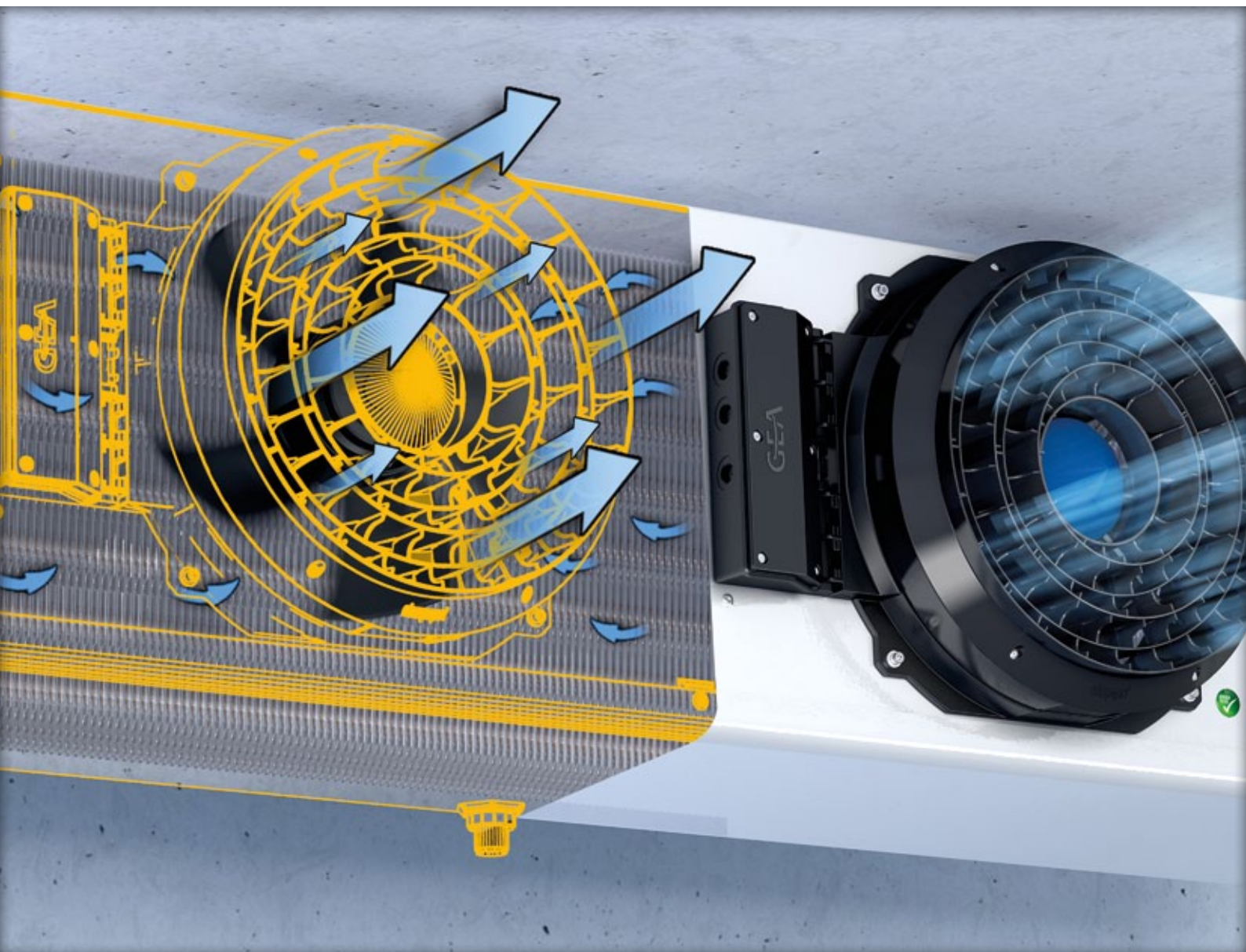




Fresh solutions with Blue: GEA Küba SG *commercial*

The flexible solution for complex refrigeration applications

GEA Küba SG *commercial*

The flexible solution 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 or secondary fluid (Box 5)

F	HFC/CO ₂	G	Glycol	N	Pump operation, NH ₃
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- 1 Model range designation
- 2 Fin spacing
- 3 Electric defrost
- 4 Fan diameter
- 5 Refrigerant/secondary fluid
- 6 Number of rows deep
- 7 Number of fans

Hinged, integrated fan system with air straightener



Küba HFE® fin-tube system with Küba CAL® distributor

Capacity range (for SC2)

0.6 kW  45.5 kW

Number of fans

 up to 

Temperature range (t_{L1})


-35°C 0°C +20°C

Fan diameter

230 mm, 300 mm, 350 mm, 450 mm



Applications

- ➔ Cooling of unpacked goods
- ➔ Cold rooms with frequent coming and going of staff
- ➔ Deep freezing
- ➔ Complex cooling applications

GEA Küba SG *commercial*

Application benefits for contractors and operators

Complex cooling and refrigeration applications have demanding requirements, particularly on system components. GEA Küba has thoroughly reworked its high-performance cooler SG *commercial* and has further optimized the matching of its individual components such as the heat exchanger and the fan system.

As a result, GEA Küba has responded to ever increasing operating costs with sustainable solutions that comply with increasingly strict legal regulations. This means long-term investment security for you.

Whether you have extreme storage conditions or need long-term food freshness – the GEA Küba SG *commercial* is the answer to

your requirements and ensures the long term value of your refrigerated product. The focus of our engineering design is on your requirements and is primarily directed to long refrigeration periods between defrost cycles. The new SG *commercial* also means low fan power consumption – while maintaining good control characteristics at minimal temperature differences. This results in compressor output as low as possible for the required cooling load.

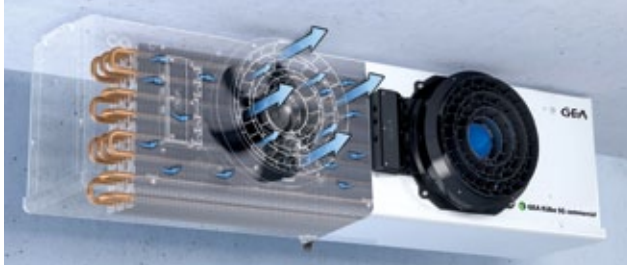
The results speak for themselves:

A genuine GEA Küba high-performance air cooler.

GEA 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, and it features a new condensate drain.

Hygienic without a doubt



- All component parts are easy to access and simple to clean. The hinge-down drip tray and the hinged fans 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.

