

TECHNICAL DATA SHEET



GHA

**AIR COOLED CHILLER
WITH SCREW COMPRESSORS
AND AXIAL FANS FOR
OUTDOOR INSTALLATION**



GHA Range 68 - 1.800 kW

GHA Range

Air cooled chiller with screw compressors and axial fans for outdoor installation



Screw compressors
Dry expansion evaporator
AC or EC axial fans both 800 mm

R134a

HFO
1234ze

R290

General Description

The air cooled screw chillers of the GHA series are assembled on a self-supporting metal screwed structure, painted with epoxy powder suitably treated for outdoor installation. All units are supplied completely wired and ready to be connected to the user's plant. Prior to delivery every machine is submitted to a performance test according to the strictest norms in force, with intervention tests of all the safety systems and components installed. Each unit is available with low-speed fan and compressor sound insulation kit (Low Noise LN version or Super Low Noise LLN) for installation in areas where noise emission must be extremely limited.

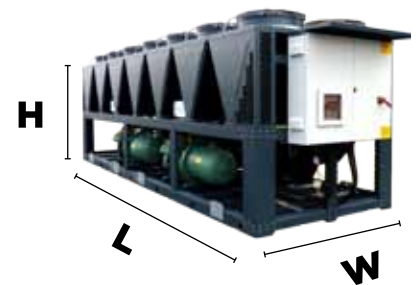
Typical units dimensions

Length: from 2.410 to 12.910 mm

Width: from 1.050 to 2.250 mm

Height: from 2.540 to 2.790 mm

Operating Weight: from 1.116 kg to 14.166 kg



2.410



12.910



Length from 2.410 mm to 12.910 mm. The bigger sizes are delivered in two sections.

GHA with EC fans

R134a

Air cooled chiller with screw compressors and axial fans for outdoor installation

Energymiser		GHA B135A EC-34	GHA B140A EC-34	GHA B150A EC-34	GHA B160A EC-34	GHA B170A EC-34	GHA B180A EC-34
CHILLER PERFORMANCE							
Refrigerant		R134a	R134a	R134a	R134a	R134a	R134a
Total cooling capacity	kW	67,5	83,7	99,4	114,9	125,8	156,9
Nominal power input	kW	24,55	31,8	36,8	42,3	48,6	58,6
E.E.R.	Coef.	2,75	2,63	2,7	2,72	2,59	2,68
Energy class		C	D	C	C	D	D
E.S.E.E.R.	Coef.	4,96	4,48	4,58	4,88	4,79	5,14
Noise Pressure Level	dB(A)	56	58	59	59	60	62
Distance	m	10	10	10	10	10	10
WORKING CONDITIONS							
Compressors type	Type	Screw	Screw	Screw	Screw	Screw	Screw
Compressors number	n°	1	1	1	1	1	1
Inlet water temperature	°C	12	12	12	12	12	12
Outlet water temperature	°C	6	6	6	6	6	6
Ambient temperature	°C	35	35	35	35	35	35
Condenser coil type (*1)	Type	M	M	M	M	M	M
Evaporator type (*2)	Type	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE
Power circuit voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Control circuit voltage	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Total power input	kW	24,55	31,8	36,8	42,3	48,6	58,6
Total running current	A	44,3	54,8	63,2	72,8	82,9	92,7
Total max current	A	60,8	71,6	84,6	103,6	129,6	149,6
Total starting current	A	25,75	32,9	36,5	45,65	49,1	64,7
DIMENSIONS							
Length with cabinet	mm	2560	2560	2560	2560	2560	2410
Width	mm	1050	1050	1050	1050	1050	2250
Height	mm	2540	2540	2540	2540	2540	2540
Shipping weight	kg	1110	1160	1390	1420	1430	2150
Operating weight	kg	1116	1168	1399	1433	1445	2167
(*1) M: Microchannels (*2) S&T or BPHE: Shell and Tube - Brazed Plate Heat Exchanger							

GHA with EC fans

Air cooled chiller with screw compressors and axial fans for outdoor installation

