

Industrial air cooler VCI

Cooling/Freezing

Cu/Al - R404A



GEA Heat Exchangers



Goedhart



Goedhart VCI

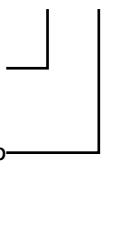
The extensive range Goedhart VCI single discharge ceiling mounted industrial air coolers are available with capacities between 3,4 and 149 kW. The Goedhart VCI air coolers are suitable for cooling and freezing applications and with a wide variety of accessories and options available. The coil block is standard build from aluminium end plates, copper tubes and aluminium fins. The fans are arranged for blow-through air configuration for the Goedhart VCI-B and draw-through for the Goedhart VCI-Z (please state which is required when ordering).. The modular design incorporates 5 different sizes of fan, with model options of up to 8 fans per cooler.

Type description

VCI-B 63457

B=Blow through
Z=Draw through

Number of rows deep



Fin spacing



Fan diameter
in cm

Number of fans

Coil block

- Tube pitch : 50x50 mm straight
- Fin spacing : 4, 6, 7, 8 and 10 mm
- Material : 15mm o.d copper tube
- : aluminium HT-lamellen
- Optimized cooling circuits
- Standard refrigerant connections are positioned on the left hand side of the unit when looking with the direction of the airflow.
- A good thermal contact is achieved by expansion of the tubes into the fin collars, that are also utilised as spacers to provide a constant distance between the fins.
- All coolers are pressure tested to 30 bar (lower by cooling mediums) and are supplied with a light over pressure charge of dry nitrogen.
- Suitable for all known refrigerants and coolants, with the exception of NH₃.

Casing

- Construction for ceiling mounting
- The flush mounting protects against and prevents accumulation of dust and dirt.
- Casing material of galvanized sheet steel
- Finishing is standard white epoxy spray (RAL 9003)
- Bend/header projection by end covers, easy removed for maintenance
- Hinged drip tray.
- Defrost by hot gas spiral or electric defrost elements will be fixed to the bottom side of the coil.

General range features

Capacity

The listed nominal cooling capacities are based on R404A en DT1

Influence of Coating on Capacity

The use of coated fins, or of a fully coated coil will result in a capacity decrease of approximately 3%

Capacity optimisation

Since Goedhart tries to limit stock products, we are capable of optimising the circuitry of our evaporators. In order to do this, the following information is needed :

- Design capacity
- Air volume
- Refrigerant
- Air on temperature
- Evaporating temperature
- Liquid temperature before expansion valve.

Sound data

The mean sound pressure (LpA @ 3m ± 2 dB (A)) each air cooler is a calculated indication value according to the EN13487 standard parallel pipe. Goedhart uses the fan manufacturer's sound power level (LwA) at the inlet side of the fan. Changes to or by the fan or the product, affect the sound, in these cases, consult the manufacturer for the new indication value. In critical sound requirements, we advise you to consult an expert.

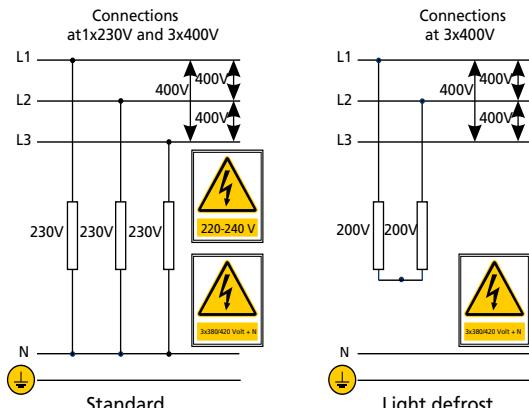
Defrostsystem:

For room temperatures where ice build-up can be expected and where the coilblock can not be defrosted by the room air, electric or hotgas defrost is necessary.

With low temperatures we also advise fan periphery heating.

Electrical defrost:

The Goedhart VRB and VRZ can be provided with electric defrost. A distinction can be made here between heavy defrost loads for low temperatures and light defrost load for higher temperatures (room temperature approximately 0 °C). The stainless steel heater elements are fitted in the coilblock in tubes, which forms a high conductive medium between the heaters and the fins. The driptray heaters are fitted to the underside of the aluminium inner tray with aluminium profiles. The heater elements which are rated for 220/240 V are connected for supply 380/415 V with neutral. The coilblock elements are removable from the end opposite to the refrigerant connections, whilst the tray heater elements can



be removed once the outer tray has been taken off.

Hot gas defrost:

The coil block is suited for hot gas defrost (hot gas supply through the suction header). At an extra price the driptray can be provided with a hotgas/cooling medium spiral. The stainless steel tubes of the hotgas spiral are enclosed in special aluminium profiles that are rigidly secured to the underside of the aluminium inner tray, thus providing a good bond for maximum heat transfer. Just as with electric defrost a distinction is made with hotgas defrost between light defrost load (room temperature about 0°C) and heavy defrost load.

Accessories:

Standard accessories for the Goedhart VCI air coolers are:

- blow-through / draw-through air configuration
- Electric defrost, hot gas defrost and/or water defrost
- Fan periphery heating
- Insulated drip tray
- Insulated hygienic polyester drip tray
- Goedhart VCI-Z supplied with bellmouth connection per fan for a longer air throw
- Goedhart VCI-B supplied with air diffusor for a longer air throw
- Goedhart VCI-B supplied with air diffusor with air operated damper to increase defrost efficiency (airvolume reduced to approx. 90% and capacity reduced to approx. 95%)

The accessories are included in the price list.

Optional extras:

Various optional extras for the VCI are available, price and delivery upon request:

- Isulation disks
- Feet for floor mounting
- Coating of the coil block
- Fan hood
- 60 Hz motors
- EC-fans
- Single phase motors
- Coolants (glycol, water, etc.)
- Pump system
- Other casing materials
- Other fin spacings
- Sea water resistant fins

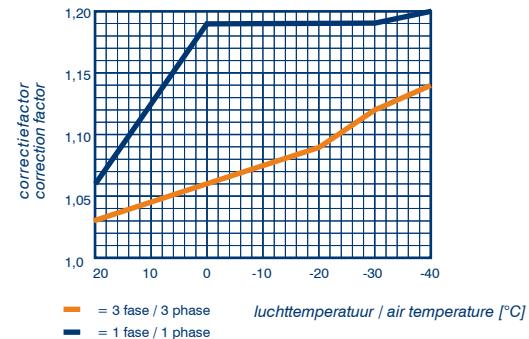
Mounting and Maintenance

Goedhart VCI is delivered on a wooden frame. When on the frame, Goedhart VCI can be handled by forklift truck, which makes positioning and installation simple. Refer to our maintenance and installation manual.



Fans

The manufacturer of the fans is Süd Electric (we reserve the right to alter the manufacturer). The fans have glass fibre reinforced polypropylene impellers. The motors are available for 400V-50Hz-3 phase or 230V-50Hz-1 phase electrical supply. 2-Speed regulation can be achieved at 400/690V-50Hz-3 phase by using a D-Y reconnection (fig. 1). 3 Phase motors are suitable for a frequency controller (A sinus filter is needed, fig. 2). 1 Phase motors are suitable for phase control and transformator. The motors are standard executed with a thermo contact and must always be connected to prevent motor damages. The fans are suitable for operation in air temperature applications between -40 oC and +45 oC. When the air temperature is lower than -40 °C , special fans are needed. These speciale fans have a longer delivery time. The technical data in the table below are the same as on the motor name plates and is valid for an air temperature of +40 °C. For air temperatures lower then +40 oC, the current amperage can be calculated by using the diagram multiplication factor, suitable thermal overloads can then be selected.



Three phase - 50 Hz

Fan type	Tension	Δ				Y				Protection class*	Fan heating
		Speed	Input	FLC	Sound power indication each fan LwA (+/-2dB(A))	Speed	Input	FLC			
	V	min ⁻¹	Watt	A	dB(A)	min ⁻¹	Watt	A		Watt (230V)	

4 pole motor (n=1500 rpm nom.)

400-32°	3x400/690	1350	250	0.60	74	1050	150	0.30	IP44	460
450-32°	3x400/690	1350	400	0.85	78	1050	300	0.50	IP44	580
500-40°	3x400/690	1380	880	1.90	85	1050	660	1.15	IP44	580
560-36°	3x400/690	1250	1000	2.10	85	850	650	1.20	IP66	700
630-32°	3x400/690	1250	1400	2.70	86	870	750	1.50	IP66	820

6 pole motor (n=1000 rpm nom.)

