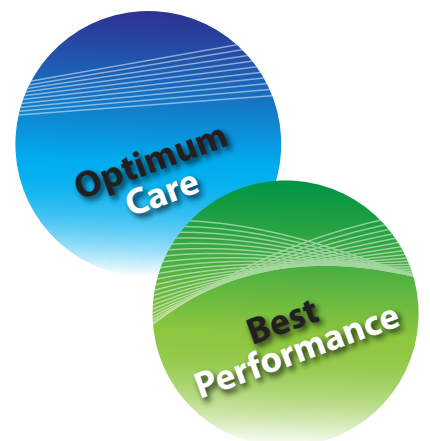




Goedhart systematic customized products

## Cu/Al

Freons - CO<sub>2</sub> - Coolants



# Goedhart SCP air coolers Cu/Al

## Basic information

### Capacity

The listed nominal cooling capacities are based on R404A, DT1 condition -8/0 (SC2), RH of 85% and 4 pole 3 phase fans connected in Δ for the air cooler ranges VCI, VCe, VNS and DVS. For the BC50 range the listed nominal cooling capacities are based on R404A, DT1 condition -25/-18 (SC3), RH of 85% and 4 pole 3 phase fans connected in Δ. Other cooling conditions (refrigerant, coolant, another DT1, DTM, etc.) can be selected with the GEA Goedhart GPC program.

#### 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.

### Capacity on DT1

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 saturation temperature corresponding to the pressure at the suction outlet of the cooler. The nominal capacities are based on refrigeration temperature of -8°C and DT1 = 8K for the air cooler ranges VCI, VCe, VNS and DVS, for BC50 the nominal capacities in this brochure are based on refrigeration temperature of -25°C and DT1 = 7K.

Correction factors for various evaporation temperatures and temperature differences (DT1) are as indicated in the tables beside. 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.

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

Capacities for other refrigerants, coolants and conditions can be calculated with the Goedhart GPC selection program.

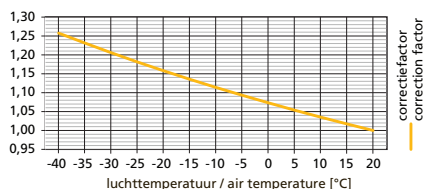
DT1	SC2-DT1 =8K-Air-on=0°C (-8/0)									
	Evaporation temperature (°C)									
K	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12
6	1,32	1,34	1,39	1,43	1,46	1,46	1,47	1,47	1,48	1,49
7	1,05	1,08	1,12	1,15	1,18	1,19	1,19	1,20	1,20	1,21
8	0,86	0,88	0,91	0,94	0,97	1,00	1,00	1,01	1,01	1,02
9	0,76	0,76	0,78	0,80	0,82	0,86	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

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

# Goedhart SCP air coolers Cu/Al

## Basic information

### Fans



Because of the flexible construction of the Goedhart air cooler, in principle it is possible to deliver with different fans. GEA Goedhart selected a standard fan range of Ziehl Abegg (we reserve the right to alter the manufacturer) which fit perfectly on the Goedhart SCP air coolers. The fans can be supplied in both blow-through and draw-through executions. Against an extra price and with extra delivery times stainless steel guards and EC-fans are available.

#### Execution

The fans meet the ErP2015 directive. The fans have very good aerodynamic features because of the special impeller geometry. This special impeller geometry gives the fan a low noise level and an high efficiency.

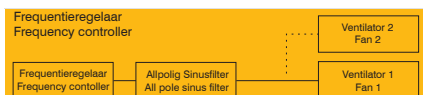
1x230V fans are suitable for a room temperature till -25°C. 3x400V fans are suitable for a room temperature till -40°C. When lower room temperatures are desired, special fans are required.

