



Air Cooled Dry coolers and Condensers

PRO-DIALOG PLUS



Carrier is participating in the Eurovent Certification Programme. Products are as listed in the Eurovent Directory of Certified Products.

09GDV and 09LDV

Nominal cooling capacities for dry coolers 146 to 1638 kW (water)
and for condensers 170 to 1812 kW (R404A)

Air cooled 09GDV dry coolers and 09LDV condensers are designed for commercial and industrial cooling and refrigeration plants. Due to its construction, the range is especially suitable when high capacity relative to available space, low energy consumption or low noise levels are required.

Features

- 15 sizes with nominal capacities from 146 to 1638 kW (water, EN 1048) for liquid use and with nominal capacities from 170 to 1812 kW for condenser use (R404A/ΔT1 15 K, EN 327)
- Performance data according to Eurovent Rating Standards 7/C/002 and 7/C/003
- Two fan sizes and five fan speed alternatives to reach the required sound level
- Casing made of hot dip galvanised steel
- Complete fan control systems available, based on fan speed regulation (SVC) or on stepped fan starting cycle (Step Control)
- Pro-Dialog option is available for dry coolers matching 30RW water cooled chillers and for air cooled condensers matching 30RWA & 30HZV condenserless chillers
- Product selection with the Polar Power selection program

Technical data

The heat transfer section is made of copper tubes and aluminium fins. Standard fin spacing is 2.3 mm. As an option, aluminium fins with epoxy coating are also available.

They extend the working life of the coil in urban and coastal environments. The capacity correction factor for epoxy-coated aluminium fins is 0.97.

The heat transfer section can be multi-circuited or equipped with a sub-cooling circuit. During short loading peaks a water spraying system can considerably increase the heat transfer capacity.

The coil of a dry cooler is equipped with draining and venting nipples but the standard version cannot be totally drained. Please take this into consideration when specifying the freezing point of the heat transfer liquid.

The fan chambers are separated crosswise. The units are equipped with lifting lugs, and smaller models have lifting points for a forklift (see lifting instructions in the dimensional drawing).

When placing the units, please ensure that the air flow is neither obstructed nor recirculated. If there are several coolers, you can reduce the spacing between units by installing them on a higher mounting base. Please check the placing of multiple coolers with our representative.

A manual including installation and service instructions is shipped with each unit.

Product designation

09GDVE-184-3 12-10-9-50-136DN65-D

09GDV = Dry cooler

09LDV = Condenser

E = Special model

184 = Size

3 = Number of fans

12 = Fan diameter

10 = Fan speed rpm

6 = 15.8 r/s 8 = 12.0 r/s

10 = 9.3 r/s 12 = 7.8 r/s

16 = 5.8 r/s

9 = Power supply

8 = 230 V-3 ph-50 Hz

9 = 400 V-3 ph-50 Hz

Additional markings for dry cooler 09GDV:

136DN65

136 = Number of circuits

DN = Tube connection type

DN = Flange R = Outer thread

125 = Connection size

Options:

- D = water spraying system
- S = vibration dampers
- Ep = epoxy coated aluminium fins
- SC = step control (see separate brochure)
- SVC = fan speed control with frequency converter (see separate brochure)
- Sub = sub-cooling block
- J = multi-circuited condenser number of passes from up to down (J:1:2:1)

Fans

The axial fans are equipped with squirrel cage motors built according to IEC standards, with IP 54 standard degree of protection and class F insulation. The motors are provided with shaft seals and drainage holes. Allowed air outlet temperature for standard motors is at least +60 °C. Suitability for higher temperatures has to be checked separately. The motors are wired to the fans' safety switches (IP 65) on the end of the unit.

The standard motors are suitable for 380 V-3 ph-50 Hz... 420 V-3 ph-50 Hz. With delta connection they are suitable for 230 V-3 ph-50 Hz (except the motor 11 kW, 15.8 r/s). For other power supplies, the fans must be specified as special.

The fan power input at +20 °C is given in the performance data tables. The full load current is given at a temperature of -30 °C for specifying the overload protector. The current value changes according to air density. This data may also vary due to changes in motor types; therefore the overload protectors should have a +/- 20 % adjustment margin.

To ensure the lifetime of the fans, they shall be started for at least 3...4 hours once a month.