400-28°	3x400/690	900	105	0.33	63	750	65	0.13	IP44	460
450-32°	3x400/690	900	180	0.40	69	750	120	0.20	IP44	580
500-40°	3x400/690	900	500	1.00	81	760	350	0.65	IP44	580
560-32°	3x400/690	880	680	1.60	75	680	400	0.90	IP66	700
630-36°	3x400/690	880	680	1.60	80	680	400	0.90	IP66	820

Single phase - 50 Hz

Ventilatortype	Speed	Input	FLC	Protection class*	
				min ⁻¹	Watt
				A	

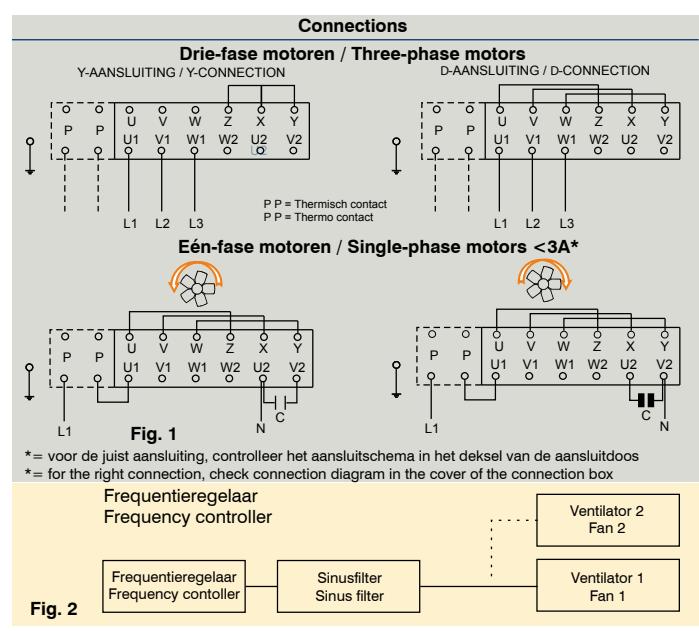
4 pole motor (n=1500 rpm nom.)

400-32°	1350	450	1.95	IP44
450-32°	1350	450	1.95	IP44
500-40°	1330	700	3.40	IP44
560-36°	1350	920	4.00	IP66
630-32°	1350	1300	7.10	IP66

6 pole motor (n=1000 rpm nom.)

400-28°	900	250	1.10	IP44
450-32°	900	250	1.10	IP44
500-40°	900	400	1.75	IP44
560-32°	870	700	3.40	IP66
630-36°	870	700	3.40	IP66

*= IP44 motors also available in IP66 execution (extra price)



Correction factors

Correction factors DT1 (=air-on)

The capacities are based on R-404A direct expansion, DT1 and a RH of 85 %. DT1 is the difference between air-on temperature and the evaporation temperature of the cooler. The evaporation temperature is the saturate temperature corresponding to the pressure at the suction outlet of the cooler.

The nominal capacities:

(SC1)	$t_o=0^\circ\text{C}$	and DT1=10K
(SC2)	$t_o=-8^\circ\text{C}$	and DT1 = 8K
(SC3)	$t_o=-25^\circ\text{C}$	and DT1=7K

Correction factors for various air-on temperatures and temperature differences (DT1) are as indicated in the table below. The requested capacity must be multiplied by a correction factor from the table, so that a cooler with the resulting nominal capacity can be chosen from the selection tables.

Q nominal = factor x Q requested

Cooling

DT1	SC1-DT1 =10K-Air-on=10°C (0/+10)											
	Evaporation temperature (°C)											
K	+7	+6	+5	+4	+3	+2	+1	0	-1	-2		
6	1,87	1,87	1,87	1,88	1,88	1,89	1,89	1,89	1,89	1,90		
7	1,53	1,53	1,54	1,54	1,54	1,55	1,55	1,55	1,55	1,56		
8	1,28	1,28	1,28	1,29	1,29	1,30	1,30	1,30	1,30	1,31		
9	1,11	1,11	1,11	1,12	1,12	1,13	1,13	1,13	1,13	1,14		
10	0,98	0,98	0,98	0,99	0,99	0,99	1,00	1,00	1,00	1,01		
11	0,89	0,89	0,89	0,90	0,90	0,91	0,91	0,91	0,91	0,92		
12	0,78	0,79	0,79	0,79	0,80	0,80	0,80	0,80	0,80	0,81		

Cooling / Freezing

DT1	SC2-DT1 =8K-Air-on=0°C (-8/+0)										
	Evaporation temperature (°C)										
K	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	
6	1,32	1,34	1,39	1,43	1,46	1,46	1,47	1,47	1,48	1,49	
7	1,05	1,08	1,12	1,15	1,18	1,19	1,19	1,20	1,20	1,21	
8	0,86	0,88	0,91	0,94	0,97	1,00	1,00	1,01	1,01	1,02	
9	0,76	0,76	0,78	0,80	0,82	0,86	0,86	0,87	0,87	0,88	
10	0,66	0,67	0,69	0,71	0,73	0,74	0,74	0,75	0,75	0,76	
11	0,58	0,59	0,59	0,60	0,62	0,64	0,64	0,65	0,66	0,67	
12	0,55	0,54	0,54	0,54	0,55	0,55	0,56	0,57	0,58	0,59	

Freezing

DT1	SC3-DT1 =7K-Air-on=-18°C (-25/-18)										
	Evaporation temperature (°C)										
K	-21	-22	-23	-24	-25	-26	-27	-28	-29	-30	
6	1,20	1,20	1,21	1,21	1,22	1,22	1,23	1,23	1,24	1,24	
7	0,99	0,99	0,99	1,00	1,00	1,00	1,01	1,01	1,02	1,02	
8	0,83	0,84	0,84	0,84	0,85	0,85	0,85	0,85	0,86	0,86	
9	0,72	0,72	0,72	0,73	0,73	0,73	0,73	0,74	0,74	0,74	
10	0,63	0,63	0,63	0,64	0,64	0,64	0,64	0,65	0,65	0,65	
11	0,56	0,56	0,56	0,57	0,57	0,57	0,50	0,58	0,58	0,58	
12	0,50	0,51	0,51	0,51	0,51	0,51	0,52	0,52	0,52	0,52	

Calculation example

Fin spacing	: 6 mm	-	DT1 = +3- (+10) = 7K
Required capacity	: 30 kW	-	Correction factor = 1,54
Air-on temperature	: +10 °C	-	Multiply required capacity
Refrigeration temp.	: +3 °C	-	with correction factor.
Condition	: SC1	-	30 kW x 1,54 = 46,2 kW
Refrigerant	: R-404A	-	Select air cooler from the table (SC1 type VCI-B 63506=47,5 kW)

Attention!

Moisture carry over from the coil block:

When you select VCI-B with a Ø500 mm fan in an application with a high relative humidity and/or defrost with room air, Goedhart advises the use of a fan with a low pitch angle or the draw-through execution VCI-Z. Thus, you will avoid the risk of moisture carry over from the coil block. The fan with a low pitch angle give a reducing of the capacity of approx. 5% and a reduction of the air volume of approx. 10%.

Air throw** (only draw-through execution)

The air throw mentioned in the selection table indicated with ** is based on an air temperature of 20°C, blowing under a flat ceiling without any obstruction. The height and air circulation fold of the room can influence the air throw. The air speed at the end of the throw-length is 0,25 m/sec

