

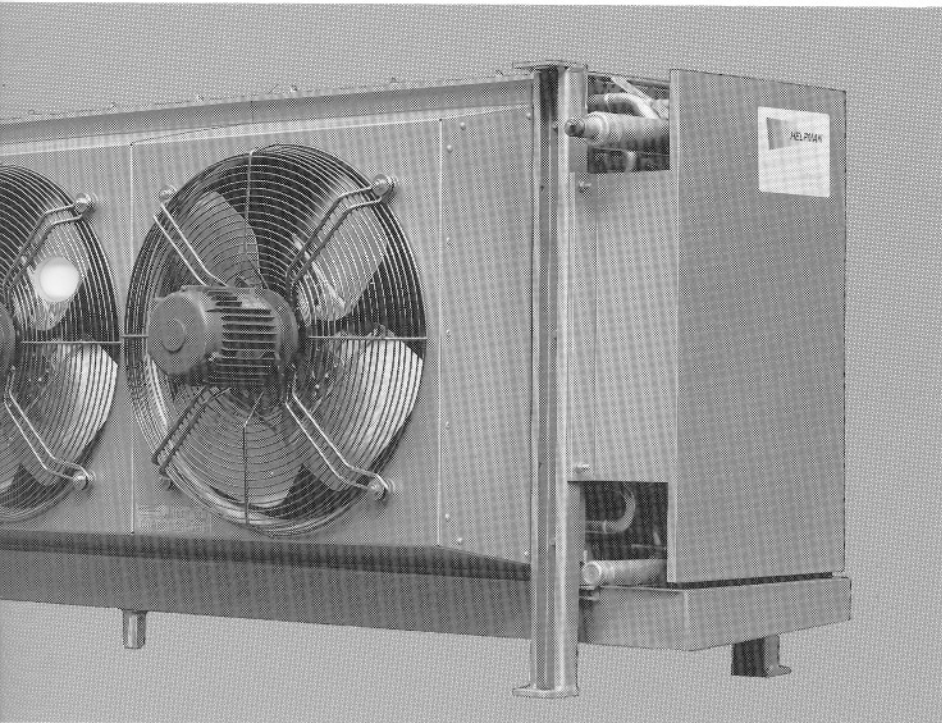
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NH₃

Industrial
Air Coolers

ZL

NH₃ Industrial Air Coolers

ZL

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NH₃ Industrial Air Coolers

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Type indication

Example : **ZL 6.8.312-P2-*-.**-.*******ZL** : Air cooler with steel coilblock**6** : Number of tube rows in air direction**8** : Fin spacing in mm**3..** : Model number (number of modules)**.12** : Number of tube rows high**P2** : Refrigerant circuiting design
O / P2 / P3 / P4 / Q / R
(see page 12)***** : Type of fans**V1** - Fans ø 508 mm
"Blow-through" design
(see page 5 and 13).**V2** - Fans ø 610 mm
"Draw-through" design
(see page 5 and 13).****** : Optional extras according to page 16 and 17.**E1/4** - Electric defrost**G** - Hot gas coil in driptray**W** - Water defrost**I** - Driptray insulation with 1/2" armaflex®******* : Optional extras according to page 18.**D** - Diffusor on air discharge side**DOV** - Diffusor with damper plate and fan hood**Z** - Side plates

In the model indication, the circuit design code can only be included when either NH₃ pumped system or NH₃ gravity flow is applied. It's essential that the following is specified (where relevant) when ordering for other applications:

- Cooling capacity in kW
- Air temperature °C
- Refrigerant
- Pumped system or dry expansion (the coolers are fitted with a distributor in the case of dry expansion and multi circuiting).
- Evaporating temperature °C
- Liquid temperature and pressure before the expansion valve (for direct expansion only)
- Brine volume m³/h
- Accessories required

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ZL 6.8.312-P2-V1-Z

General

The ZL standard range of air coolers consists of 252 models, all of which have a hot dipped galvanized steel coil block.

Coolers with type Nr. ...12 are equipped with:

V1 - 508 mm dia fans **blowing** through the coil.

V2 - 610 mm dia fans **drawing** through the coil (only model numbers 2, 4, 6 and 8).

Coolers with type Nr. ...16 are equipped with 610 mm dia fans **drawing** through the coil (V2). Design V1 on request only.

Nominal cooling capacity: 5 up to 240 kW (NH₃ pumped system).

Standard cooler versions are suitable for the NH₃ (R717) pumped system and NH₃ gravity flow.

By adapting its circuiting the ZL is also suitable for NH₃ dry expansion, R22 or brine.

ZL coolers can be used for both cooling and freezing applications.

Finned coil

Steel precision tubes with steel fins.

Tube diameter	: 22 mm
Fin spacing	: 6, 8, 10, 12, 14, 16 or 18 mm
Fin thickness	: 0.4 mm (0.5 mm after galvanizing)
Tube centres	: 60 x 60 mm square pitch

Number of tube rows in air direction : 4, 6 or 8

Height of block : 12 or 16 tubes.

The coils are pressure tested with dry air at 25 bar and hot dipped galvanized after fabrication.

Fans

ø 508 mm, blow-through, 250 / 370 / 550 W motors:

Enclosed design motors, protection class IP 55, incorporating a thermal safety device in the windings which is connected to separate terminals in the box. The terminal box has 2 cable inlets Pg 13.5. The motors are suitable for 220-240/380-415/50/3.

