

Air coolers FC38

Standard

Cu/Al-R404A/Coolants

GEA Heat Exchangers

Goedhart FC38S



Goedhart FC38D



Goedhart FC38L





Goedhart FC38

The range Goedhart FC38 standard ceiling mounted air coolers are standard air coolers for cooling and freezing applications (FC38S), working/preparation rooms and storage rooms for humidity sensitive products (FC38D) and for cold storage rooms with height limitation (FC38L).

The standard FC38 aircoolers are suitable for all known refrigerants and not corrosive coolants, with the exception of NH3.

Type description

FC38Si(dx) 6.2.40.7-230-E

FC38S = Ceiling mounted air coolers	2	= Number of fans
FC38D = Dual discharge air coolers		
FC38L = Extra low air cooler	40	= Fan diameter in cm
i = internally enhanced tubes	7	= Fin spacing
p = plain tubes		
	230	= 1x230V Fan tension
	400	= 3x400V Fan tension
(dx) = R404A		
(G) = coolant		
6 = number of tubes deep	E	= Electrical defrost
	H	= Hot gas defrost

General features

Coil block

- Tube distance : 38x33 mm versprongen
- Tubes : 12mm o.d copper tube
- : I= internally enhanced tubes for refrigerants (dx)
P= internally plain tubes for coolants(G) and refrigerants (dx)
- Fins : aluminium HT-fins
- Fin spacing : 4 mm : Suitable for applications with air temperatures above 0°C and with expected limited frost
: 7 mm : Suitable for applications with air temperatures below 0°C and expected frost
- A good thermal with the fins contact because the copper tubes are mechanically expanded into fully collared aluminium fins.
- The suction header is executed with a Schröder valve for testing applications
- All coil blocks for refrigerants are pressure tested to 40 bars. All coil blocks for coolants are pressure tested to 15 bars.
- FC38 aircoolers are supplied with a light overpressure charge.

General features

Casing

- Standard refrigerant connections are fixed on the left hand side of the unit when looking with the direction of the air flow.
- Construction suitable for mounting to the ceiling.
- The FC38 casing is made from galvanized sheet steel, with exception of:
 - FC38S drip tray is hinged and made from light aluminum.
 - FC38D has a fixed galvanized drip tray.
 - FC38L drip tray is hinged and made from light aluminum.
- Goedhart FC38L air cooler is executed with a short splash plate as standard.
- The casing has a corrosion resistant white epoxy spray finish (RAL 9003).
- Almost all fixing materials are made of stainless steel to prevent corrosion.
- A possible hot gas spiral or electric defrost elements will be fixed to the bottom side of the coil

Options

Extra opties	FC38S	FC38D	FC38L
Hot gas defrost	•		
Warm glycol defrost	•		
Fan heating	•		•
Splash plate	•		•
Zuigende uitvoering	•		
Draw through execution	•		
StSt tubes	•	•	•
StSt casing	•	•	•
Goldlack fins	•	•	•
Almg fins	•	•	•
Insulated drip tray	•		

P.E.D.

All air coolers produced by Goedhart comply with the Pressure Equipment Directive 97/23/EC. PED certificates can be downloaded from www.goedhart.nl.

Guarantee

Goedhart gives in conformity with her general conditions of delivery the following guarantee periode on the Goedhart FC38 air coolers:

- within a 12 month period of product use
- at the latest within 18 months after the time of delivery.

Sound data

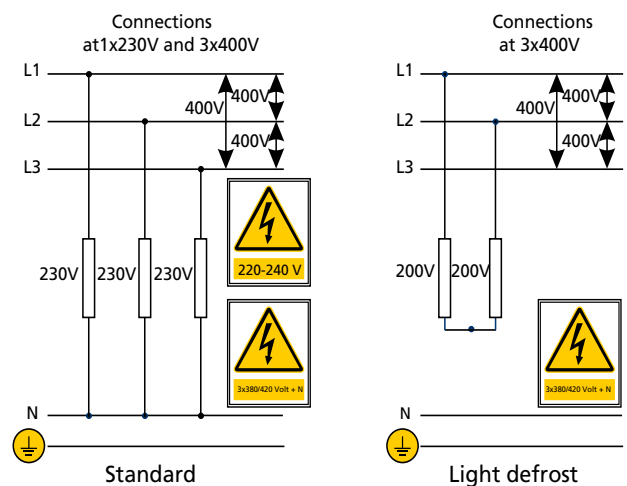
The mean sound pressure (LpA @ 3m ± 2 dB (A)) each air cooler is a calculated indication value according to the EN13487 standard parallel pipe. Goedhart uses the fan manufacturer's sound power level (LwA) at the inlet side of the fan. Changes to or by the fan or the product, affect the sound, in these cases, consult the manufacturer for the new indication value. In critical sound requirements, we advise you to consult an expert.

Defrost systems

For room temperatures where ripe formation can be expected and where the coil can not be defrosted by the room air, electrical or hot gas defrost is necessary

Electrical defrost

On request FC38 can be provided with electrical defrost. FC38 is always delivered with heavy defrost. The heater elements are rated for 220/240 V and are 400/420 V with zero wire supply. The stainless steel heater elements are fitted in the coil block in inner tubes which form a highly conductive medium between the heaters and the fins. In the drip-tray, the heater elements are fitted to the bottom side of the underside of the aluminum inner tray. The heater elements in the coil block are removable from the header side of the unit, whilst the tray heater elements can be removed once the outer tray has been taken off.



Hot gas defrost

The coil block is suited for hot gas defrost (hot gas supply through the suction header). The drip tray can be provided with a copper hot gas spiral, which is enclosed in special aluminum profiles, which are rigidly secured to underside of the aluminum inner tray.

Mounting & Maintenance

FC38 is delivered in a wooden crate. FC38S will be delivered with the separate drip-tray. When crated, FC38 can be handled by crane or fork-lift truck, which makes it very easy to mount. The drip tray of the FC38S is delivered separately. For maintenance and instructions see our manual delivered on order or can be downloaded from our web site www.goedhart.nl.



Fans

FC38 aircoolers are executed with 2 fan manufactures:
 EBM : Ø250, Ø300, Ø350, Ø400 and Ø450
 Ziehl Abegg : Ø500

(We reserve the right to alter the manufacturer)

The fans are suitable for operation in air temperatures between -30 °C to +40 °C. When the air temperature is lower then -30 °C , special fans are needed. These speciale fans have a longer delivery time. The protection class is IP44. The fans are neither available with stainless steel protection guards nor stainless steel arms.

The technical data in the table are the same as on the motor name plates and is valid for an air temperature of +20 oC. Also the data are given for working in an air temperature of 0 °C and -20 °C.

1x230V-50Hz

The standard connection tension for the EBM fans is 230V-50Hz-1 phase for the fan diameters Ø250, Ø300, Ø350, Ø400 en Ø450.

The fan motors are standard equipped with internally connected thermo-contacts.

3x400V-50Hz

The EBMØ450 fan is on request available in 230/400V-50Hz-3 phase. The fan is executed with a thermal contact.

The standard connection voltage for the Ziehl Abegg Ø500 is 400/690V-50Hz- 3phase (on request 230V-50Hz-1 phase). This fan is equipped with thermo contacts.

Fan type	Values at 1x230V-50Hz								Sound power indication ach fan LwA (+/-2dB(A))
	Speed	Input	+20°C		0°C		-20°C		
			FLC	Start	FLC	Start	FLC	Start	
rpm	[W]	[A]	[A]	[A]	[A]	[A]	[A]	[dBA]	
4 pole fans (1500 rpm nominal)									
S4E250	400	45	0,21	0,35	0,23	0,38	0,24	0,41	69
S4E300	1390	73	0,32	0,60	0,44	0,65	0,46	0,70	74
S4E350	1400	130	0,58	1,30	0,63	1,40	0,67	1,51	79
S4E400	1430	160	0,73	1,90	0,79	2,05	0,85	2,20	82
S4E450*	1390	245	1,10	2,70	1,19	2,92			85
S4E450	1350	480	2,20	5,80	2,27	6,26	2,44	3,13	85
FE050	1210	770	3,40	7,40	3,67	7,99	3,94	8,58	81

6 pole fans (1000 rpm nominal) *

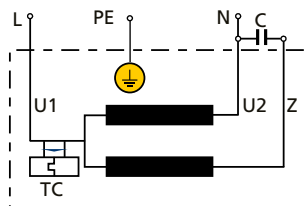
S6E400	950	120	0,55	0,90	0,59	0,97			72
S6E450	920	165	0,80	1,36	0,85	1,47			77

Fan type	Values at 3x230/400V-50Hz								Sound pressure level each fan **
	Speed	Input	+20°C		0°C		-20°C		
			FLC	Start	FLC	Start	FLC	Start	
rpm	[W]	[A]	[A]	[A]	[A]	[A]	[A]	[dBA]	
4 pole fans (1500 rpm nominal)									
S4D450	1330	585	1,10	3,00	1,18	3,24	1,28	3,48	85
FE050	1330	790	1,45	5,20	1,57	5,62	1,68	6,03	83

* = Only FC38D

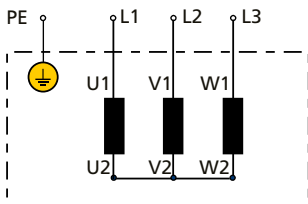
ebm-papst 1x230V-50Hz

L= blue
 N=black
 Z=brown



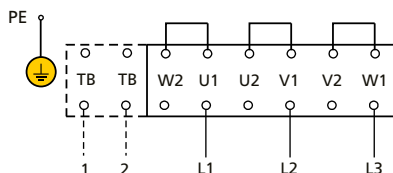
ebm-papst 3x230/400V-50Hz

U1 =black
 V1 =blue
 W1=brown
 U2=green
 V2 =white
 W2=yellow



Ziehl Abegg 3x400/690V

U1 =brown
 V1 =blue
 W1=black
 U2 =red
 V2 =grey
 W2=orange
 TB =white



Correction factors

Correction factors DT1 (=Air-on)

The nominal capacities of the Goedhart FC38i(dx) and FC38p(dx) air coolers 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 saturated temperature corresponding to the pressure at the suction outlet of the cooler.

The nominal capacities:

- (SC1) $t_o = 0\text{ °C}$ and DT1= 10 K
- (SC2) $t_o = -8\text{ °C}$ and DT1= 8 K
- (SC3) $t_o = -25\text{ °C}$ and DT1= 7 K

Correction factors for various evaporation temperatures and temperature differences (DT1) are as indicated in the tables 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										
DT1	Evaporation temperature (°C)									
K	+7	+6	+5	+4	+3	+2	+1	0	-1	-2
6	1,81	1,81	1,82	1,82	1,83	1,83	1,84	1,84	1,84	1,85
7	1,49	1,50	1,50	1,50	1,51	1,51	1,52	1,52	1,52	1,53
8	1,27	1,28	1,28	1,29	1,29	1,29	1,30	1,30	1,30	1,31
9	1,10	1,10	1,11	1,11	1,12	1,12	1,13	1,13	1,13	1,14
10	0,97	0,98	0,98	0,99	0,99	0,99	1,00	1,00	1,00	1,01
11	0,88	0,88	0,88	0,89	0,89	0,90	0,90	0,90	0,90	0,91
12	0,79	0,79	0,79	0,80	0,80	0,81	0,81	0,81	0,81	0,82

SC1 DT1 = 10K
Air on = 10°C (0/+10°C)

R404A										
DT1	Evaporation temperature (°C)									
K	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12
6	1,30	1,34	1,38	1,42	1,42	1,43	1,43	1,43	1,44	1,44
7	1,04	1,07	1,10	1,14	1,17	1,18	1,18	1,18	1,19	1,19
8	0,86	0,88	0,91	0,94	0,97	1,00	1,00	1,01	1,01	1,01
9	0,75	0,75	0,77	0,79	0,82	0,84	0,87	0,87	0,87	0,88
10	0,66	0,66	0,66	0,68	0,70	0,72	0,74	0,77	0,77	0,77
11	0,59	0,59	0,59	0,59	0,61	0,63	0,65	0,67	0,69	0,69
12	0,54	0,54	0,54	0,54	0,54	0,55	0,57	0,58	0,60	0,62

SC2 DT1 = 8K
Air on = 0°C (-8/0°C)

R404A										
DT1	Evaporation temperature (°C)									
K	-21	-22	-23	-24	-25	-26	-27	-28	-29	-30
6	1,20	1,20	1,21	1,21	1,21	1,22	1,22	1,23	1,23	1,23
7	0,99	0,99	0,99	1,00	1,00	1,00	1,00	1,01	1,01	1,02
8	0,84	0,84	0,84	0,85	0,85	0,85	0,85	0,86	0,86	0,86
9	0,73	0,73	0,73	0,73	0,73	0,74	0,74	0,74	0,74	0,75
10	0,64	0,64	0,64	0,64	0,65	0,65	0,65	0,65	0,66	0,66
11	0,57	0,57	0,57	0,58	0,58	0,58	0,58	0,58	0,59	0,59
12	0,52	0,52	0,52	0,52	0,52	0,52	0,53	0,53	0,53	0,53

SC3 DT1 = 7K
Air on = -18°C (-25/-18°C)

Capacity optimization

To achieve the best possible combination of application, refrigerant and capacity, Goedhart can optimise the coil circuiting, depending on the specific conditions under which the products will be used. FC38 is a standard product to ensure shorter delivery times. The circuiting of these evaporators has been optimized according to the most commonly used coolants/refrigerants and conditions. Specific applications can vary from this, our sales department is there to assist you in selecting the best circuiting for your application.

