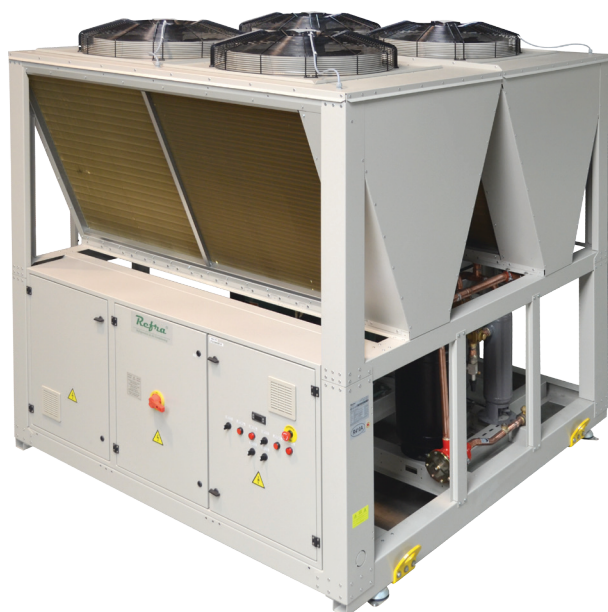


Galaxy

Air cooled chiller for air conditioning

Cooling capacity range
from 58 kW to 185 kW



FUNCTIONS AND FEATURES



Cooling



Scroll



R-410A



Air cooled



BPHE

UNIT DESCRIPTION

Air cooled chillers are designed to absorb the building heat using chilled water or chilled water and antifreeze mixtures and reject it to the ambient air using air cooled condenser. Galaxy series air cooled chillers are made for medium-large size commercial, industrial air conditioning or process cooling needs. These units could be connected to huge amount of room fan coil system, terminals, air handling units or process cooling equipment.

Our units are equipped with latest model Scroll compressors made specially for air cooled chiller systems on R410A refrigerant. Galaxy series units are equipped with highest quality copper tube and aluminium fins condensers. When HyBlade axial fans are used it gives superior heat utilization level.

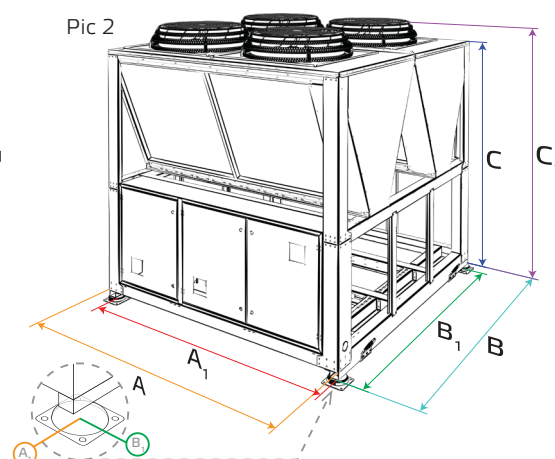
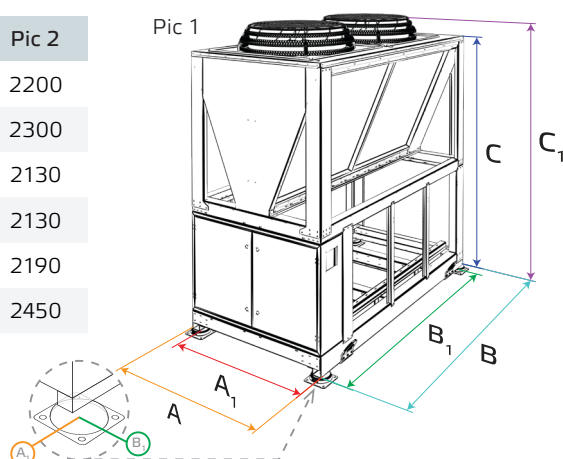
Air cooled chillers are all-in-one built package installs quickly and easily on the ground or the rooftop. The optional hydronic module is already built in - this cost less and saves space than installing individually.

