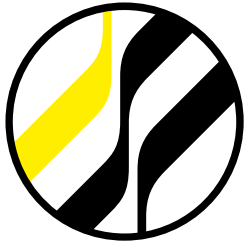


Kelvion



Küba Blue Line Aircoolers

Küba SG commercial classic

PRECISION IN THE COLD ROOM – AVAILABLE EX STOCK





WE ARE KELVION – THE NEW BRAND IN HEAT EXCHANGE

GEA Heat Exchangers has changed: another new standalone company has been created out of the former Heat Exchanger Division of the GEA Group AG. The name Kelvion is new, but we continue as global experts in heat exchange.

As always, we remain committed to earning your trust.

You'll still recognize us. We continue to develop our products, manufacture them with precision and distribute globally. We continue to offer one of the world's largest heat exchanger product portfolios: Plate heat exchangers, shell & tube heat exchangers, finned tube heat exchangers, modular cooling towers and refrigeration heat exchangers for a wide range of applications.

We operate in global markets for power generation, oil and gas,

chemistry, marine applications, climate and environment, and food and beverages. From us, you can expect products with outstanding levels of efficiency, safety, and sustainability. More importantly, we care about your business, like close, trusted partners.

Customers rely on us to understand their needs, boost their performance, and deliver products that always get the job done. We compete for the toughest deals, in the harshest environments. But we're not too big to care. We're Kelvion – ready to take on the challenges of heat exchange. www.kelvion.com

Experts in Heat Exchange.

Küba SG commercial classic






PRECISION IN THE COLD ROOM – AVAILABLE EX STOCK



Capacity range (for SC2)

0.9 kW    23 kW

Temperature range (t_{L1})

-25°C      +20°C

Type designation code

1 2 3 4 5 6

SG B E 06 2 D

- | | | | |
|---|-------------------------|---|-----------------|
| 1 | Model range designation | 5 | Number of fans |
| 2 | Fin spacing | 6 | Generation Code |
| 3 | Electric defrost | | |
| 4 | Size | | |



Küba SG commercial classic

APPLICATION BENEFITS FOR CONTRACTORS AND OPERATORS

Application examples

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

HIGHLY EFFECTIVE UNDER COMPLEX CONDITIONS

Long-term storage, safeguard maturing processes and precise humidity: these are the key performance factors for the Küba SG commercial classic. It satisfies complex commercial refrigeration requirements in production and processing of open and pre-packed food.

The requirements placed by chilled goods are complex, and an effective cooling process involves considerably more than merely the temperature of the goods being refrigerated. For example, the units must feature large surface areas to ensure minimal dehumidification.

These characteristics are essential in industrial processing of meat and bakery products; warehousing of flowers, fruit, and vegetables; and production of deep-frozen goods – basically all applications without aggressive airborne particles in the ambient air.

The Küba SG commercial classic is also highly effective under complex conditions: for example, with frequent coming and going of staff in and out of the cold rooms – which means regular air exchange with the surrounding air.

With intensive handling of goods and long storage times, the SG commercial classic sets standards in efficiency and safety. If the stored goods are frequently removed and re-stored, the cooler's capacity has to ensure even temperature distribution. The Küba SG commercial classic is the optimal air cooler for applications such as these.

One decisive factor is that its parallel, tubing system permits less dehumidification of the air than a conventional air cooler with staggered tubing. The SG application range, depending on configuration, extends from medium temperature cooling to freezing as low as -25 °C room temperature.

The benefit that makes the new SG commercial classic a standalone air cooler range is primarily its standardized equipment, matched to the requirements of individual applications. The finish of the casing components, with their food-safe and environmentally friendly powder coating, provides a surface structure that is effectively resistant to scratches, impacts, and corrosion.

These components can also be very easily cleaned, and the mounting brackets are made of stainless steel.

The AC fans, in conformity with the relevant ErP Directive, offer speed control in conjunction with a retrofitted unit*.

