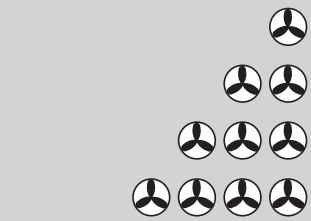
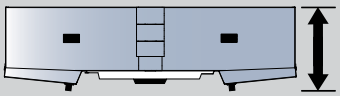
Küba DZ *production*

Küba DZ *production*: Specific advantages

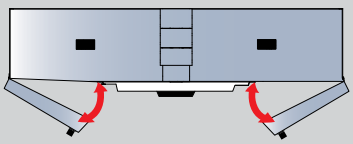
Our dual discharge Küba DZ *production* is designed for use in production and work rooms such as in slaughterhouses and dairies.



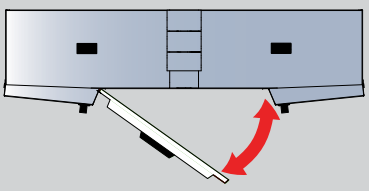
The low profile ceiling design enables optimum use of area space and perfect cool air distribution in normal cold stores as well as in large refrigerated warehouses.



Even the standard design includes the hinge-down drip tray. This makes it easy to clean the cooler and it is easy to assemble and to make service work easy.



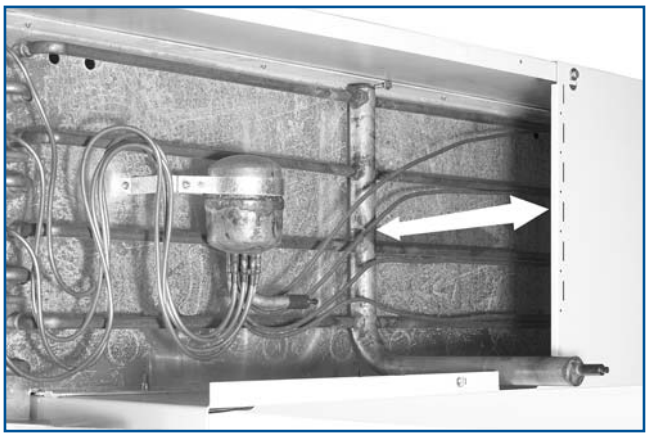
To meet the strictest hygiene requirements the Küba DZ *production* can be cleaned quickly and easily, thanks to its optional hinged fans.



Küba DZ *production*: Specific advantages

1. Quick installation

The generously sized installation area allows components such as expansion valves, solenoid valves to be mounted easily.



2. Hygiene

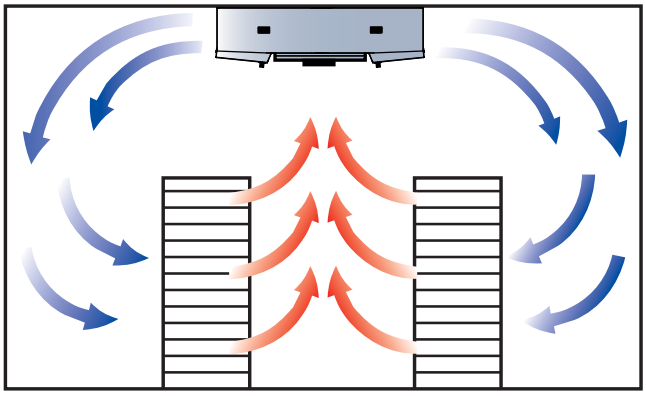
Even in the standard design the brackets are designed such that the Air Coolers can be mounted as desired:

- Flush with the ceiling for the hygienic area
- With a clearance of 20 mm from the ceiling for deep-freeze applications an insulating air cushion is generated.

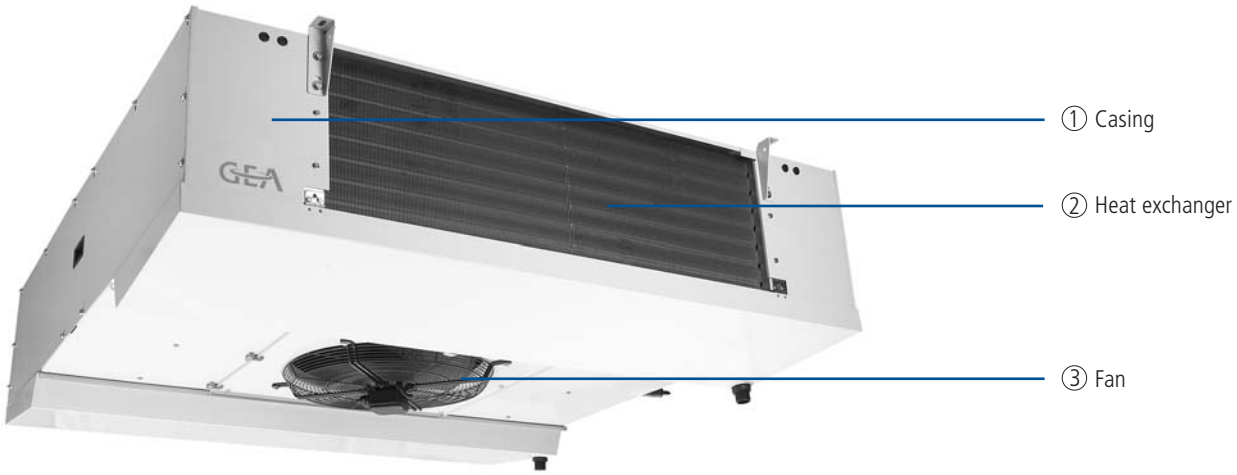
The adjustment can be made on site by simply moving the brackets. The standard ceiling clearance is 20 mm. However, when an order is placed, this specification can be given as 3 mm.

3. Ventilation

Air is discharged evenly on both sides of the air cooler. When it is mounted in the centre of the room or between suspension racks, it provides air circulation on both sides, resulting in homogeneous room conditions and uniform cooling of the products:



Construction



1. Casing

- Smooth Sendzimir galvanised steel
- High-grade powder coating, papyrus white RAL 9018
  - Food quality
  - Easy to clean
  - Optimum corrosion protection
- Hinge-down drip tray and removable side panels
- Stainless steel mounting material
- Plastic drain up to 1 1/4“ longer than 2“, stainless steel

2. Heat exchanger

- Fin spacing
  DZA: 4,5 mm
  DZB: 7 mm
  DZK: 12 mm
- Tube arrangement aligned, spacing 50 x 50 mm
- HFE® tube / fin system
- **DZ *production*-F: FKW / CO_2**
  Küba-CAL®-refrigerant distributor for multiple injection
  Tubing: Cu-special
  Fins: Al
  End plates: Al
- **DZ *production*-G: Glycol**
  Distributor tubes for multiple injection
  Tubing: Cu-special
  Fins: Al
  End plates: Al
- **DZ *production*-N: Pump operation, NH_3**
  Distributor tubes for multiple injection
  Tubing: VA
  Fins: Al
  End plates: Al

3. Fans

- Ø 400 / 450 / 500 / 560 mm
- With built-in protector to be connected on site
- Application range: - 40 °C to + 45 °C
- 400 ±10% V-3~, 50 Hz
- At maximum speed (Δ operation) only very minimal moisture discharge from the fins
- Protection class IP54 in accordance with EN 60529
- Insulation class F in accordance with EN 60034
- 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 (max. allowable value +40 °C)

	Δ operation			Y operation		
	min^{-1}	W	A	min^{-1}	W	A
DZ 40 – F41-F64	1350	320	0,66	1050	230	0,38
DZ 45 – F41-F64	1330	640	1,10	970	430	0,70
DZ 50 – F41-F84	1320	820	1,50	1030	550	0,95
DZ 56 – F41-F84	1360	845	1,65	1090	640	1,05

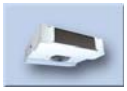
Construction

4. Electric defrost

- 230 ±10% V-1~ oder 400 ±10% V-3~ -Y
- Heaters with CrNi steel sleeve
- Vapour-tight connections
- Connector cable 1.5 mm^2 x 1000 mm
- Designed to defrost the fin package quickly and evenly
- To prevent vapour build-up and to accomplish heat exchange with almost no loss, the heaters are mounted in special expanded tube sleeves
- Wired ready for connection to the connection box in accordance with VDE specifications

The following designs are available on request:

- Special voltage on request
- Special design for frequency converter
- Hot air construction: up to +65 / +70 °C



Refrigerant / coolant

- Can be used with all HFC refrigerants, performance data can be found with Küba Select (Product Selection Software)
- For water / brine circulation choose your air cooler with Küba Select
- For CO_2 operation and for NH_3 applications immediate selection with Küba Select is possible; or ask our technical staff in sales

! The performance data in the Q_V charts refer to the combination of materials: tubes, Cu / fins, Al.

