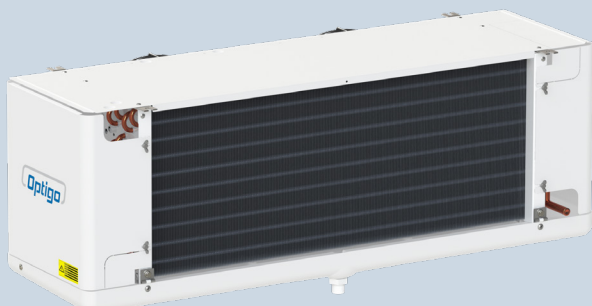
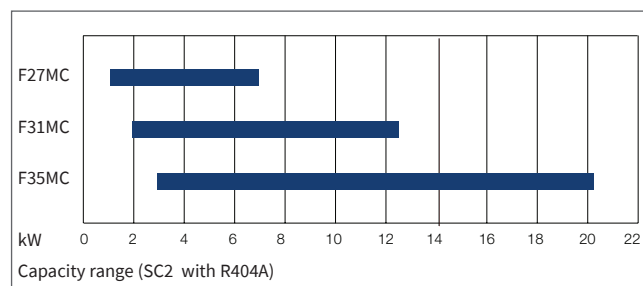


Optigo



Optigo FMC are cubic commercial air coolers for general application in small to medium-sized cooling, freezing and working rooms. Optigo FMC models are especially suitable for refrigerated working, processing and storage rooms.

- Dedicated ranges for HFC* refrigerants (E), CO₂ (X) and brine (W)
- Available in 3 fan diameters
F27MC: Ø 275 mm
F31MC: Ø 315 mm
F35MC: Ø 350 mm
- Capacity range (SC2 with R404A): 1,050 up 20,200 kW
- Air flow: 900 up to 10,400 m³/h
- Min. room temperature: -35 °C



Benefits

- Eurovent certified performance (FMCE & FMCX models)
- Optimized coil design
- Energy efficient AC & EC fans
- Plug&play installation
- Two-year product guarantee
- Easy access to on-line product information





Standard configuration

- High-efficiency coil manufactured from internally grooved Cu tubes and louvered aluminium fins.

Model	Standard fin spacing (mm)			
	4.5	6	7	9
F27MC	✓	✓	✓	
F31MC	✓	✓	✓	✓
F35MC	✓	✓	✓	✓

- Durable galvanized steel casing, powder coated RAL 9003. Dismountable and openable casing for cleaning and inspecting purposes. Optimized driptray with rounded edges. Optigo F31MC and F35MC models fitted with hinged side panels and driptray.
- Fan motors wired to a central connection box.
- Each heat exchanger is leak tested with dry air and pre-charged with nitrogen.
- Fitted with schröder valve on the suction connection for testing purposes (for FMCE and FMCX units).
- Delivered on a wooden pallet, either covered with a reinforced cardboard box or a wooden crate (F35MC models with 4 fans).

Design pressure

Model	Refrigerant	Max working pressure
FMCE	HFC*	24 bar
FMCX	CO ₂	60 bar**
FMCW	Brine	10 bar

* Fluid group 2 according to EN 378

** 85 bar in special execution

Certifications

The Alfa LU-VE quality system is in accordance with ISO 9001. All products are manufactured according to PED regulations.

All FMCE & FMCX models are EUROVENT certified. Certified data:

- Capacities (ENV328)
- Air flow
- Motor power consumption
- Surface area



Optional features

Coil protection

Coil protection is available for more aggressive climate conditions: pre-coated aluminium fins (AP)

EC fan motors

Single speed for F27MC, dual speed for F31MC and F35MC

Central internal connection box wired to a single external switch (SW)

Electric defrost (E)

For cold rooms with room temperatures below 4 °C frost build-up is likely, the application of a defrosting system is advised. The stainless steel defrost elements are connected to separated terminal box.

Fan shroud heater (FRH)

Driptray heater (HD)

standard for F31MC models with fin spacing 7 and 9 mm; optional for all other models

Driptray insulation (IS)

Shut-up sock with adapter ring

only for F31MC and F35MC models

Insulated suction hood

Code description

F27MC	E	A	-	2	1	-	4	N	*	AL	BP	-	*	FRH
1	2	3		4	5		6	7	8	9	10		11	12

- Optigo FMC cubic commercial unit coolers (F27MC=Ø 275 mm, F31MC=Ø 315 mm, F35MC=Ø 350 mm)
- Refrigerant system (E=HFC, X=CO₂, W=brine)
- Fan motor type (A=AC, E=EC)
- Number of fans (1 to 4)
- Coil type (1, 2)
- Fin spacing (4=4.5, 6=6.0, 7=7.0, 9=9.0 mm)
- Defrost system (N=air defrost, E=electric defrost, HD=driptray heater, E+HD=electric defrost+driptray heater)
- Circuits code - only for brine units
- Fin material (AL=aluminium, AP=pre-painted aluminium)
- Packing (BP=box + pallet, CR=crate)
- Applications - only for CO₂ units (blank=DX 60 bar design pressure, P=pumped 60 bar, 85=DX 85 bar design pressure)
- Options



Fans

Optigo FMC coolers are available with 1 to 4 fans fitted with high efficiency AC or EC fan motors, available in 3 fan diameters (275, 315 & 350 mm) drawing through the coil. EC fan motors: single speed for F27MC, dual speed for F31MC and F35MC. Motors with external rotor for Optigo F31MC and F35MC models. Power supply 230/50-60/1.

Type	Power supply	Ø mm	No. fans			
			1	2	3	4
AC	1~230 V - 50/60 Hz	275	85 W 0.6 A	170 W 1.2 A	255 W 1.8 A	340 W 2.4 A
AC	1~230 V - 50/60 Hz	315	102 W 0.5 A	204 W 1.0 A	306 W 1.5 A	408 W 2.0 A
AC	1~230 V - 50/60 Hz	350	175 W 0.8 A	350 W 1.6 A	525 W 2.4 A	700 W 3.2 A
EC	1~230 V - 50/60 Hz	275	28 W 0.2 A	56 W 0.4 A	84 W 0.6 A	112 W 0.8 A
EC	1~230 V - 50/60 Hz	315	66 W 0.6 A	132 W 1.2 A	198 W 1.8 A	264 W 2.4 A
EC	1~230 V - 50/60 Hz	350	143 W 1.2 A	286 W 2.4 A	429 W 3.6 A	572 W 4.8 A

