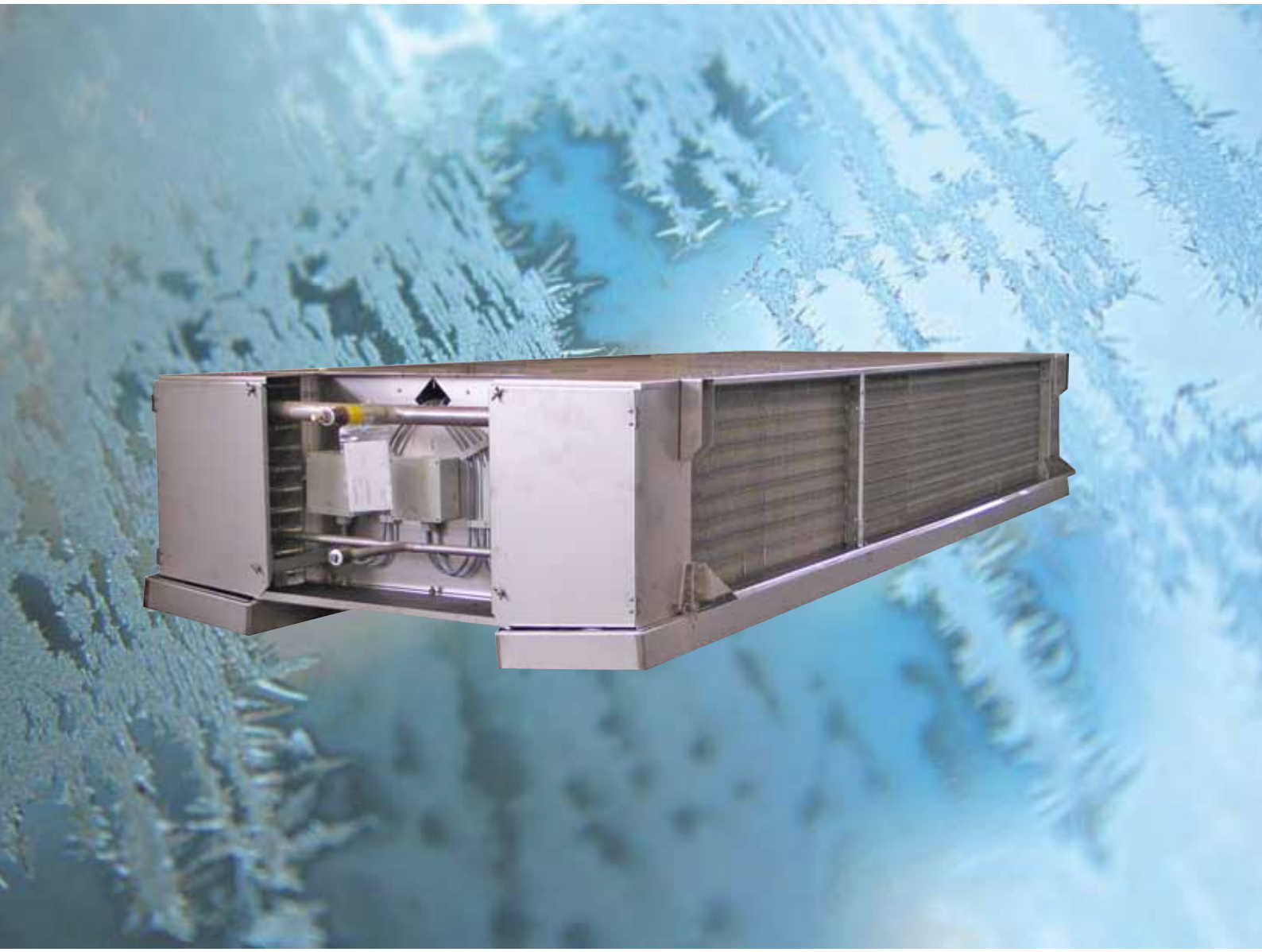


Goedhart DRS

Industrial air coolers for cooling and working rooms
StSt/Al

NH_3 - CO_2

engineering for a better world

GEA Heat Exchangers

Goedhart DRS

The Goedhart DRS range of dual discharge ceiling mounted air coolers consists of 240 types with capacities between 3,8 and 200,9 kW. The aircoolers are especially suitable for cooling and working room applications. The height of the aircooler is low, so the maximum space in the chill room can be utilised. The fans are arranged for blow-through or draw-through air configuration (please state which is required when ordering).The modular design incorporates 5 different sizes of fan, with model options of up to 6 fans per cooler. The fans are mounted to the outside of the air cooler. The fans are as standard not wired on a junction box to the connection side. Wiring is available against an extra price.

