

Genesis

Air and water cooled screw chillers and heat pumps



R1234
ze

AIR COOLED *Inverter*
❄️ 400 - 1350 kW

WATER COOLED *Inverter*
❄️ 400 - 1650 kW
🔥 400 - 1950 kW

R513A

AIR COOLED *Inverter*
❄️ 400 - 1100 kW
🔥 400 - 1200 kW

WATER COOLED *Inverter*
❄️ 400 - 1300 kW
🔥 400 - 1500 kW

R134a

AIR COOLED *Inverter*
❄️ 220 - 1600 kW
🔥 230 - 1440 kW

WATER COOLED *Inverter*
❄️ 270 - 2470 kW



LENNOX participates in the ECP programme for LCP-HP. Check ongoing validity of certificate : www.eurovent-certification.com

- # **Air or water cooled units, with two refrigerant options**, that meet any building and environmental requirements.
- # Precise control of the compressor speed which stabilises the water temperature and **ensures comfort** provision.
- # **Partial or total heat recovery** achieved with two configurations of the desuperheater, that provides free hot water for domestic use.
- # **Free-Cooling** version available with additional water coil in parallel with the refrigerant coil.

AIR COOLED VERSION



SILENT MODES

- # **Silent version:**
 - Insulated compartment for compressors, made of soundproof polyurethane foam sheets (air-cooled version only).
- # **Super Silent version** (not available on Free-Cooling models):
 - Insulated compartment for compressors, made of soundproof polyurethane foam sheets & polyethylene layers (all versions).
 - Lower fans speed & empowerment of condensing coils (air-cooled version only).

THERMODYNAMIC SYSTEM

- # High efficiency screw compressors with built-in sliding valve for capacity control (inverter as an option).
- # Enhanced cooling capacity and efficiency with Economizer.
- # Screw compressor with integrated oil separator.
- # Shell and tube evaporator on air-cooled versions and flooded on water-cooled versions.
- # Aluminium microchannel condenser coil (Cooling only version).
- # High performance fans to improve efficiency and reduce noise level (EC version available in option).
- # Brazed plate heat exchanger on each refrigerant circuit to produce hot sanitary water up to 65°C.
- # Up to three independent circuits, each equipped with electronic expansion valve.

CONTROL

- # Communication Controller-Display through proprietary device.
- # Connections to peripheral equipment take place through a gateway via CAN Bus connection.
- # 64 x 128 pixel display (read-write).
- # Remote control panel (CR) available as accessory on all units.



WEB MONITORING

- # Remote monitoring via GPRS/EDGE/3G/TCP-IP protocol.
- # Monitors the functioning of the unit through a dedicated web portal.
- # Automatically send email warnings of system alarms.

WATER CIRCUIT

- # Single or dual pump (inverter as an option).
- # Shut-off valve on discharge and suction lines of each circuit.
- # Water differential pressure switch to avoid ice forming on the piping and to stop the system in case of pump breakage or leakage (alerts the user with dedicated warning).
- # Inertial tank combined with shell & tube evaporator in one unique piece to reduce the overall footprint (as an option).
- # Antifreeze heaters as optional feature on evaporator, tank, pumps and/or pipes (not available on Free-cooling version)
- # Low temperature water kit (as an option), to adjust system operation with water temperature from +5°C to -8°C.

WATER COOLED VERSION



J_(A) A_(B) C_(C) 1100_(D) D_(E) X_(F) 1_(G) -A_(H) SSL_(I)

- (A) **J** = Genesis
 (B) **A** = Air cooled - **W** = Water cooled
 (C) **C** = Cooling only mode - **H** = Heat pump
 (D) Approximate capacity in kW
 (E) **S** = Single circuit - **D** = Double circuit - **T** = Triple circuit
 (F) **A** = R134A - **J** = R513A - **X** = R1234ZE
 (G) **1** = Revision number
 (H) **-A** = Advanced - **-FC** = Free cooling
 (I) **--** = Standard - **SSL** = Super low noise



Air cooled version

Cooling only units

GENESIS: JAC -A (R1234ze)		200D	250D	300D	350D	400D	450D	550D	600D	700D	850D	950D	1100D	1200D	1350D
Nominal thermal performances - Cooling mode															
Cooling capacity ⁽¹⁾	kW	197,0	261,0	309,0	366,0	406,0	464,0	548,0	608,0	717,0	809,0	980,0	1064,0	1228,0	1353,0
Total absorbed power ⁽¹⁾	kW	62,0	81,0	96,0	114,0	126,0	144,0	165,0	185,0	219,0	244,0	294,0	326,0	371,0	414,0
EER ⁽¹⁾		3,18	3,22	3,22	3,21	3,22	3,22	3,32	3,29	3,27	3,32	3,33	3,26	3,31	3,27
Comfort Application	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,22	4,25	4,43	4,30	4,55	4,55	4,61	4,60	4,61	4,61	4,62	4,55	4,55	4,55
	Seasonal energy efficiency ⁽²⁾ η_{s,c}	% 166	167	174	169	179	179	181	181	181	181	182	179	179	179
Nominal thermal performances - Free Cooling mode															
Air temperature ⁽³⁾	°C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total absorbed power ⁽³⁾	kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acoustic data															
Global sound power level Standard unit ⁽⁴⁾	dB(A)	94,0	95,0	95,0	96,0	96,0	98,0	98,0	98,0	100,0	102,0	104,0	104,0	106,0	106,0
Electrical data															
Maximum current	A	203,0	275,0	319,0	355,0	413,0	467,0	512,0	597,0	670,0	731,0	764,0	831,0	951,0	1039,0
Starting current	A	291,0	417,0	488,0	586,0	642,0	723,0	783,0	896,0	947,0	1091,0	1206,0	1244,0	1450,0	1494,0
Refrigeration circuit															
Number of circuits		2	2	2	2	2	2	2	2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2	2	2	2	2	2	2	2
Total refrigerant load - R1234ze	kg	39,0	42,0	52,0	65,0	67,0	67,0	87,0	89,0	110,0	226,0	263,0	289,0	323,0	335,0
Condenser															
Nominal water flow rate ⁽¹⁾	l/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nominal pressure drop ⁽¹⁾	kPa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water connections	DN	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Evaporator															
Nominal water flow rate ⁽¹⁾	l/h	9,41	12,47	14,76	17,49	19,40	22,17	26,18	29,05	34,26	38,65	46,82	50,84	58,67	64,64
Nominal pressure drop ⁽¹⁾	kPa	39	37	32	34	31	28	37	33	40	42	30	38	47	54
Water connections	DN	125	125	150	150	150	150	150	150	200	200	200	200	250	250

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Outdoor air temperature = 35°C.

