

Condensers

ECA



21 kW

876 kW



EUROVENT
CERTIFIED PERFORMANCE



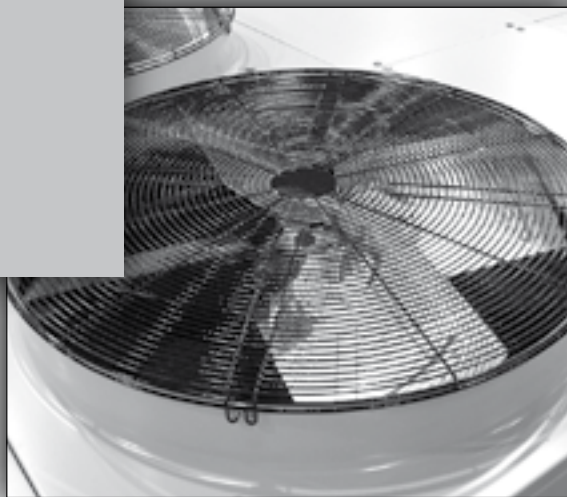
CERTIFY ALL
AIR COOLED CONDENSERS

FRIGA-BOHN



www.friga-bohn.com

The air-cooled condensers of the ECA line are designed for refrigeration and air conditioning applications. The 389 basic models cover a power range from 21 to 876 kW. The «floating» coil design limits the risk of leaks around the end and intermediate plates due to transport and handling conditions.



ECA



NOMENCLATURE ...

ECA 06P 7 L03 A3

Condenser		Module	
	Ø 762 mm	Ø 900 mm	
06P	950 r.p.m.	900 r.p.m.	Number of fans
08P	720 r.p.m.	700 r.p.m.	
12N	660 r.p.m.	570 r.p.m.	
12P	450 r.p.m.	430 r.p.m.	
16P	380 r.p.m.	320 r.p.m.	
7 = Ø 762 mm		Fan arrangement :	
9 = Ø 900 mm		L : in line	
		P : in parallel	

DESCRIPTION ...

HIGH-TECH HEAT EXCHANGER

- The air-cooled condensers of the ECA line are equipped with highperformance finned coils using corrugated aluminium fins crimped to internally grooved copper tubes.
- Operation with screw compressors oil-cooled in a liquid trap requires a specially designed coil circuit : please contact us for this application.

VENTILATION

- The fan assemblies are equipped with the following motors:
 - Ø 762 mm : 06P = 950 r.p.m., 08P = 720 r.p.m., 12N = 660 r.p.m., 12P = 450 r.p.m., 16P = 380 r.p.m.
 - Ø 900 mm : 06P = 900 r.p.m., 08P = 700 r.p.m., 12N = 570 r.p.m., 12P = 430 r.p.m., 16P = 320 r.p.m.
- These motors are of the type 400 V 3-ph, 50 Hz, totally enclosed, IP55, class F, conforming to standard CEI 34-1, permanently lubricated.
- Please consult us when the outlet air temperature exceeds 60°C.
- The motors are factory-wired in :
 - a junction box for the L models (line motors).
 - 2 junction boxes for the P models (parallel motors).
- 12N motors are obtained by factory-wiring the 8P motors in star (Y) and 16P motors are obtained by factory-wiring the 12P motors in star (Y).
- The fan guard complies to NF E51.190 standard.
- In the case of installation with a horizontal air flow, the dominant wind direction must be taken into consideration to avoid any risk of fan damage (fan rotating in the wrong direction during stoppage periods) or difficult fan start up at low rotation speeds.
- Fans with external rotor are optionally available.

CASING

- The casing is made of galvanised steel sheets and grey enamelled galvanised steel RAL7035.
- The use of 18/10 stainless steel nuts and bolts offers a high resistance to corrosion (ISO 7253 standard) as well as high quality aesthetics.
- All components have passed the corrosion tests: salt spray and Kesternich cycles.
- The condensers are screwed onto a wooden pallet.