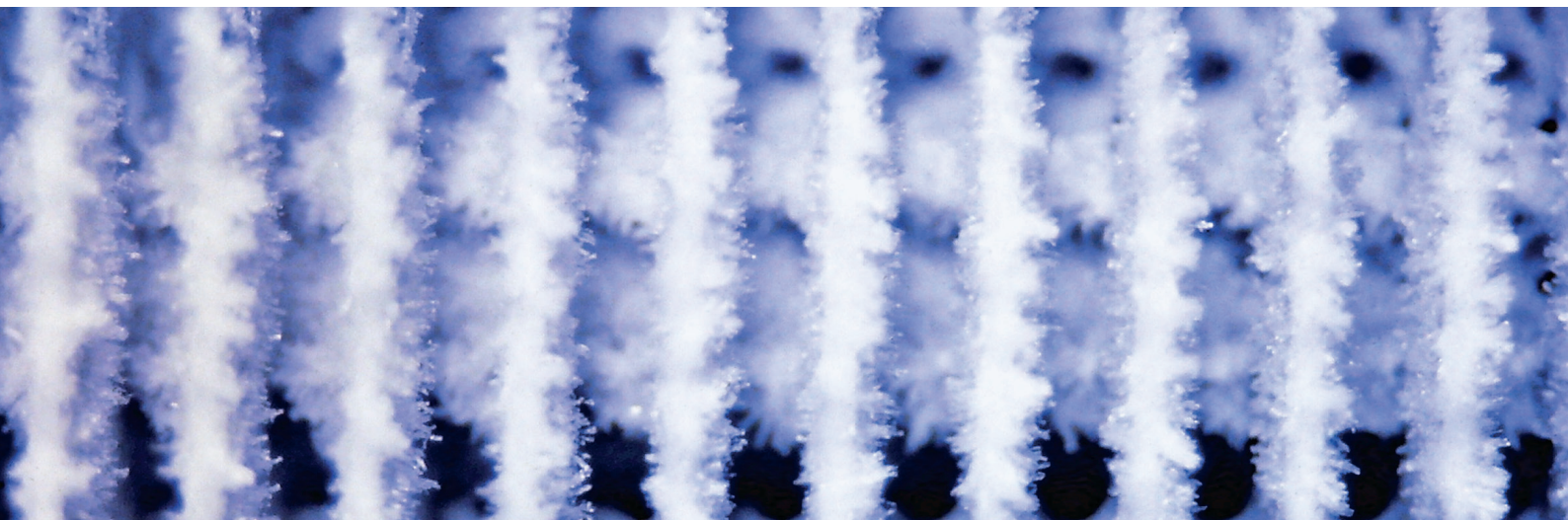




Defrost

Model	Electric defrost (E)		Driptray heater (HD)		Fan shroud heater (FRH)	
	n.	W (tot)	n.	W (tot)	n.	W (tot)
F27MC-11	2*	1220	1	200	1	130
F27MC-12	2*	1220	1	200	1	130
F27MC-21	2*	2160	1	350	2	260
F27MC-22	2*	2160	1	350	2	260
F27MC-32	2*	3080	1	480	3	390
F27MC-42	2*	4000	1	650	4	520
F31MC-11	2	1700	1	235	1	145
F31MC-12	3	2550	1	235	1	145
F31MC-21	2	2900	1	415	2	290
F31MC-22	3	4350	1	415	2	290
F31MC-31	2	4050	1	600	3	435
F31MC-32	3	6075	1	600	3	435
F31MC-42	3	7800	1	775	4	580
F35MC-11	4	1800	1	275	1	165
F35MC-12	6	2700	1	275	1	165
F35MC-21	4	3200	1	480	2	330
F35MC-22	6	4800	1	480	2	330
F35MC-31	6	6900	1	720	3	495
F35MC-32	6	6900	1	720	3	495
F35MC-41	6	9000	1	940	4	660
F35MC-42	6	9000	1	940	4	660

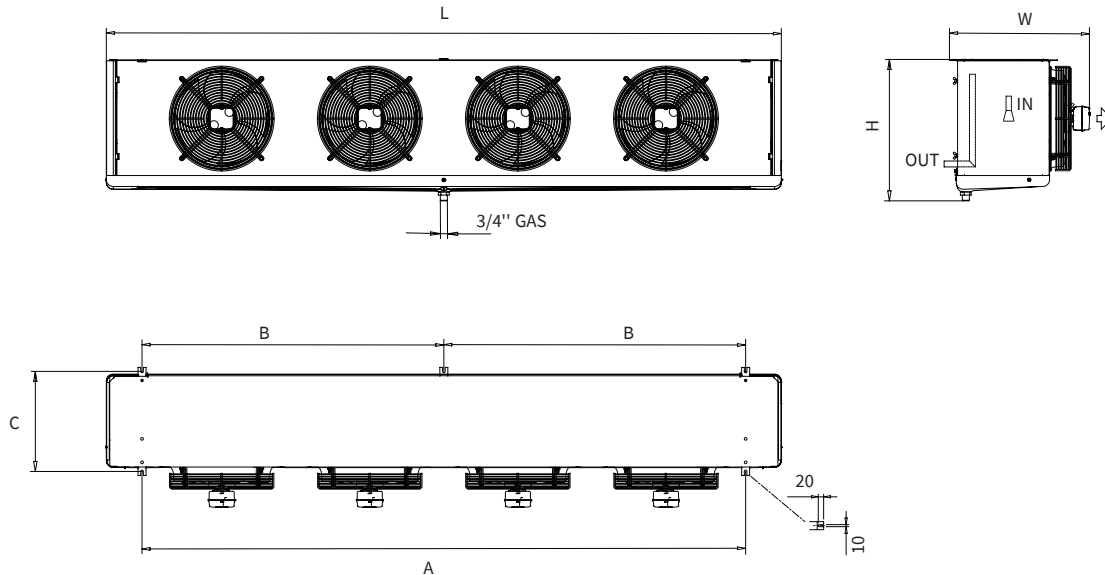
*n. 3 electric heaters for heavy defrost





Dimensions

Dimensions



Model	n. of fans	Dimensions (mm)					
		L	A	B	C	W	H
F27MC	1	680	412	-	298	365	461
F27MC	2	1050	782	-	298	365	461
F27MC	3	1420	1152	-	298	365	461
F27MC	4	1790	1522	-	298	365	461
F31MC	1	770	492	-	375	500	460
F31MC	2	1220	942	-	375	500	460
F31MC	3	1670	1392	-	375	500	460
F31MC	4	2120	1842	-	375	500	460
F35MC	1	870	597	-	375	525	530
F35MC	2	1425	1152	-	375	525	530
F35MC	3	1980	1707	-	375	525	530
F35MC	4	2535	2262	1131	375	525	530



Selection tables

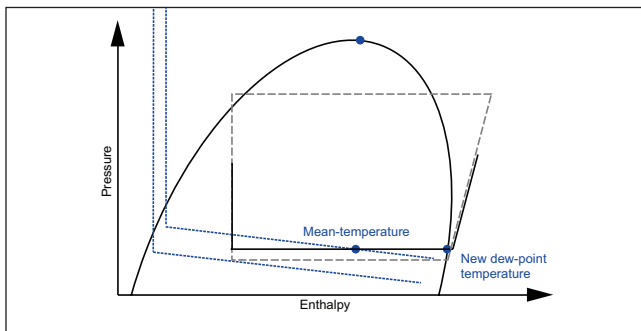
Cooling capacities air coolers

Cooling capacities as given in the tables are nominal capacities for wet conditions (Q_n) in compliance with Eurovent regulations and EN328:2014. These nominal values have been calculated from the standard (dry) condition Q_{st} with the following formula: $Q_n = Q_{st} \times \text{correction factor}$.