(2) Seasonal energy efficiency of ambient heating at low temperature. According to EU Regulation n. 2016/2281.

(3) Temperature at which cooling capacity is reached equal to that indicated at point (1).

(4) Sound power according to Standard ISO 3744 and Eurovent 8/1.

J_(A) A_(B) C_(C) 1100_(D) D_(E) X_(F) 1_(G) -A_(H) SSL_(I)

- (A) **J** = Genesis
- (B) **A** = Air cooled - **W** = Water cooled
- (C) **C** = Cooling only mode - **H** = Heat pump
- (D) Approximate capacity in kW
- (E) **S** = Single circuit - **D** = Double circuit - **T** = Triple circuit
- (F) **A** = R134A - **J** = R513A - **X** = R1234ZE
- (G) **1** = Revision number
- (H) **-A** = Advanced - **-FC** = Free cooling
- (I) **--** = Standard - **SSL** = Super low noise



Air cooled version

Free cooling units

GENESIS: JAC -FC (R1234ze)		200D	250D	300D	350D	400D	450D	550D	600D	700D	850D	950D	1100D
Nominal thermal performances - Cooling mode													
Cooling capacity ⁽¹⁾	kW	232,0	297,0	350,0	404,0	444,0	519,0	604,0	684,0	801,0	891,0	1044,0	1144,0
Total absorbed power ⁽¹⁾	kW	67,0	87,0	107,0	125,0	142,0	158,0	187,0	205,0	239,0	271,0	338,0	362,0
EER ⁽¹⁾		3,48	3,43	3,29	3,24	3,11	3,28	3,23	3,34	3,35	3,29	3,09	3,16
Process Application	Seasonal Energy Performance Ratio High Temperature ⁽²⁾	5,59	5,57	5,52	5,63	5,50	5,67	5,63	5,66	5,71	5,74	5,50	5,50
	SEPR HT												
Nominal thermal performances - Free Cooling mode													
Air temperature ⁽²⁾	°C	2,0	0,0	1,3	1,0	-0,5	-0,5	0,5	-1,0	-0,5	-0,5	-1,0	0,0
Total absorbed power ⁽²⁾	kW	10,8	10,8	14,4	14,4	14,4	18,0	21,6	21,6	21,6	25,2	28,8	32,4
Acoustic data													
Global sound power level Standard unit ⁽³⁾	dB(A)	95,0	96,0	96,0	97,0	97,0	99,0	100,0	100,0	102,0	104,0	105,0	105,0
Electrical data													
Maximum current	A	211,0	275,0	327,0	355,0	413,0	467,0	520,0	605,0	670,0	731,0	764,0	831,0
Starting current	A	299,0	417,0	496,0	586,0	642,0	723,0	791,0	904,0	947,0	1091,0	1206,0	1244,0
Refrigeration circuit													
Number of circuits		2	2	2	2	2	2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2	2	2	2	2	2
Total refrigerant load - R1234ze	kg	59,0	60,0	61,0	76,0	80,0	104,0	98,0	183,0	221,0	231,0	278,0	321,0
Condenser													
Nominal water flow rate ⁽¹⁾	l/h	-	-	-	-	-	-	-	-	-	-	-	-
Nominal pressure drop ⁽¹⁾	kPa	-	-	-	-	-	-	-	-	-	-	-	-
Water connections	DN	-	-	-	-	-	-	-	-	-	-	-	-
Evaporator													
Nominal water flow rate ⁽¹⁾	l/h	11,60	14,90	17,50	20,20	22,20	25,90	30,20	34,20	40,10	44,60	52,20	57,20
Nominal pressure drop ⁽¹⁾	kPa	77	96	143	118	132	77	104	124	98	108	138	169
Water connections	DN	100	100	100	125	125	125	150	150	150	150	200	200

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Outdoor air temperature = 35°C.

(2) Temperature at which cooling capacity is reached equal to that indicated at point (1).

(3) Sound power according to Standard ISO 3744 and Eurovent 8/1.

J_(A) A_(B) C_(C) 1100_(D) D_(E) X_(F) 1_(G) -A_(H) SSL_(I)

- (A) **J** = Genesis
 (B) **A** = Air cooled - **W** = Water cooled
 (C) **C** = Cooling only mode - **H** = Heat pump
 (D) Approximate capacity in kW
 (E) **S** = Single circuit - **D** = Double circuit - **T** = Triple circuit
 (F) **A** = R134A - **J** = R513A - **X** = R1234ZE
 (G) **1** = Revision number
 (H) **-A** = Advanced - **-FC** = Free cooling
 (I) **--** = Standard - **SSL** = Super low noise