PROTECTION AND REGULATION

- CMP option** : motor protection enclosure. A factory-wired assembly comprising:
 - IP55 enclosure,
 - Switches/main circuit-breaker with position indicator contacts,
 - One thermal overload per motor,
 - General fault indication: a normally-open contact (NO) and a normally-closed contact (NC),
- RP1 option** : option CMP plus regulation by fan cycling:
 - Electronic pressure switch control.
 - Electronic sensor pressure measurement.
- RP2 option** : option CMP plus speed controller regulation:
 - Electronic speed controller with voltage regulator.
 - Electronic sensor pressure measurement.
- RP3 option** : option CMP plus speed controller regulation:
 - Electronic speed controller with frequency regulator.
 - Electronic sensor pressure measurement.
- RP4 option** : pressure regulation with electronic motor speed control.

CERTIFICATIONS



EUROVENT : The performance published of our products are certified in conformity with european standards EN327.

ISO 9001 : Our company is certified by LRQA to comply with quality standards ISO 9001 : 2000.

RoHS - WEEE : Our products are compliant with regards to european guideline 2002/95/CE and 2002/96/CE concerning electric and enlectronic components.

CE : Our products are in conformity with european guidelines.

GOST : Products in conformity with "GOST" agreement.

Multiple selection criteria for a specific capacity range:

- 5 fan speeds for a noise level adapted to the environment,
- low fan rotation speed for reduced power consumption,
- various width, length and air direction combinations, vertical or horizontal, for perfect site adaptation,
- number of fans selected for simplified control and wiring,
- easy head pressure control, enabling selection of the condenser best adapted to site requirements.

OPTIONS ...

COIL

MCI	Multi-circuiting.
BYD	Blygold Plus coating of the fins: please consult us.
BAE	Coating of the fins.
BCC	Copper fins: please consult us.

FANS

M60	60 Hz fan assembly (adapted fan vanes).
M25	3-phase 230 V 50 Hz fan assemblies.
M26	3-phase 230 V 60 Hz fan assemblies.
MTH	Motors with overload thermostat. Recommended when the system could start very frequently (more than 30 starts per hour) or when used with a speed controller.
MVZ	Ø 900 : External rotor fan assembly (height +120 mm).
IRP	Rotary proximity switch(es).
C2V	Factory wiring in two speed into a common junction box (except 06P).

CASING

REH	Legs extended by 250 mm.
RE2	Legs extended by 840 mm.
ECB	Full crate.
RAL	Special colour.

PROTECTION AND REGULATION

CMP*	Motor protection enclosure (contactors, main circuit-breaker...).
RP1*	Fan cycling head pressure control cabinet.
RP2*	Speed variation (voltage) condensation pressure control cabinet.
RP3*	Speed variation (frequency) condensation pressure control cabinet.
RP4*	Pressure regulation with electronic motor speed control.
MSK	Floor mounting kit.

* see specific leaflet CMP.RP1.RP2.RP3.RP4

TO MULTIPLY BY THE NUMBER OF MODULES

Module	m ²	06P	08P	m ³ /h 12N	12P	16P	dm ³
A1	97	15580	11575	10304	6866	5563	10
A2	129	14457	10697	9503	6162	-	13
A3	162	13577	9885	8698	-	4860	16
A4	194	12773	9162	-	-	-	19
B1	136	22391	17221	13330	10088	7014	14
B2	181	21264	16095	12400	9287	-	18
B3	226	19985	15098	11500	-	-	23
B4	272	18939	14187	-	-	-	27
C1	170	23416	18330	14470	10923	7725	17
C2	226	22579	17409	13466	10195	-	23
C3	283	21708	16576	12876	-	-	28
C4	340	20849	15778	-	-	-	34
D1	204	23978	19014	15314	11431	8223	20
D2	272	23393	18291	14422	10851	-	27
D3	340	22760	17580	13628	-	-	34
D4	407	22105	16921	-	-	-	41

