

Industrial air cooler VRB/VRZ

Cooling/Freezing

StSt/Al - NH₃

GEA Heat Exchangers



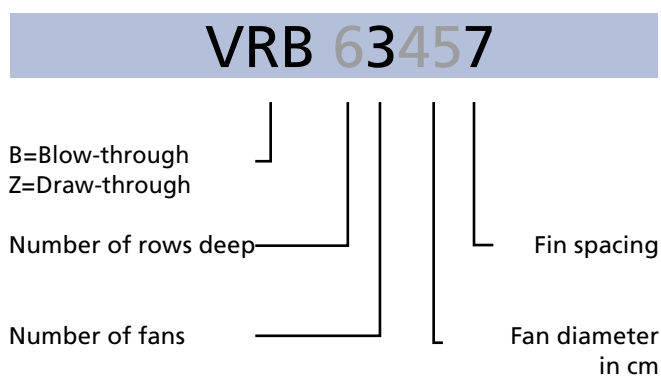
Goedhart



Goedhart VRB/VRZ

The range Goedhart VRB/VRZ single discharge ceiling mounted industrial air coolers consists of 510 types with capacities between 3,9 and 131,3 kW. The Goedhart VRB/VRZ 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, stainless steel 304 tubes and aluminium fins. The fans are arranged for blow-through air configuration for the Goedhart VRB and draw-through for the Goedhart VRZ (please state which is required when ordering).. The modular design incorporates 5 different sizes of fan, with model options of up to 4 fans per cooler

Type-description



Coil block

- Tube pitch : 50x50 mm straight
- Fin spacings : 4, 7, 8, 10 and 12 mm
- Material : 15mm o.d stainless steel 304 tubes
- : aluminium HT-fins
- 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 hydraulic 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.
- Standard the air coolers are suitable for NH₃-pumpcirculation (ratio 2/4).

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 protection 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 NH₃, DT1 and DTM and a RH of 85%.

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.

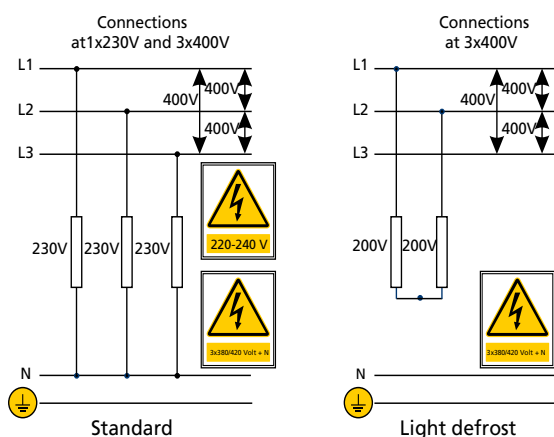
Defrostsystem:

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.

Hotgas defrost:

The coilblock can be made suitable for hotgas. 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 VRB/VRZ air coolers are:

- Electric, hotgas and/or water defrost system.
- Fan periphery heating.
- Insulation within the driptray.
- Insulated hygienic polyester driptray.
- Goedhart VRZ supplied with bellmouth connection per fan for a longer air throw
- Goedhart VRB supplied with air diffuser for a longer air throw
- Goedhart VRB supplied with air diffuser with air operated damper to increase defrost efficiency (air volume reduced to approx. 90% and capacity reduced to approx. 95%)

The accessories are included in the price list.

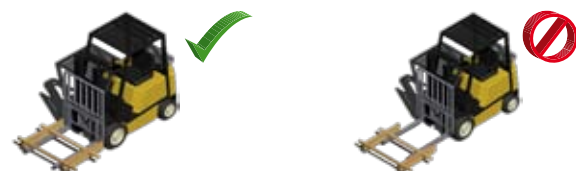
Optional extras:

Various optional extras for the VRB/VRZ are available, price and delivery upon request:

- Insulation discs
- Feet for floor mounting
- Coating of the coilblock
- Fan hood
- 60 Hz motors
- EC-fans
- Single phase motors
- Over heat protection on the motors
- Glycol/water/etc. cooling mediums, NH₃ dx, R22 dx/pump-system.
- Stainless steel casing
- Coupling between hotgas spiral and coilblock
- Other fin spacings
- Stainless steel 316 tubes