Water cooled version

Cooling only units

GENESIS: JWC -A (R1234ze)		250D	300D	350D	450D	500D	550D	650D	750D	850D	950D	1150D	1250D	1450D	1650D
Nominal thermal performances - Cooling mode															
Cooling capacity ⁽¹⁾	kW	234,0	310,0	375,0	437,0	488,0	558,0	655,0	736,0	868,0	980,0	1160,0	1278,0	1475,0	1650,0
Total absorbed power ⁽¹⁾	kW	44,0	57,0	66,0	80,0	89,0	100,0	117,0	131,0	154,0	174,0	222,0	242,0	275,0	304,0
EER ⁽¹⁾		5,32	5,44	5,68	5,46	5,48	5,58	5,60	5,62	5,64	5,63	5,23	5,28	5,36	5,43
Comfort Application	Seasonal Energy Efficiency Ratio ⁽²⁾	5,68	5,71	5,89	6,76	6,79	6,80	6,84	6,92	7,02	6,98	7,06	7,14	7,28	7,28
	SEER														
	Seasonal energy efficiency ⁽²⁾	%	219	220	228	262	264	264	266	269	271	274	278	283	283
	η_{s,c}														
Nominal thermal performances - Free Cooling mode															
Air temperature ⁽³⁾	°C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total absorbed power ⁽³⁾	kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acoustic data															
Global sound power level Standard unit ⁽⁴⁾	dB(A)	94,0	94,0	95,0	95,0	95,0	95,0	96,0	96,0	97,0	98,0	100,0	100,0	102,0	103,0
Electrical data															
Maximum current	A	144,0	190,0	220,0	260,0	290,0	334,0	384,0	436,0	489,0	549,0	701,0	761,0	873,0	961,0
Starting current	A	199,0	257,0	318,0	373,0	420,0	504,0	492,0	576,0	692,0	782,0	1144,0	1174,0	1372,0	1416,0
Refrigeration circuit															
Number of circuits		2	2	2	2	2	2	2	2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2	2	2	2	2	2	2	2
Total refrigerant load - R1234ze	kg	96	100	100	98	96	93	133	133	163	166	222	219	272	333
Condenser															
Nominal water flow rate ⁽¹⁾	l/h	13,28	17,53	21,07	24,70	27,57	31,44	36,88	41,42	48,83	55,14	66,03	72,62	83,61	93,36
Nominal pressure drop ⁽¹⁾	kPa	17	28	34	36	36	35	32	34	37	37	37	37	35	32
Water connections	DN	80	80	80	80	80	80	100	100	100	100	125	125	125	150
Evaporator															
Nominal water flow rate ⁽¹⁾	l/h	11,18	14,81	17,92	20,88	23,32	26,66	31,29	35,16	41,47	46,82	55,42	61,06	70,47	78,83
Nominal pressure drop ⁽¹⁾	kPa	36	37	42	39	32	31	35	45	39	38	39	49	57	54
Water connections	DN	125	150	150	150	200	200	200	200	200	250	250	250	250	250

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Condenser water temperature = 30/35°C.

(2) Seasonal energy efficiency of ambient heating at low temperature. According to EU Regulation n. 2016/2281.

(3) Temperature at which cooling capacity is reached equal to that indicated at point (1).

(4) Sound power according to Standard ISO 3744 and Eurovent 8/1.



Air cooled version

Cooling only units

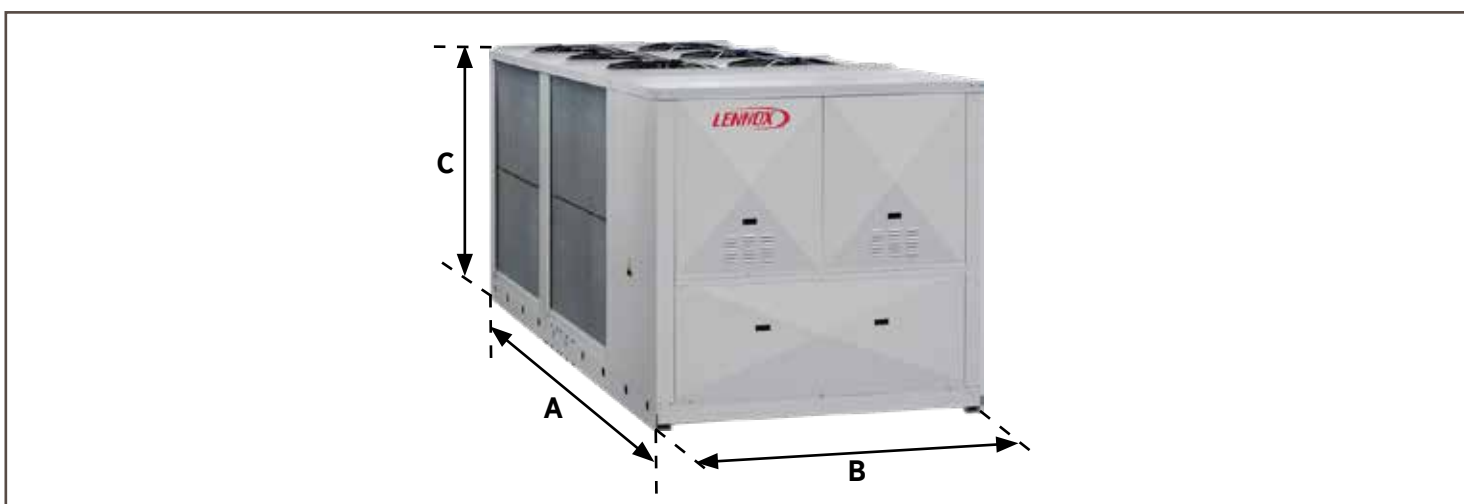
GENESIS: JAC -A (R1234ze)		200D	250D	300D	350D	400D	450D	550D	600D	700D	850D	950D	1100D	1200D	1350D
A	mm	4400	5000	5550		6700			8900	10050	11100	12250	13400		
B		2200	2200	2200		2200			2200	2200	2200	2200	2200		
C		2100	2100	2100		2100			2100	2550	2550	2550	2550		
Weight of standard units															
Transport weight	kg	2600	3115	3340	3785	3860	4415	4935	5010	6000	7210	8355	8915	10820	11110