VCI 4mm Technical data

Type VCI	3x400V-50H-4pole (1500 min ⁻¹ nom.)							Dimensions	Connections				Refrigerant	Air throw**																
	R404A			LpA @ 3 m (+/- 2 dB(A))*	Surface	Internal volume	Weight		L		B		H		C		E1		E2		E3		D1		D2		In	Out	Hot gas	
	DT1 = 10K (SC1) air on= 10°C (0/+10)	DT1 = 8K (SC2) air on= 0°C (-8/+0)	DT1 = 7K (SC3) air on= -18°C (-25/+18)						kW	kW	kW	m ³ /h	dB(A)	m ²	dm ³	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
4.1.40.4	7,1			3079	52	38	6	72	1156	670	620	500					756		578						15	15	19	20		
6.1.40.4	9,7			2820	52	57	9	90	1156	770	620	600					756		578						12	22	19	20		
4.1.45.4	11,6			4652	56	52	8	88	1256	670	720	500					856		628						12	22	19	22,5		
6.1.45.4	14,0			4269	56	78	12	110	1256	720	600					856		628							12	22	19	22,5		
4.1.50.4	15,3			6648	63	65	10	110	1456	790	720	600					1056		728						12	22	19	25		
6.1.50.4	19,0			6124	63	97	15	137	1456	890	720	700					1056		728						12	28	19	25		
4.1.56.4	23,1			9704	63	95	14	153	1556	910	920	700					1156		778						12	28	19	27,5		
6.1.56.4	27,8			9077	63	142	21	189	1556	1010	920	800					1156		778						16	28	35	27,5		
4.1.63.4	30,5			12209	63	129	19	193	1656	910	1120	700					1256		828						16	35	35	27,5		
6.1.63.4	36,7			11498	63	194	29	239	1656	1010	1120	800					1256		828						16	35	35	27,5		
4.2.40.4	15,1			6149	55	75	11	119	1856	670	620	500					1456		928						12	22	19	20		
6.2.40.4	19,5			5629	55	113	17	149	1856	770	620	600					1456		928						12	28	19	20		
4.2.45.4	24,0			9291	59	103	15	147	2056	670	720	500					1656		1028						16	28	19	22,5		
6.2.45.4	28,2			8522	59	155	23	186	2056	770	720	600					1656		1028						16	35	35	22,5		
4.2.50.4	31,2			13283	66	129	19	187	2456	790	720	600					2056		1228						16	35	35	25		
6.2.50.4	38,9			12233	66	194	29	237	2456	890	720	700					2056		1228						16	35	35	25		
4.2.56.4	47,1			19392	66	190	28	262	2656	910	920	700					2256		1328						16	42	35	27,5		
6.2.56.4	56,2			18134	66	285	42	330	2656	1010	920	800					2256		1328						16	42	35	27,5		
4.2.63.4	62,3			24402	66	259	38	335	2856	910	1120	700					2456		1428						22	42	35	27,5		
6.2.63.4	75,4			22978	66	388	57	422	2856	1010	1120	800					2456		1428						22	54	35	27,5		
4.3.45.4	36,3			13929	61	155	23	207	2856	670	720	500					2456		1428						16	35	35	22,5		
6.3.45.4	43,4			12776	61	233	34	263	2856	770	720	600					2456		1428						16	42	35	22,5		
4.3.50.4	48,8			19918	67	194	29	265	3456	790	720	600					1028		2028	864	1728	16	42	35	25					
6.3.50.4	58,9			18341	67	291	43	338	3456	890	720	700					1028		2028	864	1728	16	42	35	25					
4.3.56.4	67,0			29081	67	284	42	372	3756	910	920	700					1128		2228	939	1878	16	42	35	27,5					
6.3.56.4	87,6			27192	67	427	62	470	3756	1010	920	800					1128		2228	939	1878	22	54	42	27,5					
4.3.63.4	93,0			36595	67	388	57	478	4056	910	1120	700					1228		2428	1014	2028	22	54	35	27,5					
6.3.63.4	114,9			34458	67	582	85	605	4056	1010	1120	800					1228		2428	1014	2028	22	54	42	27,5					
4.4.45.4	48,6			18568	62	207	30	264	3656	670	720	500					1628		1628	914	1828	16	42	35	22,5					
6.4.45.4	57,4			17030	62	310	45	339	3656	770	720	600					1628		1628	914	1828	16	42	35	22,5					
4.4.50.4	63,8			26553	68	258	38	342	4456	790	720	600					2028		1114	2228	16	42	35	25						
6.4.50.4	79,0			24449	68	388	57	438	4456	890	720	700					2028		1114	2228	22	54	35	25						
4.4.56.4	95,2			38770	68	379	55	481	4856	910	920	700					2228		1214	2428	22	54	42	27,5						
6.4.56.4	114,0			36251	68	569	83	609	4856	1010	920	800					2228		1214	2428	22	54	42	27,5						
4.4.63.4	125,9			48790	68	517	75	620	5256	910	1120	700					2428		1314	2628	22	54	42	27,5						
6.4.63.4	152,8			45937	68	776	113	789	5256	1010	1120	800					2428		1314	2628	28	64	42	27,5						
4.5.45.4	59,9			23206	62	258	38	324	4456	670	720	500					1628		2428	1114	2228	16	42	35	22,5					
6.5.45.4	72,8			21284	62	388	57	417	4456	770	720	600					1628		2428	1114	2228	22	42	35	22,5					
4.5.50.4	82,7			33189	69	323	47	419	5456	790	720	600					2028		3028	1364	2728	22	54	35	25					
6.5.50.4	99,4			30557	69	485	71	537	5456	890	720	700					2028		3028	1364	2728	22	54	42	25					
4.6.45.4	73,3			27846	63	310	45	385	5256	670	720	500					2428		1314	2628	22	42	35	22,5						
6.6.45.4	85,7			25537	63	465	68	494	5256	770	720	600					2428		1314	2628	22	54	42	22,5						
4.6.50.4	98,4			39823	69	388	57	496	6456	790	720	600					2028		2028	1076	2x2152	22	54	42	25					
6.6.50.4	119,3			36665	69	582	85	637	6456	890	720	700					2028		2028	1076	2x2152	22	54	42	25					
4.7.45.4	85,6			32484	63	362	53	443	6056	670	720	500					2428		2428	1514	3028	22	54	42	22,5					
6.7.45.4	102,6			29791	63	543	79	569	6056	770	720	600					2428		2428	1514	3028	22	54	42	22,5					
4.8.45.4	98,0			37123	64	414	60	502	6856	670	720	500					2428		2428	1443	2x2285	22	54	42	22,5					
6.8.45.4	116,0			34045	64	621	90	646	6856	770	720	600					2428		2428	1443	2x2285	22	54	42	22,5					

* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)), free field conditions, according EN13487

** = Air throw see remark page 5

VCI 6mm Technical data

Type VCI	3x400V-50H-4pole (1500 min ⁻¹ nom.)								Internal volume	Weight	Dimensions										Connections			Air throw*																						
	R404A			Air volume	LpA @ 3 m (+/- 2 dB(A))*	Surface	Internal volume				L					B					H					C		E1		E2		E3		D1		D2		In		Out		Hot gas				
	DT1 = 10K (SC1) air on= 0°C (0/+10)	DT1 = 8K (SC2) air on= 0°C (-8/+0)	DT1 = 7K (SC3) air on= -18°C (-25/+18)								mm ³ /h	dB(A)	m ²	dm ³	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm											
	kW	kW	kW								m ³ /h					mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm												
4.1.40.6	6,2	4,3	3356	52	25	6	68	1156	670	620	500					756		578										15	15	19	20															
6.1.40.6	8,4	5,6	4,1	3179	52	38	9	82	1156	770	620	600					756		578										12	22	19	20														
8.1.40.6	9,7	6,7	4,7	3018	52	51	11	99	1156	870	620	700					756		578										12	22	19	20														
4.1.45.6	9,4	6,2	5083	56	35	8	81	1256	670	720	500					856		628										12	22	19	22,5															
6.1.45.6	11,9	8,1	5,8	4803	56	53	12	100	1256	770	720	600					856		628										12	22	19	22,5														
8.1.45.6	14,2	9,7	6,9	4560	56	70	16	120	1256	870	720	700					856		628										12	22	19	22,5														
4.1.50.6	11,8	8,5		7226	63	44	10	102	1456	790	720	600					1056		728										12	22	19	25														
6.1.50.6	15,4	11,2	7,9	6854	63	66	15	125	1456	890	720	700					1056		728										12	28	19	25														
8.1.50.6	19,3	13,1	9,4	6525	63	88	19	148	1456	990	720	800					1056		728										12	28	19	25														
4.1.56.6	16,3	11,5		10369	63	64	14	141	1556	910	920	700					1156		778										12	28	19	27,5														
6.1.56.6	22,4	16,1	11,2	9943	63	97	21	171	1556	1010	920	800					1156		778										12	28	19	27,5														
8.1.56.6	25,7	17,3	12,6	9557	63	129	28	201	1556	1110	920	900					1156		778										16	28	19	27,5														
4.1.63.6	24,1	16,1		12912	63	88	19	177	1656	910	1120	700					1256		828										16	28	19	27,5														
6.1.63.6	31,5	21,3	15,2	12468	63	132	29	214	1656	1010	1120	800					1256		828									16	35	19	27,5															
8.1.63.6	36,8	25,0	18,0	12048	63	176	38	253	1656	1110	1120	900					1256		828									16	35	19	27,5															
4.2.40.6	13,0	8,7		6706	55	51	11	110	1856	670	620	500					1456		928										12	22	19	20														
6.2.40.6	16,9	11,4	8,2	6352	55	77	17	134	1856	770	620	600					1456		928										12	28	19	20														
8.2.40.6	19,5	13,3	9,5	6027	55	102	22	161	1856	870	620	700					1456		928										12	28	19	20														
4.2.45.6	19,1	12,7		10158	59	70	15	134	2056	670	720	500					1656		1028										12	28	19	22,5														
6.2.45.6	24,3	16,3	11,6	9596	59	105	23	166	2056	770	720	600					1656		1028									16	28	19	22,5															
8.2.45.6	28,7	19,4	13,9	9108	59	141	30	200	2056	870	720	700					1656		1028									16	35	19	22,5															
4.2.50.6	24,2	17,2		14442	66	88	19	171	2456	790	720	600					2056		1228									16	28	19	25															
6.2.50.6	31,4	22,5	15,9	13696	66	132	29	212	2456	890	720	700					2056		1228									16	35	35	25															
8.2.50.6	39,2	26,2	18,8	13035	66	176	38	251	2456	990	720	800					2056		1228									16	35	35	25															
4.2.56.6	32,6	23,0		20729	66	129	28	239	2656	910	920	700					2256		1328									16	35	35	27,5															
6.2.56.6	45,9	32,7	22,5	19873	66	193	42	293	2656	1010	920	800					2256		1328									16	42	35	27,5															
8.2.56.6	53,0	35,6	25,2	19100	66	258	55	347	2656	1110	920	900					2256		1328									16	42	35	27,5															
4.2.63.6	49,3	32,7		25816	66	176	38	302	2856	910	1120	700					2456		1428									16	42	35	27,5															
6.2.63.6	64,3	42,7	30,3	24923	66	264	57	371	2856	1010	1120	800					2456		1428									16	42	35	27,5															
8.2.63.6	74,7	49,9	36,0	24077	66	352	75	443	2856	1110	1120	900					2456		1428									22	54	35	27,5															
4.3.45.6	28,3	18,9		15232	61	105	23	187	2856	670	720	500					2456		1428									16	35	35	22,5															
6.3.45.6	37,1	24,8	17,9	14388	61	158	34	233	2856	770	720	600					2456		1428									16	35	35	22,5															
8.3.45.6	43,1	29,0	20,2	13655	61	211	45	282	2856	870	720	700					2456		1428									16	42	35	22,5															
4.3.50.6	36,6	26,0		21659	67	131	29	240	3456	790	720	600	1028				2228	864	1728		16	35	35	25																						
6.3.50.6	47,5	34,0	23,8	20538	67	197	43	300	3456	890	720	700	1028				2228	864	1728		16	42	35	25																						
8.3.50.6	59,2	39,4	28,2	19545	67	263	57	356	3456	990	720	800	1028				2228	864	1728		16	42	35	25																						
4.3.56.6	52,8	37,4		31087	67	193	42	335	3756	910	920	700	1128																																	