Mounting and Maintenance

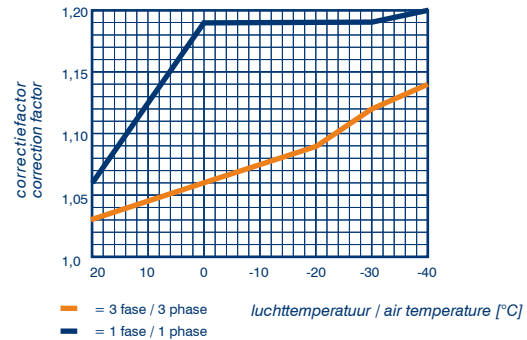
Goedhart VRB/VRZ is delivered on a wooden frame. When on the frame, Goedhart VRB/VRZ can be handled by forklift truck, which makes positioning and installation simple. Refer to our maintenance and installation manual..



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 transformer. The motors are standard executed with a thermo contact. The fans are suitable for operation in air temperature applications between -40 oC and +45 oC. When the air temperature is lower then -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		
		min ⁻¹	Watt	A	dB(A)	min ⁻¹	Watt	A		

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	1300	1250	2.30	85	1000	750	1.30	IP66	700
630-32°	3x400/690	1300	1250	2.30	86	1000	750	1.30	IP66	820
630-28°**	3x230/400				88	1400	1400	2.50	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

Ventilator type	Speed	Input	FLC	Protection class*
	min ⁻¹	Watt	A	

4 pole motor (n=1500 rpm nom.)

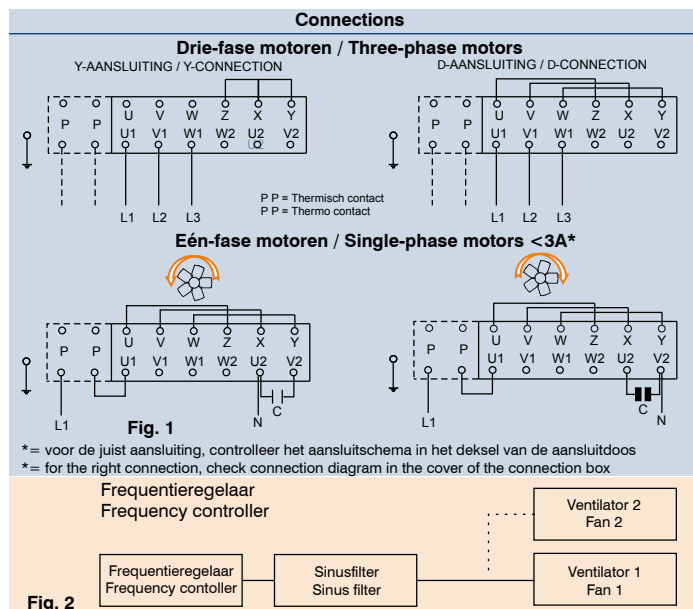
400-32°	1350	450	1.95	IP44
450-32°	1350	450	1.95	IP44
500-40°	1330	700	3.40	IP44
560-36°	1350	920	4.00	IP66
630-32°	1350	1300	7.10	IP66

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)

**= Only freezing conditions



Correction factors

Capacities at DTM:

The capacities are based on NH₃ pump system and the difference between the mean air temperature and the evaporation temperature (DTM). The evaporation temperature is the saturated temperature corresponding to the pressure at the suction outlet of the cooler. The nominal capacities are based on evaporation temperatures of -5 °C and -25°C, a DTM of 7 K and light frosting. Capacities for other mediums and systems are available upon request.

Correction factors for various mean air temperatures and evaporation temperatures (DTM) are as indicated in the tables below.