Air cooled version

Free cooling units

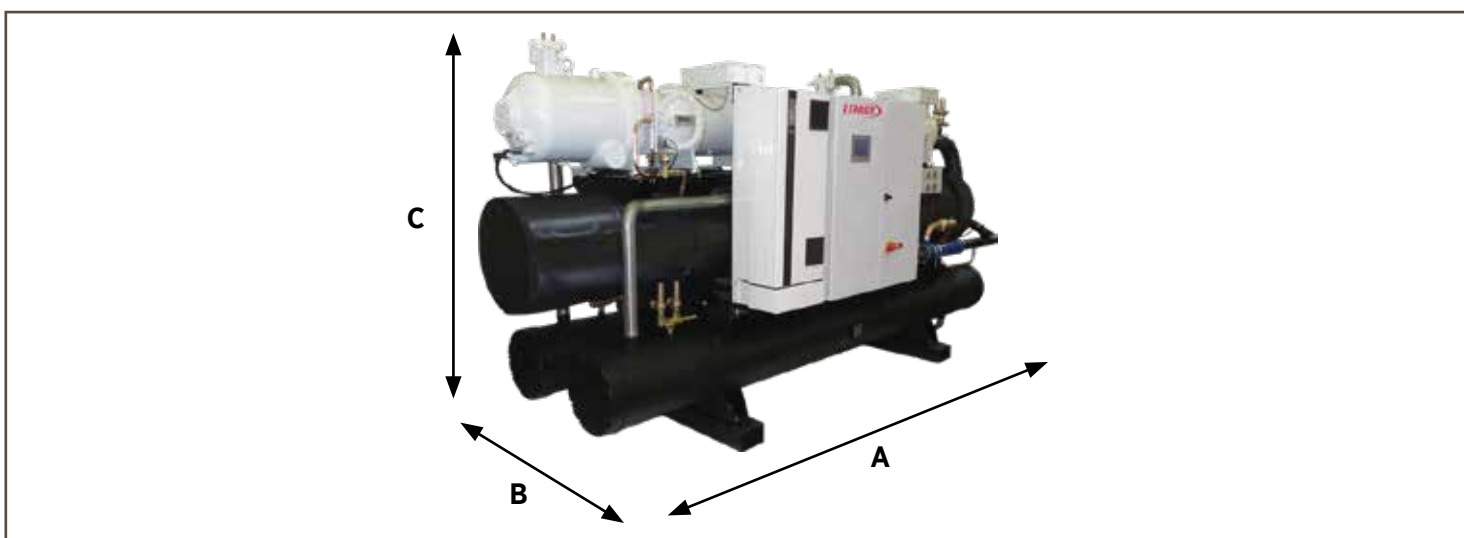
GENESIS: JAC -FC (R1234ze)		200D	250D	300D	350D	400D	450D	550D	600D	700D	850D	950D	1100D	
A	mm	4400		5550			6700		10050		10050		12250	13400
B		2200		2200			2200		2200		2200		2200	2200
C		2360		2360			2360		2360		2750		2750	2750
Weight of standard units														
Transport weight	kg	3150	3420	4020	4410	4560	5440	6800	7280	8420	8900	10690	11570	



Water cooled version

Cooling only units

GENESIS: JWC -A (R1234ze)		250D	300D	350D	450D	500D	550D	650D	750D	850D	950D	1150D	1250D	1450D	1650D	
A	mm	3700			3800		3900			4900	4900	5300	5550	5550		
B		1000		1150			1200		1300	1300	1400	2000	2000			
C		1800		1950			2050		2250	2300	2450	2500	2500			
Weight of standard units																
Transport weight	kg	2140	2445	2640	2860	3090	3230	4180	4560	5205	5670	6950	7080	9060	10050	



J_(A) A_(B) C_(C) 1100_(D) D_(E) J_(F) 1_(G) -A_(H) SSL_(I)

- (A) **J** = Genesis
- (B) **A** = Air cooled - **W** = Water cooled
- (C) **C** = Cooling only mode - **H** = Heat pump
- (D) Approximate capacity in kW
- (E) **S** = Single circuit - **D** = Double circuit - **T** = Triple circuit
- (F) **A** = R134A - **J** = R513A - **X** = R1234ZE
- (G) **1** = Revision number
- (H) **-A** = Advanced - **-FC** = Free cooling
- (I) **--** = Standard - **SSL** = Super low noise



Air cooled version

Heat pump units

GENESIS: JAH -A (R513A)		250D	300D	350D	400D	450D	550D	700D	850D	950D	1100D
Nominal thermal performances - Cooling mode											
Cooling capacity ⁽¹⁾	kW	257	306	351	404	454	561	680	820	937	1110
Total absorbed power ⁽¹⁾	kW	78	92	113	129	144	175	214	247	299	341
EER ⁽¹⁾		3,3	3,31	3,12	3,13	3,15	3,21	3,18	3,32	3,14	3,26
Eurovent energy class ⁽¹⁾ - Full load operation		A	A	A	A	A	A	A	A	A	A
Comfort Application	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,85	4,93	4,86	4,68	4,69	4,73	4,6	4,82	4,8	4,64
	Seasonal energy efficiency ⁽²⁾ η_{s,c}	%	191	194	191	184	185	186	181	190	189
Nominal thermal performances - Heating mode											
Heating capacity ⁽¹⁾	kW	333,7	321,1	372	416	475,8	591	710,4	857,3	982,6	1184,1
Total absorbed power ⁽¹⁾	kW	77,9	88,9	107,1	123,2	137	166,9	204,1	237,5	284,8	328,1
COP ⁽¹⁾		4,28	3,61	3,47	3,38	3,47	3,54	3,48	3,61	3,45	3,61
Eurovent energy class ⁽¹⁾ - Full load operation		A	A	A	A	A	A	A	A	A	A
Comfort Application	Seasonal Coefficient of Performance ⁽²⁾ SCOP	3,28	3,59	3,54	3,58	3,48	3,53	3,52	3,82	3,48	3,43
	Seasonal energy efficiency ⁽²⁾ η_{s,c}	%	128	140	138	140	136	168	137	143	136
Acoustic data											
Global sound power level Standard unit ⁽³⁾	dB(A)	96	96	96	96	97	97	98	99	99	100
Electrical data											
Maximum current	A	201	237	261	301	337	393	485	580	664	720
Starting current	A	263	281	337	361	405	504	596	785	827	855
Refrigeration circuit											
Number of circuits		2	2	2	2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2	2	2	2
Total refrigerant load - 513A (cooling only)	kg	62	66	68	86	88	134	170	232	232	282
Total refrigerant load - 513A (heat pump)	kg	66	68	74	92	98	146	178	222	242	296
Condenser											
Nominal water flow rate ⁽¹⁾	l/h	-	-	-	-	-	-	-	-	-	-
Nominal pressure drop ⁽¹⁾	kPa	-	-	-	-	-	-	-	-	-	-
Water connections	DN	-	-	-	-	-	-	-	-	-	-
Evaporator											
Nominal water flow rate ⁽¹⁾	l/h	12,57	14,95	17,15	19,73	22,17	27,42	33,25	40,09	45,82	54,28
Nominal pressure drop ⁽¹⁾	kPa	30	26	49	44	34	28	42	34	39	48
Water connections	DN	125	125	150	150	150	150	150	200	200	200

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Outdoor air temperature = 35°C.