Type-description

Goedhart DRS 66457

Number of rows deep
Number of fans
Fan diameter [cm]
Fin spacing [mm]

Coil block

- Tube pitch : 50x50 mm straight
- Fin spacings : 4, 7 and 10 mm
- Material : 15mm o.d stainless steel 304 tubes
- : aluminium HT-fins
- Optimized cooling circuits
- The coil block is standard build from aluminium end plates, stainless steel 304 tubes and aluminium fins.
- 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 NH_3- 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 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
- Stainless steel fasteners.

Capacity

The listed nominal cooling capacities are are based on NH_3 , DT1, a RH of 85% and 4 pole 3 phase fans connected in D.

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 DRS 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.

Accessoires:

Voor de Goedhart DRS luchtkoelers zijn de volgende accessoires leverbaar:

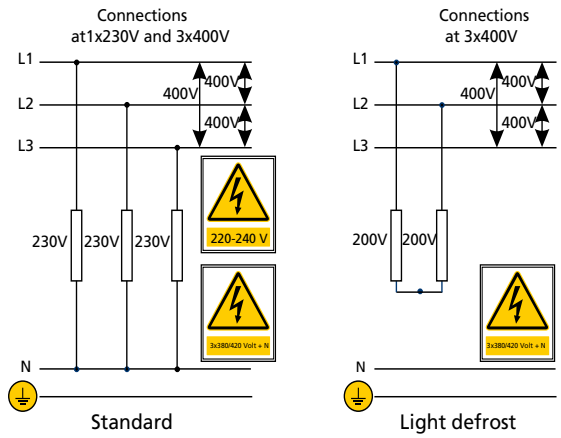
- fans wired on a junction box to the connection side.
- Electric, hotgas defrost system.
- Insulation within the driptray.
- Insulated hygienic polyester driptray.
- Insulated fan plate

The accessories are included in the price list.

Optional extras:

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

- Insulation discs
- Feet for floor mounting
- Hinged fan plates
- Other fin spacings
- Sea water resistant fins
- 60 Hz motors
- EC-fans
- Single phase motors
- Glycol/water/etc. cooling mediums,
- NH3 dx, R22 dx/pumpsystem.
- Other casing material
- Stainless steel 316 tubes



Mounting and Maintenance

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

Fans

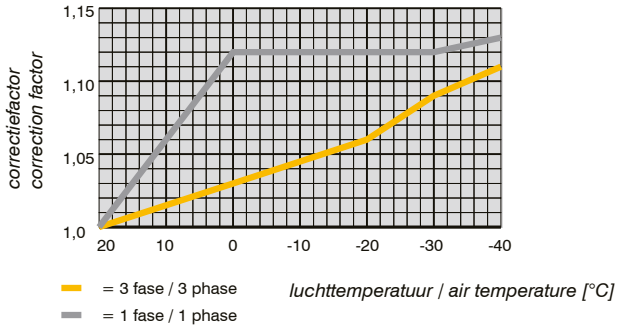
Because of the flexible construction of the Goedhart DVS air cooler, in principle it is possible to deliver with different fans. GEA Goedhart selected a standard fan range of Ziehl Abegg (we reserve the right to alter the manufacturer) which fit perfectly on the Goedhart DVS air coolers. The fans can be supplied in both blow-through and draw-through executions. The fans are mounted to the outside of the air cooler. The fans are as standard not wired (wiring is optional) on a junction box to the connection side. Against an extra price and with extra delivery times stainless steel guards and EC-fans are available.

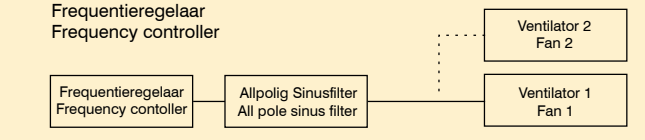
Execution
The fans meet the ErP directive. The fans have very good aerodynamic features because of the special impeller geometry. This special impeller geometry gives the fan a low noise level and an high efficiency.

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 need.

Tension : 3x400V-50Hz-3 phase
: 1x230V-50Hz-1 phase
(60Hz execution on request)
Protection class : IP44 / IP54
Color : RAL9005 (black)
Speed controlling : - 3 Phase motors are suitable for 2-speed regulation by Δ-Y reconnection.
- 3 Phase motors are suitable for frequency controller with all-pole sinus filter.
- 1 Phase motors are suitable for phase control and transformator.

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 ρ = 1,2 kg/m³). 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.