Simple installation



- The integrated terminal box with spring-clamp terminals (provided in the standard version) 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.

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.

GEA Küba SG commercial

Basic version (for available variants, please see page 14)



Casing

- Smooth aluminum and zinc coated steel *
- High grade powder-coating, food-safe, papyrus white, RAL 9018
- 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



Heat exchanger

- 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 = 7.0 mm | L = 12.0 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: special copper piping with inner fins; *Fins*: Al; *End plates*: Al
- Series SG-N: with pump / NH₃
Distribution tubes for multi injections
Tubing: smooth copper; *Fins*: Al; *End plates*: Al



Electric defrost

- Wired ready for easy connection in the junction boxes
- Optimized tubular header configurations, to assure fast and even defrost
- Aluminum heat pipes that ensure excellent heat transfer to the fins and, in turn, efficient defrost cycles with optimized service life
- Mains voltage: 230 V-1 / 400 V-3-Y
- Fins flared to form-fit the core tube

* Continuously hot-dip zinc coated low carbon steel



Fan system

- Fan system made of high-quality composite material with integrated terminal box and water-spray protection
- Operating temperature ranges for the motors:
-30 °C ... +60 °C (EC)
-40 °C ... +50 °C (AC)
- Built-in protector (AC) and connection box integrated into the hinge
- Pre-wired to springloaded terminals, with outgoing thermistor leads to terminals (AC).
- 230 Volt, 50/60 Hz, 1-phase as AC (IP 44), or optionally available as EC system (IP 54)
- Optionally available EC motor with integrated Motor Management System for monitoring operational parameters essential to protect the fan unit: excess current, excess temperature, and undervoltage
- Adapter for textile socks and Shut-Up® integrated in the fan system

Motor label data*

Type	Ø mm	50 Hz				60 Hz			
		rpm	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		

Motor data per fan

* Data provided by the manufacturer

The product configurator Küba Select enables you to achieve an exact thermodynamic selection of your desired equipment variants with different operational parameters: e.g., 60 Hz, other refrigerants, relative humidity variations, and coated fins.

In the event that you have any questions, please get in contact with our technical staff.

GEA Küba SG commercial

Technical data – SGA(E)



4.5 mm

Capacity range (for SC2)

1.3 kW 46 kW

Temperature range (t_{L1})