ø 610 mm, draw-through, 1.1 / 1.5 kW motors:

Enclosed design motors, protection class IP 55, Terminal box with 2 cable inlets Pg 13.5. The motors are suitable for 220-240/380-415/50/3.

See page 13 for fan data and setting values for the thermal protection device.

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Casing

Epoxy coated aluminium casing, colour silver-grey (RAL 7001). Deep double drip tray, designed to avoid condensation to the outside surface.

Drip tray with 1 or 2 vertical water-drains 1" B.S.P. Anti splash guard (V1 blow-through only).

For optional extras see page 18.

Mounting

Coolers are standard equipped with mounting channels that allow for ceiling mounting as well as floor mounting.

The coolers are delivered in the upright position on wooden beams, to facilitate lifting with a fork lift truck.

Defrosting

The standard design coil block is suitable for hot-gas defrosting. The following systems are available as alternatives:

Hotgas coil in the drip tray

For this defrosting system the drip tray is equipped with a hot gas coil under the inner tray (bottom plate). Hot-gas coil connections vertical inside the tray (see page 17).

Water defrost

The design guarantees a good water flow over the coil. For connections and flow-data see page 17.

Electric defrost

Stainless steel heating elements positioned in additional tubes between the evaporator tubes and, in the drip tray, clipped to the bottom of the inner tray. The elements are for a voltage up to 240 V and suitable for 220-240 V or 380-415 V 3 phase supply when connected either in delta or star. The heating elements are connected into a terminal box.

All elements can be withdrawn at the refrigerant connection side, the drip-tray elements after removal of the drip-tray.

Extra information regarding the various defrosting systems can be found on pages 16.

Side plates (code Z, page 18) are standard with E2, E3 and E4.

Selection

Using the correction factor given in the tables (page 7) times the required cooling capacity, will give the nominal capacity.

The calculated nominal cooling capacity is the basis for your choice of cooler from the "nominal capacity" column in the tables on pages 8 / 11.

Circuiting

Depending on the operating conditions, a choice must be made for the number of refrigerant injections. The diagram on page 12, gives the most suitable circuiting (coded O, P- etc). This diagram only applies to the NH₃ pumped system and NH₃ gravity flow.

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Cooling Capacity

The stated **nominal** cooling capacity is based on an evaporating temperature of -7.5 °C at a Mean T.D. (Δt) of 10 K.

Mean T.D. is the difference between the average of air on and air off temperature, and the evaporating temperature.

The *evaporating temperature* is the saturated temperature according to the pressure at the cooler end.

Capacities are based on a relative humidity of 85 % and a lightly frosted coil (following a cooling period of 30 minutes). Refrigerant NH₃ pumped system.

The tables contain the correction factors for:

- various evaporating temperatures and temperature differences
- alternative refrigerants

Cooling capacity for use of brine on request.

Selection example

Required cooling capacity : 24 kW
 Evaporating temperature : -15 °C
 Mean T.D. : 6 K
 Fin spacing : 8 mm
 NH₃ pumped system

Correction factor : 1.99

Nominal capacity: 24 x 1.99 = 47.8 kW

For this cooling capacity a ZL 8.8.216 cooler (nominal capacity 48.7 kW) or ZL 8.8.312 cooler (nominal capacity 55.1 kW) can be selected.

NH₃ - pumped system

MTD K	evaporating temperature °C							
	0	-5	-10	-15	-20	-25	-30	-35
6	1.62	1.79	1.91	1.99	2.03	2.05	2.08	2.14
7	1.33	1.47	1.59	1.66	1.71	1.74	1.78	1.85
8	1.11	1.24	1.34	1.42	1.47	1.51	1.56	1.63
9	0.95	1.10	1.16	1.23	1.28	1.33	1.38	1.46
10	0.80	0.98	1.01	1.08	1.13	1.19	1.24	1.33

NH₃ - gravity flow

MTD K	evaporating temperature °C							
	0	-5	-10	-15	-20	-25	-30	-35
6	1.74	1.92	2.06	2.15	2.19	2.21	2.23	2.27
7	1.41	1.57	1.68	1.77	1.82	1.85	1.88	1.93
8	1.18	1.31	1.41	1.49	1.54	1.58	1.62	1.67
9	1.00	1.11	1.20	1.28	1.33	1.37	1.42	1.48
10	0.86	0.96	1.04	1.11	1.16	1.21	1.26	1.32

NH₃ - dry expansion

MTD K	evaporating temperature °C							
	0	-5	-10	-15	-20	-25	-30	-35
6	1.77	1.96	2.10	2.21	2.27	2.31	2.33	2.38
7	1.47	1.63	1.76	1.85	1.92	1.96	2.00	2.05
8	1.25	1.38	1.50	1.59	1.65	1.70	1.75	1.81
9	1.08	1.20	1.30	1.39	1.45	1.50	1.55	1.62
10	0.94	1.05	1.14	1.22	1.29	1.34	1.40	1.46

R22 - pumped system

MTD K	evaporating temperature °C							
	0	-5	-10	-15	-20	-25	-30	-35
6	1.99	2.21	2.39	2.53	2.63	2.71	2.79	2.91
7	1.61	1.79	1.95	2.07	2.17	2.25	2.33	2.46
8	1.34	1.49	1.62	1.73	1.82	1.91	1.99	2.12
9	1.13	1.26	1.38	1.48	1.56	1.64	1.73	1.85
10	0.97	1.08	1.18	1.28	1.36	1.44	1.52	1.64

