



Air cooled CHILLERS

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AIR COOLED CHILLER GALAXY AIR COOLED CHILLER MINDAUGAS

AIR COOLED CHILLER GALAXY

Unit description

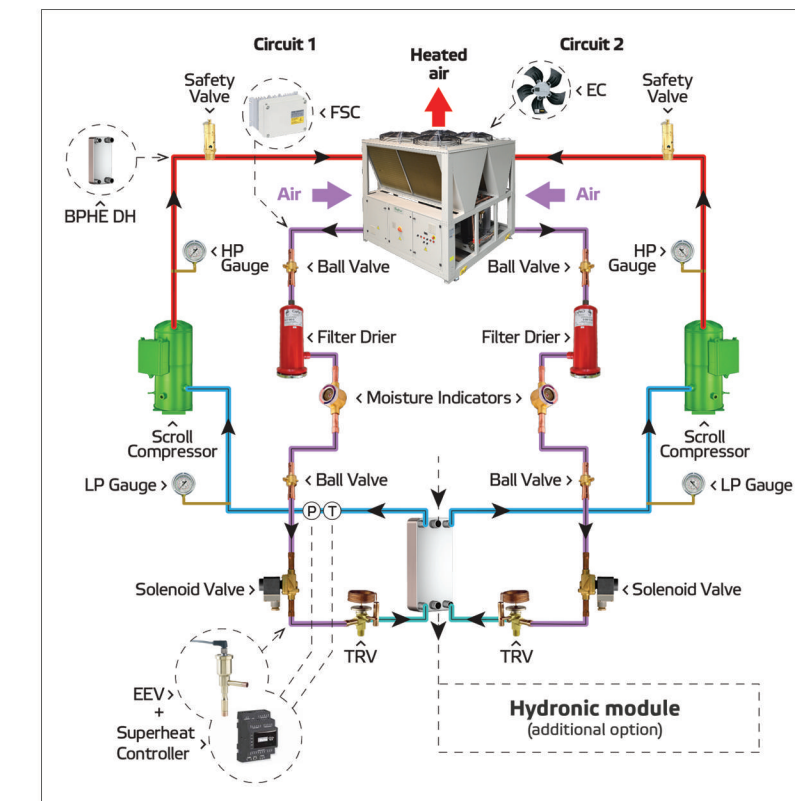
Air cooled chillers are designed to absorb the building heat using chilled water or chilled water and antifreeze mixtures and reject it to the ambient air using air cooled condenser. Galaxy series air cooled chillers are made for medium-large size commercial, industrial air conditioning or process cooling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

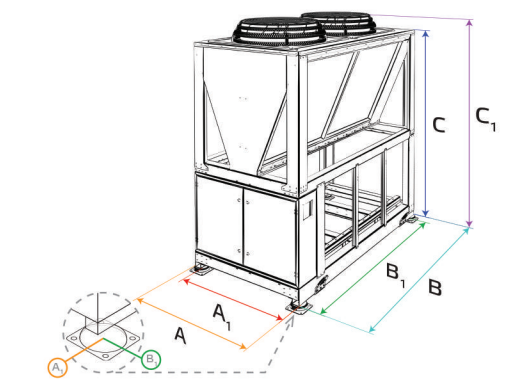
- Scroll compressors with crankcase heater
- R410A system charge
- Cartridge pressostats on HP/LP lines for each circuit Filter drier with replaceble core, moisture indicator and shut-off valves on liquid line
- Thermostatic expansion valve (TEV)
- Solenoid valve on liquid line (SV)
- Copper aluminium 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