GHA B190A EC-34	GHA B1110A EC-34	GHA B1125A EC-34	GHA B1140A EC-34	GHA B1160A EC-34	GHA B1180A EC-34	GHA B1210A EC-34	GHA B1240A EC-34	GHA B235A EC-34	GHA B240A EC-34	GHA B250A EC-34
R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
184,7	215,9	241,2	274,3	314,3	366,9	408,9	450,4	133,8	167,4	198,8
65,65	79,4	85,8	98,9	113,45	135,5	151,9	167,75	49,7	63,6	73,6
2,81	2,72	2,81	2,77	2,77	2,71	2,69	2,68	2,69	2,63	2,7
C	C	C	C	C	C	D	D	D	D	C
4,97	4,95	4,97	5,01	5,03	5,04	4,96	4,94	4,48	4,12	4,25
63	65	64	64	64	64	64	66	59	61	62
10	10	10	10	10	10	10	10	10	10	10
Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw
1	1	1	1	1	1	1	1	2	2	2
12	12	12	12	12	12	12	12	12	12	12
6	6	6	6	6	6	6	6	6	6	6
35	35	35	35	35	35	35	35	35	35	35
M	M	M	M	M	M	M	M	M	M	M
BPHE	BPHE	BPHE	BPHE	S&T	S&T	S&T	S&T	BPHE	BPHE	BPHE
400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
65,65	79,4	85,8	98,9	113,45	135,5	151,9	167,75	49,7	63,6	73,6
106,9	133,4	146	166,7	186,6	218,4	251,5	276,2	89,2	109,6	126,4
163,4	193,2	226,2	225,2	294	326,8	336,8	379,6	121,6	143,2	169,2
74,25	89,2	103	110,95	79,4	86,55	104,7	117,1	142,47	172,45	199,45
2410	2410	2410	3460	3460	3460	4510	4510	2410	2410	2410
2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540
2210	2320	2370	3000	3520	3610	3820	3990	1890	1990	2470
2229	2351	2400	3124	3644	3723	3922	4149	1901	2004	2490

GHA with EC fans

Air cooled chiller with screw compressors and axial fans for outdoor installation

Energymiser		GHA B260A EC-34	GHA B270A EC-34	GHA B280A EC-34	GHA B290A EC-34	GHA B2110A EC-34	GHA B2125A EC-34
CHILLER PERFORMANCE							
Refrigerant		R134a	R134a	R134a	R134a	R134a	R134a
Total cooling capacity	kW	229,8	253,8	335,4	372,6	439	486,4
Nominal power input	kW	84,6	96,4	112,1	130,1	156	170,2
E.E.R.	Coef.	2,72	2,63	2,99	2,86	2,81	2,86
Energy class		C	D	B	C	C	C
E.S.E.E.R.	Coef.	4,5	4,44	4,72	4,63	4,62	4,57
Noise Pressure Level	dB(A)	62	63	65	66	68	67
Distance	m	10	10	10	10	10	10
WORKING CONDITIONS							
Compressors type	Type	Screw	Screw	Screw	Screw	Screw	Screw
Compressors number	n°	2	2	2	2	2	2
Inlet water temperature	°C	12	12	12	12	12	12
Outlet water temperature	°C	6	6	6	6	6	6
Ambient temperature	°C	35	35	35	35	35	35
Condenser coil type (*1)	Type	M	M	M	M	M	M
Evaporator type (*2)	Type	BPHE	BPHE	S&T	S&T	S&T	S&T
Power circuit voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Control circuit voltage	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Total power input	kW	84,6	96,4	112,1	130,1	156	170,2
Total running current	A	145,6	164,4	178,8	212,2	262,6	290
Total max current	A	207,2	259,2	304,8	326,8	386,4	452,4
Total starting current	A	232,8	262,7	289,3	342,8	421,7	469,7
DIMENSIONS							
Length with cabinet	mm	2410	2410	4510	4510	4510	4510
Width	mm	2250	2250	2250	2250	2250	2250
Height	mm	2540	2540	2540	2540	2540	2540
Shipping weight	kg	2490	2520	4180	4190	4390	4430
Operating weight	kg	2513	2546	4290	4296	4549	4583
(*1) M: Microchannels (*2) S&T or BPHE: Shell and Tube - Brazed Plate Heat Exchanger							

GHA with EC fans

R134a

Air cooled chiller with screw compressors and axial fans for outdoor installation

GHA B2140A EC-34	GHA B2160A EC-34	GHA B2180A EC-34	GHA B2210A EC-34	GHA B2240A EC-34	GHA B2280A EC-34	GHA B2320A EC-34	GHA B3160A EC-34	GHA B3180A EC-34	GHA B3210A EC-34	GHA B3240A EC-34
R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
544,2	606,2	751,4	804,6	942,4	1063,8	1121,4	976,2	1127,1	1236,6	1330,2
199,8	231,6	263,4	309	322	376,6	409,4	333,9	395,1	451,8	506,7
2,72	2,62	2,85	2,6	2,93	2,82	2,74	2,92	2,85	2,74	2,63
C	D	C	D	B	C	C	B	C	C	D
4,55	4,64	4,71	4,46	4,61	4,59	4,57	4,83	4,79	4,6	4,55
67	67	67	67	69	76	79	69	69	69	71
10	10	10	10	10	10	10	10	10	10	10
Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw
2	2	2	2	2	2	2	3	3	3	3
12	12	12	12	12	12	12	12	12	12	12
6	6	6	6	6	6	6	6	6	6	6
35	35	35	35	35	35	35	35	35	35	35
M	M	M	M	M	M	M	M	M	M	M
S&T	S&T	S&T	S&T	S&T	S&T	S&T	S&T	S&T	S&T	S&T
400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
199,8	231,6	263,4	309	322	376,6	409,4	333,9	395,1	451,8	506,7
336	379,8	425	510,8	532,6	621,2	681	550,8	637,5	748,8	833,4
450,4	582,4	653,6	673,6	764,8	944,8	1176,8	890,4	980,4	1010,4	1130,4
542,6	591,2	655,5	793,35	825,2	969,7	1067,8	1406,6	1639,2	1942,1	2170,9
4510	4510	6610	6610	8710	8710	8710	9760	9760	9760	9760
2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
2540	2540	2540	2540	2540	2540	2790	2540	2540	2540	2540
4460	5590	6510	6680	7640	7860	8180	9570	9610	9830	9950
4601	5852	6766	6928	7881	8095	8593	9976	10016	10228	10337

