

Küba SG *commercial*

The flexible solution for complex refrigeration applications

Küba SG commercial

High performance air cooler for complex refrigeration applications



Integrated electrical terminal box



Type designation code

1 2 3 4 5 6 7

SG A E 35 - F 2 3

Refrigerant (Box 5)

F HFC/CO₂ **G** Glycol **N** Pump operation, NH₃

- 1 Model range designation
- 2 Fin spacing
- 3 Electric defrost
- 4 Fan diameter
- 5 Refrigerant
- 6 Number of rows deep
- 7 Number of fans

Küba SG commercial

from the GEA Küba Blue Line production range

Maximum energy efficiency



- Aerodynamically integrated fan system with air straightener. The benefit in the cold room is strong, focused flow of air with more flow volume and longer air throw.
- Thanks to the optimal fin structure of the Küba HFE® system, the optimized design of the heat exchanger enables stable control functions with minimum temperature differences, also during part-load operation.
- The EC fans reduce energy consumption by up to 67%, and on an average by approx. 30%. The fan unit is additionally hinged and heated (except SG 23), and it features a new condensate drain.

Simple installation



- The integrated terminal box with spring-clamp terminals (provided in the standard version, except SG 23) enables fast and sure connections. The thermistor of the fan motor is delivered on terminals.
- The spacious connection areas enable simple handling. This applies especially to the connection to the refrigerant piping and to installation of the expansion valve.
- The round corners and the smooth edges of the casing parts mean no danger of injury for installation and cleaning staff.

Hygienic without a doubt



- All component parts are easy to access and simple to clean. The hinge-down drip tray and the hinged fans (except SG 23) are already included in the basic version.
- The food-safe and environmentally friendly powder-coating finish means that the surface of the casing is resistant to scratches, impacts, and corrosion.
- The air straightener can be removed with a few simple manual operations and can be easily cleaned. Condensate drainage is integrated into the full bellmouth, which assures effective draining into the drip tray.

Optimal protection of your goods



- The new fan system with air straightener – precisely matched to the heat exchanger – provides up to 15% greater air throw at lower air resistance and higher air volume.
- The many models and options mean that the SG commercial – especially for complex refrigeration applications – can be perfectly matched to individual customer requirements.
- Latest technologies and high heat transfer values produce a minimum of temperature differences. Optimal configuration of the air cooler is therefore critical for minimal moisture removal from the product.

Küba SG commercial

Basic version



Casing

- Smooth aluminum and zinc coated steel
- High-grade powder coating RAL 9018 papyrus white
- Food-safe
- Best quality powder coated edges
- Enhanced air flow by an extended Coanda effect
- Prevention of ice formation in the wall ring gap
- Condensate drain grooves integrated in the wall ring: they provide effective drainage of the condensate from the fan plate, which is inclined at 3° to the drip tray
- Hinged drip tray and removable side panels
- Stainless steel mounting material
- Plastic drain



Heat exchanger for direct expansion

- Heat exchanger with aligned tube pattern; internally grooved special copper tubes (drawn oxygen-free), according to DIN EN 12735-1,2; diameter: 15 mm; with closed pure-aluminum HFE® fins
- Fin spacing:
A = 4.5 mm | B = 7 mm | L = 12 mm
- Fins flared to form-fit the core tube
- Maximum heat transfer with compact dimensions
- Series SG-F: HFC / CO₂
Küba-CAL® refrigerant distributors throughout the entire HFC range
Tubing: special copper piping with inner fins; *Fins*: Al; *End plates*: Al
- Series SG-G: Glycol
Distribution tubes for multiple injections
Tubing: Cu smooth; *Fins*: Al; *End plates*: Al
- Series SG-N: with pump / NH₃
Distribution tubes for multi injections
Tubing: VA; *Fins*: Al; *End plates*: Al



Electric defrost

- Heaters with CrNi steel sleeve
- Vapour-tight connections
- Mains voltage: 230 V-1/400V-3-Y
- Wired ready to connect in junction boxes
- Optimized tubular heater configurations ensure fast and even defrosting
- Fins flared to form-fit the core tube
- Aluminium heat pipes that ensure excellent heat transfer to the fins and thus effective defrosting cycles with optimized service life.
- Integrated tube bushings allow a subsequent modification to an electric defrost system.



SG 23: Standard = ESM-Motor



SG 30, 35, 45: Standard = AC-Motor

Fan system

- Fan system with integrated terminal box and protection against liquid spray
- Permissible motor operating temperatures:
 - 30 to +5°C (SG 23 [EC]),
 - 40 to +4°C (SG 30,35,45 [AC])
- Built-in protector (AC), wired internally (except SG 45-61,62,63) and connection box integrated in the hinge (not SG 23)
- Pre-wired to springloaded terminals
- Fan diameters available:
 - 230 / 300 / 350 / 450 mm
- 230 Volt, 50/60 Hz, 1 -phase as AC, (IP 44) or optionally as EC system (IP 54)
- Optional EC motor available with integrated motor management for monitoring of operational parameters to protect the fan unit: excess current, excess temperature, and undervoltage
- Adapter for textile socks and Shut-Up® integrated in the fan system
- Hinged fan system (not SG 23)
- Controller:

	SG 23	SG 30,35,45
Phase control	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Transformer	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Delta/star	<input type="checkbox"/>	<input type="checkbox"/>
Frequency converter	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please observe the manufacturer's information!