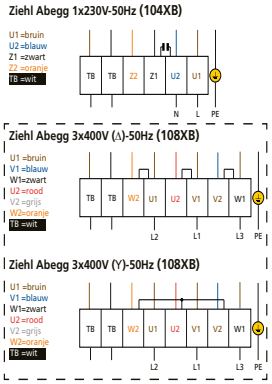
Three phase - 50 Hz

Fan type	Tension	Δ				Y				
		Speed	Input	FLC	Sound power indication each fan LwA (+/-2dB(A))	Seed	Input	FLC	Sound power indication each fan LwA (+/-2dB(A))	Wiring diagram blow-through/ draw-trhough
	V	min⁻¹	Watt	A	dB(A)	min⁻¹	Watt	A	dB(A)	
4 pole (n=1500 min⁻¹ nom.)										
FN040	3x400/690	1370	230	0.44	76	1110	170	0.27	70,5	108B/108A
FN045	3x400/690	1250	350	0.64	78	950	220	0.35	70	108B/108A
FN050	3x400/690	1330	830	1.45	81	940	550	0.97	75	108B/108A
FN056	3x400/690	1280	1050	2.20	85	920	580	1.10	76	108B/108A
FE063	3x400/690	1330	1450	2.60	89	1080	980	1.60	84	108B/108A
6 pole (n=1000 min⁻¹ nom.)										
FN045	3x400/690	860	180	0.39	67	640	100	0.19	61	108B/108A
FN050	3x400/690	870	290	0.74	72	590	150	0.36	64	108B/108A
FN056	3x400/690	870	340	0.70	73	630	210	0.38	65	108B/108A
FN063	3x400/690	900	630	1.25	74	720	440	0.73	69	108B/108A

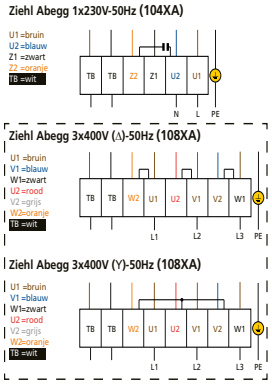
Single phase - 50 Hz

Fan type	Speed	Input	FLC	Sound power indication each fan LwA (+/-2dB(A))	Wiring diagram blow-through/ draw-trhough
	min⁻¹	Watt	A	dB(A)	
4 pole (n=1500 min⁻¹ nom.)					
FN040	1350	240	1.10	76	104B/104A
FN045	1290	390	1.75	80	104B/104A
FN050	1230	750	3.35	81,5	104B/104A
6 pole (n=1000 min⁻¹ nom.)					
FN040	950	130	0.58	68	104B/104A
FN045	860	180	0.82	68,5	104B/104A
FN050	910	300	1.30	71,5	104B/104A

Wiring diagram fans for blow-through air coolers



Wiring diagram fans for draw-through air coolers



Correction factors

Capacities at DT1:

Hereby the capacities are based on NH_3 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 light frosting. Capacities for other mediums and systems are avalable 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 nominal = factor x Q requested

R404A light frost = 0.2 mm RV = 85%

DT1	Evaporation temperature (°C)						
K	0	-2,5	-5	-7,5	-10	-12,5	-15
6	1.29	1.34	1.39	1.43	1.47		
7	1.06	1.11	1.14	1.17	1.21		
8	0.90	0.94	0.97	1.00	1.02		
9	0.78	0.80	0.84	0.86	0.88		
10	0.68	0.70	0.74	0.76	0.78		
11	0.61	0.63	0.66	0.68	0.69		
12	0.54	0.56	0.59	0.60	0.62		

R404A normal frost = 0.5 mm RV= 85%

DT1	Evaporation temperature (°C)						
K	0	-2,5	-5	-7,5	-10	-12,5	-15
6		1.48	1.52	1.57	1.61		
7		1.22	1.26	1.29	1.33		
8		1.04	1.07	1.09	1.12		
9			0.92	0.95	0.97		
10			0.81	0.83	0.85		
11			0.72	0.74	0.76		
12			0.65	0.67	0.68		

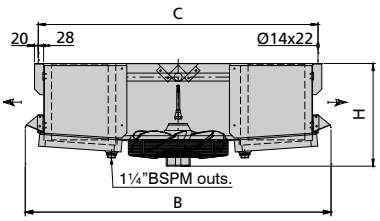
Attention!

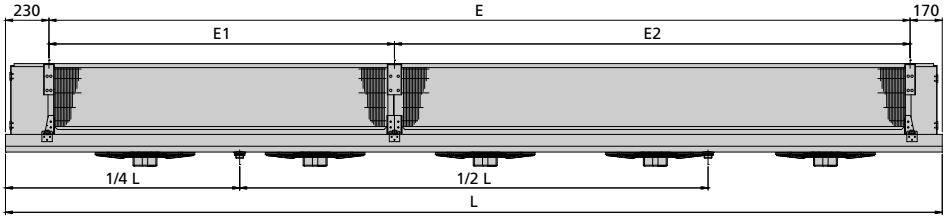
ATTENTION !!!

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).