Standard Condition	Air inlet temp. (°C)	Evaporating temp. (°C)	Relative humidity	Correction factor
SC2	0	-8	85 %	1.15

High glide refrigerants and air coolers

Traditional air cooler design is based on evaporating temperature being the refrigerant dew-point temperature at the evaporating pressure. This design approach boosts the evaporator's performance in case of refrigerants with glide thus reducing its size. If the size is reduced, there is the chance to reduce the cost of the cooler. Mean-temperature design instead of dew-point can be used for evaporators when dealing with high-glide refrigerants and is the advised approach for unpacked food applications, for which dew-point approach may result in higher dehumidification and consequent higher weight losses of the products stored.



DT1 - 10 K conditions

In addition to the Eurovent Standard Conditions, the tables also show DT1 - 10 K capacities air coolers for $T_{air} = 2,5 \text{ °C}$ and $T_{evap} = -7,5 \text{ °C}$. They correspond to dry atmosphere capacities multiplied by a factor of 1.25 (latent heat factor) to take into account the increase of capacity (latent heat) caused by the condensation of water vapour on the surfaces of the unit cooler. This factor depends on the operating conditions of the cold room. It increases for high room temperatures and decreases for low room temperatures as indicated in the table.

Air inlet temperature (°C)	Latent heat factor
10	1.35
2.5	1.25
0	1.15
-18	1.05
-25	1.01

Correction factors air coolers

All nominal capacities are calculated with R404A. To get capacity with other refrigerants, multiply by the following correction factors R404A capacity in the same condition:

Refrigerant	Correction factors for dew-point selection		Correction factors for mean temperature selection	
	SC2	DT1 - 10 K	SC2	DT1 - 10K
R134a	0.91	0.92	-	-
R507A	0.97	0.97	-	-
R407A	1.24	1.22	-	-
R407C	1.26	-	-	-
R407F	1.24	1.22	-	-
R448A	1.26	1.24	0.96	0.92
R449A	1.23	1.22	0.95	0.92
R450A	0.91	0.92	0.89	-
R452A	1.12	1.11	0.94	0.93
R513A	0.91	0.91	0.9	-

Air throw

The values given in the tables are for ceiling mounted coolers at $t=20 \text{ °C}$, an unrestrained air flow in the cold room and a minimal air velocity of 0.25 m/s at the given air throw distance. The height and air circulation of the room may influence the air throw.



Sound power level dB(A)

Sound power level is the acoustic energy emitted by a source which produces a sound pressure level at some distance.

Sound pressure dB(A)

Sound pressure are sound pressure levels in dB(A) in free field conditions according to EN13487, at 3 m distance. Values may deviate depending on situations at site.



Optigo F27MCE
AC fans 1~230 V - 50 Hz
Fan Ø 275 mm

Model	Nominal capacities HFC			AC fans Ø 275 mm							Connections	
	DT1 +2.5/-7.5 °C W	SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
F27MCE												
Fin spacing 4.5 mm												
F27MCEA-11-4	1850	1360	1	85	10,5	62	41	900	7,3	0,8	10	10
F27MCEA-12-4	2350	1730	1	85	10,5	62	41	900	7,3	1,3	12	22
F27MCEA-21-4	3850	2830	2	170	12,5	65	44	1800	14,6	1,6	12	22
F27MCEA-22-4	4750	3500	2	170	12,5	65	44	1800	14,6	2,3	12	28
F27MCEA-32-4	7200	5300	3	255	14	67	46	2700	21,9	3,3	12	28
F27MCEA-42-4	9400	6900	4	340	15,5	68	47	3600	29,2	4,3	12	28
Fin spacing 6.0 mm												
F27MCEA-11-6	1600	1180	1	85	11	62	41	950	5,6	0,8	10	10
F27MCEA-12-6	2050	1510	1	85	11	62	41	950	5,6	1,3	12	22
F27MCEA-21-6	3300	2430	2	170	13	65	44	1900	11,2	1,6	12	22
F27MCEA-22-6	4150	3050	2	170	13	65	44	1900	11,2	2,3	12	28
F27MCEA-32-6	6300	4640	3	255	14,5	67	46	2850	16,8	3,3	12	28
F27MCEA-42-6	8300	6100	4	340	16	68	47	3800	22,4	4,3	12	28
Fin spacing 7.0 mm												
F27MCEA-11-7	1450	1070	1	85	11,5	62	41	1000	4,9	0,8	10	10
F27MCEA-12-7	1850	1360	1	85	11,5	62	41	1000	4,9	1,3	12	22
F27MCEA-21-7	3000	2210	2	170	13,5	65	44	2000	9,8	1,6	12	22
F27MCEA-22-7	3700	2720	2	170	13,5	65	44	2000	9,8	2,3	12	28
F27MCEA-32-7	5700	4200	3	255	15,5	67	46	3000	14,7	3,3	12	28
F27MCEA-42-7	7600	5600	4	340	17	68	47	4000	19,6	4,3	12	28



Optigo F27MCE
EC fans 1~230 V - 50 Hz
Fan Ø 275 mm

Model	Nominal capacities HFC			EC fans Ø 275 mm							Connections	
	DT1 +2.5/-7.5 °C W	SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
F27MCE												
Fin spacing 4.5 mm												
F27MCEE-11-4	1850	1360	1	28	10,5	62	41	900	7,3	0,8	10	10
F27MCEE-12-4	2350	1730	1	28	10,5	62	41	900	7,3	1,3	12	22
F27MCEE-21-4	3850	2830	2	56	12,5	65	44	1800	14,6	1,6	12	22
F27MCEE-22-4	4750	3500	2	56	12,5	65	44	1800	14,6	2,3	12	28
F27MCEE-32-4	7200	5300	3	84	14	67	46	2700	21,9	3,3	12	28
F27MCEE-42-4	9400	6900	4	112	15,5	68	47	3600	29,2	4,3	12	28
Fin spacing 6.0 mm												
F27MCEE-11-6	1600	1180	1	28	11	62	41	950	5,6	0,8	10	10
F27MCEE-12-6	2050	1510	1	28	11	62	41	950	5,6	1,3	12	22
F27MCEE-21-6	3300	2430	2	56	13	65	44	1900	11,2	1,6	12	22
F27MCEE-22-6	4150	3050	2	56	13	65	44	1900	11,2	2,3	12	28
F27MCEE-32-6	6300	4640	3	84	14,5	67	46	2850	16,8	3,3	12	28
F27MCEE-42-6	8300	6100	4	112	16	68	47	3800	22,4	4,3	12	28
Fin spacing 7.0 mm												
F27MCEE-11-7	1450	1070	1	28	11,5	62	41	1000	4,9	0,8	10	10
F27MCEE-12-7	1850	1360	1	28	11,5	62	41	1000	4,9	1,3	12	22
F27MCEE-21-7	3000	2210	2	56	13,5	65	44	2000	9,8	1,6	12	22
F27MCEE-22-7	3700	2720	2	56	13,5	65	44	2000	9,8	2,3	12	28
F27MCEE-32-7	5700	4200	3	84	15,5	67	46	3000	14,7	3,3	12	28
F27MCEE-42-7	7600	5600	4	112	17	68	47	4000	19,6	4,3	12	28