Motor label data *

Type	Ø mm	rpm	50 Hz		60 Hz		
			W	A	rpm	W	A
SG 23 21-35	230	1.600	30	0,24	1.600	30	0,24
SG 23 21-35	230	1.000	14	0,11	1.000	14	0,11
SG 30 21-35	300	1.320	72	0,32	1.500	90	0,40
SG 35 21-45	350	1.400	180	0,81	1.600	250	1,10
SG 45 31-45	450	1.400	245	1,10	1.600	355	1,55
SG 45 61,62,63	450	1.390	510	2,20	1.600	710	3,11

Motor data per fan

* Data provided by the manufacturer

Küba SG commercial

Technical data – SGB(E)



Type	Rating Q ₀ at 50 Hz DT1. R404A		Cooling surface m ²	Air flow m ³ /h	Air throw *** m	Tube volume dm ³	Connections		Sound L _{WA} db (A)	Fans (Operational values at 50 Hz)				
	SC2	SC3					Inlet Ø mm	Outlet Ø mm		Blade Ø mm	Current 230 ± 10% V-1 50Hz	Per Fan		
	kW	kW							rpm			W	A	
SGB 23-F21	0,9	0,5	4,1	990	12	1,1	10x1,0*	15x1,0	68	230	230 V-1	1.580	30	0,25
SGB 23-F31	1,2	0,8	6,1	950	11	1,6	10x1,0*	15x1,0	68	230	230 V-1	1.580	30	0,25
SGB 30-F21	1,5	1,0	7,2	1.550	17	1,8	10x1,0*	15x1,0	66	300	230 V-1	1.360	65	0,30
SGB 30-F31	1,9	1,3	10,7	1.510	16	2,7	10x1,0*	15x1,0	66	300	230 V-1	1.360	65	0,30
SGB 35-F21	2,5	1,6	10,7	3.020	31	2,7	10x1,0*	22x1,0	73	350	230 V-1	1.430	150	0,70
SGB 35-F31	3,4	2,3	15,9	2.950	30	4,0	12x1,0*	22x1,0	73	350	230 V-1	1.430	150	0,70
SGB 35-F41	4,1	2,8	21,1	2.880	29	5,4	12x1,0**	28x1,5	73	350	230 V-1	1.430	150	0,70
SGB 35-F61	5,3	3,7	31,6	2.760	28	8,0	12x1,0**	28x1,5	73	350	230 V-1	1.430	150	0,70
SGB 45-F31	5,6	3,7	24,5	5.030	42	6,2	12x1,0**	28x1,5	82	450	230 V-1	1.360	275	1,25
SGB 45-F41	6,7	4,6	32,6	4.920	41	8,1	12x1,0**	28x1,5	82	450	230 V-1	1.360	275	1,25
SGB 45-F51	8,0	5,4	40,6	4.810	40	10,3	15x1,0**	35x1,5	82	450	230 V-1	1.360	275	1,25
SGB 45-F61	9,4	6,6	48,7	5.580	49	12,2	12x1,0**	35x1,5	82	450	230 V-1	1.370	500	2,65
SGB 23-F22	1,8	1,2	8,2	1.980	17	2,0	10x1,0*	15x1,0	71	230	230 V-1	1.580	30	0,25
SGB 23-F32	2,3	1,6	12,3	1.900	17	3,0	10x1,0*	15x1,0	71	230	230 V-1	1.580	30	0,25
SGB 30-F22	3,0	1,9	14,4	3.100	22	3,5	12x1,0**	22x1,0	69	300	230 V-1	1.360	65	0,30
SGB 30-F32	3,9	2,7	21,4	3.020	22	5,3	12x1,0**	28x1,5	69	300	230 V-1	1.360	65	0,30
SGB 35-F22	4,9	3,3	21,3	6.040	36	5,2	12x1,0**	28x1,5	76	350	230 V-1	1.430	150	0,70
SGB 35-F32	6,8	4,6	31,8	5.900	36	7,7	12x1,0**	28x1,5	76	350	230 V-1	1.430	150	0,70
SGB 35-F42	8,3	5,8	42,2	5.760	35	10,3	12x1,0**	35x1,5	76	350	230 V-1	1.430	150	0,70
SGB 35-F62	10,6	7,6	63,1	5.520	34	15,2	15x1,0**	35x1,5	76	350	230 V-1	1.430	150	0,70
SGB 45-F32	11,3	7,4	49,0	10.060	47	11,8	15x1,0**	35x1,5	85	450	230 V-1	1.360	275	1,25
SGB 45-F42	13,5	9,4	65,1	9.840	47	15,6	15x1,0**	35x1,5	85	450	230 V-1	1.360	275	1,25
SGB 45-F52	16,0	10,8	81,3	9.620	46	19,6	22x1,0**	42x1,5	85	450	230 V-1	1.360	275	1,25
SGB 45-F62	19,3	13,5	97,4	11.160	55	23,4	22x1,0**	42x1,5	85	450	230 V-1	1.370	500	2,65
SGB 23-F23	2,7	1,8	12,3	2.970	21	3,0	12x1,0**	22x1,0	73	230	230 V-1	1.580	30	0,25