Küba Blue Line
Freshness that lasts longer

Technical data (R404A) DZA-F 4,5 mm

Nomenclature
Standard

DZ	B	E	50	-	F	6	4

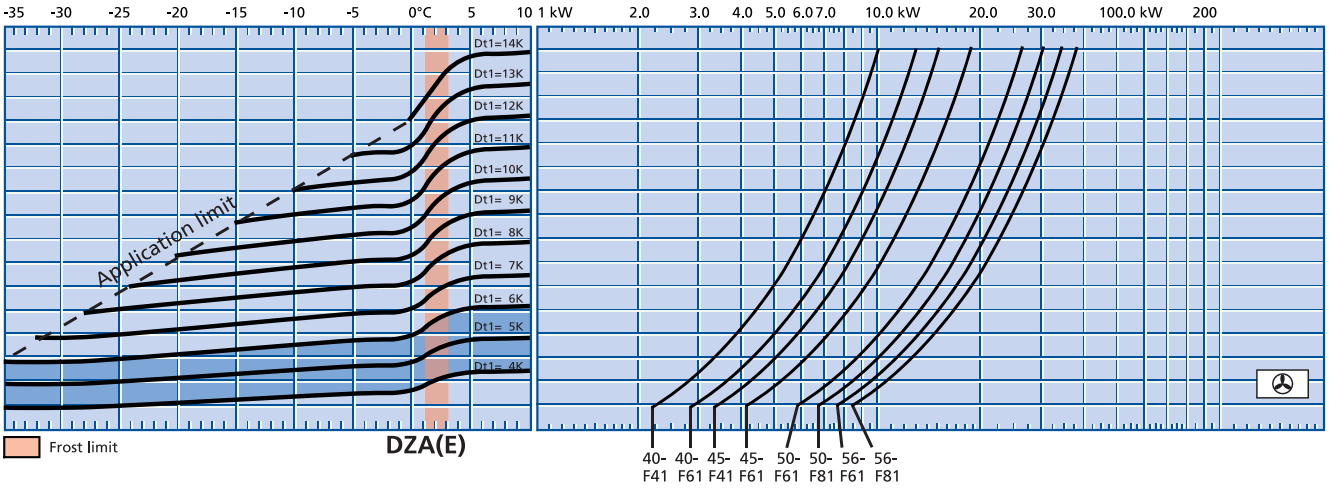
- Line designation
- Fin spacing: A = 4,5 mm; B = 7 mm; K = 10 mm
- Electric defrost: E = with electrical defrost
- Fan diameter: 40 = 400 mm; 45 = 450 mm; 50 = 500 mm; 56 = 560 mm
- Number of fans: 1-4
- Coil depth: 4 tubes; 6 tubes; 8 tubes
- Refrigerant: F = FKW/CO_2; G = Glycol; N = NH_3

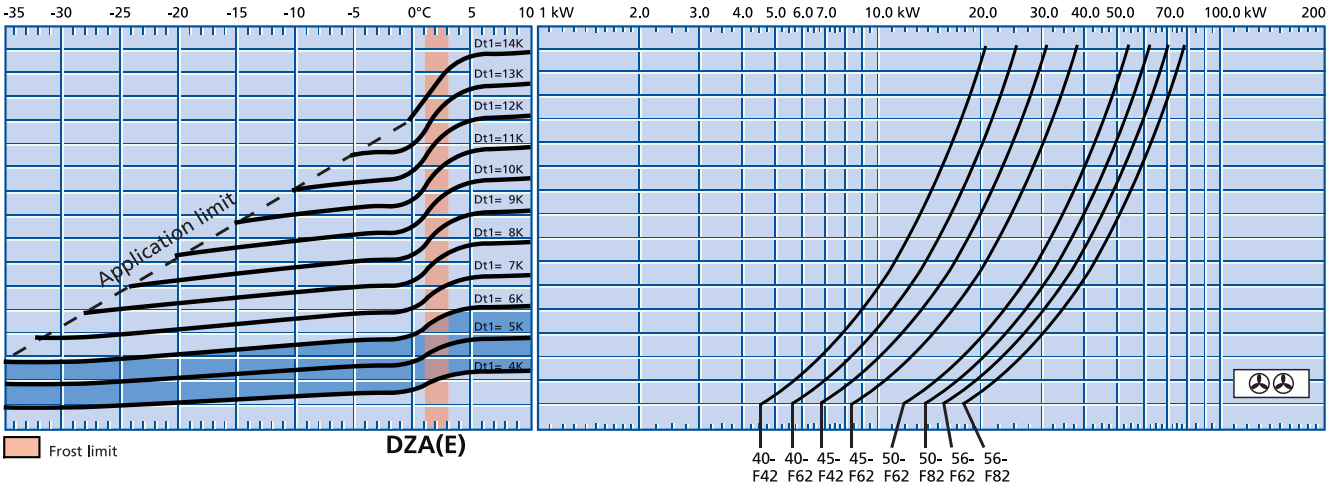
		Rating Q_0 at 50 Hz		Surface	Airflow	Air throw	Tube volume	Connections					
Model		t_{L1} ±0 °C DT1 = 8K	t_{L1} -18 °C DT1 = 7K					Inlet	Outlet	Blade	Per fan 400 ± 10% V-3~ 50Hz (operating values at 50 Hz)		
DZA(E)		kW	kW	m²	m³/h	m	dm³	Ø mm	Ø mm	Ø mm	min⁻¹	W	A
40-F41	✇	5,0	4,0	33	2890	2 x 9	5	10	28	400	1350/1050	320/230	0,66/0,38
40-F61	✇	6,3	5,0	49	2720	2 x 9	8	10	28	400	1350/1050	320/230	0,66/0,38
45-F41	✇	7,6	6,1	44	4400	2 x 11	7	10	28	450	1330/970	640/430	1,10/0,70
45-F61	✇	9,4	7,5	66	4050	2 x 11	11	10	28	450	1330/970	640/430	1,10/0,70
50-F61	✇	13,4	10,7	110	5400	2 x 14	17	10	35	500	1330/1030	820/550	1,50/0,70
50-F81	✇	15,0	11,9	146	5175	2 x 14	23	15	35	500	1330/1030	820/550	1,50/0,70
56-F61	✇	17,3	13,8	132	7245	2 x 16	21	15	35	560	1360/1090	840/640	1,65/1,05
56-F81	✇	19,4	15,5	176	6975	2 x 16	28	15	35	560	1360/1090	840/640	1,65/1,05
40-F42	✇✇	10,1	8,0	66	5780	2 x 12	11	10	28	400	1350/1050	320/230	0,66/0,38
40-F62	✇✇	12,6	10,0	99	5440	2 x 12	16	10	35	400	1350/1050	320/230	0,66/0,38
45-F42	✇✇	15,2	12,1	88	8800	2 x 14	14	10	35	450	1330/970	640/430	1,10/0,70
45-F62	✇✇	18,8	15,0	132	8100	2 x 14	21	15	35	450	1330/970	640/430	1,10/0,70
50-F62	✇✇	26,8	21,4	220	10800	2 x 17	35	22	35	500	1330/1030	820/550	1,50/0,70
50-F82	✇✇	29,9	23,9	293	10350	2 x 17	46	22	42	500	1330/1030	820/550	1,50/0,70
56-F62	✇✇	34,5	27,6	264	14490	2 x 19	41	22	42	560	1360/1090	840/640	1,65/1,05
56-F82	✇✇	38,9	31,1	352	13950	2 x 19	55	22	42	560	1360/1090	840/640	1,65/1,05
40-F43	✇✇✇	15,1	12,0	99	8670	2 x 15	16	10	35	400	1350/1050	320/230	0,66/0,38
40-F63	✇✇✇	18,8	15,0	148	8160	2 x 15	25	15	35	400	1350/1050	320/230	0,66/0,38
45-F43	✇✇✇	22,8	18,2	132	13200	2 x 17	22	15	35	450	1330/970	640/430	1,10/0,70
45-F63	✇✇✇	28,2	22,5	198	12150	2 x 17	32	22	42	450	1330/970	640/430	1,10/0,70
50-F63	✇✇✇	40,2	32,1	329	16200	2 x 20	52	22	42	500	1330/1030	820/550	1,50/0,70
50-F83	✇✇✇	44,9	35,8	439	15525	2 x 20	70	22	42	500	1330/1030	820/550	1,50/0,70
56-F63	✇✇✇	51,8	41,3	395	21735	2 x 22	62	22	54	560	1360/1090	840/640	1,65/1,05
56-F83	✇✇✇	58,3	46,6	528	20925	2 x 22	83	2x22	2x42	560	1360/1090	840/640	1,65/1,05
40-F44	✇✇✇✇	20,1	16,1	132	11560	2 x 18	22	15	35	400	1350/1050	320/230	0,66/0,38
40-F64	✇✇✇✇	25,1	20,1	198	10880	2 x 18	33	22	35	400	1350/1050	320/230	0,66/0,38
45-F44	✇✇✇✇	30,4	24,3	176	17600	2 x 20	29	15	42	450	1330/970	640/430	1,10/0,70
45-F64	✇✇✇✇	37,6	30,0	264	16200	2 x 20	42	22	42	450	1330/970	640/430	1,10/0,70
50-F64	✇✇✇✇	53,5	42,8	439	21600	2 x 23	70	28	54	500	1330/1030	820/550	1,50/0,70
50-F84	✇✇✇✇	59,8	47,8	586	20700	2 x 23	93	2x22	2x42	500	1330/1030	820/550	1,50/0,70
56-F64	✇✇✇✇	69,0	55,1	527	28980	2 x 25	82	28	54	560	1360/1090	840/640	1,65/1,05
56-F84	✇✇✇✇	77,7	62,1	704	27900	2 x 25	110	2x22	2x42	560	1360/1090	840/640	1,65/1,05