Goedhart DRS 7mm

Type DVS	3x400V-50H-4pole (1500 min⁻¹ nom.)			3x400V-50H-6pole (1000 min⁻¹ nom.)			Surface	Internaly volume	Weight	Dimensions								Connections			
	R404A			R404A														Refrigerant			
	DT1 = 8K (SC2) Air on= 0°C	Air volume	LpA @ 3 m (+/-2 dB(A))**	DT1 = 8K (SC2) Air on= 0°C	Air volume	LpA @ 3 m (+/-2 dB(A))**				L	B	H	C	E1	E2	E3	E4	in	out	Hot gas	Drain
	kW	m³/h	dB(A)	kW	m³/h	dB(A)	m²	dm³	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	NW"





1x	**3.1.40.7**	4,8	3474	54,3	3,8	2301	46,3	17	6	93	1056	1220	420	1080	656				21,3	21,3	4x22	2x1¼"
	4.1.40.7	5,9	3394	54,3	4,6	2252	46,3	23	6	102	1056	1320	420	1180	656				21,3	21,3	4x22	2x1¼"
	6.1.40.7	7,5	3229	54,3	5,7	2156	46,3	35	10	121	1056	1520	420	1380	656				21,3	21,3	4x22	2x1¼"
	8.1.40.7	8,4	3073	54,3	6,3	2066	46,3	46	12	139	1056	1720	420	1580	656				21,3	21,3	4x22	2x1¼"
	3.1.45.7	6,9	5284	56,2	5,6	3606	45,2	23	6	104	1056	1270	520	1130	656				21,3	21,3	4x22	2x1¼"
	4.1.45.7	8,4	5130	56,2	6,8	3518	45,2	31	8	114	1056	1370	520	1230	656				21,3	21,3	4x22	2x1¼"
	6.1.45.7	10,7	4834	56,2	8,4	3353	45,2	46	12	137	1056	1570	520	1430	656				21,3	26,7	4x22	2x1¼"
	8.1.45.7	12,1	4569	56,2	9,4	3206	45,2	61	16	159	1056	1770	520	1630	656				21,3	26,7	4x22	2x1¼"
	3.1.50.7	10,0	7565	59,1	8,1	5180	50,1	34	10	140	1356	1320	520	1180	956				21,3	26,7	4x22	2x1¼"
	4.1.50.7	12,4	7430	59,1	9,9	5099	50,1	46	12	155	1356	1420	520	1280	956				21,3	26,7	4x22	2x1¼"
	6.1.50.7	15,9	7176	59,1	12,4	4923	50,1	69	18	183	1356	1620	520	1480	956				21,3	26,7	4x22	2x1¼"
	8.1.50.7	18,3	6939	59,1	13,9	4745	50,1	92	22	213	1356	1820	520	1680	956				21,3	33,7	4x22	2x1¼"
	3.1.56.7	14,0	10559	62,8	11,3	7141	50,8	48	12	165	1456	1380	620	1240	1056				21,3	26,7	4x22	2x1¼"
	4.1.56.7	17,1	10377	62,8	13,7	7045	50,8	64	16	183	1456	1480	620	1340	1056				21,3	33,7	4x22	2x1¼"
	6.1.56.7	22,0	10050	62,8	17,2	6840	50,8	96	24	220	1456	1680	620	1540	1056				21,3	33,7	4x22	2x1¼"
	8.1.56.7	25,4	9760	62,8	19,5	6633	50,8	127	32	257	1456	1880	620	1740	1056				21,3	33,7	4x22	2x1¼"
	3.1.63.7	16,9	12732	66,6	14,1	9193	51,6	57	14	191	1456	1450	720	1310	1056				21,3	33,7	4x22	2x1¼"
	4.1.63.7	20,7	12569	66,6	17,2	9087	51,6	76	20	212	1456	1550	720	1410	1056				21,3	33,7	4x22	2x1¼"
	6.1.63.7	26,9	12240	66,6	21,5	8866	51,6	115	28	253	1456	1750	720	1610	1056				21,3	33,7	4x22	2x1¼"
	8.1.63.7	31,1	11915	66,6	24,8	8644	51,6	153	38	296	1456	1950	720	1810	1056				21,3	42,2	4x22	2x1¼"
2x	**3.2.40.7**	9,5	6942	57,0	7,6	4599	49,0	34	10	143	1656	1220	420	1080	1256				21,3	21,3	4x22	2x1¼"
	4.2.40.7	11,7	6782	57,0	9,2	4501	49,0	46	12	157	1656	1320	420	1180	1256				21,3	26,7	4x22	2x1¼"
	6.2.40.7	14,9	6449	57,0	11,3	4307	49,0	69	18	189	1656	1520	420	1380	1256				21,3	26,7	4x22	2x1¼"
	8.2.40.7	16,8	6133	57,0	12,6	4124	49,0	92	22	218	1656	1720	420	1580	1256				21,3	33,7	4x22	2x1¼"
	3.2.45.7	13,7	10561	58,9	11,1	7208	47,9	46	12	159	1656	1270	520	1130	1256				21,3	26,7	4x22	2x1¼"
	4.2.45.7	16,8	10249	58,9	13,5	7028	47,9	61	16	178	1656	1370	520	1230	1256				21,3	33,7	4x22	2x1¼"