SGB 23-F33	3,5	2,4	18,4	2.850	20	4,4	12x1,0**	22x1,0	73	230	230 V-1	1.580	30	0,25
SGB 30-F23	4,3	3,0	21,6	4.650	26	5,2	12x1,0**	28x1,5	71	300	230 V-1	1.360	65	0,30
SGB 30-F33	5,9	4,1	32,1	4.530	25	7,6	12x1,0**	28x1,5	71	300	230 V-1	1.360	65	0,30
SGB 35-F23	7,7	4,8	32,0	9.060	40	7,7	15x1,0**	35x1,5	78	350	230 V-1	1.430	150	0,70
SGB 35-F33	10,3	7,0	47,7	8.850	39	11,4	15x1,0**	35x1,5	78	350	230 V-1	1.430	150	0,70
SGB 35-F43	12,2	8,6	63,3	8.640	38	15,0	15x1,0**	35x1,5	78	350	230 V-1	1.430	150	0,70
SGB 35-F63	15,1	11,0	94,7	8.280	37	22,5	15x1,0**	42x1,5	78	350	230 V-1	1.430	150	0,70
SGB 45-F33	17,0	11,2	73,5	15.090	51	17,6	22x1,0**	42x1,5	87	450	230 V-1	1.360	275	1,25
SGB 45-F43	20,9	13,9	97,7	14.760	50	23,1	22x1,0**	42x1,5	87	450	230 V-1	1.360	275	1,25
SGB 45-F53	23,2	16,5	121,9	14.430	49	28,7	22x1,0**	42x1,5	87	450	230 V-1	1.360	275	1,25
SGB 45-F63	27,0	19,3	146,1	16.740	58	34,9	22x1,0**	54x2,0	87	450	230 V-1	1.370	500	2,65
SGB 23-F24	3,6	2,4	16,5	3.960	23	3,9	12x1,0**	22x1,0	74	230	230 V-1	1.580	30	0,25
SGB 23-F34	4,8	3,2	24,5	3.800	23	5,8	12x1,0**	22x1,0	74	230	230 V-1	1.580	30	0,25
SGB 30-F24	6,0	3,9	28,8	6.200	28	6,8	12x1,0**	28x1,5	72	300	230 V-1	1.360	65	0,30
SGB 30-F34	8,1	5,3	42,9	6.040	28	10,2	15x1,0**	35x1,5	72	300	230 V-1	1.360	65	0,30
SGB 35-F24	10,1	6,6	42,7	12.080	42	10,1	15x1,0**	35x1,5	79	350	230 V-1	1.430	150	0,70
SGB 35-F34	13,3	9,3	63,6	11.800	42	14,9	15x1,0**	35x1,5	79	350	230 V-1	1.430	150	0,70
SGB 35-F44	16,9	11,4	84,4	11.520	41	20,0	22x1,0**	42x1,5	79	350	230 V-1	1.430	150	0,70
SGB 35-F64	20,9	15,2	126,2	11.040	40	29,6	22x1,0**	42x1,5	79	350	230 V-1	1.430	150	0,70
SGB 45-F34	22,1	15,1	98,1	20.120	53	23,0	22x1,0**	42x1,5	88	450	230 V-1	1.360	275	1,25
SGB 45-F44	27,2	18,8	130,3	19.680	53	31,0	22x1,0**	54x2,0	88	450	230 V-1	1.360	275	1,25
SGB 45-F54	31,4	22,1	162,5	19.240	52	38,4	22x1,0**	54x2,0	88	450	230 V-1	1.360	275	1,25
SGB 23-F25	4,5	2,9	20,6	4.950	25	4,8	12x1,0**	28x1,5	75	230	230 V-1	1.580	30	0,25
SGB 23-F35	6,0	4,1	30,6	4.750	24	7,2	12x1,0**	28x1,5	75	230	230 V-1	1.580	30	0,25
SGB 30-F25	7,4	5,0	36,0	7.750	30	8,5	12x1,0**	35x1,5	73	300	230 V-1	1.360	65	0,30
SGB 30-F35	10,0	6,8	53,6	7.550	29	12,5	15x1,0**	35x1,5	73	300	230 V-1	1.360	65	0,30
SGB 35-F25	13,0	7,9	53,3	15.100	44	12,4	22x1,0**	35x1,5	80	350	230 V-1	1.430	150	0,70
SGB 35-F35	17,7	11,0	79,4	14.750	43	18,6	22x1,0**	42x1,5	80	350	230 V-1	1.430	150	0,70
SGB 35-F45	20,8	14,5	105,6	14.400	42	24,7	22x1,0**	42x1,5	80	350	230 V-1	1.430	150	0,70
SGB 35-F65	26,6	19,0	157,8	13.800	41	37,1	22x1,0**	54x2,0	80	350	230 V-1	1.430	150	0,70
SGB 45-F35	28,7	18,3	122,6	25.150	55	29,0	22x1,0**	54x2,0	89	450	230 V-1	1.360	275	1,25
SGB 45-F45	35,1	22,8	162,9	24.600	54	38,2	28x1,5**	54x2,0	89	450	230 V-1	1.360	275	1,25