VCI 7mm Technical data

Type VCI	3x400V-50H-4pole (1500 min ⁻¹ nom.)								Dimensions	Connections				Air throw**						
	R404A				Surface	Internal volume	Weight	L	B	H	C	E1	E2	E3	D1	D2	In	Out	Hot gas	
	DT1 = 10K (SC1) air on= 0°C (0/+10)	DT1 = 8K (SC2) air on= 0°C (-8/+0)	DT1 = 7K (SC3) air on= -18°C (-25/+18)	Air volume																
	kW	kW	kW	m ³ /h	dB(A)	m ²	dm ³	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
4.1.40.7	4,0	2,8	3430	52	22	6	76	1156	670	620	500	756	578	15	15	19	20			
6.1.40.7	5,1	3,8	3285	52	33	9	80	1156	770	620	600	756	578	12	15	19	20			
8.1.40.7	6,3	4,5	3147	52	44	11	96	1156	870	620	700	756	578	12	22	19	20			
4.1.45.7	5,5	4,1	5206	56	30	8	93	1256	670	720	500	856	628	12	22	19	22,5			
6.1.45.7	7,7	5,4	4968	56	45	12	97	1256	770	720	600	856	628	12	22	19	22,5			
8.1.45.7	9,2	6,6	4754	56	61	16	116	1256	870	720	700	856	628	12	22	19	22,5			
4.1.50.7	7,8	5,5	7387	63	38	10	115	1456	790	720	600	1056	728	12	22	19	25			
6.1.50.7	10,4	7,5	7073	63	57	15	122	1456	890	720	700	1056	728	12	22	19	25			
8.1.50.7	12,4	8,9	6786	63	76	19	143	1456	990	720	800	1056	728	12	28	19	25			
4.1.56.7	10,1	7,6	10553	63	56	14	160	1556	910	920	700	1156	778	12	22	19	27,5			
6.1.56.7	15,1	10,6	10195	63	84	21	166	1556	1010	920	800	1156	778	12	28	19	27,5			
8.1.56.7	16,7	11,5	9864	63	112	28	193	1556	1110	920	900	1156	778	16	28	19	27,5			
4.1.63.7	14,7	10,5	13095	63	76	19	203	1656	910	1120	700	1256	828	12	28	19	27,5			
6.1.63.7	19,6	14,1	12734	63	114	29	206	1656	1010	1120	800	1256	828	16	35	19	27,5			
8.1.63.7	23,3	16,9	12384	63	152	38	243	1656	1110	1120	900	1256	828	16	35	19	27,5			
4.2.40.7	8,0	5,6	6853	55	44	11	123	1856	670	620	500	1456	928	12	22	19	20			
6.2.40.7	10,7	7,6	6563	55	66	17	130	1856	770	620	600	1456	928	12	22	19	20			
8.2.40.7	12,7	9,0	6285	55	89	22	156	1856	870	620	700	1456	928	12	28	19	20			
4.2.45.7	11,7	8,2	10405	59	60	15	151	2056	670	720	500	1656	1028	12	28	19	22,5			
6.2.45.7	15,3	10,7	9926	59	91	23	160	2056	770	720	600	1656	1028	12	28	19	22,5			
8.2.45.7	18,3	13,2	9495	59	121	30	192	2056	870	720	700	1656	1028	16	28	19	22,5			
4.2.50.7	15,6	11,0	14765	66	76	19	191	2456	790	720	600	2056	1228	16	28	19	25			
6.2.50.7	20,8	14,9	14135	66	114	29	205	2456	890	720	700	2056	1228	16	35	35	25			
8.2.50.7	24,7	17,8	13560	66	152	38	242	2456	990	720	800	2056	1228	16	35	35	25			
4.2.56.7	20,4	15,2	21096	66	111	28	267	2656	910	920	700	2256	1328	16	35	35	27,5			
6.2.56.7	30,3	21,2	20378	66	167	42	282	2656	1010	920	800	2256	1328	16	42	35	27,5			
8.2.56.7	34,2	22,9	19714	66	223	55	333	2656	1110	920	900	2256	1328	16	42	35	27,5			
4.2.63.7	29,5	20,9	26184	66	152	38	342	2856	910	1120	700	2456	1428	16	42	35	27,5			
6.2.63.7	39,3	28,2	25457	66	228	57	357	2856	1010	1120	800	2456	1428	22	42	35	27,5			
8.2.63.7	46,5	33,8	24754	66	304	75	424	2856	1110	1120	900	2456	1428	22	42	35	27,5			
4.3.45.7	17,4	12,3	15604	61	91	23	210	2856	670	720	500	2456	1428	16	28	35	22,5			
6.3.45.7	23,3	16,6	14883	61	137	34	225	2856	770	720	600	2456	1428	16	35	35	22,5			
8.3.45.7	27,5	19,4	14236	61	182	45	270	2856	870	720	700	2456	1428	16	35	35	22,5			
4.3.50.7	23,7	16,5	22144	67	114	29	268	3456	790	720	600	1028	2028	864	1728	16	35	35	25	
6.3.50.7	31,5	22,3	21197	67	171	43	288	3456	890	720	700	1028	2028	864	1728	16	42	35	25	
8.3.50.7	37,0	26,7	20333	67	228	57	342	3456	990	720	800	1028	2028	864	1728	16	42	35	25	
4.3.56.7	34,3	23,2	31642	67	167	42	384	3756	910	920	700	1128	2228	939	1878	16	42	35	27,5	
6.3.56.7	45,9	31,8	30562	67	251	62	398	3756	1010	920	800	1128	2228	939	1878	16	42	35	27,5	
8.3.56.7	54,7	38,6	29566	67	334	83	473	3756	1110	920	900	1128	2228	939	1878	22	54	35	27,5	
4.3.63.7	44,2	29,8	39271	67	228	57	483	4056	910	1120	700	1228	2428	1014	2028	22	42	35	27,5	
6.3.63.7	59,5	42,0	38181	67	342	85	507	4056	1010	1120	800	1228	2428	1014	2028	22	54	35	27,5	
8.3.63.7	71,1	49,5	37124	67	456	113	604	4056	1110	1120	900	1228	2428	1014	2028	22	54	35	27,5	
4.4.45.7	23,7	16,4	20802	62	121	30	274	3656	670	720	500	1628	1628	914	1828	16	35	35	22,5	
6.4.45.7	31,3	22,1	19840	62	182	45	287	3656	770	720	600	1628	1628	914	1828	16	42	35	22,5	
8.4.45.7	36,6	26,4	18978	61	243	60	346	3656	870	720	700	1628	1628	914	1828	16	42	35	22,5	
4.4.50.7	31,7	22,0	29523	68	152	38	351	4456	790	720	600	2028	2028	1114	2228	16	42	35	25	
6.4.50.7	42,0	29,7	28259	68	228	57	373	4456	890	720	700	2028	2028	1114	2228	16	42	35	25	
8.4.50.7	49,4	35,6	27107	68	304	75	441	4456	990	720	800	2028	2028	1114	2228	22	42	35	25	
4.4.56.7	41,8	30,5	42182	68	223	55	491	4856	910	920	700	2228	2228	1214	2428	16	42	35	27,5	
6.4.56.7	61,5	42,4	40744	68	334	83	513	4856	1010	920	800	2228	2228	1214	2428	22	54	42	27,5	
8.4.56.7	69,8	45,8	39415	68	446	110	610	4856	1110	920	900	2228	2228	1214	2428	22	54	42	27,5	
4.4.63.7	59,7	41,8	52359	68	304	75	623	5256	910	1120	700	2428	2428	1314	2628	22	54	42	27,5	
6.4.63.7	79,7	56,4	50904	68	456	113	659	5256	1010	1120	800	2428	2428	1314	2628	22	54	42	27,5	
8.4.63.7	93,2	67,6	49495	68	608	150	784	5256	1110	1120	900	2428	2428	1314	2628	28	64	42	27,5	
4.5.45.7	29,7	20,8	26001	62	152	38	333	4456	670	720	500	1628	2428	1114	2228	16	42	35	22,5	
6.5.45.7	38,8	27,8	24798	62	228	57	352	4456	770	720	600	1628	2428	1114	2228	16	42	35	22,5	
8.5.45.7	45,8	32,9	23720	62	304	75	425	4456	870	720	70									