Heating mode: Evaporator water temperature = 40/45°C | Outdoor air temperature (DB/WB) = 7°C/6°C.

(2) Seasonal energy efficiency of ambient heating at low temperature. According to EU Regulation n. 2016/2281.

(3) Sound power according to Standard ISO 3744 and Eurovent 8/1.

J_(A) A_(B) C_(C) 1100_(D) D_(E) J_(F) 1_(G) -A_(H) SSL_(I)

- (A) J = Genesis
- (B) A = Air cooled - W = Water cooled
- (C) C = Cooling only mode - H = Heat pump
- (D) Approximate capacity in kW
- (E) S = Single circuit - D = Double circuit - T = Triple circuit
- (F) A = R134A - J = R513A - X = R1234ZE
- (G) 1 = Revision number
- (H) -A = Advanced - -FC = Free cooling
- (I) -- = Standard - SSL = Super low noise



Air cooled version

Cooling only units

GENESIS: JAH -A (R513A)		250D	300D	350D	400D	450D	550D	700D	850D	950D	1100D	1250D	1400D	1550D
Nominal thermal performances - Cooling mode														
Cooling capacity ⁽¹⁾	kW	258	307	352	405	455	563	682	822	940	1113	1239	1370	1502
Total absorbed power ⁽¹⁾	kW	78	93	111	126	141	171	210	242	293	334	363	418	457
EER ⁽¹⁾		3,29	3,31	3,16	3,21	3,23	3,29	3,25	3,4	3,21	3,33	3,41	3,28	3,29
Eurovent energy class ⁽¹⁾ - Full load operation		A	A	A	A	A	A	A	A	A	A	A	A	A
Comfort Application	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,29	4,35	4,35	4,69	4,7	4,74	4,61	4,83	4,82	4,65	4,71	4,68	4,7
	Seasonal energy efficiency ⁽²⁾ η_{s,c}	%	167	171	171	185	185	187	181	190	190	183	185	184
Nominal thermal performances - Free Cooling mode														
Air temperature ⁽³⁾	°C	-	-	-	-	-	-	-	-	-	-	-	-	-
Total absorbed power ⁽³⁾	kW	-	-	-	-	-	-	-	-	-	-	-	-	-
Acoustic data														
Global sound power level Standard unit ⁽⁴⁾	dB(A)	96	96	96	96	97	97	98	99	99	100	100	100	101
Electrical data														
Maximum current	A	201	237	261	301	337	393	485	580	664	720	922	876	1002
Starting current	A	263	281	337	361	405	504	596	785	827	855	1267	1261	1379
Refrigeration circuit														
Number of circuits		2	2	2	2	2	2	2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2	2	2	2	2	2	2
Total refrigerant load - 513A (cooling only)	kg	44	46	48	52	64	70	96	84	104	128	158	170	194
Condenser														
Nominal water flow rate ⁽¹⁾	l/h	-	-	-	-	-	-	-	-	-	-	-	-	-
Nominal pressure drop ⁽¹⁾	kPa	-	-	-	-	-	-	-	-	-	-	-	-	-
Water connections	DN	-	-	-	-	-	-	-	-	-	-	-	-	-
Evaporator														
Nominal water flow rate ⁽¹⁾	l/h	12,57	14,95	17,15	19,73	22,17	27,42	33,25	40,09	45,82	54,28	60,39	66,79	73,24
Nominal pressure drop ⁽¹⁾	kPa	30	26	49	44	34	28	42	34	39	48	38	46	59
Water connections	DN	125	125	150	150	150	150	150	200	200	200	200	200	200

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Condenser water temperature = 30/35°C.

(2) Seasonal energy efficiency of ambient heating at low temperature. According to EU Regulation n. 2016/2281.

(3) Temperature at which cooling capacity is reached equal to that indicated at point (1).

(4) Sound power according to Standard ISO 3744 and Eurovent 8/1.

J_(A) A_(B) C_(C) 1100_(D) D_(E) J_(F) 1_(G) -A_(H) SSL_(I)

- (A) **J** = Genesis
- (B) **A** = Air cooled - **W** = Water cooled
- (C) **C** = Cooling only mode - **H** = Heat pump
- (D) Approximate capacity in kW
- (E) **S** = Single circuit - **D** = Double circuit - **T** = Triple circuit
- (F) **A** = R134A - **J** = R513A - **X** = R1234ZE
- (G) **1** = Revision number
- (H) **-A** = Advanced - **-FC** = Free cooling
- (I) **--** = Standard - **SSL** = Super low noise



Water cooled version

Cooling only units

GENESIS: JWC (R513A)		300D	350D	400D	450D	500D	600D	750D	800D	900D	1150D	1300D
Nominal thermal performances - Cooling mode												
Cooling capacity ⁽¹⁾	kW	274	333	383	438	496	612	695	774	939	1101	1260
Total absorbed power ⁽¹⁾	kW	49	59	68	78	87	106	119	130	158	185	214
EER ⁽¹⁾		5,56	5,64	5,64	5,63	5,72	5,75	5,83	5,95	5,96	5,94	5,89
Eurovent energy class ⁽¹⁾ - Full load operation		A	A	A	A	A	A	A	A	A	A	A
Comfort Application	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	6,96	7,13	7,18	7,04	7,2	7,27	7,39	7,55	7,58	7,59	7,54
	Seasonal energy efficiency ⁽²⁾ η_{s,c}	% 270	277	279	274	280	283	288	294	295	296	294
Nominal thermal performances - Free Cooling mode												
Air temperature ⁽³⁾	°C	-	-	-	-	-	-	-	-	-	-	-
Total absorbed power ⁽³⁾	kW	-	-	-	-	-	-	-	-	-	-	-
Acoustic data												
Global sound power level Standard unit ⁽⁴⁾	dB(A)	95	95	96	96	96	96	96	98	99	100	100
Electrical data												
Maximum current	A	178	214	238	270	292	354	398	438	456	536	622
Starting current	A	240	258	314	330	434	465	487	549	558	598	775
Refrigeration circuit												
Number of circuits		1	1	1	1	1	1	1	1	1	1	2
Number of compressors		2	2	2	2	2	2	2	2	2	2	2
Total refrigerant load - R134a	kg	150	160	170	210	240	250	270	310	330	380	400
Condenser												
Nominal water flow rate ⁽¹⁾	l/h	15,77	19,16	22,03	25,18	28,43	35,07	39,75	44,15	53,56	62,78	71,95
Nominal pressure drop ⁽¹⁾	kPa	46	39	42	62	52	60	62	65	58	58	59
Water connections	DN	80	100	100	100	125	125	125	125	150	150	150
Evaporator												
Nominal water flow rate ⁽¹⁾	l/h	13,38	16,29	18,73	21,4	24,22	29,91	33,97	37,84	45,91	53,8	61,59
Nominal pressure drop ⁽¹⁾	kPa	28	32	26	60	54	57	57	54	56	57	61
Water connections	DN	100	100	100	125	125	125	125	150	150	150	150