Standard condition	t _{L1}	t ₀	DT1
NB2/SC2	0	-8	8
NB3/SC3	-18	-25	7

























Correction factors
for other refrigerants

Refrigerant	NB2/SC2	NB3/SC3
R134a	1,00	0,91
R507	0,97	0,97
R22	0,95	0,95

- * Single injection
- ** Multiple injection through Küba CAL® distributor
- *** Throw limit at 0.5 m/s

Küba SG commercial
















Weights, electric defrost

Type	Electrical defrost 230 V-1 / 400 V-3-Y				Weights (net)						Weights (gross)					
	Coil	Tray	Total	Circuits	SGA	SGA E	SGB	SGB E	SGL	SGL E	SGA	SGA E	SGB	SGB E	SGL	SGL E
	kW	kW	kW		kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
 SG 23-21	0,5	0,4	0,9	1	13	15	13	14	12	14	18	19	17	18	16	18
SG 23-31	0,5	0,4	0,9	1	15	17	14	16	13	15	19	21	18	20	18	19
SG 30-21	0,6	0,6	1,2	1	25	27	23	25	22	24	30	31	28	30	27	29
SG 30-31	1,2	0,6	1,8	1	28	30	26	28	25	27	33	35	31	33	30	32
SG 35-21	0,7	0,8	1,5	1	37	39	35	37	34	36	44	46	42	44	41	43
SG 35-31	1,3	0,8	2,1	1	42	45	39	41	37	39	49	51	46	48	44	46
SG 35-41	2,0	0,8	2,8	1	48	51	44	47	41	44	55	58	51	54	48	51
SG 35-61	2,7	0,8	3,5	1	58	61	51	55	47	51	65	68	58	61	54	58
SG 45-31	2,6	0,9	3,5	1	54	57	49	52	46	49	90	93	85	88	82	85
SG 45-41	2,6	0,9	3,5	1	61	65	54	58	51	54	97	100	90	94	86	90
SG 45-51	3,5	0,9	4,4	1	69	73	60	64	57	61	105	108	96	100	93	97
SG 45-61	4,4	0,9	5,3	1	79	84	69	74	67	71	115	119	105	109	103	107
 SG 23-22	0,8	0,8	1,6	1	21	23	20	22	19	21	26	28	25	27	24	26
 SG 23-32	0,8	0,8	1,6	1	25	27	23	25	21	23	30	32	27	29	26	28
 SG 30-22	1,1	1,0	2,1	1	39	41	36	38	34	37	66	68	63	65	61	63
SG 30-32	2,1	1,0	3,1	1	45	48	41	44	38	41	72	75	68	71	65	68
SG 35-22	1,3	1,3	2,6	1	59	62	55	58	52	55	96	98	91	94	89	91
SG 35-32	2,6	1,3	3,9	1	69	72	62	66	58	62	105	109	99	102	95	98
SG 35-42	3,6	1,3	4,9	1	79	84	70	75	65	70	116	120	107	111	102	106
SG 35-62	4,8	1,3	6,1	1	98	103	85	90	78	82	135	140	122	127	114	119
SG 45-32	4,5	1,6	6,1	1	95	100	85	90	79	84	170	175	160	165	154	159
SG 45-42	4,5	1,6	6,1	1	109	114	96	101	88	93	184	189	171	176	163	168
SG 45-52	6,0	1,6	7,6	1	124	130	107	113	101	107	199	205	182	188	176	182
SG 45-62	7,9	1,6	9,5	1	146	152	125	132	120	127	221	227	200	207	195	202
 SG 23-23	1,2	1,1	2,3	1	28	30	25	28	24	26	62	64	59	62	58	60
 SG 23-33	1,2	1,1	2,3	1	33	36	29	32	27	30	67	70	63	66	61	64
 SG 30-23	1,5	1,5	3,0	1	55	58	50	53	48	51	90	93	86	89	83	86
 SG 30-33	3,0	1,5	4,5	1	64	68	58	62	54	58	100	104	93	97	89	93
 SG 35-23	1,8	1,8	3,6	1	84	87	77	80	74	76	182	184	175	178	171	174
 SG 35-33	3,6	1,8	5,4	1	98	102	88	92	82	86	195	199	186	189	180	184
 SG 35-43	5,2	1,8	7,0	1	112	117	99	104	91	96	209	215	196	202	188	194
 SG 35-63	7,2	1,8	9,0	1	141	146	121	127	109	115	238	244	219	224	207	213
 SG 45-33	6,5	2,2	8,7	1	139	144	124	129	115	120	267	272	251	256	243	248
 SG 45-43	6,5	2,2	8,7	1	159	165	138	145	127	134	286	293	266	272	255	261
 SG 45-53	8,6	2,2	10,8	1	180	188	154	162	145	153	307	315	282	290	273	280
 SG 45-63	10,9	2,2	13,1	1	210	219	179	188	172	181	337	346	307	316	299	308
 SG 23-24	1,5	1,5	3,0	1	35	38	32	35	30	33	110	113	107	110	105	108
 SG 23-34	1,5	1,5	3,0	1	43	46	38	41	35	38	118	121	113	116	110	113
 SG 30-24	1,9	2,0	3,9	1	71	75	66	69	62	66	161	165	156	159	152	156
 SG 30-34	3,9	2,0	5,9	1	84	89	76	81	71	75	174	179	166	171	161	165
 SG 35-24	2,2	2,3	4,5	1	109	112	100	103	95	98	222	224	213	216	208	211
 SG 35-34	4,5	2,3	6,8	1	128	131	114	118	107	111	240	244	227	231	219	223
 SG 35-44	6,5	2,3	8,8	1	148	153	131	136	121	125	261	266	243	248	233	238
 SG 35-64	9,0	2,3	11,3	1	185	191	159	164	143	149	297	303	271	277	256	261
SG 45-34	7,2	0,7	7,9	1	180	187	159	167	148	156	375	382	354	362	343	351
SG 45-44	10,1	0,7	10,8	1	209	220	182	193	167	178	404	415	377	388	362	373
SG 45-54	11,5	0,7	12,2	1	238	250	205	216	192	204	433	445	400	411	387	399
SG 23-25	1,9	1,8	3,7	1	45	48	40	44	38	41	127	130	123	126	121	124
SG 23-35	1,9	1,8	3,7	1	54	57	47	50	44	47	136	139	130	133	126	129
SG 30-25	2,3	1,2	3,5	1	88	91	80	84	76	79	193	196	185	189	181	184
SG 30-35	4,6	1,2	5,8	1	104	109	93	98	86	91	209	214	198	203	191	196
SG 35-25	4,3	0,7	5,0	1	136	142	125	131	118	124	271	277	260	266	253	259
SG 35-35	5,8	0,7	6,5	1	160	167	144	151	134	141	295	302	279	286	269	276
SG 35-45	8,6	0,7	9,3	1	182	190	160	168	147	156	317	325	295	303	282	291
SG 35-65	11,5	0,7	12,2	1	230	241	197	208	178	189	365	376	332	343	313	324
SG 45-35	9,0	0,9	9,9	1	224	231	198	206	184	192	501	509	476	483	462	469
SG 45-45	12,6	0,9	13,5	1	258	268	227	237	205	215	535	546	504	515	482	493

Subject to modification.