GHA with EC fans

R134a

Air cooled chiller with screw compressors and axial fans for outdoor installation

Energymiser		GHA B3280A EC-34	GHA B4160A EC-34	GHA B4180A EC-34	GHA B4210A EC-34	GHA B4240A EC-34	
CHILLER PERFORMANCE							
Refrigerant		R134a	R134a	R134a	R134a	R134a	
Total cooling capacity	kW	1595,7	1301,6	1502,8	1648,8	1773,6	
Nominal power input	kW	564,9	445,2	526,8	602,4	675,6	
E.E.R.	Coef.	2,82	2,92	2,85	2,74	2,63	
Energy class		C	B	C	C	D	
E.S.E.E.R.	Coef.	4,68	4,47	4,59	4,4	4,36	
Noise Pressure Level	dB(A)	77	70	70	70	72	
Distance	m	10	10	10	10	10	
WORKING CONDITIONS							
Compressors type	Type	Screw	Screw	Screw	Screw	Screw	
Compressors number	n°	3	4	4	4	4	
Inlet water temperature	°C	12	12	12	12	12	
Outlet water temperature	°C	6	6	6	6	6	
Ambient temperature	°C	35	35	35	35	35	
Condenser coil type (*1)	Type	M	M	M	M	M	
Evaporator type (*2)	Type	S&T	S&T	S&T	S&T	S&T	
Power circuit voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	
Control circuit voltage	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	
Total power input	kW	564,9	445,2	526,8	602,4	675,6	
Total running current	A	931,8	734,4	850	998,4	1111,2	
Total max current	A	1417,2	1187,2	1307,2	1347,2	1507,2	
Total starting current	A	2413	2585	3020	3581	4006,5	
DIMENSIONS							
Length with cabinet	mm	12910	12910	12910	12910	12910	
Width	mm	2250	2250	2250	2250	2250	
Height	mm	2790	2540	2540	2540	2540	
Shipping weight	kg	11700	12640	12710	13050	13220	
Operating weight	kg	12243	13164	13222	13546	13702	
(*1) M: Microchannels (*2) S&T or BPHE: Shell and Tube - Brazed Plate Heat Exchanger							

GHA with AC fans

Air cooled chiller with screw compressors and axial fans for outdoor installation

GHA B135A AC-34	GHA B140A AC-34	GHA B150A AC-34	GHA B160A AC-34	GHA B170A AC-34	GHA B180A AC-34	GHA B190A AC-34	GHA B1110A AC-34	GHA B1125A AC-34	GHA B1140A AC-34	GHA B1160A AC-34
R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
67,5	83,7	99,4	114,9	125,8	156,9	184,7	215,9	241,2	274,3	314,3
24,55	31,8	36,8	42,3	48,6	58,6	65,65	79,4	85,8	98,9	113,45
2,75	2,63	2,7	2,72	2,59	2,68	2,81	2,72	2,81	2,77	2,77
C	D	C	C	D	D	C	C	C	C	C
2,7	2,48	2,55	2,68	2,59	2,74	2,74	2,71	2,7	2,75	2,75
56	58	59	59	60	62	63	65	64	64	64
10	10	10	10	10	10	10	10	10	10	10
Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw
1	1	1	1	1	1	1	1	1	1	1
12	12	12	12	12	12	12	12	12	12	12
6	6	6	6	6	6	6	6	6	6	6
35	35	35	35	35	35	35	35	35	35	35
M	M	M	M	M	M	M	M	M	M	M
BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	S&T
400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
24,55	31,8	36,8	42,3	48,6	58,6	65,65	79,4	85,8	98,9	113,45
45,2	56,6	65	74,6	84,7	94,5	109,6	137	149,6	170,3	191,1
61,7	73,4	86,4	105,4	131,4	151,4	166,1	196,8	229,8	228,8	298,5
156,7	189,4	213,4	274,4	297,4	401,4	450,1	534,8	626,8	679,8	454,5
2560	2560	2560	2560	2560	2410	2410	2410	2410	3460	3460
1050	1050	1050	1050	1050	2250	2250	2250	2250	2250	2250
2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540
1110	1160	1390	1420	1430	2150	2210	2320	2370	3000	3520
1116	1168	1399	1433	1445	2167	2229	2351	2400	3124	3644