Tension : 3x400V-50Hz-3 phase  
 : 1x230V-50Hz-1 phase  
 On request 60Hz is possible in 400V - 460V

Protection class : IP44 / IP54

Color : RAL9005 (zwart)

Speed controlling: - 3 phase AC-motors are suitable for 2-speed regulation by D-Y reconnection at 3x400/690V-50Hz  
 - 3 phase AC-motors are suitable for frequency controller with all-pole sinus filter  
 - 3 phase EC-motors are available with 0-10V or Modbus  
 - 1 phase AC-motors are suitable for phase control and transformer.



The motors are standard executed with a thermo contact (TB) and must be connected to prevent motor damages. The maximum allowable working data in the table and on the name plate of the fans are to operate in an air temperature of +20 °C (air density of  $\rho = 1,2 \text{ kg/m}^3$ ). For air temperatures lower then +20 °C, the current amperage can be calculated by using the diagram multiplication factor, suitable thermal overloads can then be selected. In our Goedhart GPC selection program also the values in the working point are indicated.

#### 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.

#### ZAPLus fans

The Goedhart VCE 800 mm fans are fitted as ZAPLus fans. The ZAPLus is a bionic axial fan in a compact housing made of strong composite material, which integrates the motor and control, and on which a protection guard can be mounted. The special design of the fan wing ensures high efficiency and low noise. If desired, also other Cu / Al Systematic customized air coolers can be delivered with this special fan. Ask your Goedhart contact for the possibilities and applicability.



ZAPLus fan optional



# The most efficient solution for your project

## In good hands at Goedhart

Even before you place an order at Goedhart, a complete and professional team is at your disposal, providing you with thorough advice. We use the latest CAD / CAM developments in the field of parametric engineering. For less complex projects, please consult the electronic selection program GPC. Our goal is to achieve an optimal and cost efficient cooling system for your business. Flexible, easy to use, quality and safety, which are the key targets of our approach.

### **Flexible**

Every industry and therefore every customer has different requirements and has different needs. That is why we do not believe in mass production of fully standardized products. Depending on your program requirements, you can choose from standardized cooling systems available in different sizes (level 1 series), customized cooling systems consisting of standard product modules (level 2) to fully customized solutions produced (level 3). In order to achieve the objectives of our clients, we use the so-called “customized production philosophy. For that Goedhart has a wide range of materials and a highly efficient and flexible production.

The size of your cooling system and your requirements regarding investment costs and efficiency levels, lifespan and environment are leading to the choice of the type of refrigerant. Goedhart supplies air coolers and air cooled condensers suitable for natural (NH<sub>3</sub> and Co<sub>2</sub>) and synthetic refrigerants. Based on your program requirements our sales engineers will provide a customized advice.

### **User friendly**

Not only the fact that Goedhart delivers high-tech products, makes our customers satisfied. Besides quality, service and ease of use is our top priority. Because each heat exchanger is made on behalf of the customer, additional specifications related to wiring and connections can be achieved during the production process.

Subsequently we deliver the air cooler packed or crated on request, taking into account the mode of installation. Your air cooler or condenser is delivered directly ready for installation, which is the service you can expect from Goedhart.

### **Quality and safety**

Both production sites (Sintmaartensdijk and Nymburk) are certified to ISO 9001, ERP2015 and European PED pressure systems. This means that the products of Goedhart meet the strictest safety standards. Intervention of an external inspector by the PED certification no longer needed. This increases the efficiency of the design and manufacturing process and saves the initial cost.

Additionally Goedhart embraces the Japanese Kaizen philosophy that stands for “do it better, make it better, improve even if it goes well. All employees, from management to the cleaning crew are involved and motivated to suggest improvements. Not once a month or a year, but every day. The quality of this awareness increases work morale and has a positive effect on the efficiency. It has to do GEA Goedhart evolve from a traditional metal company into a modern and sustainable industry.





## Goedhart VCI air coolers

### Cooling and freezing

The extensive range Goedhart VCI single discharge ceiling mounted industrial air coolers are suitable industrial cooling and freezing applications. The possible air direction is blow-through or draw-through (please specify when ordering).