Küba SG commercial

Dimensions, drain

Type	Dimensions																		Drain	
	H	B	T	L	E ₁	E ₂	E ₃	F	A	W _{min}	W _{Haube}	ØG	GA	GE ₁	GE ₂	GE ₃	GE ₄	GE ₅		D
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		mm
 SG 23-21	347	760	455	335	480	-	-	140	129	200	290	253	155	380	-	-	-	-	G ¾	
SG 23-31	347	760	455	335	480	-	-	140	129	200	290	253	155	380	-	-	-	-	G ¾	
SG 30-21	449	960	453	360	620	-	-	170	103	200	340	353	204	480	-	-	-	-	G ¾	
SG 30-31	449	960	453	360	620	-	-	170	103	200	340	353	204	480	-	-	-	-	G ¾	
SG 35-21	554	1.130	624	515	730	-	-	200	118	300	430	421	253	565	-	-	-	-	G ¾	
SG 35-31	554	1.130	624	515	730	-	-	200	118	300	430	421	253	565	-	-	-	-	G ¾	
SG 35-41	554	1.130	624	515	730	-	-	200	118	300	430	421	253	565	-	-	-	-	G ¾	
SG 35-61	554	1.130	624	515	730	-	-	200	118	300	430	421	253	565	-	-	-	-	G ¾	
SG 45-31	652	1.330	662	510	930	-	-	200	162	400	500	550	306	665	-	-	-	-	G ¾	
SG 45-41	652	1.330	662	510	930	-	-	200	162	400	500	550	306	665	-	-	-	-	G ¾	
SG 45-51	652	1.330	662	510	930	-	-	200	162	400	500	550	306	665	-	-	-	-	G ¾	
SG 45-61	652	1.330	662	510	930	-	-	200	162	400	500	550	306	665	-	-	-	-	G ¾	
 SG 23-22	347	1.210	455	335	930	-	-	140	129	200	290	253	155	830	380	-	-	-	G ¾	
SG 23-32	347	1.210	455	335	930	-	-	140	129	200	290	253	155	830	380	-	-	-	G ¾	
 SG 30-22	449	1.550	453	360	1.210	-	-	170	103	200	340	353	204	1.070	480	-	-	-	G ¾	
SG 30-32	449	1.550	453	360	1.210	-	-	170	103	200	340	353	204	1.070	480	-	-	-	G ¾	
SG 35-22	554	1.830	624	515	1.430	-	-	200	118	300	430	421	253	1.265	565	-	-	-	G 1¼	
SG 35-32	554	1.830	624	515	1.430	-	-	200	118	300	430	421	253	1.265	565	-	-	-	G 1¼	
SG 35-42	554	1.830	624	515	1.430	-	-	200	118	300	430	421	253	1.265	565	-	-	-	G 1¼	
SG 35-62	554	1.830	624	515	1.430	-	-	200	118	300	430	421	253	1.265	565	-	-	-	G 1¼	
SG 45-32	652	2.230	662	510	1.830	-	-	200	162	400	500	550	306	1.565	665	-	-	-	G 1¼	
SG 45-42	652	2.230	662	510	1.830	-	-	200	162	400	500	550	306	1.565	665	-	-	-	G 1¼	
SG 45-52	652	2.230	662	510	1.830	-	-	200	162	400	500	550	306	1.565	665	-	-	-	G 1¼	
SG 45-62	652	2.230	662	510	1.830	-	-	200	162	400	500	550	306	1.565	665	-	-	-	G 1¼	
 SG 23-23	347	1.660	455	335	1.380	450	-	140	129	200	290	253	155	1.280	380	830	-	-	G ¾	
SG 23-33	347	1.660	455	335	1.380	450	-	140	129	200	290	253	155	1.280	380	830	-	-	G ¾	
 SG 30-23	449	2.140	453	360	1.800	590	-	170	103	200	340	353	204	1.660	480	1.070	-	-	G ¾	
SG 30-33	449	2.140	453	360	1.800	590	-	170	103	200	340	353	204	1.660	480	1.070	-	-	G ¾	
 SG 35-23	554	2.530	624	515	2.130	700	-	200	118	300	430	421	253	1.965	565	1.265	-	-	G 1¼	
SG 35-33	554	2.530	624	515	2.130	700	-	200	118	300	430	421	253	1.965	565	1.265	-	-	G 1¼	