Heat transfer capacities

The capacities, air flows, sound power levels and liquid pressure drop (dry cooler) shown in the Polar Power selection software and in the tables in this brochure are certified by Eurovent Certify-All certification, and are verified by tests (EN 1048, EN 327) in independent laboratories.

The performance data of the dry coolers are given for water +40/35 °C, air entering temperature +25 °C according to Eurovent, and for ethylene glycol 40 %, +42/36 °C, air entering temperature +27 °C.

The nominal heat transfer capacities of the condensers are given for refrigerant R404A, with temperature difference 15 K and air entering temperature +25 °C. The performance data is given at the sea level and with normal atmospheric pressure.

L_{wa} is the A-weighted sound power level [dB(A)]. The A-weighted sound pressure level L_{pa} [dB(A)] is given at fan deck height and at a distance of 10 meters from the end of the unit, with the unit in free field conditions over one reflective plane (hemisphere).

Selection

The preliminary product selection can be made using the tables in this leaflet. The condenser capacities for the required refrigerant and temperature difference can be calculated with the help of the correction factors. The exact cooler selection and dry cooler dimensioning is made by Polar Power software, which is available on CD-rom.

The selection is based on required capacity, temperatures, noise level at desired point and refrigerant or liquid choice. The program gives the most suitable models with heat transfer capacities, connection data, noise levels by octave bands, operating cost calculations and dimensional drawings.

Performance data 09LDV

Fan diameter 914 mm

R404A, ΔT_1 15 K, EN 327

400 V-3 ph-50 Hz

Fan speed		5.8 r/s				7.8 r/s				9.3 r/s				12.0 r/s				15.8 r/s						
Poles	16					Poles	12				Poles	10				Poles	8				Poles	6		
Power input	0.35 kW					Power input	0.59 kW				Power input	0.75 kW				Power input	1.37 kW				Power input	3.10 kW		
FLC (full load current)	1.4 A					FLC (full load current)	2.5 A				FLC (full load current)	2.8 A				FLC (full load current)	4.3 A				FLC (full load current)	7.0 A		
09LDV	Placing of fans	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)			
100-4	2x2	170	11.1	38	71	226	15.8	46	79	254	18.5	50	83	310	24.4	57	88	372	32.1	63	96			
110-4	2x2	185	10.7	38	71	248	15.3	46	79	280	18.0	50	83	348	23.7	57	88	422	31.3	63	96			
120-4	2x2	195	10.1	38	71	268	14.4	46	79	308	16.9	50	83	392	22.5	57	88	492	29.7	63	96			
148-6	2x3	260	16.7	40	73	338	23.7	48	81	378	27.8	51	85	460	36.6	58	90	548	48.2	64	98			
168-6	2x3	278	16.1	40	73	376	23.0	48	81	426	27.0	51	85	528	35.6	58	90	644	47.0	64	98			
184-6	2x3	292	15.2	40	73	402	21.6	48	81	460	25.3	51	85	600	33.7	58	90	736	44.6	64	98			
198-8	2x4	344	22.3	40	74	456	31.6	49	82	512	37.1	52	86	624	48.8	59	92	744	64.3	65	99			
222-8	2x4	372	21.5	40	74	500	30.7	49	82	568	36.0	52	86	704	47.5	59	92	856	62.7	65	99			
246-8	2x4	390	20.3	40	74	536	28.8	49	82	616	33.7	52	86	786	44.9	59	92	986	59.5	65	99			
250-10	2x5	424	27.8	41	75	562	39.5	49	83	634	46.3	53	87	776	61.0	59	93	932	80.3	66	100			
280-10	2x5	460	26.8	41	75	620	38.3	49	83	704	45.0	53	87	878	59.3	59	93	1076	78.3	66	100			
310-10	2x5	490	25.3	41	75	674	36.0	49	83	772	42.2	53	87	980	56.2	59	93	1222	74.3	66	100			
300-12	2x6	516	33.4	41	76	682	47.4	50	84	768	55.6	53	88	934	73.2	60	93	1114	96.4	67	101			
330-12	2x6	558	32.2	41	76	754	46.0	50	84	854	54.0	53	88	1060	71.2	60	93	1292	94.0	67	101			
370-12	2x6	584	30.4	41	76	806	43.2	50	84	924	50.6	53	88	1180	67.4	60	93	1482	89.2	67	101			

