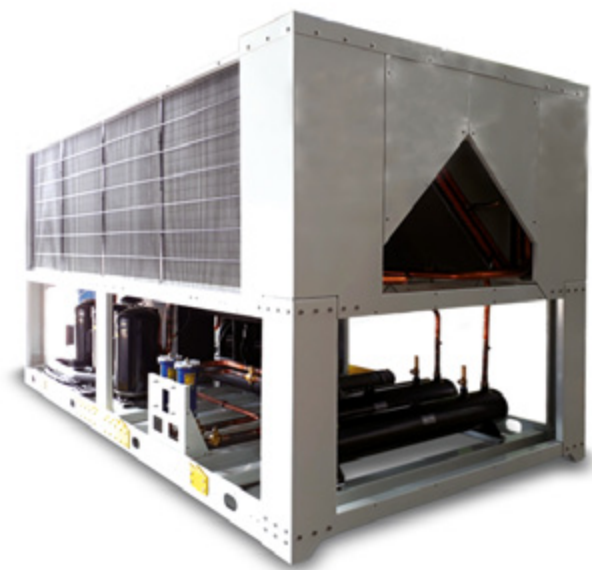




GALAXY PLUS

High efficiency air cooled chillers



- **Low noise level**
- **Wide range of accessories (optional)**
- **High efficiency at partial loads**
- **R410a Multiscroll unit**
- **Optional internal hydronic kit**
- **Available in a STD or SUPER SILENT (SLN) version**
- **Standard RS485 card**
- **Robust and well-finished metalwork**

GALAXY PLUS is a high efficiency air cooled water chillers, for outdoor installations with scroll compressors. Available in a wide range of models with multi-compressor and cooling capacity 190 up to 330 kW.

All units are designed for optimal energy efficiency, particularly high when operating at partial loads, and are equipped with scroll compressors, with refrigerant R410A.

The compactness and the presence of a wide range of equipments and accessories, allow the use of GALAXY PLUS in every plant environment.

All standard models have the compressor assembled in a soundproofed compartment. The noise emission is very low and it is in compliance with the required normal standards. For particularly low noise requirements, a Low Noise version (SLN) is available. In addition to strengthening insulation of the compressor compartment, low speed fans and increased heat exchange surfaces are used in order to ensure high energy efficiency.

Available on request: customised dimensions, refrigerants, operating conditions and increased efficiency.

Accessories

1 pump hydronic kit	Rubber antivibration mountings std
1 HP pump hydronic kit	Condensing coils protection grids
2 pumps hydronic kit	Compressors soft starter
2 HP pumps hydronic kit	Coils with prevarnished fins
1 pump hydronic kit + buffer tank	Condensers fully Electrofin® painted
1 HP pump hydronic kit + buffer tank	Condensers with copper fins
2 pumps hydronic kit + buffer tank	Power factor regulator kit (cos ϕ 0,95)
2 HP pumps hydronic kit + buffer tank	Electrical panel ventilation / Heating kit (INCLUDED)
Partial heat recovery (desuperheater) HRP	Electrical panel ventilation
Total heat recovery HRT	Modulating fan speed control
Refrigerants gauges	Electronic thermostatic expansion valve
Top remote control	El. Exp. Valve backup battery
Antifreeze evaporator heater + pipes	EC Fans
Antifreeze evaporator heater + buffer tank	A.V mounts (spring type) only pipes
Compressor crankcase heater	A.V mounts (spring type) pumps+buffer tank
Compressor magnetothermal protection	Liquid receiver (ON REQUEST)
Rubber antivibration mountings std / hydronic kit	Standard RS485 Modbus card (INCLUDED)