R22 - dry expansion

MTD K	evaporating temperature °C							
	0	-5	-10	-15	-20	-25	-30	-35
6	2.13	2.38	2.58	2.72	2.81	2.89	2.98	3.15
7	1.73	1.94	2.11	2.23	2.32	2.40	2.50	2.66
8	1.44	1.62	1.76	1.87	1.96	2.05	2.14	2.30
9	1.22	1.37	1.50	1.60	1.69	1.77	1.87	2.02
10	1.05	1.18	1.29	1.39	1.47	1.55	1.65	1.79

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Fin spacing 6 mm *

Fin spacing 8 mm

Model number	Tube rows in air direction	Tube rows high	Nominal capacity kW $t_o = -7.5^\circ\text{C}, \text{MTD} (\Delta t) = 10 \text{ K}$	Selection example (kW) at: $t_o = -30^\circ\text{C}, \text{MTD} (\Delta t) = 10 \text{ K}$ (correction factors <u>not</u> applicable)	Air volume m ³ /h	Surface m ²	Weight kg	Type ZL
1	4	12	11.2	9.0	3700	35.6	145	4.6.112
		6	16.0	12.9	4500	53.4	205	6.6.112
		8	21.7	17.5	3750	71.1	265	8.6.112
2	4	12	23.0	18.5	7400	71.1	260	4.6.212
		16	31.3	25.2	11400	94.8	390	4.6.216
	6	12	33.2	26.8	9000	106.7	370	6.6.212
		16	46.5	37.5	11200	142.3	535	6.6.216
	8	12	44.8	36.1	7500	142.3	480	8.6.212
		16	57.7	46.5	9900	189.7	675	8.6.216
3	4	12	34.3	27.7	11100	106.7	375	4.6.312
		6	50.0	40.3	13500	160.1	535	6.6.312
		8	66.4	53.5	11250	213.4	690	8.6.312
4	4	12	47.0	37.9	14800	142.3	490	4.6.412
		16	63.5	51.2	22800	189.7	730	4.6.416
	6	12	68.0	54.8	18000	213.4	695	6.6.412
		16	93.8	75.6	22400	284.5	1000	6.6.416
	8	12	90.5	73.0	15000	284.5	900	8.6.412
		16	116.8	94.2	19800	379.4	1270	8.6.416
5	4	12	59.1	47.7	18500	182.0	610	4.6.512
		6	85.3	68.8	22500	273.0	870	6.6.512
		8	113.3	91.4	18750	364.0	1130	8.6.512
6	4	12	70.6	56.9	22200	221.7	730	4.6.612
		16	101.1	81.5	34200	295.6	1090	4.6.616
	6	12	102.0	82.3	27000	332.6	1040	6.6.612
		16	149.0	120.2	33600	443.4	1500	6.6.616
	8	12	136.0	109.7	22500	443.4	1350	8.6.612
		16	184.2	148.6	29700	591.2	1920	8.6.616
7	4	12	83.7	67.5	25900	257.3	850	4.6.712
		6	124.2	100.2	31500	385.9	1200	6.6.712
		8	161.0	129.8	26250	514.6	1560	8.6.712
8	4	12	96.3	77.6	29600	292.8	960	4.6.812
		16	131.4	105.9	45600	390.5	1430	4.6.816
	6	12	139.0	112.1	36000	439.3	1385	6.6.812
		16	193.5	156.0	44800	585.7	1970	6.6.816
	8	12	184.8	149.0	30000	585.7	1800	8.6.812
		16	240.5	193.9	39600	780.9	2610	8.6.816

Model number	Tube rows in air direction	Tube rows high	Nominal capacity kW $t_o = -7.5^\circ\text{C}, \text{MTD} (\Delta t) = 10 \text{ K}$	Selection example (kW) at: $t_o = -30^\circ\text{C}, \text{MTD} (\Delta t) = 10 \text{ K}$ (correction factors <u>not</u> applicable)	Air volume m ³ /h	Surface m ²	Weight kg	Type ZL
1	4	12	9.1	7.3	4000	27.2	130	4.8.112
		6	13.0	10.5	3700	40.8	180	6.8.112
		8	18.5	14.9	4350	54.4	230	8.8.112
2	4	12	18.5	14.9	8000	54.4	225	4.8.212
		16	24.9	20.1	11650	72.5	345	4.8.216
	6	12	27.0	21.8	7400	81.6	315	6.8.212
		16	37.1	29.9	11400	108.7	465	6.8.216
	8	12	37.8	30.5	8700	108.7	410	8.8.212
		16	48.7	39.3	11200	145.0	585	8.8.216
3	4	12	27.2	21.9	12000	81.6	320	4.8.312
		6	39.8	32.1	11100	122.3	455	6.8.312
		8	55.1	44.4	13050	163.1	585	8.8.312
4	4	12	37.4	30.2	16000	108.7	420	4.8.412
		16	51.2	41.3	23300	145.0	635	4.8.416
	6	12	54.6	44.0	14800	163.1	590	6.8.412
		16	76.0	61.3	22800	217.5	860	6.8.416
	8	12	76.3	61.5	17400	217.5	760	8.8.412
		16	99.8	80.5	22400	290.0	1090	8.8.416
5	4	12	47.7	38.5	20000	139.1	525	4.8.512
		6	69.7	56.2	18500	208.7	740	6.8.512
		8	97.0	78.2	21750	278.2	960	8.8.512
6	4	12	56.6	45.6	24000	169.5	620	4.8.612
		16	79.1	63.8	34950	226.0	940	4.8.616
	6	12	82.4	66.5	22200	254.2	875	6.8.612
		16	117.6	94.8	34200	338.9	1280	6.8.616
	8	12	114.6	92.4	26100	338.9	1135	8.8.612
		16	153.9	124.1	33600	451.9	1615	8.8.616
7	4	12	66.1	53.3	28000	196.7	720	4.8.712
		6	96.4	77.7	25900	295.0	1020	6.8.712
		8	134.9	108.8	30450	393.3	1320	8.8.712
8	4	12	76.6	61.8	32000	223.8	820	4.8.812
		16	105.3	84.9	46600	298.5	1240	4.8.816
	6	12	111.5	89.9	29600	335.8	1160	6.8.812
		16	156.2	125.9	45600	447.7	1690	6.8.816
	8	12	155.9	125.7	34800	447.7	1500	8.8.812
		16	204.6	165.0	44800	596.9	2240	8.8.816