The requested capacity must be multiplied by a correction factor from one of these tables.

$$Q_{\text{nominal}} = \text{factor} \times Q_{\text{requested}}$$

Capacities at DT1:

Hereby the capacities are based on NH₃ pump system and DT1. DT1 is the difference between air-on temperature and the evaporation temperature of the cooler. The evaporation temperature is the saturated temperature corresponding to the pressure at the suction outlet of the cooler. The nominal capacities are based on evaporation temperatures of -8°C and DT1=8K and -25°C and DT1=7K and light frosting.

Capacities for other mediums and systems are available upon request.


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.


$$Q_{\text{nominal}} = \text{factor} \times Q_{\text{requested}}$$

NH₃ light frost = 0.2 mm RV = 85%

DTM	Evaporation temperature (°C)														
	K	0	-2,5	-5	-7,5	-10	-12,5	-15	-20	-22,5	-25	-27,5	-30	-32,5	-35
5	1.44	1.49	1.54	1.59	1.62	1.65	1.69	1.51	1.52	1.54	1.56	1.58	1.60	1.61	
6	1.14	1.18	1.23	1.26	1.29	1.31	1.32	1.18	1.20	1.22	1.23	1.25	1.26	1.28	
7	0.93	0.97	1.00	1.03	1.05	1.07	1.09	0.97	0.99	1.00	1.01	1.03	1.04	1.05	
8	0.79	0.82	0.85	0.87	0.88	0.90	0.92	0.82	0.83	0.85	0.86	0.87	0.88	0.89	
9	0.68	0.71	0.73	0.75	0.76	0.77	0.79	0.71	0.72	0.73	0.74	0.75	0.76	0.77	
10	0.61	0.61	0.64	0.65	0.67	0.68	0.69	0.62	0.63	0.64	0.65	0.66	0.66	0.67	
11	0.53	0.55	0.57	0.58	0.59	0.60	0.61	0.55	0.56	0.57	0.58	0.58	0.59	0.60	
12	0.47	0.49	0.51	0.52	0.53	0.54	0.55	0.50	0.50	0.51	0.52	0.52	0.53	0.54	

DT1	Evaporation temperature (°C)														
	K	0	-2,5	-5	-7,5	-10	-12,5	-15	-20	-22,5	-25	-27,5	-30	-32,5	-35
5	1.63	1.69	1.75	1.80	1.85	1.90	1.95	1.48	1.51	1.54	1.57	1.60	1.63	1.65	
6	1.29	1.34	1.39	1.43	1.47	1.50	1.54	1.17	1.20	1.22	1.24	1.26	1.29	1.31	
7	1.06	1.11	1.14	1.17	1.21	1.24	1.26	0.97	0.99	1.00	1.02	1.04	1.06	1.07	
8	0.90	0.94	0.97	1.00	1.02	1.04	1.06	0.82	0.83	0.85	0.86	0.88	0.89	0.91	
9	0.78	0.80	0.84	0.86	0.88	0.90	0.92	0.70	0.72	0.73	0.75	0.76	0.77	0.78	
10	0.68	0.70	0.74	0.76	0.78	0.79	0.80	0.62	0.63	0.64	0.65	0.66	0.67	0.69	
11	0.61	0.63	0.66	0.68	0.69	0.70	0.71	0.55	0.56	0.57	0.58	0.59	0.60	0.60	
12	0.54	0.56	0.59	0.60	0.62	0.63	0.64	0.49	0.50	0.51	0.52	0.53	0.54	0.53	

 = calculated without frost layer

 = calculated without frost layer

NH₃ normal frost = 0.5 mm RV= 85%

DTM	Evaporation temperature (°C)														
	K	0	-2,5	-5	-7,5	-10	-12,5	-15	-20	-22,5	-25	-27,5	-30	-32,5	-35
5		1.67	1.72	1.77	1.80	1.83	1.86	1.65	1.67	1.69	1.71	1.74	1.76	1.77	
6		1.32	1.37	1.39	1.42	1.45	1.48	1.31	1.32	1.34	1.36	1.38	1.39	1.41	
7		1.10	1.13	1.16	1.17	1.19	1.21	1.08	1.09	1.11	1.12	1.13	1.15	1.16	
8			0.92	0.95	0.97	0.98	1.00	1.02	0.91	0.92	0.94	0.95	0.96	0.97	0.98
9				0.82	0.83	0.85	0.87	0.88	0.79	0.80	0.81	0.82	0.83	0.84	0.85
10				0.72	0.74	0.75	0.76	0.77	0.69	0.70	0.71	0.72	0.73	0.74	0.74
11				0.64	0.65	0.66	0.67	0.69	0.62	0.63	0.63	0.64	0.65	0.66	0.66
12				0.57	0.58	0.60	0.61	0.62	0.55	0.56	0.57	0.58	0.58	0.59	0.59