Q_V chart (EN328, R404A) DZA-F 4,5 mm

t_{L1} [°C] Air inlet temperature

Q_0 [kW] Cooling capacity

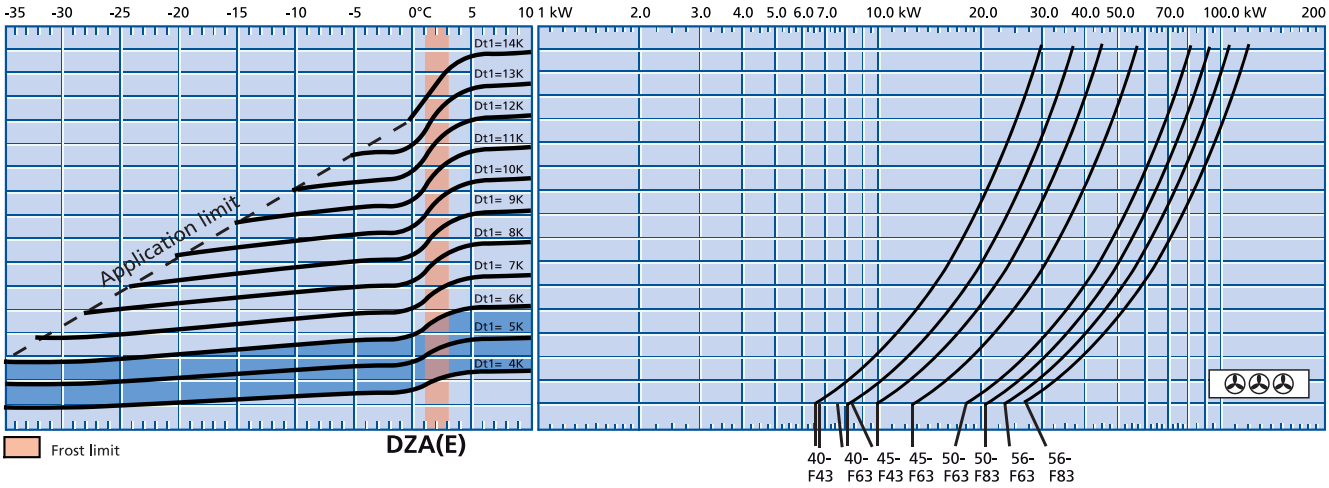


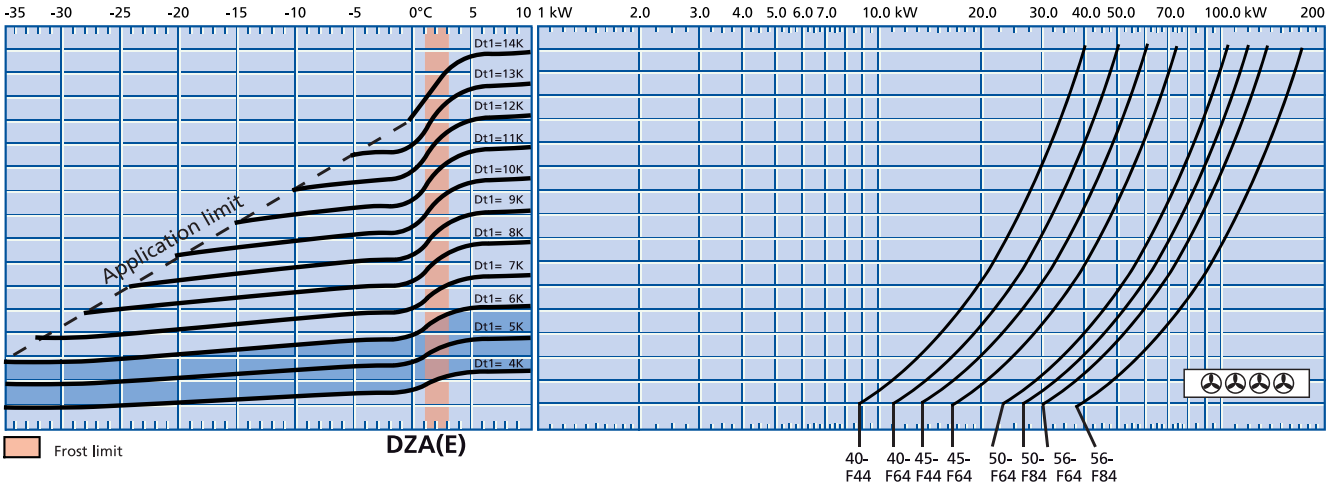


Q_V chart (EN328, R404A) DZA-F 4,5 mm

t_{L1} [°C] Air inlet temperature

Q_0 [kW] Cooling capacity

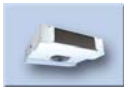




Q_0 = Cooling capacity
t_{L1} = Air inlet temperature
t_0 **[°C]** = Evaporating temperature (coil outlet)
DT1 [K] = Temperature difference $= t_{L1} - t_0$ (°C)

DT1 = 4 K bis 6 K
with electronic expansion valve

Example selection:
For example and explanation, see the information section on p. 136.