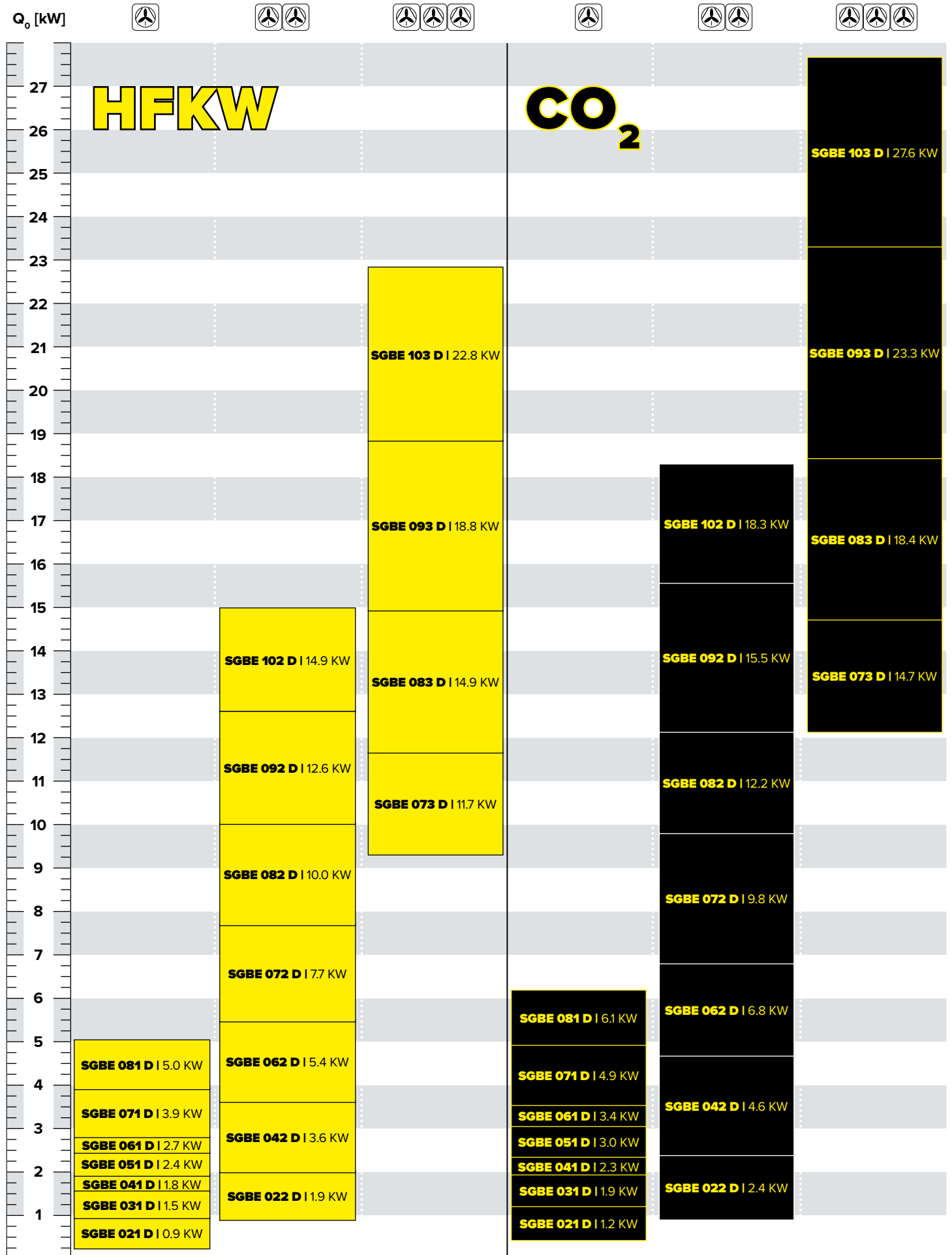
These fans are especially effective for small and medium-sized cold stores.

The SG commercial classic range offers series-production models for standard as well as more complex applications. These best value for money coolers are available on stock. 18 cooler unit types can be selected out of a cooling range from 0.9 to 23 kW [SC2]. The entire range is available ex stock for CO₂ applications up to 60bar operating pressure.