Correction factors for coolants

The nominal capacities of the Goedhart FC38p(G) air coolers are based on an air-on temperature of 12°C, a RH of 85% and:

- Water : in / out temperatuur = +1/+5°C
- E-Glycol : in / out temperatuur = - 2/+3°C
- P-Glycol : in / out temperatuur = - 2/+3°C
- Pekasol : in / out temperatuur = - 2/+3°C
- Freezium : in / out temperatuur = - 2/+3°C

Correction factors for various air-on temperatures and refrigerants or secondary coolants are as indicated in the tables 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 = faktor x Q requested

Water										
in/out	Air-on temperature (°C)									
°C	+8	+9	+10	+11	+12	+13	+14	+15	+16	
1 / 5	1,99	1,59	1,32	1,14	1,00	0,88	0,78	0,72	0,66	
2 / 6		1,95	1,57	1,30	1,12	0,98	0,87	0,78	0,71	
3 / 7			1,92	1,54	1,28	1,11	0,97	0,86	0,77	
4 / 8				1,94	1,56	1,31	1,13	0,98	0,87	
5 / 9					1,86	1,49	1,25	1,07	0,94	

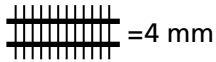
E-Glycol 28%										
in/out	Air-on temperature (°C)									
°C	+8	+9	+10	+11	+12	+13	+14	+15	+16	
-2 / 3	1,81	1,46	1,34	1,16	1,00	0,88	0,82	0,81	0,69	
-1 / 4	2,35	1,72	1,41	1,28	1,10	0,96	0,85	0,79	0,75	
0 / 5	2,43	2,30	1,64	1,40	1,24	1,06	0,93	0,84	0,76	
1 / 6		2,38	2,28	1,59	1,37	1,21	1,05	0,92	0,82	
2 / 7			2,28	2,09	1,55	1,35	1,17	1,03	0,91	

P-Glycol 28%										
in/out	Air-on temperature (°C)									
°C	+8	+9	+10	+11	+12	+13	+14	+15	+16	
-2 / 3	1,66	1,45	1,26	1,11	1,00	0,91	0,83	0,76	0,70	
-1 / 4	2,00	1,65	1,42	1,24	1,11	1,01	0,90	0,81	0,77	
0 / 5	2,48	1,94	1,65	1,41	1,23	1,14	1,00	0,91	0,85	
1 / 6		2,46	1,97	1,64	1,42	1,29	1,12	1,00	0,92	
2 / 7			2,45	1,96	1,63	1,42	1,28	1,11	1,00	

Pekasol 50%										
in/out	Air-on temperature (°C)									
°C	+8	+9	+10	+11	+12	+13	+14	+15	+16	
-2 / 3	1,68	1,42	1,26	1,11	1,00	0,90	0,82	0,77	0,70	
-1 / 4	2,02	1,65	1,42	1,24	1,10	0,98	0,89	0,81	0,76	
0 / 5	2,39	1,96	1,62	1,39	1,22	1,07	0,96	0,87	0,80	
1 / 6		2,36	1,93	1,60	1,37	1,20	1,06	0,94	0,86	
2 / 7			2,32	1,89	1,57	1,35	1,18	1,05	0,94	

Freezium 24%										
in/out	Air-on temperature (°C)									
°C	+8	+9	+10	+11	+12	+13	+14	+15	+16	
-2 / 3	1,66	1,44	1,25	1,11	1,00	0,91	0,83	0,77	0,71	
-1 / 4	1,94	1,62	1,42	1,23	1,09	0,98	0,89	0,82	0,76	
0 / 5	2,38	1,91	1,59	1,39	1,21	1,07	0,97	0,88	0,81	
1 / 6		2,34	1,88	1,57	1,37	1,20	1,06	0,95	0,86	
2 / 7			2,30	1,86	1,55	1,35	1,18	1,05	0,94	

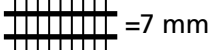
F38Si(dx) - R404A



Type	Fan diameter	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)					Surface	Connections		Weight	Internal volume
		SC1 DT1 = 10K Air on =10°C 0 / +10	SC2 DT1 = 8K Air on =0°C -8 / 0	SC3 DT1 = 7K Air on =-18°C -25 / -18	Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K		
FC38S	mm	kW	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³
4.1.25.4	1x250	2,4	1,6		613	48	7	12	12	26	2
4.1.30.4	1x300	4,2	2,9		1222	52	11	12	28	34	3
6.1.30.4	1x300	4,7	3,3		1076	52	16	12	28	39	4
6.1.35.4	1x350	7,9	5,4		1866	57	25	12	28	51	6
6.1.40.4	1x400	11,0	7,5		2623	60	34	16	28	63	8
6.1.45.4	1x450	16,8	11,4		4248	65	45	16	28	75	10
4.2.30.4	2x300	8,4	5,7		2434	55	22	12	28	50	5
6.2.30.4	2x300	9,4	6,5		2143	55	32	12	28	61	7
6.2.35.4	2x350	15,8	10,8		3720	60	50	16	28	82	11
6.2.40.4	2x400	21,9	14,9		5235	63	68	16	35	103	15
6.2.45.4	2x450	33,6	22,8		8480	68	90	16	35	122	19
6.2.50.4	2x500	43,6	29,5		11179	61	112	16	42	204	24
6.3.30.4	3x300	14,1	9,7		3209	57	49	16	28	81	11
6.3.35.4	3x350	23,7	16,2		5575	62	75	16	28	112	16
6.3.40.4	3x400	33,2	22,8		7847	64	102	16	35	142	22
6.3.45.4	3x450	50,3	34,1		12711	69	134	16	42	174	28
6.3.50.4	3x500	65,6	44,5		16757	62	168	16	54	291	35
6.4.30.4	4x300	18,8	12,9		4277	58	65	16	28	104	14
6.4.35.4	4x350	31,4	21,5		7430	63	99	16	35	143	21
6.4.40.4	4x400	44,3	30,3		10459	65	136	22	42	183	29
6.4.45.4	4x450	67,4	45,7		16943	70	179	22	54	222	38
6.4.50.4	4x500	87,2	59,0		22334	63	224	28	54	376	47
6.5.45.4	5x450	84,7	57,4		21174	71	223	22	54	267	47
6.6.45.4	6x450	100,7	68,0		25405	72	268	28	54	322	56

Air cooler details

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

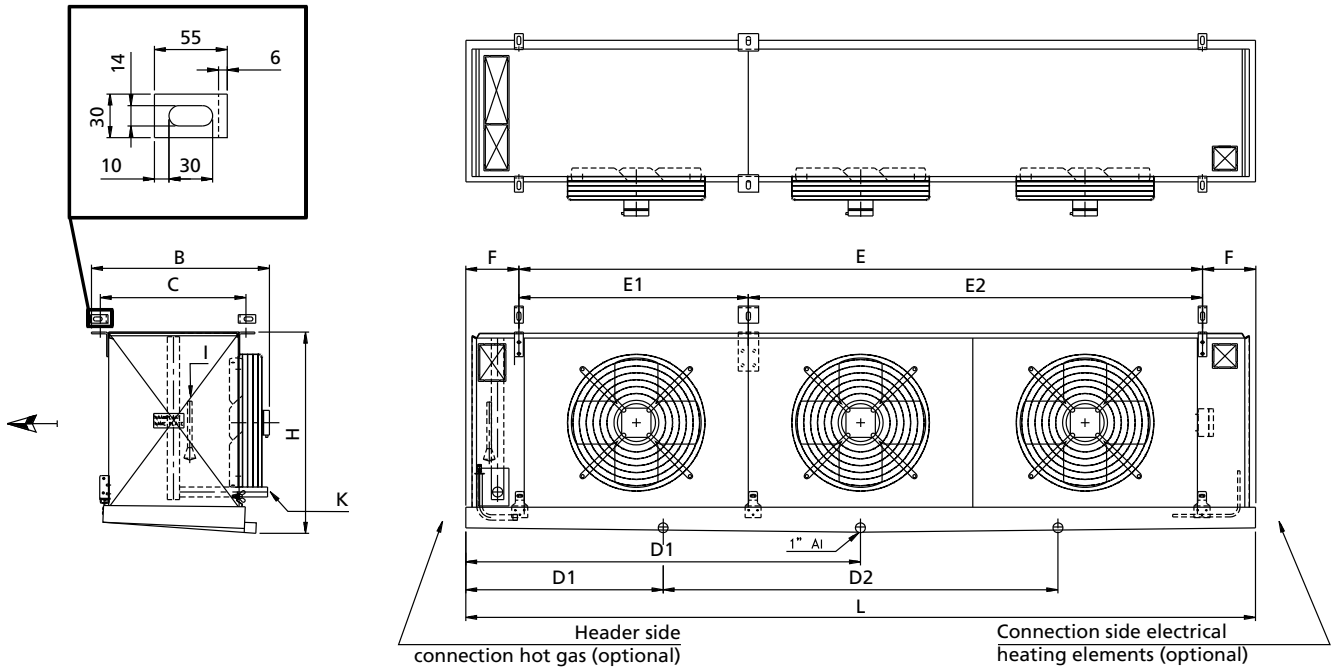


Type	Fan diameter	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)					Surface	Connections		Weight	Internal volume
		SC1 DT1 = 10K Air on =10°C 0 / +10	SC2 DT1 = 8K Air on =0°C -8 / 0	SC3 DT1 = 7K Air on =-18°C -25 / -18	Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K		
FC38S	mm	kW	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³
4.1.25.7	1x250	1,8	1,2	0,9	699	48	4	12	12	25	2
4.1.30.7	1x300	3,1	2,1	1,5	1404	52	7	12	28	32	3
6.1.30.7	1x300	4,0	2,8	2,0	1291	52	10	12	28	36	4
6.1.35.7	1x350	6,6	4,5	3,3	2200	57	15	12	28	46	6
6.1.40.7	1x400	9,1	6,2	4,5	3052	60	21	16	28	57	8
6.1.45.7	1x450	13,7	9,2	6,8	4969	65	27	16	28	67	10
4.2.30.7	2x300	6,1	4,2	3,1	2802	55	13	12	28	47	5
6.2.30.7	2x300	8,1	5,5	4,0	2574	55	19	12	28	56	7
6.2.35.7	2x350	13,2	9,0	6,6	4391	60	30	16	28	74	11
6.2.40.7	2x400	17,9	12,3	8,8	6096	63	41	16	28	92	15
6.2.45.7	2x450	27,3	18,4	13,5	9926	68	54	16	35	109	19
6.2.50.7	2x500	35,3	23,8	17,4	13192	61	67	16	35	186	24
6.3.30.7	3x300	12,1	8,2	6,0	3858	57	29	12	28	74	11
6.3.35.7	3x350	19,8	13,5	9,8	6582	62	45	16	28	100	16
6.3.40.7	3x400	27,3	18,6	13,6	9139	64	61	16	28	126	22
6.3.45.7	3x450	40,8	27,5	20,0	14882	69	80	16	42	152	28
6.3.50.7	3x500	52,9	35,5	26,2	19780	62	101	16	42	263	35
6.4.30.7	4x300	15,8	10,8	8,0	5142	58	39	16	28	93	14
6.4.35.7	4x350	26,4	17,9	13,1	8774	63	60	16	35	127	21
6.4.40.7	4x400	36,1	24,5	18,0	12183	65	82	16	35	161	29
6.4.45.7	4x450	54,6	36,7	27,0	19839	70	107	16	42	193	38
6.4.50.7	4x500	70,9	47,5	34,8	26367	63	134	28	54	339	47
6.5.45.7	5x450	68,1	45,7	33,7	24795	71	134	22	54	229	47
6.6.45.7	6x450	82,1	55,0	39,9	29751	72	161	22	54	279	56

Air cooler details

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

F38Si(dx) - R404A

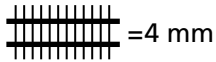


Declarations

Connection ≤ 35 mm : Declaration of incorporation (SEP)
 Connection 42mm and 54 mm : module A
 Group of fluid : 2
 PS : 28 bar
 TS : +55 / -40 °C