GHA with AC fans

Air cooled chiller with screw compressors and axial fans for outdoor installation

Energymiser		GHA B1180A AC-34	GHA B1210A AC-34	GHA B1240A AC-34	GHA B235A AC-34	GHA B240A AC-34	GHA B250A AC-34
CHILLER PERFORMANCE							
Refrigerant		R134a	R134a	R134a	R134a	R134a	R134a
Total cooling capacity	kW	366,9	408,9	450,4	133,8	167,4	198,8
Nominal power input	kW	135,5	151,9	167,75	49,7	63,6	73,6
E.E.R.	Coef.	2,71	2,69	2,68	2,69	2,63	2,7
Energy class		C	D	D	D	D	C
E.S.E.E.R.	Coef.	2,78	2,72	2,74	3,38	3,18	3,25
Noise Pressure Level	dB(A)	64	64	66	59	61	62
Distance	m	10	10	10	10	10	10
WORKING CONDITIONS							
Compressors type	Type	Screw	Screw	Screw	Screw	Screw	Screw
Compressors number	n°	1	1	1	2	2	2
Inlet water temperature	°C	12	12	12	12	12	12
Outlet water temperature	°C	6	6	6	6	6	6
Ambient temperature	°C	35	35	35	35	35	35
Condenser coil type (*1)	Type	M	M	M	M	M	M
Evaporator type (*2)	Type	S&T	S&T	S&T	BPHE	BPHE	BPHE
Power circuit voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Control circuit voltage	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Total power input	kW	135,5	151,9	167,75	49,7	63,6	73,6
Total running current	A	223,8	256,9	282,5	91	113,2	130
Total max current	A	332,2	342,2	385,9	123,4	146,8	172,8
Total starting current	A	487,2	608,2	675,9	209,3	253,4	290,6
DIMENSIONS							
Length with cabinet	mm	3460	4510	4510	2410	2410	2410
Width	mm	2250	2250	2250	2250	2250	2250
Height	mm	2540	2540	2540	2540	2540	2540
Shipping weight	kg	3610	3820	3990	1890	1990	2470
Operating weight	kg	3723	3922	4149	1901	2004	2490
(*1) M: Microchannels (*2) S&T or BPHE: Shell and Tube - Brazed Plate Heat Exchanger							

GHA with AC fans

R134a

Air cooled chiller with screw compressors and axial fans for outdoor installation

GHA B260A AC-34	GHA B270A AC-34	GHA B280A AC-34	GHA B290A AC-34	GHA B2110A AC-34	GHA B2125A AC-34	GHA B2140A AC-34	GHA B2160A AC-34	GHA B2180A AC-34	GHA B2210A AC-34	GHA B2240A AC-34
R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
229,8	253,8	335,4	372,6	439	486,4	544,2	606,2	751,4	804,6	942,4
84,6	96,4	112,1	130,1	156	170,2	199,8	231,6	263,4	309	322
2,72	2,63	2,99	2,86	2,81	2,86	2,72	2,62	2,85	2,6	2,93
C	D	B	C	C	C	C	D	C	D	B
3,4	3,3	3,65	3,54	3,59	3,5	3,43	3,34	3,56	3,35	2,98
62	63	65	66	68	67	67	67	67	67	69
10	10	10	10	10	10	10	10	10	10	10
Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw
2	2	2	2	2	2	2	2	2	2	2
12	12	12	12	12	12	12	12	12	12	12
6	6	6	6	6	6	6	6	6	6	6
35	35	35	35	35	35	35	35	35	35	35
M	M	M	M	M	M	M	M	M	M	M
BPHE	BPHE	S&T	S&T	S&T	S&T	S&T	S&T	S&T	S&T	S&T
400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
84,6	96,4	112,1	130,1	156	170,2	199,8	231,6	263,4	309	322
149,2	168	184,2	217,6	269,8	297,2	343,2	387	435,8	521,6	547
210,8	262,8	310,2	332,2	393,6	459,6	457,6	589,6	664,4	684,4	779,2
349,9	389,6	462,2	534,8	649,9	737	832,5	783,7	864	1053,2	1115,9
2410	2410	4510	4510	4510	4510	4510	4510	6610	6610	8710
2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540
2490	2520	4180	4190	4390	4430	4460	5590	6510	6680	7640
2513	2546	4290	4296	4549	4583	4601	5852	6766	6928	7881

GHA with AC fans

R134a

Air cooled chiller with screw compressors and axial fans for outdoor installation