#### Coil block

Tube distance	: 50x50 mm straight
Fin spacing	: 4, 6, 7, 8, 10 and 12mm
Material	: 15mm o.d internally plain (p) or enhanced (i) copper tubes : aluminium HT-fins

Goedhart VCI coil blocks have copper tubes mechanically expanded into fully collared aluminium fins. 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 dried air. Suitable for all known refrigerants and coolants, with the exception of NH<sub>3</sub>.



#### Casing

- Construction for ceiling mounting
- Casing material of galvanized sheet steel
- Standard white epoxy spray finishing (RAL 9003)
- Bend/header projection by end covers, easy removed for maintenance
- Standard refrigerant connections are positioned on the left hand side of the unit when looking with the direction of the airflow.
- Cleanable execution optional
- Possible defrost by hot gas spiral or electric defrost elements will be fixed to the bottom side of the coil.
- Stainless steel fasteners



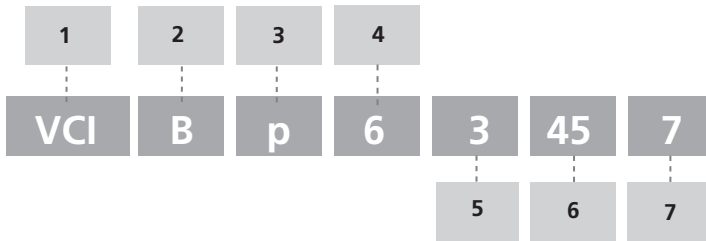
#### Goedhart VCI features

- For cooling and freezing applications
- Blow-through or draw-through execution possible
- Available with internally plain or enhanced copper tubes
- Consisting of 1500 models
- Capacity range from 2,5 to 265,0kW.
- EC fan technology possible
- Fans not standard wired to a junction box (optional)
- Suitable for most refrigerants / coolants with exception of NH<sub>3</sub>
- Goedhart VCI is delivered on a wooden frame for easy mounting
- Many options and accessories available (see p. 48)

# Goedhart SCP air coolers Cu/Al

Goedhart VCI -p en VCI-i

## Goedhart VCI - Air coolers



- 1. Range : VCI
- 2. Air direction : B=blow Z=draw
- 3. Tube execution : p = internally plain  
i = internally enhanced
- 4. Number of rows deep: 3, 4, 6, 8, 10
- 5. Number of fans : 1 - 8
- 6. Fan diameter : 400, 450, 560, 630
- 7. Fin spacing : 4, 6, 7, 8, 10, 12

## Goedhart VCI - Fan information

Fan diameter	Tension	Δ			Y			Δ	Y	Δ							
		Speed	Nominal power	FLC	Speed	Nominal power	FLC	Sound power indication each fan LwA (+/-2dB(A))	Speed	Nominal power	FLC	Sound power indication each fan LwA (+/-2dB(A))					
mm	V	min <sup>-1</sup>	Watt	A	min <sup>-1</sup>	Watt	A	dB(A)	dB(A)	min <sup>-1</sup>	Watt	A	dB(A)				
<b>Three phase - 50Hz</b>														<b>Three phase - 60Hz</b>			
400	3x400/690	1370	230	0,44	1110	170	0,27	76	70,5	1580	370	0,56	**				
450	3x400/690	1350	540	1,10	1020	360	0,66	78	70	1560	880	1,40	**				
560	3x400/690	1280	1050	2,20	920	580	1,10	85	76	1430	1550	2,70	**				
630	3x400/690	1360	1500	2,70	1100	1100	1,80	88	83	1640	2900	4,60	**				
450	3x400/690	900	180	0,50	630	100	0,24	67	61	1020	280	0,60	**				
560	3x400/690	870	340	0,70	630	210	0,38	73	65	980	540	0,88	**				
630	3x400/690	900	620	1,25	720	440	0,72	73	67	1040	1000	1,55	**				
<b>Single phase - 50Hz</b>														<b>Single phase - 60Hz</b>			
450	1x230	1390	600	2,90				80		1430	820	3,50	**				
400	1x230	950	130	0,60				68		1110	170	0,78	**				