Optigo F31MCE
AC fans 1~230 V - 50 Hz
Fan Ø 315 mm

Model	Nominal capacities HFC			AC fans Ø 315 mm							Connections	
	DT1 +2.5/-7.5 °C W	SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
Fin spacing 4.5 mm												
F31MCEA-11-4	3500	2580	1	102	14	70	49	1650	8,9	1,5	12	16
F31MCEA-12-4	4300	3160	1	102	12	70	49	1500	13,3	2,3	12	18
F31MCEA-21-4	7000	5200	2	204	16	73	52	3300	17,8	2,8	12	18
F31MCEA-22-4	8500	6300	2	204	14	73	52	3000	26,6	4,2	12	22
F31MCEA-31-4	10400	7700	3	306	19	75	54	4950	26,7	4,1	12	22
F31MCEA-32-4	13200	9700	3	306	17	75	54	4500	39,9	6,3	16	35
F31MCEA-42-4	17400	12800	4	408	18	76	55	6000	53,2	8,1	16	35
Fin spacing 6.0 mm												
F31MCEA-11-6	3000	2210	1	102	15	70	49	1750	6,8	1,5	12	16
F31MCEA-12-6	3800	2800	1	102	13	70	49	1600	10,2	2,3	12	18
F31MCEA-21-6	6000	4420	2	204	17	73	52	3500	13,6	2,8	12	18
F31MCEA-22-6	7650	5600	2	204	15	73	52	3200	20,4	4,2	12	22
F31MCEA-31-6	9000	6600	3	306	20	75	54	5250	20,4	4,1	12	22
F31MCEA-32-6	11700	8600	3	306	17	75	54	4800	30,6	6,3	16	35
F31MCEA-42-6	15600	11500	4	408	18	76	55	6400	40,8	8,1	16	35
Fin spacing 7.0 mm												
F31MCEA-11-7	2700	1190	1	102	16	70	49	1800	5,9	1,5	12	16
F31MCEA-12-7	3500	2580	1	102	14	70	49	1650	8,9	2,3	12	18
F31MCEA-21-7	5450	4010	2	204	18	73	52	3600	11,8	2,8	12	18
F31MCEA-22-7	7050	5200	2	204	16	73	52	3300	17,8	4,2	12	22
F31MCEA-31-7	8200	6000	3	306	21	75	54	5400	17,7	4,1	12	22
F31MCEA-32-7	10700	7900	3	306	19	75	54	4950	26,7	6,3	16	35
F31MCEA-42-7	14350	10600	4	408	20	76	55	6600	35,6	8,1	16	35
Fin spacing 9.0 mm												
F31MCEA-11-9	2310	1740	1	102	20	70	49	1900	4,7	1,5	12	16
F31MCEA-12-9	3120	2360	1	102	17	70	49	1850	7,1	2,3	12	18
F31MCEA-21-9	4640	3500	2	204	23	73	52	3850	9,4	2,8	12	18
F31MCEA-22-9	6200	4750	2	204	20	73	52	3650	14,2	4,2	12	22
F31MCEA-31-9	6900	5300	3	306	26	75	54	5750	14,2	4,1	12	22
F31MCEA-32-9	9400	7100	3	306	24	75	54	5500	21,3	6,3	16	35
F31MCEA-42-9	12600	9600	4	408	25	76	55	7350	28,3	8,1	16	35



Optigo F31MCE
EC fans 1~230 V - 50 Hz
Fan Ø 315 mm

Model	Nominal capacities HFC			EC fans Ø 315 mm							Connections	
	DT1 +2.5/-7.5 °C W	SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
Fin spacing 4.5 mm												
F31MCEE-11-4	3400	2500	1	66	14	69	48	1600	8,9	1,5	12	16
F31MCEE-12-4	4200	3090	1	66	12	69	48	1400	13,3	2,3	12	18
F31MCEE-21-4	6950	5100	2	132	16	72	51	3200	17,8	2,8	12	18
F31MCEE-22-4	8400	6200	2	132	14	72	51	2800	26,6	4,2	12	22
F31MCEE-31-4	10300	7600	3	198	19	74	53	4800	26,7	4,1	12	22
F31MCEE-32-4	12900	9500	3	198	17	74	53	4200	39,9	6,3	16	35
F31MCEE-42-4	17050	12500	4	264	18	75	54	5600	53,2	8,1	16	35
Fin spacing 6.0 mm												
F31MCEE-11-6	2950	2170	1	66	15	69	48	1700	6,8	1,5	12	16
F31MCEE-12-6	3800	2800	1	66	13	69	48	1500	10,2	2,3	12	18
F31MCEE-21-6	6000	4420	2	132	17	72	51	3400	13,6	2,8	12	18
F31MCEE-22-6	7600	5600	2	132	15	72	51	3000	20,4	4,2	12	22
F31MCEE-31-6	8950	6600	3	198	20	74	53	5100	20,4	4,1	12	22
F31MCEE-32-6	11500	8500	3	198	17	74	53	4500	30,6	6,3	16	35
F31MCEE-42-6	15350	11300	4	264	18	75	54	6000	40,8	8,1	16	35
Fin spacing 7.0 mm												
F31MCEE-11-7	2650	1950	1	66	16	69	48	1750	5,9	1,5	12	16
F31MCEE-12-7	3500	2580	1	66	14	69	48	1600	8,9	2,3	12	18
F31MCEE-21-7	5400	3970	2	132	18	72	51	3500	11,8	2,8	12	18
F31MCEE-22-7	7050	5200	2	132	16	72	51	3200	17,8	4,2	12	22
F31MCEE-31-7	8100	6000	3	198	21	74	53	5250	17,7	4,1	12	22
F31MCEE-32-7	10550	7800	3	198	19	74	53	4800	26,7	6,3	16	35
F31MCEE-42-7	14200	10500	4	264	20	75	54	6400	35,6	8,1	16	35
Fin spacing 9.0 mm												
F31MCEE-11-9	2270	1710	1	66	20	69	48	1900	4,7	1,5	12	16
F31MCEE-12-9	3050	2310	1	66	16	69	48	1750	7,1	2,3	12	18
F31MCEE-21-9	4570	3440	2	132	22	72	51	3750	9,4	2,8	12	18
F31MCEE-22-9	6100	4640	2	132	19	72	51	3550	14,2	4,2	12	22
F31MCEE-31-9	6800	5200	3	198	25	74	53	5650	14,2	4,1	12	22
F31MCEE-32-9	9200	6900	3	198	23	74	53	5300	21,3	6,3	16	35
F31MCEE-42-9	12300	9300	4	264	24	75	54	7100	28,3	8,1	16	35