* Note: at fin spacing = 6 mm and M.T.D. = 10 K, cooling down air through coil is relatively large.

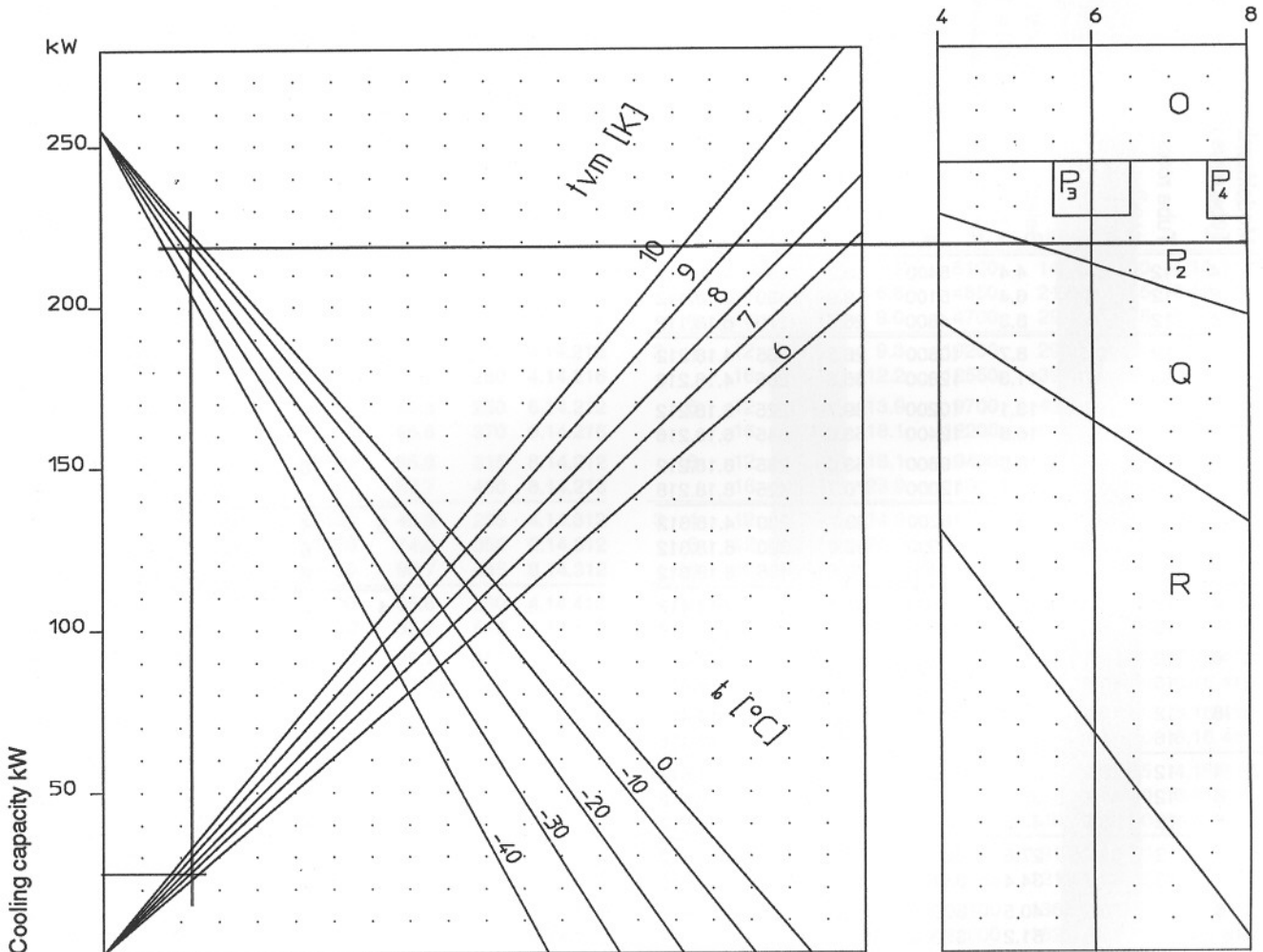
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Circuiting

Determination of circuiting for ZL

Number of tube rows deep.



Selection example

Chosen cooler : **ZL8.8.216**
 Required cooling capacity : 24 kW
 TD : 6 K
 Evaporating temperature : -15 °C
 Number of tube rows : 8

The diagram indicates circuit design **P2** for the NH₃ pumped system and NH₃ gravity flow.