Energymiser		GHA B2280A AC-34	GHA B2320A AC-34	GHA B3160A AC-34	GHA B3180A AC-34	GHA B3210A AC-34	GHA B3240A AC-34
CHILLER PERFORMANCE							
Refrigerant		R134a	R134a	R134a	R134a	R134a	R134a
Total cooling capacity	kW	1063,8	1121,4	976,2	1127,1	1236,6	1330,2
Nominal power input	kW	376,6	409,4	333,9	395,1	451,8	506,7
E.E.R.	Coef.	2,82	2,74	2,92	2,85	2,74	2,63
Energy class		C	C	B	C	C	D
E.S.E.E.R.	Coef.	3,56	3,55	3,63	3,7	3,5	3,42
Noise Pressure Level	dB(A)	76	79	69	69	69	71
Distance	m	10	10	10	10	10	10
WORKING CONDITIONS							
Compressors type	Type	Screw	Screw	Screw	Screw	Screw	Screw
Compressors number	n°	2	2	3	3	3	3
Inlet water temperature	°C	12	12	12	12	12	12
Outlet water temperature	°C	6	6	6	6	6	6
Ambient temperature	°C	35	35	35	35	35	35
Condenser coil type (*1)	Type	M	M	M	M	M	M
Evaporator type (*2)	Type	S&T	S&T	S&T	S&T	S&T	S&T
Power circuit voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Control circuit voltage	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Total power input	kW	376,6	409,4	333,9	395,1	451,8	506,7
Total running current	A	635,6	695,4	567	653,7	765	849,6
Total max current	A	959,2	1191,2	906,6	996,6	1026,6	1146,6
Total starting current	A	1326,3	1472	1546,3	1787,2	2124,3	2371,2
DIMENSIONS							
Length with cabinet	mm	8710	8710	9760	9760	9760	9760
Width	mm	2250	2250	2250	2250	2250	2250
Height	mm	2540	2790	2540	2540	2540	2540
Shipping weight	kg	7860	8180	9570	9610	9830	9950
Operating weight	kg	8095	8593	9976	10016	10228	10337
(*1) M: Microchannels (*2) S&T or BPHE: Shell and Tube - Brazed Plate Heat Exchanger							

GHA with AC fans

Air cooled chiller with screw compressors and axial fans for outdoor installation

GHA B3280A AC-34	GHA B4160A AC-34	GHA B4180A AC-34	GHA B4210A AC-34	GHA B4240A AC-34						
R134a	R134a	R134a	R134a	R134a						
1595,7	1301,6	1502,8	1648,8	1773,6						
564,9	445,2	526,8	602,4	675,6						
2,82	2,92	2,85	2,74	2,63						
C	B	C	C	D						
3,53	3,58	3,85	3,68	3,66						
77	70	70	70	72						
10	10	10	10	10						
Screw	Screw	Screw	Screw	Screw						
3	4	4	4	4						
12	12	12	12	12						
6	6	6	6	6						
35	35	35	35	35						
M	M	M	M	M						
S&T	S&T	S&T	S&T	S&T						
400/3/50	400/3/50	400/3/50	400/3/50	400/3/50						
230/1/50	230/1/50	230/1/50	230/1/50	230/1/50						
564,9	445,2	526,8	602,4	675,6						
953,4	756	871,6	1020	1132,8						
1438,8	1208,8	1328,8	1368,8	1528,8						
2662,7	2699,8	3140,5	3727,3	4166,3						
12910	12910	12910	12910	12910						
2250	2250	2250	2250	2250						
2790	2540	2540	2540	2540						
11700	12640	12710	13050	13220						
12243	13164	13222	13546	13702						

GHA with EC fans



HFO
1234ze

Air cooled chiller with screw compressors and axial fans for outdoor installation

Greenmiser		GHA F150A EC-ZE	GHA F160A EC-ZE	GHA F170A EC-ZE	GHA F180A EC-ZE	GHA F190A EC-ZE	GHA F110A EC-ZE
CHILLER PERFORMANCE							
Refrigerant		HFO1234ZE	HFO1234ZE	HFO1234ZE	HFO1234ZE	HFO1234ZE	HFO1234ZE
Total cooling capacity	kW	85,1	98,5	110	129,6	144,3	175,2
Nominal power input	kW	27,2	31	35,3	40,95	45,45	54,75
E.E.R.	Coef.	3,13	3,18	3,12	3,16	3,17	3,2
Energy class		A	A	A	A	A	A
E.S.E.E.R.	Coef.	4,94	5,31	5,28	5,14	5,14	5,58
Noise Pressure Level	dB(A)	56	62	62	62	62	65
Distance	m	10	10	10	10	10	10
WORKING CONDITIONS							
Compressors type	Type	Screw	Screw	Screw	Screw	Screw	Screw
Compressors number	n°	1	1	1	1	1	1
Inlet water temperature	°C	12	12	12	12	12	12
Outlet water temperature	°C	6	6	6	6	6	6
Ambient temperature	°C	35	35	35	35	35	35
Condenser coil type (*1)	Type	M	M	M	M	M	M
Evaporator type (*2)	Type	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE
Power circuit voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Control circuit voltage	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Total power input	kW	24,55	31	35,3	40,95	45,45	54,75
Total running current	A	44,3	50,2	57,2	66,3	73,6	88,7
Total max current	A	60,8	103,6	130,6	153,4	168,4	188,4
Total starting current	A	25,75	44,9	50,3	64,35	71,85	76,95
DIMENSIONS							
Length with cabinet	mm	2560	2560	2560	2410	2410	2410
Width	mm	1050	1050	1050	2250	2250	2250
Height	mm	2540	2540	2540	2540	2540	2540
Shipping weight	kg	1360	1390	1390	1810	1840	2260
Operating weight	kg	1366	1398	1399	1823	1855	2279
(*1) M: Microchannels (*2) S&T or BPHE: Shell and Tube - Brazed Plate Heat Exchanger							