\*\* Ask your Goedhart contact for the sound power indication

# Goedhart SCP air coolers Cu/Al

Goedhart VCI-i

## Capacities

Type VCI-i	4 mm			6 mm			7 mm			8 mm			10 mm			12 mm			LpA @ 3 m (+/- 2 dB(A))
	DT1 = 8K (5/2) air on= 0°C (-8/0)			DT1 = 8K (5/2) air on= 0°C (-8/0)			DT1 = 8K (5/2) air on= 0°C (-8/0)			DT1 = 8K (5/2) air on= 0°C (-8/0)			DT1 = 8K (5/2) air on= 0°C (-8/0)			DT1 = 8K (5/2) air on= 0°C (-8/0)			
	kW	m³/h	m²	kW	m³/h	m²	kW	m³/h	m²	kW	m³/h	m²	kW	m³/h	m²	kW	m³/h	m²	
3.1.40.	6,1	3166	29	4,6	3438	19	4,1	3505	17									53,3	
4.1.40.	7	2985	38	5,6	3323	26	5,1	3415	22	4,7	3479	20						53,3	
6.1.40.	8	2687	57	7,1	3105	39	6,6	3234	34	6,2	3330	30	5,4	3455	24	5,1	3527	20	53,3
8.1.40.							7,6	3065	45	7,2	3183	39	6,5	3346	32	6,2	3448	27	53,3
3.1.45.	9,6	5623	39	7,3	6199	27	6,4	6360	23									53,2	
4.1.45.	11,2	5272	52	8,9	5945	35	8,2	6148	31	7,5	6297	27						53,2	
6.1.45.	13,1	4723	78	11,4	5503	53	10,6	5758	46	10	5957	41	8,9	6238	33	8,3	6418	28	53,2
8.1.45.							12,4	5425	61	11,7	5656	54	10,6	5993	44	10,1	6221	37	53,2
3.1.56.	16,9	9596	71	12,6	10251	49	11,3	10419	42									59,8	
4.1.56.	19,8	9151	95	15,3	9974	65	13,7	10197	56	12,5	10354	49						59,8	
6.1.56.	23,3	8392	143	20,2	9447	97	18,6	9760	84	17,3	9988	74	15,1	10293	60	14,2	10477	51	59,8
8.1.56.							21,4	9350	112	20,3	9637	99	18,4	10029	81	17,5	10274	68	59,8
3.1.63.	23,2	13553	97	17,5	14219	66	15,6	14399	57									63,6	
4.1.63.	28	13104	130	21,7	13934	88	19,5	14163	76	17,7	14329	67						63,6	
6.1.63.	33,7	12318	195	28,2	13403	132	25,8	13717	115	23,9	13949	101	21	14263	82	19,6	14462	70	63,6
8.1.63.							30,4	13305	153	28,3	13593	135	25,2	13989	110	24	14244	93	63,6
3.2.40.	12	6323	57	9,2	6869	39	8,2	7005	33									56,1	
4.2.40.	14,1	5958	76	11,3	6638	51	10,2	6824	45	9,4	6952	39						56,1	
6.2.40.	16	5362	114	14,3	6200	77	13,3	6459	67	12,3	6651	59	10,9	6903	48	10,3	7051	41	56,1
8.2.40.							15,2	6119	89	14,4	6355	79	12,9	6684	64	12,4	6888	54	56,1