	6.2.45.7	21,1	9652	58,9	16,8	6696	47,9	92	22	214	1656	1570	520	1430	1256				21,3	33,7	4x22	2x1¼"
	8.2.45.7	24,2	9120	58,9	18,7	6400	47,9	122	30	250	1656	1770	520	1630	1256				21,3	33,7	4x22	2x1¼"
	3.2.50.7	20,0	15124	61,7	16,2	10359	52,7	69	18	229	2256	1320	520	1180	1856				21,3	33,7	4x22	2x1¼"
	4.2.50.7	24,7	14855	61,7	19,8	10194	52,7	92	22	254	2256	1420	520	1280	1856				21,3	33,7	4x22	2x1¼"
	6.2.50.7	31,8	14342	61,7	24,8	9840	52,7	137	34	305	2256	1620	520	1480	1856				21,3	42,2	4x22	2x1¼"
	8.2.50.7	36,5	13867	61,7	27,8	9481	52,7	183	44	354	2256	1820	520	1680	1856				21,3	42,2	4x22	2x1¼"
	3.2.56.7	27,8	21111	65,4	22,3	14279	53,4	95	24	270	2456	1380	620	1240	2056				21,3	33,7	4x22	2x1¼"
	4.2.56.7	34,4	20746	65,4	27,3	14084	53,4	127	30	303	2456	1480	620	1340	2056				21,3	42,2	4x22	2x1¼"
	6.2.56.7	44,1	20089	65,4	34,4	13673	53,4	191	46	368	2456	1680	620	1540	2056				26,7	42,2	4x22	2x1¼"
	8.2.56.7	50,8	19508	65,4	38,9	13257	53,4	254	60	432	2456	1880	620	1740	2056				26,7	42,2	4x22	2x1¼"
	3.2.63.7	33,7	25460	69,2	28,1	18381	54,2	114	28	317	2456	1450	720	1310	2056				21,3	42,2	4x22	2x1¼"
	4.2.63.7	41,4	25132	69,2	34,3	18168	54,2	152	36	355	2456	1550	720	1410	2056				26,7	42,2	4x22	2x1¼"
	6.2.63.7	53,4	24470	69,2	42,9	17725	54,2	229	54	429	2456	1750	720	1610	2056				26,7	42,2	4x22	2x1¼"
	8.2.63.7	62,2	23816	69,2	49,5	17279	54,2	305	72	504	2456	1950	720	1810	2056				26,7	48,3	4x22	2x1¼"
3x	**3.3.45.7**	20,5	15835	60,4	16,6	10809	49,4	69	18	216	2256	1270	520	1130	1856				21,3	33,7	4x22	2x1¼"
	4.3.45.7	25,1	15366	60,4	20,2	10537	49,4	92	22	240	2256	1370	520	1230	1856				21,3	33,7	4x22	2x1¼"
	6.3.45.7	31,9	14470	60,4	25,1	10039	49,4	137	34	292	2256	1570	520	1430	1856				21,3	42,2	4x22	2x1¼"
	8.3.45.7	36,2	13670	60,4	28,1	9595	49,4	183	44	341	2256	1770	520	1630	1856				21,3	42,2	4x22	2x1¼"
	3.3.50.7	30,1	22683	63,1	24,1	15537	54,1	103	26	317	3156	1320	520	1180	2756				21,3	42,2	4x22	2x1¼"
	4.3.50.7	36,9	22278	63,1	29,7	15290	54,1	137	34	353	3156	1420	520	1280	2756				21,3	42,2	4x22	2x1¼"
	6.3.50.7	47,1	21508	63,1	36,9	14757	54,1	206	50	426	3156	1620	520	1480	2756				26,7	42,2	4x22	2x1¼"
	8.3.50.7	54,8	20794	63,1	41,8	14216	54,1	274	66	499	3156	1820	520	1680	2756				26,7	42,2	4x22	2x1¼"
	3.3.56.7	41,7	31663	66,8	33,4	21419	54,8	143	34	387	3456	1380	620	1240	3056	1028	2028		21,3	42,2	4x22	2x1¼"
	4.3.56.7	51,5	31116	66,8	41,0	21124	54,8	190	46	434	3456	1480	620	1340	3056	1028	2028		26,7	42,2	4x22	2x1¼"
	6.3.56.7	66,1	30128	66,8	51,2	20506	54,8	286	68	527	3456	1680	620	1540	3056	1028	2028		26,7	48,3	4x22	2x1¼"
	8.3.56.7	76,7	29255	66,8	58,3	19878	54,8	381	90	622	3456	1880	620	1740	3056	1028	2028		33,7	60,3	4x22	2x1¼"
	3.3.63.7	50,5	38187	70,6	42,2	27570	55,6	171	42	454	3456	1450	720	1310	3056	1028	2028		26,7	42,2	4x22	2x1¼"
	4.3.63.7	62,4	37693	70,6	51,5	27248	55,6	228	54	508	3456	1550	720	1410	3056	1028	2028		26,7	48,3	4x22	2x1¼"
	6.3.63.7	80,1	36699	70,6	64,2	26584	55,6	343	82	617	3456	1750	720	1610	3056	1028	2028		33,7	60,3	4x22	2x1¼"
	8.3.63.7	93,3	35718	70,6	74,3	25912	55,6	457	108	726	3456	1950	720	1810	3056	1028	2028		33,7	60,3	4x22	2x1¼"