VCI 8mm Technical data

Type VCI	3x400V-50H-4pole (1500 min ⁻¹ nom.)								Dimensions										Connections			Air throw**
	R404A																	Refrigerant				
	DT1 = 10K air on= 0°C (0/+10)	DT1 = 8K air on= 0°C (-8/0)	DT1 = 7K air on= -18°C (-25/-18)	Air volume	LpA @ 3 m (+/- 2 dB(A))*	Surface	Internal volume	Weight	L	B	H	C	E1	E2	E3	D1	D2	In	Out	Hot gas		
	kW	kW	kW	m ³ /h	dB(A)	m ²	dm ³	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		
6.1.40.8	4,7	3,5	3361	52	29	9	80	1156	770	620	600	756	578	12	15	19	20					
8.1.40.8	6,0	4,3	3244	52	39	11	94	1156	870	620	700	756	578	12	22	19	20					
1.1.40.8	6,7	4,6	3131	52	49	14	108	1156	970	620	800	756	578	12	22	19	20					
6.1.45.8	7,2	5,1	5090	56	40	12	95	1256	770	720	600	856	628	12	22	19	22,5					
8.1.45.8	8,7	6,3	4902	56	54	16	112	1256	870	720	700	856	628	12	22	19	22,5					
1.1.45.8	9,8	7,0	4730	56	67	19	130	1256	970	720	800	856	628	12	22	19	22,5					
6.1.50.8	9,7	7,0	7236	63	50	15	119	1456	890	720	700	1056	728	12	22	19	25					
8.1.50.8	11,6	8,5	6986	63	67	19	139	1456	990	720	800	1056	728	12	28	19	25					
1.1.50.8	13,3	9,6	6754	63	84	24	159	1456	1090	720	900	1056	728	12	28	19	25					
6.1.56.8	14,1	10,0	10380	63	74	21	162	1556	1010	920	800	1156	778	12	28	19	27,5					
8.1.56.8	16,1	11,0	10096	63	98	28	189	1556	1110	920	900	1156	778	12	28	19	27,5					
1.1.56.8	18,7	13,6	9827	63	123	35	215	1556	1210	920	1000	1156	778	12	35	19	27,5					
6.1.63.8	18,2	13,2	12925	63	101	29	201	1656	1010	1120	800	1256	828	12	28	19	27,5					
8.1.63.8	21,7	15,9	12630	63	134	38	236	1656	1110	1120	900	1256	828	16	35	19	27,5					
1.1.63.8	25,3	18,0	12344	63	168	47	269	1656	1210	1120	1000	1256	828	16	35	19	27,5					
6.2.40.8	10,0	7,1	6716	55	58	17	127	1856	770	620	600	1456	928	12	22	19	20					
8.2.40.8	12,0	8,6	6479	55	78	22	151	1856	870	620	700	1456	928	12	28	19	20					
1.2.40.8	13,4	9,7	6254	55	98	28	173	1856	970	620	800	1456	928	12	28	19	20					
6.2.45.8	14,5	10,2	10173	59	80	23	155	2056	770	720	600	1656	1028	12	28	19	22,5					
8.2.45.8	17,3	12,5	9794	59	107	30	186	2056	870	720	700	1656	1028	16	28	19	22,5					
1.2.45.8	19,6	13,9	9448	59	134	38	214	2056	970	720	800	1656	1028	16	35	19	22,5					
6.2.50.8	19,4	14,0	14463	66	100	29	199	2456	890	720	700	2056	1228	16	35	19	25					
8.2.50.8	23,2	16,9	13960	66	134	38	234	2456	990	720	800	2056	1228	16	35	19	25					
1.2.50.8	26,6	19,1	13496	66	168	47	269	2456	1090	720	900	2056	1228	16	35	35	25					
6.2.56.8	28,3	20,0	20752	66	147	42	274	2656	1010	920	800	2256	1328	16	35	35	27,5					
8.2.56.8	32,8	22,0	20178	66	197	55	322	2656	1110	920	900	2256	1328	16	42	35	27,5					
1.2.56.8	37,7	27,2	19642	66	246	69	369	2656	1210	920	1000	2256	1328	16	42	35	27,5					
6.2.63.8	36,7	26,3	25840	66	201	57	346	2856	1010	1120	800	2456	1428	16	42	35	27,5					
8.2.63.8	43,4	31,7	25249	66	268	75	409	2856	1110	1120	900	2456	1428	22	42	35	27,5					
1.2.63.8	48,8	35,9	24674	66	336	94	471	2856	1210	1120	1000	2456	1428	22	42	35	27,5					
6.3.45.8	21,8	15,4	15256	61	121	34	219	2856	770	720	600	2456	1428	16	35	19	22,5					
8.3.45.8	26,1	18,6	14685	61	161	45	261	2856	870	720	700	2456	1428	16	35	19	22,5					
1.3.45.8	29,5	21,1	14166	60	201	57	302	2856	970	720	800	2456	1428	16	42	35	22,5					
6.3.50.8	29,5	20,9	21690	67	151	43	281	3456	890	720	700	1028	2028	864	1728	16	42	35	25			
8.3.50.8	34,8	25,3	20936	67	201	57	331	3456	990	720	800	1028	2028	864	1728	16	42	35	25			
1.3.50.8	40,1	28,6	20238	67	252	71	382	3456	1090	720	900	1028	2028	864	1728	16	42	35	25			
6.3.56.8	42,7	30,0	31123	67	221	62	386	3756	1010	920	800	1128	2228	939	1878	16	42	35	27,5			
8.3.56.8	51,4	36,7	30261	67	295	83	457	3756	1110	920	900	1128	2228	939	1878	22	54	35	27,5			
1.3.56.8	58,2	42,0	29454	67	369	103	525	3756	1210	920	1000	1128	2228	939	1878	22	54	35	27,5			
6.3.63.8	55,5	38,8	38756	67	302	85	491	4056	1010	1120	800	1228	2428	1014	2028	22	54	35	27,5			
8.3.63.8	67,0	47,1	37867	67	403	113	582	4056	1110	1120	900	1228	2428	1014	2028	22	54	35	27,5			
1.3.63.8	75,9	54,1	37004	67	503	141	672	4056	1210	1120	1000	1228	2428	1014	2028	22	54	35	27,5			
6.4.45.8	29,3	20,8	20337	62	161	45	279	3656	770	720	600	1628	1628	914	1828	16	42	35	22,5			
8.4.45.8	34,5	25,0	19578	61	215	60	335	3656	870	720	700	1628	1628	914	1828	16	42	35	22,5			
1.4.45.8	39,3	28,2	18883	61	268	75	386	3656	970	720	800	1628	1628	914	1828	16	42	35	22,5			
6.4.50.8	38,9	27,9	28916	68	201	57	361	4456	890	720	700	2028	2028	2228	1628	16	42	35	25			
8.4.50.8	46,9	33,7	27911	68	268	75	426	4456	990	720	800	2028	2028	1114	2228	22	42	35	25			
1.4.50.8	53,4	38,1	26979	68	335	94	492	4456	1090	720	900	2028	2028	1114	2228	22	54	35	25			
6.4.56.8	57,2	40,1	41494	68	295	83	498	4856	1010	920	800	2228	2228	1214	2428	22	54	35	27,5			
8.4.56.8	66,8	44,1	40345	68	394	110	589	4856	1110	920	900	2228	2228	1214	2428	22	54	35	27,5			
1.4.56.8	76,7	54,3	39268	68	492	137	677	4856	1210	920	1000	2228	2228	1214	2428	22	54	35	27,5			
6.4.63.8	74,2	52,6	51671	68	402	113	638	5256	1010	1120	800	2428	2428	1314	2628	22	54	35	27,5			
8.4.63.8	86,7	63,4	50486	68	537	150	755	5256	1110	1120	900	2428	2428	1314	2628	28	54	42	27,5			
1.4.63.8	97,7	71,7	49334	68	671	187	871	5256	1210	1120	1000	2428	2428	1314	2628	28	64	42	27,5			
6.5.45.8	36,2	26,0	25420	62	201	57	341	4456	770	720	600	1628	2428	1114	2228	16	42	35	22,5			
8.5.45.8	43,6	31,1	24470	62	268	75	410	4456	870	720	700	1628	2428	1114	2228	16	42	35	22,5			
1.5.45.8	49,3	34,8	23601	62	335	94	476	4456	720	800	1628	2428	1114	2228	22	42	35	22,5				
6.5.50.8	49,1	33,8	36143	69	251	71	442	5456	890	720	700	2028	3028	1364	2728	22	42	35	25			
8.5.50.8	59,4	40,7	34885	69	335	94	523	5456	990	720	800	2028	3028	1364	2728	22	54	35	25			
1.5.50.8	67,3	47,8	33721	69	419	117	603	5456	1090	720	900	2028	3028	1364	2728	22	54	35	25			
6.6.45.8	44,1	30,5	30502	63	241	68	403	5256	770	720	600	2428	2428	1314	2628	16	42	35	22,5			
8.6.45.8	52,7	37,1	29361	63	322	90	486	5256	870	720	700	2428	2428	1314	2628	22	54	35	22,5			
1.6.45.8	59,1	42,2	28318	63	402	113	563	5256	970	720	800	2428	2428	1314	2628	22	54	35	22,5			
6.6.50.8	58,6	41,9	43370	69	302	85	524	6456	890	720	700	2028	2028	1076	2x2152	22						