Optigo F35MCE
AC fans 1~230 V - 50 Hz
Fan Ø 350 mm

Model	Nominal capacities HFC			AC fans Ø 350 mm							Connections	
	DT1 +2.5/-7.5 °C W	SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
F35MCE												
Fin spacing 4.5 mm												
F35MCEA-11-4	5400	3970	1	175	15	74	53	2600	13,1	2,1	12	28
F35MCEA-12-4	6800	5000	1	175	14	74	53	2400	19,7	3,2	12	28
F35MCEA-21-4	10900	8000	2	350	18	77	56	5200	26,2	4	12	28
F35MCEA-22-4	13600	10000	2	350	17	77	56	4800	39,4	6	16	28
F35MCEA-31-4	18700	13800	3	525	21	79	58	7450	49,1	7,4	16	35
F35MCEA-32-4	20400	15000	3	525	20	79	58	7200	59,1	8,7	16	35
F35MCEA-41-4	25100	18500	4	700	24	80	59	9950	65,5	9,7	16	42
F35MCEA-42-4	27500	20200	4	700	23	80	59	9600	78,8	11,5	22	42
Fin spacing 6.0 mm												
F35MCEA-11-6	4500	3310	1	175	16	74	53	2650	10,1	2,1	12	28
F35MCEA-12-6	5900	4340	1	175	15	74	53	2500	15,1	3,2	12	28
F35MCEA-21-6	9200	6800	2	350	19	77	56	5300	20,2	4	12	28
F35MCEA-22-6	12000	8800	2	350	18	77	56	5000	30,2	6	16	28
F35MCEA-31-6	16100	11800	3	525	21	79	58	7700	37,9	7,4	16	35
F35MCEA-32-6	18000	13200	3	525	20	79	58	7500	45,3	8,7	16	35
F35MCEA-41-6	21500	15800	4	700	24	80	59	10300	50,5	9,7	16	42
F35MCEA-42-6	24000	17700	4	700	23	80	59	10000	60,4	11,5	22	42
Fin spacing 7.0 mm												
F35MCEA-11-7	4000	2940	1	175	16	74	53	2700	8,7	2,1	12	28
F35MCEA-12-7	5400	3970	1	175	15	74	53	2600	13,1	3,2	12	28
F35MCEA-21-7	8200	6000	2	350	19	77	56	5400	17,4	4	12	28
F35MCEA-22-7	11000	8100	2	350	18	77	56	5200	26,2	6	16	28
F35MCEA-31-7	14600	10700	3	525	21	79	58	7950	32,6	7,4	16	35
F35MCEA-32-7	16500	12100	3	525	20	79	58	7800	39,3	8,7	16	35
F35MCEA-41-7	19400	14300	4	700	25	80	59	10600	43,5	9,7	16	42
F35MCEA-42-7	22000	16200	4	700	24	80	59	10400	52,4	11,5	22	42
Fin spacing 9.0 mm												
F35MCEA-11-9	3430	2540	1	175	20	74	53	2850	7	2,1	12	28
F35MCEA-12-9	4670	3480	1	175	19	74	53	2750	10,5	3,2	12	28
F35MCEA-21-9	6900	5200	2	350	24	77	56	5750	14	4	12	28
F35MCEA-22-9	9400	7100	2	350	23	77	56	5550	21	6	16	28
F35MCEA-31-9	12400	9400	3	525	27	79	58	8450	26,2	7,4	16	35
F35MCEA-32-9	14200	10700	3	525	26	79	58	8300	31,5	8,7	16	35
F35MCEA-41-9	16600	12500	4	700	31	80	59	11300	35	9,7	16	42
F35MCEA-42-9	18900	14200	4	700	30	80	59	11050	41,9	11,5	22	42



Optigo F35MCE
EC fans 1~230 V - 50 Hz
Fan Ø 350 mm

Model	Nominal capacities HFC			EC fans Ø 350 mm							Connections	
	DT1 +2.5/-7.5 °C W	SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
F35MCE												
Fin spacing 4.5 mm												
F35MCEE-11-4	5400	3970	1	143	15	74	53	2600	13,1	2,1	12	28
F35MCEE-12-4	6800	5000	1	143	14	74	53	2400	19,7	3,2	12	28
F35MCEE-21-4	10900	8000	2	286	18	77	56	5200	26,2	4	12	28
F35MCEE-22-4	13600	10000	2	286	17	77	56	4800	39,4	6	16	28
F35MCEE-31-4	18700	13800	3	429	21	79	58	7450	49,1	7,4	16	35
F35MCEE-32-4	20400	15000	3	429	20	79	58	7200	59,1	8,7	16	35
F35MCEE-41-4	25100	18500	4	572	24	80	59	9950	65,5	9,7	16	42
F35MCEE-42-4	27500	20200	4	572	23	80	59	9600	78,8	11,5	22	42
Fin spacing 6.0 mm												
F35MCEE-11-6	4500	3310	1	143	16	74	53	2650	10,1	2,1	12	28
F35MCEE-12-6	5900	4340	1	143	15	74	53	2500	15,1	3,2	12	28
F35MCEE-21-6	9200	6800	2	286	19	77	56	5300	20,2	4	12	28
F35MCEE-22-6	12000	8800	2	286	18	77	56	5000	30,2	6	16	28
F35MCEE-31-6	16100	11800	3	429	21	79	58	7700	37,9	7,4	16	35
F35MCEE-32-6	18000	13200	3	429	20	79	58	7500	45,3	8,7	16	35
F35MCEE-41-6	21500	15800	4	572	24	80	59	10300	50,5	9,7	16	42
F35MCEE-42-6	24000	17700	4	572	23	80	59	10000	60,4	11,5	22	42
Fin spacing 7.0 mm												
F35MCEE-11-7	4000	2940	1	143	16	74	53	2700	8,7	2,1	12	28
F35MCEE-12-7	5400	3970	1	143	15	74	53	2600	13,1	3,2	12	28
F35MCEE-21-7	8200	6000	2	286	19	77	56	5400	17,4	4	12	28
F35MCEE-22-7	11000	8100	2	286	18	77	56	5200	26,2	6	16	28
F35MCEE-31-7	14600	10700	3	429	21	79	58	7950	32,6	7,4	16	35
F35MCEE-32-7	16500	12100	3	429	20	79	58	7800	39,3	8,7	16	35
F35MCEE-41-7	19400	14300	4	572	25	80	59	10600	43,5	9,7	16	42
F35MCEE-42-7	22000	16200	4	572	24	80	59	10400	52,4	11,5	22	42
Fin spacing 9.0 mm												
F35MCEE-11-9	3430	2540	1	143	20	74	53	2850	7	2,1	12	28
F35MCEE-12-9	4670	3480	1	143	19	74	53	2750	10,5	3,2	12	28
F35MCEE-21-9	6900	5200	2	286	24	77	56	5750	14	4	12	28
F35MCEE-22-9	9400	7100	2	286	23	77	56	5550	21	6	16	28
F35MCEE-31-9	12400	9400	3	429	27	79	58	8450	26,2	7,4	16	35
F35MCEE-32-9	14200	10700	3	429	26	79	58	8300	31,5	8,7	16	35
F35MCEE-41-9	16600	12500	4	572	31	80	59	11300	35	9,7	16	42
F35MCEE-42-9	18900	14200	4	572	30	80	59	11050	41,9	11,5	22	42