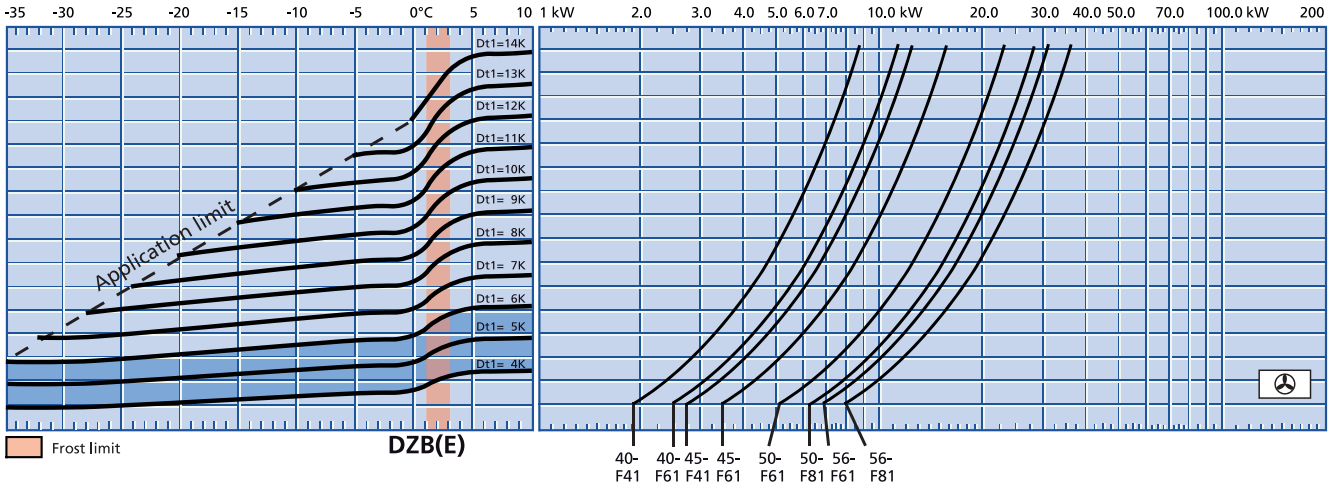
Technical data (R404A) DZB-F 7 mm

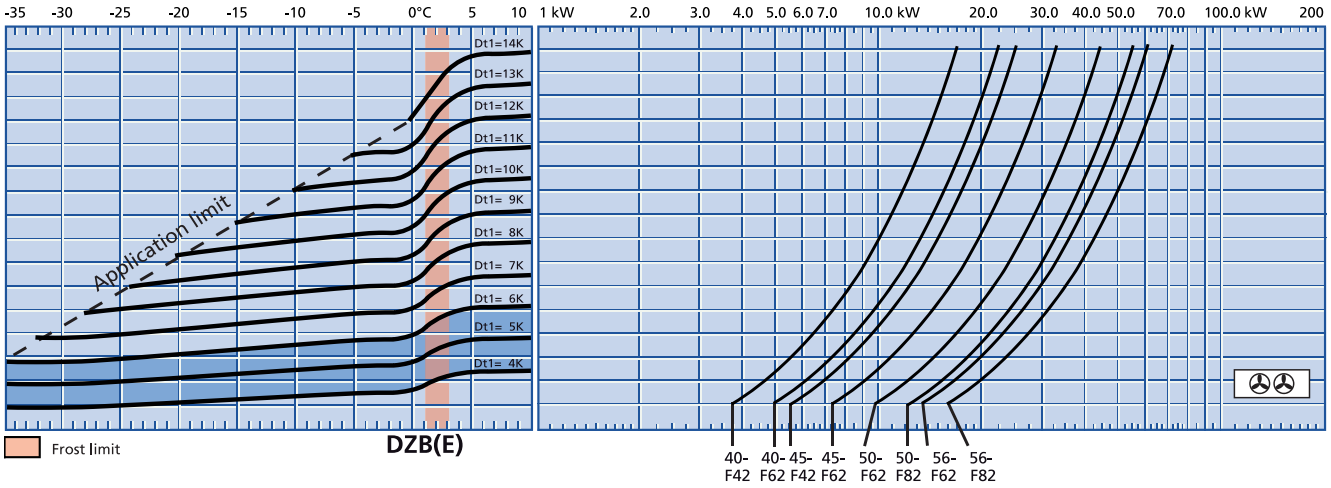
Model DZB(E)		Rating Q_0 at 50 Hz t_{t1} ±0 °C DT1 = 8K	Rating Q_0 at 50 Hz t_{t1} -18°C DT1 = 7K	Surface	Airflow	Air throw	Tube volume	Connections Inlet	Connections Outlet	Blade	Per fan 400 ± 10% V-3~ 50Hz (operating values at 50 Hz)		
		kW	kW	m²	m³/h	m	dm³	Ø mm	Ø mm	Ø mm	min⁻¹	W	A
40-F41	✇	4,2	3,3	22	3140	2 x 10	5	10	28	400	1350/1050	320/230	0,66/0,38
40-F61	✇	5,5	4,4	33	2980	2 x 10	8	10	28	400	1350/1050	320/230	0,66/0,38
45-F41	✇	6,0	4,8	29	4545	2 x 12	7	10	28	450	1330/970	640/430	1,10/0,70
45-F61	✇	7,7	6,1	43	4275	2 x 12	11	10	28	450	1330/970	640/430	1,10/0,70
50-F61	✇	11,4	9,1	72	5670	2 x 15	17	10	35	500	1330/1030	820/550	1,50/0,70
50-F81	✇	13,7	10,9	96	5580	2 x 15	23	15	35	500	1330/1030	820/550	1,50/0,70
56-F61	✇	15,0	12,0	87	7740	2 x 17	21	15	35	560	1360/1090	840/640	1,65/1,05
56-F81	✇	17,7	14,1	116	7560	2 x 17	28	15	35	560	1360/1090	840/640	1,65/1,05
40-F42	✇✇	8,4	6,7	44	6280	2 x 13	11	10	28	400	1350/1050	320/230	0,66/0,38
40-F62	✇✇	11,0	8,8	65	5960	2 x 13	16	10	35	400	1350/1050	320/230	0,66/0,38
45-F42	✇✇	12,0	9,6	58	9090	2 x 15	14	10	35	450	1330/970	640/430	1,10/0,70
45-F62	✇✇	15,3	12,3	87	8550	2 x 15	21	15	35	450	1330/970	640/430	1,10/0,70
50-F62	✇✇	22,8	18,2	145	11340	2 x 18	35	22	35	500	1330/1030	820/550	1,50/0,70
50-F82	✇✇	27,3	21,8	193	11160	2 x 18	46	22	42	500	1330/1030	820/550	1,50/0,70
56-F62	✇✇	30,0	24,0	174	15480	2 x 20	41	22	42	560	1360/1090	840/640	1,65/1,05
56-F82	✇✇	35,4	28,3	232	15120	2 x 20	55	22	42	560	1360/1090	840/640	1,65/1,05
40-F43	✇✇✇	12,6	10,0	65	9420	2 x 16	16	10	35	400	1350/1050	320/230	0,66/0,38
40-F63	✇✇✇	16,5	13,2	98	8940	2 x 16	25	15	35	400	1350/1050	320/230	0,66/0,38
45-F43	✇✇✇	18,0	14,4	87	13635	2 x 18	22	15	35	450	1330/970	640/430	1,10/0,70
45-F63	✇✇✇	23,0	18,4	130	12825	2 x 18	32	22	42	450	1330/970	640/430	1,10/0,70
50-F63	✇✇✇	34,2	27,3	217	17010	2 x 21	52	22	42	500	1330/1030	820/550	1,50/0,70
50-F83	✇✇✇	41,0	32,8	289	16740	2 x 21	70	22	42	500	1330/1030	820/550	1,50/0,70
56-F63	✇✇✇	45,0	36,0	260	23220	2 x 23	62	22	54	560	1360/1090	840/640	1,65/1,05
56-F83	✇✇✇	53,1	42,4	347	22680	2 x 23	83	2x22	2x42	560	1360/1090	840/640	1,65/1,05
40-F44	✇✇✇✇	16,8	13,4	87	12560	2 x 19	22	15	35	400	1350/1050	320/230	0,66/0,38
40-F64	✇✇✇✇	22,0	17,6	130	11920	2 x 19	33	22	35	400	1350/1050	320/230	0,66/0,38
45-F44	✇✇✇✇	24,0	19,2	116	18180	2 x 21	29	15	42	450	1330/970	640/430	1,10/0,70
45-F64	✇✇✇✇	30,7	24,5	174	17100	2 x 21	42	22	42	450	1330/970	640/430	1,10/0,70
50-F64	✇✇✇✇	45,5	36,4	290	22680	2 x 24	70	28	54	500	1330/1030	820/550	1,50/0,70
50-F84	✇✇✇✇	54,7	43,7	386	22320	2 x 24	93	2x22	2x42	500	1330/1030	820/550	1,50/0,70
56-F64	✇✇✇✇	60,0	48,0	347	30960	2 x 26	82	28	54	560	1360/1090	840/640	1,65/1,05
56-F84	✇✇✇✇	70,8	56,6	463	30240	2 x 26	110	2x22	2x42	560	1360/1090	840/640	1,65/1,05

