CHANGING
GEA HEAT EXCHANGERS



Küba SG *industrial*

High-performance air cooler for the most complex of cooling applications

Küba SG *industrial*

Maximum range of performance for the most complex of demands for cooling







Enormous air volumes and directed air flow

Hinged fans optional



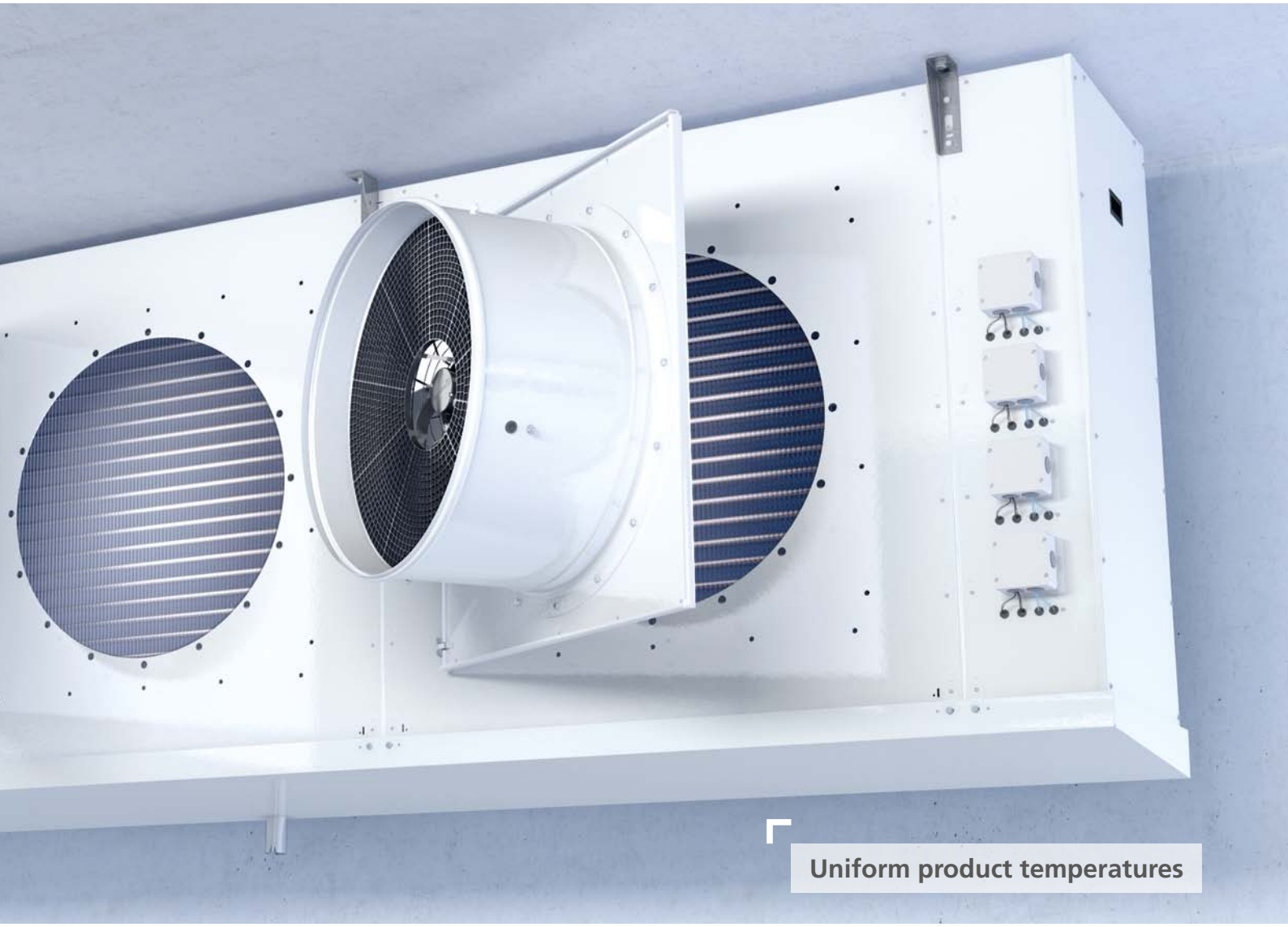
Type designation code

1	2	3	4		5	6	7	8
SG	A	E	71	-	F	6	2	A

Refrigerant (Box 5)

F	HFC / CO_2	**G**	Glycol	**N**	Pump operation, NH_3

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



Uniform product temperatures

Capacity range (for SC2)

6.1 kW — 146 kW

Temperature range (t_{L1})

-35°C | 0°C | +30°C

Number of fans

to

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Applications

- Cooling of unpackaged goods
- Cold storage rooms with high traffic loading
- Deep freezing
- Complex cooling applications

Küba SG *industrial*

Application benefits for contractors and operators

System complexity depends on a wide range of impacting factors. Construction conditions such as large halls require large throws. If the room is frequently filled or if products are removed regularly, opening and closing of doors leads to a relatively high influx of moisture. The installed air coolers must be able to handle such high moisture volumes and keep defrosting intervals to a minimum. If aggressive particles suspended in the air of other rooms enter the storage area, the selection of corrosion protection must take this situation into account.

Due to their size and high external resistance, rapid cooling areas in abattoirs require high air flow volumes.
The Küba SG *industrial* sports reinforced fans which provide the reliability needed to satisfy these demands.

The Küba SG *industrial* air equalisers ensure that the air flow is directed, thereby reaching throws up to 110 m. Lower air volumes are required in storage areas: speed controlled fans ensure adequate movement of air throughout the storage phase.

Küba SG *industrial*

from the Küba Blue Line production range

Easily meeting hygiene directives

The statutory hygiene directives for small and large abattoirs and butcheries are becoming increasingly more strict. These directives mandate that working and storage areas be cleaned and disinfected on a regular basis.

The Küba Blue Line has special corrosion protection variants such as stainless steel tubes, gold varnish fins (epoxy resin coated) and powder coated or lacquered casings enabling it to withstand such intensive cleaning and disinfection.

For cleaning to be fast, simple and therefore cost-effective, accessories such as swivelling fans are also available for the Küba SG *industrial*. Hinged drip trays are standard.

Further processing of the meat through smoking or pickling must also be taken into consideration in terms of corrosion protection. We recommend a stainless steel casing for such applications and the corrosion protection model with stainless steel tubes and gold varnish coated fins.

The energy-saving powerhouse in the deep freeze store

The standard Küba SG *industrial* handles classic deep freeze applications (-18°C to -28°C) with ease. Deep frozen goods should be stored at temperatures no higher than -18°C.

Partial thawing must be prevented, even if frequent access allows a great deal of warm air and moisture to enter the storage area. Entering air must reach the air cooler as quickly as possible. Speed controlled fans or delta/star switched fans allow the air volume to be regulated.

Some dehumidification is also important to the storage of open refrigerated goods – a function which the Küba HFE® tube/fin system and the Küba CAL® distributor will ensure.

A long cooling period, or cooling time between defrosting phases, will ensure that the temperature of the cold room and of the produce will remain constant: The coolers will need defrosting less often – in the light of the increasing cost of power, this is an important contribution to the energy efficiency of the system.

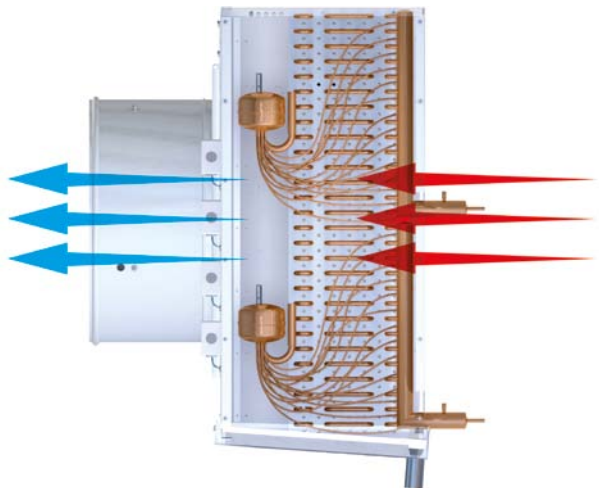
Variants perfectly complement standard designs

Selecting the right corrosion protection is decisive to operational reliability, particularly in the case of fish and seafood. The Küba SG *industrial* can offer suitable combinations of materials for these applications.

Defrosting the air cooler at low temperatures is particularly challenging. As for the entire Küba Blue Line, the desired solution to defrosting (electrical, hot gas, cold gas, brine) may be fine-tuned to suit the plant design.

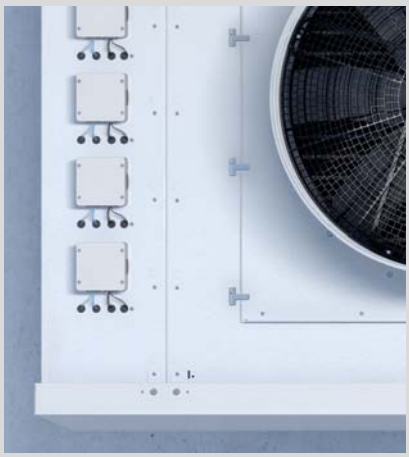
To achieve maximum efficiency in these applications, we recommend using Shut-Up® in combination with the double-walled, insulated Küba defrosting hood and an insulated drip tray. The generated heat will thus remain in the radiator block, preventing undesirable temperature increases in the freezer room.

The option with the 5° sloping fan chute will ensure that condensate drains from the nozzle into the drip tray thus, in combination with the fan heater (VRB), largely preventing the fan blades from freezing to the air guide ring.



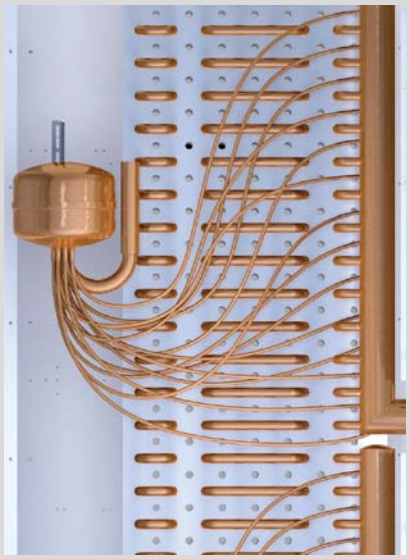
Küba SG *industrial*

Basic version



Casing

- Zinc coated steel
- High-grade powder coating RAL 9018 papyrus white
- Food-safe
- Best quality powder coated edges
- Hinged drip tray and removable side panels
- Double drip tray
- Stainless steel mounting material
- Plastic drain up to 1 1/4“ Stainless steel drain from 2“



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 K = 10 mm | L = 12 mm
- Fins flared to form-fit the core tube
- Maximum heat transfer with compact dimensions
- **Series SG-F: HFC / CO_2** 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 / NH_3** 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.



Fans

- Available fan diameter:
  500 / 560 / 630 / 710 / 800 mm
- Permissible motor ambient temperatures:
  -40°C bis +70°C (depends on type)
- 400 ± 10% V-3~ 50Hz
- SG 56 and SG 63 also available in 60 Hz
- In the standard design the fans are equipped with Air Guiding Grid, air duct and contact protection.
- Protection class: IP 54
- Insulation class: F
- Operating data can be found with Küba Select or in the technical data.
- Controller:
  Phase control ☑
  Transformer ☐
  Delta/star ☑
  Frequency converter ☑
  Please observe the manufacturer's information!