Optigo F27MCX
AC fans 1~230 V - 50 Hz
Fan Ø 275 mm

Model	Nominal capacities		AC fans Ø 275 mm							Connections	
	CO ₂ SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
F27MCX											
Fin spacing 4.5 mm											
F27MCXA-11-4	1600	1	85	10,5	62	41	900	7,3	0,8	10	10
F27MCXA-12-4	1950	1	85	10,5	62	41	900	7,3	1,3	12	22
F27MCXA-21-4	3140	2	170	12,5	65	44	1800	14,6	1,6	12	22
F27MCXA-22-4	3540	2	170	12,5	65	44	1800	14,6	2,3	12	28
F27MCXA-32-4	5750	3	255	14	67	46	2700	21,9	3,3	12	28
F27MCXA-42-4	7230	4	340	15,5	68	47	3600	29,2	4,3	12	28
Fin spacing 6.0 mm											
F27MCXA-11-6	1350	1	85	11	62	41	950	5,6	0,8	10	10
F27MCXA-12-6	1690	1	85	11	62	41	950	5,6	1,3	12	22
F27MCXA-21-6	2690	2	170	13	65	44	1900	11,2	1,6	12	22
F27MCXA-22-6	3180	2	170	13	65	44	1900	11,2	2,3	12	28
F27MCXA-32-6	5050	3	255	14,5	67	46	2850	16,8	3,3	12	28
F27MCXA-42-6	6470	4	340	16	68	47	3800	22,4	4,3	12	28
Fin spacing 7.0 mm											
F27MCXA-11-7	1200	1	85	11,5	62	41	1000	4,9	0,8	10	10
F27MCXA-12-7	1530	1	85	11,5	62	41	1000	4,9	1,3	12	22
F27MCXA-21-7	2420	2	170	13,5	65	44	2000	9,8	1,6	12	22
F27MCXA-22-7	2920	2	170	13,5	65	44	2000	9,8	2,3	12	28
F27MCXA-32-7	4590	3	255	15,5	67	46	3000	14,7	3,3	12	28
F27MCXA-42-7	5930	4	340	17	68	47	4000	19,6	4,3	12	28



Optigo F27MCX
EC fans 1~230 V - 50 Hz
Fan Ø 275 mm

Model	Nominal capacities		EC fans Ø 275 mm							Connections	
	CO ₂ SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
Fin spacing 4.5 mm											
F27MCXE-11-4	1600	1	28	10,5	62	41	900	7,3	0,8	10	10
F27MCXE-12-4	1950	1	28	10,5	62	41	900	7,3	1,3	12	22
F27MCXE-21-4	3140	2	56	12,5	65	44	1800	14,6	1,6	12	22
F27MCXE-22-4	3540	2	56	12,5	65	44	1800	14,6	2,3	12	28
F27MCXE-32-4	5750	3	84	14	67	46	2700	21,9	3,3	12	28
F27MCXE-42-4	7230	4	112	15,5	68	47	3600	29,2	4,3	12	28
Fin spacing 6.0 mm											
F27MCXE-11-6	1350	1	28	11	62	41	950	5,6	0,8	10	10
F27MCXE-12-6	1690	1	28	11	62	41	950	5,6	1,3	12	22
F27MCXE-21-6	2690	2	56	13	65	44	1900	11,2	1,6	12	22
F27MCXE-22-6	3180	2	56	13	65	44	1900	11,2	2,3	12	28
F27MCXE-32-6	5050	3	84	14,5	67	46	2850	16,8	3,3	12	28
F27MCXE-42-6	6470	4	112	16	68	47	3800	22,4	4,3	12	28
Fin spacing 7.0 mm											
F27MCXE-11-7	1200	1	28	11,5	62	41	1000	4,9	0,8	10	10
F27MCXE-12-7	1530	1	28	11,5	62	41	1000	4,9	1,3	12	22
F27MCXE-21-7	2420	2	56	13,5	65	44	2000	9,8	1,6	12	22
F27MCXE-22-7	2920	2	56	13,5	65	44	2000	9,8	2,3	12	28
F27MCXE-32-7	4590	3	84	15,5	67	46	3000	14,7	3,3	12	28
F27MCXA-42-7	5930	4	112	17	68	47	4000	19,6	4,3	12	28