EXAMPLE

ECA 06P 9L04 B1

4 modules

Surface area

$$136 \times 4 = 544 \text{ m}^2$$

Air volume

$$22391 \times 4 = 88564 \text{ m}^3/\text{h}$$

Internal volume

$$14 \times 4 = 56 \text{ dm}^3$$

NOISE LEVELS LwA

Ø	Type	r.p.m.	Sound power per fan LwA							
			Hz	125	250	500	1000	2000	4000	8000
Ø 762 mm	06P	950	69	82	82	84	82	78	68	89
	08P	720	70	74	74	75	73	68	56	81
	12N	660	64	70	70	71	69	62	49	77
	12P	450	55	58	62	63	58	50	40	67
	16P	380	48	49	52	53	46	38	32	57
Ø 900 mm	06P	900	74	87	87	89	87	83	73	94
	08P	700	75	79	79	80	78	73	61	86
	12N	570	69	75	75	76	74	67	54	82
	12P	430	60	63	67	68	63	55	45	72
	16P	320	53	54	57	58	51	43	37	62

ECA 06P .L.. ..

(Ø 762 = 950 r.p.m. / Ø 900 = 900 r.p.m.)

Models	Capa. - R404A	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight
	DT1 = 15K (1)	Lp (2)	Lp (3)	(4)	P/M (5)		length	width	Inlet	Outlet	
	kW	dB(A)	dB(A)	kW tot.	Num.		mm	mm	Ø	Ø	kg
ECA 06P 7L01 A1	37.15	51	58	1.70	3/39	E	1280	1226	7/8"	7/8"	165
ECA 06P 7L01 A2	43.66	51	58	1.70	4/52	E	1280	1226	7/8"	7/8"	174
ECA 06P 7L01 A3	47.75	51	58	1.70	5/65	E	1280	1226	7/8"	7/8"	183
ECA 06P 7L01 A4	50.33	51	58	1.70	6/78	E	1280	1226	7/8"	7/8"	192
ECA 06P 9L01 B1	52.44	56	63	2.45	3/39	E	1680	1226	7/8"	7/8"	193
ECA 06P 9L01 C1	59.30	56	62	2.45	9/39	E	2030	1226	7/8"	7/8"	215
ECA 06P 9L01 B2	61.10	56	63	2.45	4/52	E	1680	1226	7/8"	7/8"	206
ECA 06P 9L01 D1	67.31	56	62	2.45	9/39	E	2380	1226	7/8"	7/8"	239
ECA 06P 9L01 B3	69.17	56	63	2.45	5/65	E	1680	1226	7/8"	7/8"	218
ECA 06P 9L01 C2	70.82	56	62	2.45	5/52	E	2030	1226	7/8"	7/8"	230
ECA 06P 9L01 B4	73.00	56	63	2.45	6/78	E	1680	1226	7/8"	7/8"	231
ECA 06P 7L02 A1	74.30	54	60	3.40	9/39	E	2282	1226	7/8"	7/8"	275
ECA 06P 9L01 D2	77.14	56	62	2.45	10/52	D	2380	1226	1"1/8	1"1/8	257
ECA 06P 9L01 C3	78.90	56	62	2.45	7/65	D	2030	1226	1"1/8	1"1/8	246
ECA 06P 9L01 C4	84.76	56	62	2.45	7/78	D	2030	1226	1"1/8	1"1/8	261
ECA 06P 9L01 D3	86.23	56	62	2.45	7/65	D	2380	1226	1"1/8	1"1/8	276
ECA 06P 7L02 A2	87.31	54	60	3.40	10/52	E	2282	1226	1"1/8	1"1/8	293
ECA 06P 9L01 D4	93.19	56	62	2.45	13/78	D	2380	1226	1"1/8	1"1/8	295
ECA 06P 7L02 A3	95.49	54	60	3.40	13/65	E	2282	1226	1"1/8	1"1/8	311
ECA 06P 9L02 B1	104.88	59	65	4.90	9/39	E	3082	1226	1"1/8	1"1/8	332
ECA 06P 7L03 A1	111.45	56	62	5.10	13/39	E	3284	1226	1"1/8	1"1/8	397
ECA 06P 9L02 C1	118.59	59	65	4.90	9/39	E	3782	1226	1"1/8	1"1/8	386
ECA 06P 9L02 B2	122.20	59	65	4.90	10/52	E	3082	1226	1"1/8	1"1/8	357
ECA 06P 7L03 A2	130.97	56	62	5.10	13/52	E	3284	1226	1"1/8	1"1/8	424
ECA 06P 9L02 D1	134.62	59	65	4.90	13/39	E	4482	1226	1"3/8	1"3/8	434