* Transformer, Phase Control, Frequency Converter with all-pole sinusoidal filter (please see manufacturer specifications)

QUICK SELECTION MEDIUM TEMP. COOLING [SC2]

Air inlet temperature at cooler $t_{L1} = 0^\circ\text{C}$ | Evaporating temperature $t_0 = -8^\circ\text{C}$



Küba SG commercial classic

BASIC VERSION



CASING

- ▶ Aluminum, Sendzimir zinc-plated steel
- ▶ Best quality powder coated edges thanks to high-grade powder coating, RAL 9010 pure white
- ▶ Food-safe
- ▶ Smooth surfaces: Easy to clean
- ▶ Removable side panels
- ▶ Drip tray: additional integrated splash pan

HEAT EXCHANGER

- ▶ Tube: Copper, inner finned, \varnothing 15 mm
- ▶ Fins: Aluminum HFE® fins
- ▶ End plates: Aluminum
- ▶ Aligned tube system
- ▶ Fin spacing:
B = 7.0 mm
- ▶ Fins flared to form-fit the core tube
- ▶ Internal cleanliness according to DIN 14276
- ▶ Connection Inlet:
Venturi distributor with multiple injection, sealed
- ▶ Connection Outlet:
Copper pipe for solder connection with schrader valve UNF 7/16", sealed

ELECTRIC DEFROST

- ▶ Tubular heater: Stainless steel
- ▶ Connections: steam-proof
- ▶ Mains voltage: 1/N/PE 230V 50/60Hz
- ▶ Readily wired for connection box
- ▶ Optimized tubular heater configurations ensure fast and even defrosting
- ▶ Aluminum tube sleeves: Ensure excellent heat transfer to the fins and thus effective defrosting cycles with optimized service life



FAN UNIT

- ▶ AC technology
- ▶ Draw through axial fan
- ▶ Fan diameter: 250 / 300 / 400 / 500 mm
- ▶ Permissible motor ambient temperatures:
 - SG 02x D = -40° C up to +55° C
 - SG 03x & 04x D = -40° C up to +60° C
 - SG 05x & 06 D = -25° C up to +70° C
 - SG 07x & 08 D = -25° C up to +65° C
 - SG 09x & 10x D = -25° C bis +70° C
- ▶ Supply voltage: 1/N/PE 230V 60Hz
- ▶ Motor protection: Built-in thermal contact (inaccessible)
- ▶ Protection class
 - SG 02x D = IP 44
 - SG 03x & 04x D = IP 44
 - SG 05x & 06 D = IP 54
 - SG 07x & 08 D = IP 54
 - SG 09x & 10x D = IP 54
- ▶ Insulation class: F
- ▶ Fans are wired to 1 internal distribution box
- ▶ Motor Control:
 - Phase control
 - Transformer
 - Delta/star
 - Frequency converter

Please observe the manufacturer's information!
Bitte Herstellerangaben beachten!

MOTOR LABEL DATA

Type	Ø mm	50 Hz		
		rpm	W	A
SGBE 02x D	250	1,370	50	0.24
SGBE 03x & 04x D	300	1,330	100	0.42
SGBE 05x & 06x D	400	950	130	0.60
SGBE 07x & 08x D	400	1,340	240	1.05
SGBE 09x & 10x D	500	900	270	1.25