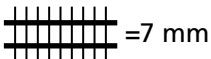
Type	Dimensions										Electrical defrost at 3x400V-50Hz				Standard	Light	Dimensions & Electrical defrost		
	L	B	H	C	E	E1	E2	F	D1	D2	Coil block		Drip tray					kW	kW**
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]					
FC38S																			
4.1.25.*	690	510	395	400	406			142	345		2x L=1000	66	1x L=1600	200	1,4				
4.1.30.*	765	510	470	400	481			142	383		2x L=1300	66	1x L=1600	200	1,6				
6.1.30.*	765	510	470	400	481			142	383		2x L=1300	66	1x L=1600	200	1,6				
6.1.35.*	970	640	550	500	606			182	485		3x L=1600	132	1x L=2200	300	2,8				
6.1.40.*	1070	640	625	500	706			182	535		3x L=1900	132	1x L=2500	300	3,3				
6.1.45.*	1170	640	700	500	806			182	585		5x L=1900	132	1x L=2500	300	4,8	3,7			
4.2.30.*	1210	510	470	400	926			142	605		2x L=2200	66	1x L=2500	200	2,8				
6.2.30.*	1210	510	470	400	926			142	605		2x L=2200	66	1x L=2500	200	2,8				
6.2.35.*	1540	640	550	500	1176			182	770		3x L=2800	132	1x L=3100	300	4,8				
6.2.40.*	1740	640	625	500	1376			182	870		3x L=3100	132	1x L=3700	300	5,4				
6.2.45.*	1940	640	700	500	1576			182	970		5x L=3700	132	1x L=4000	300	9,4	7,1			
6.2.50.*	2040	830	850	600	1576			232	1020		5x L=3700	132	1x L=4300	400	9,6	7,2			
6.3.30.*	1655	510	470	400	1371			142	828		2x L=3100	66	1x L=3700	200	4,1				
6.3.35.*	2110	640	550	500	1746			182	1055		3x L=4000	132	1x L=4600	300	6,1				
6.3.40.*	2410	640	625	500	2046			182	1205		3x L=4600	132	1x L=5200	300	8,0				
6.3.45.*	2710	640	700	500	2346			182	1355		5x L=5200	132	1x L=5800	300	13,5	10,2			
6.3.50.*	2810	830	850	600	2346			232	1405		5x L=5200	132	2x L=5800	400	13,5	10,2			
6.4.30.*	2100	510	470	400	1816			142	1050		2x L=4000	66	1x L=4600	200	5,3				
6.4.35.*	2680	640	550	500	2316			182	1340		3x L=5200	132	1x L=5800	300	9,1				
6.4.40.*	3080	640	625	500	2716			182	770	1540	3x L=5800	132	1x L=6700	300	10,3				
6.4.45.*	3480	640	700	500		1558	1558	182	870	1740	5x L=6700	132	1x L=7300	300	17,6	13,4			
6.4.50.*	3580	830	850	600		1558	1558	232	895	1790	5x L=6700	132	1x L=7600	400	17,8	13,5			
6.5.45.*	4250	640	700	500		1558	2328	182	1063	2125	10x L=4300	-	2x L=4600	-	22,0	16,6			
6.6.45.*	5020	640	700	500		2328	2328	182	1255	2510	10x L=4900	-	2x L=5200	-	25,1	18,9			

F38Di(dx) - R404A



Type	Fan diameter	1x230V-50Hz-4 pole				1x230V-50Hz-6 pole				Surface	Connections		Weight	Internal volume
		SC1	SC2			SC1	SC2				I	K		
FC38D	mm	DT1 = 10K Air on =10°C 0 / +10	DT1 = 8K Air on =0°C -8 / 0	Air volume	LpA @ 3 m (+/- 2 dB(A))*	DT1 = 10K Air on =10°C 0 / +10	DT1 = 8K Air on =0°C -8 / 0	Air volume	LpA @ 3 m (+/- 2 dB(A))*	m ²	mm	mm	kg	dm ³
6.1.30.4	1x300	4,6	3,1	1048	52					16	12	28	54	4
6.1.35.4	1x350	6,8	4,6	1644	57					20	12	28	66	6
6.2.30.4	2x300	8,9	6,1	2045	55					30	12	28	82	8
6.2.35.4	2x350	12,2	8,3	3060	60					34	16	28	92	8
6.2.40.4	2x400	20,2	13,8	4890	63	15,6	10,8	3434	53	61	16	35	123	14
6.2.45.4	2x450	34,4	23,4	8674	68	25,4	17,6	5669	58	95	16	42	161	20
6.3.30.4	3x300	13,7	9,5	3155	57					48	16	28	114	10
6.3.35.4	3x350	17,2	11,7	4343	62					48	16	28	116	10
6.3.40.4	3x400	30,2	20,7	7339	64	23,4	16,2	5156	54	91	16	35	169	20
6.3.45.4	3x450	52,4	35,7	13139	69	38,3	26,5	8600	60	146	22	42	228	32
6.4.30.4	4x300	17,7	12,2	4095	58					61	16	28	138	14
6.4.35.4	4x350	22,1	15,1	5609	63					61	16	28	139	14
6.4.40.4	4x400	37,5	25,6	9240	65	28,7	19,8	6439	55	110	16	42	200	24

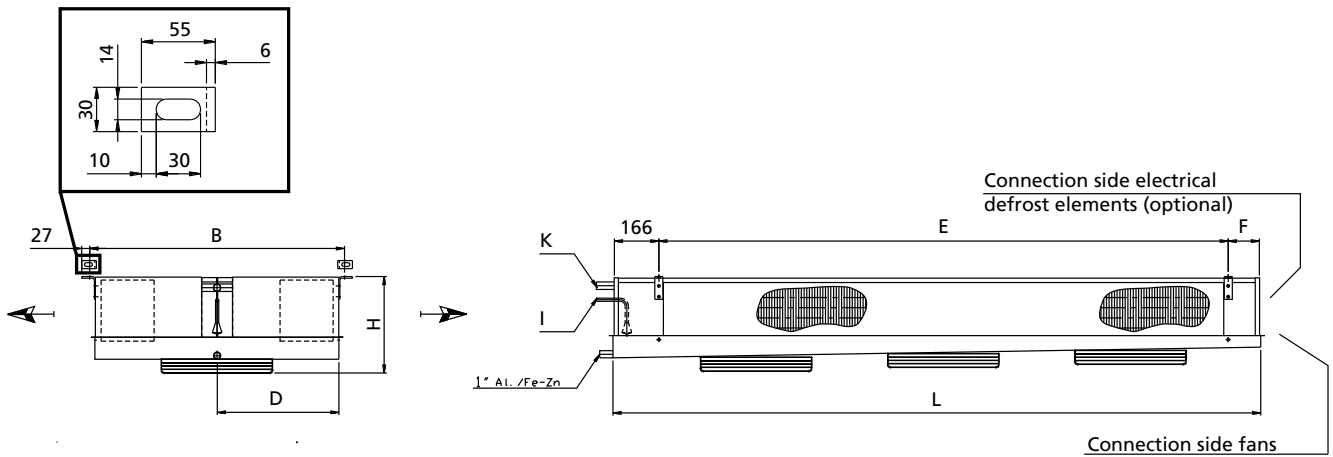
* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)), free field conditions, according EN13487



Type	Fan diameter	1x230V-50Hz-4 pole				1x230V-50Hz-6 pole				Surface	Connections		Weight	Internal volume
		SC1	SC2			SC1	SC2				I	K		
FC38D	mm	DT1 = 10K Air on =10°C 0 / +10	DT1 = 8K Air on =0°C -8 / 0	Air volume	LpA @ 3 m (+/- 2 dB(A))*	DT1 = 10K Air on =10°C 0 / +10	DT1 = 8K Air on =0°C -8 / 0	Air volume	LpA @ 3 m (+/- 2 dB(A))*	m ²	mm	mm	kg	dm ³
6.1.30.7	1x300	3,9	2,6	1262	52					10	12	28	51	4
6.1.35.7	1x350	5,6	3,8	2004	57					12	12	28	62	6
6.2.30.7	2x300	7,5	5,1	2480	55					18	12	28	77	8
6.2.35.7	2x350	10,0	6,8	3706	60					21	12	28	87	8
6.2.40.7	2x400	16,6	11,2	5793	63	13,5	9,3	4197	53	36	16	28	114	14
6.2.45.7	2x450	27,6	18,7	10019	68	21,5	14,7	6703	58	57	16	35	145	20
6.3.30.7	3x300	11,7	7,9	3795	57					29	16	28	107	10
6.3.35.7	3x350	14,3	9,7	5320	62					29	12	28	109	10
6.3.40.7	3x400	24,9	16,9	8695	64	20,3	13,9	6299	54	55	16	35	154	20
6.3.45.7	3x450	41,7	28,2	15125	69	32,8	22,5	10128	60	88	16	42	203	32
6.4.30.7	4x300	15,1	10,2	4964	58					36	16	28	128	14
6.4.35.7	4x350	18,4	12,4	6912	63					36	16	28	129	14
6.4.40.7	4x400	31,0	20,9	11135	65	25,4	17,4	7999	55	66	16	35	181	24

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

F38Di(dx) - R404A

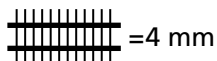


Declarations

Connection \leq 35 mm	: Declaration of incorporation (SEP)
Connection 42mm and 54 mm	: module A
Group of fluid	: 2
PS	: 28 bar
TS	: +55 / -40 °C

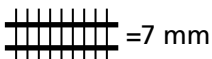
Type	Dimensions						Electrical defrost at 3x400V-50Hz				Standard	Light	Dimensions & Electrical defrost		
	L	B	H	D	E	F	Coil block		Drip tray					kW	kW**
	mm	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]					
FC38D	mm	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]	kW	kW**			
6.1.30.*	925	850	280	405	575	166	2x L=1600	132	2x L=1600	150	2,5				
6.1.35.*	1080	850	280	405	730	166	2x L=1900	132	2x L=1900	150	3,0				
6.2.30.*	1425	850	280	405	1075	166	2x L=2500	132	2x L=2500	150	4,1				
6.2.35.*	1570	850	280	405	1220	166	2x L=2800	132	2x L=2800	150	4,6				
6.2.40.*	1775	950	390	455	1425	166	4x L=3100	132	2x L=3400	150	8	6,1			
6.2.45.*	2025	1000	465	480	1675	166	4x L=3700	132	2x L=3700	150	9,3	7,0			
6.3.30.*	2025	850	280	405	1675	166	2x L=3700	132	2x L=3700	150	6,2				
6.3.35.*	2025	850	280	405	1675	166	2x L=3700	132	2x L=3700	150	6,2				
6.3.40.*	2475	950	390	455	2125	166	4x L=4600	132	2x L=4600	150	11,6	8,8			
6.3.45.*	2850	1000	465	480	2550	116	4x L=5500	132	2x L=5500	150	14,0	10,6			
6.4.30.*	2475	850	280	405	2125	166	2x L=4600	132	2x L=4600	150	7,8				
6.4.35.*	2475	850	280	455	2125	166	2x L=4600	132	2x L=4600	150	7,8				
6.4.40.*	2850	950	390	480	2550	116	4x L=5500	132	2x L=5500	150	14,0	10,6			

F38Li(dx) - R404A



Type	Fan diameter	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)					Surface	Connections		Weight	Internal volume	Air cooler details
		SC1 DT1 = 10K Air on =10°C 0 / +10	SC2 DT1 = 8K Air on =0°C -8 / 0	SC3 DT1 = 7K Air on =-18°C -25 / -18	Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K			
FC38L	mm	kW	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³	
6.1.25.4	1x250	2,2	1,6		488	47	9	12	12	15	2	
6.1.30.4	1x300	4,0	2,7		930	52	13	12	28	20	3	
6.1.40.4	1x400	9,9	6,8		2386	60	29	16	28	40	7	
6.2.25.4	2x250	4,5	3,1		977	50	18	12	28	25	4	
6.2.30.4	2x300	8,0	5,5		1861	55	26	12	28	35	6	
6.2.40.4	2x400	19,7	13,4		4770	63	58	16	35	60	13	
6.3.30.4	3x300	12,0	8,3		2792	57	39	16	28	45	9	
6.3.40.4	3x400	29,7	20,3		7156	64	87	16	35	90	19	
6.4.30.4	4x300	15,9	10,9		3723	58	52	16	28	60	11	

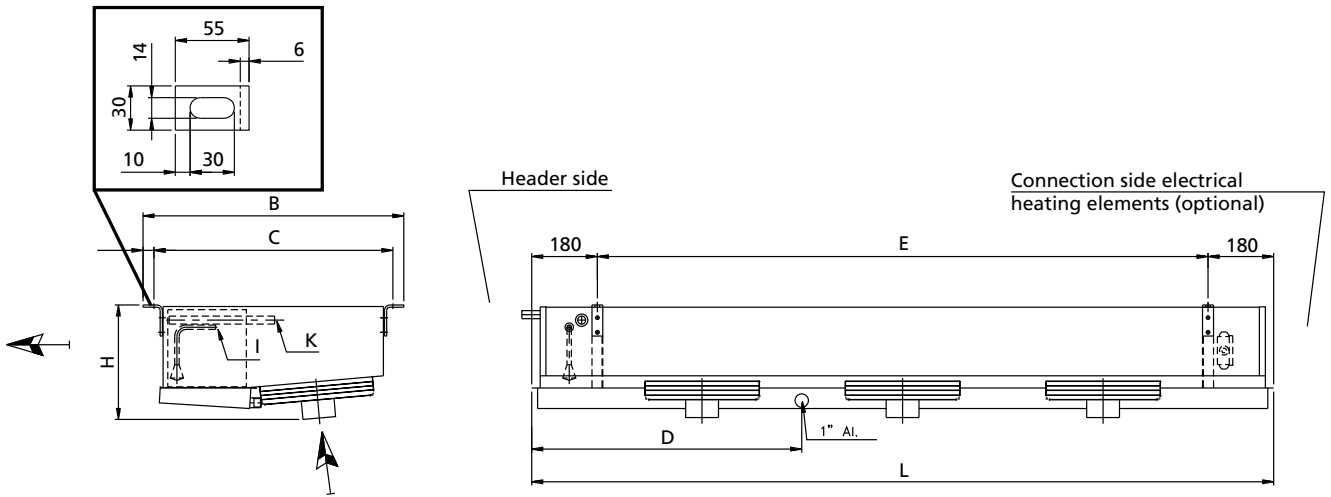
* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)) , free field conditions, according EN13487