3.2.45.	19,1	11230	78	14,5	12385	53	12,9	12712	46									55,9	
4.2.45.	22,4	10525	104	17,9	11875	71	16,3	12282	61	15	12583	54						55,9	
6.2.45.	26	9426	156	22,9	10987	106	21,3	11503	91	19,9	11902	81	17,7	12464	66	16,6	12827	56	55,9
8.2.45.							24,7	10833	122	23,4	11294	108	21,2	11973	88	20,1	12429	74	55,9
3.2.56.	33,7	19178	143	25,2	20493	97	22,6	20831	84									62,4	
4.2.56.	39,5	18284	190	30,5	19936	129	27,4	20384	112	25	20701	99						62,4	
6.2.56.	46,5	16761	285	40,3	18878	194	37,2	19505	168	34,5	19966	148	30,2	20577	121	28,4	20949	102	62,4
8.2.56.							42,8	18683	223	40,6	19258	197	36,8	20046	161	35	20541	136	62,4
3.2.63.	46,9	27093	194	34,9	28430	132	31,1	28790	114									66,2	
4.2.63.	55,9	26192	259	43,4	27856	176	38,9	28315	152	35,4	28649	134						66,2	
6.2.63.	67,2	24615	389	56,3	26792	264	51,5	27421	228	47,8	27886	202	41,9	28518	164	39,1	28918	139	66,2
8.2.63.							60,6	26595	305	56,5	27172	269	50,4	27968	219	47,9	28480	186	66,2
3.3.45.	28,7	16837	117	21,7	18571	79	19,3	19062	69									57,4	
4.3.45.	33,6	15778	155	26,5	17806	106	24,1	18416	91	22,3	18869	81						57,4	
6.3.45.	39	14129	233	34	16472	158	31,8	17245	137	29,8	17846	121	26,5	18691	99	25	19237	84	57,4
8.3.45.							37,1	16240	183	35,2	16935	161	32	17952	131	30,5	18639	112	57,4
3.3.56.	50,8	28760	214	37,9	30735	145	33,9	31244	126									63,8	
4.3.56.	58,8	27417	285	46,9	29899	194	42,4	30571	167	38,7	31046	148						63,8	
6.3.56.	70,3	25132	427	60,4	28309	290	55,8	29252	251	51,8	29943	222	45,3	30860	181	42,3	31418	153	63,8
8.3.56.							65,3	28015	335	61,4	28879	296	54,8	30063	241	51,8	30807	204	63,8
3.3.63.	70,4	40632	291	52,4	42640	198	46,3	43182	171									67,6	
4.3.63.	82,5	39279	388	64,1	41780	264	58,1	42469	228	53,1	42970	202						67,6	
6.3.63.	101,3	36910	583	83,7	40179	396	77,3	41125	342	71,7	41824	302	62,8	42772	246	58,6	43374	209	67,6
8.3.63.							91,7	39885	457	86	40751	403	76,5	41946	328	72,3	42716	279	67,6