ECA 06P 9L02 B3	138.35	59	65	4.90	13/65	E	3082	1226	1"3/8	1"3/8	382
ECA 06P 9L02 C2	141.64	59	65	4.90	10/52	E	3782	1226	1"3/8	1"3/8	417
ECA 06P 7L03 A3	143.24	56	62	5.10	13/65	E	3284	1226	1"3/8	1"3/8	450
ECA 06P 9L02 B4	146.01	59	65	4.90	13/78	E	3082	1226	1"3/8	1"3/8	407
ECA 06P 7L03 A4	150.98	56	62	5.10	13/78	E	3284	1226	1"3/8	1"3/8	477
ECA 06P 9L02 D2	154.28	59	65	4.90	13/52	D	4482	1226	1"3/8	1"3/8	471
ECA 06P 9L03 B1	157.31	61	67	7.35	13/39	E	4484	1226	1"3/8	1"3/8	481
ECA 06P 9L02 C3	157.80	59	65	4.90	13/65	D	3782	1226	1"3/8	1"3/8	448
ECA 06P 9L02 C4	169.52	59	65	4.90	13/78	D	3782	1226	1"3/8	1"3/8	480
ECA 06P 9L02 D3	172.45	59	65	4.90	13/65	D	4482	1226	1"3/8	1"3/8	509
ECA 06P 9L03 C1	177.89	61	67	7.35	13/39	E	5534	1226	1"3/8	1"3/8	557
ECA 06P 9L03 B2	183.30	61	67	7.35	13/52	E	4484	1226	1"3/8	1"3/8	519
ECA 06P 9L02 D4	186.39	59	65	4.90	19/78	D	4482	1226	1"3/8	1"3/8	546
ECA 06P 9L03 B3	207.52	61	67	7.35	21/65	E	4484	1226	1"5/8	1"5/8	556
ECA 06P 9L04 B1	209.75	62	68	9.80	13/39	E	5886	1226	1"5/8	1"5/8	620
ECA 06P 9L03 C2	212.46	61	67	7.35	17/52	E	5534	1226	1"5/8	1"5/8	604
ECA 06P 9L03 B4	219.01	61	67	7.35	19/78	E	4484	1226	1"5/8	1"5/8	594
ECA 06P 9L03 C3	236.69	61	67	7.35	21/65	D	5534	1226	1"5/8	1"5/8	651
ECA 06P 9L04 B2	244.40	62	68	9.80	17/52	E	5886	1226	1"5/8	1"5/8	670
ECA 06P 9L03 C4	254.29	61	67	7.35	26/78	D	5534	1226	1"5/8	1"5/8	698
ECA 06P 9L05 B1	262.19	63	69	12.25	19/39	E	7288	1226	1"5/8	1"5/8	770
ECA 06P 9L04 B3	276.70	62	68	9.80	21/65	E	5886	1226	1"5/8	1"5/8	720
ECA 06P 9L04 C2	283.28	62	68	9.80	26/52	E	7286	1226	2"1/8	2"1/8	791
ECA 06P 9L04 B4	292.02	62	68	9.80	26/78	E	5886	1226	2"1/8	2"1/8	770
ECA 06P 9L05 B2	305.50	63	69	12.25	26/52	E	7288	1226	2"1/8	2"1/8	832
ECA 06P 9L04 C3	315.59	62	68	9.80	21/65	D	7286	1226	2"1/8	2"1/8	853
ECA 06P 9L04 C4	339.05	62	68	9.80	26/78	D	7286	1226	2"1/8	2"1/8	916
ECA 06P 9L05 B3	345.87	63	69	12.25	21/65	E	7288	1226	2"1/8	2"1/8	895
ECA 06P 9L05 B4	365.02	63	69	2.25	26/78	E	7288	1226	2"1/8	2"1/8	957
ECA 06P 9L05 C1	296.48	63	69	12.25	19/39	E	9038	1226	2"1/8	2"1/8	910
ECA 06P 9L06 B1	314.63	64	70	14.70	19/39	E	8690	1226	2"1/8	2"1/8	930
ECA 06P 9L05 C2	354.10	63	69	12.25	26/52	E	9038	1226	2"1/8	2"1/8	990
ECA 06P 9L06 B2	366.60	64	70	14.70	26/52	E	8690	1226	2"1/8	2"1/8	1000
ECA 06P 9L05 C3	394.49	63	69	12.25	32/65	D	9038	1226	2"1/8	2"1/8	1070
ECA 06P 9L06 B3	415.04	64	70	14.70	32/65	E	8690	1226	2"1/8	2"1/8	1070
ECA 06P 9L05 C4	423.81	63	69	12.25	39/78	D	9038	1226	2"1/8	2"1/8	1150
ECA 06P 9L06 B4	438.03	64	70	14.70	39/78	E	8690	1226	2"1/8	2"1/8	1140