Galaxy Plus STD Technical Data

GALAXY PLUS STANDARD UNIT					136A	146A	156A	234A	284A	304A	
COOLING	COOLING MODE SEASONAL EFFICIENCY (Reg. UE 2016/2281)										
	SEER				3,9	4,02	4,14	4,06	3,88	3,82	
	η				153	158	163	159	152	150	
	A35/W7	Cooling capacity			kW	193,2	212,2	232,2	266,6	297,5	334,9
		Total power input (1)			kW	70,8	73,8	82,4	97,0	103,4	116,3
		EER (EN 14511-2013)				2,69	2,83	2,78	2,71	2,84	2,84
	A35/W18	Cooling capacity			kW	265,2	287,8	309,1	355,6	406,0	454,3
		Total power input (1)			kW	76,8	80,3	90,5	105,4	112,1	126,1
		EER (EN 14511-2013)				3,37	3,48	3,33	3,28	3,53	3,51
Refrigerant					R410A						
Max current input				A	181,6	189,8	206,2	234,8	260,2	286,2	
Starting current				A	283,8	316,9	333,3	455,8	494,2	507,2	
Scroll Compressors				n°	6	6	6	4	4	4	
Refrigerant circuits				n°	2	2	2	2	2	2	
Capacity steps				n°	6	6	6	4	4	4	
Main supply voltage				V/Ph/Hz	400/3/50						
Noise power level Lw (2)				dB(A)	85,2	85,8	86,7	88,9	89,6	90,2	
Noise pressure level Lp (2)				dB(A)	53,0	53,6	54,5	56,6	57,3	57,8	
USER PLANT HEAT EXCHANGER											
Medium type				clean water							
Brazed plate heat exch				n°	1	1	1	1	1	1	
Medium flow (A35/B7)				l/s	9,2	10,1	11,1	12,7	14,2	16,0	
Pressure drops (A35/B7)				KPa	39,0	41,7	40,0	48,2	41,9	43,0	
FAN SECTION											
Axial fans				n°	4	4	4	4	6	6	
Total air flow				m³/s	24,4	24,4	24,4	25,5	36,2	35,0	
Fan speed				min ⁻¹	885	885	885	885	885	885	
Power input single fan				kW	1,70	1,70	1,70	1,70	1,70	1,70	
Current input single fan				A	3,70	3,70	3,70	3,70	3,70	3,70	
DIMENSIONS AND WEIGHT (without accessories)											
Lenght				mm	3725	3725	3725	4725	4725	4725	
Width				mm	2205	2205	2205	2205	2205	2205	
Height				mm	2266	2266	2266	2266	2266	2266	
Empty weight				Kg	1682	1760	1783	2210	2280	2306	

A35/W7 Ambient temperature: 35 °C - Medium (water) temperature: 12/7 °C

A35/W18 Ambient temperature: 35 °C - Medium (water) temperature: 23/18 °C

(1) Total power input without water pumps

(2) Sound power level according to ISO3744. Average sound pressure level 10 m dsitance with unit standing on a reflecting suface

Galaxy Plus SLN Technical Data

GALAXY PLUS SUPERSILENCED UNIT				136A	146A	156A	234A	284A	304A
COOLING	COOLING MODE SEASONAL EFFICIENCY (Reg. UE 2016/2281)								
	SEER			4,08	4,12	4,19	4,03	3,96	3,87
	η			160	162	165	158	155	152
	A35/W7	Cooling capacity	kW	196,2	209,1	229,4	272,0	290,1	326,0
		Total power input (1)	kW	69,7	72,9	81,3	94,6	104,3	116,8
		EER (EN 14511-2013)		2,77	2,83	2,78	2,83	2,75	2,75
	A35/W18	Cooling capacity	kW	267,5	283,3	305,6	365,2	393,0	439,9
		Total power input (1)	kW	76,4	79,7	89,4	101,9	114,2	127,6
		EER (EN 14511-2013)		3,41	3,46	3,34	3,47	3,36	3,36
Refrigerant				R410A					
Max current input			A	175,0	183,2	199,6	232,3	250,3	276,3
Starting current			A	277,2	310,3	326,7	475,3	484,3	497,3
Scroll Compressors			n°	6	6	6	4	4	4
Refrigerant circuits			n°	2	2	2	2	2	2
Capacity steps			n°	6	6	6	4	4	4
Main supply voltage			V/Ph/Hz	400/3/50					
Noise power level Lw (2)			dB(A)	82,1	82,8	83,8	86,6	86,6	87,2
Noise pressure level Lp (2)			dB(A)	49,9	50,6	51,6	54,3	54,3	54,9
USER PLANT HEAT EXCHANGER									
Medium type			clean water						
Brazed plate heat exch			n°	1	1	1	1	1	1
Medium flow (A35/B7)			l/s	9,4	10,0	11,0	13,0	13,9	15,6
Pressure drops (A35/B7)			KPa	40,3	40,5	39,1	50,2	39,9	40,8
FAN SECTION									
Axial fans			n°	4	4	4	6	6	6
Total air flow			m³/s	20,4	19,7	19,0	30,2	30,2	27,9
Fan speed			min ⁻¹	720	720	720	720	720	720
Power input single fan			kW	1,19	1,19	1,19	1,19	1,19	1,19
Current input single fan			A	2,05	2,05	2,05	2,05	2,05	2,05
DIMENSIONS AND WEIGHT (without accessories)									
Lenght			mm	3725	3725	3725	4725	4725	4725
Width			mm	2205	2205	2205	2205	2205	2205
Height			mm	2266	2266	2266	2266	2266	2266
Empty weight			Kg	1820	1905	1992	2320	2342	2590