Motor data per fan

Data provided by the manufacturer

TECHNICAL DATA SGB E

Küba SG commercial classic | Fin spacing 7 mm

Type	Rating Q _o at 50 Hz, DT1, R404A		Cooling surface m ²	Air flow m ³ /h	Air throw *** m	Tube volume dm ³	Connections		Sound L _{WA} dB(A)	Fans (Operational values at 50 Hz)				
	SC2	SC3					Inlet Ømm	Outlet Ømm		Blade Ømm	Current 230±10% V-1 50Hz	Per fan		
	kW	kW										rpm	W	A
SGBE 021 D	0.9	0.7	6.3	780	6	1.7	12 x 1.0*	15 x 1.0	62	250	230	1,375	48	0.24
SGBE 031 D	1.5	1.1	8.2	1,730	8	2.1	12 x 1.0*	15 x 1.0	66	300	230	1,358	89	0.38
SGBE 041 D	1.8	1.3	10.9	1,660	8	2.8	12 x 1.0*	15 x 1.0	66	300	230	1,358	89	0.38
SGBE 051 D	2.4	1.7	15.1	2,080	9	3.9	12 x 1.0*	22 x 1.0	64	400	230	953	126	0.58
SGBE 061 D	2.7	2.0	18.8	1,990	9	4.9	12 x 1.0*	22 x 1.0	64	400	230	953	126	0.58
SGBE 071 D	3.9	2.8	22.6	3,210	15	5.8	15 x 1.0**	28 x 1.5	71	400	230	1,382	212	0.92
SGBE 081 D	5.0	3.7	33.8	3,340	16	8.4	15 x 1.0**	28 x 1.5	71	400	230	1,382	212	0.92
SGBE 022 D	1.9	1.4	12.7	1,560	11	3.1	12 x 1.0*	15 x 1.0	65	250	230	1,375	48	0.24
SGBE 042 D	3.6	2.6	21.7	3,320	14	5.3	15 x 1.0*	22 x 1.0	69	300	230	1,358	89	0.38
SGBE 062 D	5.4	4.0	37.6	3,980	15	9.2	15 x 1.0**	28 x 1.5	67	400	230	953	126	0.58
SGBE 072 D	7.7	5.7	45.1	6,420	21	11.0	15 x 1.0**	35 x 1.5	74	400	230	1,382	212	0.92
SGBE 082 D	10.0	7.4	67.6	6,680	22	16.2	15 x 1.0**	35 x 1.5	74	400	230	1,382	212	0.92
SGBE 092 D	12.6	9.2	81.1	8,700	20	19.6	22 x 1.0**	42 x 1.5	79	500	230	921	236	1.11
SGBE 102 D	14.9	10.6	108.2	9,660	22	25.7	22 x 1.0**	42 x 1.5	79	500	230	921	236	1.11
SGBE 073 D	11.7	8.5	67.7	9,630	24	16.1	22 x 1.0**	35 x 1.5	76	400	230	1,382	212	0.92
SGBE 083 D	14.9	11.2	101.4	10,020	25	23.9	22 x 1.0**	42 x 1.5	76	400	230	1,382	212	0.92
SGBE 093 D	18.8	14.1	121.7	13,050	24	28.7	28 x 1.5**	42 x 1.5	81	500	230	921	236	1.11
SGBE 103 D	22.8	17.0	162.3	14,490	25	38.3	28 x 1.5**	54 x 2.0	81	500	230	921	236	1.11

Standard condition	t ₁	t ₀	DT1	Correction factors for other refrigerants	Refrigerant	NB2/SC2	NB3/SC3	* Single injection ** Multiple injection through Venturi distributor *** Throw limit at 0.5 m/s	Subject to modification.
NB2/SC2	0°C	-8°C	8K						
NB3/SC3	-18°C	-25°C	7K						