Q_V chart (EN328, R404A) — DZB-F — 7 mm

t_{L1} [°C] Air inlet temperature

Q_0 [kW] Cooling capacity

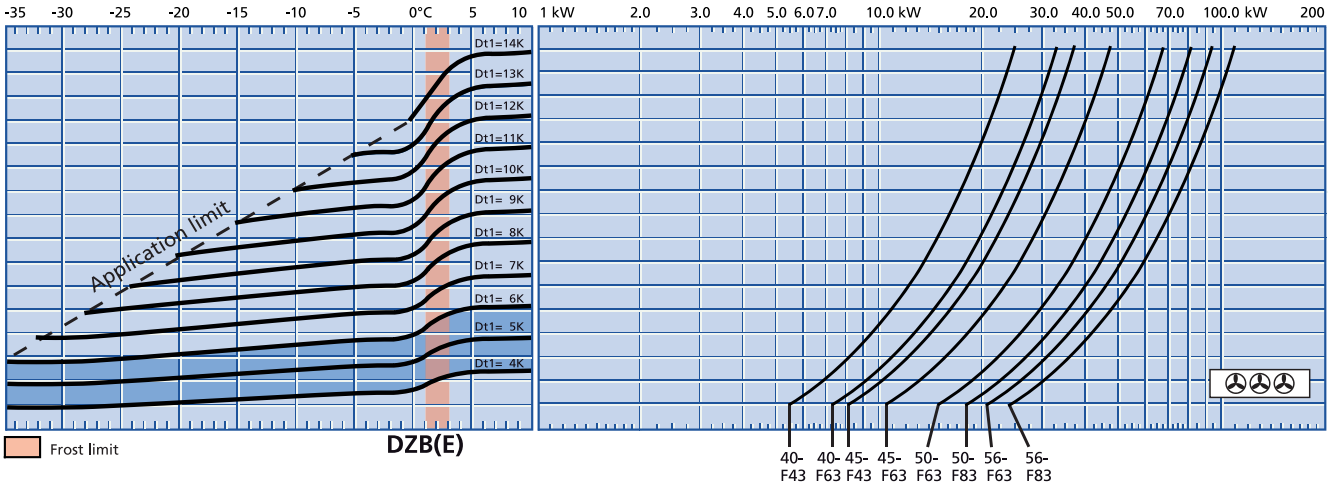


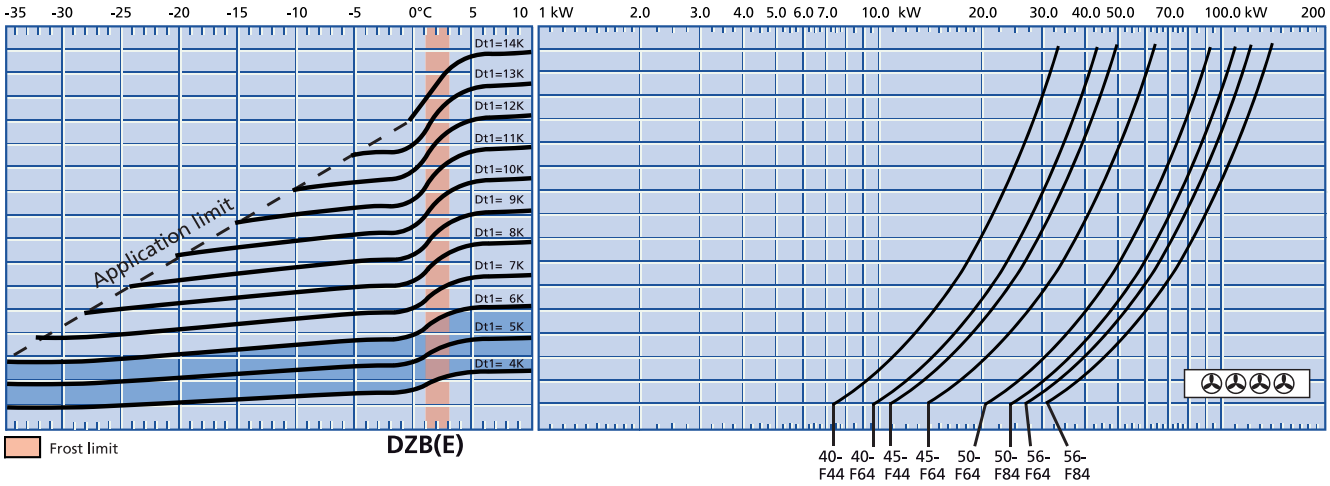


Q_V chart (EN328, R404A) DZB-F 7 mm

t_{L1} [°C] Air inlet temperature

Q_0 [kW] Cooling capacity





Q_0 = Cooling capacity
t_{L1} = Air inlet temperature
t_0 [°C] = Evaporating temperature (coil outlet)
DT1 [K] = Temperature difference $= t_{L1} - t_0$ (°C)

DT1 = 4 K bis 6 K
with electronic expansion valve

Example selection:
For example and explanation, see the information section on p. 136.