Type	Fan diameter	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)					Surface	Connections		Weight	Internal volume	Air cooler details
		SC1 DT1 = 10K Air on =10°C 0 / +10	SC2 DT1 = 8K Air on =0°C -8 / 0	SC3 DT1 = 7K Air on =-18°C -25 / -18	Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K			
FC38L	mm	kW	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³	
6.1.25.7	1x250	2,0	1,4	1,0	593	47	5	12	12	15	2	
6.1.30.7	1x300	3,4	2,3	1,7	1157	52	8	12	28	20	3	
6.1.40.7	1x400	8,2	5,5	4,1	2847	60	17	16	28	30	7	
6.2.25.7	2x250	4,0	2,7	2,0	1186	50	11	12	28	20	4	
6.2.30.7	2x300	6,9	4,7	3,4	2313	55	16	12	28	30	6	
6.2.40.7	2x400	16,1	11,0	8,0	5695	63	35	12	35	55	13	
6.3.30.7	3x300	10,3	7,0	5,2	3470	57	23	16	28	40	9	
6.3.40.7	3x400	24,6	16,6	12,3	8543	64	52	16	35	80	19	
6.4.30.7	4x300	13,9	9,4	6,9	4626	58	31	16	28	55	11	

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

F38Li(dx) - R404A

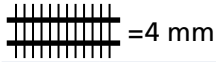


Declarations

Connection \leq 35 mm	: Declaration of incorporation (SEP)
Connection 42mm and 54 mm	: module A
Group of fluid	: 2
PS	: 28 bar
TS	: +55 / -40 °C

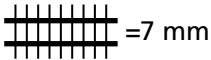
Type	Dimensions					Electrical defrost at 3x400V-50Hz				Standard	Dimensions & Electrical defrost
	L	B	H	E	D1	Coil block		Drip tray			
	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]		
FC38L	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]	kW	
6.1.25.*	890	705	280	530	245	2x L=1300	132	1x L=1300	175	1,5	
6.1.30.*	990	705	315	630	295	2x L=1600	132	1x L=1600	175	1,9	
6.1.40.*	1190	865	465	830	295	2x L=1900	132	1x L=2200	175	3,2	
6.2.25.*	1390	705	280	1030	695	2x L=2500	132	1x L=2500	175	3,1	
6.2.30.*	1590	705	315	1230	795	2x L=2800	132	1x L=2800	175	3,5	
6.2.40.*	1990	865	465	1630	995	2x L=3700	132	1x L=3700	175	4,7	
6.3.30.*	2190	705	315	1830	795	2x L=4000	132	1x L=4000	175	5,0	
6.3.40.*	2790	865	465	2430	995	2x L=5200	132	1x L=5200	175	6,6	
6.4.30.*	2790	705	315	2430	1395	2x L=5200	132	1x L=5200	175	6,6	

F38Sp(G) - coolants



Type	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)																	Surface	Connections		Weight	Internal volume
	E-Glycol 28% -2 / 3 °C (in/uit temp.)			Water 1 / 5 °C (in/uit temp.)			P-Glycol 34% -2 / 3 °C (in/uit temp.)			Pekasol 50% -2 / 3 °C (in/uit temp.)			Freezium 24% -2 / 3 °C (in/uit temp.)			Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K		
	Capacity	Volume flow	Pressure drop	Capacity	Volume flow	Pressure drop	Capacity	Volume flow	Pressure drop	Capacity	Volume flow	Pressure drop	Capacity	Volume flow	Pressure drop							
FC38S	kW	m ³ /h	kPa	kW	m ³ /h	kPa	kW	m ³ /h	kPa	kW	m ³ /h	kPa	kW	m ³ /h	kPa	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³
4.1.25.4	1,7	0,44	110,6	1,9	0,49	102,7	1,9	0,34	95,5	1,8	0,48	124,0	2,2	0,40	13,0	613	48	7	16	16	26	2
4.1.30.4	3,0	0,56	22,6	4,0	0,83	51,1	2,9	0,52	47,8	4,8	0,80	59,1	5,0	0,92	72,6	1222	52	11	16	16	34	3
6.1.30.4	3,9	0,72	19,3	4,6	0,95	31,5	3,8	0,72	99,3	5,4	0,90	35,4	5,7	1,04	44,6	1076	52	16	16	16	39	4
6.1.35.4	6,2	1,13	22,4	7,8	1,62	48,0	6,3	1,12	89,3	9,5	1,59	56,5	9,8	1,79	68,6	1866	57	25	22	22	51	6
6.1.40.4	10,7	1,91	55,9	11,1	2,22	33,8	8,5	1,51	84,1	13,5	2,14	39,0	13,9	2,45	48,1	2623	60	34	28	28	63	8
6.1.45.4	15,8	3,30	106,7	16,9	3,51	91,2	11,8	2,03	60,6	20,1	3,49	110,8	20,7	3,69	54,1	4248	65	45	28	28	75	10
4.2.30.4	8,8	1,59	89,1	8,3	1,64	32,7	5,3	0,94	50,2	10,2	1,58	37,5	9,8	1,81	46,3	2434	55	22	22	22	50	5
6.2.30.4	10,3	1,87	80,5	9,7	2,00	69,4	7,0	1,26	56,5	11,9	1,99	84,6	11,7	2,14	50,8	2143	55	32	22	22	51	7
6.2.35.4	17,7	3,21	92,2	16,2	3,36	76,4	11,2	1,93	52,2	20,0	3,35	93,4	19,9	3,55	45,9	3720	60	50	28	28	82	11
6.2.40.4	23,4	4,54	97,9	22,7	4,41	23,3	15,4	2,76	95,5	27,4	4,69	97,4	28,0	5,14	80,7	5235	63	68	35	35	103	15
6.2.45.4	35,9	6,50	74,6	34,1	6,99	64,7	21,0	3,77	90,8	41,3	6,93	78,4	42,2	7,75	93,1	8480	68	90	42	42	122	19
6.2.50.4	46,6	8,46	80,0	44,0	9,04	68,7	26,7	4,79	92,4	53,4	8,97	83,3	54,0	10,03	98,9	11179	61	112	54	54	204	24
6.3.30.4	15,4	2,78	65,3	14,5	3,05	97,1	10,0	1,88	104,4	17,8	2,98	69,1	18,1	3,33	81,9	3209	57	49	28	28	81	11
6.3.35.4	26,4	4,78	77,0	24,6	5,09	90,7	15,5	2,89	99,0	29,8	5,00	78,3	30,4	5,58	92,6	5575	62	75	35	35	112	16
6.3.40.4	37,4	6,78	83,2	34,3	7,03	67,9	21,6	3,87	96,6	41,8	7,02	83,1	42,1	7,82	98,1	7847	64	102	42	42	142	22
6.3.45.4	55,2	10,30	98,5	51,2	10,61	79,4	28,9	5,05	70,5	62,4	10,59	97,2	63,1	11,69	95,6	12711	69	134	54	54	174	28
6.3.50.4	72,0	13,36	105,1	65,8	13,74	84,4	36,5	6,42	71,6	81,0	13,70	103,3	81,4	14,84	70,2	16757	62	168	64	64	291	35
6.4.30.4	21,9	3,97	94,6	19,5	3,85	25,8	12,8	2,39	100,8	24,2	4,05	92,2	24,1	4,43	72,9	4277	58	65	35	35	104	14
6.4.35.4	36,5	6,36	69,5	32,6	6,69	58,0	20,0	3,58	83,5	40,3	6,66	70,8	40,5	7,43	83,8	7430	63	99	42	42	143	21
6.4.40.4	51,0	9,49	119,8	45,5	9,50	91,9	27,1	4,86	95,0	56,3	9,53	113,6	56,7	10,41	89,7	10459	65	136	54	54	183	29
6.4.45.4	75,9	12,89	59,0	67,9	13,92	51,6	35,8	6,18	60,0	83,6	13,79	62,4	84,1	15,43	74,2	16943	70	179	54	54	222	38
6.4.50.4	97,3	16,77	63,2	87,6	18,01	54,8	45,9	7,84	60,6	107,8	17,85	66,3	108,8	19,97	78,8	22334	63	224	64	64	376	47
6.5.45.4	95,1	17,27	93,8	85,0	17,87	94,9	42,2	7,58	77,1	104,7	17,79	103,5	105,5	19,48	86,7	21174	71	223	64	64	267	47
6.6.45.4	112,8	20,76	92,4	102,1	21,18	67,1	48,0	8,63	73,5	125,8	21,11	82,0	126,5	23,53	96,8	25405	72	268	76	76	322	56

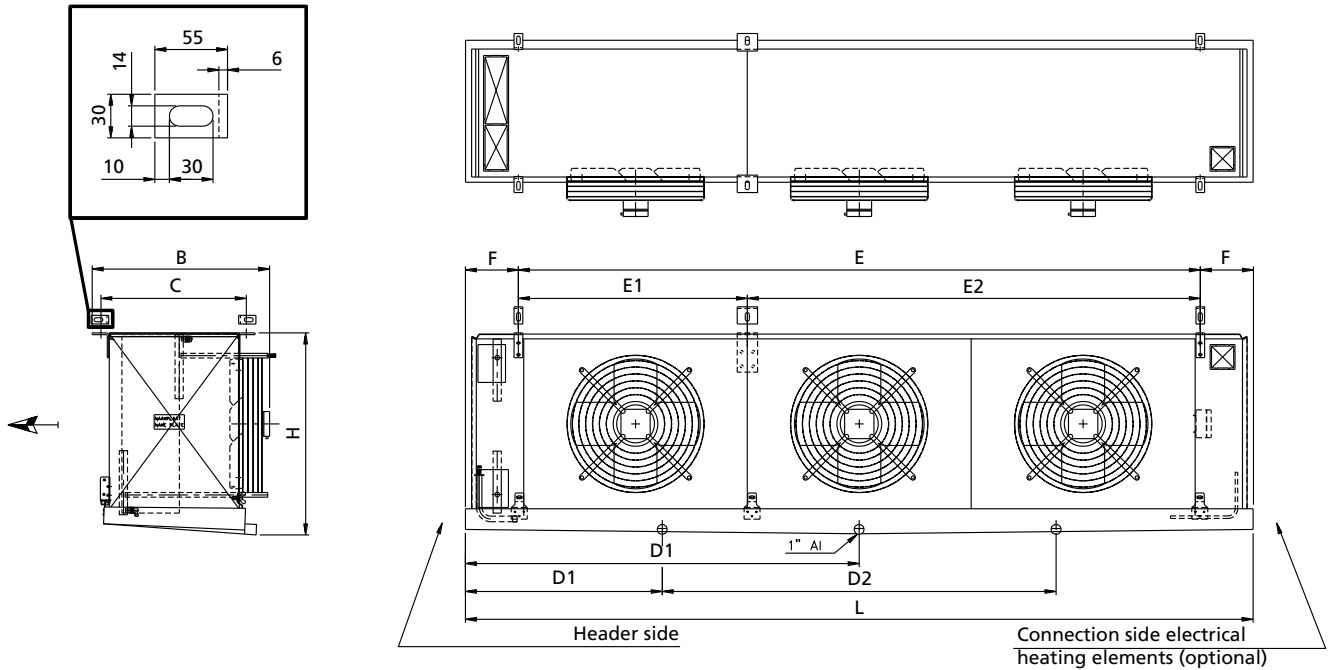
* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)), free field conditions, according EN13487