-35°C +20°C

Type	Rating Q_0 at 50 Hz, DT1, R404 A		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	Outlet		Blade	Power	Per fan		
	kW	kW					$\varnothing$ mm	$\varnothing$ mm		$\varnothing$ mm	230 $\pm$ 10% V-1 50 Hz	rpm	W	A
SGA 23-F21	1.3	0.7	6.2	930	11	1.1	10x1.0*	15x1.0	68	230	230 V-1	1,580	30	0.25
SGA 23-F31	1.7	1.0	9.3	900	11	1.6	10x1.0*	15x1.0	68	230	230 V-1	1,580	30	0.25
SGA 30-F21	2.1	1.3	10.9	1,490	16	1.8	10x1.0*	15x1.0	66	300	230 V-1	1,360	65	0.30
SGA 30-F31	2.6	1.7	16.3	1,430	15	2.7	10x1.0*	15x1.0	66	300	230 V-1	1,360	65	0.30
SGA 35-F21	3.6	2.2	16.2	2,900	30	2.7	10x1.0*	22x1.0	73	350	230 V-1	1,430	150	0.70
SGA 35-F31	4.4	2.9	24.1	2,790	29	4.0	12x1.0*	22x1.0	73	350	230 V-1	1,430	150	0.70
SGA 35-F41	5.2	3.5	32.1	2,700	28	5.4	12x1.0**	28x1.5	73	350	230 V-1	1,430	150	0.70
SGA 35-F61	6.2	4.4	47.9	2,510	26	8.0	12x1.0**	28x1.5	73	350	230 V-1	1,430	150	0.70
SGA 45-F31	7.6	4.8	37.2	4,750	40	6.2	12x1.0**	28x1.5	82	450	230 V-1	1,360	275	1.25
SGA 45-F41	8.5	5.7	49.5	4,570	38	8.1	12x1.0**	28x1.5	82	450	230 V-1	1,360	275	1.25
SGA 45-F51	9.8	6.6	61.7	4,420	37	10.3	15x1.0**	35x1.5	82	450	230 V-1	1,360	275	1.25
SGA 23-F22	2.5	1.6	12.5	1,860	17	2.0	10x1.0*	15x1.0	71	230	230 V-1	1,580	30	0.25
SGA 23-F32	3.0	2.1	18.6	1,800	16	3.0	10x1.0*	15x1.0	71	230	230 V-1	1,580	30	0.25
SGA 30-F22	4.3	2.7	21.8	2,980	22	3.5	12x1.0**	22x1.0	69	300	230 V-1	1,360	65	0.30
SGA 30-F32	5.2	3.5	32.5	2,860	21	5.3	12x1.0**	28x1.5	69	300	230 V-1	1,360	65	0.30
SGA 35-F22	6.8	4.4	32.4	5,800	35	5.2	12x1.0**	28x1.5	76	350	230 V-1	1,430	150	0.70
SGA 35-F32	8.9	6.0	48.3	5,580	34	7.7	12x1.0**	28x1.5	76	350	230 V-1	1,430	150	0.70
SGA 35-F42	10.6	7.2	64.1	5,400	33	10.3	12x1.0**	35x1.5	76	350	230 V-1	1,430	150	0.70
SGA 35-F62	12.4	8.9	95.8	5,020	31	15.2	15x1.0**	35x1.5	76	350	230 V-1	1,430	150	0.70
SGA 45-F32	15.2	9.8	74.5	9,500	45	11.8	15x1.0**	35x1.5	85	450	230 V-1	1,360	275	1.25
SGA 45-F42	17.1	11.7	98.9	9,140	44	15.6	15x1.0**	35x1.5	85	450	230 V-1	1,360	275	1.25
SGA 45-F52	19.8	13.4	123.4	8,840	42	19.6	22x1.0**	42x1.5	85	450	230 V-1	1,360	275	1.25
SGA 23-F23	3.8	2.4	18.7	2,790	20	3.0	12x1.0**	22x1.0	73	230	230 V-1	1,580	30	0.25
SGA 23-F33	4.6	3.1	27.9	2,700	20	4.4	12x1.0**	22x1.0	73	230	230 V-1	1,580	30	0.25
SGA 30-F23	6.1	4.0	32.8	4,470	25	5.2	12x1.0**	28x1.5	71	300	230 V-1	1,360	65	0.30
SGA 30-F33	7.8	5.4	48.8	4,290	24	7.6	12x1.0**	28x1.5	71	300	230 V-1	1,360	65	0.30
SGA 35-F23	11.0	6.6	48.6	8,700	39	7.7	15x1.0**	35x1.5	78	350	230 V-1	1,430	150	0.70
SGA 35-F33	13.7	9.1	72.4	8,370	38	11.4	15x1.0**	35x1.5	78	350	230 V-1	1,430	150	0.70
SGA 35-F43	15.3	10.6	96.2	8,100	37	15.0	15x1.0**	35x1.5	78	350	230 V-1	1,430	150	0.70
SGA 35-F63	17.3	12.6	143.7	7,530	35	22.5	15x1.0**	42x1.5	78	350	230 V-1	1,430	150	0.70
SGA 45-F33	22.9	14.7	111.7	14,250	49	17.6	22x1.0**	42x1.5	87	450	230 V-1	1,360	275	1.25
SGA 45-F43	26.9	17.7	148.4	13,710	47	23.1	22x1.0**	42x1.5	87	450	230 V-1	1,360	275	1.25
SGA 45-F53	28.1	19.8	185.1	13,260	46	28.7	22x1.0**	42x1.5	87	450	230 V-1	1,360	275	1.25
SGA 23-F24	5.0	3.2	25.0	3,720	23	3.9	12x1.0**	22x1.0	74	230	230 V-1	1,580	30	0.25
SGA 23-F34	6.5	4.3	37.2	3,600	22	5.8	12x1.0**	28x1.5	74	230	230 V-1	1,580	30	0.25
SGA 30-F24	8.6	5.4	43.7	5,960	28	6.8	12x1.0**	28x1.5	72	300	230 V-1	1,360	65	0.30
SGA 30-F34	10.9	7.1	65.1	5,720	27	10.2	15x1.0**	35x1.5	72	300	230 V-1	1,360	65	0.30
SGA 35-F24	14.3	9.1	64.8	11,600	41	10.1	15x1.0**	35x1.5	79	350	230 V-1	1,430	150	0.70
SGA 35-F34	17.3	11.7	96.5	11,160	40	14.9	15x1.0**	35x1.5	79	350	230 V-1	1,430	150	0.70
SGA 35-F44	21.9	14.6	128.2	10,800	39	20.0	22x1.0**	42x1.5	79	350	230 V-1	1,430	150	0.70
SGA 35-F64	24.3	17.8	191.6	10,040	37	29.6	22x1.0**	42x1.5	79	350	230 V-1	1,430	150	0.70
SGA 45-F34	29.1	19.5	148.9	19,000	51	23.0	22x1.0**	42x1.5	88	450	230 V-1	1,360	275	1.25
SGA 45-F44	34.4	23.6	197.8	18,280	50	31.0	22x1.0**	54x2.0	88	450	230 V-1	1,360	275	1.25
SGA 45-F54	38.3	26.9	246.8	17,680	48	38.4	22x1.0**	54x2.0	88	450	230 V-1	1,360	275	1.25
SGA 23-F25	6.4	4.0	31.2	4,650	24	4.8	12x1.0**	28x1.5	75	230	230 V-1	1,580	30	0.25
SGA 23-F35	7.9	5.4	46.5	4,500	24	7.2	12x1.0**	28x1.5	75	230	230 V-1	1,580	30	0.25
SGA 30-F25	10.4	6.8	54.6	7,450	29	8.5	12x1.0**	35x1.5	73	300	230 V-1	1,360	65	0.30
SGA 30-F35	13.4	9.0	81.3	7,150	28	12.5	15x1.0**	35x1.5	73	300	230 V-1	1,360	65	0.30
SGA 35-F25	18.6	10.9	81.0	14,500	43	12.4	22x1.0**	35x1.5	80	350	230 V-1	1,430	150	0.70
SGA 35-F35	24.2	14.6	120.6	13,950	42	18.6	22x1.0**	42x1.5	80	350	230 V-1	1,430	150	0.70
SGA 35-F45	26.6	18.3	160.3	13,500	41	24.7	22x1.0**	42x1.5	80	350	230 V-1	1,430	150	0.70
SGA 35-F65	31.2	22.6	239.6	12,550	39	37.1	22x1.0**	54x2.0	80	350	230 V-1	1,430	150	0.70
SGA 45-F35	38.9	24.2	186.1	23,750	53	29.0	22x1.0**	54x2.0	89	450	230 V-1	1,360	275	1.25
SGA 45-F45	45.5	29.1	247.3	22,850	51	38.2	28x1.5**	54x2.0	89	450	230 V-1	1,360	275	1.25

Standard condition	t_{L1}	t_0	DT1
NB1/SC1	+10	0	10
NB2/SC2	0	-8	8
NB3/SC3	-18	-25	7

Correction factors
for other refrigerants

Refrigerants	NB1/SC1	NB2/SC2	NB3/SC3
R134a	1.00	1.00	0.90
R507	0.97	0.97	0.97
R22	0.95	0.95	0.95

* Single injection

** Multiple injection through Küba CAL® distributor

*** Throw limit at 0.5 m/s

Subject to modification.

GEA Küba SG commercial

Technical data – SGB(E)

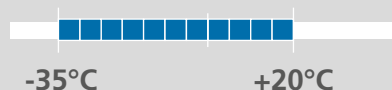


 **7 mm**

Capacity range (for SC2)

0.9 kW  35 kW

Temperature range (t_{L1})



Type	Rating Q ₀ at 50 Hz. DT1. R404 A		Cooling surface	Air flow	Air throw ***	Tube volume	Connections		Sound	Fans (Operational values at 50 Hz)					
	SC2	SC3					Inlet	Outlet		L _{WA}	Blade	Power	Per fan		
	kW	kW											m ²	m ³ /h	m
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	6.2	4.4	47.9	2,510	26	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 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	12.4	8.9	95.8	5,020	31	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 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	17.3	12.6	143.7	7,530	35	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 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**	28x1.5	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	24.3	17.8	191.6	10,040	37	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	31.2	22.6	239.6	12,550	39	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
NB1/SC1	+10	0	10
NB2/SC2	0	-8	8
NB3/SC3	-18	-25	7

Correction factors
for other refrigerants

Refrigerants	NB1/SC1	NB2/SC2	NB3/SC3
R134a	1.00	1.00	0.90
R507	0.97	0.97	0.97
R22	0.95	0.95	0.95

* Single injection

** Multiple injection through Küba CAL® distributor

*** Throw limit at 0.5 m/s

Subject to modification.