Motor label data*

Type		50 Hz						60 Hz					
		rpm		W		A		rpm		W		A	
	Ø mm	Δ	Y	Δ	Y	Δ	Y	Δ	Y	Δ	Y	Δ	Y
SG 50 41-85 A	500	1,340	940	840	550	1.45	0.96	-	-	-	-	-	-
SG 56 41-85 A	560	1,280	910	1,050	580	2.20	1.10	1,320	830	1,350	580	2.60	1.15
SG 63 41-85 A	630	900	720	620	440	1.25	0.72	980	640	940	520	1.60	0.88
SG 71 41-84 A	710	900	690	940	620	1.70	1.05	-	-	-	-	-	-
SG 80 41-84 A	800	900	700	1,800	1,150	3.90	2.20	-	-	-	-	-	-

Motor data per fan

* Data provided by the manufacturer

Küba SG *industrial*

Technical data – SGA (E)

4,5 mm

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	Current	Per Fan		
	kW	kW	m^2	m^3/h	m	dm^3	Ø mm	Ø mm	db (A)	Ø mm	230 ± 10% V-1 50 Hz	rpm	W	A
SGA 50-F41 A	10.3	6.9	55.0	5,420	29	9.0	10 x 1.0	28 x 1.5	82.8	500	400 V-3	1,350	740	1.36
SGA 50-F61 A	12.0	8.5	82.1	5,000	27	13.3	10 x 1.0	28 x 1.5	82.8	500	400 V-3	1,350	740	1.36
SGA 56-F41 A	13.1	8.8	73.3	6,710	31	12.0	10 x 1.0	28 x 1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGA 56-F61 A	15.4	10.8	109.5	6,240	29	18.0	15 x 1.0	35 x 1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGA 56-F81 A	16.5	11.9	145.8	5,890	27	23.8	15 x 1.0	35 x 1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGA 63-F41 A	15.6	10.4	98.9	7,250	28	16.0	15 x 1.0	28 x 1.5	79.8	630	400 V-3	900	590	1.21
SGA 63-F61 A	18.0	12.6	147.8	6,790	26	24.1	22 x 1.0	35 x 1.5	79.8	630	400 V-3	900	590	1.21
SGA 63-F81 A	18.9	13.8	196.8	6,430	25	31.8	22 x 1.0	35 x 1.5	79.8	630	400 V-3	900	590	1.21
SGA 71-F41 A	23.8	16.4	153.9	11,150	40	25.0	15 x 1.0	35 x 1.5	79.5	710	400 V-3	920	710	1.44
SGA 71-F61 A	27.6	19.8	230.0	10,480	37	37.0	22 x 1.0	35 x 1.5	79.5	710	400 V-3	920	710	1.44
SGA 71-F81 A	29.1	21.6	306.1	9,910	35	49.3	22 x 1.0	42 x 1.5	79.5	710	400 V-3	920	710	1.44
SGA 80-F41 A	30.8	21.4	179.5	15,810	48	29.7	15 x 1.0	42 x 1.5	86.8	800	400 V-3	930	1,480	3.58
SGA 80-F61 A	37.2	26.2	268.3	14,960	45	43.8	22 x 1.0	42 x 1.5	86.8	800	400 V-3	930	1,480	3.58
SGA 50-F42 A	20.6	13.8	109.9	10,840	41	17.3	15 x 1.0	35 x 1.5	85.8	500	400 V-3	1,350	740	1.36
SGA 50-F62 A	23.4	16.9	164.3	10,000	38	25.7	15 x 1.0	35 x 1.5	85.8	500	400 V-3	1,350	740	1.36
SGA 56-F42 A	26.3	17.7	146.5	13,420	44	23.1	15 x 1.0	35 x 1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGA 56-F62 A	31.0	21.7	219.0	12,480	41	34.7	22 x 1.0	42 x 1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGA 56-F82 A	33.1	24.0	291.5	11,780	39	45.8	22 x 1.0	42 x 1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGA 63-F42 A	30.6	21.5	197.8	14,500	39	31.4	22 x 1.0	42 x 1.5	82.8	630	400 V-3	900	590	1.21
SGA 63-F62 A	36.0	25.2	295.7	13,580	37	46.3	22 x 1.0	42 x 1.5	82.8	630	400 V-3	900	590	1.21
SGA 63-F82 A	37.5	28.3	393.5	12,860	35	61.3	22 x 1.0	42 x 1.5	82.8	630	400 V-3	900	590	1.21
SGA 71-F42 A	46.5	33.2	307.7	22,300	56	48.4	22 x 1.0	42 x 1.5	82.5	710	400 V-3	920	710	1.44
SGA 71-F62 A	55.3	39.7	459.9	20,960	53	72.9	28 x 1.5	54 x 2.0	82.5	710	400 V-3	920	710	1.44
SGA 71-F82 A	57.4	44.0	612.2	19,820	50	96.1	28 x 1.5	54 x 2.0	82.5	710	400 V-3	920	710	1.44
SGA 80-F42 A	60.7	42.9	359.0	31,620	68	57.8	22 x 1.0	54 x 2.0	89.8	800	400 V-3	930	1,480	3.58
SGA 80-F62 A	74.6	52.7	536.6	29,920	64	83.4	2x22 x 1.0	2x42 x 1.5	89.8	800	400 V-3	930	1,480	3.58
SGA 50-F43 A	30.6	21.0	164.9	16,260	50	25.7	15 x 1.0	42 x 1.5	87.6	500	400 V-3	1,350	740	1.36
SGA 50-F63 A	36.2	25.7	246.4	15,000	47	38.2	22 x 1.0	42 x 1.5	87.6	500	400 V-3	1,350	740	1.36
SGA 56-F43 A	37.6	26.5	219.8	20,130	53	34.3	15 x 1.0	42 x 1.5	91.9	560	400 V-3	1,300	1,010	2.22
SGA 56-F63 A	46.1	32.9	328.5	18,720	50	50.9	22 x 1.0	42 x 1.5	91.9	560	400 V-3	1,300	1,010	2.22
SGA 56-F83 A	48.4	36.6	437.3	17,670	48	68.2	22 x 1.0	54 x 2.0	91.9	560	400 V-3	1,300	1,010	2.22
SGA 63-F43 A	45.4	32.3	296.7	21,750	47	46.0	22 x 1.0	42 x 1.5	84.6	630	400 V-3	900	590	1.21
SGA 63-F63 A	52.8	39.0	443.5	20,370	45	69.1	22 x 1.0	54 x 2.0	84.6	630	400 V-3	900	590	1.21
SGA 63-F83 A	55.9	42.7	590.3	19,290	43	91.5	28 x 1.5	54 x 2.0	84.6	630	400 V-3	900	590	1.21
SGA 71-F43 A	71.7	49.5	461.6	33,450	69	72.4	28 x 1.5	54 x 2.0	84.3	710	400 V-3	920	710	1.44
SGA 71-F63 A	82.9	59.6	689.9	31,440	65	105.5	2x22 x 1.0	2x42 x 1.5	84.3	710	400 V-3	920	710	1.44
SGA 71-F83 A	87.3	65.0	918.2	29,730	62	140.3	2x28 x 1.5	2x42 x 1.5	84.3	710	400 V-3	920	710	1.44
SGA 80-F43 A	94.3	64.4	538.5	47,430	83	84.5	28 x 1.5	54 x 2.0	91.6	800	400 V-3	930	1,480	3.58
SGA 80-F63 A	111.9	79.1	804.9	44,880	79	124.7	2x28 x 1.5	2x54 x 2.0	91.6	800	400 V-3	930	1,480	3.58
SGA 50-F44 A	39.2	27.6	219.8	21,680	58	33.8	15 x 1.0	42 x 1.5	88.8	500	400 V-3	1,350	740	1.36
SGA 50-F64 A	46.9	34.2	328.5	20,000	55	50.9	22 x 1.0	54 x 2.0	88.8	500	400 V-3	1,350	740	1.36
SGA 56-F44 A	52.8	35.6	293.1	26,840	62	45.9	22 x 1.0	54 x 2.0	93.1	560	400 V-3	1,300	1,010	2.22
SGA 56-F64 A	62.0	43.4	438.0	24,960	58	68.0	28 x 1.5	54 x 2.0	93.1	560	400 V-3	1,300	1,010	2.22
SGA 56-F84 A	66.2	48.0	583.0	23,560	56	89.0	2x22 x 1.0	2x42 x 1.5	93.1	560	400 V-3	1,300	1,010	2.22
SGA 63-F44 A	61.3	43.2	395.7	29,000	55	61.4	22 x 1.0	54 x 2.0	85.8	630	400 V-3	900	590	1.21
SGA 63-F64 A	71.0	51.9	591.4	27,160	52	91.1	28 x 1.5	54 x 2.0	85.8	630	400 V-3	900	590	1.21
SGA 63-F84 A	75.0	56.7	787.1	25,720	50	119.6	2x22 x 1.0	2x42 x 1.5	85.8	630	400 V-3	900	590	1.21
SGA 71-F44 A	93.2	66.8	615.5	44,600	79	95.1	28 x 1.5	54 x 2.0	85.5	710	400 V-3	920	710	1.44
SGA 71-F64 A	108.7	80.7	919.9	41,920	75	140.7	2x22 x 1.0	2x54 x 2.0	85.5	710	400 V-3	920	710	1.44
SGA 71-F84 A	115.0	88.2	1224.3	39,640	72	186.8	2x28 x 1.5	2x54 x 2.0	85.5	710	400 V-3	920	710	1.44
SGA 80-F44 A	121.8	86.3	718.0	63,240	96	112.3	28 x 1.5	64 x 2.0	92.8	800	400 V-3	930	1,480	3.58
SGA 80-F64 A	145.9	106.7	1073.2	59,840	91	164.5	2x28 x 1.5	2x54 x 2.0	92.8	800	400 V-3	930	1,480	3.58
SGA 50-F55 A	50.5	35.1	274.8	27,100	65	42.6	22 x 1.0	54 x 2.0	89.8	500	400 V-3	1,350	740	1.36
SGA 50-F65 A	59.9	43.1	410.7	25,000	61	63.0	22 x 1.0	54 x 2.0	89.8	500	400 V-3	1,350	740	1.36
SGA 56-F55 A	64.5	45.1	366.3	33,550	69	56.7	22 x 1.0	54 x 2.0	94.1	560	400 V-3	1,300	1,010	2.22
SGA 56-F65 A	76.4	55.2	547.6	31,200	65	84.2	28 x 1.5	54 x 2.0	94.1	560	400 V-3	1,300	1,010	2.22
SGA 56-F85 A	81.9	61.1	728.8	29,450	62	110.6	2x22 x 1.0	2x42 x 1.5	94.1	560	400 V-3	1,300	1,010	2.22
SGA 63-F55 A	74.7	53.7	494.6	36,250	62	76.0	22 x 1.0	54 x 2.0	86.8	630	400 V-3	900	590	1.21
SGA 63-F65 A	87.3	65.1	739.2	33,950	59	113.0	28 x 1.5	54 x 2.0	86.8	630	400 V-3	900	590	1.21
SGA 63-F85 A	92.7	71.4	983.8	32,150	56	149.6	2x22 x 1.0	2x54 x 2.0	86.8	630	400 V-3	900	590	1.21

Subject to modification.