TECHNICAL DATA **SGB E** | CO₂ up to 60bar

Küba SG commercial classic | **Fin spacing 7 mm**

Type	Rating Q _o at 50 Hz, DT1, R744		Cooling surface	Air flow	Air throw ***	Tube volume	Connections		Sound L _{WA}	Fans (Operational values at 50 Hz)				
	SC2	SC3					Inlet Ømm	Outlet Ømm		Blade Ømm	Current 230±10% V-1 50Hz	Per fan		
	kW	kW	m ²	m ³ /h	m	dm ³			dB(A)			rpm	W	A
SGBE 021 D	1.2	0.9	6.3	780	6	1.7	12 x 1.0*	15 x 1.0	62	250	230	1,375	48	0.24
SGBE 031 D	1.9	1.4	8.2	1,730	8	2.1	12 x 1.0*	15 x 1.0	66	300	230	1,358	89	0.38
SGBE 041 D	2.3	1.7	10.9	1,660	8	2.8	12 x 1.0*	15 x 1.0	66	300	230	1,358	89	0.38
SGBE 051 D	3.0	2.2	15.1	2,080	9	3.9	12 x 1.0*	15 x 1.0	64	400	230	953	126	0.58
SGBE 061 D	3.4	2.5	18.8	1,990	9	4.9	12 x 1.0*	15 x 1.0	64	400	230	953	126	0.58
SGBE 071 D	4.9	3.6	22.6	3,210	15	5.8	12 x 1.0*	15 x 1.0	71	400	230	1,382	212	0.92
SGBE 081 D	6.1	4.6	33.8	3,340	16	8.4	12 x 1.0**	18 x 1.0	71	400	230	1,382	212	0.92
SGBE 022 D	2.4	1.7	12.7	1,560	11	3.1	12 x 1.0*	15 x 1.0	65	250	230	1,375	48	0.24
SGBE 042 D	4.6	3.4	21.7	3,320	14	5.3	12 x 1.0*	15 x 1.0	69	300	230	1,358	89	0.38
SGBE 062 D	6.8	5.0	37.6	3,980	15	9.2	12 x 1.0**	18 x 1.0	67	400	230	953	126	0.58
SGBE 072 D	9.8	7.1	45.1	6,420	21	11.0	15 x 1.0**	18 x 1.0	74	400	230	1,382	212	0.92
SGBE 082 D	12.2	9.2	67.6	6,680	22	16.2	15 x 1.0**	18 x 1.0	74	400	230	1,382	212	0.92
SGBE 092 D	15.5	11.6	81.1	8,700	20	19.6	15 x 1.0**	28 x 1.5	79	500	230	921	236	1.11
SGBE 102 D	18.3	13.8	108.2	9,660	22	25.7	15 x 1.0**	28 x 1.5	79	500	230	921	236	1.11
SGBE 073 D	14.7	10.7	67.7	9,630	24	16.1	15 x 1.0**	18 x 1.0	76	400	230	1,382	212	0.92
SGBE 083 D	18.4	13.8	101.4	10,020	25	23.9	15 x 1.0**	28 x 1.5	76	400	230	1,382	212	0.92
SGBE 093 D	23.3	17.4	121.7	13,050	24	28.7	15 x 1.0**	28 x 1.5	81	500	230	921	236	1.11
SGBE 103 D	27.6	20.7	162.3	14,490	25	38.3	15 x 1.0**	28 x 1.5	81	500	230	921	236	1.11

Standard condition t₁ t₂ DT1 * Single injection
 NB2/SC2 0°C -8°C 8K ** Multiple injection through Venturi distributor
 NB3/SC3 -18°C -25°C 7K *** Throw limit at 0.5 m/s

Subject to modification.

ELECTRIC DEFROST & WEIGHTS

Küba SG commercial classic

Type	Electrical Defrost 230 V-1 / 400 V-3-Y			Weights	
	Coil	Tray	Total	(net)	
				not packed	(gross) packed
	kW	kW	kW	kg	kg
SGBE 021 D	0.8	0.4	1.2	14	16
SGBE 031 D	1.0	0.4	1.4	17	21
SGBE 041 D	1.0	0.4	1.4	21	23
SGBE 051 D	1.4	0.2	1.7	29	36
SGBE 061 D	1.6	0.2	1.9	34	39
SGBE 071 D	1.7	0.3	2.0	42	53
SGBE 081 D	2.2	0.4	2.5	54	65
SGBE 022 D	1.4	0.7	2.1	26	36
SGBE 042 D	1.7	0.8	2.5	41	63
SGBE 062 D	2.6	0.4	3.1	65	90
SGBE 072 D	3.1	0.5	3.6	82	113
SGBE 082 D	3.9	0.7	4.6	106	139
SGBE 092 D	6.5	0.7	7.2	114	162
SGBE 102 D	8.4	0.8	9.3	130	185
SGBE 073 D	4.5	0.8	5.2	111	166
SGBE 083 D	5.6	0.9	6.6	147	202
SGBE 093 D	9.4	0.9	10.3	170	239
SGBE 103 D	12.1	1.8	13.9	228	309