Fans : Ø 762/900 mm - 400 V/3/50 Hz Δ : 2600W max - 6A max (6)
 (1) (2) (3) (4) (5) and (6) see next page.

ECA 06P .P.. ..

(Ø 900 = 900 r.p.m.)

Models	Capa. - R404A	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight
	DT1 = 15K (1)	Lp (2)	Lp (3)	(4)	P/M (5)		length	width	Inlet	Outlet	
	kW	dB(A)	dB(A)	kW tot.	Num.		mm	mm	Ø	Ø	kg
ECA 06P 9P02 B1	104.88	59	65	4.90	6/78	E	1680	2310	7/8"	7/8"	364
ECA 06P 9P02 C1	118.59	59	65	4.90	18/78	E	2030	2310	7/8"	7/8"	382
ECA 06P 9P02 B2	122.20	59	65	4.90	8/104	E	1680	2310	7/8"	7/8"	389
ECA 06P 9P02 D1	134.62	59	65	4.90	18/78	E	2380	2310	7/8"	7/8"	414
ECA 06P 9P02 B3	138.35	59	65	4.90	10/130	E	1680	2310	7/8"	7/8"	414
ECA 06P 9P02 C2	141.64	59	65	4.90	10/104	E	2030	2310	7/8"	7/8"	413
ECA 06P 9P02 B4	146.01	59	65	4.90	12/156	E	1680	2310	7/8"	7/8"	439
ECA 06P 9P02 D2	154.28	59	65	4.90	20/104	D	2380	2310	1"1/8	1"1/8	452
ECA 06P 9P02 C3	157.80	59	65	4.90	14/130	D	2030	2310	1"1/8	1"1/8	444
ECA 06P 9P02 C4	169.52	59	65	4.90	14/156	D	2030	2310	1"1/8	1"1/8	475
ECA 06P 9P02 D3	172.45	59	65	4.90	14/130	D	2380	2310	1"1/8	1"1/8	489
ECA 06P 9P02 D4	186.39	59	65	4.90	26/156	D	2380	2310	1"1/8	1"1/8	527
ECA 06P 9P04 B1	209.75	62	68	9.80	18/78	E	3082	2310	1"1/8	1"1/8	614
ECA 06P 9P04 C1	237.18	62	68	9.80	18/78	E	3782	2310	1"1/8	1"1/8	671
ECA 06P 9P04 B2	244.40	62	68	9.80	20/104	E	3082	2310	1"1/8	1"1/8	664
ECA 06P 9P04 D1	269.24	62	68	9.80	26/78	E	4482	2310	1"3/8	1"3/8	737
ECA 06P 9P04 B3	276.70	62	68	9.80	26/130	E	3082	2310	1"3/8	1"3/8	714
ECA 06P 9P04 C2	283.28	62	68	9.80	20/104	E	3782	2310	1"3/8	1"3/8	733
ECA 06P 9P04 B4	292.02	62	68	9.80	26/156	E	3082	2310	1"3/8	1"3/8	764
ECA 06P 9P04 D2	308.56	62	68	9.80	26/104	D	4482	2310	1"3/8	1"3/8	812
ECA 06P 9P06 B1	314.63	64	70	14.70	26/78	E	4484	2310	1"3/8	1"3/8	875
ECA 06P 9P04 C3	315.59	62	68	9.80	26/130	D	3782	2310	1"3/8	1"3/8	796
ECA 06P 9P04 C4	339.05	62	68	9.80	26/156	D	3782	2310	1"3/8	1"3/8	858
ECA 06P 9P04 D3	344.91	62	68	9.80	26/130	D	4482	2310	1"3/8	1"3/8	887
ECA 06P 9P06 C1	355.77	64	70	14.70	26/78	E	5534	2310	1"3/8	1"3/8	960
ECA 06P 9P06 B2	366.60	64	70	14.70	26/104	E	4484	2310	1"3/8	1"3/8	950