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Condenser water temperature = 30/35°C.

(2) Seasonal energy efficiency of ambient heating at low temperature. According to EU Regulation n. 2016/2281.

(3) Temperature at which cooling capacity is reached equal to that indicated at point (1).

(4) Sound power according to Standard ISO 3744 and Eurovent 8/1.

J_(A) A_(B) C_(C) 1100_(D) D_(E) A_(F) 1_(G) -A_(H) SSL_(I)

- (A) **J** = Genesis
- (B) **A** = Air cooled - **W** = Water cooled
- (C) **C** = Cooling only mode - **H** = Heat pump
- (D) Approximate capacity in kW
- (E) **S** = Single circuit - **D** = Double circuit - **T** = Triple circuit
- (F) **A** = R134A - **J** = R513A - **X** = R1234ZE
- (G) **1** = Revision number
- (H) **-A** = Advanced - **-FC** = Free cooling
- (I) **--** = Standard - **SSL** = Super low noise



Air cooled version

Heat pump units

GENESIS: JAH -A (R134a)		250D	300D	350D	400D	450D	550D	700D	850D	950D	1100D
Nominal thermal performances - Cooling mode											
Cooling capacity ⁽¹⁾	kW	263	313	359	413	464	574	696	839	959	1136
Total absorbed power ⁽¹⁾	kW	82	96	114	131	146	179	219	256	305	352
EER ⁽¹⁾		3,21	3,26	3,15	3,15	3,18	3,21	3,18	3,28	3,14	3,23
Comfort Application	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,13	4,25	4,22	4,73	4,74	4,77	4,65	4,86	4,85	4,69
	Seasonal energy efficiency ⁽²⁾ η_{s,c}	%	162	167	166	186	187	188	183	191	185
Nominal thermal performances - Heating mode											
Heating capacity ⁽¹⁾	kW	272	324	372	428	480	594	721	869	993	1176,0
Total absorbed power ⁽¹⁾	kW	81	95	113	130	144	177	217	253	302	348,0
COP ⁽¹⁾		3,36	3,41	3,29	3,29	3,33	3,36	3,32	3,43	3,29	3,4
Eurovent energy class ⁽¹⁾ - Full load operation		A	A	A	A	A	A	A	A	A	A
Comfort Application	Seasonal Coefficient of Performance ⁽²⁾ SCOP	3,20	3,32	3,34	3,33	3,32	3,34	3,32	3,36	3,32	3,36
	Seasonal energy efficiency ⁽²⁾ η_{s,c}	%	125	130	131	130	130	131	130	131	130
Nominal thermal performances - Free Cooling mode											
Air temperature ⁽³⁾	°C	-	-	-	-	-	-	-	-	-	-
Total absorbed power ⁽³⁾	kW	-	-	-	-	-	-	-	-	-	-
Acoustic data											
Global sound power level Standard unit ⁽⁴⁾	dB(A)	96	96	96	96	97	97	98	99	99	100
Electrical data											
Maximum current	A	201	237	261	301	337	393	485	580	664	720
Starting current	A	263	281	337	361	405	504	596	785	827	855
Refrigeration circuit											
Number of circuits		2	2	2	2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2	2	2	2
Total refrigerant load - R134a (cooling only)	kg	62	66	68	86	88	134	170	232	232	282
Total refrigerant load - R134a (heat pump)	kg	66	68	74	92	98	146	178	222	242	296
Condenser											
Nominal water flow rate ⁽¹⁾	l/h	-	-	-	-	-	-	-	-	-	-
Nominal pressure drop ⁽¹⁾	kPa	-	-	-	-	-	-	-	-	-	-
Water connections	DN	-	-	-	-	-	-	-	-	-	-
Evaporator											
Nominal water flow rate ⁽¹⁾	l/h	12,57	14,95	17,15	19,73	22,17	27,42	33,25	40,09	45,82	54,28
Nominal pressure drop ⁽¹⁾	kPa	30	26	49	44	34	28	42	34	39	48
Water connections	DN	125	125	150	150	150	150	150	200	200	200

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Outdoor air temperature = 35°C.

Heating mode: Evaporator water temperature = 40/45°C | Outdoor air temperature (DB/WB) = 7°C/6°C.

(2) Seasonal energy efficiency of ambient heating at low temperature. According to EU Regulation n. 2016/2281.

(3) Temperature at which cooling capacity is reached equal to that indicated at point (1).

(4) Sound power according to Standard ISO 3744 and Eurovent 8/1.