2 Circuits application example

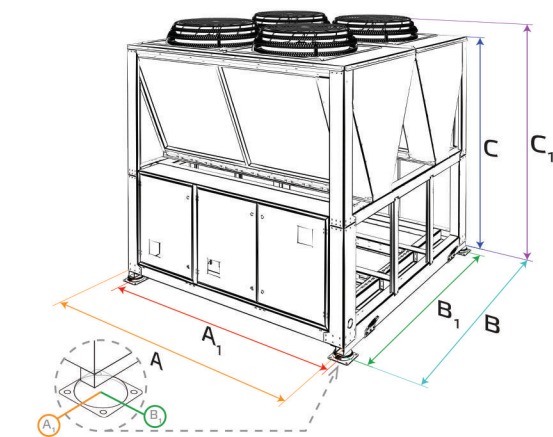
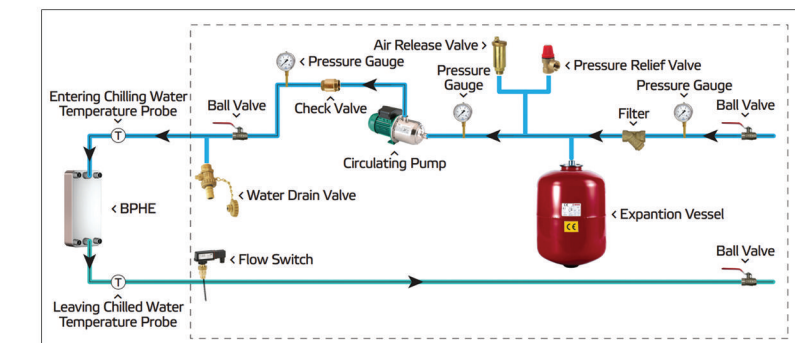


Additional options

- CCH** - Compressor compartment housing
- HM/LM** - High/low lift hydronic module: single or double circulating pumps, removable screen filter, embrane expansion tank, air release valve, safety relief valve, drain pan, shut-off valves
- FSC** - Fan speed controller
- WS** - Winter set for opperating down to -10°C temperature
- SS** - Soft start
- RD** - Remote display
- BT** - Buffer tank 200L / 500L / 800L / 1000L
- BMS** - BMS RS485 Modbus
- SSA** - Spring shock absorbers



Principal hydronic module diagram



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AIR COOLED CHILLER GALAXY

Technical data

Code of Galaxy air-cooling chiller			CW-CS1293300D	CW-CS1293400D	CW-CS1293500D	CW-CL12XXX00D	CW-CS1293600D	
Cooling capacity ^[1]	kW		56,6	64,4	75,2	84,6	96,4	
Input power	kW		16,8	18,7	22,9	26,9	31,0	
EER			3,31	3,44	3,28	3,15	3,11	
ESEER			4,65	4,66	4,44	4,44	4,26	
System	Refrigerant	R410A						
	Circuits	n°	1					
Compressors	Type	Scroll						
	Quantity	n°	2	2	2	2	2	
Steps	Quantity	n°	2	2	2	2	2	
Condenser	Fans ^[2]	n°	2	2	2	2	2	
	Diameter	mm	800					
Evaporator	Type	Braze Plate Heat Exchanger (BPHE)						
	Fluid	Ethyl. Glycol 35%						
	Inlet Temp	°C	+12					
	Outlet Temp	°C	+7					
	Pressure drop	kPa	57,36	54,97	55,9	48,63	49,05	
	Flow rate	m3/h	10,07	11,67	13,63	15,33	17,47	
Electrical characteristics	Powe supply	V/Ph/ Hz	380-420 / 3- / 50					
	Max. work current	A	58,2	76,6	82,6	88,6	94,6	
	Starting current	A	151,2	185,6	222,6	273,6	279,6	
Sound level ^[3]	STD	dBA	49	52	52	55	55	
Dimensions	Length	mm	2200	2200	2200	2200	2200	
	Width	mm	1275	1275	1275	1275	1275	
	Height	mm	2420	2420	2420	2420	2420	
Weight ^[4]	kg	687,4	759,4	759,0	833,6	908,2		

[1] Calculation made due to 7/12°C in/out water and 35°C ambient temperatures according to EN 14511:2011
 [2] Standart AC fans
 [3] Sound pressure level measured at 10m from unit according to ISO 3744
 [4] Basic equipment unit weight

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	2,20
	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 fual pump set ^[5]	kg	65	71	142	142	152	152	212	
High lift single pump set ^[6]	kg	72	75	89	85	90	97	115	
High lift dual pump set ^[6]	kg	141	147	175	167	177	191	227	
Expansion vessel volume	l	12			40				
Max. operating pressure	bar	8							

[5] Low lift hydronic module calculations based on 15 m head pressure
 [6] High lift hydronic module calculations based on 25 m head pressure
 The above data may be changed without notice for future improvement on quality and performance.