GEA Küba SG commercial

Technical data – SGL(E)



12 mm

Capacity range (for SC2)

0.6 kW 26 kW

Temperature range (t_{L1})

-35°C +20°C

Type	Rating Q ₀ at 50 Hz. DT1. R404 A		Cooling surface	Air flow	Air throw ***	Tube volume	Connections		Sound	Fans (Operational values at 50 Hz)				
	SC2	SC3					Inlet	Outlet		L _{WA}	Blade	Power	Per fan	
	kW	kW							m ²				m ³ /h	m
SGL 23-F21	0.6	0.4	2.5	1,080	13	1.1	10x1.0*	15x1.0	68	230	230 V-1	1,580	30	0.25
SGL 23-F31	0.9	0.6	3.7	980	12	1.6	10x1.0*	15x1.0	68	230	230 V-1	1,580	30	0.25
SGL 30-F21	1.0	0.7	4.4	1,590	17	1.8	10x1.0*	15x1.0	66	300	230 V-1	1,360	65	0.30
SGL 30-F31	1.4	1.0	6.5	1,570	17	2.7	10x1.0*	15x1.0	66	300	230 V-1	1,360	65	0.30
SGL 35-F21	1.8	1.2	6.5	3,120	32	2.7	10x1.0*	22x1.0	73	350	230 V-1	1,430	150	0.70
SGL 35-F31	2.4	1.7	9.7	3,070	31	4.0	12x1.0*	22x1.0	73	350	230 V-1	1,430	150	0.70
SGL 35-F41	3.1	2.2	12.9	3,030	31	5.4	12x1.0**	28x1.5	73	350	230 V-1	1,430	150	0.70
SGL 35-F61	4.1	3.0	19.3	2,960	30	8.0	12x1.0**	28x1.5	73	350	230 V-1	1,430	150	0.70
SGL 45-F31	4.0	2.7	15.0	5,220	44	6.2	12x1.0**	28x1.5	82	450	230 V-1	1,360	275	1.25
SGL 45-F41	5.0	3.5	19.9	5,160	43	8.1	12x1.0**	28x1.5	82	450	230 V-1	1,360	275	1.25
SGL 45-F51	6.1	4.2	24.8	5,110	43	10.3	15x1.0**	35x1.5	82	450	230 V-1	1,360	275	1.25
SGL 23-F22	1.3	0.9	5.0	2,160	18	2.0	10x1.0*	15x1.0	71	230	230 V-1	1,580	30	0.25
SGL 23-F32	1.7	1.2	7.5	1,960	17	3.0	10x1.0*	15x1.0	71	230	230 V-1	1,580	30	0.25
SGL 30-F22	2.0	1.4	8.8	3,180	23	3.5	12x1.0**	22x1.0	69	300	230 V-1	1,360	65	0.30
SGL 30-F32	2.8	2.0	13.1	3,140	22	5.3	12x1.0**	28x1.5	69	300	230 V-1	1,360	65	0.30
SGL 35-F22	3.5	2.4	13.0	6,240	37	5.2	12x1.0**	28x1.5	76	350	230 V-1	1,430	150	0.70
SGL 35-F32	4.9	3.4	19.4	6,140	37	7.7	12x1.0**	28x1.5	76	350	230 V-1	1,430	150	0.70
SGL 35-F42	6.2	4.4	25.8	6,060	36	10.3	12x1.0**	35x1.5	76	350	230 V-1	1,430	150	0.70
SGL 35-F62	8.3	6.0	38.6	5,920	36	15.2	15x1.0**	35x1.5	76	350	230 V-1	1,430	150	0.70
SGL 45-F32	8.1	5.5	30.0	10,440	49	11.8	15x1.0**	35x1.5	85	450	230 V-1	1,360	275	1.25
SGL 45-F42	10.1	7.1	39.8	10,320	49	15.6	15x1.0**	35x1.5	85	450	230 V-1	1,360	275	1.25
SGL 45-F52	12.1	8.3	49.7	10,220	48	19.6	22x1.0**	42x1.5	85	450	230 V-1	1,360	275	1.25
SGL 23-F23	1.9	1.3	7.5	3,240	22	3.0	12x1.0*	22x1.0	73	230	230 V-1	1,580	30	0.25
SGL 23-F33	2.5	1.8	11.2	2,940	21	4.4	12x1.0*	22x1.0	73	230	230 V-1	1,580	30	0.25
SGL 30-F23	3.0	2.1	13.2	4,770	26	5.2	12x1.0**	28x1.5	71	300	230 V-1	1,360	65	0.30
SGL 30-F33	4.2	3.0	19.6	4,710	26	7.6	12x1.0**	28x1.5	71	300	230 V-1	1,360	65	0.30
SGL 35-F23	5.3	3.5	19.5	9,360	41	7.7	15x1.0**	35x1.5	78	350	230 V-1	1,430	150	0.70
SGL 35-F33	7.4	5.1	29.1	9,210	40	11.4	15x1.0**	35x1.5	78	350	230 V-1	1,430	150	0.70
SGL 35-F43	9.1	6.6	38.7	9,090	40	15.0	15x1.0**	35x1.5	78	350	230 V-1	1,430	150	0.70
SGL 35-F63	12.1	9.0	57.9	8,880	39	22.5	15x1.0**	42x1.5	78	350	230 V-1	1,430	150	0.70
SGL 45-F33	12.2	8.2	44.9	15,660	53	17.6	22x1.0**	42x1.5	87	450	230 V-1	1,360	275	1.25
SGL 45-F43	15.3	10.5	59.7	15,480	52	23.1	22x1.0**	42x1.5	87	450	230 V-1	1,360	275	1.25
SGL 45-F53	17.8	12.9	74.5	15,330	52	28.7	22x1.0**	42x1.5	87	450	230 V-1	1,360	275	1.25
SGL 23-F24	2.5	1.7	10.1	4,320	24	3.9	12x1.0**	22x1.0	74	230	230 V-1	1,580	30	0.25
SGL 23-F34	3.4	2.3	15.0	3,920	23	5.8	12x1.0**	28x1.5	74	230	230 V-1	1,580	30	0.25
SGL 30-F24	4.0	2.7	17.6	6,360	29	6.8	12x1.0**	28x1.5	72	300	230 V-1	1,360	65	0.30
SGL 30-F34	5.7	3.9	26.2	6,280	28	10.2	15x1.0**	35x1.5	72	300	230 V-1	1,360	65	0.30
SGL 35-F24	7.0	4.8	26.1	12,480	43	10.1	15x1.0**	35x1.5	79	350	230 V-1	1,430	150	0.70
SGL 35-F34	9.7	7.0	38.8	12,280	43	14.9	15x1.0**	35x1.5	79	350	230 V-1	1,430	150	0.70
SGL 35-F44	12.5	8.6	51.6	12,120	42	20.0	22x1.0**	42x1.5	79	350	230 V-1	1,430	150	0.70
SGL 35-F64	16.5	12.1	77.2	11,840	42	29.6	22x1.0**	42x1.5	79	350	230 V-1	1,430	150	0.70
SGL 45-F34	16.0	11.2	59.9	20,880	55	23.0	22x1.0**	42x1.5	88	450	230 V-1	1,360	275	1.25
SGL 45-F44	20.2	14.3	79.6	20,640	55	31.0	22x1.0**	54x2.0	88	450	230 V-1	1,360	275	1.25
SGL 45-F54	24.0	17.1	99.3	20,440	54	38.4	22x1.0**	54x2.0	88	450	230 V-1	1,360	275	1.25
SGL 23-F25	3.2	2.1	12.6	5,400	26	4.8	12x1.0**	28x1.5	75	230	230 V-1	1,580	30	0.25
SGL 23-F35	4.2	3.0	18.7	4,900	25	7.2	12x1.0**	28x1.5	75	230	230 V-1	1,580	30	0.25
SGL 30-F25	5.0	3.5	22.0	7,950	30	8.5	12x1.0**	35x1.5	73	300	230 V-1	1,360	65	0.30
SGL 30-F35	7.0	4.9	32.7	7,850	30	12.5	15x1.0**	35x1.5	73	300	230 V-1	1,360	65	0.30
SGL 35-F25	8.9	5.7	32.6	15,600	45	12.4	22x1.0**	35x1.5	80	350	230 V-1	1,430	150	0.70
SGL 35-F35	12.5	8.1	48.5	15,350	44	18.6	22x1.0**	42x1.5	80	350	230 V-1	1,430	150	0.70
SGL 35-F45	15.4	11.0	64.5	15,150	44	24.7	22x1.0**	42x1.5	80	350	230 V-1	1,430	150	0.70
SGL 35-F65	20.8	15.0	96.4	14,800	43	37.1	22x1.0**	54x2.0	80	350	230 V-1	1,430	150	0.70
SGL 45-F35	20.4	13.4	74.9	26,100	57	29.0	22x1.0**	54x2.0	89	450	230 V-1	1,360	275	1.25
SGL 45-F45	25.7	17.1	99.5	25,800	56	38.2	28x1.5**	54x2.0	89	450	230 V-1	1,360	275	1.25