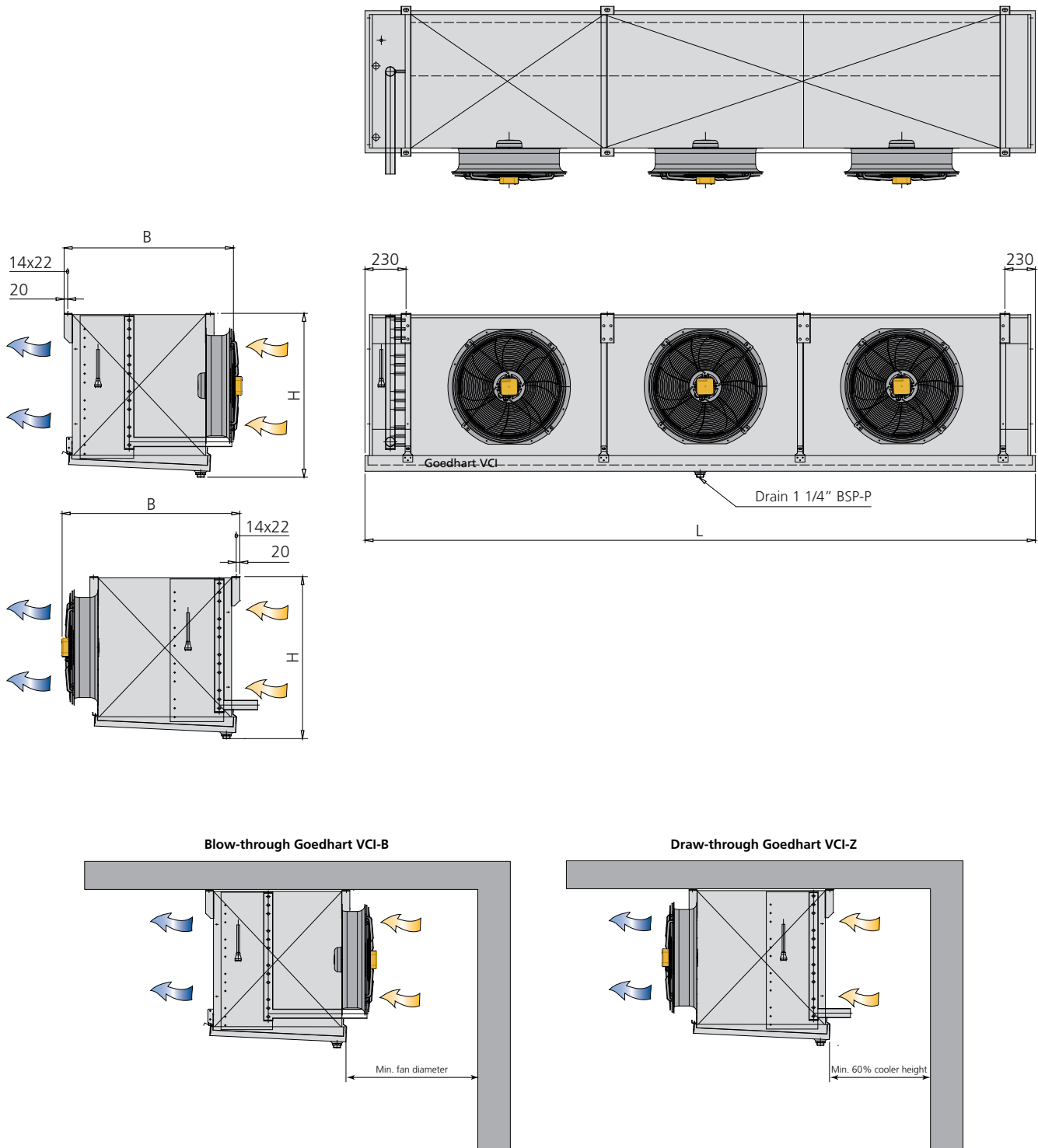
\* =Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)), free field conditions, according EN13487