GHA with EC fans

Air cooled chiller with screw compressors and axial fans for outdoor installation

GHA F1125A EC-ZE	GHA F1140A EC-ZE	GHA F1160A EC-ZE	GHA F1180A EC-ZE	GHA F1210A EC-ZE	GHA F1240A EC-ZE	GHA F250A EC-ZE	GHA F260A EC-ZE	GHA F270A EC-ZE	GHA F280A EC-ZE	GHA F290A EC-ZE
HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE
202,5	228,3	267,7	307,3	346,2	379,2	170,2	197	220	259,2	288,6
62	72,8	82,65	96,85	110,2	119,5	54,4	62	70,6	81,9	90,9
3,27	3,14	3,24	3,17	3,14	3,17	3,13	3,18	3,12	3,16	3,17
A	A	A	A	A	A	A	A	A	A	A
5,37	5,43	5,49	5,65	5,45	5,54	4,78	5,09	5,05	4,94	4,93
67	66	67	65	67	70	59	65	65	65	65
10	10	10	10	10	10	10	10	10	10	10
Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw
1	1	1	1	1	1	2	2	2	2	2
12	12	12	12	12	12	12	12	12	12	12
6	6	6	6	6	6	6	6	6	6	6
35	35	35	35	35	35	35	35	35	35	35
M	M	M	M	M	M	M	M	M	M	M
BPHE	BPHE	BPHE	S&T	S&T	S&T	BPHE	BPHE	BPHE	BPHE	BPHE
400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
62	72,8	82,65	96,85	110,2	119,5	54,4	62	70,6	81,9	90,9
100,4	117,9	133,8	156,9	178,4	193,6	88,2	100,4	114,4	132,6	147,2
209,2	232,2	297	329	372,8	443,8	171,2	207,2	261,2	306,8	336,8
95,5	98,05	79,4	83,75	104,7	114,3	142,15	164,65	188,35	218,4	244,1
2410	2410	3460	3460	3460	4510	2410	2410	2410	4510	4510
2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540
2350	2370	3740	3760	3620	3980	2390	2450	2480	3280	3330
2371	2394	3873	3884	3726	4082	2401	2464	2500	3303	3356

GHA with EC fans

Air cooled chiller with screw compressors and axial fans for outdoor installation

Greenmiser		GHA F2110A EC-ZE	GHA F2125A EC-ZE	GHA F2140A EC-ZE	GHA F2160A EC-ZE	GHA F2180A EC-ZE	GHA F2210A EC-ZE
CHILLER PERFORMANCE							
Refrigerant		HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE
Total cooling capacity	kW	350,4	405	456,6	535,4	614,6	692,4
Nominal power input	kW	109,5	124	145,6	165,3	193,7	220,4
E.E.R.	Coef.	3,2	3,27	3,14	3,24	3,17	3,14
Energy class		A	A	A	A	A	A
E.S.E.E.R.	Coef.	5,31	5,15	5,17	5,28	5,39	5,2
Noise Pressure Level	dB(A)	68	70	69	70	68	70
Distance	m	10	10	10	10	10	10
WORKING CONDITIONS							
Compressors type	Type	Screw	Screw	Screw	Screw	Screw	Screw
Compressors number	n°	2	2	2	2	2	2
Inlet water temperature	°C	12	12	12	12	12	12
Outlet water temperature	°C	6	6	6	6	6	6
Ambient temperature	°C	35	35	35	35	35	35
Condenser coil type (*1)	Type	M	M	M	M	M	M
Evaporator type (*2)	Type	S&T	S&T	S&T	S&T	S&T	S&T
Power circuit voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Control circuit voltage	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Total power input	kW	109,5	124	145,6	165,3	193,7	220,4
Total running current	A	177,4	200,8	235,8	267,6	313,8	356,8
Total max current	A	376,8	418,4	464,4	594	658	745,6
Total starting current	A	291,9	332,1	385,9	420,1	491,5	562,3
DIMENSIONS							
Length with cabinet	mm	4510	4510	4510	6610	6610	6610
Width	mm	2250	2250	2250	2250	2250	2250
Height	mm	2540	2540	2540	2540	2540	2540
Shipping weight	kg	4280	4470	4490	6670	6860	6960
Operating weight	kg	4386	4629	4643	6811	7122	7216
(*1) M: Microchannels (*2) S&T or BPHE: Shell and Tube - Brazed Plate Heat Exchanger							