Standard condition	t_{L1}	t_0	DT1
NB1/SC1	+10	0	10
NB2/SC2	0	-8	8
NB3/SC3	-18	-25	7

Correction factors
for other refrigerants

Refrigerants	NB1/SC1	NB2/SC2	NB3/SC3
R134a	1.00	1.00	0.90
R507	0.97	0.97	0.97
R22	0.95	0.95	0.95

* Single injection

** Multiple injection through Küba CAL® distributor

*** Throw limit at 0.5 m/s

Subject to modification.

GEA Küba SG *commercial*

Electric defrost, weights, drain

Type	Electrical defrost 230 V-1 / 400 V-3-Y			Weights (net)						Weights (gross)						Drain
	Coil	Tray	Total	SGA	SGA E	SGB	SGB E	SGL	SGL E	SGA	SGA E	SGB	SGB E	SGL	SGL E	D
	kW	kW	kW	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	inch
SG 23-21	0.5	0.4	0.9	13	15	13	14	12	14	18	19	17	18	16	18	G ¾
SG 23-31	0.5	0.4	0.9	15	17	14	16	13	15	19	21	18	20	18	19	G ¾
SG 30-21	0.6	0.6	1.2	25	27	23	25	22	24	30	31	28	30	27	29	G ¾
SG 30-31	1.2	0.6	1.8	28	30	26	28	25	27	33	35	31	33	30	32	G ¾
SG 35-21	0.7	0.8	1.5	37	39	35	37	34	36	44	46	42	44	41	43	G ¾
SG 35-31	1.3	0.8	2.1	42	45	39	41	37	39	49	51	46	48	44	46	G ¾
SG 35-41	2.0	0.8	2.8	48	51	44	47	41	44	55	58	51	54	48	51	G ¾
SG 35-61	2.7	0.8	3.5	58	61	51	55	47	51	65	68	58	61	54	58	G ¾
SG 45-31	2.6	0.9	3.5	54	57	49	52	46	49	90	93	85	88	82	85	G ¾
SG 45-41	2.6	0.9	3.5	61	65	54	58	51	54	97	100	90	94	86	90	G ¾
SG 45-51	3.5	0.9	4.4	69	73	60	64	57	61	105	108	96	100	93	97	G ¾
SG 23-22	0.8	0.8	1.6	21	23	20	22	19	21	26	28	25	27	24	26	G ¾
SG 23-32	0.8	0.8	1.6	25	27	23	25	21	23	30	32	27	29	26	28	G ¾
SG 30-22	1.1	1.0	2.1	39	41	36	38	34	37	66	68	63	65	61	63	G ¾
SG 30-32	2.1	1.0	3.1	45	48	41	44	38	41	72	75	68	71	65	68	G ¾
SG 35-22	1.3	1.3	2.6	59	62	55	58	52	55	96	98	91	94	89	91	G 1¼
SG 35-32	2.6	1.3	3.9	69	72	62	66	58	62	105	109	99	102	95	98	G 1¼
SG 35-42	3.6	1.3	4.9	79	84	70	75	65	70	116	120	107	111	102	106	G 1¼
SG 35-62	4.8	1.3	6.1	98	103	85	90	78	82	135	140	122	127	114	119	G 1¼
SG 45-32	4.5	1.6	6.1	95	100	85	90	79	84	170	175	160	165	154	159	G 1¼
SG 45-42	4.5	1.6	6.1	109	114	96	101	88	93	184	189	171	176	163	168	G 1¼
SG 45-52	6.0	1.6	7.6	124	130	107	113	101	107	199	205	182	188	176	182	G 1¼
SG 23-23	1.2	1.1	2.3	28	30	25	28	24	26	62	64	59	62	58	60	G ¾
SG 23-33	1.2	1.1	2.3	33	36	29	32	27	30	67	70	63	66	61	64	G ¾
SG 30-23	1.5	1.5	3.0	55	58	50	53	48	51	90	93	86	89	83	86	G ¾
SG 30-33	3.0	1.5	4.5	64	68	58	62	54	58	100	104	93	97	89	93	G ¾
SG 35-23	1.8	1.8	3.6	84	87	77	80	74	76	182	184	175	178	171	174	G 1¼
SG 35-33	3.6	1.8	5.4	98	102	88	92	82	86	195	199	186	189	180	184	G 1¼
SG 35-43	5.2	1.8	7.0	112	117	99	104	91	96	209	215	196	202	188	194	G 1¼
SG 35-63	7.2	1.8	9.0	141	146	121	127	109	115	238	244	219	224	207	213	G 1¼
SG 45-33	6.5	2.2	8.7	139	144	124	129	115	120	267	272	251	256	243	248	G 1¼
SG 45-43	6.5	2.2	8.7	159	165	138	145	127	134	286	293	266	272	255	261	G 1¼
SG 45-53	8.6	2.2	10.8	180	188	154	162	145	153	307	315	282	290	273	280	G 1¼
SG 23-24	1.5	1.5	3.0	35	38	32	35	30	33	110	113	107	110	105	108	G ¾
SG 23-34	1.5	1.5	3.0	43	46	38	41	35	38	118	121	113	116	110	113	G ¾
SG 30-24	1.9	2.0	3.9	71	75	66	69	62	66	161	165	156	159	152	156	G 1¼
SG 30-34	3.9	2.0	5.9	84	89	76	81	71	75	174	179	166	171	161	165	G 1¼
SG 35-24	2.2	2.3	4.5	109	112	100	103	95	98	222	224	213	216	208	211	G 1¼
SG 35-34	4.5	2.3	6.8	128	131	114	118	107	111	240	244	227	231	219	223	G 1¼
SG 35-44	6.5	2.3	8.8	148	153	131	136	121	125	261	266	243	248	233	238	G 1¼
SG 35-64	9.0	2.3	11.3	185	191	159	164	143	149	297	303	271	277	256	261	G 1¼
SG 45-34	7.2	0.7	7.9	180	187	159	167	148	156	375	382	354	362	343	351	G 1¼
SG 45-44	10.1	0.7	10.8	209	220	182	193	167	178	404	415	377	388	362	373	G 1¼
SG 45-54	11.5	0.7	12.2	238	250	205	216	192	204	433	445	400	411	387	399	G 1¼
SG 23-25	1.9	1.8	3.7	45	48	40	44	38	41	127	130	123	126	121	124	G 1¼
SG 23-35	1.9	1.8	3.7	54	57	47	50	44	47	136	139	130	133	126	129	G 1¼
SG 30-25	2.3	1.2	3.5	88	91	80	84	76	79	193	196	185	189	181	184	G 1¼
SG 30-35	4.6	1.2	5.8	104	109	93	98	86	91	209	214	198	203	191	196	G 1¼
SG 35-25	4.3	0.7	5.0	136	142	125	131	118	124	271	277	260	266	253	259	G 1¼
SG 35-35	5.8	0.7	6.5	160	167	144	151	134	141	295	302	279	286	269	276	G 1¼
SG 35-45	8.6	0.7	9.3	182	190	160	168	147	156	317	325	295	303	282	291	G 1¼