Fan diameter 1240 mm

Fan speed		5.8 r/s				7.8 r/s				9.3 r/s				12.0 r/s				15.8 r/s						
Poles	16					Poles	12				Poles	10				Poles	8				Poles	6		
Power input	1.10 kW					Power input	2.15 kW				Power input	3.23 kW				Power input	6.00 kW				Power input	13.0 kW		
FLC (full load current)	6.2 A					FLC (full load current)	7.5 A				FLC (full load current)	11 A				FLC (full load current)	17 A				FLC (full load current)	27 A		
09LDV	Placing of fans	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)			
100-2	1x2	206	14.3	47	80	272	20.7	56	88	312	24.9	60	93	382	34.0	65	99	442	43.2	72	106			
110-2	1x2	228	14.0	47	80	306	20.2	56	88	352	24.5	60	93	432	33.0	65	99	502	42.0	72	106			
120-2	1x2	248	13.3	47	80	344	19.4	56	88	404	23.5	60	93	502	31.2	65	99	598	39.6	72	106			
148-3	1x3	310	21.5	48	82	406	31.0	57	90	464	37.3	61	95	560	51.0	66	101	642	64.8	73	108			
168-3	1x3	346	21.0	48	82	464	30.3	57	90	534	36.7	61	95	658	49.6	66	101	768	63.0	73	108			
184-3	1x3	372	20.0	48	82	546	29.1	57	90	606	35.2	61	95	752	46.8	66	101	900	59.4	73	108			
198-4	1x4	418	28.7	49	83	550	41.3	58	92	626	49.7	62	96	762	68.0	67	102	876	86.6	74	109			
222-4	1x4	460	28.0	49	83	618	40.4	58	92	714	48.9	62	96	876	66.0	67	102	1024	84.0	74	109			
246-4	1x4	496	26.7	49	83	688	38.8	58	92	808	46.9	62	96	1008	62.4	67	102	1204	79.0	74	109			
250-5	1x5	516	35.8	50	84	682	51.7	58	92	782	62.2	63	97	956	85.0	68	103	1106	108	74	110			
280-5	1x5	568	35.0	50	84	768	50.5	58	92	890	61.2	63	97	1102	82.6	68	103	1298	105	74	110			
310-5	1x5	626	33.3	50	84	864	48.5	58	92	1010	58.7	63	97	1226	78.0	68	103	1478	99.0	74	110			
300-6	1x6	626	43.0	50	85	824	62.0	59	93	938	74.6	63	98	1140	102	68	104	1310	130	75	111			
330-6	1x6	690	42.0	50	85	932	60.6	59	93	1074	73.4	63	98	1324	99.0	68	104	1546	126	75	111			
370-6	1x6	744	40.0	50	85	1034	58.2	59	93	1214	70.4	63	98	1514	93.6	68	104	1812	119	75	111			

CAP = Nominal capacity

Flow = Air flow

L_{pa} = Sound pressure level

L_{wa} = Sound power level

Correction factors for different refrigerants

Temperature difference ΔT_1 [K]:								
Refrigerant	8	10	12	14	15	16	18	20
R404A / R507	0.53	0.67	0.80	0.93	1.00	1.07	1.20	1.33
R407C	0.40	0.54	0.67	0.81	0.87	0.94	1.07	1.20
R134a	0.50	0.62	0.74	0.87	0.93	0.99	1.12	1.24
R22	0.51	0.64	0.77	0.90	0.96	1.02	1.15	1.28