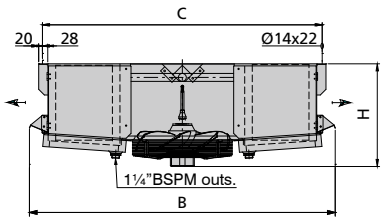
* Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)) , free field conditions, according EN13487
Capacities and air volumes with 60 Hz fans on request or in our GPC selection program available.

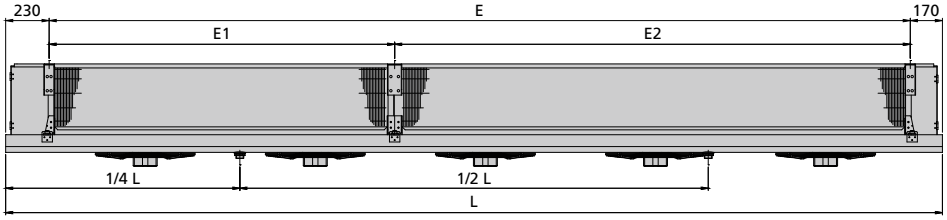
Attention!

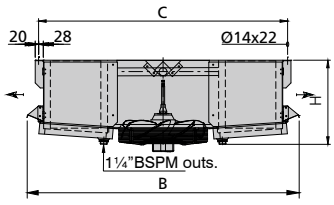
The fans are mounted to the outside of the air cooler. The fans are as standard not wired on a junction box to the connection side. Wiring is available against an extra price.