Type	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)																	Surface	Connections		Weight	Internal volume
	E-Glycol 28% -2 / 3 °C (in/uit temp.)			Water 1 / 5 °C (in/uit temp.)			P-Glycol 34% -2 / 3 °C (in/uit temp.)			Pekasol 50% -2 / 3 °C (in/uit temp.)			Freezium 24% -2 / 3 °C (in/uit temp.)			Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K		
	Capacity	Volume flow	Pressure drop	Capacity	Volume flow	Pressure drop	Capacity	Volume flow	Pressure drop	Capacity	Volume flow	Pressure drop	Capacity	Volume flow	Pressure drop							
FC38S	kW	m ³ /h	kPa	kW	m ³ /h	kPa	kW	m ³ /h	kPa	kW	m ³ /h	kPa	kW	m ³ /h	kPa	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³
4.1.25.7	1,6	0,30	36,4	1,8	0,37	62,6	1,6	0,28	77,9	2,2	0,36	74,3	2,2	0,41	90,0	699	48	4	16	16	25	2
4.1.30.7	2,5	0,46	18,6	3,0	0,61	30,1	2,4	0,43	39,6	3,4	0,58	33,2	3,7	0,67	42,4	1404	52	7	16	16	32	3
6.1.30.7	4,0	0,72	78,4	4,1	0,84	78,1	3,5	0,63	86,1	5,0	0,83	94,5	4,6	0,85	31,2	1291	52	10	16	16	36	4
6.1.35.7	6,9	1,25	87,4	6,6	1,38	79,2	5,4	0,97	77,0	8,1	1,37	96,2	7,9	1,45	47,0	2200	57	15	22	22	46	6
6.1.40.7	9,7	1,76	89,7	9,2	1,90	78,6	7,3	1,30	72,2	11,3	1,89	95,7	11,1	1,94	32,1	3052	60	21	22	22	57	8
6.1.45.7	13,4	2,41	61,6	13,4	2,79	60,8	10,2	1,75	52,3	16,4	2,75	73,1	16,8	3,09	87,5	4969	65	27	28	28	67	10
4.2.30.7	4,6	0,85	19,9	6,2	1,21	19,2	4,4	0,86	103,1	7,5	1,27	56,3	7,8	1,43	67,8	2802	55	13	16	16	47	5
6.2.30.7	7,8	1,38	47,0	8,0	1,67	50,2	6,5	1,17	93,0	9,8	1,65	60,5	10,1	1,85	72,4	2574	55	19	22	22	56	7
6.2.35.7	13,6	2,44	57,2	13,5	2,73	53,2	9,8	1,68	45,6	16,2	2,71	64,5	16,5	3,04	76,8	4391	60	30	28	28	74	11
6.2.40.7	19,2	3,75	101,0	18,5	3,85	80,8	13,4	2,40	82,8	22,4	3,85	99,4	22,9	4,21	78,6	6096	63	41	35	35	92	15
6.2.45.7	30,1	5,46	90,7	27,4	5,54	43,1	18,3	3,28	79,0	33,8	5,67	91,0	33,9	6,23	80,8	9926	68	54	35	35	109	19
6.2.50.7	38,4	7,22	112,1	35,6	7,39	89,3	23,3	4,18	80,6	43,4	7,29	86,0	43,8	8,05	81,4	13192	61	67	42	42	186	24
6.3.30.7	13,5	2,45	86,6	12,3	2,55	70,6	9,2	1,65	91,7	15,2	2,55	86,8	15,1	2,76	59,2	3858	57	29	28	28	74	11
6.3.35.7	21,9	3,97	76,7	20,3	4,15	63,4	14,1	2,52	86,5	24,7	4,14	77,7	25,1	4,62	91,8	6582	62	45	35	35	100	16
6.3.40.7	30,2	5,16	51,6	27,9	5,67	46,5	18,8	3,37	84,2	34,1	5,80	98,3	34,7	6,30	67,1	9139	64	61	42	42	126	22
6.3.45.7	44,9	7,86	61,4	41,3	8,43	53,1	26,0	4,65	93,5	50,5	8,57	97,0	51,5	9,37	76,6	14882	69	80	42	42	152	28
6.3.50.7	58,0	10,25	66,1	53,6	10,92	56,5	32,7	5,66	63,1	65,9	11,06	94,9	66,5	12,14	81,6	19780	62	101	54	54	263	35
6.4.30.7	17,5	3,41	110,9	16,5	3,43	85,6	11,8	2,11	88,9	20,0	3,44	106,0	20,4	3,75	78,8	5142	58	39	28	35	93	14
6.4.35.7	30,0	5,44	87,2	27,1	5,62	94,5	17,6	3,15	73,4	33,2	5,57	85,5	33,3	6,04	58,3	8774	63	60	42	42	127	21
6.4.40.7	41,0	7,44	78,4	37,2	7,79	99,1	23,8	4,26	83,3	45,7	7,67	77,6	46,5	8,54	91,5	12183	65	82	54	54	161	29
6.4.45.7	61,1	11,10	86,2	55,2	11,04	34,4	32,3	5,92	101,8	67,8	11,48	99,8	68,6	12,68	99,9	19839	70	107	54	54	193	38
6.4.50.7	79,0	14,36	89	71,3	14,74	71,2	41,3	7,54	103,7	87,7	14,72	87,5	88,8	16,31	91,3	26367	63	134	64	64	339	47
6.5.45.7	77,2	13,79	78,8	69,1	14,22	63,6	38,8	6,84	78,6	85,1	14,20	78	86,1	15,81	92	24795	71	134	64	64	229	47
6.6.45.7	93,3	16,95	94,9	83,0	16,83	44,9	45,0	8,07	95,2	102,4	17,20	91,4	103,2	19,04	96,5	29751	72	161	64	64	279	56

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

F38Sp(G) - coolants

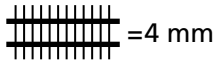


Declarations

According to : Declaration of incorporation (SEP)
 Group of coolant : 2
 PS : 10 bar
 TS : +50/ -40 °C

Type	Dimensions										Electrical defrost at 3x400V-50Hz				Standard kW	Light kW**	Dimensions & Electrical defrost
	L	B	H	C	E	E1	E2	F	D1	D2	Coil block		Drip tray				
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]			
FC38S	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]	kW	kW**	
4.1.25.*	690	510	395	400	406			142	345		2x L=1000	66	1x L=1600	200	1,4		
4.1.30.*	765	510	470	400	481			142	383		2x L=1300	66	1x L=1600	200	1,6		
6.1.30.*	765	510	470	400	481			142	383		2x L=1300	66	1x L=1600	200	1,6		
6.1.35.*	970	640	550	500	606			182	485		3x L=1600	132	1x L=2200	300	2,8		
6.1.40.*	1070	640	625	500	706			182	535		3x L=1900	132	1x L=2500	300	3,3		
6.1.45.*	1170	640	700	500	806			182	585		5x L=1900	132	1x L=2500	300	4,8	3,7	
4.2.30.*	1210	510	470	400	926			142	605		2x L=2200	66	1x L=2500	200	2,8		
6.2.30.*	1210	510	470	400	926			142	605		2x L=2200	66	1x L=2500	200	2,8		
6.2.35.*	1540	640	550	500	1176			182	770		3x L=2800	132	1x L=3100	300	4,8		
6.2.40.*	1740	640	625	500	1376			182	870		3x L=3100	132	1x L=3700	300	5,4		
6.2.45.*	1940	640	700	500	1576			182	970		5x L=3700	132	1x L=4000	300	9,4	7,1	
6.2.50.*	2040	830	850	600	1576			232	1020		5x L=3700	132	1x L=4300	400	9,6	7,2	
6.3.30.*	1655	510	470	400	1371			142	828		2x L=3100	66	1x L=3700	200	4,1		
6.3.35.*	2110	640	550	500	1746			182	1055		3x L=4000	132	1x L=4600	300	6,1		
6.3.40.*	2410	640	625	500	2046			182	1205		3x L=4600	132	1x L=5200	300	8,0		
6.3.45.*	2710	640	700	500	2346			182	1355		5x L=5200	132	1x L=5800	300	13,5	10,2	
6.3.50.*	2810	830	850	600	2346			232	1405		5x L=5200	132	2x L=5800	400	13,5	10,2	
6.4.30.*	2100	510	470	400	1816			142	1050		2x L=4000	66	1x L=4600	200	5,3		
6.4.35.*	2680	640	550	500	2316			182	1340		3x L=5200	132	1x L=5800	300	9,1		
6.4.40.*	3080	640	625	500	2716			182	770	1540	3x L=5800	132	1x L=6700	300	10,3		
6.4.45.*	3480	640	700	500		1558	1558	182	870	1740	5x L=6700	132	1x L=7300	300	17,6	13,4	
6.4.50.*	3580	830	850	600		1558	1558	232	895	1790	5x L=6700	132	1x L=7600	400	17,8	13,5	
6.5.45.*	4250	640	700	500		1558	2328	182	1063	2125	10x L=4300	-	2x L=4600	-	22,0	16,6	
6.6.45.*	5020	640	700	500		2328	2328	182	1255	2510	10x L=4900	-	2x L=5200	-	25,1	18,9	

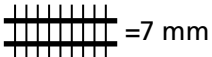
F38Dp(G) - coolants



=4 mm

Type	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)																			Air volume m ³ /h	LpA @ 3 m (+/- 2 dB(A))*	Surface m ²	Connections		Weight kg	Internal volume dm ³	Air cooler details
	E-Glycol 28% -2 / 3 °C (In/out temp.)			Water 1 / 5 °C (In/out temp.)			P-Glycol 34% -2 / 3 °C (In/out temp.)			Pekasol 50% -2 / 3 °C (In/out temp.)			Frezium 24% -2 / 3 °C (In/out temp.)			I	K										
	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa			Capacity kW	Volume flow m ³ /h				Pressure drop kPa				
6.1.30.4	3,6	0,90	99,1	4,7	0,98	86,7	3,8	0,67	78,9	5,1	0,97	105,6	5,4	1,09	125,2	1048	52	16	16	16	54	4					
6.1.35.4	6,6	0,87	12,3	6,8	1,33	24,3	4,8	0,81	26,0	8,3	1,25	27,0	8,5	1,46	34,3	1644	57	20	16	16	66	6					
6.2.30.4	9,3	1,67	57,2	9,1	1,88	53,6	6,7	1,13	43,7	11,1	1,86	64,8	11,4	2,09	77,2	2045	55	30	22	22	82	8					
6.2.35.4	12,4	2,57	129,5	12,3	2,63	103,0	7,9	1,42	58,8	15,0	2,39	35,2	15,4	2,72	43,1	2961	60	34	28	28	92	8					
6.2.40.4	21,7	3,92	66,3	20,9	4,26	58,5	13,5	2,41	72,9	25,2	4,22	70,9	25,7	4,72	84,3	4890	63	61	35	35	123	14					
6.2.45.4	38,3	6,95	87,1	35,2	7,30	72,6	21,4	3,95	99,0	43,3	7,26	88,5	43,6	8,11	104,7	8674	68	95	42	42	161	20					
6.3.30.4	14,9	2,69	55,6	14,5	2,93	49,5	9,8	1,76	88,2	17,4	2,91	60,1	17,8	3,26	71,4	3155	57	48	28	28	114	10					
6.3.35.4	19,2	3,48	87,3	17,6	3,65	72,7	10,4	1,98	99,1	21,7	3,63	88,6	21,6	4,06	104,8	4200	62	48	28	28	116	10					
6.3.40.4	34,1	6,43	110,2	31,5	6,53	86,4	18,8	3,37	74,0	38,3	6,53	106,4	39,1	7,08	72,5	7339	64	91	42	42	169	20					
6.3.45.4	58,6	10,63	80,0	54,0	11,27	93,6	30,9	5,41	80,2	66,6	11,07	80,7	66,7	12,35	95,4	13139	69	146	54	54	228	32					
6.4.30.4	20,2	3,32	42,8	18,8	3,88	94,7	12,0	2,05	53,3	22,8	3,72	49,0	23,2	4,17	58,4	4095	58	61	28	28	138	14					
6.4.35.4	24,0	4,36	68,6	22,5	4,66	59,1	13,3	2,27	59,1	27,6	4,63	71,7	28,2	5,17	85,1	5421	63	61	35	35	139	14					
6.4.40.4	42,7	7,99	111,0	38,7	8,10	86,8	22,2	4,11	102,7	47,7	8,10	106,9	48,1	8,82	79,3	9240	65	110	42	42	200	24					