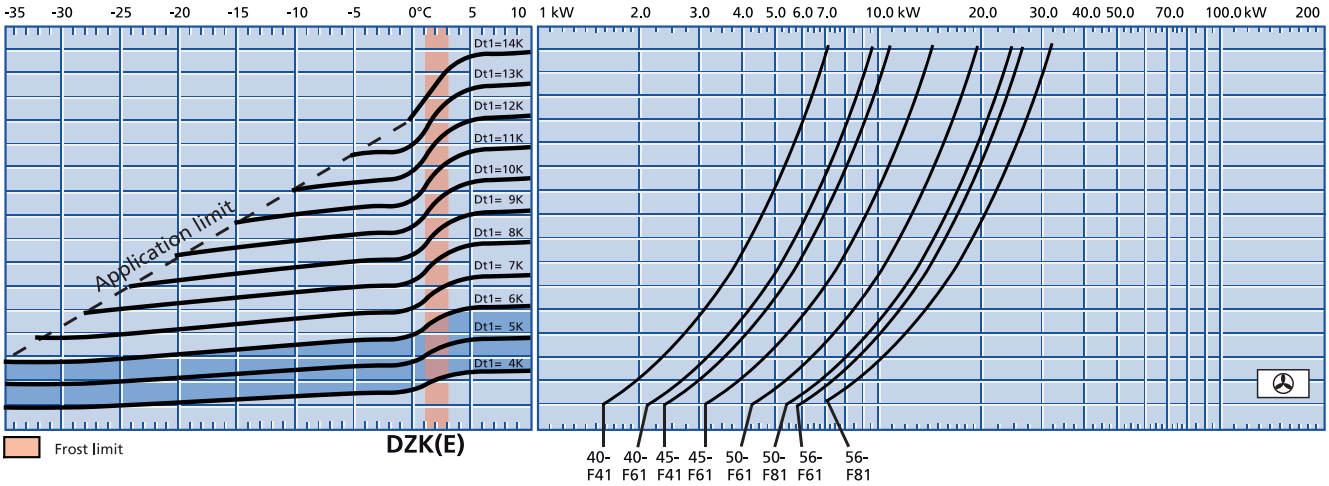
Technical data (R404A) DZK-F 10 mm

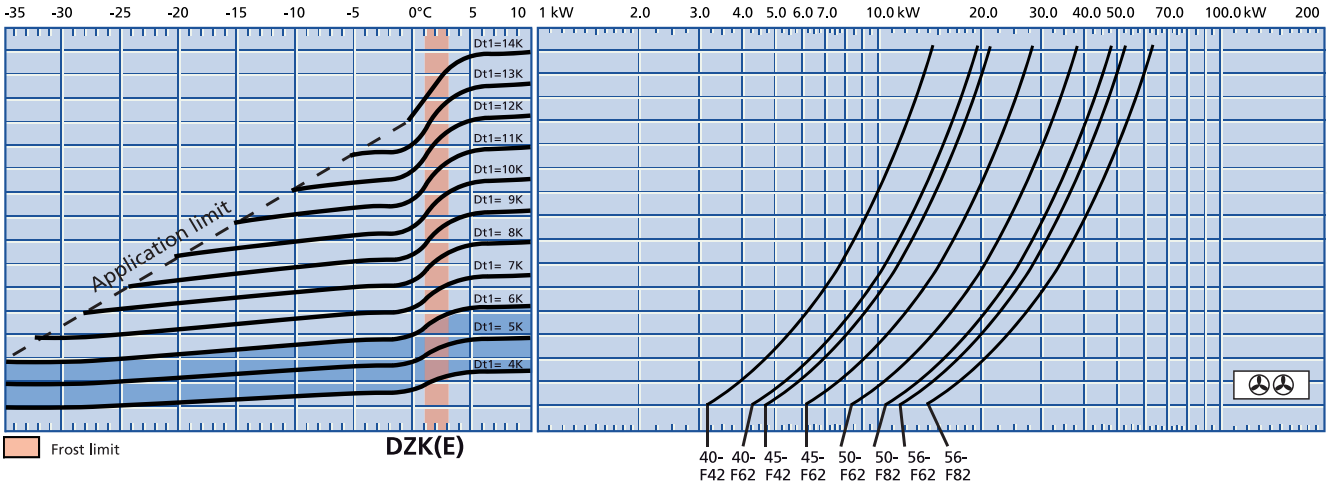
Model		Rating Q_0 at 50 Hz		Surface	Airflow	Air throw	Tube volume	Connections			Per fan 400 ± 10% V-3~ 50Hz (operating values at 50 Hz)		
		t_{t1} ±0 °C DT1 = 8K	t_{t1} -18 °C DT1 = 7K					Inlet	Outlet	Blade			
DZK-F(E)		kW	kW	m²	m³/h	m	dm³	Ø mm	Ø mm	Ø mm	min⁻¹	W	A
40-F41	✇	3,6	2,9	16	3330	2 x 11	5	10	28	400	1350/1050	320/230	0,66/0,38
40-F61	✇	4,9	3,9	23	3240	2 x 11	8	10	28	400	1350/1050	320/230	0,66/0,38
45-F41	✇	5,2	4,1	21	5040	2 x 13	7	10	28	450	1330/970	640/430	1,10/0,70
45-F61	✇	7,1	5,7	31	4905	2 x 13	11	10	28	450	1330/970	640/430	1,10/0,70
50-F61	✇	9,6	7,7	52	5850	2 x 16	17	10	35	500	1330/1030	820/550	1,50/0,70
50-F81	✇	12,0	9,6	69	5760	2 x 16	23	15	35	500	1330/1030	820/550	1,50/0,70
56-F61	✇	12,8	10,2	62	7965	2 x 18	21	15	35	560	1360/1090	840/640	1,65/1,05
56-F81	✇	15,4	12,3	83	7740	2 x 18	28	15	35	560	1360/1090	840/640	1,65/1,05
40-F42	✇✇	7,2	5,7	31	6660	2 x 14	11	10	28	400	1350/1050	320/230	0,66/0,38
40-F62	✇✇	9,8	7,8	47	6480	2 x 14	16	10	35	400	1350/1050	320/230	0,66/0,38
45-F42	✇✇	10,3	8,2	42	10080	2 x 16	14	10	35	450	1330/970	640/430	1,10/0,70
45-F62	✇✇	14,1	11,3	62	9810	2 x 16	21	15	35	450	1330/970	640/430	1,10/0,70
50-F62	✇✇	19,2	15,3	104	11700	2 x 19	35	22	35	500	1330/1030	820/550	1,50/0,70
50-F82	✇✇	23,9	19,1	139	11520	2 x 19	46	22	42	500	1330/1030	820/550	1,50/0,70
56-F62	✇✇	25,5	20,4	125	15930	2 x 21	41	22	42	560	1360/1090	840/640	1,65/1,05
56-F82	✇✇	30,8	24,6	167	15480	2 x 21	55	22	42	560	1360/1090	840/640	1,65/1,05
40-F43	✇✇✇	10,8	8,6	47	9990	2 x 17	16	10	35	400	1350/1050	320/230	0,66/0,38
40-F63	✇✇✇	14,7	11,7	70	9720	2 x 17	25	15	35	400	1350/1050	320/230	0,66/0,38
45-F43	✇✇✇	15,5	12,3	62	15120	2 x 19	22	15	35	450	1330/970	640/430	1,10/0,70
45-F63	✇✇✇	21,2	17,0	94	14715	2 x 19	32	22	42	450	1330/970	640/430	1,10/0,70
50-F63	✇✇✇	28,8	23,0	156	17550	2 x 22	52	22	42	500	1330/1030	820/550	1,50/0,70
50-F83	✇✇✇	35,9	28,7	208	17280	2 x 22	70	22	42	500	1330/1030	820/550	1,50/0,70
56-F63	✇✇✇	38,3	30,6	187	23895	2 x 24	62	22	54	560	1360/1090	840/640	1,65/1,05
56-F83	✇✇✇	46,2	36,9	250	23220	2 x 24	83	2x22	2x42	560	1360/1090	840/640	1,65/1,05
40-F44	✇✇✇✇	14,4	11,5	62	13320	2 x 20	22	15	35	400	1350/1050	320/230	0,66/0,38
40-F64	✇✇✇✇	19,6	15,7	94	12960	2 x 20	33	22	35	400	1350/1050	320/230	0,66/0,38
45-F44	✇✇✇✇	20,6	16,5	83	20160	2 x 22	29	15	42	450	1330/970	640/430	1,10/0,70
45-F64	✇✇✇✇	28,3	22,6	125	19620	2 x 22	42	22	42	450	1330/970	640/430	1,10/0,70
50-F64	✇✇✇✇	38,4	30,6	208	23400	2 x 25	70	28	54	500	1330/1030	820/550	1,50/0,70
50-F84	✇✇✇✇	47,8	38,2	278	23040	2 x 25	93	2x22	2x42	500	1330/1030	820/550	1,50/0,70
56-F64	✇✇✇✇	51,0	40,8	250	31860	2 x 27	82	28	54	560	1360/1090	840/640	1,65/1,05
56-F84	✇✇✇✇	61,6	49,2	334	30960	2 x 27	110	2x22	2x42	560	1360/1090	840/640	1,65/1,05