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

* Throw limit at 0.5 m/s

Küba SG *industrial*

Technical data – SGB (E)

7 mm

Type	Rating Q_0 at 50 Hz. DT1. R404A		Cooling surface	Air flow	Air throw *	Tube volume	Connections		Sound	Fans (Operational values at 50 Hz)				
	SC2	SC3					Inlet	Outlet	L_{WA}	Blade	Current	Per Fan		
	kW	kW	m^2	m^3/h	m	dm^3	Ø mm	Ø mm	db (A)	Ø mm	230 ± 10% V-1 50 Hz	rpm	W	A
SGB 50-F41 A	8.1	5.4	36.2	5,990	32	9.0	10x1.0	28x1.5	82.8	500	400 V-3	1,350	740	1.36
SGB 50-F61 A	10.2	7.1	54.1	5,610	30	13.3	10x1.0	28x1.5	82.8	500	400 V-3	1,350	740	1.36
SGB 56-F41 A	10.3	6.9	48.3	7,340	34	12.0	10x1.0	28x1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGB 56-F61 A	13.1	9.0	72.1	6,940	32	18.0	15x1.0	35x1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGB 56-F81 A	15.0	10.5	96.0	6,640	30	23.8	15x1.0	35x1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGB 63-F41 A	12.2	8.1	65.1	7,820	30	16.0	15x1.0	28x1.5	79.8	630	400 V-3	900	590	1.21
SGB 63-F61 A	15.3	10.5	97.4	7,460	28	24.1	22x1.0	35x1.5	79.8	630	400 V-3	900	590	1.21
SGB 63-F81 A	17.2	12.1	129.6	7,150	27	31.8	22x1.0	35x1.5	79.8	630	400 V-3	900	590	1.21
SGB 71-F41 A	18.4	12.6	101.3	11,720	42	25.0	15x1.0	35x1.5	79.5	710	400 V-3	920	710	1.44
SGB 71-F61 A	23.4	16.4	151.5	11,440	41	37.0	22x1.0	35x1.5	79.5	710	400 V-3	920	710	1.44
SGB 71-F81 A	26.6	19.1	201.6	11,050	39	49.3	22x1.0	42x1.5	79.5	710	400 V-3	920	710	1.44
SGB 80-F41 A	24.4	17.0	118.2	17,350	53	29.7	15x1.0	42x1.5	86.8	800	400 V-3	930	1,480	3.58
SGB 80-F61 A	31.5	21.9	176.7	16,580	50	43.8	22x1.0	42x1.5	86.8	800	400 V-3	930	1,480	3.58
SGB 80-F81 A	35.7	25.8	235.2	15,810	48	57.6	22x1.0	42x1.5	86.8	800	400 V-3	930	1,480	3.58
SGB 50-F42 A	16.3	10.9	72.4	11,980	45	17.3	15x1.0	35x1.5	85.8	500	400 V-3	1,350	740	1.36
SGB 50-F62 A	20.1	14.5	108.2	11,220	42	25.7	15x1.0	35x1.5	85.8	500	400 V-3	1,350	740	1.36
SGB 56-F42 A	20.7	13.9	96.5	14,680	47	23.1	15x1.0	35x1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGB 56-F62 A	26.2	18.0	144.3	13,880	45	34.7	22x1.0	42x1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGB 56-F82 A	30.0	21.1	192.0	13,280	43	45.8	22x1.0	42x1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGB 63-F42 A	24.0	16.8	130.3	15,640	41	31.4	22x1.0	42x1.5	82.8	630	400 V-3	900	590	1.21
SGB 63-F62 A	30.6	21.0	194.7	14,920	40	46.3	22x1.0	42x1.5	82.8	630	400 V-3	900	590	1.21
SGB 63-F82 A	34.2	25.0	259.2	14,300	38	61.3	22x1.0	42x1.5	82.8	630	400 V-3	900	590	1.21
SGB 71-F42 A	36.2	25.9	202.7	23,440	59	48.4	22x1.0	42x1.5	82.5	710	400 V-3	920	710	1.44
SGB 71-F62 A	46.9	33.0	302.9	22,880	57	72.9	28x1.5	54x2.0	82.5	710	400 V-3	920	710	1.44
SGB 71-F82 A	52.6	39.2	403.2	22,100	56	96.1	28x1.5	54x2.0	82.5	710	400 V-3	920	710	1.44
SGB 80-F42 A	48.5	34.3	236.4	34,700	74	57.8	22x1.0	54x2.0	89.8	800	400 V-3	930	1,480	3.58
SGB 80-F62 A	63.1	43.8	353.4	33,160	71	83.4	2x22x1.0	2x42x1.5	89.8	800	400 V-3	930	1,480	3.58
SGB 80-F82 A	71.0	52.2	470.4	31,620	68	110.5	2x22x1.0	2x42x1.5	89.8	800	400 V-3	930	1,480	3.58
SGB 50-F43 A	24.3	16.6	108.6	17,970	55	25.7	15x1.0	42x1.5	87.6	500	400 V-3	1,350	740	1.36
SGB 50-F63 A	30.8	21.5	162.3	16,830	52	38.2	22x1.0	42x1.5	87.6	500	400 V-3	1,350	740	1.36
SGB 56-F43 A	30.1	21.4	144.8	22,020	58	34.3	15x1.0	42x1.5	91.9	560	400 V-3	1,300	1,010	2.22
SGB 56-F63 A	39.2	27.5	216.4	20,820	55	50.9	22x1.0	42x1.5	91.9	560	400 V-3	1,300	1,010	2.22
SGB 56-F83 A	44.1	32.6	288.0	19,920	53	68.2	22x1.0	54x2.0	91.9	560	400 V-3	1,300	1,010	2.22
SGB 63-F43 A	35.8	25.5	195.4	23,460	50	46.0	22x1.0	42x1.5	84.6	630	400 V-3	900	590	1.21
SGB 63-F63 A	45.2	32.8	292.1	22,380	48	69.1	22x1.0	54x2.0	84.6	630	400 V-3	900	590	1.21
SGB 63-F83 A	51.1	37.9	388.8	21,450	47	91.5	28x1.5	54x2.0	84.6	630	400 V-3	900	590	1.21
SGB 71-F43 A	55.2	38.0	304.0	35,160	72	72.4	28x1.5	54x2.0	84.3	710	400 V-3	920	710	1.44
SGB 71-F63 A	70.3	49.5	454.4	34,320	70	105.5	2x22x1.0	2x42x1.5	84.3	710	400 V-3	920	710	1.44
SGB 71-F83 A	79.8	57.4	604.8	33,150	68	140.3	2x28x1.5	2x42x1.5	84.3	710	400 V-3	920	710	1.44
SGB 80-F43 A	74.3	50.5	354.7	52,050	90	84.5	28x1.5	54x2.0	91.6	800	400 V-3	930	1,480	3.58
SGB 80-F63 A	94.8	65.8	530.1	49,740	87	124.7	2x28x1.5	2x54x2.0	91.6	800	400 V-3	930	1,480	3.58
SGB 80-F83 A	107.8	76.5	705.6	47,430	83	164.9	2x28x1.5	2x54x2.0	91.6	800	400 V-3	930	1,480	3.58
SGB 50-F44 A	31.5	22.4	144.8	23,960	63	33.8	15x1.0	42x1.5	88.8	500	400 V-3	1,350	740	1.36
SGB 50-F64 A	40.3	29.1	216.4	22,440	60	50.9	22x1.0	54x2.0	88.8	500	400 V-3	1,350	740	1.36
SGB 56-F44 A	41.4	27.9	193.0	29,360	66	45.9	22x1.0	54x2.0	93.1	560	400 V-3	1,300	1,010	2.22
SGB 56-F64 A	52.5	36.1	288.5	27,760	63	68.0	28x1.5	54x2.0	93.1	560	400 V-3	1,300	1,010	2.22
SGB 56-F84 A	60.0	42.2	384.0	26,560	61	89.0	2x22x1.0	2x42x1.5	93.1	560	400 V-3	1,300	1,010	2.22
SGB 63-F44 A	48.1	33.8	260.6	31,280	58	61.4	22x1.0	54x2.0	85.8	630	400 V-3	900	590	1.21
SGB 63-F64 A	60.6	43.4	389.5	29,840	56	91.1	28x1.5	54x2.0	85.8	630	400 V-3	900	590	1.21
SGB 63-F84 A	68.5	50.1	518.4	28,600	54	119.6	2x22x1.0	2x42x1.5	85.8	630	400 V-3	900	590	1.21
SGB 71-F44 A	72.5	52.0	405.3	46,880	83	95.1	28x1.5	54x2.0	85.5	710	400 V-3	920	710	1.44
SGB 71-F64 A	92.7	67.8	605.9	45,760	81	140.7	2x22x1.0	2x54x2.0	85.5	710	400 V-3	920	710	1.44
SGB 71-F84 A	105.4	78.6	806.4	44,200	79	186.8	2x28x1.5	2x54x2.0	85.5	710	400 V-3	920	710	1.44
SGB 80-F44 A	97.1	68.9	472.9	69,400	104	112.3	28x1.5	64x2.0	92.8	800	400 V-3	930	1,480	3.58
SGB 80-F64 A	124.5	90.0	706.8	66,320	100	164.5	2x28x1.5	2x54x2.0	92.8	800	400 V-3	930	1,480	3.58
SGB 80-F84 A	142.1	104.7	940.8	63,240	96	217.9	2x28x1.5	2x54x2.0	92.8	800	400 V-3	930	1,480	3.58
SGB 50-F55 A	40.2	28.0	180.9	29,950	71	42.6	22x1.0	54x2.0	89.8	500	400 V-3	1,350	740	1.36
SGB 50-F65 A	51.1	36.3	270.5	28,050	67	63.0	22x1.0	54x2.0	89.8	500	400 V-3	1,350	740	1.36
SGB 56-F55 A	51.0	35.7	241.3	36,700	74	56.7	22x1.0	54x2.0	94.1	560	400 V-3	1,300	1,010	2.22
SGB 56-F65 A	65.0	46.3	360.6	34,700	71	84.2	28x1.5	54x2.0	94.1	560	400 V-3	1,300	1,010	2.22
SGB 56-F85 A	74.4	54.0	480.0	33,200	68	110.6	2x22x1.0	2x42x1.5	94.1	560	400 V-3	1,300	1,010	2.22
SGB 63-F55 A	59.3	42.7	325.7	39,100	66	76.0	22x1.0	54x2.0	86.8	630	400 V-3	900	590	1.21
SGB 63-F65 A	74.9	55.1	486.9	37,300	63	113.0	28x1.5	54x2.0	86.8	630	400 V-3	900	590	1.21
SGB 63-F85 A	84.8	63.7	648.0	35,750	61	149.6	2x22x1.0	2x54x2.0	86.8	630	400 V-3	900	590	1.21

Subject to modification.

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

* Throw limit at 0.5 m/s

Küba SG *industrial*

Technical data – SGK(E)