* = Sound pressure indication (L_p) at 3 m distance each air cooler (+/- 2 dB(A)), free field conditions, according EN13487

** = Air throw see remark page 5

For moisture carry over see remark pag 5

VCI 10mm Technical data

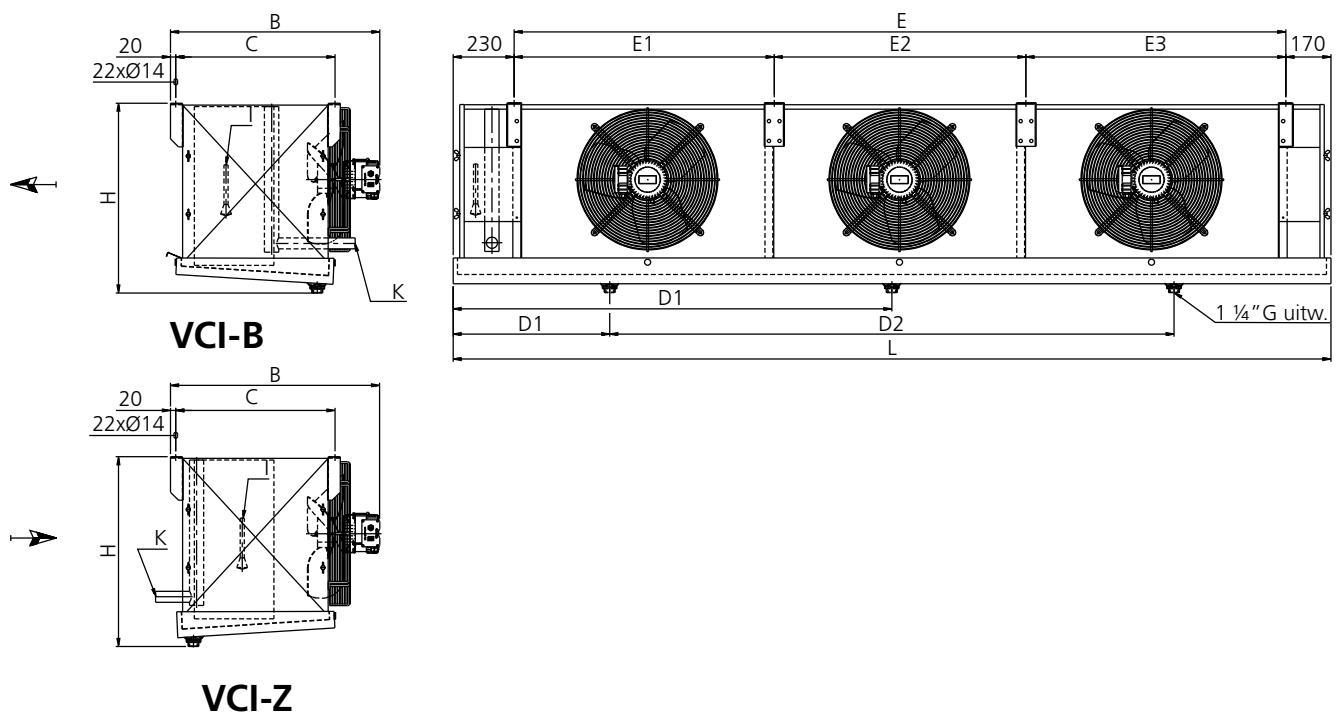
Type VCI	3x400V-50H-4pole (1500 min ⁻¹ nom.)							Dimensions	Connections							Refrigerant	Air throw**													
	R404A			LpA @ 3 m (+/- 2 dB(A))*	Surface	Internal volume	Weight		L		B		H		C		E1		E2		E3		D1		D2		In	Uit	Hot gas	
	DT1 = 10K (SC1) (0/+10)	DT1 = 8K (SC2) (-8/0)	DT1 = 7K (SC3) (-25/-18)						kW	kW	m ³ /h	dB(A)	m ²	dm ³	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
8.1.40.10	5,4	3,9	3374	52	32	11	89	1156	870	620	700		756		578		12	22	19	20										
1.1.40.10	6,2	4,4	3289	52	40	14	103	1156	970	620	800		756		578		12	22	19	20										
8.1.45.10	7,8	5,7	5112	56	44	16	107	1256	870	720	700		856		628		12	22	19	22,5										
1.1.45.10	9,1	6,5	4973	56	55	19	122	1256	720	800			856		628		12	22	19	22,5										
8.1.50.10	10,6	7,6	7264	63	54	19	131	1456	990	720	800		1056		728		12	22	19	25										
1.1.50.10	12,3	8,8	7081	63	68	24	150	1456	1090	720	900		1056		728		12	28	19	25										
8.1.56.10	15,0	10,3	10413	63	80	28	179	1556	1110	920	900		1156		778		12	28	19	27,5										
1.1.56.10	17,5	12,2	10203	63	100	35	203	1556	1210	920	1000		1156		778		12	28	19	27,5										
8.1.63.10	19,1	14,1	12957	63	109	38	222	1656	1110	1120	900		1256		828		16	35	19	27,5										
1.1.63.10	23,1	16,5	12743	63	137	47	253	1656	1210	1120	1000		1256		828		16	35	19	27,5										
8.2.40.10	10,8	7,8	6742	55	64	22	143	1856	870	620	700		1456		928		12	22	19	20										
1.2.40.10	12,4	8,9	6570	55	80	28	163	1856	970	620	800		1456		928		12	28	19	20										
8.2.45.10	15,5	11,3	10217	59	87	30	174	2056	870	720	700		1656		1028		16	28	19	22,5										
1.2.45.10	18,2	12,9	9937	59	109	38	200	2056	970	720	800		1656		1028		16	28	19	22,5										
8.2.50.10	21,1	15,2	14520	66	109	38	220	2456	990	720	800		2056		1228		16	35	19	25										
1.2.50.10	24,6	17,6	14151	66	137	47	251	2456	1090	720	900		2056		1228		16	35	19	25										
8.2.56.10	30,2	20,7	20817	66	160	55	301	2656	1110	920	900		2256		1328		16	42	35	27,5										
1.2.56.10	35,1	24,4	20395	66	200	69	345	2656	1210	920	1000		2256		1328		16	42	35	27,5										
8.2.63.10	38,4	28,1	25907	66	219	75	382	2856	1110	1120	900		2456		1428		16	42	35	27,5										
1.2.63.10	43,5	32,2	25475	66	273	94	439	2856	1210	1120	1000		2456		1428		22	42	35	27,5										
8.3.45.10	23,7	17,0	15321	61	131	45	244	2856	870	720	700		2456		1428		16	35	19	22,5										
1.3.45.10	27,1	19,6	14901	60	164	57	282	2856	970	720	800		2456		1428		16	35	35	22,5										
8.3.50.10	31,3	22,8	21776	67	164	57	310	3456	990	720	800		1028		2028		16	42	35	25										
1.3.50.10	37,0	26,3	21221	67	205	71	356	3456	1090	720	900		1028		2028		16	42	35	25										
8.3.56.10	45,9	33,3	31221	67	240	83	426	3756	1110	920	900		1128		2228		16	42	35	27,5										
1.3.56.10	53,6	38,4	30589	67	301	103	488	3756	1210	920	1000		1128		2228		16	42	35	27,5										
8.3.63.10	59,8	42,8	38854	67	328	113	541	4056	1110	1120	900		1228		2428		16	42	35	27,5										
1.3.63.10	68,9	49,7	38208	67	410	141	623	4056	1210	1120	1000		1228		2428		16	42	35	27,5										
8.4.45.10	30,9	22,6	20425	61	175	60	312	3656	870	720	700		1628		1628		16	42	35	22,5										
1.4.45.10	36,3	25,8	19864	61	218	75	360	3656	970	720	800		1628		1628		16	42	35	22,5										
8.4.50.10	42,9	30,3	29031	68	218	75	398	4456	990	720	800		2028		2228		16	42	35	25										
1.4.50.10	49,5	34,7	28291	68	273	94	457	4456	1090	720	900		2028		2228		22	54	35	25										
8.4.56.10	61,3	41,3	41626	68	321	110	547	4856	1110	920	900		2228		2228		22	54	35	27,5										
1.4.56.10	71,2	48,7	40780	68	401	137	629	4856	1210	920	1000		2228		2228		22	54	35	27,5										
8.4.63.10	78,0	56,2	51803	68	437	150	702	5256	1110	1120	900		2428		1314		22	54	42	27,5										
1.4.63.10	90,8	64,4	50941	68	547	187	807	5256	1210	1120	1000		2428		1314		22	54	42	27,5										
8.5.45.10	39,7	27,8	25530	62	218	75	381	4456	870	720	700		1628		2428		1114		22	42	35	22,5								
1.5.45.10	45,5	32,2	24827	62	273	94	441	4456	970	720	800		1628		2428		1114		22	42	35	22,5								
8.5.50.10	53,9	37,7	36287	69	273	94	487	5456	990	720	800		2028		1000		2028		1364		2728		22	54	35	25				
1.5.50.10	61,9	43,9	35361	69	341	117	562	5456	1090	720	900		2028		1000		2028		1364		2728		22	54	35	25				
8.6.45.10	47,5	34,0	30633	63	262	90	451	5256	870	720	700		2428		2428		1314		2628		22	42	35	22,5						
1.6.45.10	54,2	39,1	29791	63	328	113	522	5256	970	720	800		2428		2428		1314		2628		22	54	35	22,5						
8.6.50.10	63,4	45,5	43543	69	328	113	576	6456	990	720	800		2028		2000		2028		1076	2x2152	22	54	35	25						
1.6.50.10	74,4	52,6	42431	69	410	141	663	6456	1090	720	900		2028		2000		2028		1076	2x2152	22	54	35	25						

* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)), free field conditions, according EN13487

** = Air throw see remark page 5

For moisture carry over see remark pag 5

VCI Drawing



VCI Electrical defrost

Type VC	Light defrost									Heavy defrost*								
	Coil block			Drip tray			Total each air cooler	Coil block			Drip tray			Total each air cooler				
	Number	Type of heating element	Total	Number	Type of heating element	Tension		Number	Type of heating element	Total	Number	Type of heating element	Tension					
	n	mm	kW	aantal	mm	V		n	mm	kW	aantal	mm	V					
4.1.40.f	2	1900	1,52	1	2800	230	1,16	2,68	3	1900	2,28	2	2500	200	1,56	3,84		
6.1.40.f	2	1900	1,52	1	2800	230	1,16	2,68	4	1900	3,04	2	2500	200	1,56	4,6		
8.1.40.f	3	1900	2,28	1	2800	230	1,16	3,44	6	1900	4,56	2	2500	200	1,56	6,12		
1.1.40.f	3	1900	2,28	1	3100	230	1,29	3,57	6	1900	4,56	2	2500	200	1,56	6,12		
4.1.45.f	2	2200	1,78	1	3100	230	1,29	3,07	3	2200	2,67	2	2800	200	1,76	4,43		
6.1.45.f	3	2200	2,67	1	3100	230	1,29	3,96	4	2200	3,56	2	2800	200	1,76	5,32		
8.1.45.f	4	2200	3,56	1	3100	230	1,29	4,85	6	2200	5,34	2	2800	200	1,76	7,1		
1.1.45.f	4	2200	3,56	1	3400	230	1,42	4,98	6	2200	5,34	2	2800	200	1,76	7,1		
4.1.50.f	2	2500	2,04	1	3400	230	1,42	3,46	3	2500	3,06	2	3100	200	1,96	5,02		
6.1.50.f	3	2500	3,06	1	3400	230	1,42	4,48	4	2500	4,08	2	3100	200	1,96	6,04		
8.1.50.f	4	2500	4,08	1	3700	230	1,55	5,63	6	2500	6,12	2	3100	200	1,96	8,08		
1.1.50.f	4	2500	4,08	2	3100	200	1,96	6,04	6	2500	6,12	2	3100	200	1,96	8,08		
4.1.56.f	3	2800	3,48	1	3700	230	1,55	5,03	4	2800	4,64	2	3400	200	2,14	6,78		
6.1.56.f	4	2800	4,64	1	3700	230	1,55	6,19	6	2800	6,96	2	3400	200	2,14	9,1		
8.1.56.f	6	2800	6,96	2	3400	200	2,14	9,1	8	2800	9,28	2	3400	200	2,14	11,42		
1.1.56.f	6	2800	6,96	2	3400	200	2,14	9,1	8	2800	9,28	2	3400	200	2,14	11,42		
4.1.63.f	5	3100	6,45	1	4000	230	1,68	8,13	6	3100	7,74	2	3700	200	2,34	10,08		
6.1.63.f	5	3100	6,45	1	4000	230	1,68	8,13	6	3100	7,74	2	3700	200	2,34	10,08		
8.1.63.f	7	3100	9,03	2	3700	200	2,34	11,37	9	3100	11,61	2	3700	200	2,34	13,95		
1.1.63.f	7	3100	9,03	2	3700	200	2,34	11,37	9	3100	11,61	2	3700	200	2,34	13,95		
4.2.40.f	2	3400	2,84	1	4300	230	1,81	4,65	3	3400	4,26	2	4000	200	2,54	6,8		
6.2.40.f	2	3400	2,84	1	4300	230	1,81	4,65	4	3400	5,68	2	4000	200	2,54	8,22		
8.2.40.f	3	3400	4,26	1	4300	230	1,81	6,07	6	3400	8,52	2	4000	200	2,54	11,06		
1.2.40.f	3	3400	4,26	1	4600	230	1,94	6,2	6	3400	8,52	2	4000	200	2,54	11,06		
4.2.45.f	2	3700	3,1	1	4600	230	1,94	5,04	3	3700	4,65	2	4300	200	2,74	7,39		
6.2.45.f	3	3700	4,65	1	4600	230	1,94	5,59	4	3700	6,2	2	4300	200	2,74	8,94		
8.2.45.f	4	3700	6,2	1	4600	230	1,94	8,14	6	3700	9,3	2	4300	200	2,74	12,04		
1.2.45.f	4	3700	6,2	1	4900	230	2,07	8,27	6	3700	9,3	2	4300	200	2,74	12,04		
4.2.50.f	2	4600	3,88	1	5500	230	2,13	6,01	3	4600	5,82	2	5200	200	3,34	9,16		
6.2.50.f	3	4600	5,82	1	5500	230	2,13	7,95	4	4600	7,76	2	5200	200	3,34	11,1		
8.2.50.f	4	4600	7,76	1	5500	230	2,13	9,89	6	4600	11,64	2	5200	200	3,34	14,98		
1.2.50.f	4	4600	7,76	2	5200	200	3,34	11,1	6	4600	11,64	2	5200	200	3,34	14,98		
4.2.56.f	3	4900	6,21	1	6100	230	2,6	8,81	4	4900	8,28	2	5500	200	3,52	11,8		
6.2.56.f	4	4900	8,28	1	6100	230	2,6	10,88	6	4900	12,42	2	5500	200	3,52	15,94		
8.2.56.f	6	4900	12,42	2	5500	200	3,52	15,94	8	4900	16,56	2	5500	200	3,52	20,08		
1.2.56.f	6	4900	12,42	2	5500	200	3,52	15,94	8	4900	16,56	2	5500	200	3,52	20,08		
4.2.63.f	5	5500	11,65	1	6400	230	2,76	14,41	6	5500	13,98	2	6100	200	3,92	17,9		
6.2.63.f	5	5500	11,65	1	6400	230	2,76	14,41	6	5500	13,98	2	6100	200	3,92	17,9		
8.2.63.f	7	5500	16,31	2	6100	200	3,92	20,23	9	5500	20,97	2	6100	200	3,92	24,89		
1.2.63.f	7	5500	16,31	2	6100	200	3,92	20,23	9	5500	20,97	2	6100	200	3,92	24,89		
4.3.45.f	2	5500	4,66	1	6400	230	2,76	7,42	3	5500	6,99	2	6100	200	3,92	10,91		
6.3.45.f	3	5500	6,99	1	6400	230	2,76	9,75	4	5500	9,32	2	6100	200	3,92	13,24		
8.3.45.f	4	5500	9,32	1	6400	230	2,76	12,08	6	5500	13,98	2	6100	200	3,92	17,9		
1.3.45.f	4	5500	9,32	1	6400	230	2,76	12,08	6	5500	13,98	2	6100	200	3,92	17,9		
4.3.50.f	4	3400	5,68	2	3700	200	2,34	8,02	6	3400	8,52	4	3700	200	4,68	13,2		
6.3.50.f	6	3400	8,52	2	3700	200	2,34	10,86	8	3400	11,36	4	3700	200	4,68	16,04		
8.3.50.f	8	3400	11,36	2	3700	200	2,34	13,7	12	3400	17,04	4	3700	200	4,68	21,72		
1.3.50.f	8	3400	11,36	4	3700	200	4,68	16,04	12	3400	17,04	4	3700	200	4,68	21,72		
4.3.56.f	6	3700	9,3	2	4000	200	2,54	11,84	8	3700	12,4	4	4000	200	5,08	17,48		
6.3.56.f	8	3700	12,4	2	4000	200	2,54	14,94	12	3700	18,6	4	4000	200	5,08	23,68		
8.3.56.f	12	3700	18,6	4	4000	200	5,08	23,68	16	3700	24,8	4	4000	200	5,08	29,88		
1.3.56.f	12	3700	18,6	4	4000	200	5,08	23,68	16	3700	24,8	4	4000	200	5,08	29,88		
4.3.63.f	10	4000	16,8	2	4300	200	2,74	19,54	12	4000	20,16	4	4300	200	5,48	25,64		
6.3.63.f	10	4000	16,8	2	4300	200	2,74	19,54	12	4000	20,16	4	4300	200	5,48	25,64		
8.3.63.f	14	4000	23,52	4	4300	200	5,48	29	18	4000	30,24	4	4300	200	5,48	35,72		
1.3.63.f	14	4000	23,52	4	4300	200	5,48	29	18	4000	30,24	4	4300	200	5,48	35,72		
4.4.45.f	4	3400	5,68	2	4000	200	2,54	8,22	6	3400	8,52	4	4000	200	5,08	13,6		
6.4.45.f	6	3400	8,52	2	4000	200	2,54	11,06	8	3400	11,36	4	4000	200	5,08	16,44		
8.4.45.f	8	3400	11,36	2	4000	200	2,54	13,9	12	3400	17,04	4	4000	200	5,08	22,12		
1.4.45.f	8	3400	11,36	4	4000	200	5,08	16,44	12	3400	17,04	4	4000	200	5,08	22,12		
4.4.50.f	4	4300	7,24	2	4600	200	2,92	10,16	6	4300	10,86	4	4600	200	5,84	16,7		
6.4.50.f	6	4300	10,86	2	4600	200	2,92	13,78	8	4300	14,48	4	4600	200	5,84	20,32		
8.4.50.f	8	4300	14,48	2	4600	200	2,92	17,4	12	4300	21,72	4	4600	200	5,84	27,56		
1.4.50.f	8	4300	14,48	4	4600	200	5,84	20,32	12	4300	21,72	4	4600	200	5,84	27,56		
4.4.56.f	6	4600	11,64	2	5200	200	3,34	14,98	8	4600	15,52	4	5200	200	6,68	22,2		
6.4.56.f	8	4600	15,52	2	5200	200	3,34	18,86	12	4600	23,28	4	5200	200	6,68	29,96		
8.4.56.f	12	4600	23,28	4	5200	200	6,68	29,96	16	4600	31,04	4	5200					

