA *Euro*

Modelo KWG Euro (Version R)			3120	4130	4140	4150	4180	4210	4240
COOLING ONLY VERSION (R)									
Cooling capacity	Cooling power (1)	kW	100,0	105,0	118,1	139,3	155,2	182,9	209,1
		TR	28,5	30,0	34,0	40,0	44,5	52,5	59,5
		kBTU/h	342	360	408	480	534	630	714
	Absorbed power (2)	kW	34,8	35,7	39,3	48,8	56,3	63,1	73,1
	EER (3)	kW/kW	2,9	2,9	3,0	2,9	2,8	2,9	2,9
		BTU/(h*W)	9,8	10,1	10,4	9,8	9,5	10,0	9,8
	SEER (4)	kWh/kWh	4,5	4,6	4,7	4,3	4,2	4,6	4,5
	ηs,c (4) (5)	%	175%	179%	185%	168%	165%	180%	176%
	SEPR (7°C) (4) (6)	kWh/kWh	5,4	5,5	5,7	5,3	5,2	5,6	5,5
	SEPR (-8°C) (4) (6)	kWh/kWh	3,5	3,6	3,8	3,3	3,3	3,6	3,5
	IPLV (7)	kW/TR	0,69	0,66	0,63	0,73	0,75	0,66	0,68
		kBtu/kW*h	17,03	17,61	18,48	16,01	15,58	17,75	17,17
HEAT PUMP VERSION (I)									
Cooling mode	Cooling power (1)	kW	98,8	104,5	117,5	138,6	154,4	-	-
	Absorbed power (2)	kW	35,2	36,5	40,2	50,0	57,0	-	-
	EER (3)	W/W	2,8	2,9	2,9	2,8	2,7	-	-
	SEER (4)	kWh/kWh	4,4	4,5	4,3	4,2	4,1	-	-
	ηs,c (4)	%	173%	176%	170%	165%	162%	-	-
	SEPR (7°C) (6)	kWh/kWh	5,4	5,5	5,3	5,2	5,1	-	-
	SEPR (-8°C) (6)	kWh/kWh	3,5	3,5	3,4	3,3	3,2	-	-
	IPLV (7)	kW/TR	0,70	0,68	0,72	0,75	0,77	-	-
		kBtu/kW*h	16,74	17,17	16,30	15,58	15,14	-	-
Heating mode	Heating power (8)	kW	119,2	121,9	136,1	160,7	181,1	-	-
	Absorbed power (2)	kW	36,1	37,7	42,1	52,2	60,6	-	-
	COP (3)	W/W	3,3	3,2	3,2	3,1	3,0	-	-
	SCOP, average climate (4)	kWh/kWh	3,2	3,3	3,3	3,3	3,2	-	-
	ηs,h, average climate (4) (5)	%	125%	127%	127%	127%	125%	-	-
TECHNICAL FEATURES									
Power supply			400V / III / 50HZ with neutral						
Cooling circuit	Inner water flow rate	kg CO_2	R410A / 2088						
	No. circuits/compressors		1/3	1/3	1/3	2/4	2/4	2/6	2/6
	No. power stages		3	3	3	4	4	6	6
Hydraulic circuit	Inner water flow rate	m^3/h	17,2	18,1	20,3	24,0	26,7	31,5	36,0
	Type of heat exchanger		stainless steel brazed plates						
	Ø hydraulic connections		2 1/2"	DN 80	DN 80	DN 80	DN 80	DN 80	DN 80
	Buffer tank capacity (H)	litres	200	200	200	200	200	200	200
Outdoor fan	Outdoor airflow with microchannel coil	m^3/h	32000	39000	39000	64000	64000	64000	64000
	Outdoor airflow with Cu-Al coil	m^3/h	35000	39000	39000	70000	70000	64000	64000
	Number of fans		2	2	2	4	4	4	4
	Ø and type of fan	mm	800-6 AC	800-6 AC	800-6 AC	800-6 AC	800-6 AC	800-6 AC	800-6 AC
	Fan speed	rpm	900/700	900/700	900/700	900/700	900/700	900/700	900/700
Equipment sound pressure (Lp10) (9)		dB(A)	62,7	63,6	64,0	66,1	66,5	66,9	67,3
Weights (S version)	Empty weight (R mode)	kg	587	1051	1060	1182	1202	1443	1463
	In-service weight (R mode)	kg	605	1070	1080	1201	1224	1469	1490
	Empty weight (I mode)	kg	628	1181	1190	1305	1326	-	-
	In-service weight (I mode)	kg	653	1207	1217	1332	1353	-	-

(6) Seasonal Energy Performance Ratio (SEPR) values for chillers for high-temperature processes (12/7°C) in line with Ecodesign Regulation EU 2016/2281. Seasonal Energy Performance Ratio (SEPR) values for chillers for medium-temperature processes (-2/-8°C) in line with Ecodesign Regulation EU 2015/1095

(7) Seasonal Energy Efficiency Ratio in line with AHRI Standards 550/590

(8) Nominal heating capacity for a water inlet/outlet temp. of 40/45°C and outdoor air temp. of 7°C DB/6°C WB. Capacities calculated with a fouling factor in the plate heat exchanger of 0.43·10E-4 ($m^2 \cdot K / W$)

(9) Sound pressure level in dB(A) measured in a free field at 10 m from the source and with directivity 1

Dimensions H version (mm)	Series 1	Series 2	Series 3	Series 4
L	1735	1850	2525	2525
W	1050	1100	1050	2100
H	1620	2025	1695	1695