Performance data 09GDV

Fan diameter 914 mm

Air on +25 °C, water +40/35 °C, EN 1048

400 V-3 ph-50 Hz

Fan speed				5.8 r/s				7.8 r/s				9.3 r/s				12.0 r/s				15.8 r/s					
Poles				16				12				10				8				6					
Power input				0.35 kW				0.59 kW				0.75 kW				1.37 kW				3.10 kW					
FLC (full load current)				1.4 A				2.5 A				2.8 A				4.3 A				7.0 A					
09GDV	Placing of fans	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)
100-4	2x2	146	11.1	38	71	197	15.8	46	79	226	18.5	50	83	273	24.4	57	88	330	32.1	63	96				
110-4	2x2	151	10.7	38	71	216	15.3	46	79	250	18.0	50	83	306	23.7	57	88	380	31.3	63	96				
120-4	2x2	168	10.1	38	71	234	14.4	46	79	281	16.9	50	83	345	22.5	57	88	436	29.7	63	96				
148-6	2x3	217	16.7	40	73	292	23.7	48	81	335	27.8	51	85	416	36.6	58	90	508	48.2	64	98				
168-6	2x3	225	16.1	40	73	325	23.0	48	81	374	27.0	51	85	468	35.6	58	90	577	47.0	64	98				
184-6	2x3	250	15.2	40	73	354	21.6	48	81	409	25.3	51	85	524	33.7	58	90	657	44.6	64	98				
198-8	2x4	297	22.3	40	74	396	31.6	49	82	447	37.1	52	86	545	48.8	59	92	662	64.3	65	99				
222-8	2x4	323	21.5	40	74	440	30.7	49	82	496	36.0	52	86	624	47.5	59	92	757	62.7	65	99				
246-8	2x4	336	20.3	40	74	474	28.8	49	82	541	33.7	52	86	697	44.9	59	92	871	59.5	65	99				
250-10	2x5	376	27.8	41	75	503	39.5	49	83	559	46.3	53	87	691	61.0	59	93	845	80.3	66	100				
280-10	2x5	405	26.8	41	75	546	38.3	49	83	619	45.0	53	87	775	59.3	59	93	966	78.3	66	100				
310-10	2x5	424	25.3	41	75	587	36.0	49	83	675	42.2	53	87	871	56.2	59	93	1091	74.3	66	100				
300-12	2x6	443	33.4	41	76	598	47.4	50	84	674	55.6	53	88	821	73.2	60	93	1013	96.4	67	101				
330-12	2x6	455	32.2	41	76	658	46.0	50	84	748	54.0	53	88	932	71.2	60	93	1156	94.0	67	101				
370-12	2x6	510	30.4	41	76	710	43.2	50	84	817	50.6	53	88	1037	67.4	60	93	1321	89.2	67	101				

Fan diameter 1240 mm

Fan speed				5.8 r/s				7.8 r/s				9.3 r/s				12.0 r/s				15.8 r/s					
Poles				16				12				10				8				6					
Power input				1.10 kW				2.15 kW				3.23 kW				6.00 kW				13.0 kW					
FLC (full load current)				6.2 A				7.5 A				11 A				17 A				27 A					
09GDV	Placing of fans	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)
100-2	1x2	177	14.3	47	80	239	20.7	56	88	275	24.9	60	93	342	34.0	65	99	403	43.2	72	106				
110-2	1x2	199	14.0	47	80	269	20.2	56	88	311	24.5	60	93	392	33.0	65	99	464	42.0	72	106				
120-2	1x2	213	13.3	47	80	302	19.4	56	88	357	23.5	60	93	453	31.2	65	99	538	39.6	72	106				
148-3	1x3	270	21.5	48	82	362	31.0	57	90	419	37.3	61	95	521	51.0	66	101	607	64.8	73	108				
168-3	1x3	300	21.0	48	82	411	30.3	57	90	475	36.7	61	95	594	49.6	66	101	706	63.0	73	108				
184-3	1x3	323	20.0	48	82	455	29.1	57	90	538	35.2	61	95	682	46.8	66	101	821	59.4	73	108				
198-4	1x4	361	28.7	49	83	484	41.3	58	92	548	49.7	62	96	676	68.0	67	102	803	86.6	74	109				
222-4	1x4	406	28.0	49	83	543	40.4	58	92	632	48.9	62	96	775	66.0	67	102	932	84.0	74	109				
246-4	1x4	436	26.7	49	83	610	38.8	58	92	721	46.9	62	96	909	62.4	67	102	1094	79.0	74	109				
250-5	1x5	457	35.8	50	84	603	51.7	58	92	695	62.2	63	97	865	85.0	68	103	1022	108	74	110				
280-5	1x5	499	35.0	50	84	674	50.5	58	92	785	61.2	63	97	985	82.6	68	103	1182	105	74	110				
310-5	1x5	543	33.3	50	84	761	48.5	58	92	896	58.7	63	97	1113	78.0	68	103	1357	99.0	74	110				
300-6	1x6	544	43.0	50	85	727	62.0	59	93	838	74.6	63	98	1037	102	68	104	1237	130	75	111				
330-6	1x6	604	42.0	50	85	821	60.6	59	93	949	73.4	63	98	1176	99.0	68	104	1429	126	75	111				
370-6	1x6	654	40.0	50	85	918	58.2	59	93	1074	70.4	63	98	1351	93.6	68	104	1638	119	75	111				

Capacities depend on the tubing. The exact capacity is given by the selection software.