VCI Electrical defrost

Type VC	Light defrost											Heavy defrost*										
	Coil block			Drip tray				Total each air cooler	Coil block			Drip tray				Total each air cooler						
	Number	Type of heating element	Total	Number	Type of heating element	Tension	Total		Number	Type of heating element	Total	Number	Type of heating element	Tension	Total							
	n	mm	kW	aantal	mm	V	kW		n	mm	kW	aantal	mm	V	kW							
4.5.45.f	4	4300	7,24	2	4600	200	2,92	10,16	6	4300	10,86	4	4600	200	5,84	16,7						
6.5.45.f	6	4300	10,86	2	4600	200	2,92	13,78	8	4300	14,48	4	4600	200	5,84	20,32						
8.5.45.f	8	4300	14,48	2	4600	200	2,92	17,4	12	4300	21,72	4	4600	200	5,84	27,56						
1.5.45.f	8	4300	14,48	4	4600	200	5,84	20,32	12	4300	21,72	4	4600	200	5,84	27,56						
4.5.50.f	4	5200	8,8	2	5500	200	3,52	12,32	6	5200	13,2	4	5500	200	7,04	20,24						
6.5.50.f	6	5200	13,2	2	5500	200	3,52	16,72	8	5200	17,6	4	5500	200	7,04	24,64						
8.5.50.f	8	5200	17,6	2	5500	200	3,52	21,12	12	5200	26,4	4	5500	200	7,04	33,44						
1.5.50.f	8	5200	17,6	4	5500	200	7,04	24,64	12	5200	26,4	4	5500	200	7,04	33,44						
4.6.45.f	4	5200	8,8	2	5500	200	3,52	12,32	6	5200	13,2	4	5500	200	7,04	20,24						
6.6.45.f	6	5200	13,2	2	5500	200	3,52	16,72	8	5200	17,6	4	5500	200	7,04	24,64						
8.6.45.f	8	5200	17,6	2	5500	200	3,52	21,12	12	5200	26,4	4	5500	200	7,04	33,44						
1.6.45.f	8	5200	17,6	4	5500	200	7,04	24,64	12	5200	26,4	4	5500	200	7,04	33,44						
4.6.50.f	4	6100	10,4	2	6400	200	4,16	14,56	6	6100	15,6	4	6400	200	8,32	23,92						
6.6.50.f	6	6100	15,6	2	6400	200	4,16	19,76	8	6100	20,8	4	6400	200	8,32	29,12						
8.6.50.f	8	6100	20,8	2	6400	200	4,16	24,96	12	6100	31,2	4	6400	200	8,32	39,52						
1.6.50.f	8	6100	20,8	4	6400	200	8,32	29,12	12	6100	31,2	4	6400	200	8,32	39,52						
4.7.45.f	4	5800	9,84	2	6400	200	4,16	14	6	5800	14,76	4	6100	200	7,84	22,6						
6.7.45.f	6	5800	14,76	2	6400	200	4,16	18,92	8	5800	19,68	4	6100	200	7,84	27,52						
8.7.45.f	8	5800	19,68	2	6400	200	4,16	23,84	12	5800	29,52	4	6100	200	7,84	37,36						
1.7.45.f	8	5800	19,68	4	6400	200	8,32	28	12	5800	29,52	4	6100	200	7,84	37,36						
4.8.45.f	4	6700	11,56	2	7000	200	4,58	16,14	6	6700	17,34	4	7000	200	9,16	26,5						
6.8.45.f	6	6700	17,34	2	7000	200	4,58	21,92	8	6700	23,12	4	7000	200	9,16	32,28						
8.8.45.f	8	6700	23,12	2	7000	200	4,58	27,7	12	6700	34,68	4	7000	200	9,16	43,84						
1.8.45.f	8	6700	23,12	4	7000	200	9,16	32,28	12	6700	34,68	4	7000	200	9,16	43,84						

f = Fin spacing

* = Always heavy electric defrost when using cooling mediums.

Goedhart standard product information

Goedhart standard aircooler overview



VCI



DVS/DRS/DZS



ZGB/ZGZ



PAC



FC38



ZFB/ZFZ





Goedhart air cooler for every application

For Contractors and Original Equipment Manufacturers (OEM) related to the industrial refrigeration industry, GEA Goedhart B.V. offers an unlimited range of air coolers and air cooled condensers in several configurations.

Depending on the application, the optimum configuration will be selected in close cooperation with our customers.



Configurations

The following material combinations are available in various tube pitches and various fin spacing:

Tube material	Fin material
Copper (Cu)	Aluminium (Al)
Stainless steel (Stst)	Aluminium (Al)
Stainless steel (Stst)	Stainless steel (Stst)
Aluminium (Al)	Aluminium (Al)
Hot dipped galvanized steel (FeZn)	Hot dipped galvanized steel (FeZn)



Options on aluminium fins

- Goldblack coated fins
- Seawater resistant aluminium fins (AlMg)



Applications

Cooling	Freezing
Cold stores / Distribution centres	Cold stores / Distribution centres
Food processing rooms	Tunnel / spiral freezers
Fruit storage	Slaughter houses
Banana ripening storage	Automotive testing rooms
Greenhouse conditioning	Ski domes



Pressure Equipment Directive (P.E.D.)

All aircoolers produced by Goedhart comply with the Pressure Equipment Directive 97/23/EC. PED certificates can be downloaded from www.goedhart.nl.





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