ECA 06P 9P04 D4	372.77	62	68	9.80	38/156	D	4482	2310	1"3/8	1"3/8	962
ECA 06P 9P06 B3	415.04	64	70	14.70	42/130	E	4484	2310	1"5/8	1"5/8	1025
ECA 06P 9P08 B1	419.50	65	71	19.60	26/78	E	5886	2310	1"5/8	1"5/8	1125
ECA 06P 9P06 C2	424.92	64	70	14.70	34/104	E	5534	2310	1"5/8	1"5/8	1054
ECA 06P 9P06 B4	438.03	64	70	14.70	38/156	E	4484	2310	1"5/8	1"5/8	1100
ECA 06P 9P06 C3	473.39	64	70	14.70	42/130	D	5534	2310	1"5/8	1"5/8	1147
ECA 06P 9P08 B2	488.79	65	71	19.60	34/104	E	5886	2310	1"5/8	1"5/8	1224
ECA 06P 9P06 C4	508.57	64	70	14.70	52/156	D	5534	2310	1"5/8	1"5/8	1241
ECA 06P 9P10 B1	524.38	66	72	24.50	38/78	E	7288	2310	1"5/8	1"5/8	1385
ECA 06P 9P08 D1	538.47	65	71	19.60	38/78	E	8686	2310	1"5/8	1"5/8	1324
ECA 06P 9P08 B3	553.39	65	71	19.60	42/130	E	5886	2310	1"5/8	1"5/8	1324
ECA 06P 9P08 C2	566.55	65	71	19.60	52/104	E	7286	2310	2"1/8	2"1/8	1374
ECA 06P 9P08 B4	584.04	65	71	19.60	52/156	E	5886	2310	2"1/8	2"1/8	1424
ECA 06P 9P10 C1	592.96	66	72	24.50	38/78	E	9038	2310	2"1/8	2"1/8	1539
ECA 06P 9P10 B2	610.99	66	72	24.50	52/104	E	7288	2310	2"1/8	2"1/8	1510
ECA 06P 9P08 D2	617.13	65	71	19.60	52/104	D	8686	2310	2"1/8	2"1/8	1474
ECA 06P 9P12 B1	629.25	67	73	29.40	38/78	E	8690	2310	2"1/8	2"1/8	1635
ECA 06P 9P08 C3	631.18	65	71	19.60	42/130	D	7286	2310	2"1/8	2"1/8	1499
ECA 06P 9P08 C4	678.10	65	71	19.60	52/156	D	7286	2310	2"1/8	2"1/8	1624
ECA 06P 9P08 D3	689.82	65	71	19.60	64/130	D	8686	2310	2"1/8	2"1/8	1624
ECA 06P 9P10 B3	691.74	66	72	24.50	42/130	E	7288	2310	2"1/8	2"1/8	1635
ECA 06P 9P10 C2	708.19	66	72	24.50	52/104	E	9038	2310	2"1/8	2"1/8	1694
ECA 06P 9P10 B4	730.04	66	72	24.50	52/156	E	7288	2310	2"1/8	2"1/8	1760
ECA 06P 9P12 B2	733.19	67	73	29.40	52/104	E	8690	2310	2"1/8	2"1/8	1785
ECA 06P 9P08 D4	745.55	65	71	19.60	78/156	D	8686	2310	2"1/8	2"1/8	1775
ECA 06P 9P10 C3	788.98	66	72	24.50	64/130	D	9038	2310	2"1/8	2"1/8	1851
ECA 06P 9P12 B3	830.09	67	73	29.40	64/130	E	8690	2310	2"1/8	2"1/8	1935
ECA 06P 9P10 C4	847.62	66	72	24.50	78/156	D	9038	2310	2"1/8	2"1/8	2007
ECA 06P 9P12 B4	876.05	67	73	29.40	78/156	E	8690	2310	2"1/8	2"1/8	2085