CAP = Nominal capacity

Flow = Air flow

L_{pA} = Sound pressure level

L_{wA} = Sound power level

Performance data 09GDV

Fan diameter 914 mm

Air on +27 °C, ethylene glycol 40% +42/36 °C

400 V-3 ph-50 Hz

Fan speed	5.8 r/s				7.8 r/s				9.3 r/s				12.0 r/s				15.8 r/s				
Poles	16				12				10				8				6				
Power input	0.35 kW				0.59 kW				0.75 kW				1.37 kW				3.10 kW				
FLC (full load current)	1.4 A				2.5 A				2.8 A				4.3 A				7.0 A				
09GDV	Placing of fans	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	
100-4	2x2	141	11.1	38	71	189	15.8	46	79	214	18.5	50	83	258	24.4	57	88	315	32.1	63	96
110-4	2x2	153	10.7	38	71	207	15.3	46	79	236	18.0	50	83	295	23.7	57	88	357	31.3	63	96
120-4	2x2	159	10.1	38	71	221	14.4	46	79	249	16.9	50	83	323	22.5	57	88	400	29.7	63	96
148-6	2x3	211	16.7	40	73	283	23.7	48	81	321	27.8	51	85	387	36.6	58	90	472	48.2	64	98
168-6	2x3	230	16.1	40	73	310	23.0	48	81	354	27.0	51	85	443	35.6	58	90	535	47.0	64	98
184-6	2x3	238	15.2	40	73	331	21.6	48	81	374	25.3	51	85	484	33.7	58	90	600	44.6	64	98
198-8	2x4	281	22.3	40	74	377	31.6	49	82	428	37.1	52	86	516	48.8	59	92	629	64.3	65	99
222-8	2x4	307	21.5	40	74	413	30.7	49	82	472	36.0	52	86	591	47.5	59	92	713	62.7	65	99
246-8	2x4	317	20.3	40	74	441	28.8	49	82	499	33.7	52	86	645	44.9	59	92	800	59.5	65	99
250-10	2x5	352	27.8	41	75	472	39.5	49	83	535	46.3	53	87	645	61.0	59	93	787	80.3	66	100
280-10	2x5	383	26.8	41	75	517	38.3	49	83	590	45.0	53	87	738	59.3	59	93	892	78.3	66	100
310-10	2x5	397	25.3	41	75	552	36.0	49	83	623	42.2	53	87	807	56.2	59	93	1000	74.3	66	100
300-12	2x6	422	33.4	41	76	566	47.4	50	84	642	55.6	53	88	774	73.2	60	93	944	96.4	67	101
330-12	2x6	460	32.2	41	76	620	46.0	50	84	708	54.0	53	88	886	71.2	60	93	1070	94.0	67	101
370-12	2x6	476	30.4	41	76	662	43.2	50	84	748	50.6	53	88	968	67.4	60	93	1200	89.2	67	101