10 mm

Type	Rating Q_0 at 50 Hz. DT1. R404A		Cooling surface	Air flow	Air throw *	Tube volume	Connections		Sound	Fans (Operational values at 50 Hz)				
	SC2	SC3					Inlet	Outlet	L_{WA}	Blade	Current	Per Fan		
	kW	kW	m^2	m^3/h	m	dm^3	Ø mm	Ø mm	db (A)	Ø mm	230 ± 10% V-1 50 Hz	rpm	W	A
SGK 50-F41 A	6.9	4.6	26.1	6,250	34	9.0	10x1.0	28x1.5	82.8	500	400 V-3	1,350	740	1.36
SGK 50-F61 A	9.1	6.3	39.0	6,030	32	13.3	10x1.0	28x1.5	82.8	500	400 V-3	1,350	740	1.36
SGK 56-F41 A	8.7	5.9	34.7	7,660	35	12.0	10x1.0	28x1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGK 56-F61 A	11.5	7.9	51.9	7,360	34	18.0	15x1.0	35x1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGK 56-F81 A	13.6	9.5	69.1	7,140	33	23.8	15x1.0	35x1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGK 63-F41 A	10.1	6.8	46.9	8,130	31	16.0	15x1.0	28x1.5	79.8	630	400 V-3	900	590	1.21
SGK 63-F61 A	13.3	9.1	70.1	7,870	30	24.1	22x1.0	35x1.5	79.8	630	400 V-3	900	590	1.21
SGK 63-F81 A	15.6	10.9	93.3	7,660	29	31.8	22x1.0	35x1.5	79.8	630	400 V-3	900	590	1.21
SGK 71-F41 A	15.4	10.6	73.0	12,200	43	25.0	15x1.0	35x1.5	79.5	710	400 V-3	920	710	1.44
SGK 71-F61 A	20.1	14.1	109.1	11,820	42	37.0	22x1.0	35x1.5	79.5	710	400 V-3	920	710	1.44
SGK 71-F81 A	23.7	16.9	145.2	11,580	41	49.3	22x1.0	42x1.5	79.5	710	400 V-3	920	710	1.44
SGK 80-F41 A	20.7	14.5	85.1	18,130	55	29.7	15x1.0	42x1.5	86.8	800	400 V-3	930	1,480	3.58
SGK 80-F61 A	27.6	19.1	127.3	17,590	53	43.8	22x1.0	42x1.5	86.8	800	400 V-3	930	1,480	3.58
SGK 80-F81 A	32.4	23.3	169.4	16,970	51	57.6	22x1.0	42x1.5	86.8	800	400 V-3	930	1,480	3.58
SGK 50-F42 A	13.8	9.3	52.1	12,500	47	17.3	15x1.0	35x1.5	85.8	500	400 V-3	1,350	740	1.36
SGK 50-F62 A	17.9	12.9	77.9	12,060	45	25.7	15x1.0	35x1.5	85.8	500	400 V-3	1,350	740	1.36
SGK 56-F42 A	17.4	11.8	69.5	15,320	49	23.1	15x1.0	35x1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGK 56-F62 A	23.0	15.8	103.9	14,720	47	34.7	22x1.0	42x1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGK 56-F82 A	27.2	19.0	138.3	14,280	46	45.8	22x1.0	42x1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGK 63-F42 A	20.1	14.2	93.8	16,260	43	31.4	22x1.0	42x1.5	82.8	630	400 V-3	900	590	1.21
SGK 63-F62 A	26.6	18.2	140.2	15,740	42	46.3	22x1.0	42x1.5	82.8	630	400 V-3	900	590	1.21
SGK 63-F82 A	31.0	22.5	186.7	15,320	41	61.3	22x1.0	42x1.5	82.8	630	400 V-3	900	590	1.21
SGK 71-F42 A	30.4	21.9	145.9	24,400	61	48.4	22x1.0	42x1.5	82.5	710	400 V-3	920	710	1.44
SGK 71-F62 A	40.2	28.3	218.1	23,640	59	72.9	28x1.5	54x2.0	82.5	710	400 V-3	920	710	1.44
SGK 71-F82 A	47.1	34.9	290.4	23,160	58	96.1	28x1.5	54x2.0	82.5	710	400 V-3	920	710	1.44
SGK 80-F42 A	41.1	29.3	170.2	36,260	77	57.8	22x1.0	54x2.0	89.8	800	400 V-3	930	1,480	3.58
SGK 80-F62 A	55.3	38.3	254.5	35,180	75	83.4	2x22x1.0	2x42x1.5	89.8	800	400 V-3	930	1,480	3.58
SGK 80-F82 A	64.5	47.2	338.8	33,940	72	110.5	2x22x1.0	2x42x1.5	89.8	800	400 V-3	930	1,480	3.58
SGK 50-F43 A	20.6	14.1	78.2	18,750	57	25.7	15x1.0	42x1.5	87.6	500	400 V-3	1,350	740	1.36
SGK 50-F63 A	27.3	19.0	116.9	18,090	55	38.2	22x1.0	42x1.5	87.6	500	400 V-3	1,350	740	1.36
SGK 56-F43 A	25.6	18.3	104.2	22,980	60	34.3	15x1.0	42x1.5	91.9	560	400 V-3	1,300	1,010	2.22
SGK 56-F63 A	34.3	24.0	155.8	22,080	58	50.9	22x1.0	42x1.5	91.9	560	400 V-3	1,300	1,010	2.22
SGK 56-F83 A	40.2	29.6	207.4	21,420	56	68.2	22x1.0	54x2.0	91.9	560	400 V-3	1,300	1,010	2.22
SGK 63-F43 A	30.1	21.5	140.7	24,390	52	46.0	22x1.0	42x1.5	84.6	630	400 V-3	900	590	1.21
SGK 63-F63 A	39.5	28.6	210.4	23,610	51	69.1	22x1.0	54x2.0	84.6	630	400 V-3	900	590	1.21
SGK 63-F83 A	46.4	34.2	280.0	22,980	50	91.5	28x1.5	54x2.0	84.6	630	400 V-3	900	590	1.21
SGK 71-F43 A	46.1	31.9	218.9	36,600	74	72.4	28x1.5	54x2.0	84.3	710	400 V-3	920	710	1.44
SGK 71-F63 A	60.4	42.4	327.2	35,460	72	105.5	2x22x1.0	2x42x1.5	84.3	710	400 V-3	920	710	1.44
SGK 71-F83 A	71.2	50.8	435.6	34,740	71	140.3	2x28x1.5	2x42x1.5	84.3	710	400 V-3	920	710	1.44
SGK 80-F43 A	62.6	42.8	255.4	54,390	94	84.5	28x1.5	54x2.0	91.6	800	400 V-3	930	1,480	3.58
SGK 80-F63 A	83.0	57.6	381.8	52,770	91	124.7	2x28x1.5	2x54x2.0	91.6	800	400 V-3	930	1,480	3.58
SGK 80-F83 A	97.7	68.8	508.1	50,910	89	164.9	2x28x1.5	2x54x2.0	91.6	800	400 V-3	930	1,480	3.58
SGK 50-F44 A	26.9	19.2	104.2	25,000	65	33.8	15x1.0	42x1.5	88.8	500	400 V-3	1,350	740	1.36
SGK 50-F64 A	35.8	25.9	155.8	24,120	64	50.9	22x1.0	54x2.0	88.8	500	400 V-3	1,350	740	1.36
SGK 56-F44 A	34.9	23.6	139.0	30,640	69	45.9	22x1.0	54x2.0	93.1	560	400 V-3	1,300	1,010	2.22
SGK 56-F64 A	46.0	31.6	207.8	29,440	66	68.0	28x1.5	54x2.0	93.1	560	400 V-3	1,300	1,010	2.22
SGK 56-F84 A	54.4	38.0	276.5	28,560	65	89.0	2x22x1.0	2x42x1.5	93.1	560	400 V-3	1,300	1,010	2.22
SGK 63-F44 A	40.3	28.4	187.6	32,520	60	61.4	22x1.0	54x2.0	85.8	630	400 V-3	900	590	1.21
SGK 63-F64 A	52.8	37.8	280.5	31,480	59	91.1	28x1.5	54x2.0	85.8	630	400 V-3	900	590	1.21
SGK 63-F84 A	62.1	45.1	373.3	30,640	57	119.6	2x22x1.0	2x42x1.5	85.8	630	400 V-3	900	590	1.21
SGK 71-F44 A	60.9	43.8	291.9	48,800	86	95.1	28x1.5	54x2.0	85.5	710	400 V-3	920	710	1.44
SGK 71-F64 A	79.8	58.3	436.3	47,280	83	140.7	2x22x1.0	2x54x2.0	85.5	710	400 V-3	920	710	1.44
SGK 71-F84 A	94.2	69.8	580.7	46,320	82	186.8	2x28x1.5	2x54x2.0	85.5	710	400 V-3	920	710	1.44
SGK 80-F44 A	82.4	58.8	340.5	72,520	108	112.3	28x1.5	64x2.0	92.8	800	400 V-3	930	1,480	3.58
SGK 80-F64 A	109.4	79.0	509.0	70,360	105	164.5	2x28x1.5	2x54x2.0	92.8	800	400 V-3	930	1,480	3.58
SGK 80-F84 A	129.1	94.5	677.5	67,880	102	217.9	2x28x1.5	2x54x2.0	92.8	800	400 V-3	930	1,480	3.58
SGK 50-F55 A	34.1	23.8	130.3	31,250	73	42.6	22x1.0	54x2.0	89.8	500	400 V-3	1,350	740	1.36
SGK 50-F65 A	45.3	32.1	194.8	30,150	71	63.0	22x1.0	54x2.0	89.8	500	400 V-3	1,350	740	1.36
SGK 56-F55 A	43.2	30.3	173.7	38,300	77	56.7	22x1.0	54x2.0	94.1	560	400 V-3	1,300	1,010	2.22
SGK 56-F65 A	57.0	40.6	259.7	36,800	74	84.2	28x1.5	54x2.0	94.1	560	400 V-3	1,300	1,010	2.22
SGK 56-F85 A	67.5	48.7	345.7	35,700	72	110.6	2x22x1.0	2x42x1.5	94.1	560	400 V-3	1,300	1,010	2.22
SGK 63-F55 A	49.9	36.1	234.5	40,650	68	76.0	22x1.0	54x2.0	86.8	630	400 V-3	900	590	1.21
SGK 63-F65 A	65.5	48.1	350.6	39,350	66	113.0	28x1.5	54x2.0	86.8	630	400 V-3	900	590	1.21
SGK 63-F85 A	77.1	57.5	466.7	38,300	64	149.6	2x22x1.0	2x54x2.0	86.8	630	400 V-3	900	590	1.21

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

* Throw limit at 0.5 m/s

Subject to modification.

Küba SG *industrial*

Technical data – SGL(E)