Connections mm

Circuiting design	liquid	suction
O	22	22
P4	33.7	42.4
P3	33.7	42.4
P2	33.7	48.3
Q	33.7	76.1
R	42.4	88.9

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Fans

Model-number	Number of fans		Nominal capacity per motor (kW)				
			V1			V2	
			fin spacing mm			fin spacing mm	
ZL	V1	V2	6	8 and 10	12 / 18	6 / 18	
4.-.112	1		0.25	0.25	0.25		
6.-.112	1		0.37	0.25	0.25		
8.-.112	1		0.37	0.37	0.25		
4.-.212	2	1	0.25	0.25	0.25	1.1	
4.-.216	*	1				1.5	
6.-.212	2	1	0.37	0.25	0.25	1.1	
6.-.216	*	1				1.5	
8.-.212	2	1	0.37	0.37	0.25	1.1	
8.-.216	*	1				1.5	
4.-.312	3		0.25	0.25	0.25		
6.-.312	3		0.37	0.25	0.25		
8.-.312	3		0.37	0.37	0.25		
4.-.412	4	2	0.25	0.25	0.25	1.1	
4.-.416	*	2				1.5	
6.-.412	4	2	0.37	0.25	0.25	1.1	
6.-.416	*	2				1.5	
8.-.412	4	2	0.37	0.37	0.25	1.1	
8.-.416	*	2				1.5	
4.-.512	5		0.25	0.25	0.25		
6.-.512	5		0.37	0.25	0.25		
8.-.512	5		0.37	0.37	0.25		
4.-.612	6	3	0.25	0.25	0.25	1.1	
4.-.616	*	3				1.5	
6.-.612	6	3	0.37	0.25	0.25	1.1	
6.-.616	*	3				1.5	
8.-.612	6	3	0.37	0.37	0.25	1.1	
8.-.616	*	3				1.5	
4.-.712	7		0.25	0.25	0.25		
6.-.712	7		0.37	0.25	0.25		
8.-.712	7		0.37	0.37	0.25		
4.-.812	8	4	0.25	0.25	0.25	1.1	
4.-.816	*	4				1.5	
6.-.812	8	4	0.37	0.25	0.25	1.1	
6.-.816	*	4				1.5	
8.-.812	8	4	0.37	0.37	0.25	1.1	
8.-.816	*	4				1.5	

* Only available on request.

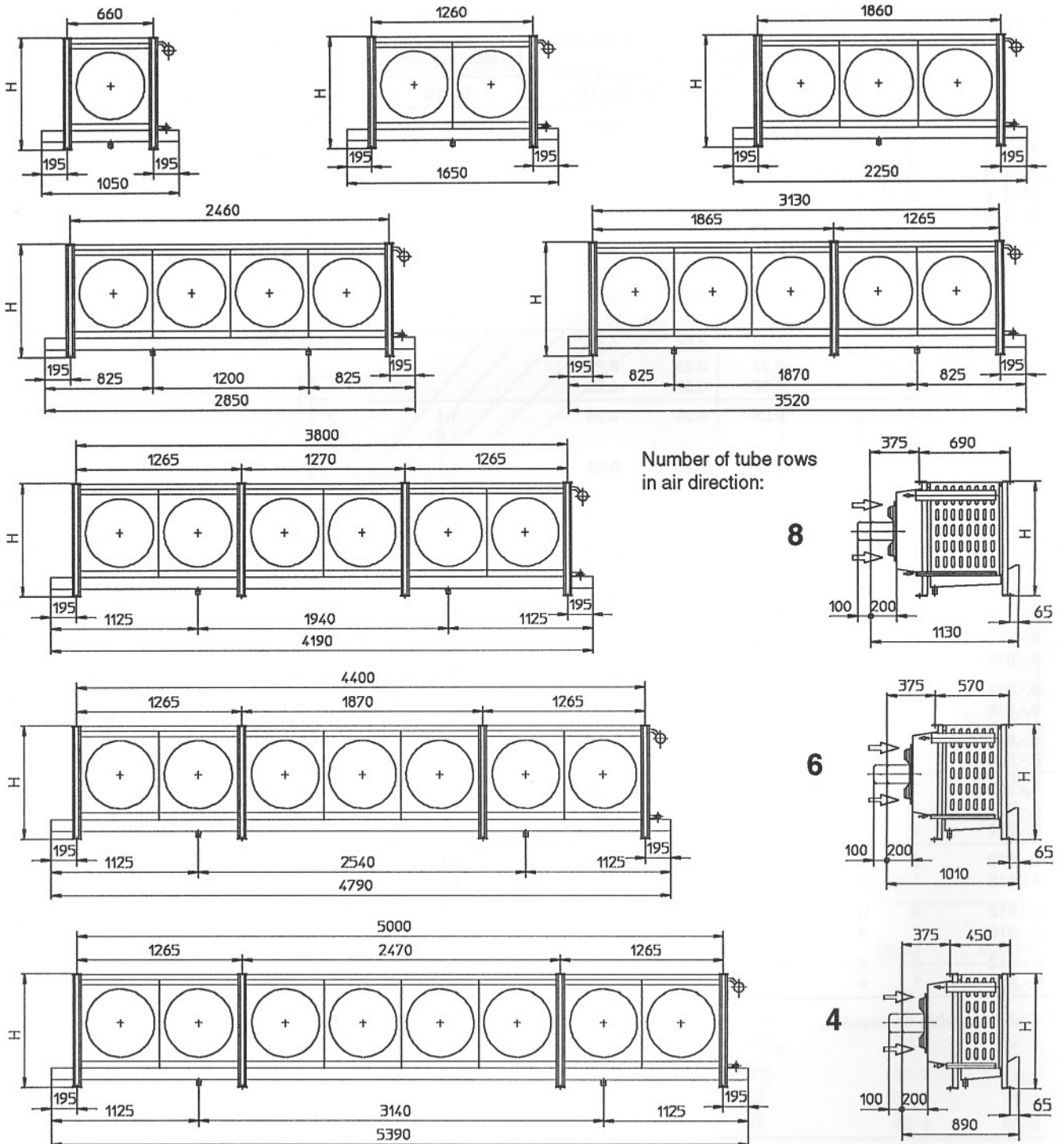
Setting values for thermal protection device