J_(A) A_(B) C_(C) 1100_(D) D_(E) A_(F) 1_(G) -A_(H) SSL_(I)

- (A) **J** = Genesis
 (B) **A** = Air cooled - **W** = Water cooled
 (C) **C** = Cooling only mode - **H** = Heat pump
 (D) Approximate capacity in kW
 (E) **S** = Single circuit - **D** = Double circuit - **T** = Triple circuit
 (F) **A** = R134A - **J** = R513A - **X** = R1234ZE
 (G) **1** = Revision number
 (H) **-A** = Advanced - **-FC** = Free cooling
 (I) **--** = Standard - **SSL** = Super low noise



Air cooled version

Cooling only units

GENESIS: JAC-A (R134a)		250D	300D	350D	400D	450D	550D	700D	850D	950D	1100D	1250D	1400D	1550D
Nominal thermal performances - Cooling mode														
Cooling capacity ⁽¹⁾	kW	263,0	313,0	359,0	413,0	464,0	574,0	696,0	839,0	959,0	1136,0	1264,0	1398,0	1533,0
Total absorbed power ⁽¹⁾	kW	80,0	94,0	112,0	128,0	143,0	175,0	215,0	251,0	299,0	345,0	372	431	470
EER ⁽¹⁾		3,29	3,33	3,21	3,23	3,24	3,28	3,24	3,34	3,21	3,29	3,40	3,24	3,26
Comfort Application	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	4,14	4,26	4,23	4,74	4,75	4,78	4,66	4,87	4,86	4,70	4,75	4,72	4,74
	Seasonal energy efficiency ⁽²⁾ $\eta_{s,c}$	%	163	167	166	187	187	188	183	192	191	185	187	186
Nominal thermal performances - Free Cooling mode														
Air temperature ⁽³⁾	°C	-	-	-	-	-	-	-	-	-	-	-	-	-
Total absorbed power ⁽³⁾	kW	-	-	-	-	-	-	-	-	-	-	-	-	-
Acoustic data														
Global sound power level Standard unit ⁽⁴⁾	dB(A)	96	96	96	96	97	97	98	99	99	100	100	100	101
Electrical data														
Maximum current	A	201	237	261	301	337	393	485	580	664	720	922	876	1002
Starting current	A	263	281	337	361	405	504	596	785	827	855	1267	1261	1379
Refrigeration circuit														
Number of circuits		2	2	2	2	2	2	2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2	2	2	2	2	2	2
Total refrigerant load - R134a (cooling only)	kg	44	46	48	52	64	70	96	84	104	128	158	170	194
Condenser														
Nominal water flow rate ⁽¹⁾	l/h	-	-	-	-	-	-	-	-	-	-	-	-	-
Nominal pressure drop ⁽¹⁾	kPa	-	-	-	-	-	-	-	-	-	-	-	-	-
Water connections	DN	-	-	-	-	-	-	-	-	-	-	-	-	-
Evaporator														
Nominal water flow rate ⁽¹⁾	l/h	12,57	14,95	17,15	19,73	22,17	27,42	33,25	40,09	45,82	54,28	60,39	66,79	73,24
Nominal pressure drop ⁽¹⁾	kPa	30	26	49	44	34	28	42	34	39	48	38	46	59
Water connections	DN	125	125	150	150	150	150	150	200	200	200	200	200	200

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Outdoor air temperature = 35°C.

Heating mode: Evaporator water temperature = 40/45°C | Outdoor air temperature (DB/WB) = 7°C/6°C.

(2) Seasonal energy efficiency of ambient heating at low temperature. According to EU Regulation n. 2016/2281.

(3) Temperature at which cooling capacity is reached equal to that indicated at point (1).

(4) Sound pressure level according to Standard DIN 45635, measured in free field conditions at 1 m from the unit (condensing coil side) and at 1.5 m from the ground.

J_(A) A_(B) C_(C) 1100_(D) D_(E) A_(F) 1_(G) -A_(H) SSL_(I)

- (A) J = Genesis
 (B) A = Air cooled - W = Water cooled
 (C) C = Cooling only mode - H = Heat pump
 (D) Approximate capacity in kW
 (E) S = Single circuit - D = Double circuit - T = Triple circuit
 (F) A = R134A - J = R513A - X = R1234ZE
 (G) 1 = Revision number
 (H) -A = Advanced - -FC = Free cooling
 (I) -- = Standard - SSL = Super low noise



Air cooled version

Free cooling units

GENESIS: JAC -FC (R134a)		200D	250D	300D	350D	400D	450D	550D	700D	850D	950D	1100D	1200D	1350D
Nominal thermal performances - Cooling mode														
Cooling capacity ⁽¹⁾	kW	217	258	315	375	418	473	569	709	847	994	1139	1288	1460
Total absorbed power ⁽¹⁾	kW	83	97	114	148	157	184	210	263	316	370	434	490	541
EER ⁽¹⁾		2,61	2,66	2,76	2,53	2,66	2,57	2,71	2,70	2,68	2,69	2,62	2,63	2,70
Comfort Application	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	-	-	-	-	-	-	-	-	-	-	-	-	-
	Seasonal energy efficiency ⁽²⁾ η_{s,c}	%	-	-	-	-	-	-	-	-	-	-	-	-
Nominal thermal performances - Free Cooling mode														
Air temperature ⁽³⁾	°C	-2,5	-2,0	-2,0	-4,5	-3,7	-4,0	-3,5	-4,3	-4,3	-4,6	-4,7	-4,1	-3,9
Total absorbed power ⁽³⁾	kW	8	12	12	12	12	16	20	20	22	22	25	29	36
Acoustic data														
Global sound power level Standard unit ⁽⁴⁾	dB(A)	79,8	80,6	80,8	81,1	81,7	82,6	83,6	85,8	86,1	86,4	87,4	88,3	90,6
Electrical data														
Maximum current	A	194	201	237	261	293	337	393	437	565	649	713	720	896
Starting current	A	256	263	281	337	353	405	504	526	770	812	848	855	1688
Refrigeration circuit														
Number of circuits		2	2	2	2	2	2	2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2	2	2	2	2	2	2
Total refrigerant load - R134a	kg	36	38	50	54	64	72	118	160	170	216	230	240	300
Condenser														
Nominal water flow rate ⁽¹⁾	l/h	-	-	-	-	-	-	-	-	-	-	-	-	-
Nominal pressure drop ⁽¹⁾	kPa	-	-	-	-	-	-	-	-	-	-	-	-	-
Water connections	DN	-	-	-	-	-	-	-	-	-	-	-	-	-
Evaporator														
Nominal water flow rate ⁽¹⁾	l/h	11,22	13,34	16,29	19,38	21,61	24,45	29,42	36,65	43,79	51,38	58,88	66,58	75,47
Nominal pressure drop ⁽¹⁾	kPa	125	170	180	168	191	130	115	160	164	160	200	225	300
Water connections	DN	100	100	100	125	125	125	150	150	150	200	200	200	200

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Outdoor air temperature = 35°C.