12 mm

Type	Rating Q_0 at 50 Hz. DT1. R404A		Cooling surface	Air flow	Air throw *	Tube volume	Connections		Sound	Fans (Operational values at 50 Hz)				
	SC2	SC3					Inlet	Outlet	L_{WA}	Blade	Current	Per Fan		
	kW	kW	m^2	m^3/h	m	dm^3	Ø mm	Ø mm	db(A)	Ø mm	230 ± 10% V-1 50 Hz	rpm	W	A
SGL 50-F41 A	6.1	4.1	22.1	6,380	34	9.0	10x1.0	28x1.5	82.8	500	400 V-3	1,350	740	1.36
SGL 50-F61 A	8.1	5.7	33.1	6,180	33	13.3	10x1.0	28x1.5	82.8	500	400 V-3	1,350	740	1.36
SGL 56-F41 A	7.6	5.2	29.5	7,770	36	12.0	10x1.0	28x1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGL 56-F61 A	10.3	7.1	44.1	7,550	35	18.0	15x1.0	35x1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGL 56-F81 A	12.4	8.6	58.7	7,350	34	23.8	15x1.0	35x1.5	87.1	560	400 V-3	1,300	1,010	2.22
SGL 63-F41 A	8.9	6.0	39.8	8,270	32	16.0	15x1.0	28x1.5	79.8	630	400 V-3	900	590	1.21
SGL 63-F61 A	12.0	8.2	59.5	8,090	31	24.1	22x1.0	35x1.5	79.8	630	400 V-3	900	590	1.21
SGL 63-F81 A	14.3	9.9	79.2	7,860	30	31.8	22x1.0	35x1.5	79.8	630	400 V-3	900	590	1.21
SGL 71-F41 A	13.4	9.3	61.9	12,200	43	25.0	15x1.0	35x1.5	79.5	710	400 V-3	920	710	1.44
SGL 71-F61 A	18.0	12.6	92.6	12,010	43	37.0	22x1.0	35x1.5	79.5	710	400 V-3	920	710	1.44
SGL 71-F81 A	21.6	15.4	123.2	11,820	42	49.3	22x1.0	42x1.5	79.5	710	400 V-3	920	710	1.44
SGL 80-F41 A	18.3	12.8	72.3	18,510	56	29.7	15x1.0	42x1.5	86.8	800	400 V-3	930	1,480	3.58
SGL 80-F61 A	24.7	17.1	108.0	17,890	54	43.8	22x1.0	42x1.5	86.8	800	400 V-3	930	1,480	3.58
SGL 80-F81 A	29.7	21.3	143.8	17,590	53	57.6	22x1.0	42x1.5	86.8	800	400 V-3	930	1,480	3.58
SGL 50-F42 A	12.1	8.2	44.2	12,760	48	17.3	15x1.0	35x1.5	85.8	500	400 V-3	1,350	740	1.36
SGL 50-F62 A	16.1	11.6	66.1	12,360	46	25.7	15x1.0	35x1.5	85.8	500	400 V-3	1,350	740	1.36
SGL 56-F42 A	15.3	10.4	59.0	15,540	50	23.1	15x1.0	35x1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGL 56-F62 A	20.6	14.2	88.2	15,100	48	34.7	22x1.0	42x1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGL 56-F82 A	24.8	17.3	117.4	14,700	47	45.8	22x1.0	42x1.5	90.1	560	400 V-3	1,300	1,010	2.22
SGL 63-F42 A	17.7	12.5	79.6	16,540	43	31.4	22x1.0	42x1.5	82.8	630	400 V-3	900	590	1.21
SGL 63-F62 A	23.9	16.4	119.0	16,180	43	46.3	22x1.0	42x1.5	82.8	630	400 V-3	900	590	1.21
SGL 63-F82 A	28.4	20.6	158.5	15,720	42	61.3	22x1.0	42x1.5	82.8	630	400 V-3	900	590	1.21
SGL 71-F42 A	26.6	19.2	123.9	24,400	61	48.4	22x1.0	42x1.5	82.5	710	400 V-3	920	710	1.44
SGL 71-F62 A	36.0	25.3	185.2	24,020	60	72.9	28x1.5	54x2.0	82.5	710	400 V-3	920	710	1.44
SGL 71-F82 A	43.0	31.8	246.5	23,640	59	96.1	28x1.5	54x2.0	82.5	710	400 V-3	920	710	1.44
SGL 80-F42 A	36.4	26.0	144.5	37,020	78	57.8	22x1.0	54x2.0	89.8	800	400 V-3	930	1,480	3.58
SGL 80-F62 A	49.4	34.3	216.0	35,780	76	83.4	2x22x1.0	2x42x1.5	89.8	800	400 V-3	930	1,480	3.58
SGL 80-F82 A	59.3	43.3	287.6	35,180	75	110.5	2x22x1.0	2x42x1.5	89.8	800	400 V-3	930	1,480	3.58
SGL 50-F43 A	18.1	12.5	66.4	19,140	58	25.7	15x1.0	42x1.5	87.6	500	400 V-3	1,350	740	1.36
SGL 50-F63 A	24.5	17.1	99.2	18,540	56	38.2	22x1.0	42x1.5	87.6	500	400 V-3	1,350	740	1.36
SGL 56-F43 A	22.6	16.2	88.5	23,310	60	34.3	15x1.0	42x1.5	91.9	560	400 V-3	1,300	1,010	2.22
SGL 56-F63 A	30.8	21.6	132.3	22,650	59	50.9	22x1.0	42x1.5	91.9	560	400 V-3	1,300	1,010	2.22
SGL 56-F83 A	36.8	27.1	176.1	22,050	58	68.2	22x1.0	54x2.0	91.9	560	400 V-3	1,300	1,010	2.22
SGL 63-F43 A	26.5	19.0	119.4	24,810	53	46.0	22x1.0	42x1.5	84.6	630	400 V-3	900	590	1.21
SGL 63-F63 A	35.6	25.9	178.6	24,270	52	69.1	22x1.0	54x2.0	84.6	630	400 V-3	900	590	1.21
SGL 63-F83 A	42.5	31.2	237.7	23,580	51	91.5	28x1.5	54x2.0	84.6	630	400 V-3	900	590	1.21
SGL 71-F43 A	40.2	27.9	185.8	36,600	74	72.4	28x1.5	54x2.0	84.3	710	400 V-3	920	710	1.44
SGL 71-F63 A	54.0	38.0	277.8	36,030	73	105.5	2x22x1.0	2x42x1.5	84.3	710	400 V-3	920	710	1.44
SGL 71-F83 A	64.9	46.2	369.7	35,460	72	140.3	2x28x1.5	2x42x1.5	84.3	710	400 V-3	920	710	1.44
SGL 80-F43 A	55.2	37.9	216.8	55,530	96	84.5	28x1.5	54x2.0	91.6	800	400 V-3	930	1,480	3.58
SGL 80-F63 A	74.1	51.5	324.1	53,670	93	124.7	2x28x1.5	2x54x2.0	91.6	800	400 V-3	930	1,480	3.58
SGL 80-F83 A	89.6	63.1	431.4	52,770	91	164.9	2x28x1.5	2x54x2.0	91.6	800	400 V-3	930	1,480	3.58
SGL 50-F44 A	23.8	17.1	88.5	25,520	67	33.8	15x1.0	42x1.5	88.8	500	400 V-3	1,350	740	1.36
SGL 50-F64 A	32.2	23.4	132.3	24,720	65	50.9	22x1.0	54x2.0	88.8	500	400 V-3	1,350	740	1.36
SGL 56-F44 A	30.6	20.8	118.0	31,080	70	45.9	22x1.0	54x2.0	93.1	560	400 V-3	1,300	1,010	2.22
SGL 56-F64 A	41.2	28.4	176.4	30,200	68	68.0	28x1.5	54x2.0	93.1	560	400 V-3	1,300	1,010	2.22
SGL 56-F84 A	49.6	34.6	234.8	29,400	66	89.0	2x22x1.0	2x42x1.5	93.1	560	400 V-3	1,300	1,010	2.22
SGL 63-F44 A	35.5	25.1	159.3	33,080	61	61.4	22x1.0	54x2.0	85.8	630	400 V-3	900	590	1.21
SGL 63-F64 A	47.7	34.1	238.1	32,360	60	91.1	28x1.5	54x2.0	85.8	630	400 V-3	900	590	1.21
SGL 63-F84 A	56.8	41.2	316.9	31,440	59	119.6	2x22x1.0	2x42x1.5	85.8	630	400 V-3	900	590	1.21
SGL 71-F44 A	53.2	38.4	247.7	48,800	86	95.1	28x1.5	54x2.0	85.5	710	400 V-3	920	710	1.44
SGL 71-F64 A	71.6	52.3	370.4	48,040	84	140.7	2x22x1.0	2x54x2.0	85.5	710	400 V-3	920	710	1.44
SGL 71-F84 A	86.1	63.6	493.0	47,280	83	186.8	2x28x1.5	2x54x2.0	85.5	710	400 V-3	920	710	1.44
SGL 80-F44 A	72.8	52.2	289.0	74,040	110	112.3	28x1.5	64x2.0	92.8	800	400 V-3	930	1,480	3.58
SGL 80-F64 A	97.9	70.9	432.1	71,560	107	164.5	2x28x1.5	2x54x2.0	92.8	800	400 V-3	930	1,480	3.58
SGL 80-F84 A	118.6	86.8	575.1	70,360	105	217.9	2x28x1.5	2x54x2.0	92.8	800	400 V-3	930	1,480	3.58
SGL 50-F55 A	30.1	21.1	110.6	31,900	74	42.6	22x1.0	54x2.0	89.8	500	400 V-3	1,350	740	1.36
SGL 50-F65 A	40.6	28.9	165.3	30,900	73	63.0	22x1.0	54x2.0	89.8	500	400 V-3	1,350	740	1.36
SGL 56-F55 A	38.0	26.8	147.5	38,850	78	56.7	22x1.0	54x2.0	94.1	560	400 V-3	1,300	1,010	2.22
SGL 56-F65 A	51.2	36.5	220.4	37,750	76	84.2	28x1.5	54x2.0	94.1	560	400 V-3	1,300	1,010	2.22
SGL 56-F85 A	61.7	44.5	293.4	36,750	74	110.6	2x22x1.0	2x42x1.5	94.1	560	400 V-3	1,300	1,010	2.22
SGL 63-F55 A	44.0	32.0	199.1	41,350	69	76.0	22x1.0	54x2.0	86.8	630	400 V-3	900	590	1.21
SGL 63-F65 A	59.2	43.5	297.6	40,450	67	113.0	28x1.5	54x2.0	86.8	630	400 V-3	900	590	1.21
SGL 63-F85 A	70.7	52.6	396.1	39,300	66	149.6	2x22x1.0	2x54x2.0	86.8	630	400 V-3	900	590	1.21

Subject to modification.

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

* Throw limit at 0.5 m/s

Küba SG *industrial*

Dimensions, Drain

Type	Dimensions																			Drain
	H	B	T	L	E_1	E_2	E_3	E_4	E_5	F	A	W_{min}	Ø G	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	inch
SG 50-41 A	720	1,620	864	704	1,054	-	-	-	-	283	182	500	517	329	810	-	-	-	-	G 1¼
SG 50-61 A	720	1,620	864	704	1,054	-	-	-	-	283	182	500	517	329	810	-	-	-	-	G 1¼
SG 56-41 A	920	1,620	951	704	1,054	-	-	-	-	283	269	550	563	429	810	-	-	-	-	G 1¼
SG 56-61 A	920	1,620	951	704	1,054	-	-	-	-	283	269	550	563	429	810	-	-	-	-	G 1¼
SG 56-81 A	920	1,620	951	704	1,054	-	-	-	-	283	269	550	563	429	810	-	-	-	-	G 1¼
SG 63-41 A	1,020	1,820	980	729	1,254	-	-	-	-	283	274	600	639	479	910	-	-	-	-	G 1¼
SG 63-61 A	1,020	1,820	980	729	1,254	-	-	-	-	283	274	600	639	479	910	-	-	-	-	G 1¼
SG 63-81 A	1,020	1,820	980	729	1,254	-	-	-	-	283	274	600	639	479	910	-	-	-	-	G 1¼
SG 71-41 A	1,325	2,020	974	757	1,454	-	-	-	-	283	239	700	733	629	1,010	-	-	-	-	G 1¼
SG 71-61 A	1,325	2,020	974	757	1,454	-	-	-	-	283	239	700	733	629	1,010	-	-	-	-	G 1¼
SG 71-81 A	1,325	2,020	974	757	1,454	-	-	-	-	283	239	700	733	629	1,010	-	-	-	-	G 1¼
SG 80-41 A	1,535	2,020	1,130	757	1,454	-	-	-	-	283	389	800	803	729	1,010	-	-	-	-	G 1¼
SG 80-61 A	1,535	2,020	1,130	757	1,454	-	-	-	-	283	389	800	803	729	1,010	-	-	-	-	G 1¼
SG 80-81 A	1,535	2,020	1,130	757	1,454	-	-	-	-	283	389	800	803	729	1,010	-	-	-	-	G 1¼
SG 50-42 A	720	2,620	864	704	2,054	1,000	-	-	-	283	182	500	517	329	1,810	810	-	-	-	G 1¼
SG 50-62 A	720	2,620	864	704	2,054	1,000	-	-	-	283	182	500	517	329	1,810	810	-	-	-	G 1¼
SG 56-42 A	920	2,620	951	704	2,054	1,000	-	-	-	283	269	550	563	429	1,810	810	-	-	-	G 1¼
SG 56-62 A	920	2,620	951	704	2,054	1,000	-	-	-	283	269	550	563	429	1,810	810	-	-	-	G 1¼
SG 56-82 A	920	2,620	951	704	2,054	1,000	-	-	-	283	269	550	563	429	1,810	810	-	-	-	G 1¼
SG 63-42 A	1,020	3,020	980	729	2,454	1,200	-	-	-	283	274	600	639	479	2,110	910	-	-	-	G 1¼
SG 63-62 A	1,020	3,020	980	729	2,454	1,200	-	-	-	283	274	600	639	479	2,110	910	-	-	-	G 1¼
SG 63-82 A	1,020	3,020	980	729	2,454	1,200	-	-	-	283	274	600	639	479	2,110	910	-	-	-	G 1¼
SG 71-42 A	1,325	3,420	974	757	2,854	1,400	-	-	-	283	239	700	733	629	2,410	1,010	-	-	-	G 1¼
SG 71-62 A	1,325	3,420	974	757	2,854	1,400	-	-	-	283	239	700	733	629	2,410	1,010	-	-	-	G 1¼
SG 71-82 A	1,325	3,420	974	757	2,854	1,400	-	-	-	283	239	700	733	629	2,410	1,010	-	-	-	G 1¼
SG 80-42 A	1,535	3,420	1,126	757	2,854	1,400	-	-	-	283	389	800	803	729	2,410	1,010	-	-	-	G 1¼
SG 80-62 A	1,535	3,420	1,126	757	2,854	1,400	-	-	-	283	389	800	803	729	2,410	1,010	-	-	-	G 1¼
SG 80-82 A	1,535	3,420	1,126	757	2,854	1,400	-	-	-	283	389	800	803	729	2,410	1,010	-	-	-	G 1¼
SG 50-43 A	720	3,620	864	704	3,054	1,000	2,000	-	-	283	182	500	517	329	2,810	810	1,810	-	-	G 2
SG 50-63 A	720	3,620	864	704	3,054	1,000	2,000	-	-	283	182	500	517	329	2,810	810	1,810	-	-	G 2
SG 56-43 A	920	3,620	951	704	3,054	1,000	2,000	-	-	283	269	550	563	429	2,810	810	1,810	-	-	G 2
SG 56-63 A	920	3,620	951	704	3,054	1,000	2,000	-	-	283	269	550	563	429	2,810	810	1,810	-	-	G 2
SG 56-83 A	920	3,620	951	704	3,054	1,000	2,000	-	-	283	269	550	563	429	2,810	810	1,810	-	-	G 2
SG 63-43 A	1,020	4,220	980	729	3,654	1,200	2,400	-	-	283	274	600	639	479	3,310	910	2,110	-	-	G 2
SG 63-63 A	1,020	4,220	980	729	3,654	1,200	2,400	-	-	283	274	600	639	479	3,310	910	2,110	-	-	G 2
SG 63-83 A	1,020	4,220	980	729	3,654	1,200	2,400	-	-	283	274	600	639	479	3,310	910	2,110	-	-	G 2
SG 71-43 A	1,325	4,820	974	757	4,254	1,400	2,800	-	-	283	239	700	733	629	3,810	1,010	2,410	-	-	G 2
SG 71-63 A	1,325	4,820	974	757	4,254	1,400	2,800	-	-	283	239	700	733	629	3,810	1,010	2,410	-	-	G 2
SG 71-83 A	1,325	4,820	974	757	4,254	1,400	2,800	-	-	283	239	700	733	629	3,810	1,010	2,410	-	-	G 2
SG 80-43 A	1,535	4,820	1,126	757	4,254	1,400	2,800	-	-	283	389	800	803	729	3,810	1,010	2,410	-	-	G 2
SG 80-63 A	1,535	4,820	1,126	757	4,254	1,400	2,800	-	-	283	389	800	803	729	3,810	1,010	2,410	-	-	G 2
SG 80-83 A	1,535	4,820	1,126	757	4,254	1,400	2,800	-	-	283	389	800	803	729	3,810	1,010	2,410	-	-	G 2
SG 50-44 A	720	4,620	864	704	4,054	1,000	2,000	3,000	-	283	182	500	517	329	3,810	810	1,810	2,810	-	G 2
SG 50-64 A	720	4,620	864	704	4,054	1,000	2,000	3,000	-	283	182	500	517	329	3,810	810	1,810	2,810	-	G 2
SG 56-44 A	920	4,620	951	704	4,054	1,000	2,000	3,000	-	283	269	550	563	429	3,810	810	1,810	2,810	-	G 2
SG 56-64 A	920	4,620	951	704	4,054	1,000	2,000	3,000	-	283	269	550	563	429	3,810	810	1,810	2,810	-	G 2
SG 56-84 A	920	4,620	951	704	4,054	1,000	2,000	3,000	-	283	269	550	563	429	3,810	810	1,810	2,810	-	G 2
SG 63-44 A	1,020	5,420	980	729	4,854	1,200	2,400	3,600	-	283	274	600	639	479	4,510	910	2,110	3,310	-	G 2
SG 63-64 A	1,020	5,420	980	729	4,854	1,200	2,400	3,600	-	283	274	600	639	479	4,510	910	2,110	3,310	-	G 2
SG 63-84 A	1,020	5,420	980	729	4,854	1,200	2,400	3,600	-	283	274	600	639	479	4,510	910	2,110	3,310	-	G 2
SG 71-44 A	1,325	6,220	974	757	5,654	1,400	2,800	4,200	-	283	239	700	733	629	5,210	1,010	2,410	3,810	-	G 2
SG 71-64 A	1,325	6,220	974	757	5,654	1,400	2,800	4,200	-	283	239	700	733	629	5,210	1,010	2,410	3,810	-	G 2
SG 71-84 A	1,325	6,220	974	757	5,654	1,400	2,800	4,200	-	283	239	700	733	629	5,210	1,010	2,410	3,810	-	G 2
SG 80-44 A	1,535	6,220	1,126	757	5,654	1,400	2,800	4,200	-	283	389	800	803	729	5,210	1,010	2,410	3,810	-	G 2
SG 80-64 A	1,535	6,220	1,126	757	5,654	1,400	2,800	4,200	-	283	389	800	803	729	5,210	1,010	2,410	3,810	-	G 2
SG 80-84 A	1,535	6,220	1,126	757	5,654	1,400	2,800	4,200	-	283	389	800	803	729	5,210	1,010	2,410	3,810	-	G 2
SG 50-55 A	720	5,620	864	704	5,054	1,000	2,000	3,000	4,000	283	182	500	517	329	4,810	810	1,810	2,810	3,810	G 2
SG 50-65 A	720	5,620	864	704	5,054	1,000	2,000	3,000	4,000	283	182	500	517	329	4,810	810	1,810	2,810	3,810	G 2
SG 56-55 A	920	5,620	951	704	5,054	1,000	2,000	3,000	4,000	283	269	550	563	429	4,810	810	1,810	2,810	3,810	G 2
SG 56-65 A	920	5,620	951	704	5,054	1,000	2,000	3,000	4,000	283	269	550	563	429	4,810	810	1,810	2,810	3,810	G 2
SG 56-85 A	920	5,620	951	704	5,054	1,000	2,000	3,000	4,000	283	269	550	563	429	4,810	810	1,810	2,810	3,810	G 2
SG 63-55 A	1,020	6,620	980	729	6,054	1,200	2,400	3,600	4,800	283	274	600	639	479	5,710	883	2,110	3,310	4,510	G 2
SG 63-65 A	1,020	6,620	980	729	6,054	1,200	2,400	3,600	4,800	283	274	600	639	479	5,710	883	2,110	3,310	4,510	G 2
SG 63-85 A	1,020	6,620	980	729	6,054	1,200	2,400	3,600	4,800	283	274	600	639	479	5,710	883	2,110	3,310	4,510	G 2