DT1	Evaporation temperature (°C)														
	K	0	-2,5	-5	-7,5	-10	-12,5	-15	-20	-22,5	-25	-27,5	-30	-32,5	-35
5		1.86	1.92	1.98	2.03	2.08	2.13	1.68	1.71	1.73	1.74	1.76	1.79	1.80	
6		1.48	1.52	1.57	1.61	1.65	1.68	1.33	1.34	1.35	1.37	1.38	1.39	1.40	
7		1.22	1.26	1.29	1.33	1.36	1.39	1.08	1.09	1.10	1.11	1.12	1.13	1.14	
8		1.04	1.07	1.09	1.12	1.14	1.16	0.91	0.92	0.93	0.95	0.96	0.97	0.98	
9			0.92	0.95	0.97	0.99	1.00	0.79	0.80	0.81	0.81	0.82	0.83	0.84	
10			0.81	0.83	0.85	0.86	0.88	0.69	0.70	0.71	0.71	0.72	0.74	0.74	
11			0.72	0.74	0.76	0.77	0.78	0.61	0.62	0.63	0.64	0.64	0.65	0.66	
12			0.65	0.67	0.68	0.69	0.70	0.55	0.56	0.57	0.58	0.59	0.60	0.61	

Attention!

Moisture carry over from the coil block:

When you select VRB 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 VRZ. 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%.

ATTENTION !!!

When making your selection, pay attention to the ratio between the airvolume and capacity. A low volume to capacity ratio results in a wide temperature drop across the coil which cause to dry out (especially on coils with a high number of rows deep).