Fan diameter 1240 mm

Fan speed	5.8 r/s				7.8 r/s				9.3 r/s				12.0 r/s				15.8 r/s				
Poles	16				12				10				8				6				
Power input	1.10 kW				2.15 kW				3.23 kW				6.00 kW				13.0 kW				
FLC (full load current)	6.2 A				7.5 A				11 A				17 A				27 A				
09GDV	Placing of fans	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	CAP kW	Flow m³/s	Lpa dB(A)	Lwa dB(A)	
100-2	1x2	174	14.3	47	80	227	20.7	56	88	262	24.9	60	93	315	34.0	65	99	336	43.2	72	106
110-2	1x2	190	14.0	47	80	259	20.2	56	88	303	24.5	60	93	359	33.0	65	99	415	42.0	72	106
120-2	1x2	205	13.3	47	80	283	19.4	56	88	335	23.5	60	93	419	31.2	65	99	481	39.6	72	106
148-3	1x3	261	21.5	48	82	340	31.0	57	90	393	37.3	61	95	473	51.0	66	101	504	64.8	73	108
168-3	1x3	285	21.0	48	82	389	30.3	57	90	454	36.7	61	95	539	49.6	66	101	623	63.0	73	108
184-3	1x3	308	20.0	48	82	425	29.1	57	90	502	35.2	61	95	628	46.8	66	101	721	59.4	73	108
198-4	1x4	348	28.7	49	83	453	41.3	58	92	524	49.7	62	96	631	68.0	67	102	672	86.6	74	109
222-4	1x4	380	28.0	49	83	519	40.4	58	92	605	48.9	62	96	719	66.0	67	102	830	84.0	74	109
246-4	1x4	411	26.7	49	83	567	38.8	58	92	669	46.9	62	96	837	62.4	67	102	961	79.0	74	109
250-5	1x5	435	35.8	50	84	567	51.7	58	92	655	62.2	63	97	788	85.0	68	103	839	108	74	110
280-5	1x5	475	35.0	50	84	648	50.5	58	92	757	61.2	63	97	898	82.6	68	103	1038	105	74	110
310-5	1x5	513	33.3	50	84	708	48.5	58	92	837	58.7	63	97	1047	78.0	68	103	1202	99.0	74	110
300-6	1x6	522	43.0	50	85	680	62.0	59	93	786	74.6	63	98	946	102	68	104	1007	130	75	111
330-6	1x6	570	42.0	50	85	778	60.6	59	93	908	73.4	63	98	1078	99.0	68	104	1237	126	75	111
370-6	1x6	616	40.0	50	85	850	58.2	59	93	1004	70.4	63	98	1256	93.6	68	104	1442	119	75	111

Capacities depend on the tubing. The exact capacity is given by the selection software.