SG 35-43	554	2.530	624	515	2.130	700	-	200	118	300	430	421	253	1.965	565	1.265	-	-	G 1¼	
SG 35-63	554	2.530	624	515	2.130	700	-	200	118	300	430	421	253	1.965	565	1.265	-	-	G 1¼	
 SG 45-33	652	3.130	662	510	2.730	900	-	200	162	400	500	550	306	2.465	665	1.565	-	-	G 1¼	
SG 45-43	652	3.130	662	510	2.730	900	-	200	162	400	500	550	306	2.465	665	1.565	-	-	G 1¼	
SG 45-53	652	3.130	662	510	2.730	900	-	200	162	400	500	550	306	2.465	665	1.565	-	-	G 1¼	
SG 45-63	652	3.130	662	510	2.730	900	-	200	162	400	500	550	306	2.465	665	1.565	-	-	G 1¼	
 SG 23-24	347	2.110	455	335	1.830	900	-	140	129	200	290	253	155	1.730	380	830	1.280	-	G ¾	
SG 23-34	347	2.110	455	335	1.830	900	-	140	129	200	290	253	155	1.730	380	830	1.280	-	G ¾	
 SG 30-24	449	2.730	453	360	2.390	1.180	-	170	103	200	340	353	204	2.250	480	1.070	1.660	-	G 1¼	
SG 30-34	449	2.730	453	360	2.390	1.180	-	170	103	200	340	353	204	2.250	480	1.070	1.660	-	G 1¼	
 SG 35-24	554	3.230	624	515	2.830	1.400	-	200	118	300	430	421	253	2.665	565	1.265	1.965	-	G 1¼	
SG 35-34	554	3.230	624	515	2.830	1.400	-	200	118	300	430	421	253	2.665	565	1.265	1.965	-	G 1¼	
SG 35-44	554	3.230	624	515	2.830	1.400	-	200	118	300	430	421	253	2.665	565	1.265	1.965	-	G 1¼	
SG 35-64	554	3.230	624	515	2.830	1.400	-	200	118	300	430	421	253	2.665	565	1.265	1.965	-	G 1¼	
 SG 45-34	652	4.030	662	510	3.630	1.800	-	200	162	400	500	550	306	3.365	665	1.565	2.465	-	G 1¼	
SG 45-44	652	4.030	662	510	3.630	1.800	-	200	162	400	500	550	306	3.365	665	1.565	2.465	-	G 1¼	
SG 45-54	652	4.030	662	510	3.630	1.800	-	200	162	400	500	550	306	3.365	665	1.565	2.465	-	G 1¼	
 SG 23-25	347	2.560	455	335	2.280	900	1.350	140	129	200	290	253	155	2.180	380	830	1.280	1.730	G 1¼	
SG 23-35	347	2.560	455	335	2.280	900	1.350	140	129	200	290	253	155	2.180	380	830	1.280	1.730	G 1¼	
 SG 30-25	449	3.320	453	360	2.980	1.180	1.770	170	103	200	340	353	204	2.840	480	1.070	1.660	2.250	G 1¼	
SG 30-35	449	3.320	453	360	2.980	1.180	1.770	170	103	200	340	353	204	2.840	480	1.070	1.660	2.250	G 1¼	
 SG 35-25	554	3.930	624	515	3.530	1.400	2.100	200	118	300	430	421	253	3.365	565	1.265	1.965	2.665	G 1¼	
SG 35-35	554	3.930	624	515	3.530	1.400	2.100	200	118	300	430	421	253	3.365	565	1.265	1.965	2.665	G 1¼	
SG 35-45	554	3.930	624	515	3.530	1.400	2.100	200	118	300	430	421	253	3.365	565	1.265	1.965	2.665	G 1¼	
SG 35-65	554	3.930	624	515	3.530	1.400	2.100	200	118	300	430	421	253	3.365	565	1.265	1.965	2.665	G 1¼	
 SG 45-35	652	4.930	662	510	4.530	1.800	2.700	200	162	400	500	550	306	4.265	665	1.565	2.465	3.365	G 1¼	
SG 45-45	652	4.930	662	510	4.530	1.800	2.700	200	162	400	500	550	306	4.265	665	1.565	2.465	3.365	G 1¼	