# Goedhart SCP air coolers Cu/Al

Goedhart VCI-p en VCI-i

## Drawing









The dimensions in the tables are external dimensions of the heat exchanger. Measures such as suspension points, but also internal volum<sup>e</sup> [dm<sup>3</sup>], other conditions, refrigerants, coolants and materials are available in the Goedhart GPC selection program. Goedhart GPC is free to download from [www.goedhart.eu](http://www.goedhart.eu)







# Goedhart SCP air coolers Cu/Al

Goedhart VCI-p en VCI-i

## Dimensions

Type VCI	Dimensions			Weight					
	L	B	H						
				mm	mm	mm	kg	kg	kg

3.1.40.	1156	590	620			65			
4.1.40.	1156	640	620	77	73	72			
6.1.40.	1156	740	620	95	87	85	85	82	
8.1.40.	1156	840	620		103	100	98	95	95
1.1.40.	1156	940	620				112	108	108
3.1.45.	1256	560	720			76			
4.1.45.	1256	610	720	93	87	85			
6.1.45.	1256	710	720	115	105	103	101	98	
8.1.45.	1256	810	720		125	121	117	114	114
1.1.45.	1256	910	720				135	129	129
3.1.56.	1556	780	920			135			
4.1.56.	1556	830	920	164	152	148			
6.1.56.	1556	930	920	200	182	177	173	167	
8.1.56.	1556	1030	920		212	204	200	192	192
1.1.56.	1556	1130	920				226	217	216
3.1.63.	1656	795	1120			176			
4.1.63.	1656	845	1120	215	198	194			
6.1.63.	1656	945	1120	260	235	228	222	215	
8.1.63.	1656	1045	1120		274	265	257	247	247
1.1.63.	1656	1145	1120				291	277	277
3.2.40.	1856	590	620			103			
4.2.40.	1856	640	620	127	118	115			
6.2.40.	1856	740	620	157	142	138	135	131	
8.2.40.	1856	840	620		168	163	158	152	153
1.2.40.	1856	940	620				180	172	173
3.2.45.	2056	560	720			124			
4.2.45.	2056	610	720	156	143	139			
6.2.45.	2056	710	720	195	175	169	164	159	
8.2.45.	2056	810	720		208	200	194	185	186
1.2.45.	2056	910	720				222	212	211
3.2.56.	2656	780	920			226			
4.2.56.	2656	830	920	282	258	251			
6.2.56.	2656	930	920	349	312	302	293	282	
8.2.56.	2656	1030	920		366	352	341	326	326
1.2.56.	2656	1130	920				389	370	370
3.2.63.	2856	795	1120			300			
4.2.63.	2856	845	1120	376	343	334			
6.2.63.	2856	945	1120	463	412	398	387	372	
8.2.63.	2856	1045	1120		484	464	449	429	429
1.2.63.	2856	1145	1120				511	486	484
3.3.45.	2856	560	720			172			
4.3.45.	2856	610	720	219	199	194			
6.3.45.	2856	710	720	276	246	238	231	222	
8.3.45.	2856	810	720		293	280	272	260	260
1.3.45.	2856	910	720				312	297	297
3.3.56.	3756	780	920			317			
4.3.56.	3756	830	920	400	363	353			
6.3.56.	3756	930	920	497	441	426	414	397	
8.3.56.	3756	1030	920		522	500	484	462	461
1.3.56.	3756	1130	920				552	524	524
3.3.63.	4056	795	1120			426			
4.3.63.	4056	845	1120	538	488	474			
6.3.63.	4056	945	1120	664	589	567	551	529	
8.3.63.	4056	1045	1120		692	663	642	611	611
1.3.63.	4056	1145	1120				731	693	692