GHA with EC fans



Air cooled chiller with screw compressors and axial fans for outdoor installation

GHA F2240A EC-ZE	GHA F3180A EC-ZE	GHA F3210A EC-ZE	GHA F3240A EC-ZE	GHA F4180A EC-ZE	GHA F4210A EC-ZE	GHA F4240A EC-ZE				
HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE	HF01234ZE				
758,4	921,9	1038,6	1137,6	1256,4	1384,8	1516,8				
239	290,55	330,6	358,5	383,6	440,8	478				
3,17	3,17	3,14	3,17	3,28	3,14	3,17				
A	A	A	A	A	A	A				
5,28	5,38	5,15	5,24	5,24	5,05	5,13				
73	70	72	74	71	73	76				
10	10	10	10	10	10	10				
Screw	Screw	Screw	Screw	Screw	Screw	Screw				
2	3	3	3	4	4	4				
12	12	12	12	12	12	12				
6	6	6	6	6	6	6				
35	35	35	35	35	35	35				
M	M	M	M	M	M	M				
S&T	S&T	S&T	S&T	S&T	S&T	S&T				
400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50				
230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50				
239	290,55	330,6	358,5	383,6	440,8	478				
387,2	470,7	535,2	580,8	621,2	713,6	774,4				
887,6	987	1118,4	1331,4	1327,2	1491,2	1775,2				
612,7	1208,4	1372,5	1497,3	2162,1	2513,1	2743,5				
8710	9760	9760	12910	12910	12910	12910				
2250	2250	2250	2250	2250	2250	2250				
2540	2540	2540	2540	2540	2540	2540				
7700	10170	10280	11390	13580	13610	13670				
7948	10576	10686	11788	14104	14122	14166				

GHA with EC fans

R290

Air cooled chiller with screw compressors and axial fans for outdoor installation

Greenmiser		GHA F170A EC-290	GHA F180A EC-290	GHA F190A EC-290	GHA F1100A EC-290	GHA F1120A EC-290	GHA F1140A EC-290
CHILLER PERFORMANCE							
Refrigerant		R290	R290	R290	R290	R290	R290
Total cooling capacity	kW	144,8	173	192,9	223,1	260,9	339,5
Nominal power input	kW	50,45	58	65,4	74,75	84,9	110,6
E.E.R.	Coef.	2,87	2,98	2,95	2,98	3,07	3,07
Energy class		C	B	B	B	B	B
E.S.E.E.R.	Coef.	4,63	4,72	4,67	4,66	4,87	4,85
Noise Pressure Level	dB(A)	58	60	61	62	63	65
Distance	m	10	10	10	10	10	10
WORKING CONDITIONS							
Compressors type	Type	Screw	Screw	Screw	Screw	Screw	Screw
Compressors number	n°	1	1	1	1	1	1
Inlet water temperature	°C	12	12	12	12	12	12
Outlet water temperature	°C	6	6	6	6	6	6
Ambient temperature	°C	35	35	35	35	35	35
Condenser coil type (*1)	Type	M	M	M	M	M	M
Evaporator type (*2)	Type	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE
Power circuit voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Control circuit voltage	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Total power input	kW	50,5	58,0	65,4	74,8	84,9	110,6
Total running current	A	81,7	93,9	105,9	121,1	137,4	179,0
Total max current	A	136,4	156,2	171,2	189,0	211,8	267,4
Total starting current	A	306,4	384,2	434,2	415,0	508,8	601,4
DIMENSIONS							
Length with cabinet	mm	2410	2410	3460	3460	3460	4510
Width	mm	2250	2250	2250	2250	2250	2250
Height	mm	2540	2540	2540	2540	2540	2540
Shipping weight	kg	1830	1900	2290	2370	2430	3270
Operating weight	kg	1847	1919	2311	2394	2457	3300
(*1) M: Microchannels (*2) S&T or BPHE: Shell and Tube - Brazed Plate Heat Exchanger							

GHA with EC fans

Air cooled chiller with screw compressors and axial fans for outdoor installation