Subject to modification.

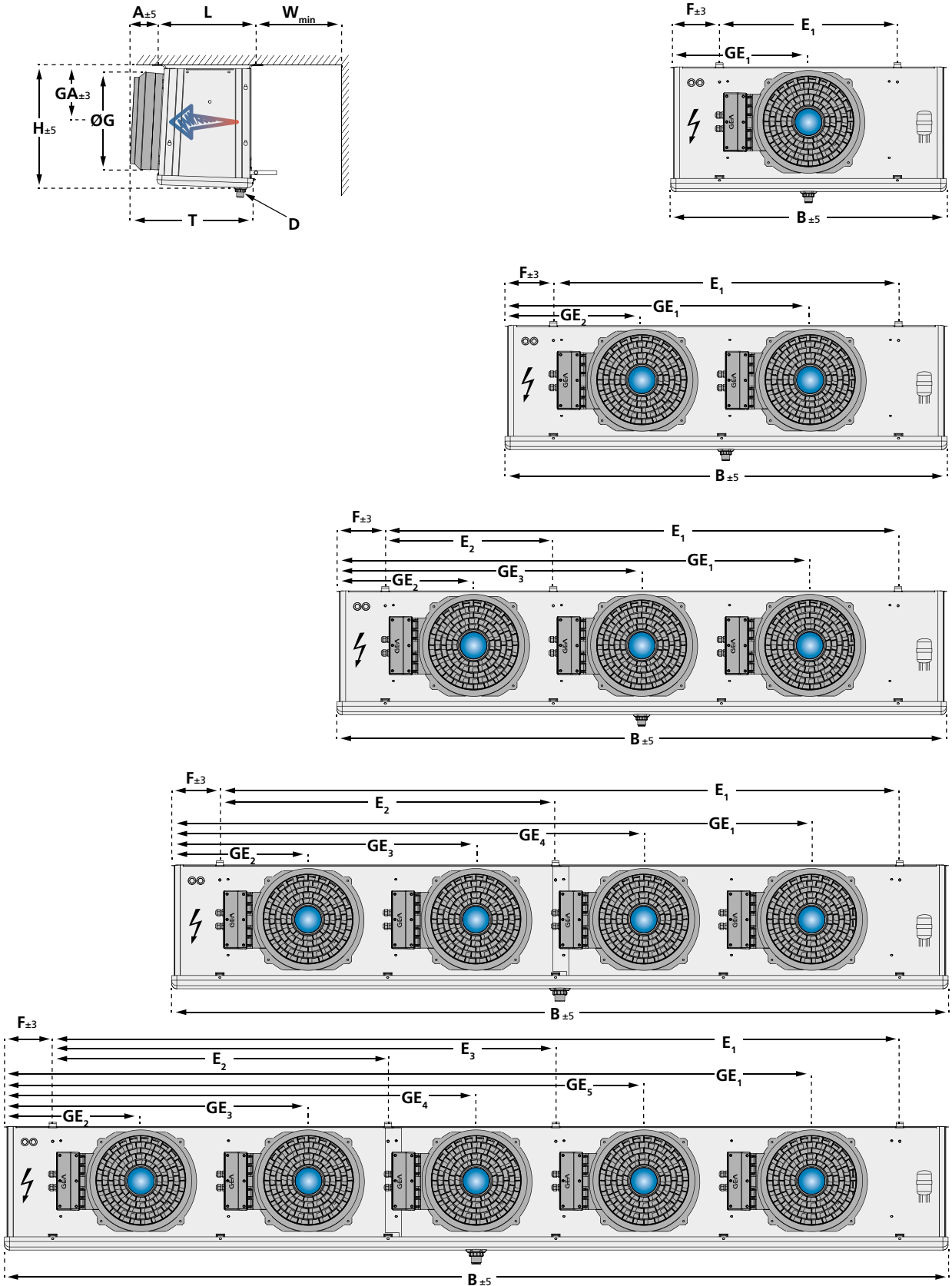
The dimensions are only valid for the standard model design!
Note the differences in dimension among versions and accessories.

Küba SG commercial

Dimensional drawings

Dimensional drawings for Küba SG commercial (1-5 motors)

The drawing shows the Küba SG commercial with 300 mm fan-blade diameter.





Recommended for frozen storage:

- Shut-Up®
- Defrost hood
- Wall ring heating
- Double insulated drip tray
- Insulate the top panel on site

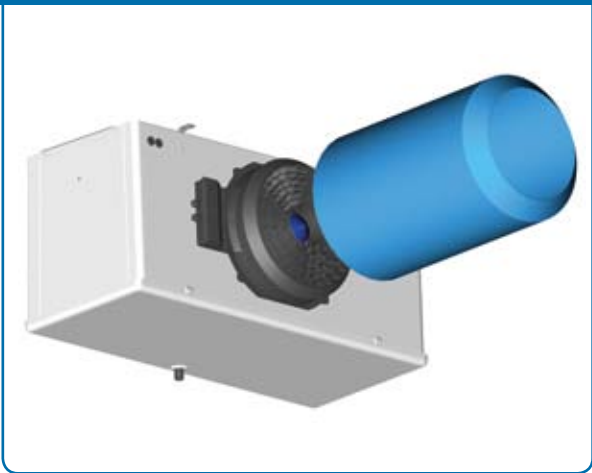


Küba Shut-Up®

The Shut-Up® optimises the defrosting procedure, especially in deep-freeze applications. Shut-Up® is suspended over the fan unit, closing the Air Cooler. Hot air cannot escape.

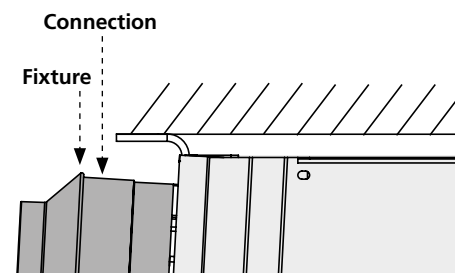
Features and material:

High-tech microfiber, damp-resistant, vapour resistant, tearproof, ultraflexible, UV-resistant, form- and temperature resistant, double stitched, rot-proof, food-safe, polyester/polyamide, washable at 30°C, chemical purification P



Selection table & Dimensions:

Type	Küba SG commercial			Shut-Up®	
	Fan blade	Connections	Fixture	Air outlet	Length
	∅ mm	∅ mm	∅ mm	∅ mm	mm
SG 23	230	253	259	149	390
SG 30	300	353	359	254	490
SG 35	350	421	427	344	610
SG 45	450	550	556	430	684



NOTE:

With introducing the new SG commercial, you don't need an additional adapter to install a Shut-Up®.

Due to the additional external pressure, the air quantity and Air Cooler capacity change:

With using Shut-Up®: Air volume reduces by 10% \pm -5% cooling capacity

With using von Shut-Up® & Defrost hood: Air volume reduces by 20% \pm -10% cooling capacity

1 Shut-Up® per fan unit required. Delivery not mounted.

Küba wall ring heating WH®

WH® Küba wall ring heating prevents formation of ice between fan blade and the wall ring.

Advantages:

- Maximum energy efficiency, optimal control behavior, and reduced power consumption (up to 87 % less).
- Heat retention in the wall ring, no vapor formation, no overheating.
- Protection from human contact by complete integration of the heating element.