SG 35-65	11.5	0.7	12.2	230	241	197	208	178	189	365	376	332	343	313	324	G 1¼
SG 45-35	9.0	0.9	9.9	224	231	198	206	184	192	501	509	476	483	462	469	G 1¼
SG 45-45	12.6	0.9	13.5	258	268	227	237	205	215	535	546	504	515	482	493	G 1¼

GEA Küba SG commercial

Dimensions

Type	Dimensions																	
	H	B	T	L	E ₁	E ₂	E ₃	F	A	W _{min}	W _{Hood}	Ø G	GA	GE ₁	GE ₂	GE ₃	GE ₄	GE ₅
	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	-	-	-	-
SG 23-31	347	760	455	335	480	-	-	140	129	200	290	253	155	380	-	-	-	-
SG 30-21	449	960	453	360	620	-	-	170	103	200	340	353	204	480	-	-	-	-
SG 30-31	449	960	453	360	620	-	-	170	103	200	340	353	204	480	-	-	-	-
SG 35-21	554	1,130	624	515	730	-	-	200	118	300	430	421	253	565	-	-	-	-
SG 35-31	554	1,130	624	515	730	-	-	200	118	300	430	421	253	565	-	-	-	-
SG 35-41	554	1,130	624	515	730	-	-	200	118	300	430	421	253	565	-	-	-	-
SG 35-61	554	1,130	624	515	730	-	-	200	118	300	430	421	253	565	-	-	-	-
SG 45-31	652	1,330	662	510	930	-	-	200	162	400	500	550	306	665	-	-	-	-
SG 45-41	652	1,330	662	510	930	-	-	200	162	400	500	550	306	665	-	-	-	-
SG 45-51	652	1,330	662	510	930	-	-	200	162	400	500	550	306	665	-	-	-	-
 SG 23-22	347	1,210	455	335	930	-	-	140	129	200	290	253	155	830	380	-	-	-
 SG 23-32	347	1,210	455	335	930	-	-	140	129	200	290	253	155	830	380	-	-	-
 SG 30-22	449	1,550	453	360	1,210	-	-	170	103	200	340	353	204	1,070	480	-	-	-
SG 30-32	449	1,550	453	360	1,210	-	-	170	103	200	340	353	204	1,070	480	-	-	-
SG 35-22	554	1,830	624	515	1,430	-	-	200	118	300	430	421	253	1,265	565	-	-	-
SG 35-32	554	1,830	624	515	1,430	-	-	200	118	300	430	421	253	1,265	565	-	-	-
SG 35-42	554	1,830	624	515	1,430	-	-	200	118	300	430	421	253	1,265	565	-	-	-
SG 35-62	554	1,830	624	515	1,430	-	-	200	118	300	430	421	253	1,265	565	-	-	-
SG 45-32	652	2,230	662	510	1,830	-	-	200	162	400	500	550	306	1,565	665	-	-	-
SG 45-42	652	2,230	662	510	1,830	-	-	200	162	400	500	550	306	1,565	665	-	-	-
SG 45-52	652	2,230	662	510	1,830	-	-	200	162	400	500	550	306	1,565	665	-	-	-
 SG 23-23	347	1,660	455	335	1,380	450	-	140	129	200	290	253	155	1,280	380	830	-	-
 SG 23-33	347	1,660	455	335	1,380	450	-	140	129	200	290	253	155	1,280	380	830	-	-
 SG 30-23	449	2,140	453	360	1,800	590	-	170	103	200	340	353	204	1,660	480	1,070	-	-
 SG 30-33	449	2,140	453	360	1,800	590	-	170	103	200	340	353	204	1,660	480	1,070	-	-
SG 35-23	554	2,530	624	515	2,130	700	-	200	118	300	430	421	253	1,965	565	1,265	-	-
SG 35-33	554	2,530	624	515	2,130	700	-	200	118	300	430	421	253	1,965	565	1,265	-	-
SG 35-43	554	2,530	624	515	2,130	700	-	200	118	300	430	421	253	1,965	565	1,265	-	-
SG 35-63	554	2,530	624	515	2,130	700	-	200	118	300	430	421	253	1,965	565	1,265	-	-
SG 45-33	652	3,130	662	510	2,730	900	-	200	162	400	500	550	306	2,465	665	1,565	-	-
SG 45-43	652	3,130	662	510	2,730	900	-	200	162	400	500	550	306	2,465	665	1,565	-	-
SG 45-53	652	3,130	662	510	2,730	900	-	200	162	400	500	550	306	2,465	665	1,565	-	-
 SG 23-24	347	2,110	455	335	1,830	900	-	140	129	200	290	253	155	1,730	380	830	1,280	-
 SG 23-34	347	2,110	455	335	1,830	900	-	140	129	200	290	253	155	1,730	380	830	1,280	-
 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	-
 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	-
 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	-
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	-
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	-
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	-
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	-
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	-
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	-
 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
 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
 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
 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
 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
 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
 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
 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
 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
 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