Q_V chart (EN328, R404A) DZK-F 10 mm

t_{L1} [°C] Air inlet temperature

Q_0 [kW] Cooling capacity

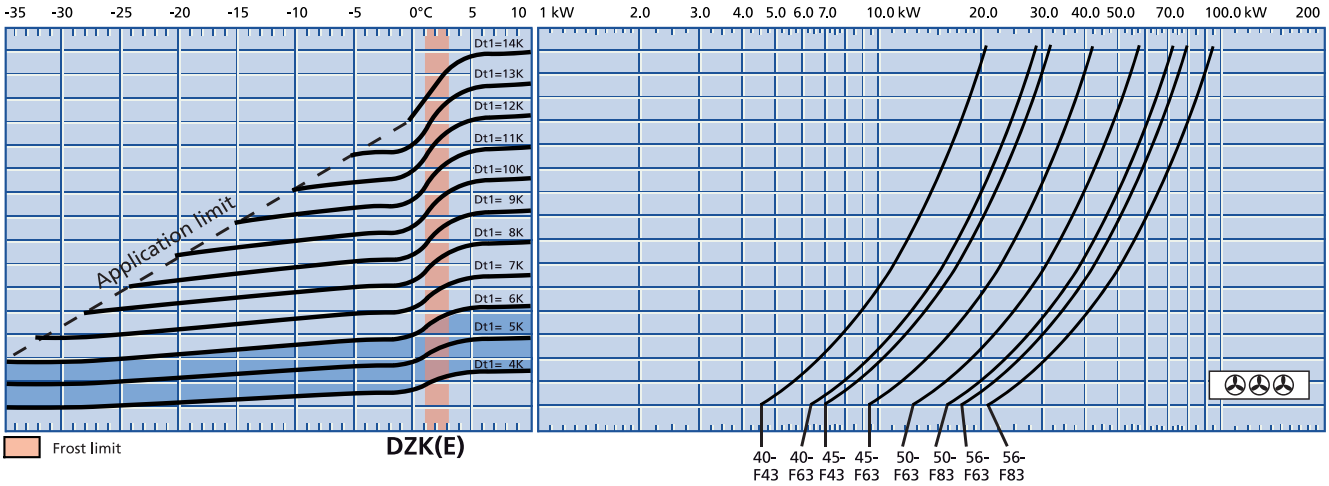


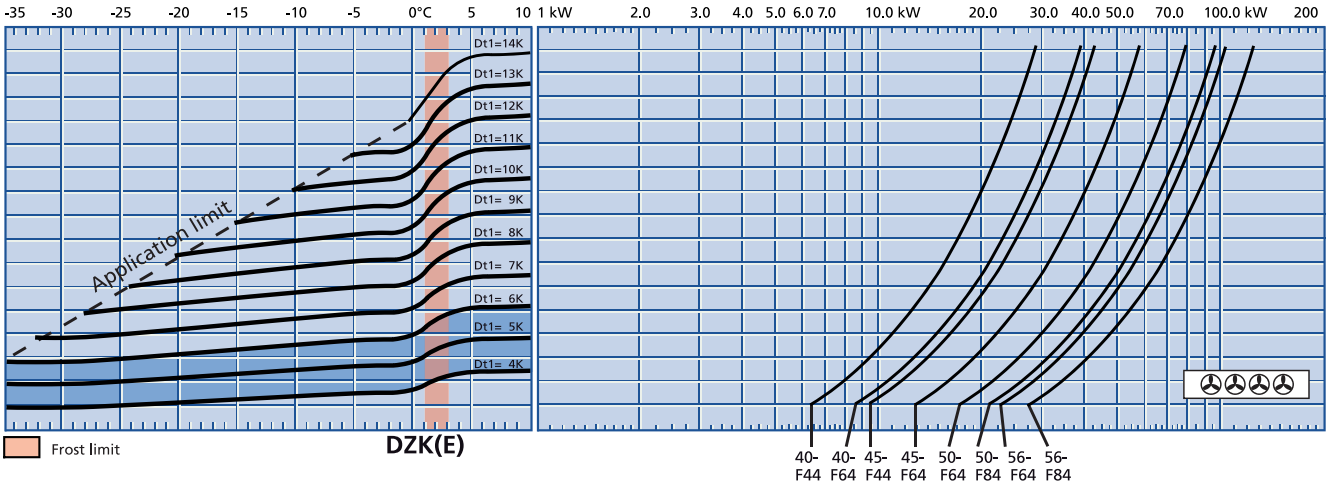


Q_V chart (EN328, R404A) DZK-F 10 mm

t_{L1} [°C] Air inlet temperature

Q_0 [kW] Cooling capacity



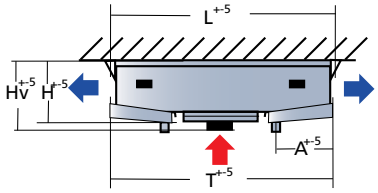


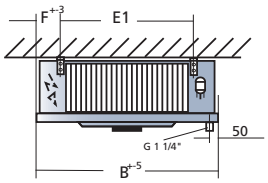
Q_0 = Cooling capacity
t_{L1} = Air inlet temperature
t_0 **[°C]** = Evaporating temperature (coil outlet)
DT1 [K] = Temperature difference = $t_{L1} - t_0$ (°C)

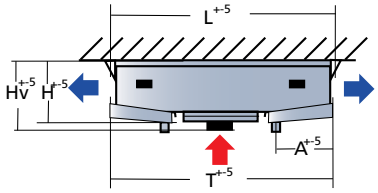
DT1 = 4 K bis 6 K
with electronic expansion valve

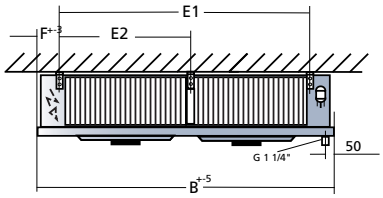
Example selection:
For example and explanation, see the information section on p. 136.

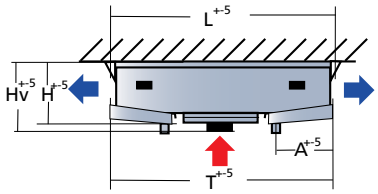
Dimensional drawings

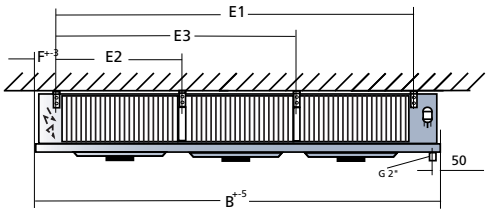


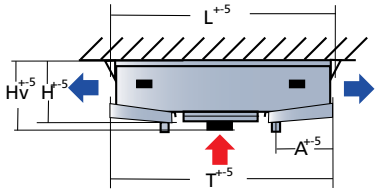


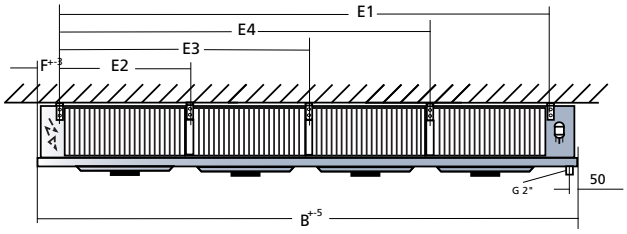












Sound power level L_{WA} [dB(A)]

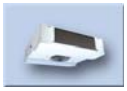
Model	✇	✇ ✇	✇ ✇ ✇	✇ ✇ ✇ ✇
DZ 40	75/69	78/72	80/74	81/75
DZ 45	79/74	82/77	84/79	85/80
DZ 50	80/73	83/76	85/78	86/79
DZ 56	81/76	84/79	86/81	87/82

Dimensional drawings, electric defrost, weights

	Dimensions [mm]											Electric defrost			DZ-F, DZ-G Net weight			DZ-N Net weight		
Size	H	Hv	B	T	L	E_1	E_2	E_3	E_4	F	A	Coil	Tray	Total	DZA	DZB	DZK	DZA	DZB	DZK
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kW	kW	kW/*	kg	kg	kg	kg	kg	kg
40-F41	419	433	1024	1513	1536	650	-	-	-	187	331	2,46	1,38	3,84/1	87	83	81	92	87	85
40-F61	419	433	1024	1513	1536	650	-	-	-	187	331	2,46	1,38	3,84/1	98	91	88	103	95	93
45-F41	419	439	1224	1513	1536	850	-	-	-	187	331	3,06	1,72	4,78/1	101	95	93	106	100	98
45-F61	419	439	1224	1513	1536	850	-	-	-	187	331	3,06	1,76	4,82/1	116	107	103	122	112	108
50-F61	522	564	1624	1902	1926	1050	-	-	-	287	431	5,73	2,29	8,02/2	190	174	169	200	183	177
50-F81	522	564	1624	1902	1926	1050	-	-	-	287	431	7,64	2,29	9,93/2	218	196	187	229	205	196
56-F61	522	541	1824	1902	1926	1250	-	-	-	287	431	6,87	2,60	9,47/2	215	196	189	226	205	198
56-F81	522	541	1824	1902	1926	1250	-	-	-	287	431	9,16	2,60	11,76/2	244	218	207	256	229	217
40-F42	419	433	1624	1513	1536	1250	600	-	-	187	331	4,28	2,29	6,57/1	133	123	116	140	130	122
40-F62	419	433	1624	1513	1536	1250	600	-	-	187	331	4,28	2,29	6,57/1	153	138	134	160	145	140
45-F42	419	439	2024	1513	1536	1650	800	-	-	187	331	5,44	2,87	8,31/1	162	150	146	170	157	153
45-F62	419	439	2024	1513	1536	1650	800	-	-	187	331	5,44	2,87	8,31/1	191	172	165	200	181	174
50-F62	522	564	2624	1902	1926	2050	1000	-	-	287	431	10,32	3,75	14,07/2	317	285	274	333	300	288
50-F82	522	564	2624	1902	1926	2050	1000	-	-	287	431	13,76	3,75	17,51/2	366	321	303	384	337	319
56-F62	522	541	3024	1902	1926	2450	1200	-	-	287	431	12,00	4,33	16,33/2	373	335	322	392	352	338
56-F82	522	541	3024	1902	1926	2450	1200	-	-	287	431	16,00	4,33	20,33/2	434	381	360	456	400	378
40-F43	419	433	2224	1513	1536	1850	600	1200	-	187	324	6,36	3,18	9,54/1	201	187	183	212	196	192
40-F63	419	433	2224	1513	1536	1850	600	1200	-	187	324	6,36	3,18	9,54/1	233	211	204	245	222	215
45-F43	419	439	2824	1513	1536	2450	800	1600	-	187	324	7,80	4,00	11,8/1	255	237	231	268	248	242
45-F63	419	439	2824	1513	1536	2450	800	1600	-	187	324	7,80	4,00	11,8/1	297	269	259	311	282	272
50-F63	522	564	3624	1902	1926	3050	1000	2000	-	287	424	14,52	5,20	19,72/2	440	394	377	462	413	396
50-F83	522	564	3624	1902	1926	3050	1000	2000	-	287	424	19,36	5,20	24,56/2	518	453	426	544	476	448
56-F63	522	541	4224	1902	1926	3650	1200	2400	-	287	424	17,22	6,36	23,58/2	523	466	446	550	489	468
56-F83	522	541	4224	1902	1926	3650	1200	2400	-	287	424	22,96	6,36	29,32/2	614	534	502	644	561	528
40-F44	419	433	2824	1513	1536	2450	600	1200	1800	187	324	7,80	4,00	11,8/1	268	249	243	281	261	255
40-F64	419	433	2824	1513	1536	2450	600	1200	1800	187	324	7,80	4,00	11,8/1	310	282	272	326	296	286
45-F44	419	439	3624	1513	1536	3250	800	1600	2400	187	324	10,40	5,20	15,6/1	325	300	292	341	315	307
45-F64	419	439	3624	1513	1536	3250	800	1600	2400	187	324	10,40	5,20	15,6/1	383	345	332	402	363	349
50-F64	522	564	4624	1902	1926	4050	1000	2000	3000	287	424	20,22	6,88	27,1/2	579	515	493	608	541	517
50-F84	522	564	4624	1902	1926	4050	1000	2000	3000	287	424	26,96	6,88	33,84/2	677	592	556	710	621	584
56-F64	522	541	5424	1902	1926	4850	1200	2400	3600	287	424	23,40	8,00	31,4/3	685	608	566	719	638	585
56-F84	522	541	5424	1902	1926	4850	1200	2400	3600	287	424	31,20	8,00	39,2/3	799	692	650	839	727	683