A35/W7 Ambient temperature: 35 °C - Medium (water) temperature: 12/7 °C

A35/W18 Ambient temperature: 35 °C - Medium (water) temperature: 23/18 °C

(1) Total power input without water pumps

(2) Sound power level according to ISO3744. Average sound pressure level 10 m dsitance with unit standing on a reflecting siface

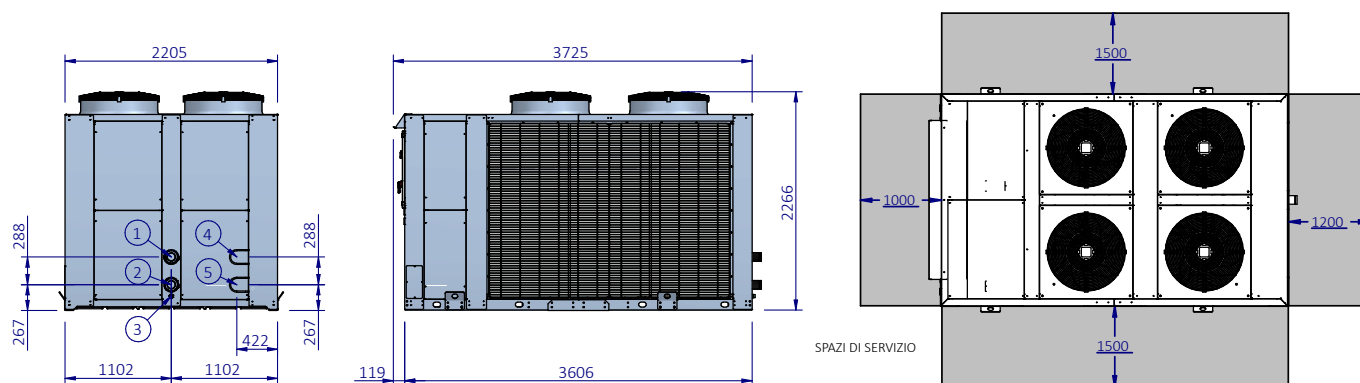
Hydronic kit technical data

GALAXY PLUS UNIT		136A	146A	156A	234A	284A	304A
PLANT PUMP HYDRONIC KIT (ACCESSORY)							
Fluid flow (A35/W7)	l/s	9,23	10,14	11,09	12,74	14,21	16,00
Safety valve	Bar	6	6	6	6	6	6
Expansion vessels	l	1 x 25	1 x 25	1 x 25	2 x 25	2 x 25	2 x 25
Plant fluid max pressure	Bar	6	6	6	6	6	6
VERSIONS: 1 std pump							
Pump nr.	n°	1	1	1	1	1	1
Available externe pressure	kPa	114	102	93	118	106	120
Single power input (each)	kW	2,2	2,2	2,2	3,0	3,0	4,0
Single current input (each)	A	4,6	4,6	4,6	6,3	6,3	7,8
Empty weight	Kg	55	55	55	80	80	80
VERSIONS: 1 pump HP							
Pump nr.	n°	1	1	1	1	1	1
Available externe pressure	kPa	157	147	149	135	186	174
Single power input (each)	kW	3	3	4	4	5,5	5,5
Single current input (each)	A	6,3	6,3	7,8	7,8	10,4	10,4
Empty weight	Kg	62	62	62	87	87	87
VERSIONS: 2 pumps STD							
Pump nr.	n°	2	2	2	2	2	2
Available externe pressure	kPa	114	102	93	118	106	120
Single power input (each)	kW	2,2	2,2	2,2	3,0	3,0	4,0
Single current input (each)	A	4,6	4,6	4,6	6,3	6,3	7,8
Empty weight	Kg	98	98	98	133	133	133
VERSIONS: 2 pumps HP							
Pump nr.	n°	2	2	2	2	2	2
Available externe pressure	kPa	157	147	149	135	186	174
Single power input (each)	kW	3	3	4	4	5,5	5,5
Single current input (each)	A	6,3	6,3	7,8	7,8	10,4	10,4
Empty weight	Kg	112	112	112	147	147	147
VERSIONS: 1 pump STD + buffer tank							
Storage water vessel	l	500	500	500	750	750	750
Pump nr.	n°	1	1	1	1	1	1
Available externe pressure	kPa	114	102	93	118	106	120
Single power input (each)	kW	2,2	2,2	2,2	3,0	3,0	4,0
Single current input (each)	A	4,6	4,6	4,6	6,3	6,3	7,8