VRB/VRZ 4mm Technical data

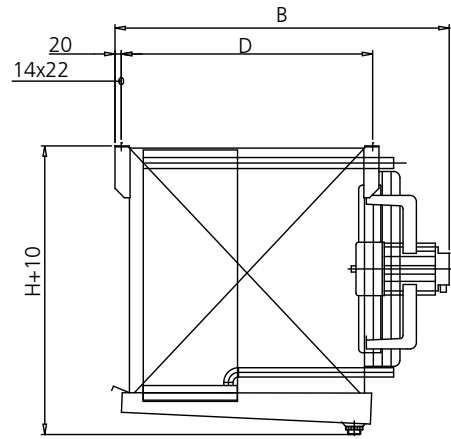
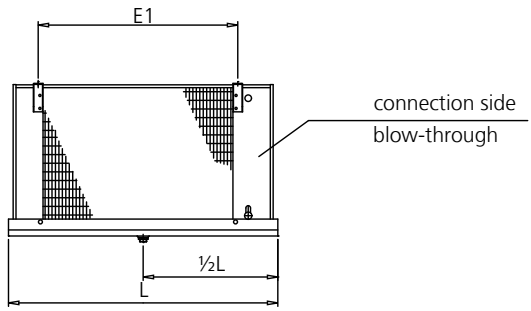
Type VRB VRZ	3x400V-50H-4pole (1500 min ⁻¹ nom.)						Surface	Internal volume	Weight	Dimensions									Connections					
	NR3									L	B	H	D	E1	E2	E3	Refrigerant			Waterdefrost				
	Cooling		Freezing		Air volume	LpA @ 3 m (+/- 2 dB(A))											In	Uit	Hot gas	Drain	In	Drain		
	DTM = 7K air mean = +2°C	DT1 = 8K (SC2) air on = 0°C	DTM = 7K air mean = -18°C	DT1 = 7K (SC3) air on = -18°C																			kW	kW
3.1.40.4	8,9	6,8			3230	52	28	4	65	1156	650	610	450	756			21,3	21,3	22	1¼	1¼	2		
4.1.40.4	11,3	7,9			3079	52	38	6	74	1156	700	610	500	756			21,3	21,3	22	1¼	1¼	2		
5.1.40.4	13,1	8,5			2942	52	47	7	82	1156	750	610	550	756			21,3	21,3	22	1¼	1¼	2		
3.1.45.4	12,6	9,9			4881	56	39	6	79	1256	690	710	450	856			21,3	21,3	22	1¼	1¼	2		
4.1.45.4	16,1	11,5			4652	56	52	8	90	1256	740	710	500	856			21,3	26,7	22	1¼	1¼	2		
5.1.45.4	18,9	12,5			4448	56	65	10	101	1256	790	710	550	856			21,3	26,7	22	1¼	1¼	2		
3.1.50.4	16,6	13,3			6958	63	48	7	99	1456	770	710	550	1056			21,3	26,7	22	1¼	1¼	2		
4.1.50.4	21,2	15,5			6648	63	65	10	112	1456	820	710	600	1056			21,3	26,7	22	1¼	1¼	2		
5.1.50.4	25,2	17,1			6371	63	81	12	127	1456	870	710	650	1056			21,3	26,7	22	1¼	1¼	2		
3.1.56.4	24,2	19,4			10063	63	71	10	136	1556	910	910	650	1156			21,3	33,7	22	1¼	1¼	2		
4.1.56.4	30,9	22,6			9704	63	95	14	155	1556	960	910	700	1156			21,3	33,7	22	1¼	1¼	2		
5.1.56.4	37,0	25,1			9375	63	119	17	175	1556	1010	910	750	1156			21,3	33,7	22	1¼	1¼	2		
3.1.63.4	31,6	25,1			12597	63	97	14	171	1656	910	1110	650	1256			21,3	33,7	22	1¼	1¼	2		
4.1.63.4	41,0	29,5			12209	63	129	18	196	1656	960	1110	700	1256			21,3	33,7	22	1¼	1¼	2		
5.1.63.4	48,7	32,1			11842	63	162	23	221	1656	1010	1110	750	1256			21,3	42,2	22	1¼	1¼	2		
3.2.40.4	17,8	13,7			6453	55	56	8	105	1856	650	610	450	1456			21,3	26,7	22	1¼	1¼	2		
4.2.40.4	22,5	15,7			6149	55	75	11	121	1856	700	610	500	1456			21,3	26,7	22	1¼	1¼	2		
5.2.40.4	26,3	17,0			5875	55	94	14	137	1856	750	610	550	1456			21,3	26,7	22	1¼	1¼	2		
3.2.45.4	25,2	19,7			9753	59	77	11	129	2056	690	710	450	1656			21,3	33,7	22	1¼	1¼	2		
4.2.45.4	32,1	22,9			9291	59	103	15	149	2056	740	710	500	1656			21,3	33,7	22	1¼	1¼	2		
5.2.45.4	37,7	24,5			8882	59	129	18	170	2056	790	710	550	1656			21,3	33,7	22	1¼	1¼	2		
3.2.50.4	32,8	26,6			13905	66	97	14	166	2456	770	710	550	2056			21,3	33,7	22	1¼	1¼	2		
4.2.50.4	42,3	31,0			13283	66	129	18	191	2456	820	710	600	2056			21,3	42,2	22	1¼	1¼	2		
5.2.50.4	50,2	33,7			12728	66	162	23	216	2456	870	710	650	2056			21,3	42,2	22	1¼	1¼	2		