DIMENSIONS & DRAIN

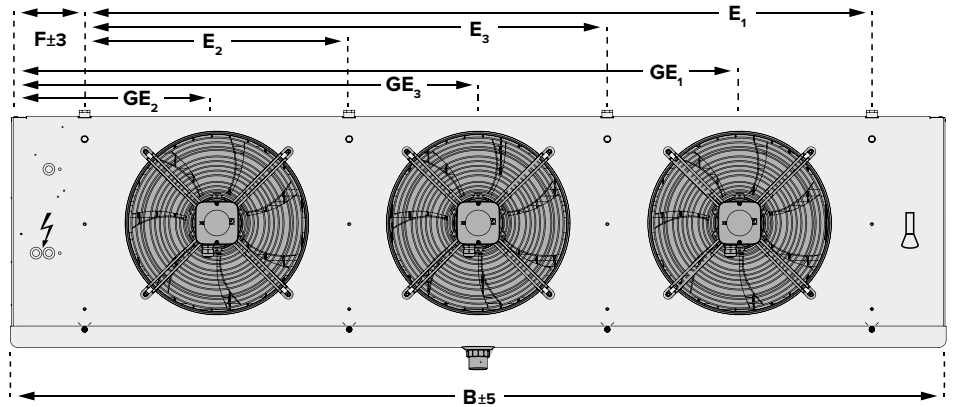
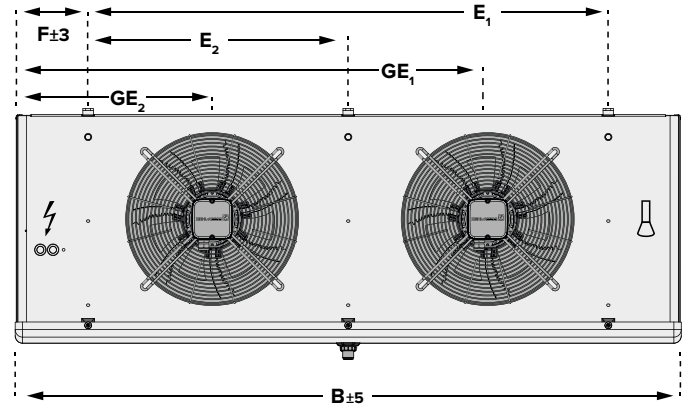
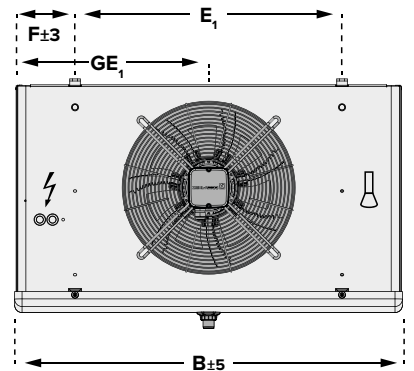
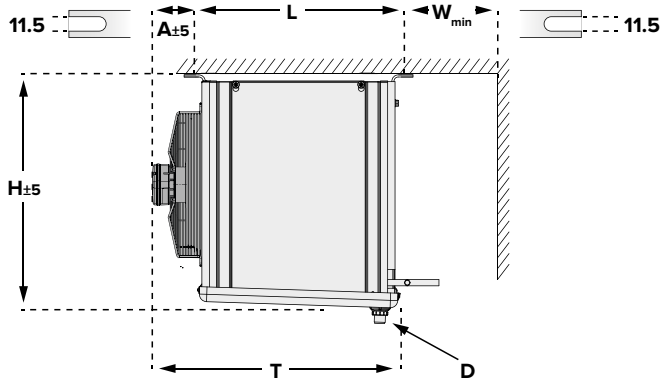
Küba SG commercial classic