CAP = Nominal capacity

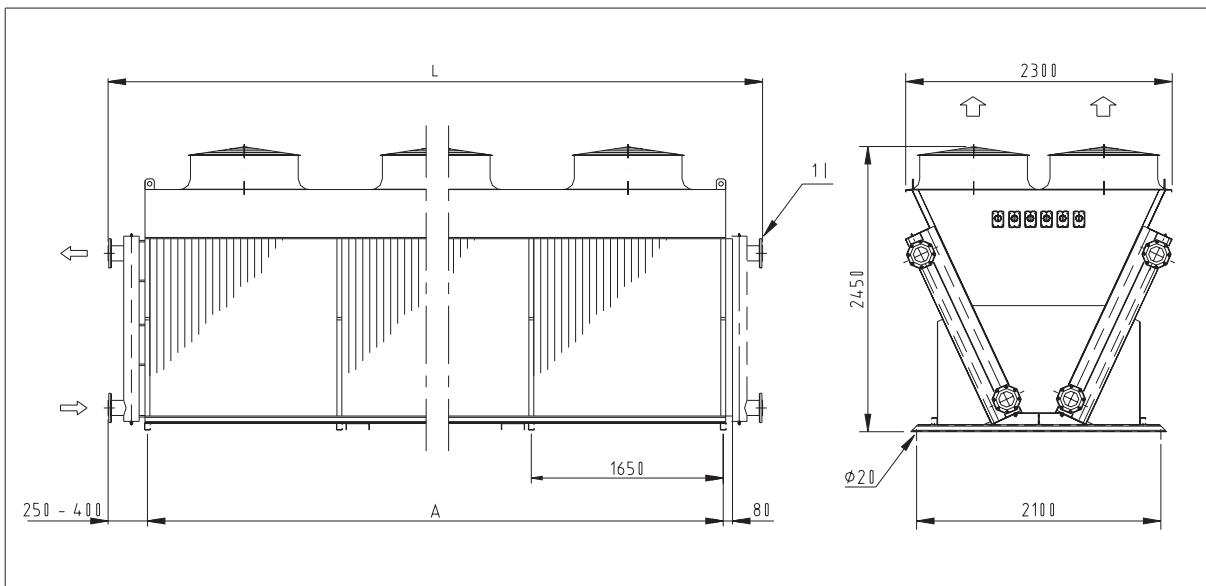
Flow = Air flow

L_pa = Sound pressure level

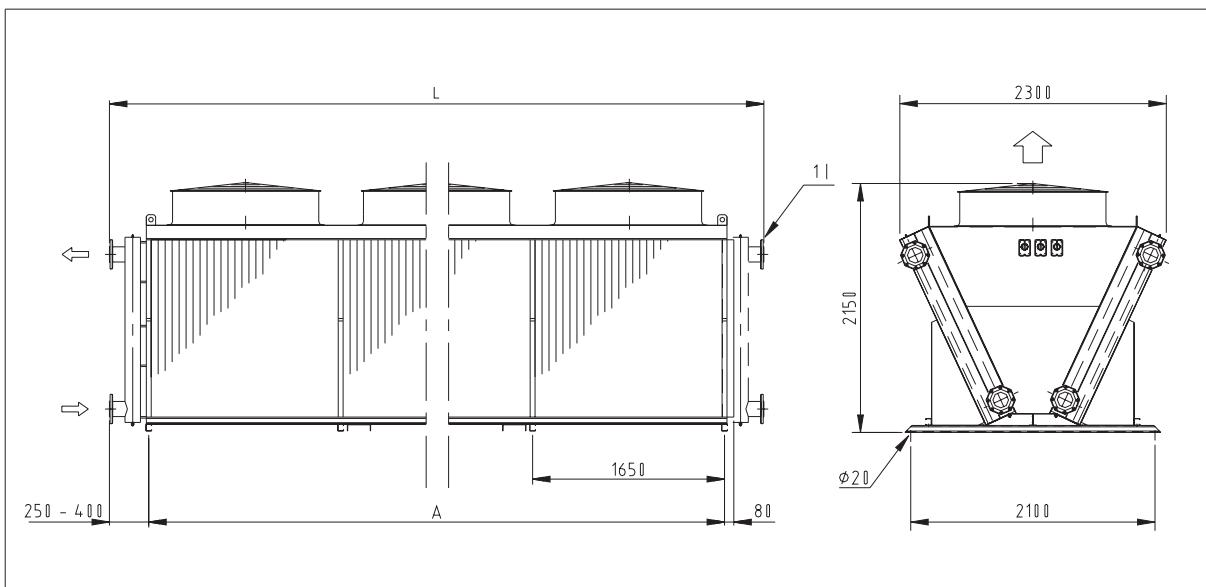
L_wa = Sound power level

Dimensional drawings

Fan Ø 914



Fan Ø 1240



Condenser tube connection sizes

09LDV	5.8 r/s, 7.8 r/s		9.3 r/s		12.0 r/s		15.8 r/s		No. of circuits
	Gas	Liquid	Gas	Liquid	Gas	Liquid	Gas	Liquid	
100	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*15
110	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*16
120	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*25
148	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*18
168	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*42	2*25
184	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*37
198	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*25
222	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*33
246	2*54	2*54	2*54	2*54	2*63	2*63	2*63	2*63	2*50
250	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*37
280	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*50
310	2*54	2*54	2*63	2*63	2*63	2*63	2*63	2*63	2*50
300	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*54	2*37
330	2*63	2*63	2*63	2*63	2*63	2*63	2*63	2*63	2*50
370	2*63	2*63	2*63	2*63	2*63	2*63	2*63	2*63	2*75

Dimension and weight

09LDV/GDV	Max. dimensions		Fixing points	NW	IV 2)	SA	Water spraying system D		
	A [mm]	L [mm] ¹⁾					[kg]	[l]	[m ²]
100	3300	4100	6	1220	160	840	2.8	290	2x15
110	3300	4100	6	1320	210	1120	2.8	290	2x15
120	3300	4100	6	1550	300	1680	2.8	290	2x15
148	4950	5750	8	1810	230	1260	4.2	380	2x15
168	4950	5750	8	1960	290	1680	4.2	380	2x15
184	4950	5750	8	2310	420	2520	4.2	380	2x15
198	6600	7400	10	2280	290	1680	5.6	480	2x15
222	6600	7400	10	2450	380	2240	5.6	480	2x15
246	6600	7400	10	2940	550	3360	5.6	480	2x15
250	8250	9050	12	2800	350	2100	7.0	580	2x15
280	8250	9050	12	3080	460	2800	7.0	580	2x15
310	8250	9050	12	3630	670	4200	7.0	580	2x15
300	9900	10700	14	3310	420	2520	8.4	680	2x15
330	9900	10700	14	3600	540	3360	8.4	680	2x15
370	9900	10700	14	4200	800	5040	8.4	680	2x15