Optigo F31MCX
AC fans 1~230 V - 50 Hz
Fan Ø 315 mm

Model	Nominal capacities		AC fans Ø 315 mm							Connections	
	CO ₂ SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
F31MCX											
Fin spacing 4.5 mm											
F31MCXA-11-4	2910	1	102	14	70	49	1650	8,9	1,5	12	16
F31MCXA-12-4	3260	1	102	12	70	49	1500	13,3	2,3	12	18
F31MCXA-21-4	5910	2	204	16	73	52	3300	17,8	2,8	12	18
F31MCXA-22-4	8210	2	204	14	73	52	3000	26,6	4,2	12	22
F31MCXA-31-4	7720	3	306	19	75	54	4950	26,7	4,1	12	22
F31MCXA-32-4	10200	3	306	17	75	54	4500	39,9	6,3	16	35
F31MCXA-42-4	14160	4	408	18	76	55	6000	53,2	8,1	16	35
Fin spacing 6.0 mm											
F31MCXA-11-6	2490	1	102	15	70	49	1750	6,8	1,5	12	16
F31MCXA-12-6	3000	1	102	13	70	49	1600	10,2	2,3	12	18
F31MCXA-21-6	5020	2	204	17	73	52	3500	13,6	2,8	12	18
F31MCXA-22-6	6460	2	204	15	73	52	3200	20,4	4,2	12	22
F31MCXA-31-6	7180	3	306	20	75	54	5250	20,4	4,1	12	22
F31MCXA-32-6	9300	3	306	17	75	54	4800	30,6	6,3	16	35
F31MCXA-42-6	12760	4	408	18	76	55	6400	40,8	8,1	16	35
Fin spacing 7.0 mm											
F31MCXA-11-7	2230	1	102	16	70	49	1800	5,9	1,5	12	16
F31MCXA-12-7	2790	1	102	14	70	49	1650	8,9	2,3	12	18
F31MCXA-21-7	4500	2	204	18	73	52	3600	11,8	2,8	12	18
F31MCXA-22-7	5920	2	204	16	73	52	3300	17,8	4,2	12	22
F31MCXA-31-7	6510	3	306	21	75	54	5400	17,7	4,1	12	22
F31MCXA-32-7	8610	3	306	19	75	54	4950	26,7	6,3	16	35
F31MCXA-42-7	11740	4	408	20	76	55	6600	35,6	8,1	16	35
Fin spacing 9.0 mm											
F31MCXA-11-9	1900	1	102	20	70	49	1900	4,7	1,5	12	16
F31MCXA-12-9	2500	1	102	17	70	49	1850	7,1	2,3	12	18
F31MCXA-21-9	3820	2	204	23	73	52	3850	9,4	2,8	12	18
F31MCXA-22-9	5200	2	204	20	73	52	3650	14,2	4,2	12	22
F31MCXA-31-9	5600	3	306	26	75	54	5750	14,2	4,1	12	22
F31MCXA-32-9	7600	3	306	24	75	54	5500	21,3	6,3	16	35
F31MCXA-42-9	10300	4	408	25	76	55	7350	28,3	8,1	16	35



Optigo F31MCX
EC fans 1~230 V - 50 Hz
Fan Ø 315 mm

Model	Nominal capacities		EC fans Ø 315 mm							Connections	
	CO ₂ SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
Fin spacing 4.5 mm											
F31MCXE-11-4	2840	1	66	14	69	48	1600	8,9	1,5	12	16
F31MCXE-12-4	3150	1	66	12	69	48	1400	13,3	2,3	12	18
F31MCXE-21-4	5760	2	132	16	72	51	3200	17,8	2,8	12	18
F31MCXE-22-4	6950	2	132	14	72	51	2800	26,6	4,2	12	22
F31MCXE-31-4	8040	3	198	19	74	53	4800	26,7	4,1	12	22
F31MCXE-32-4	9850	3	198	17	74	53	4200	39,9	6,3	16	35
F31MCXE-42-4	13660	4	264	18	75	54	5600	53,2	8,1	16	35
Fin spacing 6.0 mm											
F31MCXE-11-6	2440	1	66	15	69	48	1700	6,8	1,5	12	16
F31MCXE-12-6	2920	1	66	13	69	48	1500	10,2	2,3	12	18
F31MCXE-21-6	4930	2	132	17	72	51	3400	13,6	2,8	12	18
F31MCXE-22-6	6270	2	132	15	72	51	3000	20,4	4,2	12	22
F31MCXE-31-6	7050	3	198	20	74	53	5100	20,4	4,1	12	22
F31MCXE-32-6	9040	3	198	17	74	53	4500	30,6	6,3	16	35
F31MCXE-42-6	12400	4	264	18	75	54	6000	40,8	8,1	16	35
Fin spacing 7.0 mm											
F31MCXE-11-7	2200	1	66	16	69	48	1750	5,9	1,5	12	16
F31MCXE-12-7	2730	1	66	14	69	48	1600	8,9	2,3	12	18
F31MCXE-21-7	4430	2	132	18	72	51	3500	11,8	2,8	12	18
F31MCXE-22-7	5770	2	132	16	72	51	3200	17,8	4,2	12	22
F31MCXE-31-7	6420	3	198	21	74	53	5250	17,7	4,1	12	22
F31MCXE-32-7	8410	3	198	19	74	53	4800	26,7	6,3	16	35
F31MCXE-42-7	11450	4	264	20	75	54	6400	35,6	8,1	16	35
Fin spacing 9.0 mm											
F31MCXE-11-9	1880	1	66	20	69	48	1900	4,7	1,5	12	16
F31MCXE-12-9	2450	1	66	16	69	48	1750	7,1	2,3	12	18
F31MCXE-21-9	3870	2	132	22	72	51	3750	9,4	2,8	12	18
F31MCXE-22-9	5100	2	132	19	72	51	3550	14,2	4,2	12	22
F31MCXE-31-9	5600	3	198	25	74	53	5650	14,2	4,1	12	22
F31MCXE-32-9	7500	3	198	23	74	53	5300	21,3	6,3	16	35
F31MCXE-42-9	10100	4	264	24	75	54	7100	28,3	8,1	16	35