BASIC UNIT DESCRIPTION:

- > Scroll compressors with crankcase heater
- > R410A system charge
- > Cartridge pressostats on HP/LP lines for each circuit
- > Filter drier with replaceable core, moisture indicator and shut-off valves on liquid line
- > Thermostatic expansion valve (TEV)
- > Solenoid valve on liquid line (SV)
- > Copper brazed stainless steel plate heat exchanger (BPHE)
- > Water flow switch (separate) (FS)
- > Copper aluminium finned condensers with AC axial fans
- > High/Low pressure side gauges
- > Polymer powder coated steel frame with lifting hinges and rubber anti vibration mounts
- > Electrical board includes: controller, main switch, phase rotation and phase loss monitoring, relay, compressor /fan overload relays, contactor, transformer

DIMENSIONS AND CLEARANCES

Picture n°	Pic 1	Pic 2
A (mm)	1155	2200
B (mm)	2200	2300
C (mm)	2130	2130
A1 (mm)	1080	2130
B1 (mm)	2090	2190
C1 (mm)	2450	2450



Technical data										
Galaxy CWW-CS2			293300D	293400D	293500D	293600D	493200D	493300D	493500D	493600D
Cooling capacity ^[1]		kW	58,2	67,4	75,0	92,4	106,4	116,4	150,0	184,8
Unit power consumption		kW	19,6	23,2	26,6	35,1	35,1	39,0	53,2	70,2
EER			2,97	2,90	2,82	2,63	3,03	2,97	2,82	2,63
ESEER			3,94	3,81	3,70	3,49	4,00	3,94	3,70	3,49
Compressors	Quantity	n°	2	2	2	2	4	4	4	4
	Type		Scroll							
Condenser	Condenser quantity	n°	2	2	2	2	4	4	4	4
	Rows of tube	n°	3							
	Surface area	m ²	247,6	247,6	247,6	247,6	495,2	495,2	495,2	495,2
	Fans	n°	2	2	2	2	4	4	4	4
	Diameter	mm	800							
	Air flow ^[2]	m ³ /s	10,28	10,28	10,28	10,28	20,56	20,56	20,56	20,56
Evaporator	Quantity	n°	1							
	Type		Brazen Plate Heat Exchanger (BPHE)							
	Water volume	l	5,0	5,5	6,4	7,4	9,3	9,7	12,2	28,2
	Pressure drop (water side)	kPa	31	30	32	38	35	39	26	21
	Water connections	Ø mm	65	65	65	80	80	100	100	100
System	Minimum capacity	%	50	50	50	50	25	25	25	25
	Refrigerant		R410A							
	Circuits	n°	2							
	Charge per circuit	kg	12,0	12,3	12,5	12,6	23,4	23,5	23,7	24,0
Electrical characteristics	Power supply	V/Ph/Hz	400 / 3+N / 50							
	Max. working current	A	59	70	77	89	106	118	154	178
	Starting current	A	167	188	232	289	217	226	309	378
Sound pressure ^[3]	STD	dB(A)	55				58			
Dimensions	Picture	n°	1				2			
Transportation dimensions	Length	mm	2200				2320			
	Width	mm	1275				2300			
	Height	mm	2450				2450			
Unit weight ^[4]		kg	790	820	830	960	1300	1305	1320	1670

Note:

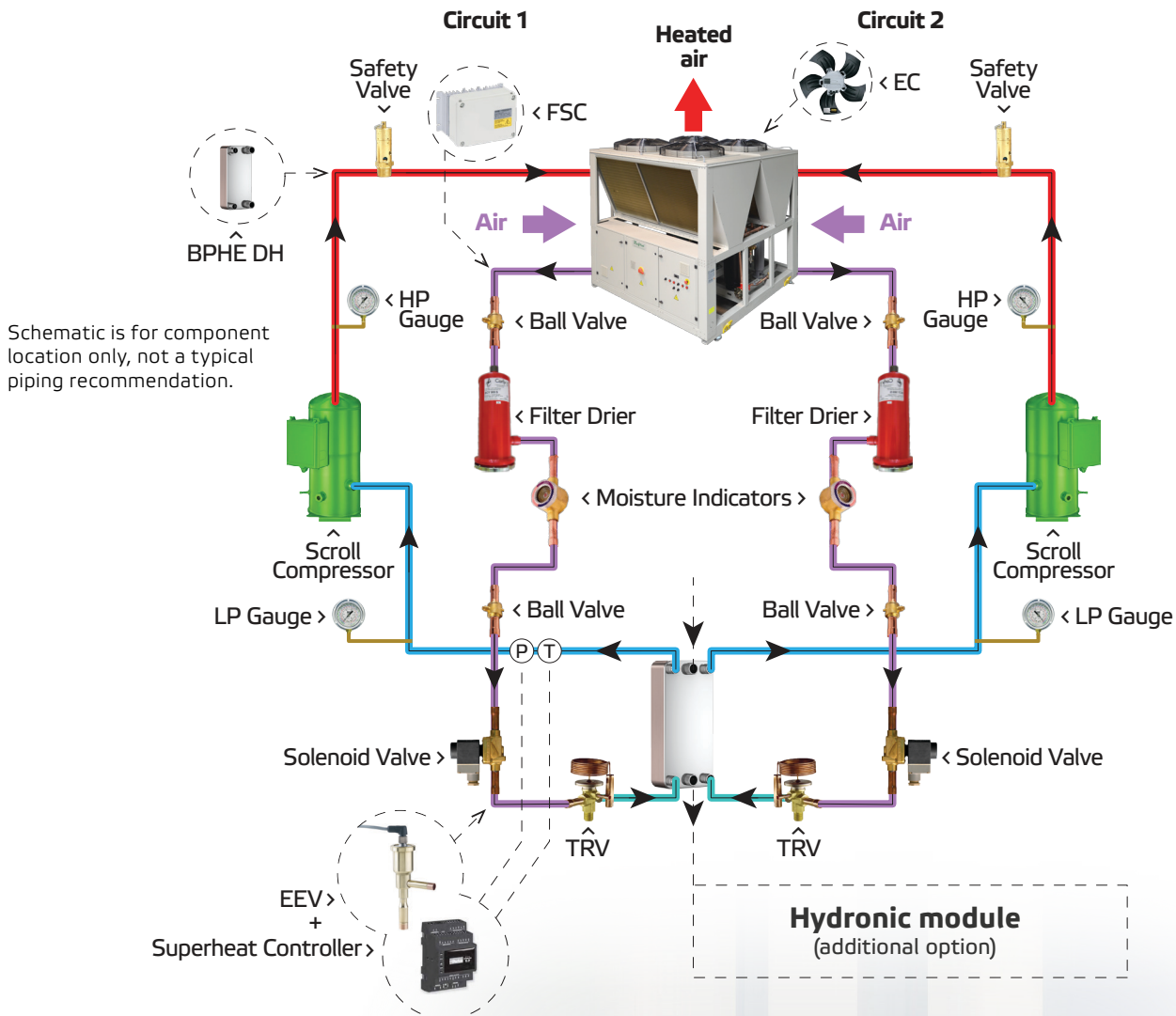
[1] Calculations made due to 7/12°C leaving/entering water and 35°C ambient temperatures according to EN 14511:2011