1) Connections on both ends

2) Internal volume with maximum header size

SA = Surface area

TC = Tube connection

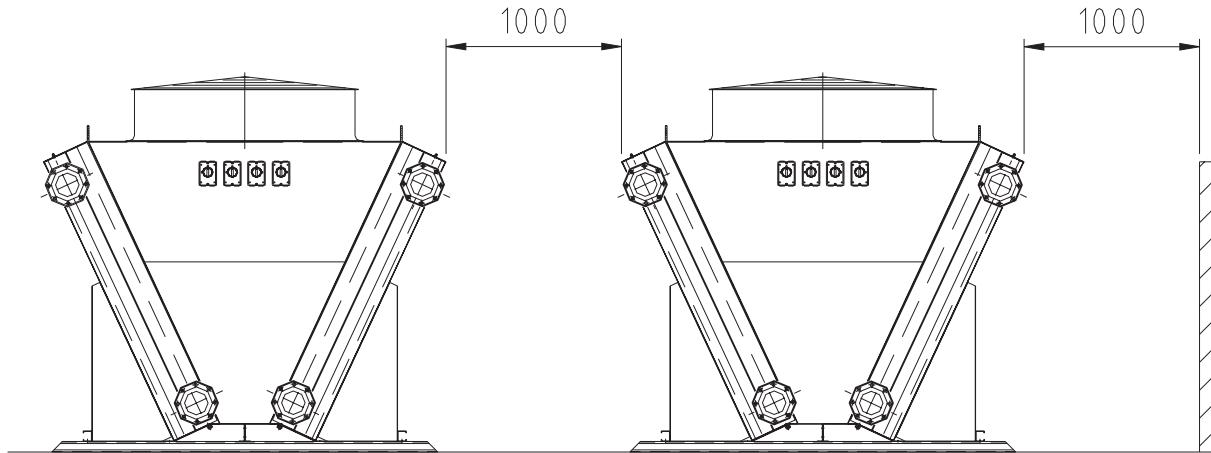
IV = Internal volume

NW = Net weight

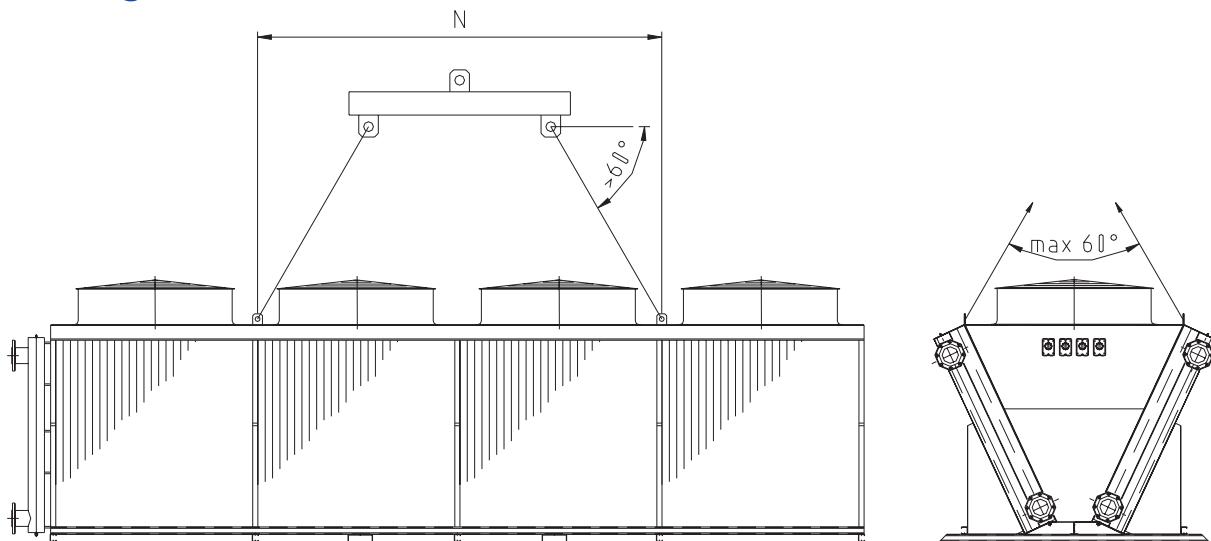
WF = Water flow

Location

When locating the products, take care that the air flow is neither obstructed nor re-circulated. If the heat exchanger is not installed on a higher mounting base, there must be a free space of at least 1 meter around all sides of each unit.



Lifting



09LDV/GDV	N [mm]
100...120	3300
148...184	4950
198...246	3300
250...310	4950
300...370	6600