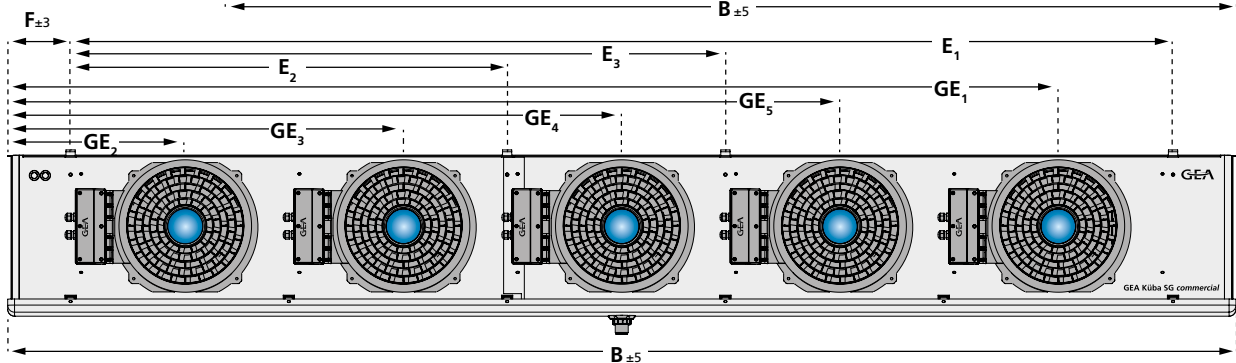
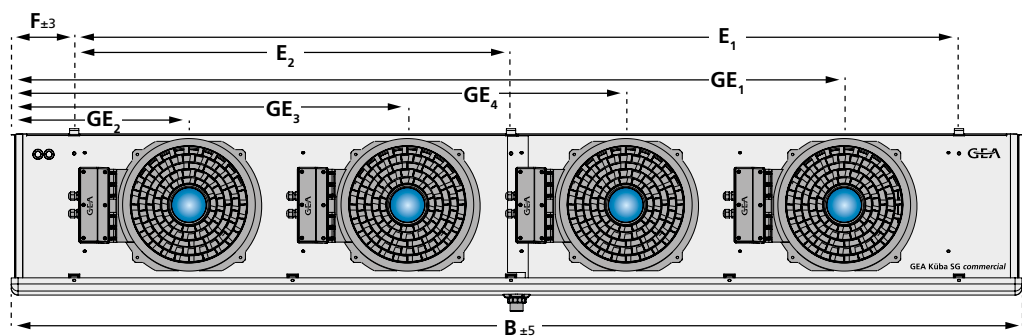
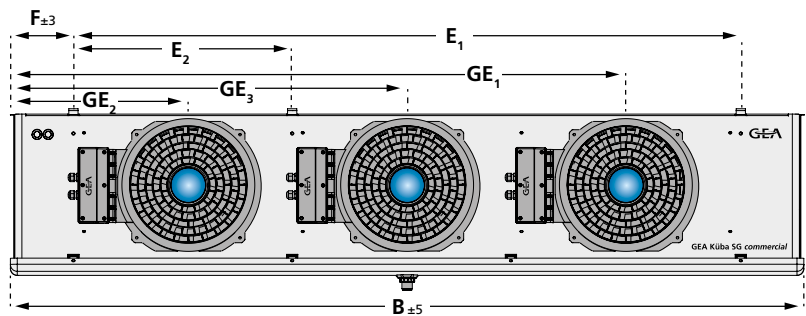
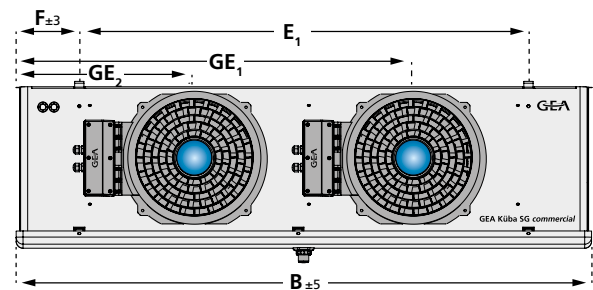
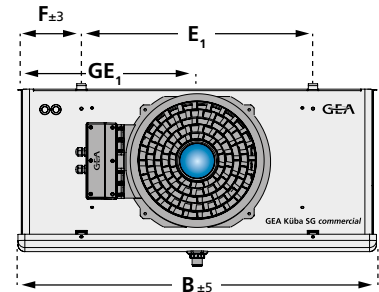
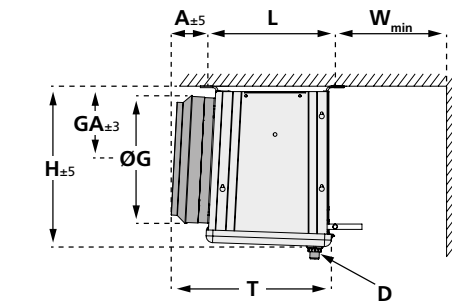
Important: The dimensions given here apply only to the standard models.
Please take into account dimension differences of variant models and accessories.