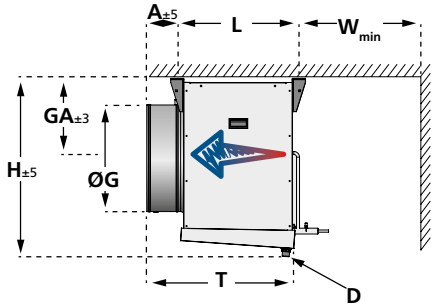
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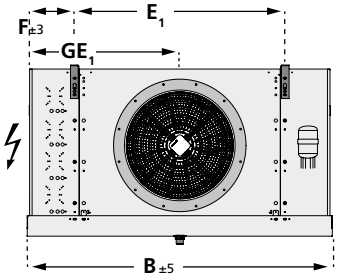
The dimensions are only valid for the standard model design!
Note the differences in dimension among versions and accessories.

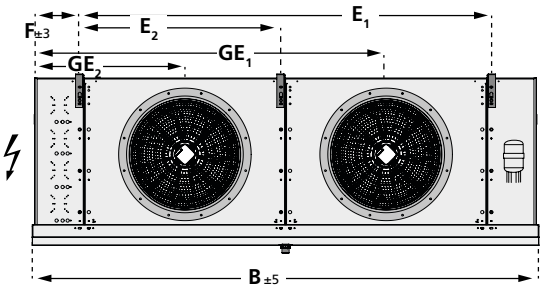
Küba SG *industrial*

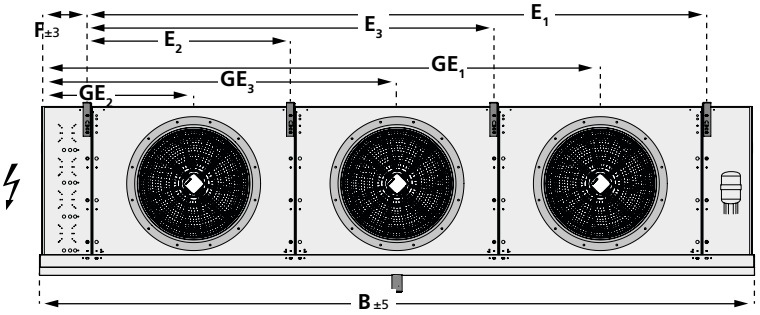
Dimensional drawings

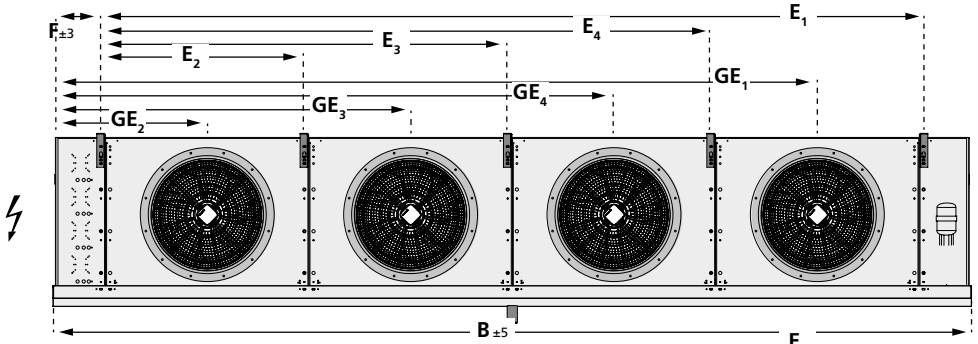
Dimensional drawings Küba SG *industrial* (1-5 motors)