Type	Dimensions													Drain
	H	B	T	L	E ₁	E ₂	E ₃	F	A	W _{min}	GE ₁	GE ₂	GE ₃	D
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	inch
SGBE 021 D	360	565	429	345	380	-	-	93	91	200	283	-	-	G ¾"
SGBE 031 D	460	665	440	345	480	-	-	93	100	200	333	-	-	G ¾"
SGBE 041 D	460	665	451	345	480	-	-	93	113	200	333	-	-	G ¾"
SGBE 051 D	560	815	570	415	530	-	-	143	160	300	408	-	-	G ¾"
SGBE 061 D	560	815	538	415	530	-	-	143	130	300	408	-	-	G ¾"
SGBE 071 D	560	915	618	495	630	-	-	143	130	300	458	-	-	G ¾"
SGBE 081 D	560	1,065	618	495	780	-	-	143	130	300	533	-	-	G ¾"
SGBE 022 D	360	1,015	429	345	730	365	-	143	91	200	690	325	-	G ¾"
SGBE 042 D	460	1,215	451	345	930	465	-	143	113	200	840	375	-	G ¾"
SGBE 062 D	560	1,375	538	415	1,030	515	-	173	130	300	945	430	-	G ¾"
SGBE 072 D	560	1,575	618	495	1,230	615	-	173	130	300	1,095	480	-	G ¾"
SGBE 082 D	560	1,875	618	495	1,530	765	-	173	130	300	1,320	555	-	G 1¼"
SGBE 092 D	660	1,875	688	495	1,530	765	-	173	160	400	1,320	555	-	G 1¼"
SGBE 102 D	660	2,375	688	495	2,030	1,015	-	173	160	400	1,695	680	-	G 1¼"
SGBE 073 D	560	2,175	640	495	1,830	615	1,215	173	150	300	1,695	480	1,088	G 1¼"
SGBE 083 D	560	2,625	640	495	2,280	765	1,515	173	150	300	2,070	555	1,313	G 1¼"
SGBE 093 D	660	2,625	688	495	2,280	765	1,515	173	160	400	2,070	555	1,313	G 1¼"
SGBE 103 D	660	3,375	688	495	3,030	1,015	2,015	173	160	400	2,695	680	1,688	G 1¼"

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

DIMENSIONAL DRAWINGS

Küba SG commercial classic



ACCESSORIES

FLANGE FOR TEXTILE SOCK & SHUT-UP®

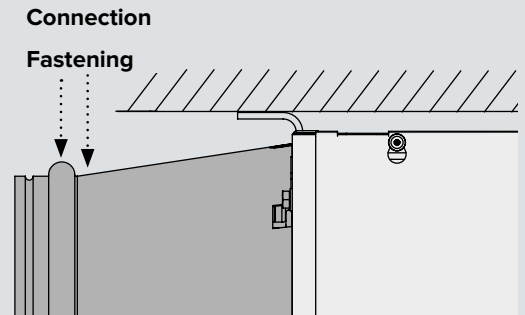
The Shut-Up® optimises the defrosting procedure, especially in deep-freeze applications. Shut-Up® is suspended over the fan unit, closing the Air Cooler. Hot air cannot escape..

Construction:

High-tech microfiber, tearproof, UV-resistant, form resistant, rot-proof, food-safe, washable at 30°C, chemical purification P

Selection table & Dimensions:

Type	Küba SG commercial classic + Adapter			Küba Shut-Up®	
	Fan blade Ø mm	Connections Ø mm	Fixture Ø mm	Air outlet Ø mm	Length mm
SGBE 02x D	250	265	289	220	415
SGBE 03x D	300	322	344	264	475
SGBE 04x D	300	322	344	264	475
SGBE 05x D	400	422	444	344	610
SGBE 06x D	400	422	444	344	610
SGBE 07x D	400	422	444	344	610
SGBE 08x D	400	422	444	344	610
SGBE 09x D	500	522	544	425	636
SGBE 10x D	500	522	544	425	636



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 % (approx. -5 % cooling capacity). 1 Shut-Up® per fan unit required. Delivery not mounted.

DOUBLE-WALLED, INSULATED DRIP TRAY

The double insulated drip tray has 25 mm of insulation.

Prevents condensed water from forming on the bottom side of the tray, and it reduces the transfer of defrost heat into the cold room.

The following dimensions are changed:

- Width B: +60 mm
- Height H: +30 mm
- Depth T: +30 mm



NOTE:

Delivery not mounted. Drain made of aluminum with thread

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