3.2.56.4	48,2	38,8			20115	66	142	20	231	2656	910	910	650	2256			21,3	42,2	22	1¼	1¼	2		
4.2.56.4	61,7	45,2			19392	66	190	27	268	2656	960	910	700	2256			26,7	42,2	34	1¼	1¼	2		
5.2.56.4	73,8	50,1			18734	66	237	33	302	2656	1010	910	750	2256			26,7	42,2	34	1¼	1¼	3		
3.2.63.4	63,8	50,3			25181	66	194	27	294	2856	910	1110	650	2456			26,7	42,2	34	1¼	1¼	3		
4.2.63.4	81,8	58,9			24402	66	259	36	341	2856	960	1110	700	2456			26,7	48,3	34	1¼	1¼	3		
5.2.63.4	97,2	64,9			23667	66	324	45	386	2856	1010	1110	750	2456			26,7	48,3	34	1¼	1¼	3		
3.3.45.4	36,9	29,6			14623	61	116	17	180	2856	690	710	450	2456			21,3	33,7	22	1¼	1¼	2x2		
4.3.45.4	48,0	34,3			13929	61	155	22	211	2856	740	710	500	2456			21,3	42,2	22	1¼	1¼	2x2		
5.3.45.4	56,6	36,8			13317	61	194	27	240	2856	790	710	550	2456			21,3	42,2	22	1¼	1¼	2x2		
3.3.50.4	49,6	39,9			20852	67	145	21	235	3456	770	710	550	3056	1028	2028	21,3	42,2	22	2x1¼	2x1¼	2x2		
4.3.50.4	63,4	46,4			19918	67	194	27	270	3456	820	710	600	3056	1028	2028	26,7	42,2	34	2x1¼	2x1¼	2x2		
5.3.50.4	75,2	51,1			19085	67	242	34	306	3456	870	710	650	3056	1028	2028	26,7	42,2	34	2x1¼	2x1¼	2x2		
3.3.56.4	71,4	58,2			30165	67	213	30	326	3806	910	910	650	3356	2228	1128	26,7	42,2	34	2x1¼	2x1¼	2x2		
4.3.56.4	92,8	67,9			29081	67	284	40	379	3806	960	910	700	3356	2228	1128	26,7	48,3	34	2x1¼	2x1¼	2x2		
5.3.56.4	110,5	75,1			28093	67	356	50	430	3806	1010	910	750	3356	2228	1128	33,7	60,3	34	2x1¼	2x1¼	2x2		
3.3.63.4	95,7	75,4			37766	67	291	41	427	4106	910	1110	650	3656	2428	1228	33,7	60,3	34	2x1¼	2x1¼	2x2		
4.3.63.4	122,4	88,3			36595	67	388	54	498	4106	960	1110	700	3656	2428	1228	33,7	60,3	42	2x1¼	2x1¼	2x2		
5.3.63.4	145,4	97,3			35492	67	485	68	563	4106	1010	1110	750	3656	2428	1228	33,7	60,3	42	2x1¼	2x1¼	2x2		
3.4.50.4	66,1	53,2			27799	68	194	27	302	4506	770	710	550	4056	2028	2028	26,7	42,2	34	2x1¼	2x1¼	2x3		
4.4.50.4	84,5	61,9			26553	68	258	36	349	4506	820	710	600	4056	2028	2028	26,7	48,3	34	2x1¼	2x1¼	2x3		
5.4.50.4	100,3	68,1			25441	68	323	45	397	4506	870	710	650	4056	2028	2028	26,7	48,3	34	2x1¼	2x1¼	2x3		
3.4.56.4	96,4	77,5			40216	68	284	40	429	4906	910	910	650	4456	2228	2228	33,7	60,3	34	2x1¼	2x1¼	2x3		
4.4.56.4	123,4	90,3			38770	68	379	53	500	4906	960	910	700	4456	2228	2228	33,7	60,3	42	2x1¼	2x1¼	2x3		
5.4.56.4	147,1	99,9			37451	68	474	66	567	4906	1010	910	750	4456	2228	2228	33,7	60,3	42	2x1¼	2x1¼	2x3		
3.4.63.4	126,2	100,4			50350	68	388	54	551	5306	910	1110	650	4856	2428	2428	33,7	60,3	42	2x1¼	2x1¼	2x3		
4.4.63.4	163,2	117,5			48790	68	517	72	643	5306	960	1110	700	4856	2428	2428	33,7	60,3	42	2x1¼	2x1¼	2x3		
5.4.63.4	193,9	129,4			47315	68	647	90	729	5306	1010	1110	750	4856	2428	2428	42,2	60,3	48	2x1¼	2x1¼	2x3		