Fans : Ø 900 mm - 400 V/3/50 Hz Δ : 2600W max. - 6A max (6)

- (1) The capacities are given in kW for R404A refrigerant with DT1 = 15 K. They are equal to the capacities measured in accordance with the CEN EN 327 European draft. 'DT1' represents the difference between the entering air temperature and the condensing temperature considered as being equal to the pressure equivalent of the condenser inlet.
- (2) Sound pressure level in dB(A) measured at 10 meters distance, at fan blade level, in a free field on a reflective plan, given as indicative value. Only the acoustic power and the Lw value, are contractual and usable for the calculation of the sound pressure level data at owner land limits.
- (3) The sound pressure in dB(A) measured at a line-of-sight to reflecting parallelepiped surface distance of 10 meters, is given as an indication only. Values measured under normal working conditions with a clean coil at nominal voltage.
- (4) Power required for all motors.
- (5) Condensers with multicircuits: P = preferred number of circuits (short delivery time), M = maximum number of circuits.
- (6) Setting of overbad protections.

ECA 08P .L.. ..

(Ø 762 = 720 r.p.m. / Ø 900 = 700 r.p.m.)

Models	Capa. - R404A	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight
	DT1 = 15K (1)	Lp (2)	Lp (3)	(4)	P/M (5)		length	width	Inlet	Outlet	
	kW	dB(A)	dB(A)	kW tot.	Num.		mm	mm	Ø	Ø	kg
ECA 08P 7L01 A1	32.28	43	50	0.90	3/39	D	1280	1226	7/8"	7/8"	165
ECA 08P 7L01 A2	37.03	43	50	0.90	4/52	D	1280	1226	7/8"	7/8"	174
ECA 08P 7L01 A3	39.49	43	50	0.90	5/65	D	1280	1226	7/8"	7/8"	183
ECA 08P 7L01 A4	40.28	43	50	0.90	6/78	D	1280	1226	7/8"	7/8"	192
ECA 08P 9L01 B1	46.63	48	55	1.34	3/39	D	1680	1226	7/8"	7/8"	193
ECA 08P 9L01 C1	53.09	48	54	1.34	9/39	D	2030	1226	7/8"	7/8"	215
ECA 08P 9L01 B2	53.26	48	55	1.34	4/52	D	1680	1226	7/8"	7/8"	206
ECA 08P 9L01 B3	58.60	48	55	1.34	5/65	D	1680	1226	7/8"	7/8"	218
ECA 08P 9L01 D1	59.87	48	54	1.34	9/39	D	2380	1226	7/8"	7/8"	239
ECA 08P 9L01 B4	60.49	48	55	1.34	6/78	C	1680	1226	7/8"	7/8"	231
ECA 08P 9L01 C2	61.61	48	54	1.34	5/52	C	2030	1226	7/8"	7/8"	230
ECA 08P 7L02 A1	64.57	46	52	1.80	9/39	D	2282	1226	7/8"	7/8"	275
ECA 08P 9L01 C3	67.09	48	54	1.34	7/65	C	2030	1226	1"1/8	1"1/8	246
ECA 08P 9L01 D2	67.58	48	54	1.34	10/52	C	2380	1226	1"1/8	1"1/8	257