220-240/380-415/50/3				
motor 0.25 kW				
t °C	Δ		Y	
	220 V	240 V	380 V	415 V
0	1.87	1.87	1.08	1.08
-20	1.98	1.91	1.14	1.10
-40	2.13	1.94	1.23	1.12
motor 0.37 kW				
t °C	Δ		Y	
	220 V	240 V	380 V	415 V
0	2.32	2.36	1.34	1.36
-20	2.44	2.44	1.41	1.41
-40	2.67	2.63	1.54	1.52
motor 0.55 kW				
t °C	Δ		Y	
	220 V	240 V	380 V	415 V
0	2.95	2.99	1.71	1.73
-20	3.14	3.10	1.82	1.79
-40	3.52	3.45	2.03	1.99
motor 1.10 kW				
t °C	Δ		Y	
	220 V	240 V	380 V	415 V
0	4.80	5.10	2.95	3.25
-20	5.10	5.50	3.15	3.40
-40	5.50	5.70	3.35	3.60
motor 1.50 kW				
t °C	Δ		Y	
	220 V	240 V	380 V	415 V
0	6.70	7.40	3.90	4.30
-20	6.90	7.60	4.00	4.40
-40	7.10	7.80	4.10	4.50

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Dimensions mm (Execution V1).

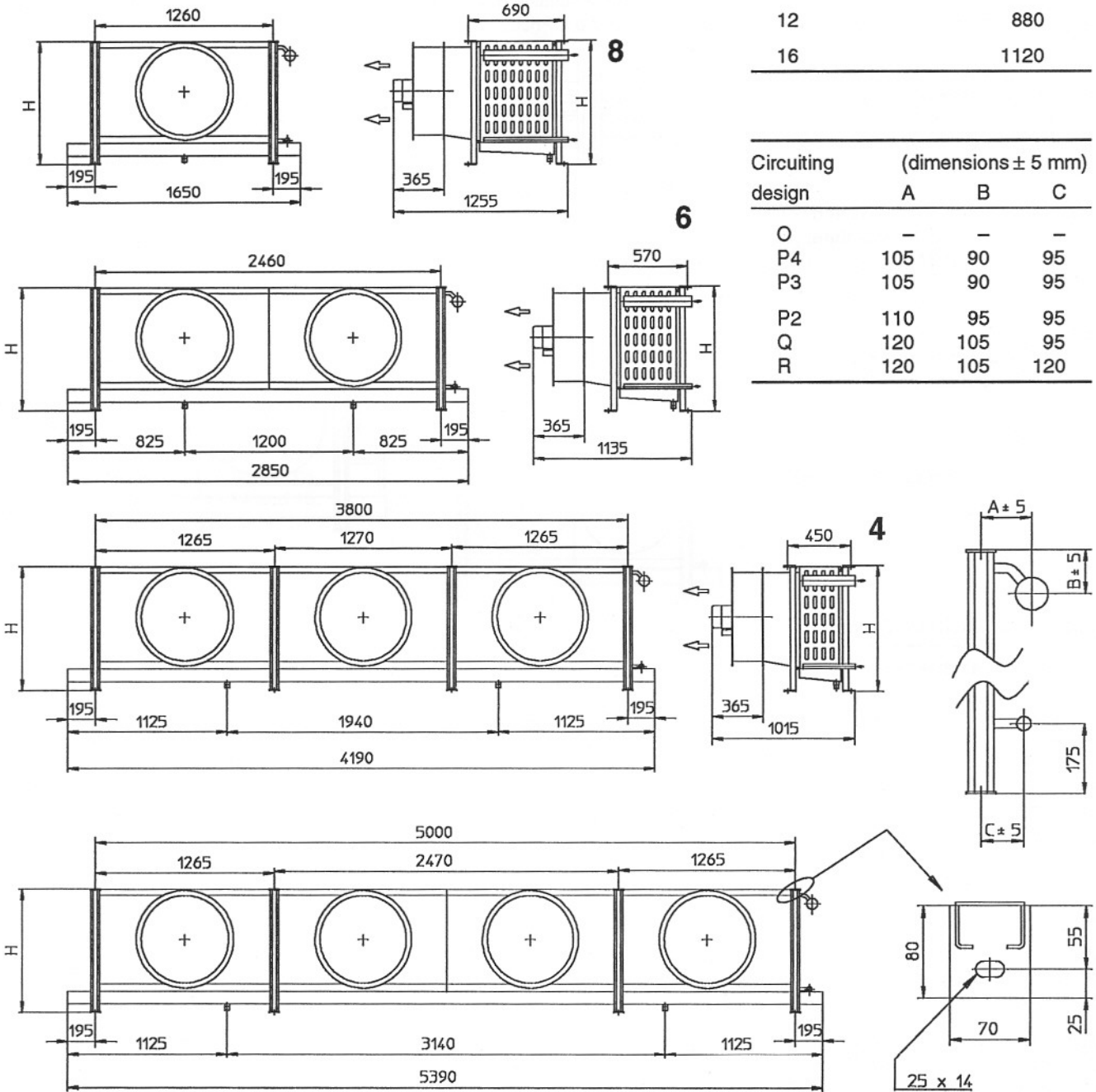


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Dimensions mm (Execution **V2**).