AIR COOLED CHILLER MINDAUGAS

Technical data

Code of Mindaugas air-cooled chiller			CF-CL12XXX00D	CF-CS1293700D	CF-CS2493500D	CF-CS1293800D	CF-CL12XXX00D	CF-CS2493600D	CF-CS1293900D	CF-CL24XXX00D	CF-CL2493700D	CF-CL24XXX00D	CF-CL24XXX00D	CF-CL24XXX00D	CF-CL24XXX00D	CF-CL2493900D	CF-CL2693800D	CF-CL26XXX00D	CF-CL26XXX00D			
Cooling capacity ^[1]	kW		110,6	125,4	147,2	152,6	177,1	194,8	201	214,6	239,2	250,8	274,6	317,8	331,2	354,2	404,0	467,4	509,6	554,2		
Input power	kW		32,2	36,0	45,8	48,8	55,6	62,0	59,6	67,1	72,0	79,1	85,3	98,1	92,0	110,8	121,6	150	159,6	176,8		
EER			3,43	3,48	3,21	3,13	3,18	3,14	3,21	3,20	3,19	3,16	3,22	3,23	3,15	3,19	3,32	3,12	3,19	3,13		
ESEER			4,58	4,51	4,41	4,28	4,34	4,33	4,29	4,26	4,32	4,15	4,21	4,11	4,45	4,07	4,16	4,17	3,92	3,78		
System	Refrigerant	R410A																				
	Circuits	n°	1		2		1		2		1		2									
Compressors	Type	Scroll																				
	Quantity	n°	2	2	4	2	2	4	2	4	4	4	4	4	4	4	4	6	6	6		
Steps	Quantity	n°	2	2	4	2	2	4	2	4	4	4	4	4	4	4	6	6	6			
Condenser	Fans ^[2]	n°	4	4	4	4	4	4	4	6	6	6	6	8	8	8	10	10	12	12		
	Diameter	mm	800																			
Evaporator	Type	Braze Plate Heat Exchanger (BPHE)																				
	Fluid	Ethyl. Glycol 35%																				
	Inlet Temp	°C	+12																			
	Outlet Temp	°C	+7																			
	Pressure drop	kPa	51,75	53,98	52,35	57,63	53,59	57,11	58,25	58,25	47,49	51,77	45,68	59,7	57,6	57,56	60,4	67,42	69,28	63,86		
	Flow rate	m3/h	20,04	22,56	26,67	27,65	32,09	35,3	38,89	38,89	43,34	45,45	49,76	57,59	64,2	64,19	73,21	84,71	92,36	100,45		
Electrical characteristics	Powe supply	V/Ph/ Hz	380-420 / 3- / 50																			
	Max. work current	A	102,4	110,9	149,9	144,7	162,1	174,1	179,3	197,9	215,2	231,7	249,0	290,9	290,3	324,7	366,3	428,5	469,9	504,3		
	Starting current	A	325,9	334,4	289,9	389,3	487,5	359,1	504,7	421,4	436,7	476,3	493,6	616,3	534,9	650,1	691,7	672,9	795,3	829,7		
Sound level ^[3]	STD	dBA	58	59	57	59	61	59	62	62	62	64	65	65	65	65	66	67	68			
Dimensions	Length	mm	2320	2320	2320	2320	2320	2320	2320	3320	3320	3320	3320	4320	4320	4320	5320	5320	6320	6320		
	Width	mm	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270	2270		
	Height	mm	2300	2300	2300	2300	2300	2300	2300	2300	2350	2350	2350	2350	2300	2300	2300	2300	2300	2300		
Weight ^[4]	kg	1555	1656	1518	1610	1704	1898	1716	1798	1944	1940	2285	2444	2477	2477	2850	3155	3458	3483			

[1] Calculation made due to 7/12°C in/out water and 35°C ambient temperatures according to EN 14511:2011
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