GHA F1160A EC-290	GHA F270A EC-290	GHA F280A EC-290	GHA F290A EC-290	GHA F2100A EC-290	GHA F2120A EC-290	GHA F2140A EC-290	GHA F2160A EC-290	GHA F170A LN EC-290	GHA F180A LN EC-290	GHA F190A LN EC-290
R290	R290	R290	R290	R290	R290	R290	R290	R290	R290	R290
377,6	289,6	346	385,8	446,2	521,8	679	755,2	144,8	173	192,9
120,1	100,9	116	130,8	149,5	169,8	221,2	240,2	48,54	55,175	63,41
3,14	2,87	2,98	2,95	2,98	3,07	3,07	3,14	2,98	3,14	3,04
A	C	B	B	B	B	B	A	B	A	B
4,94	4,58	4,68	4,6	4,6	4,82	4,8	4,88	4,92	5,11	4,89
66	61	63	64	65	66	68	69	54	55	55
10	10	10	10	10	10	10	10	10	10	10
Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw	Screw
1	2	2	2	2	2	2	2	1	1	1
12	12	12	12	12	12	12	12	12	12	12
6	6	6	6	6	6	6	6	6	6	6
35	35	35	35	35	35	35	35	35	35	35
M	M	M	M	M	M	M	M	M	M	M
BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE
400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
120,1	100,9	116,0	130,8	149,5	169,8	221,2	240,2	48,5	55,2	63,4
194,5	163,4	187,8	211,8	242,2	274,8	358,0	389,0	78,9	89,7	103,1
304,4	272,8	312,4	342,4	378,0	423,6	534,8	608,8	133,6	152,0	168,4
751,4	385,7	457	518	549,8	641,4	804,1	925,6	303,6	380	431,4
4510	4510	4510	5560	6610	6610	8710	8710	2410	3460	3460
2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540
3300	3360	3490	3930	4450	4550	6240	6310	1880	2290	2380
3336	3395	3529	3972	4498	4604	6300	6382	1897	2309	2401

GHA with EC fans

Air cooled chiller with screw compressors and axial fans for outdoor installation

Greenmiser		GHA F1100A LN EC-290	GHA F1120A LN EC-290	GHA F1140A LN EC-290	GHA F1160A LN EC-290	GHA F270A LN EC-290	GHA F280A LN EC-290
CHILLER PERFORMANCE							
Refrigerant		R290	R290	R290	R290	R290	R290
Total cooling capacity	kW	223,1	260,9	339,5	380,1	287,2	346
Nominal power input	kW	71,01	81,08	104,95	113,65	97,68	110,35
E.E.R.	Coef.	3,14	3,22	3,23	3,34	2,94	3,14
Energy class		A	A	A	A	B	A
E.S.E.E.R.	Coef.	5,05	5,24	5,27	5,36	4,82	5,01
Noise Pressure Level	dB(A)	56	58	59	59	57	58
Distance	m	10	10	10	10	10	10
WORKING CONDITIONS							
Compressors type	Type	Screw	Screw	Screw	Screw	Screw	Screw
Compressors number	n°	1	1	1	1	2	2
Inlet water temperature	°C	12	12	12	12	12	12
Outlet water temperature	°C	6	6	6	6	6	6
Ambient temperature	°C	35	35	35	35	35	35
Condenser coil type (*1)	Type	M	M	M	M	M	M
Evaporator type (*2)	Type	BPHE	BPHE	BPHE	BPHE	BPHE	BPHE
Power circuit voltage	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Control circuit voltage	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Total power input	kW	71,0	81,1	105,0	113,7	97,7	110,4
Total running current	A	115,5	131,8	170,6	184,8	159,0	179,4
Total max current	A	183,4	206,2	259,0	296,0	267,2	304,0
Total starting current	A	409,4	503,2	593	743	381,9	448,6
DIMENSIONS							
Length with cabinet	mm	4510	4510	5560	5560	4510	5560
Width	mm	2250	2250	2250	2250	2250	2250
Height	mm	2540	2540	2540	2540	2540	2540
Shipping weight	kg	2770	2860	3710	3740	3450	3930
Operating weight	kg	2794	2887	3740	3776	3485	3969
(*1) M: Microchannels (*2) S&T or BPHE: Shell and Tube - Brazed Plate Heat Exchanger							

GHA with EC fans



Air cooled chiller with screw compressors and axial fans for outdoor installation

GHA F290A LN EC-290	GHA F2100A LN EC-290	GHA F2120A LN EC-290	GHA F2140A LN EC-290	GHA F2160A LN EC-290						
R290	R290	R290	R290	R290						
385,8	446,2	521,8	679	755,2						
125,15	142,02	162,16	209,9	228,9						
3,08	3,14	3,22	3,23	3,3						
B	A	A	A	A						
4,89	4,92	5,12	5,15	5,2						
58	59	61	62	62						
10	10	10	10	10						
Screw	Screw	Screw	Screw	Screw						
2	2	2	2	2						
12	12	12	12	12						
6	6	6	6	6						
35	35	35	35	35						
M	M	M	M	M						
BPHE	BPHE	BPHE	BPHE	BPHE						
400/3/50	400/3/50	400/3/50	400/3/50	400/3/50						
230/1/50	230/1/50	230/1/50	230/1/50	230/1/50						
125,2	142,0	162,2	209,9	228,9						
203,4	231,0	263,6	341,2	372,2						
334,0	366,8	412,4	518,0	592,0						
509,6	538,6	630,2	787,3	908,8						
6610	6610	8710	10810	10810						
2250	2250	2250	2250	2250						
2540	2540	2540	2540	2540						
4370	4530	5430	7120	7180						
4412	4578	5484	7180	7252						



Brand