Pay attention to the relation capacity / air volume !!

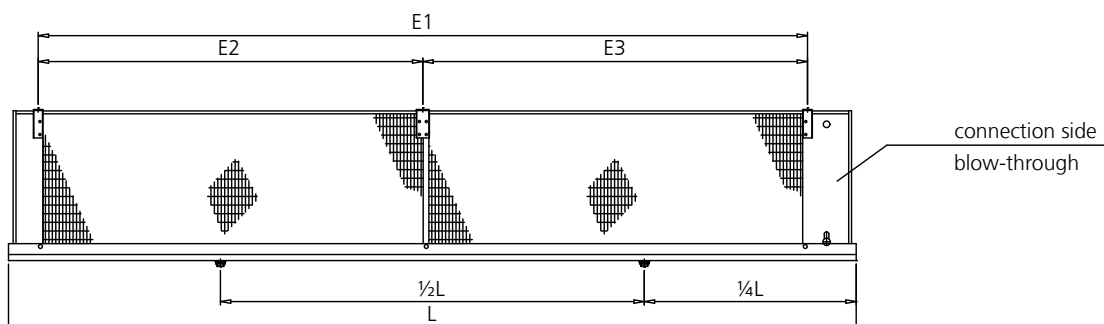
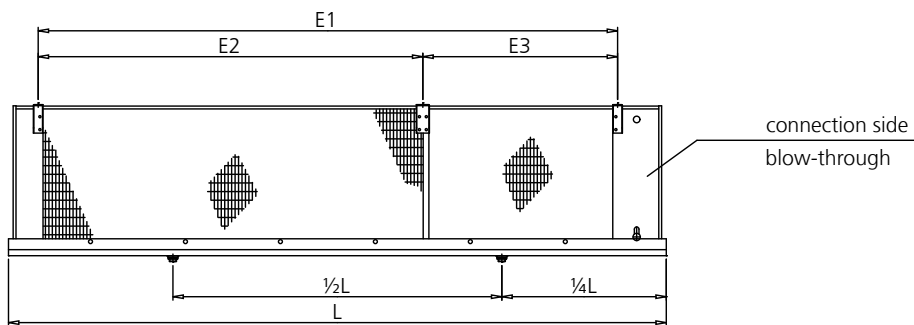
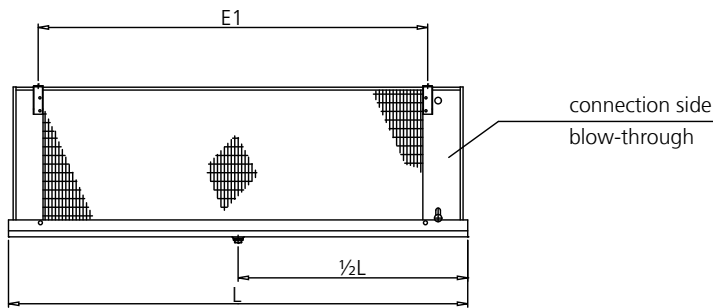
* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)) , free field conditions, according EN13487

For moisture carry over see remark pag 5

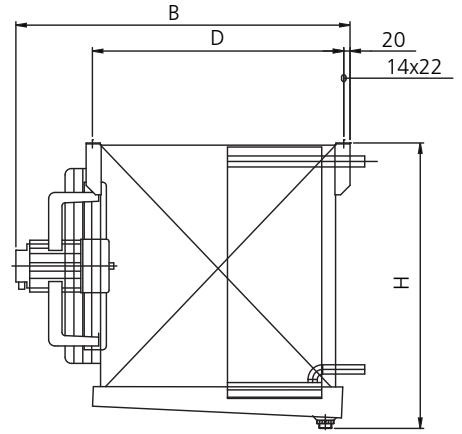
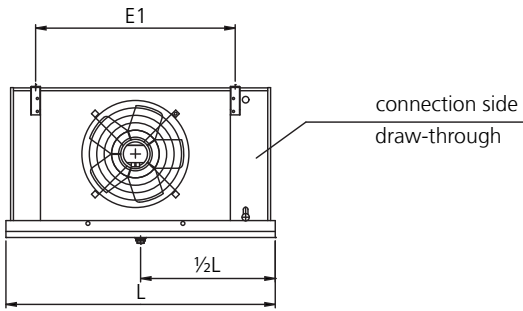
VRB Drawing