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

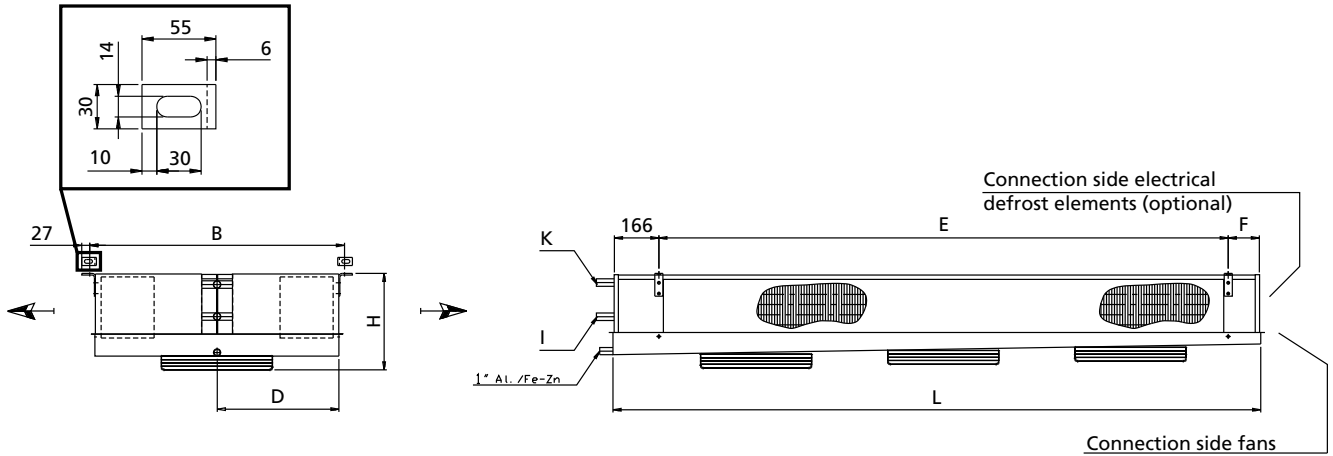


=7 mm

Type	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)																			Air volume m ³ /h	LpA @ 3 m (+/- 2 dB(A))*	Surface m ²	Connections		Weight kg	Internal volume dm ³	Air cooler details
	E-Glycol 28% -2 / 3 °C (In/out temp.)			Water 1 / 5 °C (In/out temp.)			P-Glycol 34% -2 / 3 °C (In/out temp.)			Pekasol 50% -2 / 3 °C (In/out temp.)			Frezium 24% -2 / 3 °C (In/out temp.)			I	K										
	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa			Capacity kW	Volume flow m ³ /h				Pressure drop kPa				
6.1.30.7	3,6	0,62	32,2	3,9	0,81	62,8	3,3	0,59	68,7	4,8	0,80	75,5	4,9	0,90	90,5	1262	52	10	16	16	51	4					
6.1.35.7	4,4	0,76	10,8	5,6	1,08	16,9	4,2	0,71	23,0	6,7	0,97	17,3	7,0	1,18	23,6	2004	57	12	16	16	62	6					
6.2.30.7	5,8	1,06	18,2	7,8	1,57	39,0	5,9	1,00	38,6	9,2	1,54	46,5	9,5	1,74	56,0	2480	55	18	22	22	77	8					
6.2.35.7	11,1	2,06	88,2	10,3	2,17	74,1	7,4	1,26	52,2	12,7	2,17	90,4	12,5	2,42	107,0	3706	60	21	22	22	87	8					
6.2.40.7	18,1	3,53	121,6	17,2	3,57	94,9	12,3	2,10	63,8	20,8	3,39	48,4	21,2	3,82	58,1	5793	63	36	28	28	114	14					
6.2.45.7	30,3	5,77	103,7	28,4	5,90	82,6	19,1	3,43	85,8	34,6	5,90	101,6	35,3	6,40	69,2	10019	68	57	42	42	145	20					
6.3.30.7	13,2	2,59	159,0	12,0	2,55	118,3	8,7	1,55	77,7	14,9	2,40	43,0	15,1	2,70	51,6	3795	57	29	28	28	107	10					
6.3.35.7	14,9	2,76	58,3	14,7	3,04	52,7	9,8	1,76	88,3	17,6	3,01	63,7	18,0	3,37	75,9	5320	62	29	28	28	109	10					
6.3.40.7	27,8	5,05	72,1	25,8	5,42	115,3	17,1	2,96	65,1	31,5	5,28	73,3	32,1	5,89	86,7	8695	64	55	35	35	154	20					
6.3.45.7	48,4	8,55	75,6	43,6	9,04	91,9	27,0	4,73	70,1	53,5	8,89	79,0	54,0	9,91	89,8	15125	69	88	54	54	203	32					
6.4.30.7	17,5	3,18	87,2	15,7	3,25	69,4	10,6	1,82	47,5	19,4	3,25	85,5	19,3	3,62	100,6	4964	58	36	28	28	128	14					
6.4.35.7	20,4	4,01	131,0	18,7	4,03	100,9	11,8	2,04	53,2	23,1	3,84	51,7	23,5	4,31	61,8	6912	63	36	35	35	129	14					
6.4.40.7	34,9	6,34	74,0	32,2	6,74	103,9	20,3	3,64	90,9	39,3	6,59	74,5	40,0	7,35	88,0	11135	65	66	42	42	181	24					

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

F38Dp(G) - coolants



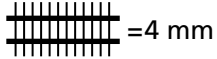
Declarations

According : Declaration of incorporation (SEP)
 Group of coolant : 2
 PS : 10 bar
 TS : +50 / -40 °C

Type	Dimensions						Electrical defrost at 3x400V-50Hz				Standard	Light	kW	kW**
	L	B	H	D	E	F	Coil block		Drip tray					
							number	O [mm]	number	O [mm]				
FC38D	mm	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]	kW	kW**		
6.1.30.*	925	850	280	405	575	166	2x L=1600	132	2x L=1600	150	2,5			
6.1.35.*	1080	850	280	405	730	166	2x L=1900	132	2x L=1900	150	3,0			
6.2.30.*	1425	850	280	405	1075	166	2x L=2500	132	2x L=2500	150	4,1			
6.2.35.*	1570	850	280	405	1220	166	2x L=2800	132	2x L=2800	150	4,6			
6.2.40.*	1775	950	390	455	1425	166	4x L=3100	132	2x L=3400	150	8	6,1		
6.2.45.*	2025	1000	465	480	1675	166	4x L=3700	132	2x L=3700	150	9,3	7,0		
6.3.30.*	2025	850	280	405	1675	166	2x L=3700	132	2x L=3700	150	6,2			
6.3.35.*	2025	850	280	405	1675	166	2x L=3700	132	2x L=3700	150	6,2			
6.3.40.*	2475	950	390	455	2125	166	4x L=4600	132	2x L=4600	150	11,6	8,8		
6.3.45.*	2850	1000	465	480	2550	116	4x L=5500	132	2x L=5500	150	14,0	10,6		
6.4.30.*	2475	850	280	405	2125	166	2x L=4600	132	2x L=4600	150	7,8			
6.4.35.*	2475	850	280	455	2125	166	2x L=4600	132	2x L=4600	150	7,8			
6.4.40.*	2850	950	390	480	2550	116	4x L=5500	132	2x L=5500	150	14,0	10,6		

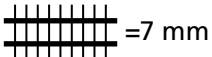
Dimensions & Electrical defrost

F38Lp(G) - coolants



Type	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)																			Air volume m ³ /h	LpA @ 3 m (+/- 2 dB(A))*	Surface m ²	Connections		Weight kg	Internal volume dm ³	Air cooler details
	E-Glycol 28% -2 / 3 °C (In/out temp.)			Water 1 / 5 °C (In/out temp.)			P-Glycol 34% -2 / 3 °C (In/out temp.)			Pekasol 50% -2 / 3 °C (In/out temp.)			Freezium 24% -2 / 3 °C (In/out temp.)			I	K										
	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa			mm	mm								
6.1.25.4	1,9	0,47	129,6	2,0	0,49	105,5	1,8	0,36	103,5	2,0	0,49	129,9	2,5	0,45	16,5	488	47	9	16	16	15	2					
6.1.30.4	3,2	0,58	23,2	4,0	0,83	50,2	3,0	0,54	49,3	4,8	0,81	59,5	5,0	0,91	71,8	930	52	13	16	16	20	3					
6.1.40.4	10,3	1,86	75,5	9,9	2,06	68,9	6,8	1,30	98,8	12,1	2,03	83,3	11,9	2,28	99,2	2386	60	29	22	22	40	7					
6.2.25.4	5,2	0,94	85,2	4,7	0,98	70,0	3,6	0,64	61,0	5,8	0,98	86,0	5,5	1,09	101,4	977	50	18	16	16	25	4					
6.2.30.4	5,4	1,66	100,1	8,3	1,71	81,0	5,5	0,99	55,1	9,6	1,71	99,4	9,9	1,82	49,0	1861	55	26	22	22	35	6					
6.2.40.4	22,1	4,00	89,7	20,1	4,17	73,7	13,0	2,32	91,5	24,8	4,16	90,1	24,8	4,54	71,2	4770	63	58	35	35	60	13					
6.3.30.4	12,9	2,33	56,6	12,2	2,60	96,9	7,7	1,49	105,2	15,0	2,51	60,9	15,3	2,81	72,3	2792	57	39	28	28	45	9					
6.3.40.4	33,7	6,12	92,5	30,3	6,29	74,1	17,8	3,19	83,9	37,4	6,28	90,9	37,6	6,99	107,1	7156	64	87	42	42	90	19					
6.4.30.4	18,2	3,30	76,6	16,5	3,42	62,4	10,3	1,85	89,2	20,4	3,41	76,5	20,7	3,80	90,2	3723	58	52	28	28	60	11					

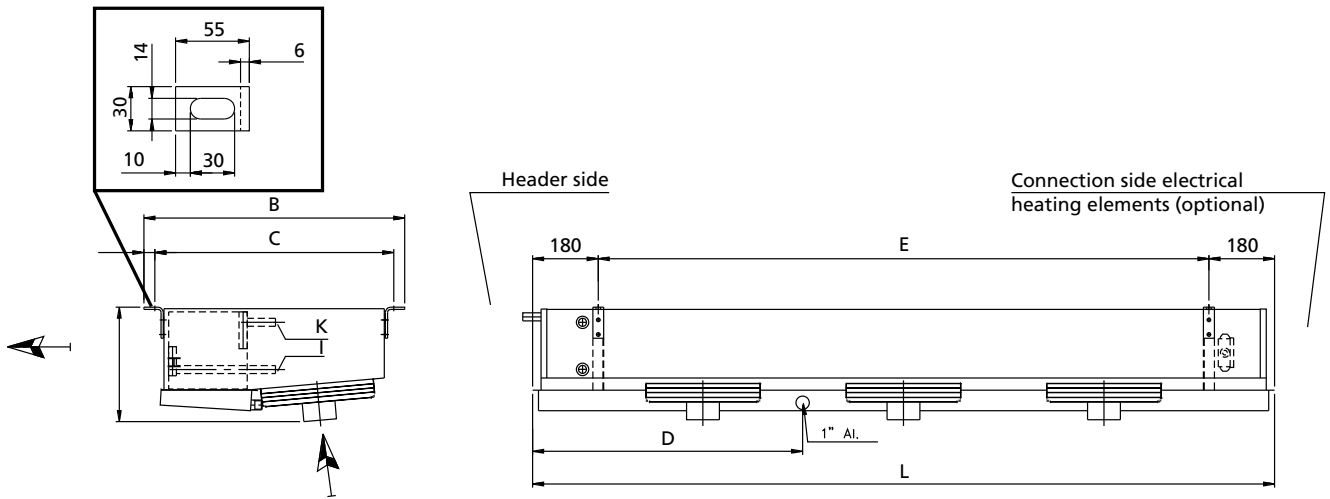
* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)) , free field conditions, according EN13487



Type	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)																			Air volume m ³ /h	LpA @ 3 m (+/- 2 dB(A))*	Surface m ²	Connections		Weight kg	Internal volume dm ³	Air cooler details
	E-Glycol 28% -2 / 3 °C (In/out temp.)			Water 1 / 5 °C (In/out temp.)			P-Glycol 34% -2 / 3 °C (In/out temp.)			Pekasol 50% -2 / 3 °C (In/out temp.)			Freezium 24% -2 / 3 °C (In/out temp.)			I	K										
	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa	Capacity kW	Volume flow m ³ /h	Pressure drop kPa			mm	mm								
6.1.25.7	2,1	0,38	87,9	2,0	0,42	80,3	1,8	0,32	90,8	1,7	0,42	97,9	1,9	0,35	104,9	593	47	5	16	16	15	2					
6.1.30.7	2,8	0,51	20,5	3,3	0,69	36,9	2,7	0,48	43,6	4,0	0,67	42,8	4,2	0,77	52,7	1157	52	8	16	16	20	3					
6.1.40.7	6,2	1,14	21,4	8,0	1,67	47,8	6,3	1,13	85,7	9,8	1,64	56,9	10,1	1,85	68,6	2847	60	17	22	22	30	7					
6.2.25.7	4,1	0,74	57,0	4,0	0,83	53,2	3,2	0,57	54,1	4,9	0,83	64,7	5,1	0,93	77,0	1186	50	11	16	16	20	4					
6.2.30.7	7,4	1,34	68,8	7,0	1,44	60,1	4,9	0,88	49,0	8,6	1,44	73,2	8,7	1,61	86,9	2313	55	16	22	22	30	6					
6.2.40.7	17,1	3,37	101,6	16,6	3,45	80,9	11,4	2,04	80,2	20,0	3,45	99,6	20,5	3,76	74,0	5695	63	35	28	28	55	13					
6.3.30.7	11,8	2,14	90,0	10,6	2,19	72,1	7,4	1,33	93,7	13,1	2,19	88,7	12,9	2,44	104,5	3470	57	23	28	28	40	9					
6.3.40.7	27,8	5,05	88,2	24,9	5,24	99,5	15,7	2,93	104,7	30,8	5,17	86,6	30,9	5,68	74,5	8543	64	52	35	35	80	19					
6.4.30.7	14,7	2,92	102,0	14,2	2,94	79,3	9,2	1,65	79,9	17,1	2,86	56,3	17,5	3,20	66,9	4626	58	31	28	28	55	11					

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

F38Lp(G) - coolants

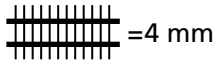


Declarations

According : Declaration of incorporation (SEP)
 Group of coolant : 2
 PS : 10 bar
 TS : +50 / -40 °C

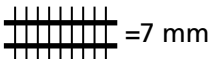
Type	Dimensions					Electrical defrost at 3x400V-50Hz				Standard	Dimensions & Electrical defrost
	L	B	H	E	D1	Coil block		Drip tray			
	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]		
FC38L	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]	kW	
6.1.25.*	890	705	280	530	245	2x L=1300	132	1x L=1300	175	1,5	
6.1.30.*	990	705	315	630	295	2x L=1600	132	1x L=1600	175	1,9	
6.1.40.*	1190	865	465	830	295	2x L=1900	132	1x L=2200	175	3,2	
6.2.25.*	1390	705	280	1030	695	2x L=2500	132	1x L=2500	175	3,1	
6.2.30.*	1590	705	315	1230	795	2x L=2800	132	1x L=2800	175	3,5	
6.2.40.*	1990	865	465	1630	995	2x L=3700	132	1x L=3700	175	4,7	
6.3.30.*	2190	705	315	1830	795	2x L=4000	132	1x L=4000	175	5,0	
6.3.40.*	2790	865	465	2430	995	2x L=5200	132	1x L=5200	175	6,6	
6.4.30.*	2790	705	315	2430	1395	2x L=5200	132	1x L=5200	175	6,6	