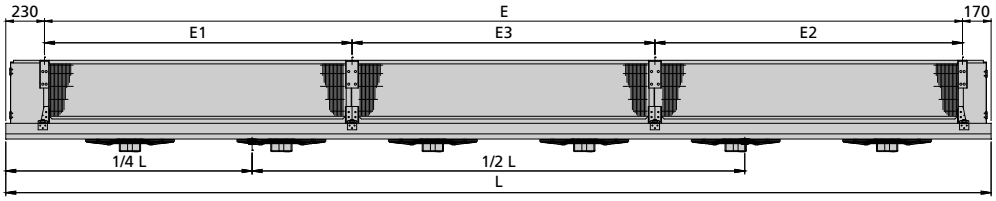
Goedhart DRS 7mm

Type DVS	3x400V-50H-4pole (1500 min⁻¹ nom.)			3x400V-50H-6pole (1000 min⁻¹ nom.)			Surface	Internaly volume	Weight	Dimensions								Connections			
	R404A			R404A														Refrigerant			
	DT1 = 8K (SC2) Air on= 0°C	Air volume	LpA @ 3 m (+/-2 dB(A))**	DT1 = 8K (SC2) Air on= 0°C	Air volume	LpA @ 3 m (+/-2 dB(A))**				L	B	H	C	E1	E2	E3	E4	in	out	Hot gas	Drain
	kW	m³/h	dB(A)	kW	m³/h	dB(A)	m²	dm³	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	NW"
4x																					
3.4.45.7	27,2	21111	61,3	22,0	14408	50,3	91	22	272	2856	1270	520	1130	2456				21,3	33,7	4x22	2x1¼"
4.4.45.7	33,5	20483	61,3	26,9	14048	50,3	122	30	303	2856	1370	520	1230	2456				21,3	42,2	4x22	2x1¼"
6.4.45.7	42,4	19288	61,3	33,5	13383	50,3	183	44	369	2856	1570	520	1430	2456				26,7	42,2	4x22	2x1¼"
8.4.45.7	48,3	18220	61,3	37,5	12791	50,3	244	58	435	2856	1770	520	1630	2456				26,7	42,2	4x22	2x1¼"
3.4.50.7	40,0	30243	64,0	32,4	20715	55,0	137	34	410	4056	1320	520	1180	3656	1828	1828		21,3	42,2	4x22	2x1¼"
4.4.50.7	49,3	29700	64,0	39,5	20385	55,0	183	44	459	4056	1420	520	1280	3656	1828	1828		26,7	42,2	4x22	2x1¼"
6.4.50.7	63,5	28674	64,0	49,5	19673	55,0	274	66	553	4056	1620	520	1480	3656	1828	1828		26,7	48,3	4x22	2x1¼"
8.4.50.7	73,0	27722	64,0	55,6	18951	55,0	365	88	648	4056	1820	520	1680	3656	1828	1828		33,7	60,3	4x22	2x1¼"
3.4.56.7	55,4	42216	67,7	45,0	28556	55,7	190	46	492	4456	1380	620	1240	4056	2028	2028		26,7	42,2	4x22	2x1¼"
4.4.56.7	68,7	41485	67,7	54,5	28164	55,7	254	60	554	4456	1480	620	1340	4056	2028	2028		26,7	48,3	4x22	2x1¼"
6.4.56.7	88,1	40168	67,7	68,8	27338	55,7	381	90	676	4456	1680	620	1540	4056	2028	2028		33,7	60,3	4x22	2x1¼"
8.4.56.7	101,4	39003	67,7	77,7	26502	55,7	507	120	798	4456	1880	620	1740	4056	2028	2028		33,7	60,3	4x22	2x1¼"
3.4.63.7	67,3	50914	71,5	56,2	36758	56,5	228	54	579	4456	1450	720	1310	4056	2028	2028		26,7	48,3	4x22	2x1¼"
4.4.63.7	82,8	50255	71,5	68,6	36329	56,5	304	72	649	4456	1550	720	1410	4056	2028	2028		33,7	60,3	4x22	2x1¼"
6.4.63.7	106,8	48927	71,5	85,8	35442	56,5	457	108	788	4456	1750	720	1610	4056	2028	2028		33,7	60,3	4x22	2x1¼"
8.4.63.7	124,3	47619	71,5	99,0	34546	56,5	609	144	931	4456	1950	720	1810	4056	2028	2028		42,2	60,3	4x22	2x1¼"
5x																					
3.5.50.7	50,2	37804	64,7	40,6	25893	55,7	171	42	501	4956	1320	520	1180	4556	1828	2728		26,7	42,2	4x22	4x1¼"
4.5.50.7	61,8	37124	64,7	49,4	25479	55,7	228	54	559	4956	1420	520	1280	4556	1828	2728		26,7	48,3	4x22	4x1¼"
6.5.50.7	79,4	35838	64,7	61,9	24589	55,7	343	82	675	4956	1620	520	1480	4556	1828	2728		33,7	60,3	4x22	4x1¼"
8.5.50.7	91,3	34648	64,7	69,5	23687	55,7	457	108	791	4956	1820	520	1680	4556	1828	2728		33,7	60,3	4x22	4x1¼"
3.5.56.7	69,4	52767	68,5	56,1	35693	56,4	238	58	600	5456	1380	620	1240	5056	2028	3028		26,7	48,3	4x22	4x1¼"
4.5.56.7	85,6	51854	68,5	68,4	35203	56,4	317	76	675	5456	1480	620	1340	5056	2028	3028		33,7	60,3	4x22	4x1¼"
6.5.56.7	109,8	50206	68,5	86,0	34171	56,4	476	114	827	5456	1680	620	1540	5056	2028	3028		33,7	60,3	4x22	4x1¼"
8.5.56.7	128,0	48750	68,5	95,6	33125	56,4	634	150	977	5456	1880	620	1740	5056	2028	3028		42,2	60,3	4x22	4x1¼"
3.5.63.7	83,7	63642	72,1	69,3	45947	57,1	285	68	707	5456	1450	720	1310	5056	2028	3028		33,7	60,3	4x22	4x1¼"
4.5.63.7	103,2	62817	72,1	85,5	45410	57,1	381	90	793	5456	1550	720	1410	5056	2028	3028		33,7	60,3	4x22	4x1¼"
6.5.63.7	133,4	61157	72,1	108,8	44300	57,1	571	136	967	5456	1750	720	1610	5056	2028	3028		42,2	76,1	4x22	4x1¼"
8.5.63.7	155,4	59520	72,1	123,8	43181	57,1	761	180	1142	5456	1950	720	1810	5056	2028	3028		42,2	76,1	4x22	4x1¼"