Optigo F35MCX

AC fans 1~230 V - 50 Hz

Fan Ø 350 mm

Model	Nominal capacities		AC fans Ø 350 mm							Connections	
	CO ₂ SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
F35MCX											
Fin spacing 4.5 mm											
F35MCXA-11-4	3980	1	175	15	74	53	2600	13,1	2,1	12	28
F35MCXA-12-4	5420	1	175	14	74	53	2400	19,7	3,2	12	28
F35MCXA-21-4	8230	2	350	18	77	56	5200	26,2	4	12	28
F35MCXA-22-4	10940	2	350	17	77	56	4800	39,4	6	16	28
F35MCXA-31-4	14990	3	525	21	79	58	7450	49,1	7,4	16	35
F35MCXA-32-4	15050	3	525	20	79	58	7200	59,1	8,7	16	35
F35MCXA-41-4	19560	4	700	24	80	59	9950	65,5	9,7	16	42
F35MCXA-42-4	20630	4	700	23	80	59	9600	78,8	11,5	22	42
Fin spacing 6.0 mm											
F35MCXA-11-6	3490	1	175	16	74	53	2650	10,1	2,1	12	28
F35MCXA-12-6	4820	1	175	15	74	53	2500	15,1	3,2	12	28
F35MCXA-21-6	7140	2	350	19	77	56	5300	20,2	4	12	28
F35MCXA-22-6	9710	2	350	18	77	56	5000	30,2	6	16	28
F35MCXA-31-6	13030	3	525	21	79	58	7700	37,9	7,4	16	35
F35MCXA-32-6	13690	3	525	20	79	58	7500	45,3	8,7	16	35
F35MCXA-41-6	17120	4	700	24	80	59	10300	50,5	9,7	16	42
F35MCXA-42-6	18620	4	700	23	80	59	10000	60,4	11,5	22	42
Fin spacing 7.0 mm											
F35MCXA-11-7	3170	1	175	16	74	53	2700	8,7	2,1	12	28
F35MCXA-12-7	4420	1	175	15	74	53	2600	13,1	3,2	12	28
F35MCXA-21-7	6460	2	350	19	77	56	5400	17,4	4	12	28
F35MCXA-22-7	8890	2	350	18	77	56	5200	26,2	6	16	28
F35MCXA-31-7	11780	3	525	21	79	58	7950	32,6	7,4	16	35
F35MCXA-32-7	12700	3	525	20	79	58	7800	39,3	8,7	16	35
F35MCXA-41-7	15530	4	700	25	80	59	10600	43,5	9,7	16	42
F35MCXA-42-7	17190	4	700	24	80	59	10400	52,4	11,5	22	42
Fin spacing 9.0 mm											
F35MCXA-11-9	2750	1	175	20	74	53	2850	7	2,1	12	28
F35MCXA-12-9	3840	1	175	19	74	53	2750	10,5	3,2	12	28
F35MCXA-21-9	5600	2	350	24	77	56	5750	14	4	12	28
F35MCXA-22-9	7700	2	350	23	77	56	5550	21	6	16	28
F35MCXA-31-9	10100	3	525	27	79	58	8450	26,2	7,4	16	35
F35MCXA-32-9	11300	3	525	26	79	58	8300	31,5	8,7	16	35
F35MCXA-41-9	13400	4	700	31	80	59	11300	35	9,7	16	42
F35MCXA-42-9	15100	4	700	30	80	59	11050	41,9	11,5	22	42



Optigo F35MCX
EC fans 1~230 V - 50 Hz
Fan Ø 350 mm

Model	Nominal capacities		EC fans Ø 350 mm							Connections	
	CO ₂ SC2 W	nr.	motor cons. W	air throw m	sound power level dB(A)	sound pressure dB(A)	air flow m ³ /h	coil surface m ²	int. volume dm ³	in mm	out mm
Fin spacing 4.5 mm											
F35MCXE-11-4	3980	1	143	15	74	53	2600	13,1	2,1	12	28
F35MCXE-12-4	5420	1	143	14	74	53	2400	19,7	3,2	12	28
F35MCXE-21-4	8230	2	286	18	77	56	5200	26,2	4	12	28
F35MCXE-22-4	10940	2	286	17	77	56	4800	39,4	6	16	28
F35MCXE-31-4	14990	3	429	21	79	58	7450	49,1	7,4	16	35
F35MCXE-32-4	15050	3	429	20	79	58	7200	59,1	8,7	16	35
F35MCXE-41-4	19560	4	572	24	80	59	9950	65,5	9,7	16	42
F35MCXE-42-4	20630	4	572	23	80	59	9600	78,8	11,5	22	42
Fin spacing 6.0 mm											
F35MCXE-11-6	3490	1	143	16	74	53	2650	10,1	2,1	12	28
F35MCXE-12-6	4820	1	143	15	74	53	2500	15,1	3,2	12	28
F35MCXE-21-6	7140	2	286	19	77	56	5300	20,2	4	12	28
F35MCXE-22-6	9710	2	286	18	77	56	5000	30,2	6	16	28
F35MCXE-31-6	13030	3	429	21	79	58	7700	37,9	7,4	16	35
F35MCXE-32-6	13690	3	429	20	79	58	7500	45,3	8,7	16	35
F35MCXE-41-6	17120	4	572	24	80	59	10300	50,5	9,7	16	42
F35MCXE-42-6	18620	4	572	23	80	59	10000	60,4	11,5	22	42
Fin spacing 7.0 mm											
F35MCXE-11-7	3170	1	143	16	74	53	2700	8,7	2,1	12	28
F35MCXE-12-7	4420	1	143	15	74	53	2600	13,1	3,2	12	28
F35MCXE-21-7	6460	2	286	19	77	56	5400	17,4	4	12	28
F35MCXE-22-7	8890	2	286	18	77	56	5200	26,2	6	16	28
F35MCXE-31-7	11780	3	429	21	79	58	7950	32,6	7,4	16	35
F35MCXE-32-7	12700	3	429	20	79	58	7800	39,3	8,7	16	35
F35MCXE-41-7	15530	4	572	25	80	59	10600	43,5	9,7	16	42
F35MCXE-42-7	17190	4	572	24	80	59	10400	52,4	11,5	22	42
Fin spacing 9.0 mm											
F35MCXE-11-9	2750	1	143	20	74	53	2850	7	2,1	12	28
F35MCXE-12-9	3840	1	143	19	74	53	2750	10,5	3,2	12	28
F35MCXE-21-9	5600	2	286	24	77	56	5750	14	4	12	28
F35MCXE-22-9	7700	2	286	23	77	56	5550	21	6	16	28
F35MCXE-31-9	10100	3	429	27	79	58	8450	26,2	7,4	16	35
F35MCXE-32-9	11300	3	429	26	79	58	8300	31,5	8,7	16	35
F35MCXE-41-9	13400	4	572	31	80	59	11300	35	9,7	16	42
F35MCXE-42-9	15100	4	572	30	80	59	11050	41,9	11,5	22	42



Commercial

Product range

Angled air coolers

Mini air coolers for general application in small to medium-sized cooling and freezing rooms. The casing design is characterised by a low silhouette.

Optigo CS



FHA



Cubic air coolers

Single discharge unit cooler for small to medium-sized cooling and freezing rooms.

Optigo FMC



FHC



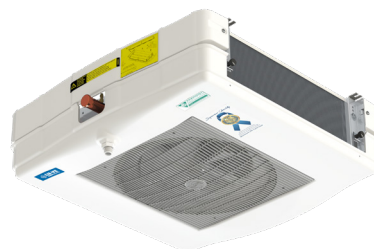
Dual discharge air coolers

Dual discharge air cooler for small to medium-sized cooling, freezing and working rooms. Low air velocity and noise level make them especially suitable for refrigerated working & processing rooms.

Optigo FMD



FHD





Product selection

Selection and pricing is to be performed with our online air heat exchanger selection software [Plair](#).

Selection output includes all relevant technical data and dimensional drawings.

Alfa LU-VE in brief

Alfa LU-VE is a leading global provider of specialized products and engineered solutions.

Our equipment, systems and services are dedicated to helping customers optimize the performance of their processes.

Time and time again.

We help our customers to cool products such as water, food-stuffs, beverages, chemicals, pharmaceuticals and oil.

Our worldwide organization works closely with customers to help them stay ahead.

How to contact Alfa LU-VE

Up-to-date Alfa LU-VE contact details for all countries are always available on our website at alfa.luvegroup.com



Optigo FMC



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