F38Sp(dx) - R404A



Type	Fan diameter	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)					Surface	Connections		Weight	Internal volume
		SC1 DT1 = 10K Air on =10°C 0 / +10	SC2 DT1 = 8K Air on =0°C -8 / 0	SC3 DT1 = 7K Air on =-18°C -25 / -18	Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K		
FC38S	mm	kW	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³
4.1.25.4	1x250	1,8	1,2		613	48	7	12	12	26	2
4.1.30.4	1x300	3,5	2,4		1222	52	11	12	12	34	3
6.1.30.4	1x300	3,9	2,6		1076	52	16	12	22	39	4
6.1.35.4	1x350	6,7	4,6		1866	57	25	12	22	51	6
6.1.40.4	1x400	9,4	6,5		2623	60	34	12	22	63	8
6.1.45.4	1x450	13,9	9,6		4248	65	45	12	22	75	10
4.2.30.4	2x300	7,0	4,8		2434	55	22	12	22	50	5
6.2.30.4	2x300	8,2	5,6		2143	55	32	12	22	61	7
6.2.35.4	2x350	13,3	9,1		3720	60	50	12	22	82	11
6.2.40.4	2x400	19,1	12,9		5235	63	68	16	28	103	15
6.2.45.4	2x450	28,6	19,1		8480	68	90	16	28	122	19
6.2.50.4	2x500	37,4	24,9		11179	61	112	16	35	204	24
6.3.30.4	3x300	12,2	8,3		3209	57	49	12	22	81	11
6.3.35.4	3x350	20,4	13,7		5575	62	75	16	28	112	16
6.3.40.4	3x400	28,0	18,6		7847	64	102	16	35	142	22
6.3.45.4	3x450	43,3	29,0		12711	69	134	16	35	174	28
6.3.50.4	3x500	55,9	37,3		16757	62	168	22	42	291	35
6.4.30.4	4x300	16,5	11,2		4277	58	65	16	28	104	14
6.4.35.4	4x350	27,6	18,6		7430	63	99	16	35	143	21
6.4.40.4	4x400	38,6	25,9		10459	65	136	16	35	183	29
6.4.45.4	4x450	58,1	38,9		16943	70	179	16	42	222	38
6.4.50.4	4x500	75,7	50,1		22334	63	224	22	42	376	47
6.5.45.4	5x450	73,2	48,5		21174	71	223	16	42	267	47
6.6.45.4	6x450	87,7	58,6		25405	72	268	22	42	322	56

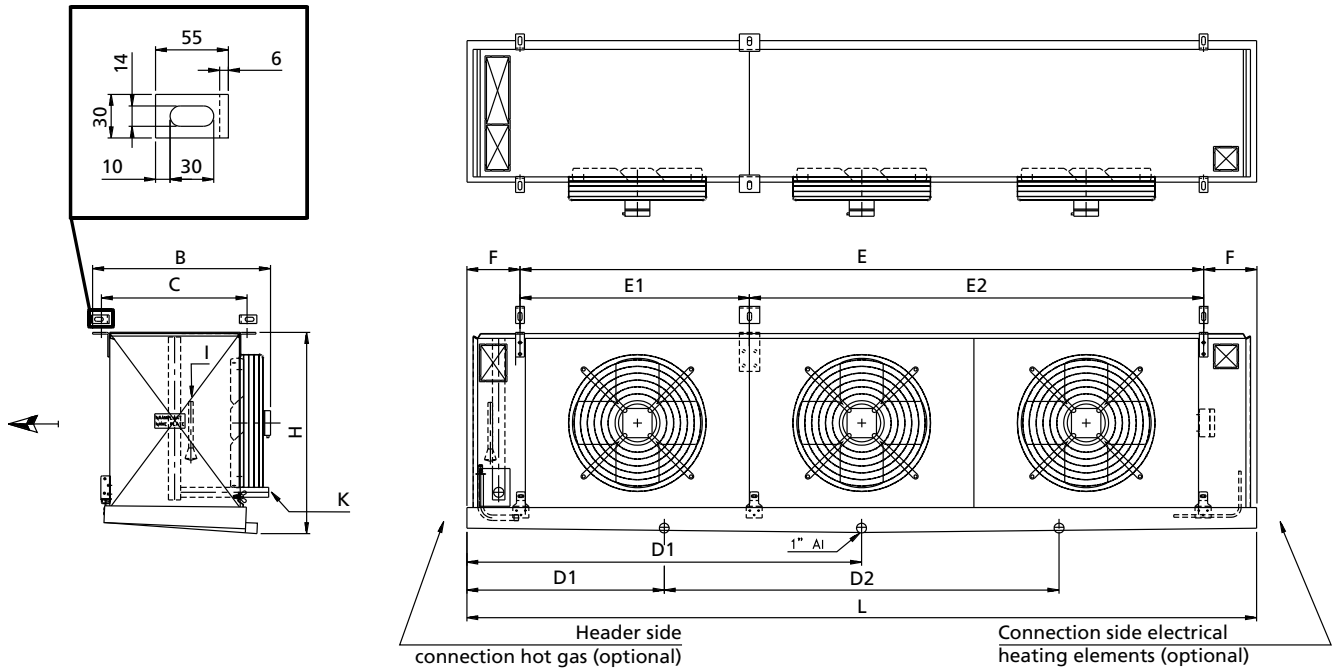
* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)), free field conditions, according EN13487



Type	Fan diameter	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)					Surface	Connections		Weight	Internal volume
		SC1 DT1 = 10K Air on =10°C 0 / +10	SC2 DT1 = 8K Air on =0°C -8 / 0	SC3 DT1 = 7K Air on =-18°C -25 / -18	Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K		
FC38S	mm	kW	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³
4.1.25.7	1x250	1,3	0,8	0,6	699	48	4	12	12	25	2
4.1.30.7	1x300	2,8	1,9	1,3	1404	52	7	12	12	32	3
6.1.30.7	1x300	3,3	2,3	1,6	1291	52	10	12	12	36	4
6.1.35.7	1x350	5,7	3,9	2,8	2200	57	15	12	22	46	6
6.1.40.7	1x400	7,9	5,3	3,9	3052	60	21	12	22	57	8
6.1.45.7	1x450	11,7	7,9	5,7	4969	65	27	12	22	67	10
4.2.30.7	2x300	5,5	3,7	2,7	2802	55	13	12	22	47	5
6.2.30.7	2x300	7,0	4,7	3,4	2574	55	19	12	22	56	7
6.2.35.7	2x350	11,4	7,7	5,5	4391	60	30	12	22	74	11
6.2.40.7	2x400	15,8	10,6	7,7	6096	63	41	16	22	92	15
6.2.45.7	2x450	23,6	15,7	11,3	9926	68	54	16	28	109	19
6.2.50.7	2x500	30,5	20,2	14,6	13192	61	67	16	28	186	24
6.3.30.7	3x300	10,5	7,1	5,1	3858	57	29	12	22	74	11
6.3.35.7	3x350	17,3	11,6	8,3	6582	62	45	16	22	100	16
6.3.40.7	3x400	23,4	15,7	10,9	9139	64	61	16	28	126	22
6.3.45.7	3x450	35,6	23,5	17,0	14882	69	80	16	35	152	28
6.3.50.7	3x500	46,1	30,3	21,8	19780	62	101	16	35	263	35
6.4.30.7	4x300	14,1	9,5	6,8	5142	58	39	12	22	93	14
6.4.35.7	4x350	23,1	15,4	11,2	8774	63	60	16	28	127	21
6.4.40.7	4x400	31,9	21,2	15,4	12183	65	82	16	35	161	29
6.4.45.7	4x450	47,7	31,4	22,6	19839	70	107	16	35	193	38
6.4.50.7	4x500	61,8	40,6	29,1	26367	63	134	16	42	339	47
6.5.45.7	5x450	58,6	38,9	28,0	24795	71	134	16	42	229	47
6.6.45.7	6x450	71,8	47,3	33,9	29751	72	161	16	42	279	56

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

F38Sp(dx) - R404A

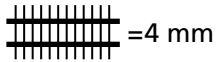


Declarations

Connection ≤ 35 mm	: Declaration of incorporation (SEP)
Connection 42mm and 54 mm	: module A
Group of fluid	: 2
PS	: 28 bar
TS	: +55 / -40 °C

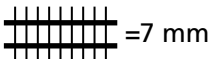
Type	Dimensions										Electrical defrost at 3x400V-50Hz				Standard	Light	Dimensions & Electrical defrost		
	L	B	H	C	E	E1	E2	F	D1	D2	Coil block		Drip tray					kW	kW**
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]					
FC38S																			
4.1.25.*	690	510	395	400	406			142	345		2x L=1000	66	1x L=1600	200	1,4				
4.1.30.*	765	510	470	400	481			142	383		2x L=1300	66	1x L=1600	200	1,6				
6.1.30.*	765	510	470	400	481			142	383		2x L=1300	66	1x L=1600	200	1,6				
6.1.35.*	970	640	550	500	606			182	485		3x L=1600	132	1x L=2200	300	2,8				
6.1.40.*	1070	640	625	500	706			182	535		3x L=1900	132	1x L=2500	300	3,3				
6.1.45.*	1170	640	700	500	806			182	585		5x L=1900	132	1x L=2500	300	4,8	3,7			
4.2.30.*	1210	510	470	400	926			142	605		2x L=2200	66	1x L=2500	200	2,8				
6.2.30.*	1210	510	470	400	926			142	605		2x L=2200	66	1x L=2500	200	2,8				
6.2.35.*	1540	640	550	500	1176			182	770		3x L=2800	132	1x L=3100	300	4,8				
6.2.40.*	1740	640	625	500	1376			182	870		3x L=3100	132	1x L=3700	300	5,4				
6.2.45.*	1940	640	700	500	1576			182	970		5x L=3700	132	1x L=4000	300	9,4	7,1			
6.2.50.*	2040	830	850	600	1576			232	1020		5x L=3700	132	1x L=4300	400	9,6	7,2			
6.3.30.*	1655	510	470	400	1371			142	828		2x L=3100	66	1x L=3700	200	4,1				
6.3.35.*	2110	640	550	500	1746			182	1055		3x L=4000	132	1x L=4600	300	6,1				
6.3.40.*	2410	640	625	500	2046			182	1205		3x L=4600	132	1x L=5200	300	8,0				
6.3.45.*	2710	640	700	500	2346			182	1355		5x L=5200	132	1x L=5800	300	13,5	10,2			
6.3.50.*	2810	830	850	600	2346			232	1405		5x L=5200	132	2x L=5800	400	13,5	10,2			
6.4.30.*	2100	510	470	400	1816			142	1050		2x L=4000	66	1x L=4600	200	5,3				
6.4.35.*	2680	640	550	500	2316			182	1340		3x L=5200	132	1x L=5800	300	9,1				
6.4.40.*	3080	640	625	500	2716			182	770	1540	3x L=5800	132	1x L=6700	300	10,3				
6.4.45.*	3480	640	700	500		1558	1558	182	870	1740	5x L=6700	132	1x L=7300	300	17,6	13,4			
6.4.50.*	3580	830	850	600		1558	1558	232	895	1790	5x L=6700	132	1x L=7600	400	17,8	13,5			
6.5.45.*	4250	640	700	500		1558	2328	182	1063	2125	10x L=4300	-	2x L=4600	-	22,0	16,6			
6.6.45.*	5020	640	700	500		2328	2328	182	1255	2510	10x L=4900	-	2x L=5200	-	25,1	18,9			

F38Dp(dx) - R404A



Type	Fan diameter	1x230V-50Hz-4 pole					1x230V-50Hz-6 pole					Surface	Connections		Weight	Internal volume
		SC1	SC2				SC1	SC2					I	K		
FC38D	mm	kW	kW	m ³ /h	dB(A)	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³		
6.1.30.4	1x300	3,7	2,4	1048	52					16	12	12	54	4		
6.1.35.4	1x350	5,8	3,9	1644	57					20	12	22	66	6		
6.2.30.4	2x300	7,7	5,2	2045	55					30	12	22	82	8		
6.2.35.4	2x350	10,4	7,0	3060	60					34	12	22	92	8		
6.2.40.4	2x400	17,4	11,8	4890	63	13,6	9,2	3434	53	61	16	28	123	14		
6.2.45.4	2x450	29,1	19,5	8674	68	22,2	15,2	5669	58	95	16	35	161	20		
6.3.30.4	3x300	11,9	8,1	3155	57					48	12	22	114	10		
6.3.35.4	3x350	14,5	9,7	4343	62					48	12	22	116	10		
6.3.40.4	3x400	26,3	17,6	7339	64	20,6	14,0	5156	54	91	16	35	169	20		
6.3.45.4	3x450	45,2	30,0	13139	69	34,1	23,1	8600	60	146	16	35	228	32		
6.4.30.4	4x300	15,5	10,4	4095	58					61	16	28	138	14		
6.4.35.4	4x350	19,2	12,8	5609	63					61	16	28	139	14		
6.4.40.4	4x400	32,4	21,6	9240	65	25,5	17,3	6439	55	110	16	35	200	24		