(2) Seasonal energy efficiency of ambient heating at low temperature. According to EU Regulation n. 2016/2281.

(3) Temperature at which cooling capacity is reached equal to that indicated at point (1).

(4) Sound pressure level according to Standard DIN 45635, measured in free field conditions at 1 m from the unit (condensing coil side) and at 1.5 m from the ground.

J_(A) A_(B) C_(C) 1100_(D) D_(E) A_(F) 1_(G) -A_(H) SSL_(I)

- (A) **J** = Genesis
- (B) **A** = Air cooled - **W** = Water cooled
- (C) **C** = Cooling only mode - **H** = Heat pump
- (D) Approximate capacity in kW
- (E) **S** = Single circuit - **D** = Double circuit - **T** = Triple circuit
- (F) **A** = R134A - **J** = R513A - **X** = R1234ZE
- (G) **1** = Revision number
- (H) **-A** = Advanced - **-FC** = Free cooling
- (I) **--** = Standard - **SSL** = Super low noise



Water cooled version

Cooling only units

GENESIS: JWC -A (R134a)		300S	350S	400S	450S	500S	600S	750S	800S	900S	1150S	1300S
Nominal thermal performances - Cooling mode												
Cooling capacity ⁽¹⁾	kW	280	341	392	448	507	626	711	792	961	1126	1289
Total absorbed power ⁽¹⁾	kW	50	60	69	79	88	108	121	132	160	188	217
EER ⁽¹⁾		5,60	5,68	5,68	5,67	5,76	5,80	5,88	6,00	6,01	5,99	5,94
Comfort Application	Seasonal Energy Efficiency Ratio ⁽²⁾ SEER	7,03	7,20	7,25	7,11	7,27	7,34	7,46	7,63	7,66	7,67	7,62
	Seasonal energy efficiency ⁽²⁾ η_{s,c}	273	280	282	276	283	286	290	297	298	299	297
Nominal thermal performances - Free Cooling mode												
Air temperature ⁽³⁾	°C	-	-	-	-	-	-	-	-	-	-	-
Total absorbed power ⁽³⁾	kW	-	-	-	-	-	-	-	-	-	-	-
Acoustic data												
Global sound power level Standard unit ⁽⁴⁾	dB(A)	95	95	96	96	96	96	96	98	99	100	100
Electrical data												
Maximum current	A	178	214	238	270	292	354	398	438	456	536	622
Starting current	A	240	258	314	330	434	465	487	549	558	598	775
Refrigeration circuit												
Number of circuits		1	1	1	1	1	1	1	1	1	1	1
Number of compressors		2	2	2	2	2	2	2	2	2	2	2
Total refrigerant load - R134a	kg	150	160	170	210	240	250	270	310	330	380	400
Condenser												
Nominal water flow rate ⁽¹⁾	l/h	15,77	19,16	22,03	25,18	28,43	35,07	39,75	44,15	53,56	62,78	71,95
Nominal pressure drop ⁽¹⁾	kPa	46	39	42	62	52	60	62	65	58	58	59
Water connections	DN	80	100	100	100	125	125	125	125	150	150	150
Evaporator												
Nominal water flow rate ⁽¹⁾	l/h	13,38	16,29	18,73	21,40	24,22	29,91	33,97	37,84	45,91	53,80	61,59
Nominal pressure drop ⁽¹⁾	kPa	28	32	26	60	54	57	57	54	56	57	61
Water connections	DN	100	100	100	125	125	125	125	150	150	150	150

(1) EUROVENT certified data, in accordance with standard EN 14511. **Cooling mode:** Evaporator water temperature = 12/7°C | Condenser water temperature = 30/35°C.

(2) Seasonal energy efficiency of ambient heating at low temperature. According to EU Regulation n. 2016/2281.

(3) Temperature at which cooling capacity is reached equal to that indicated at point (1).

(4) Sound power according to Standard ISO 3744 and Eurovent 8/1.



Air cooled version

Cooling only units

Genesis - JAC -A (R134a)		250D	300D	350D	400D	450D	550D	700D	850D	950D	1100D
A	mm	4400	4400	5000	5550	6200	6700	8900	11100	11100	11100
B		2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C		2100	2100	2100	2100	2100	2100	2100	2100	2100	2500
Weight of standard units											
Transport weight	kg	3562	3609	3719	4127	4820	5311	6437	7583	7683	8656



Air cooled version

Heat pump units

Genesis - JAH -A (R134a)		250D	300D	350D	400D	450D	550D	700D	850D	950D	1100D
A	mm	5550	5550	5550	7750	7750	8900	10050	13400	13400	13400
B		2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C		2100	2100	2100	2100	2100	2100	2100	2100	2100	2500
Weight of standard units											
Transport weight	kg	4172	4219	4457	4920	5561	6425	7527	8787	9183	10286



Air cooled version

Free cooling units

Genesis - JAC -FC (R134a)		200D	250D	300D	350D	400D	450D	550D	700D	850D	950D	1100D	1200D	1350D
A	mm	4400	4400	4400	4400	5550	5550	6700	10050	10050	10050	10050	11100	13400
B		2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C		2360	2360	2360	2360	2360	2360	2360	2360	2360	2750	2750	2750	2750
Weight of standard units														
Transport weight	kg	3250	3320	3620	3805	4180	4510	5310	6820	7710	8605	9590	10070	11750





Water cooled version

Cooling only units

Genesis - JWC -A (R134a)		300S	350S	400S	450S	500S	600S	750S	1300S	1100D	1200D	1350D
A	mm	3700	3700	3700	4200	4200	4200	4200	4600	5000	4400	5000
B		1300	1300	1300	1400	1400	1400	1400	1600	2200	2200	2200
C		2100	2100	2100	2200	2200	2200	2200	2250	2100	2100	2100
Weight of standard units												
Transport weight	kg	2840	2980	3063	3415	3802	4180	4210	4745	5210	5675	6500