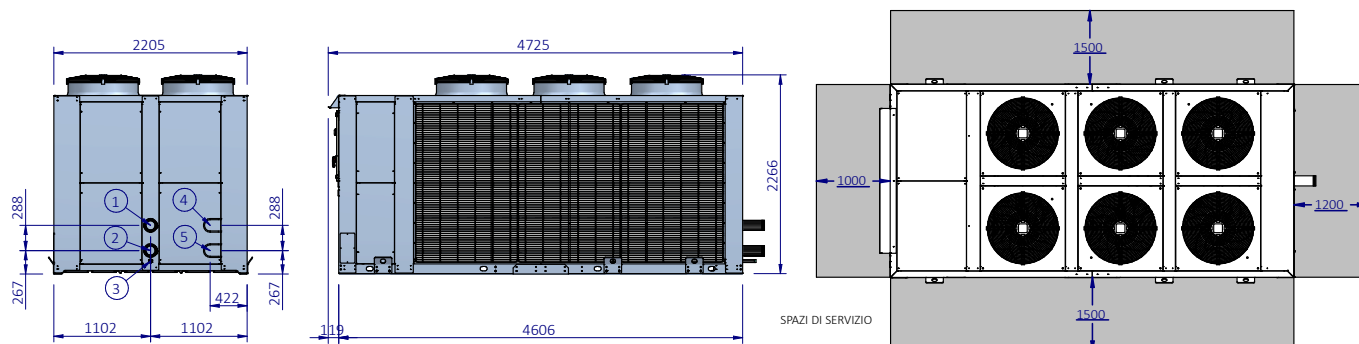
Hydronic kit technical data

GALAXY PLUS UNIT		136A	146A	156A	234A	284A	304A
VERSIONS: 1 pump HP + buffer tank							
Storage water vessel	l	500	500	500	750	750	750
Pump nr.	n°	1	1	1	1	1	1
Available externe pressure	kPa	157	147	149	135	186	174
Single power input (each)	kW	3	3	4	4	5,5	5,5
Single current input (each)	A	6,3	6,3	7,8	7,8	10,4	10,4
Empty weight	Kg	128	128	128	183	183	183
VERSIONS: 2 pump STD + buffer tank							
Storage water vessel	l	500	500	500	750	750	750
Pump nr.	n°	2	2	2	2	2	2
Available externe pressure	kPa	114	102	93	118	106	120
Single power input (each)	kW	2,2	2,2	2,2	3,0	3,0	4,0
Single current input (each)	A	4,6	4,6	4,6	6,3	6,3	7,8
Empty weight	Kg	164	164	164	229	229	229
VERSIONS: 2 pumps HP + buffer tank							
Storage water vessel	l	500	500	500	750	750	750
Pump nr.	n°	2	2	2	2	2	2
Available externe pressure	kPa	157	147	149	135	186	174
Single power input (each)	kW	3	3	4	4	5,5	5,5
Single current input (each)	A	6,3	6,3	7,8	7,8	10,4	10,4
Empty weight	Kg	178	178	178	243	243	243

Galaxy Plus STD/SLN sizes and operating spaces



GALAXY PLUS				User side			HRP		HRT	
MODEL	STD	n° ventil.	SLN	n° ventil.	1	2	3	4	5	
					V	V	G	V	V	V
136	STD	4	SLN	4	3"	3"	1"	1"1/2	1"1/2	3"
146		4		4	3"	3"	1"	1"1/2	1"1/2	3"
156		4		4	3"	3"	1"	1"1/2	1"1/2	3"



GALAXY PLUS					User side			HRP		HRT		
MODEL	STD	n° ventil.	SLN	n° ventil.		1	2	3	4	5	4	5
						V	V	G	V	V	V	V
234		4		6		4"	4"	1"	2"	2"	4"	4"
284		6		6		4"	4"	1"	2"	2"	4"	4"
304		6		6		4"	4"	1"	2"	2"	4"	4"

- 1 Medium inlet
- 2 Medium outlet
- 3 Drain (1)
- 4 Medium outlet
- 5 Medium inlet

- G Male threaded connection
- V Victaulic connection
- (1) With water section accessory only
- n.a. not available