* Electric defrost divided in /n circuits

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



Versions

Motor versions
• **V1.10**

Internal 3-phase fans
400 ± 10% V-3~, 50Hz Δ/Y

Special features:
• Internal, hinge-down fan
• Fan completely wired to connection box
• Quiet design also available

The cooling capacity data, technical data and dimensions correspond with those for the standard Küba DZ.

Water/brine circulation

• **V2...**
Tube circuitry and connections for water and brine are available.

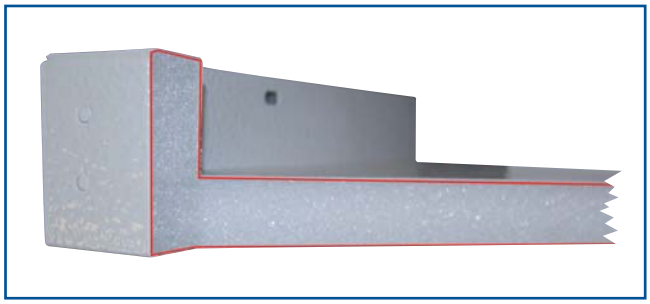
Alternative casing versions

Double insulated drip tray
• **V3.09**

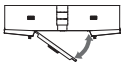
The double insulated drip tray has 25 mm of insulation. The insulation prevents condensation water from building up on the bottom side of the tray and reduces the transfer of defrost heat into the Cold Room.

This changes the following dimensions:

Width B:	+60 mm
Hight H:	+30 mm
Depth T:	+60 mm



Hinged fans
• **V3.10**



To make the devices easy to clean, the fans are mounted with stainless steel hinges.

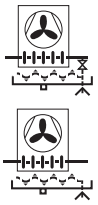
Defrosting versions

All Küba Air Coolers are available with electric defrost. See nomenclature, p. 114

Hot gas defrost in the drip tray
• Hot gas connection on both sides
• V4.01 Copper
• V4.02 Stainless steel

Hot gas in the heat exchanger
• V6.05 Hot gas connection on the heat exchanger

Hot gas in the heat exchanger and in the drip tray, copper design Copper with/without check valve
• Hot gas connection on both sides
• V6.07 with check valve
• V6.08 without check valve



Further information regarding corrosion protection can be found on pages 132 to 135

Protection against corrosion

Stainless steel casing
• **V3.12**

For protection in aggressive environments, e.g. in smokehouses and curing areas, all casing components are stainless steel.

• **V6.01**

Heat exchanger:

Tubing:	Cu
Fin:	Al „goldlack“ coating
End plates:	Al protective coating

Casing: Sendzimir galvanised steel, protective coating on both sides

Versions

- **V6.02**

Heat exchanger:
Tubing: Stainless steel
Fins: Al „goldlack“ coating
End plates: Stainless steel

Casing: Sendzimir galvanised steel, protective coating on both sides
Refrigerant distributor: Standard Venturi
Stainless steel CAL® distributor on request

- **V6.03**

Heat exchanger:
Tubing: Stainless steel
Fins: Al
End plates: Al

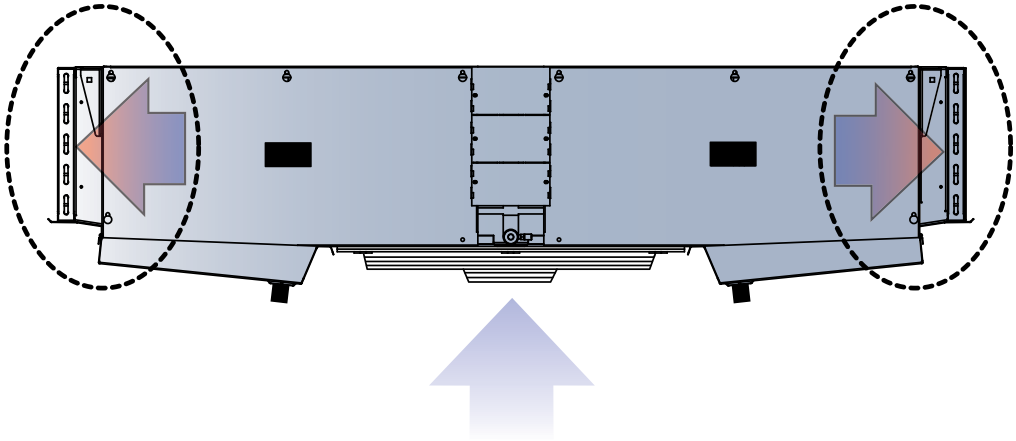
Casing: Sendzimir galvanised steel, protective coating on one side
Refrigerant distributor: Standard Venturi
Stainless steel CAL® distributor on request

- **V6.04**

Heat exchanger:
Tubing: Cu
Fins: Al „goldlack“ coating
End plates: Al

Casing: Sendzimir galvanised steel, protective coating on one side

Accessories



Electric radiator DZHR

For Air Coolers with blow-through fans, for on site assembly.
Suitable for air conditioning or heating in winter. For optimum heat transfer the heaters are mounted in Cu tube sleeves.

- For Air Coolers with blow-through fans, on site assembly.

Only for use with running air cooler fans so that the ceiling of the cold storage areas does not overheat.

Construction:
- 230 ± 10% V-1~ oder 400 ± 10% V-3~ -Y
- Heaters with CrNi steel sleeve
- Vapour-tight connections
- Connector cable 1.5 mm² x 1000 mm
- Casing: Sendzimir galvanised steel
- Fins: Al
- Tube sleeves: Cu
- Completely powder-coated RAL 9018

Selection table

For aircoolers	Rating kW	Number to order
DZ 40-1	2,88	2 DZHR 40-1
DZ 45-1	3,69	2 DZHR 45-1
DZ 50-1	7,65	2 DZHR 50-1
DZ 56-1	9,20	2 DZHR 56-1
DZ 40-2	5,52	2 DZHR 40-2
DZ 45-2	7,26	2 DZHR 45-2
DZ 50-2	15,90	2 DZHR 50-2
DZ 56-2	18,80	2 DZHR 56-2
DZ 40-3	8,15	2 DZHR 40-3
DZ 45-3	11,25	2 DZHR 45-3
DZ 50-3	22,50	2 DZHR 50-3
DZ 56-3	27,20	2 DZHR 56-3
DZ 40-4	11,25	2 DZHR 40-4
DZ 45-4	14,50	2 DZHR 45-4
DZ 50-4	31,80	2 DZHR 50-4
DZ 56-4	37,50	2 DZHR 56-4