Number of tube rows in air direction:



Dimensions (For V1 and V2)

Tube rows high	Dim. H (V1 and V2)
12	880
16	1120

Circuiting design	(dimensions ± 5 mm)		
	A	B	C
O	-	-	-
P4	105	90	95
P3	105	90	95
P2	110	95	95
Q	120	105	95
R	120	105	120

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Electric defrost (E)*

Electric defrost is available in the following executions:

E1 : defrost elements in driptray only

E2 : defrost elements in coil and driptray. Room temperature: -20 °C and below.

E3 : defrost elements in coil and driptray. Room temperature: -20 °C / -2 °C.

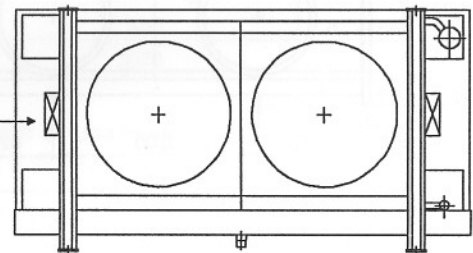
E4 : defrost elements in coil and driptray. Room temperature: -2 °C and above.

* Side plates Z included for E2, E3 and E4.

Driptray insulation (I)

Standard Armaflex insulation cannot be used with electric defrost. Only heat resistant insulation materials should be applied. Prices on request.

Terminal box for defrost elements (1 left and 1 right).



Electrical defrost power

Tuberows in air direction	4		6		8		E2		E3		E4	
	E1	E2 / E3 / E4	E2 / E3 / E4	E2 / E3 / E4	E2	E3	E2	E3	E2	E3	E4	E4
Type	Number	kW	Number	kW	Number	kW	Number	kW	Number	kW	Number	kW
ZL--.112	3	1.5	9	4.5	12	6.0	18	9.0	15	7.5	12	6.0
ZL--.212	3	2.7	9	8.1	12	10.8	18	16.2	15	13.5	12	10.8
ZL--.216	3	2.7	12	10.8	12	10.8	24	21.6	21	18.9	15	13.5
ZL--.312	3	3.7	9	11.3	12	15.0	18	22.5	15	18.8	12	15.0
ZL--.412	3	5.0	9	14.9	12	19.8	18	29.7	15	24.8	12	19.8
ZL--.416	3	5.0	12	19.8	12	19.8	24	39.6	21	34.7	15	24.8
ZL--.512	3	6.0	9	18.0	12	24.0	18	36.0	15	30.0	12	24.0
ZL--.612	3	6.7	9	20.3	12	27.0	18	40.5	15	33.8	12	27.0
ZL--.616	3	6.7	12	27.0	12	27.0	24	54.0	21	47.3	15	33.8
ZL--.712	3	7.8	9	23.4	12	31.2	18	46.8	15	39.0	12	31.2
ZL--.812	3	8.7	9	26.1	12	34.8	18	52.2	15	43.5	12	34.8
ZL--.816	3	8.7	12	34.8	12	34.8	24	69.6	21	60.9	15	43.5

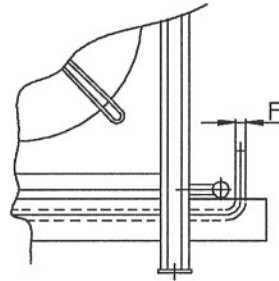
NH₃ Industrial Air Coolers

ZL

Hot gas defrost (G)

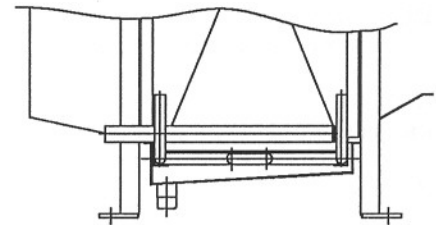
Hot gas coil in driptray:

Hot gas coil is marked with "G" in the type indication code.



Driptray insulation (I)

When hot gas defrost is being used, and room temperatures are below -18 °C, the driptray will be insulated with 1/2" Armaflex® at an extra price. Other insulation materials available, prices on request.



Dimension F : \varnothing 22 mm

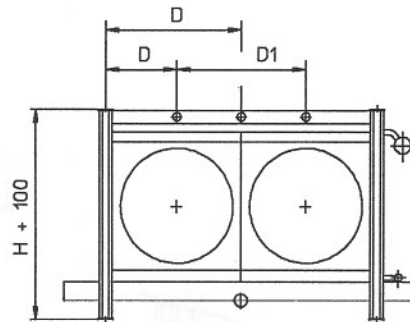
Except for
model number : ZL 8.-.712
ZL 8.-.812
ZL 8.-.816

where conn. F = \varnothing 33.7 mm

Water defrost

Water defrost is marked with "W" in the type indication code.