GEA Küba SG *commercial*

Dimensional drawings

Dimensional drawings for GEA Küba SG *commercial* (1 to 5 motors)

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



GEA Küba SG commercial

Variants

With the help of the program Küba Select, you can always choose the individual heat exchanger best suited for your requirements. If you have any questions, please get in touch with our technical staff in Sales.

Motor variants

V1.07 Fan guard

Fans with contact safety guard

V1.50 EC fans with fixed speeds

SG 23: ESM motor with 2 speeds (standard)
from SG 30: EC motor with fixed speed

V1.52 EC fan with controllable speed

Controllable fan, 0...10 V, for Ø300, 350, and 450 mm

Protection against corrosion

V3.12 Stainless steel casing*

For special protection from salts and organic acids in the air of the cold room

V6.01 Corrosion protection 1

Tubing: Cu
Fins: epoxy-resin-coated aluminum
Casing: aluminum/zinc coated steel,
with protective coating on both sides

V6.02 Corrosion protection 2

Tubing: stainless steel
Fins: epoxy-resin-coated aluminum
Casing: aluminum / zinc coated steel,
with protective coating on both sides

V6.03 Corrosion protection 3

Tubing: stainless steel
Fins: aluminum
Casing: aluminum / zinc coated steel,
with protective coating on one side

V6.04 Corrosion protection 4

Tubing: Cu
Fins: epoxy-resin-coated aluminum
Casing: aluminum / zinc coated steel,
with protective coating on one side

* Stainless steel: V2A 1.4301; upon request: V4A 1.4404

Casing variant

V3.09 Double-walled, insulated drip tray

The drip tray is provided with double walls and with insulation between the walls 25 mm thick. It prevents condensed water from forming on the bottom side of the pan, and it reduces the transfer of defrost heat into the cold rooms.

CO₂ variants

V7.10 CO₂ pump

V7.45 CO₂ -DX with up to 45 bar operating pressure

V7.60 CO₂ -DX with up to 60 bar operating pressure

Defrost variants

V4.01 Hot-gas coil in the drip tray (Cu)

Hot-gas connection on both sides; copper

V4.02 Hot-gas coil in the drip tray (VA)

Hot-gas connection on both sides; stainless steel

V4.06 Drip tray with electric heating

V6.05 Hot gas in heat exchanger and drip tray

Hot-gas circuitry for coolers, without non-return valve

V6.07 Hot gas in heat exchanger and drip tray

Hot-gas connection in coils; hot-gas coil in the drip tray, with check valve

Brine defrost with a separate circuit

Upon request

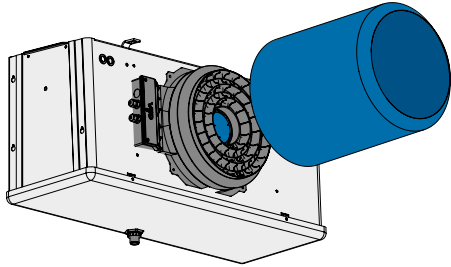


Designs with water/brine flow and with NH₃ pump operation are identified by unit type codes (F/G/N): see page 2.

GEA Küba SG commercial

Accessories and their application benefits

Shut-Up®



Shut-Up® together with the defrost hood optimize the defrost procedure, especially in deep-freeze applications.

Benefits (in conjunction with the defrost hood):

With the Shut-Up® and the defrost hood, a positive accumulation of heat in the air cooler during the defrost process occurs. The heat remains in the cooler, which results in the following benefits:

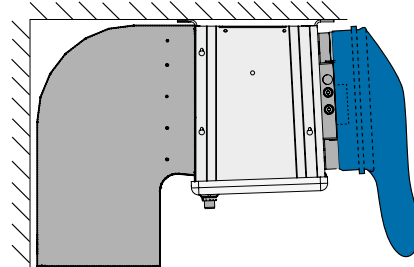
- Defrost times are reduced by more than 50 %
- Significant energy savings
- As a result of minimal vapor formation, no frost built-up on the ceiling of the cold room or on the stored goods



Design note:

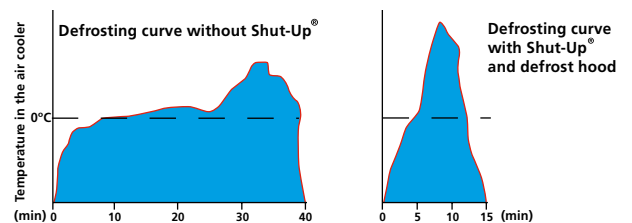
The additional external pressure reduces the air volume by approx. 10 % = approx. 5 % less cooling capacity.

Defrost hood



Application: Frozen storage from -18 °C and below
Alternating defrost of several air coolers in one room

Defrosting process with Shut-Up® and defrost hood:



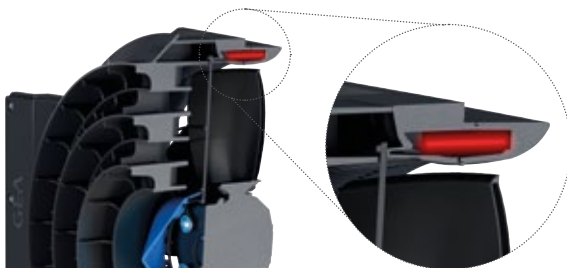
With our deep-freeze package (Shut-Up® + defrost hood), you will reduce defrost in less than half the time.



Design note:

The use of Shut-Up® and the defrost hood together reduces air volume by approx. 20% = approx. 10% less cooling capacity

WH® Küba wall ring heating



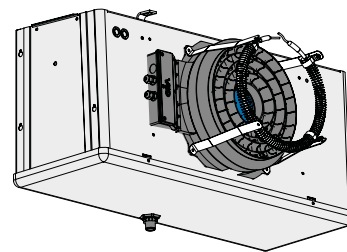
WH® Küba wall ring heating prevents formation of ice between fan blade and the wall ring.

Benefits of the newly developed wall ring heating:

- 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.



Finned-tube heaters (RHR)



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

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.

The image shows only one installation possibility. The user will have to take his particular installation situation into account.



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GEA Heat Exchangers

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