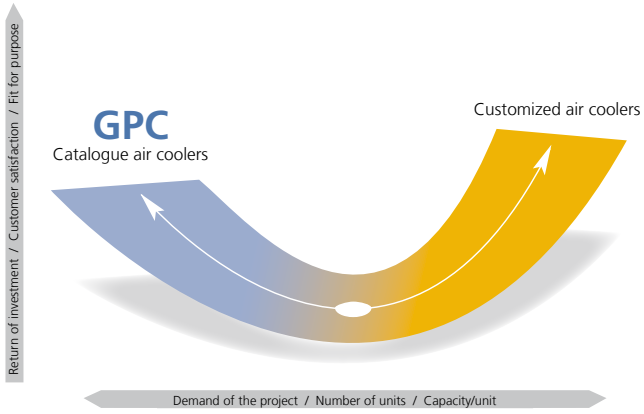




6x																					
3.6.50.7	60,2	45362	65,2	48,6	31070	56,2	205	50	591	5856	1320	520	1180	5456	1828	1828	1800	26,7	48,3	4x22	4x1¼"
4.6.50.7	73,8	44549	65,2	59,3	30574	56,2	274	66	659	5856	1420	520	1280	5456	1828	1828	1800	33,7	60,3	4x22	4x1¼"
6.6.50.7	94,1	43005	65,2	73,7	29506	56,2	411	98	797	5856	1620	520	1480	5456	1828	1828	1800	33,7	60,3	4x22	4x1¼"
8.6.50.7	109,5	41576	65,2	83,5	28423	56,2	548	130	937	5856	1820	520	1680	5456	1828	1828	1800	33,7	60,3	4x22	4x1¼"
3.6.56.7	83,9	63318	69,1	67,4	42833	56,9	285	68	713	6456	1380	620	1240	6056	2028	2028	2000	33,7	60,3	4x22	4x1¼"
4.6.56.7	102,9	62223	69,1	82,0	42243	56,9	380	90	802	6456	1480	620	1340	6056	2028	2028	2000	33,7	60,3	4x22	4x1¼"
6.6.56.7	132,1	60246	69,1	101,8	41004	56,9	571	136	981	6456	1680	620	1540	6056	2028	2028	2000	42,2	60,3	4x22	4x1¼"
8.6.56.7	153,3	58497	69,1	116,5	39749	56,9	761	180	1161	6456	1880	620	1740	6056	2028	2028	2000	42,2	76,1	4x34	4x1¼"
3.6.63.7	100,9	76368	72,6	84,3	55135	57,6	342	82	840	6456	1450	720	1310	6056	2028	2028	2000	33,7	60,3	4x22	4x1¼"
4.6.63.7	124,7	75380	72,6	102,9	54491	57,6	457	108	944	6456	1550	720	1410	6056	2028	2028	2000	42,2	60,3	4x22	4x1¼"
6.6.63.7	161,2	73386	72,6	128,7	53159	57,6	685	162	1149	6456	1750	720	1610	6056	2028	2028	2000	42,2	76,1	4x22	4x1¼"
8.6.63.7	186,5	71421	72,6	148,5	51814	57,6	913	216	1358	6456	1950	720	1810	6056	2028	2028	2000	42,2	76,1	4x34	4x1¼"

* Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)) , free field conditions, according EN13487
Capacities and air volumes with 60 Hz fans on request or in our GPC selection program available.

Best of both worlds



One question which always is in the mind of an industrial refrigeration engineer is the following:
Do I ask for standard or shall I go for tailor made?

There are good reasons for both choices. In some cases, the solution needed is beyond the boundaries of the standard program. In other occasions, tailor made can even offer a more economical solution. In again other situations standard would be the logical choice to go for.

In any of the cases GEA Goedhart can offer you the right solution. With the standard selection software GPC finding the right heat exchanger is just a few mouse clicks away. On other cases the GEA Goedhart engineers are happy to help you out!

Goedhart GPC Program, **your selection software** for air coolers and air cooled condensers!

Goedhart DRS air cooler selections are available in the Goedhart Product Catalogue or GPC.
On the tool section of **www.goedhart.nl** you will find the download button for the latest version of the GPC.

The GPC program is an easy to use tool for contractors, consultants and every other thinkable user and gives you access to many advantages such as:

- Multilingual
- The whole range of GEA Goedhart standard air coolers and air cooled condensers
- Pre-select buttons to application
- Selections including drawings and an extensive list of accessories
- Spare parts
- Accurate capacities: Under the GPC shell hides a sophisticated capacity calculation program which optimizes circuits to the design conditions as you work!

GEA Goedhart
air coolers
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
- 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.

Excellence Passion Integrity Responsibility GEA-versity

GEA Group is a global mechanical engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX Europe 600 Index.

GEA Heat Exchangers

GEA Goedhart B.V.

Nijverheidsweg 6, 4695 RC Sint Maartensdijk
The Netherlands
Phone +31 (0)166 665 665, Fax+31 (0)166 663 698
www.goedhart.nl,
info.goedhart.nl@geagroup.com

GEA Heat Exchangers

GEA Goedhart s.r.o.

Kostomlátecká 180, 288 26 Nymburk
Czech Republic
Phone +420 325 519 951, Fax+420 325 519 952
www.goedhart.cz,
goedhart.cz@geagroup.com