[2] Standart AC fans

[3] Sound pressure level measured at 10 m from the unit according to ISO 3744

[4] Basic equipment unit weight

2 CIRCUITS APPLICATION EXAMPLE



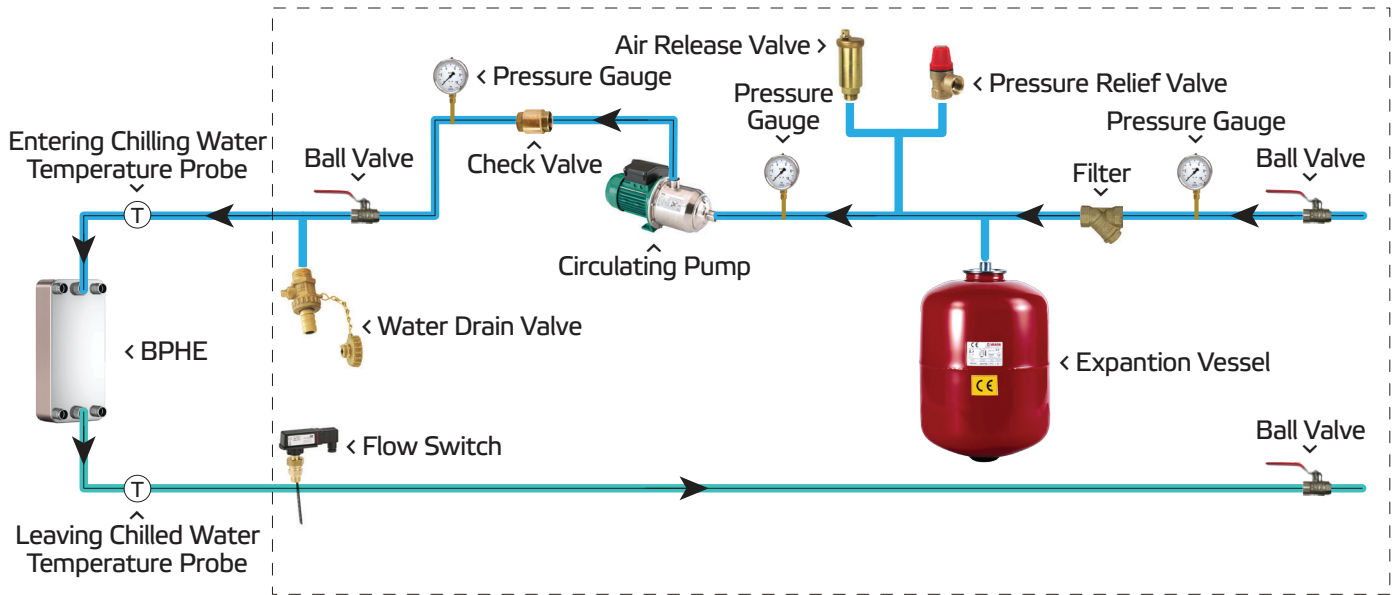
ADDITIONAL OPTIONS

- CCH — Compressor compartment housing
- DH — Desuperheater
- HM/LM — High/low lift hydronic module: single or double circulating pumps, removable screen filter, membrane expansion tank, air release valve, safety relief valve, drain pan, shut-off valves
- FSC — Fan speed controller
- EC — Electronically commutated fans
- EEV — Electronic expansion valve
- WS — Winter set for operating down to -10°C temperature

Example Code | **CWWCS2293300D**

- Series
- Chiller type
- Compressor type
- Refrigerant circuits No
- Compressor quantity
- Compressor code
- Reserved index
- Refrigerant

PRINCIPAL HYDRONIC MODULE DIAGRAM (additional option)



Hydronic module technical data

Galaxy CWW-HCS		22933D	22935D	22936D	24932D	24933D	24935D	24936D	
Pump set electrical characteristics									
Low lift single and dual pumps	Shaft power input	kW	1,32	1,41	1,71	1,78	1,84	2,00	2,53
	Power input	kW	1,50	1,50	2,20	2,20	2,20	2,20	3,00
	Maximum current draw	A	3,8	3,8	4,6	4,6	4,6	4,6	6,4
High lift single and dual pumps	Shaft power input	kW	2,01	2,18	2,92	2,79	2,88	3,17	4,69
	Power input	kW	2,20	2,20	3,00	3,00	3,00	4,00	5,50
	Maximum current draw	A	4,6	4,6	6,1	6,1	6,1	7,8	10,3
Hydronic module weight									
Low lift single pump set ^[5]	kg		35	38	74	74	79	79	79
Low lift dual pump set ^[5]			65	71	142	142	152	152	212
High lift single pump set ^[6]			72	75	89	85	90	97	115
High lift dual pump set ^[6]			141	147	175	167	177	191	227
Expansion vessel volume	l		12			40			
Max. operating pressure	bar					8			

Note:

[5] Low lift hydronic module calculations based on 15 m head pressure

[6] High lift hydronic module calculations based on 25 m head pressure