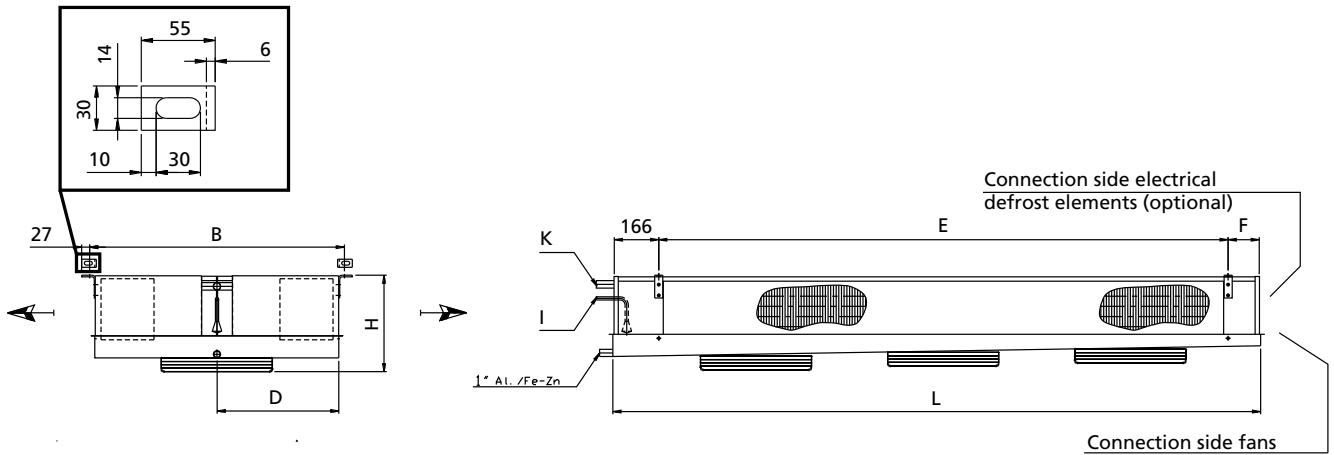
* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)) , free field conditions, according EN13487



Type	Fan diameter	1x230V-50Hz-4 pole					1x230V-50Hz-6 pole					Surface	Connections		Weight	Internal volume
		SC1	SC2				SC1	SC2					I	K		
FC38D	mm	kW	kW	m ³ /h	dB(A)	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³		
6.1.30.7	1x300	3,2	2,2	1262	52					10	12	12	51	4		
6.1.35.7	1x350	4,8	3,2	2004	57					12	12	22	62	6		
6.2.30.7	2x300	6,4	4,3	2480	55					18	12	22	77	8		
6.2.35.7	2x350	8,7	5,8	3706	60					21	12	22	87	8		
6.2.40.7	2x400	14,2	9,4	5793	63	11,7	8,0	4197	53	36	12	22	114	14		
6.2.45.7	2x450	23,9	16,0	10019	68	18,9	12,8	6703	58	57	16	28	145	20		
6.3.30.7	3x300	10,2	6,9	3795	57					29	12	22	107	10		
6.3.35.7	3x350	12,4	8,2	5320	62					29	12	22	109	10		
6.3.40.7	3x400	21,7	14,5	8695	64	17,8	12,0	6299	54	55	16	28	154	20		
6.3.45.7	3x450	36,7	24,3	15125	69	28,8	19,4	10128	60	88	16	35	203	32		
6.4.30.7	4x300	13,0	8,7	4964	58					36	12	22	128	14		
6.4.35.7	4x350	15,9	10,5	6912	63					36	16	22	129	14		
6.4.40.7	4x400	27,2	18,1	11135	65	22,4	15,1	7999	55	66	16	28	181	24		

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

F38Dp(dx) - R404A

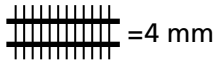


Declarations

Connection ≤ 35 mm	: Declaration of incorporation (SEP)
Connection 42mm and 54 mm	: module A
Group of fluid	: 2
PS	: 28 bar
TS	: +55 / -40 °C

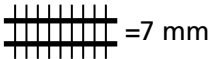
Type	Dimensions						Electrical defrost at 3x400V-50Hz				Standard	Light	Dimensions & Electrical defrost		
	L	B	H	D	E	F	Coil block		Drip tray					kW	kW**
	mm	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]					
FC38D	mm	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]	kW	kW**			
6.1.30.*	925	850	280	405	575	166	2x L=1600	132	2x L=1600	150	2,5				
6.1.35.*	1080	850	280	405	730	166	2x L=1900	132	2x L=1900	150	3,0				
6.2.30.*	1425	850	280	405	1075	166	2x L=2500	132	2x L=2500	150	4,1				
6.2.35.*	1570	850	280	405	1220	166	2x L=2800	132	2x L=2800	150	4,6				
6.2.40.*	1775	950	390	455	1425	166	4x L=3100	132	2x L=3400	150	8	6,1			
6.2.45.*	2025	1000	465	480	1675	166	4x L=3700	132	2x L=3700	150	9,3	7,0			
6.3.30.*	2025	850	280	405	1675	166	2x L=3700	132	2x L=3700	150	6,2				
6.3.35.*	2025	850	280	405	1675	166	2x L=3700	132	2x L=3700	150	6,2				
6.3.40.*	2475	950	390	455	2125	166	4x L=4600	132	2x L=4600	150	11,6	8,8			
6.3.45.*	2850	1000	465	480	2550	116	4x L=5500	132	2x L=5500	150	14,0	10,6			
6.4.30.*	2475	850	280	405	2125	166	2x L=4600	132	2x L=4600	150	7,8				
6.4.35.*	2475	850	280	455	2125	166	2x L=4600	132	2x L=4600	150	7,8				
6.4.40.*	2850	950	390	480	2550	116	4x L=5500	132	2x L=5500	150	14,0	10,6			

F38Lp(dx) - R404A



Type	Fan diameter	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)					Surface	Connections		Weight	Internal volume	Air cooler details
		SC1 DT1 = 10K Air on =10°C 0 / +10	SC2 DT1 = 8K Air on =0°C -8 / 0	SC3 DT1 = 7K Air on =-18°C -25 / -18	Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K			
FC38L	mm	kW	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³	
6.1.25.4	1x250	1,9	1,3		488	47	9	12	12	15	2	
6.1.30.4	1x300	3,3	2,3		930	52	13	12	12	20	3	
6.1.40.4	1x400	8,5	5,7		2386	60	29	12	22	40	7	
6.2.25.4	2x250	3,8	2,6		977	50	18	12	22	25	4	
6.2.30.4	2x300	6,8	4,6		1861	55	26	12	22	35	6	
6.2.40.4	2x400	17,1	11,5		4770	63	58	12	28	60	13	
6.3.30.4	3x300	10,4	7,0		2792	57	39	12	22	45	9	
6.3.40.4	3x400	25,3	16,8		7156	64	87	16	28	90	19	
6.4.30.4	4x300	13,8	9,3		3723	58	52	16	22	60	11	

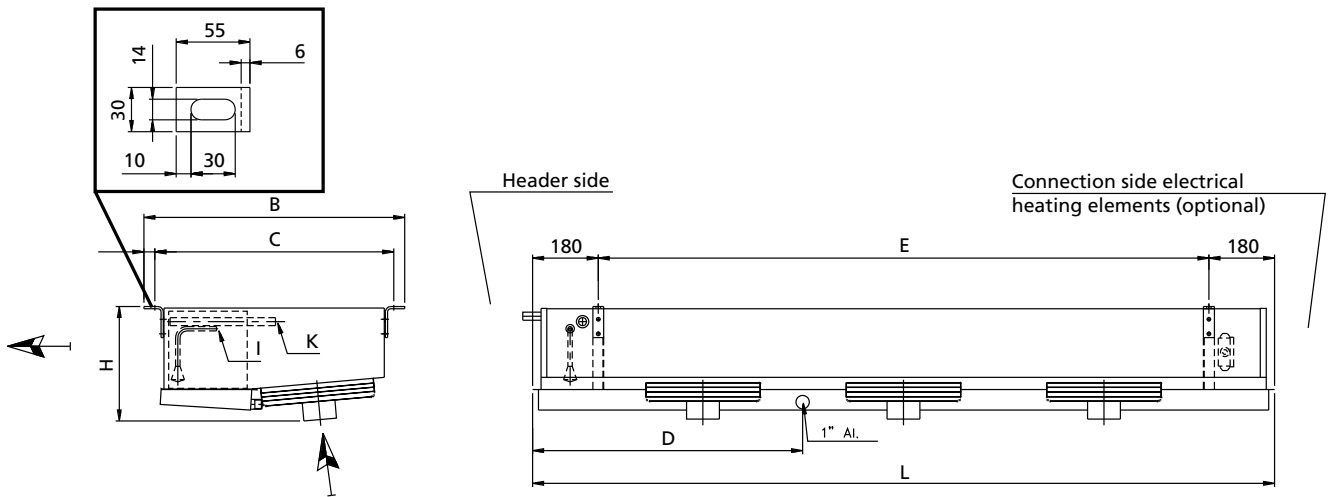
* = Sound pressure indication (LpA) at 3 m distance each air cooler (+/- 2 dB(A)), free field conditions, according EN13487



Type	Fan diameter	1x230V-50Hz-4 pole (1500 min ⁻¹ nom.)					Surface	Connections		Weight	Internal volume	Air cooler details
		SC1 DT1 = 10K Air on =10°C 0 / +10	SC2 DT1 = 8K Air on =0°C -8 / 0	SC3 DT1 = 7K Air on =-18°C -25 / -18	Air volume	LpA @ 3 m (+/- 2 dB(A))*		I	K			
FC38L	mm	kW	kW	kW	m ³ /h	dB(A)	m ²	mm	mm	kg	dm ³	
6.1.25.7	1x250	1,6	1,1	0,8	593	47	5	12	12	15	2	
6.1.30.7	1x300	3,0	2,0	1,4	1157	52	8	12	12	20	3	
6.1.40.7	1x400	7,0	4,6	3,4	2847	60	17	12	22	30	7	
6.2.25.7	2x250	3,2	2,2	1,6	1186	50	11	12	12	20	4	
6.2.30.7	2x300	6,0	4,0	2,9	2313	55	16	12	22	30	6	
6.2.40.7	2x400	14,3	9,5	6,9	5695	63	35	12	22	55	13	
6.3.30.7	3x300	9,1	6,1	4,3	3470	57	23	12	22	40	9	
6.3.40.7	3x400	21,1	14,0	9,9	8543	64	52	16	28	80	19	
6.4.30.7	4x300	12,2	8,1	5,8	4626	58	31	12	22	55	11	

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

F38Lp(dx) - R404A



Declarations

Connection \leq 35 mm	: Declaration of incorporation (SEP)
Connection 42mm and 54 mm	: module A
Group of fluid	: 2
PS	: 28 bar
TS	: +55 / -40 °C

Type	Dimensions					Electrical defrost at 3x400V-50Hz				Standard	Dimensions & Electrical defrost
	L	B	H	E	D1	Coil block		Drip tray			
						number	O [mm]	number	O [mm]		
FC38L	mm	mm	mm	mm	mm	number	O [mm]	number	O [mm]	kW	
6.1.25.*	890	705	280	530	245	2x L=1300	132	1x L=1300	175	1,5	
6.1.30.*	990	705	315	630	295	2x L=1600	132	1x L=1600	175	1,9	
6.1.40.*	1190	865	465	830	295	2x L=1900	132	1x L=2200	175	3,2	
6.2.25.*	1390	705	280	1030	695	2x L=2500	132	1x L=2500	175	3,1	
6.2.30.*	1590	705	315	1230	795	2x L=2800	132	1x L=2800	175	3,5	
6.2.40.*	1990	865	465	1630	995	2x L=3700	132	1x L=3700	175	4,7	
6.3.30.*	2190	705	315	1830	795	2x L=4000	132	1x L=4000	175	5,0	
6.3.40.*	2790	865	465	2430	995	2x L=5200	132	1x L=5200	175	6,6	
6.4.30.*	2790	705	315	2430	1395	2x L=5200	132	1x L=5200	175	6,6	

Goedhart delivery program

Goedhart catalogue air coolers



VCI



DVS/DRS/DZS



ZGB/ZGZ



PAC



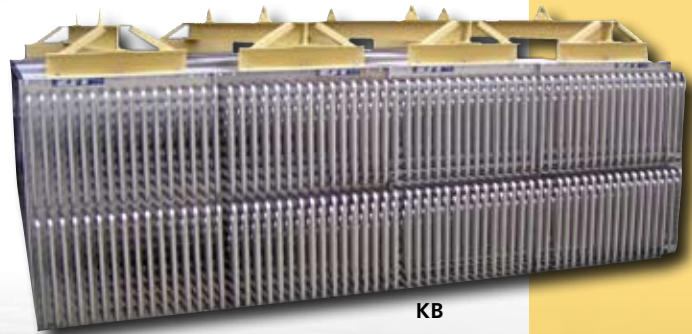
FC38



ZFB/ZFZ

Goedhart delivery program

Goedhart engineered-to-order air coolers





Goedhart air cooler for every application

For Contractors and Original Equipment Manufacturers (OEM) related to the industrial refrigeration industry, GEA Goedhart B.V. offers an unlimited range of air coolers and air cooled condensers in several configurations.

Depending on the application, the optimum configuration will be selected in close cooperation with our customers.

Configurations

The following material combinations are available in various tube pitches and various fin spacing:

Tube material	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.





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02.01.2.011.dok/2010-02 / Subject to modification

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Applicability of the general conditions put forward by any buyer is rejected explicitly by GEA Goedhart B.V.