Horizontal water drain connections, for positioning see page 14 and 15.



Water defrost

Type	Water inlet (B.S.P. ext.)				Drain			Water volume m ³ /h *			
	D	D1			Tube rows in air direction			B.S.P. ext.	Tube rows in air direction		
	mm	mm	mm	mm	4	6	8		4	6	8
ZL--.112-W	330	-	-	-	3/4"	3/4"	3/4"	2"	0.7	1.1	1.4
ZL--.212-W	630	-	-	-	3/4"	1"	1"	2 1/2"	1.4	2.2	2.9
ZL--.216-W	630	-	-	-	3/4"	1"	1"	2 1/2"	1.4	2.2	2.9
ZL--.312-W	930	-	-	-	3/4"	1"	1 1/4"	2 1/2"	2.2	3.2	4.3
ZL--.412-W	630	1270	-	-	2 x 3/4"	2 x 1"	2 x 1"	2 x 2"	2.9	4.3	5.8
ZL--.416-W	630	1270	-	-	2 x 3/4"	2 x 1"	2 x 1"	2 x 2"	2.9	4.3	5.8
ZL--.512-W	930	1570	-	-	2 x 3/4"	2 x 1"	1 1/4" + 1"	2 x 2"	3.6	5.4	7.2
ZL--.612-W	630	1270	1270	-	3 x 3/4"	3 x 1"	3 x 1"	2 x 2 1/2"	4.3	6.5	8.6
ZL--.616-W	630	1270	1270	-	3 x 3/4"	3 x 1"	3 x 1"	2 x 2 1/2"	4.3	6.5	8.6
ZL--.712-W	630	1570	1570	-	3 x 3/4"	3 x 1"	1" + 1 1/4" + 1"	2 x 2 1/2"	5.0	7.6	10.1
ZL--.812-W	630	1270	1200	1270	4 x 3/4"	4 x 1"	4 x 1"	2 x 3"	5.8	8.6	11.5
ZL--.816-W	630	1270	1200	1270	4 x 3/4"	4 x 1"	4 x 1"	2 x 3"	5.8	8.6	11.5

* Water flow tolerance +/- 30 %, water pressure at 0.3 mwg

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ZL

Optional extras

D : Cooler fitted with diffuser

DOV: Cooler fitted with diffuser plus defrost damper and fan hood.

(Option D and DOV only available in design V1)

Z : Side plates

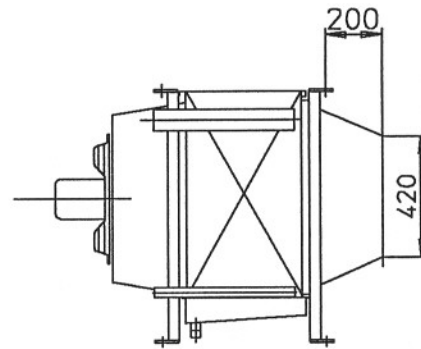
With execution **DOV** the coolers are supplied with heavy duty motors. Coolers which would normally be fitted with 250 W motors now have 370 W motors. Coolers which would normally be fitted with 370 W motors now have 550 W motors. The same air volumes are maintained.

The **DOV** design is only applied to coolers which have a defrosting system. This design incorporates an automatically closing defrost damper, mounted in the diffuser. The defrosting period and defrosting losses are thereby substantially reduced. The damper closes automatically when the fan is switched off.

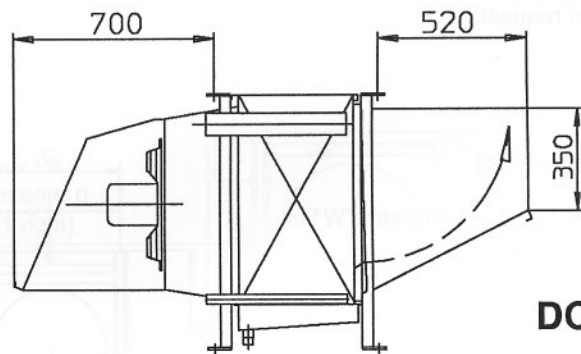
DOV in combination with hot gas defrosting requires a special double walled driptray (**G2**).

For room temperatures below - 20 °C this special tray should additionally be insulated with 1/2" Armaflex® (**G2-I**). Prices on request.

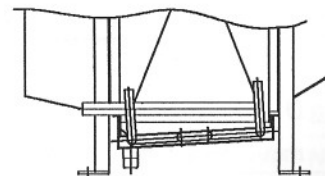
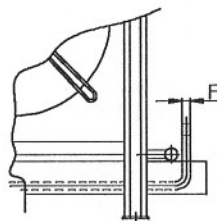
When the working conditions are such that condensation would freeze during the defrosting period, the fan hood and diffuser should be insulated. Prices on request.



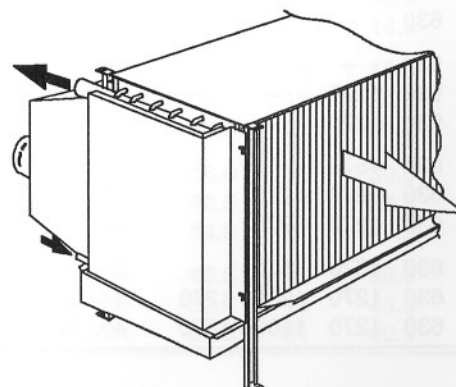
D



DOV



G2



Z