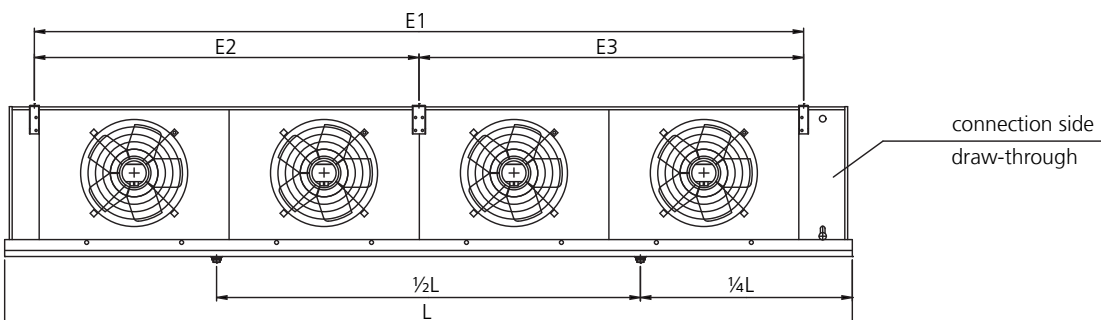
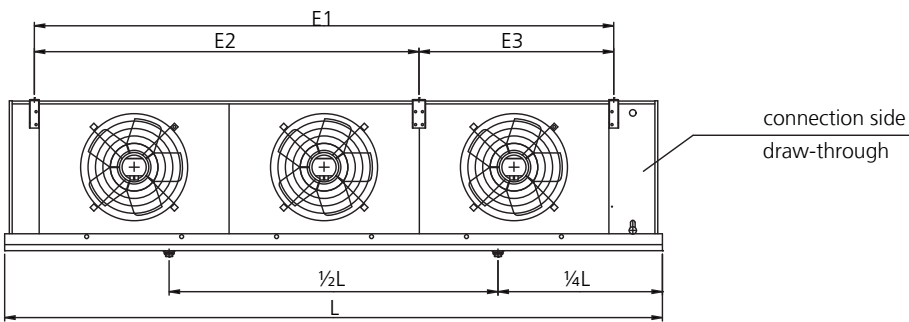
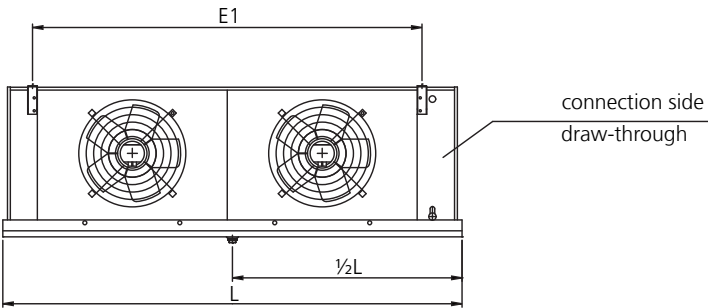
Air configuration : Blow through



VRZ Drawing



Air configuration : Draw through



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	Tube configuration	Fin material
Copper (Cu)	38x33, 50x50, 60x60	Aluminium (Al)
Stainless steel (Stst)	38x33, 50x50, 60x60	Aluminium (Al)
Stainless steel (Stst)	50x50	Stainless steel (Stst)
Aluminium (Al)	60x60	Aluminium (Al)
Hot dipped galvanized steel (FeZn)	60x60, 75x75	Hot dipped galvanized steel (FeZn)

Options on aluminium fins

- Goldlack 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.