Selection table:

For type	Description	Current	Capacity
		A	W
SG 23		not available	
SG 30	WH 30	0,5	118
SG 35	WH 35	0,9	209
SG 45	WH 45	1,2	266

Delivery:

- Mounted and wired to terminal box
- or unassembled

NOTE:

Küba wall ring heating WH® is only available for SP 30, SP 35, SP 45
 1 wall ring heating WH® per fan unit required.

Finned-tube heaters SGHR / SGHRZ

For air coolers with draw-through fans.
For conditioning of room air.

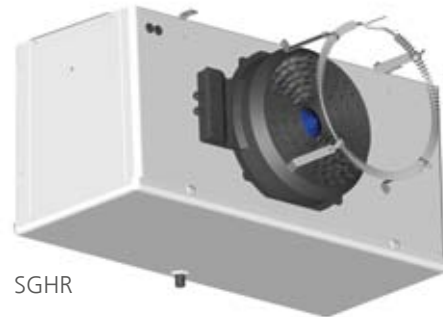
SGHR = Standard design

SGHRZ = Additional heater

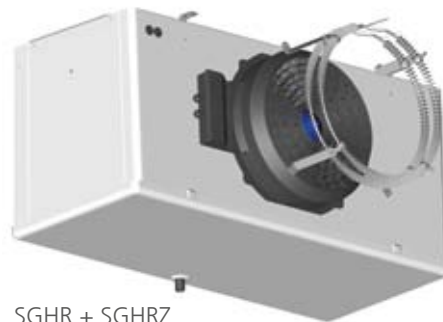
SGHR + SGHRZ = Greater heating capacity

Technical data & Dimensions:

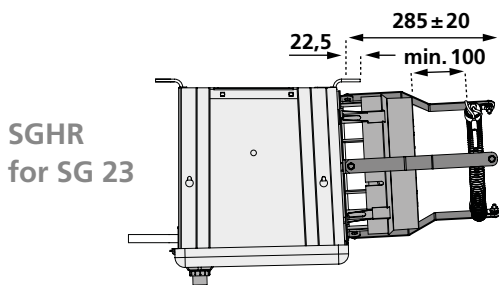
For type	Description	Current [A]				Capacity [kW]			
		L1	L2	L3	Tot.	L1	L2	L3	Tot.
SG 23	SGHR 23	4,3	-	-	4,3	1,0	-	-	1,0
SG 30	SGHR 30	5,9	-	-	5,9	1,3	-	-	1,3
SG 35	SGHR 35	7,6	-	-	7,6	1,7	-	-	1,7
SG 45	SGHR 45	10,7	-	-	10,7	2,5	-	-	2,5
SG 23	SGHR + SGHR 23 Z	4,3	4,3	-	8,6	1,0	1,0	-	2,0
SG 30	SGHR + SGHR 30 Z	5,9	5,9	-	11,8	1,3	1,3	-	2,6
SG 35	SGHR + SGHR 35 Z	7,6	7,6	-	15,2	1,7	1,7	-	3,4
SG 45	SGHR + SGHR 45 Z	10,7	10,7	-	21,4	2,5	2,5	-	5,0



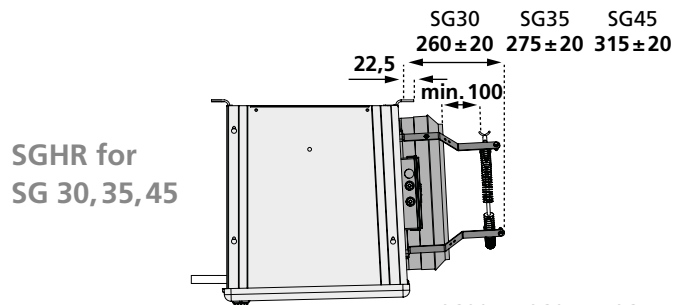
SGHR



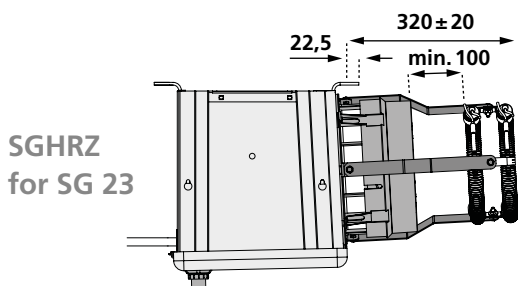
SGHR + SGHRZ



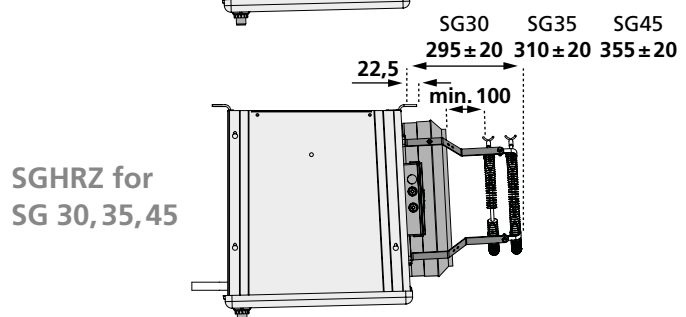
SGHR
for SG 23



SGHR for
SG 30, 35, 45



SGHRZ
for SG 23



SGHRZ for
SG 30, 35, 45

NOTE:

This unit is operated only when the air-cooler fans are in use, to prevent overheating of the ceiling of the cold room. Be sure to observe the relevant safety instructions. 1 SGHR/Z per fan unit required.



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GEA Heat Exchangers

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