Type VCI	Dimensions			Weight					
	L	B	H						
				mm	mm	mm	kg	kg	kg

3.4.45.	3656	560	720			220			
4.4.45.	3656	610	720	280	255	247			
6.4.45.	3656	710	720	355	315	303	295	283	
8.4.45.	3656	810	720		376	360	349	332	332
1.4.45.	3656	910	720				400	380	379
3.4.56.	4856	780	920			408			
4.4.56.	4856	830	920	517	469	455			
6.4.56.	4856	930	920	645	571	550	534	511	
8.4.56.	4856	1030	920		674	646	625	595	594
1.4.56.	4856	1130	920				713	676	675
3.4.63.	5256	795	1120			553			
4.4.63.	5256	845	1120	699	632	614			
6.4.63.	5256	945	1120	868	767	738	717	686	
8.4.63.	5256	1045	1120		901	863	834	794	792
1.4.63.	5256	1145	1120				950	899	898
3.5.45.	4456	560	720			267			
4.5.45.	4456	610	720	343	311	302			
6.5.45.	4456	710	720	437	386	372	360	346	
8.5.45.	4456	810	720		460	441	426	406	405
1.5.45.	4456	910	720				492	466	465
3.5.63.	6456	795	1120			677			
4.5.63.	6456	845	1120	860	778	754			
6.5.63.	6456	945	1120	1069	943	907	880	843	
8.5.63.	6456	1045	1120		1112	1063	1027	976	975
1.5.63.	6456	1145	1120				1170	1106	1104
3.6.45.	5256	560	720			315			
4.6.45.	5256	610	720	408	367	357			
6.6.45.	5256	710	720	517	457	439	426	408	
8.6.45.	5256	810	720		545	523	505	480	480
1.6.45.	5256	910	720				582	551	550
3.6.63.	7656	795	1120			803			
4.6.63.	7656	845	1120	1021	923	894			
6.6.63.	7656	945	1120	1271	1120	1077	1044	999	
8.6.63.	7656	1045	1120		1320	1262	1219	1158	1156
1.6.63.	7656	1145	1120				1390	1314	1311
3.7.45.	6056	560	720			363			
4.7.45.	6056	610	720	470	423	409			
6.7.45.	6056	710	720	596	525	505	490	468	
8.7.45.	6056	810	720		627	600	580		
1.7.45.	6056	910	720				670		
3.7.63.	7456	795	1320			899			
4.7.63.	7456	845	1320	1150	1034	1002			
6.7.63.	7456	945	1320	1435	1259	1209	1171	1118	
8.7.63.	7456	1045	1320		1486	1418	1367	1296	1294
1.7.63.	7456	1145	1320				1561	1472	1469
3.8.45.	6856	560	720			410			
4.8.45.	6856	610	720	532	479	464			
6.8.45.	6856	710	720	676	595	573	555	531	
8.8.45.	6856	810	720		713	682	658		
1.8.45.	6856	910	720				760		



logistics centers

## Goedhart VCe air coolers

### Powerful quiet

The Goedhart VCe models are highly effective, for example, for application in food and beverage distribution centers, logistics centers and production shop floors. As required by market demand, models in the Goedhart VCe/VRe series feature few but large fans. With the newly designed modules the speed of the fans and the air velocity through the coil are reduced!



food & beverage

#### Coil block

Tube distance	: 50x50 mm straight
Fin spacing	: 4, 6, 7, 8, 10 and 12mm
Material	: 15mm o.d internally plain (p) or enhanced (i) copper tubes : aluminium HT-fins

Goedhart VCe coil blocks have copper tubes mechanically expanded into fully collared aluminium fins. 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 dried air. Suitable for all known refrigerants and coolants, with the exception of NH<sub>3</sub>.



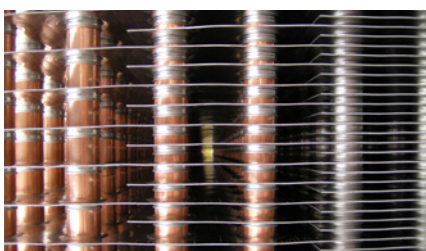
production shop floors

#### Casing

- Construction for ceiling mounting
- Casing material of galvanized sheet steel
- Standard white epoxy spray finishing (RAL 9003)
- Bend/header projection by end covers, easy removed for maintenance
- Standard refrigerant connections are positioned on the left hand side of the unit when looking with the direction of the airflow.
- Cleanable execution optional
- Possible defrost by hot gas spiral or electric defrost elements will be fixed to the bottom side of the coil.
- Stainless steel fasteners

#### Goedhart VCe features

- For cooling and freezing applications
- Blow-through or draw-through execution possible
- Available with internally plain or enhanced copper tubes
- Consisting of 132 models
- Capacity range from 14,5 to 188,0kW at SC2.
- EC fan technology possible
- Highly effective air cooler due to new designed modules and fans
- Up to 6 fans, fan diameter 500, 630, 710 and 800 mm
- Suitable for most refrigerants / coolants with exception of NH<sub>3</sub>
- Met inwendig gladde of inwendig vergrootte buis beschikbaar
- ZAplus fan optional (most energy efficient fan on the market today)
- Goedhart VCe is delivered on a wooden frame for easy mounting



Stepped fin spacings



## **GEA Heat Exchangers**

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## **GEA Heat Exchangers**

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