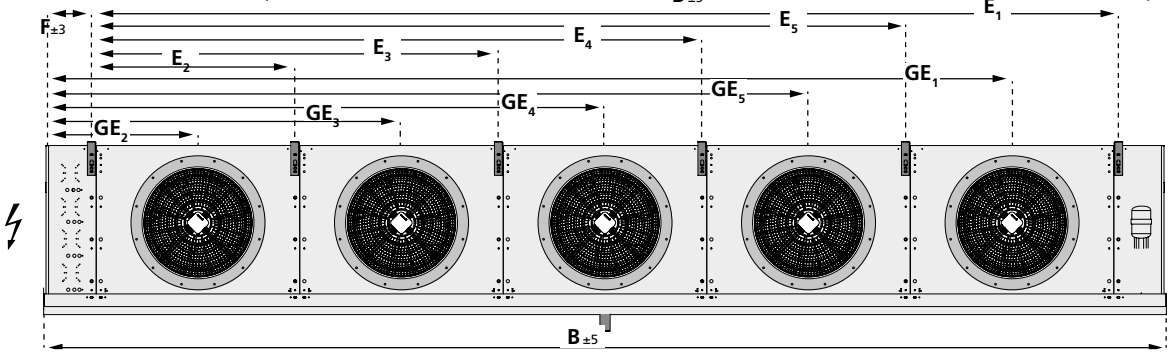












Küba SG *industrial*

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	SGK	SGK E	SGL	SGL E	SGA	SGA E	SGB	SGB E	SGK E	SGK E	SGL	SGL E
	kW	kW	kW		kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
SG 50-41 A	4.8	2.3	7.1	1	122	129	130	121	111	118	109	116	152	159	144	151	141	148	139	146
SG 50-61 A	6.0	2.3	8.3	1	138	145	147	133	123	129	120	126	168	175	156	163	153	159	150	156
SG 56-41 A	6.7	2.3	9.0	1	153	162	158	151	139	148	136	145	208	217	197	206	194	203	191	200
SG 56-61 A	8.0	2.3	10.3	2	176	184	170	163	155	163	153	162	231	239	215	218	210	218	208	217
SG 56-81 A	10.5	2.3	12.8	2	199	213	198	191	170	184	165	179	254	268	232	246	225	239	220	234
SG 63-41 A	9.2	2.6	11.8	2	194	204	197	190	175	185	172	181	275	285	261	271	256	266	253	262
SG 63-61 A	10.3	2.6	12.9	2	225	235	220	214	197	207	191	202	306	316	285	295	278	288	272	283
SG 63-81 A	13.7	2.6	16.3	2	255	268	246	240	218	231	211	224	336	349	308	321	299	312	292	305
SG 71-41 A	14.3	2.9	17.2	2	271	284	265	262	241	255	236	249	378	391	356	369	348	362	343	356
SG 71-61 A	15.6	2.9	18.5	2	318	332	302	299	273	288	265	279	425	439	391	406	380	395	372	386
SG 71-81 A	22.1	2.9	25.0	3	365	385	344	341	306	326	295	315	472	492	428	448	413	433	402	422
SG 80-41 A	16.9	2.9	19.8	2	335	350	307	307	284	299	277	293	463	478	420	435	412	427	405	421
SG 80-61 A	18.2	2.9	21.1	2	374	390	351	351	323	339	313	329	502	518	463	479	451	467	441	457
SG 80-81 A	26.0	2.9	28.9	3	-	-	375	398	359	381	346	368	-	-	503	526	487	509	474	496
SG 50-42 A	8.6	3.8	12.4	2	204	213	188	198	183	192	179	188	263	272	247	257	242	251	238	247
SG 50-62 A	10.8	3.8	14.6	2	237	246	213	222	205	215	199	209	296	305	272	281	264	274	258	268
SG 56-42 A	12.0	3.8	15.8	2	256	267	234	246	228	239	222	234	361	372	339	351	333	344	327	339
SG 56-62 A	14.4	3.8	18.2	2	301	312	269	281	259	270	255	267	406	417	374	386	364	375	360	372
SG 56-82 A	18.9	3.8	22.7	2	345	362	303	320	289	306	278	295	450	467	408	425	394	411	383	400
SG 63-42 A	16.0	4.3	20.3	2	330	346	301	318	292	308	285	301	497	513	468	485	459	475	452	468
SG 63-62 A	18.0	4.3	22.3	2	391	409	348	366	334	352	324	341	558	576	515	533	501	519	491	508
SG 63-82 A	24.0	4.3	28.3	2	450	472	393	415	374	397	360	383	617	639	560	582	541	564	527	550
SG 71-42 A	24.8	4.8	29.6	2	468	484	423	439	409	425	398	414	656	672	611	627	597	613	586	602
SG 71-62 A	27.0	4.8	31.8	2	565	582	497	514	475	492	459	476	753	770	685	702	663	680	647	664
SG 71-82 A	38.3	4.8	43.1	3	656	678	567	590	538	560	516	538	844	866	755	778	726	748	704	726
SG 80-42 A	29.3	4.8	34.1	2	590	608	503	521	487	505	474	493	822	840	735	753	719	737	706	725
SG 80-62 A	31.5	4.8	36.3	2	666	685	587	606	563	582	544	563	898	917	819	838	795	814	776	795
SG 80-82 A	45.0	4.8	49.8	3	-	-	668	694	636	662	610	636	-	-	900	926	868	894	842	868
SG 50-43 A	13.0	5.2	18.2	2	286	301	262	277	254	269	249	263	394	409	370	385	362	377	357	371
SG 50-63 A	15.6	5.2	20.8	2	335	351	300	316	288	305	279	296	443	459	408	424	396	413	387	404
SG 56-43 A	18.2	5.2	23.4	2	357	376	325	344	315	334	307	326	508	527	476	495	466	485	458	477
SG 56-63 A	20.8	5.2	26.0	2	424	445	376	398	361	382	356	378	575	596	527	549	512	533	507	529
SG 56-83 A	28.6	5.2	33.8	3	491	518	426	453	405	432	389	416	642	669	577	604	556	583	540	567
SG 63-43 A	23.8	6.0	29.8	2	465	489	422	446	408	489	398	421	656	680	613	637	599	680	589	612
SG 63-63 A	26.8	6.0	32.8	2	556	582	490	516	469	582	453	480	747	773	681	707	660	773	644	671
SG 63-83 A	35.8	6.0	41.7	3	646	678	560	593	532	678	511	543	837	869	751	784	723	869	702	734
SG 71-43 A	37.8	6.9	44.7	3	669	702	602	635	580	699	564	597	939	972	872	905	850	969	834	867
SG 71-63 A	41.3	6.9	48.2	3	809	845	708	744	675	708	651	686	1,079	1,115	978	1,014	945	978	921	956
SG 71-83 A	58.5	6.9	65.4	4	948	997	815	864	771	995	738	788	1,218	1,267	1,085	1,134	1,041	1,265	1,008	1,058
SG 80-43 A	44.7	6.9	51.6	3	845	884	715	753	691	730	672	710	1,139	1,178	1,009	1,047	985	1,024	966	1,004
SG 80-63 A	48.2	6.9	55.0	3	955	997	837	878	801	842	772	813	1,249	1,291	1,131	1,172	1,095	1,136	1,066	1,107
SG 80-83 A	68.8	6.9	75.7	4	-	-	962	1,019	914	970	876	932	-	-	1,256	1,313	1,208	1,264	1,170	1,226
SG 50-44 A	16.9	6.7	23.6	2	367	374	336	342	325	332	318	324	509	516	478	484	467	474	460	466
SG 50-64 A	20.2	6.7	27.0	2	433	440	386	392	370	377	358	365	575	582	528	534	512	519	500	507
SG 56-44 A	23.6	6.7	30.3	2	462	469	420	427	406	413	396	403	663	670	621	628	607	614	597	604
SG 56-64 A	27.0	6.7	33.7	2	551	559	488	496	467	475	461	469	752	760	689	697	668	676	662	670
SG 56-84 A	37.1	6.7	43.8	3	639	647	555	563	526	534	506	514	840	848	756	764	727	735	707	715
SG 63-44 A	31.2	7.8	39.0	3	602	632	545	575	526	556	512	542	857	887	800	830	781	811	767	797
SG 63-64 A	35.1	7.8	42.9	3	722	754	636	669	608	641	587	620	977	1,009	891	924	863	896	842	875
SG 63-84 A	46.8	7.8	54.6	4	840	882	726	767	689	730	661	702	1,095	1,137	981	1,022	944	985	916	957
SG 71-44 A	47.9	8.7	56.6	3	864	893	775	804	746	775	724	753	1,224	1,253	1,135	1,164	1,106	1,135	1,084	1,113
SG 71-64 A	52.3	8.7	61.0	4	1,050	1,082	915	947	871	903	838	870	1,410	1,442	1,275	1,307	1,231	1,263	1,198	1,230
SG 71-84 A	74.1	8.7	82.8	5	1,234	1,278	1,056	1,099	997	1,041	953	997	1,594	1,638	1,416	1,459	1,357	1,401	1,313	1,357
SG 80-44 A	56.6	8.7	65.3	4	1,096	1,130	921	956	890	924	864	898	1,478	1,512	1,303	1,338	1,272	1,306	1,246	1,280
SG 80-64 A	61.0	8.7	69.7	4	1,241	1,277	1,083	1,119	1,034	1,071	996	1,032	1,623	1,659	1,465	1,501	1,416	1,453	1,378	1,414
SG 80-84 A	87.1	8.7	95.8	5	-	-	1,248	1,298	1,183	1,233	1,132	1,182	-	-	1,630	1,680	1,565	1,615	1,514	1,564
SG 50-55 A	20.0	8.0	28.0	2	450	473	410	433	398	421	388	411	626	649	586	609	574	597	564	587
SG 50-65 A	24.0	8.0	32.0	2	532	558	474	500	454	480	439	465	708	734	650	676	630	656	615	641
SG 56-55 A	28.0	8.0	36.0	2	563	593	511	540	494	523	480	510	812	842	760	789	743	772	729	759
SG 56-65 A	32.0	8.0	40.0	3	674	707	595	628	569	602	561	594	923	956	844	877	818	851	810	843
SG 56-85 A	44.0	8.0	52.0	3	783	826	677	720	642	685	616	659	1,032	1,075	926	969	891	934	865	908
SG 63-55 A	36.8	9.2	46.0	3	736	773	665	702	641	678	624	661	1,054	1,091	983	1,020	959	996	942	979
SG 63-65 A	41.4	9.2	50.6	3	884	925	777	818	742	783	716	757	1,202	1,243	1,095	1,136	1,060	1,101	1,034	1,075
SG 63-85 A	55.2	9.2	64.4	4	1,033	1,084	890	941	843	894	808	859	1,351	1,402	1,208	1,259	1,161	1,212	1,126	1,177

Subject to modification.

Küba SG *industrial*

Variants

Designs with water/brine flow and with NH_3 pump operation are identified by unit type codes (F/G/N): see page 2.

Motor-Variants

V 1.77 Fan guard
Fans with contact safety guard

V 1.52 EC fan with controllable speed

V 1.60 Fans for rapid cooling
400 V±10% V-3

Protection against corrosion

V 3.12 Stainless steel casing
Special protection from salts (no chlorine) and organic acids in the cold room air

V 6.01 Corrosion protection 1
Tubing: Copper (NH_3 units = stainless steel)
Fins: Aluminum, epoxy-resin-coated
End plates: Aluminum protective coating
Casing: Aluminum/zinc coated steel, protective coating on both sides

V 6.02 Corrosion protection 2
Tubing: Stainless steel (V2A)
Fins: Aluminum, epoxy-resin-coated
End plates: Stainless steel
Casing: Aluminum/zinc coated steel, protective coating on both sides
Stainless steel CAL® distributor upon request

V 6.03 Corrosion protection 3
Tubing: Stainless steel (V2A)
Fins: Aluminum
End plates: Aluminum
Casing: Aluminum/zinc coated steel, protective coating on on one side
Stainless steel CAL® distributor upon request

V 6.04 Corrosion protection 4
Tubing: Copper (NH_3 units = stainless steel)
Fins: Aluminum, epoxy-resin-coated
End plates: Aluminum
Casing: Aluminum/zinc coated steel, protective coating on on one side

Construction-Variants

V 3.09 Double-walled, insulated drip tray
Prevents condensed water from forming on the bottom side of the pan, and it reduces the transfer of defrost heat into the cold rooms.

V 3.10 Fans hinged
The fans swivel on stainless steel hinges.

CO_2-Variants

V 7.10 CO_2-Pump
up to 60 bar operating pressure

V 7.45 CO_2-Direct expansion
up to 45 bar operating pressure

V 7.60 CO_2-Direct expansion
up to 60 bar operating pressure

Defrost-Variants

V 4.01 Hot-gas coil in the drip tray (Cu)
Hot-gas connection on both sides; copper

V 4.02 Hot-gas coil in the drip tray (VA)
Hot-gas connection on both sides; stainless steel

V 4.06 Drip tray with electric heating

V 6.05 Hot gas in heat exchanger and drip tray
Hot-gas circuitry for coolers, without non-return valve

V 6.07 Hot gas in heat exchanger and drip tray
Hot-gas connection in coils; hot-gas coil in the drip tray, with non-return valve

V 6.08 Cold gas in coil and drip tray, copper
Cold-gas connection in coils; Cold-gas coil in the drip tray, without non-return valve

Brine defrost with a separate circuit
Upon request

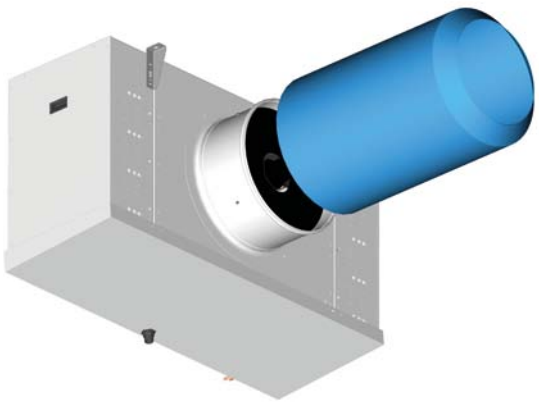


Recommended for frozen storage:

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

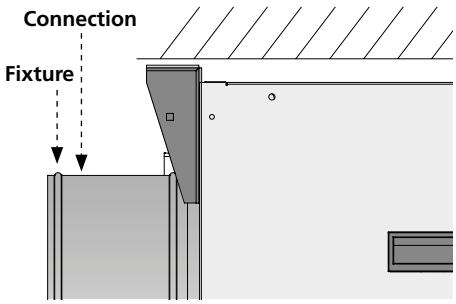


Features and material:

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:

	Küba SG *industrial*			Shut-Up®	
Type	Fan blade	Connections	Fixture	Air outlet	Length
	Ø	Ø	Ø	Ø	
	mm	mm	mm	mm	mm
SG 50 A	500	517	538	425	636
SG 56 A	560	563	584	430	684
SG 63 A	630	639	660	515	763
SG 71 A	710	733	754	588	880
SG 80 A	800	803	824	652	978



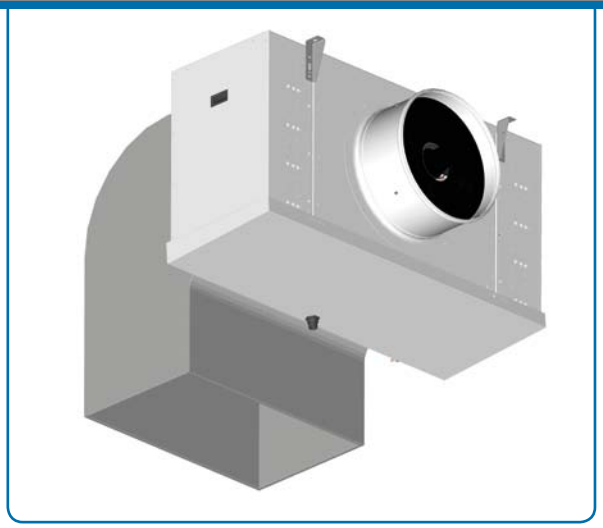
NOTE:

Due to the additional external pressure, the air quantity and Air Cooler capacity change:
When using Shut-Up®: Air volume is reduced by 10% ≙ -5% cooling capacity
When using von Shut-Up® & Defrost hood: Air volume is reduced by 20% ≙ -10% cooling capacity
1 Shut-Up® per fan unit required. Delivery not mounted.

Küba Defrost hood

Applications: Frozen storage starting at -18 °C.
Alternating defrosting of the Air Coolers in one room.

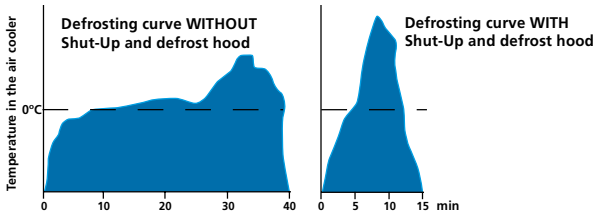
- The casing is made of aluminum, coated (RAL 9018)
- The double wall drip tray has 12 mm of insulation
- The construction is modular, i.e. 1 module per fan
- Delivery not mounted



Advantages (in connection with Shut-Up®):

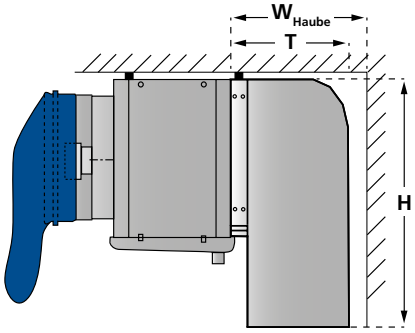
With the defrost hood and Shut-Up®, a positive accumulation of heat occurs in the Air Cooler during the defrost process. The heat remains in the cooler, which means:

- Defrost times are reduced by more than 50%
- Significant amounts of energy are saved
- No frost build up on the ceiling of the storage room or on the goods due to minimal vapour build-up



Selection table & Dimensions:

Type	Dimensions				Weight
	H	B	T	W_{Haube}	
	mm	mm	mm	mm	kg
SG 50 A	1,080	945	800	860	33
SG 56 A	1,280	945	800	960	36
SG 63 A	1,380	1,150	900	960	45
SG 71 A	1,680	1,345	1,280	1,340	61
SG 80 A	1,880	1,345	1,280	1,340	60



NOTE:

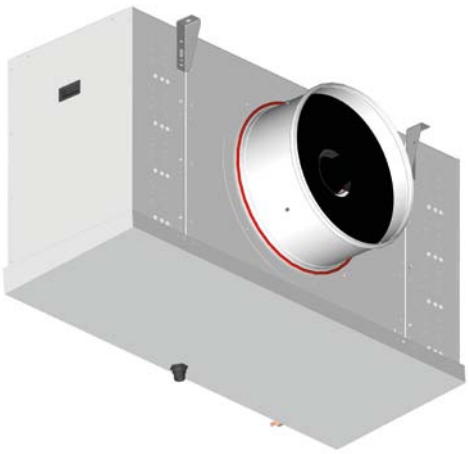
Due to the additional external pressure, the air quantity and Air Cooler capacity change:
When using Shut-Up®: Air volume is reduced by 10% ≙ -5% cooling capacity
When using von Shut-Up® & Defrost hood: Air volume is reduced by 20% ≙ -10% cooling capacity
1 Shut-Up® per fan unit required. Delivery not mounted.

Fan collar heater VRB

To prevent the fan blade from freezing up at the fan nozzle of the air coolers in extreme humidity conditions in the freezer and frozen storage area.

Field of application:

The standard Küba SG *industrial* line is suitable for use with fan collar heaters. We recommend using fan collar heaters for applications below 0 °C for version V1 .60 to prevent temperatures from falling below the dew point.



Selection table & Technical data:

For type	Description	Current	Capacity
		A	kW
SG 50 A	VRB 50	1.2	0.27
SG 56 A	VRB 56	1.3	0.30
SG 63 A	VRB 63	1.7	0.39
SG 71 A	VRB 71	1.6	0.38
SG 80 A	VRB 80	1.7	0.40

Included in delivery:

- Electric tubular heater with stainless steel sleeve Ø 8.5 mm
- Connection ends: 1.5 x 2000 mm
- Tension spring: stainless steel

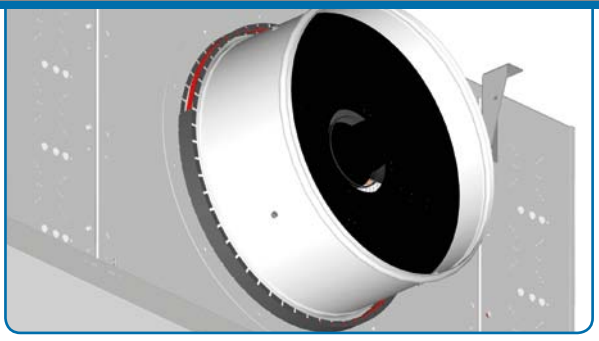
NOTE:

Can only be used with a metal air duct.
With using VRB and Shut-Up or air hose please install a fan collar heater cover.

Fan Collar Heater Cover

Application

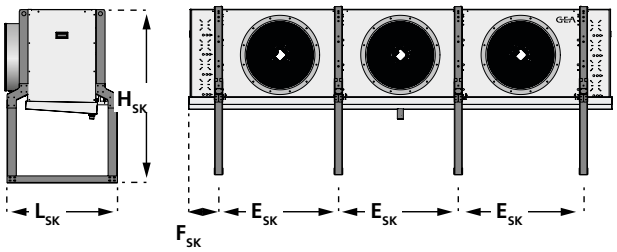
- Contact protection
- Reduces heat radiation from the fan collar heaters into the Cold Room
- Improves heat conductivity at the collar
- Increases the efficiency of the fan collar heaters
- Protects against slipping



Floor Mounting Brackets SK

Selection table & Dimensions:

For type	H_{SK}	L_{SK}	E_{SK}	F_{SK}
	mm	mm	mm	mm
SG 50 A	1,384	782	1,054	283
SG 56 A	1,584	782	1,054	283
SG 63 A	1,684	807	1,254	283
SG 71 A	1,984	835	1,454	283
SG 80 A	2,184	835	1,454	283





Duct at 5° incline

Application:

- Deep-freeze applications at high humidity
- Deep-freeze applications with high-availability, sensitive products (e.g. pharmaceuticals) with few redundant coolers

Advantages:

Ventilation ducts with a 5° incline ensures that condensation water runs out of the duct into the drip tray.

- Reduced risk of fan blades at the collar freezing up
- Prevents ice formation on the Air Guiding Grid

Construction:

- Ventilation ducts have a 5° inclination toward the casing as well as an integrated air guiding grid
- Ventilation duct is made of Sendzimir galvanised steel plate, coated (RAL 9018)
- Suitable for installation with the Küba Shut-Up® – with no additional accessories necessary

NOTE:

The ducts positioned at a 5° incline should always be used along with the Shut-Up®, defrosting hoods, fan collar heaters and insulated drip trays.

Accessories

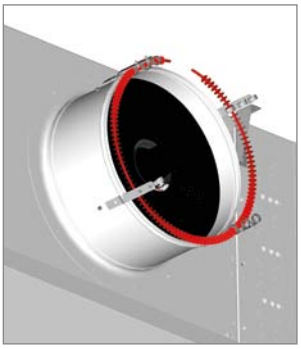
Rippenrohr-Heizregister SGHR / SGHRZ

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

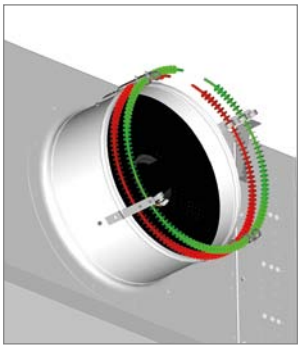
SGHR = Standard design
SGHRZ = Additional heater
SGHR + SGHRZ = Greater heating capacity

Example assembly

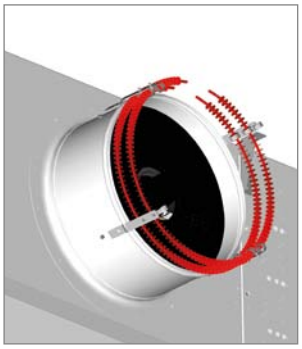
Selection table & Technical data:



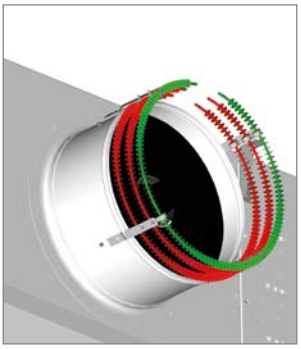
SGHR 50, 56



SGHR 50, 56 + SGHRZ



SGHR 63, 71, 80



SGHR 63, 71, 80 + SGHRZ

For type	Description	Current [A]				Capacity [kW]			
		L1	L2	L3	Total	L1	L2	L3	Total
SG 50 A	SGHR 50 i	13.8	-	-	13.8	3.2	-	-	3.2
SG 56 A	SGHR 56 i	15.5	-	-	15.5	3.6	-	-	3.6
SG 63 A	SGHR 63 i	18.1	18.1	-	36.2	4.1	4.1	-	8.2
SG 71 A	SGHR 71 i	20.5	20.5	-	41.0	4.7	4.7	-	9.4
SG 80 A	SGHR 80 i	23.6	23.6	-	47.2	5.4	5.4	-	10.8
SG 50 A	SGHR + SGHR 50 Z	13.8	-	13.8	27.6	3.2	-	3.2	6.4
SG 56 A	SGHR + SGHR 56 Z	15.5	-	15.5	31.0	3.6	-	3.6	7.2
SG 63 A	SGHR + SGHR 63 Z	18.1	18.1	18.1	54.3	4.1	4.1	4.1	12.3
SG 71 A	SGHR + SGHR 71 Z	20.5	20.5	20.5	61.5	4.7	4.7	4.7	14.1
SG 80 A	SGHR + SGHR 80 Z	23.6	23.6	23.6	70.8	5.4	5.4	5.4	16.2

Included in delivery:

- Electric finned tube heater in stainless steel with connection ends: 1,5 x 2000 mm
- Assembly kit including bracket for heater with clamp, connection box IP 54, mounting material

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.

Air Hoses (on site procurement, not available from Küba)

Ventilation can be optimised with textile / PVC air hoses.

- Applications in work rooms and production areas
- Cooled goods that are sensitive to draft (i.e. flowers, ripening cheeses)



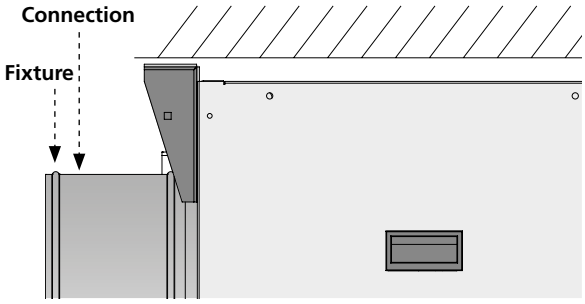
Advantages:

The air hoses make uniform air distribution possible at very low air speeds.

- Working in a draft-free environment yields low illnes rates
- Maximum protection for sensitive cooled goods
- No condensation water: temperatures do not fall below the dew point because air can penetrate the woven material

Dimensions (Connection):

Type	Küba SG *industrial*		
	Fan blade	Connection	Fixture
	Ø	Ø	Ø
	mm	mm	mm
SG 50 A	500	517	538
SG 56 A	560	563	584
SG 63 A	630	639	660
SG 71 A	710	733	754
SG 80 A	800	803	824



NOTE:

Please take the respective pressure drop for the cooler design into consideration.

Küba SG *industrial*

Notes

www.brand-change.com

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Subject to technical changes