ECA 08P 9L01 C4	70.03	48	54	1.34	7/78	C	2030	1226	1"1/8	1"1/8	261
ECA 08P 9L01 D3	73.73	48	54	1.34	7/65	C	2380	1226	1"1/8	1"1/8	276
ECA 08P 7L02 A2	74.05	46	52	1.80	10/52	D	2282	1226	1"1/8	1"1/8	293
ECA 08P 9L01 D4	77.16	48	54	1.34	13/78	C	2380	1226	1"1/8	1"1/8	295
ECA 08P 7L02 A3	78.98	46	52	1.80	13/65	D	2282	1226	1"1/8	1"1/8	311
ECA 08P 9L02 B1	93.26	51	57	2.68	9/39	D	3082	1226	1"1/8	1"1/8	332
ECA 08P 7L03 A1	96.85	48	54	2.70	13/39	D	3284	1226	1"1/8	1"1/8	397
ECA 08P 9L02 C1	106.17	51	57	2.68	9/39	D	3782	1226	1"1/8	1"1/8	386
ECA 08P 9L02 B2	106.52	51	57	2.68	10/52	D	3082	1226	1"1/8	1"1/8	357
ECA 08P 7L03 A2	111.08	48	54	2.70	13/52	D	3284	1226	1"1/8	1"1/8	424
ECA 08P 9L02 B3	117.19	51	57	2.68	13/65	D	3082	1226	1"3/8	1"3/8	382
ECA 08P 7L03 A3	118.48	48	54	2.70	13/65	D	3284	1226	1"3/8	1"3/8	450
ECA 08P 9L02 D1	119.74	51	57	2.68	13/39	D	4482	1226	1"3/8	1"3/8	434
ECA 08P 7L03 A4	120.84	48	54	2.70	13/78	D	3284	1226	1"3/8	1"3/8	477
ECA 08P 9L02 B4	120.98	51	57	2.68	13/78	C	3082	1226	1"3/8	1"3/8	407
ECA 08P 9L02 C2	123.22	51	57	2.68	10/52	C	3782	1226	1"3/8	1"3/8	417
ECA 08P 9L02 C3	134.17	51	57	2.68	13/65	C	3782	1226	1"3/8	1"3/8	448
ECA 08P 9L02 D2	135.17	51	57	2.68	13/52	C	4482	1226	1"3/8	1"3/8	471
ECA 08P 9L03 B1	139.89	53	59	4.02	13/39	D	4484	1226	1"3/8	1"3/8	481
ECA 08P 9L02 C4	140.07	51	57	2.68	13/78	C	3782	1226	1"3/8	1"3/8	480
ECA 08P 9L02 D3	147.46	51	57	2.68	13/65	C	4482	1226	1"3/8	1"3/8	509
ECA 08P 9L02 D4	154.31	51	57	2.68	19/78	C	4482	1226	1"3/8	1"3/8	546
ECA 08P 9L03 C1	159.26	53	59	4.02	13/39	D	5534	1226	1"3/8	1"3/8	557
ECA 08P 9L03 B2	159.78	53	59	4.02	13/52	D	4484	1226	1"3/8	1"3/8	519
ECA 08P 9L03 B3	175.79	53	59	4.02	21/65	D	4484	1226	1"5/8	1"5/8	556
ECA 08P 9L03 B4	181.47	53	59	4.02	19/78	C	4484	1226	1"5/8	1"5/8	594
ECA 08P 9L03 C2	184.83	53	59	4.02	17/52	C	5534	1226	1"5/8	1"5/8	604
ECA 08P 9L04 B1	186.52	54	60	5.36	13/39	D	5886	1226	1"5/8	1"5/8	620
ECA 08P 9L03 C3	201.26	53	59	4.02	21/65	C	5534	1226	1"5/8	1"5/8	651
ECA 08P 9L03 C4	210.10	53	59	4.02	26/78	C	5534	1226	1"5/8	1"5/8	698
ECA 08P 9L04 B2	213.03	54	60	5.36	17/52	D	5886	1226	1"5/8	1"5/8	670
ECA 08P 9L05 B1	233.15	55	61	6.70	19/39	D	7288	1226	1"5/8	1"5/8	770
ECA 08P 9L04 B3	234.39	54	60	5.36	21/65	D	5886	1226	1"5/8	1"5/8	720
ECA 08P 9L04 B4	241.96	54	60	5.36	26/78	C	5886	1226	2"1/8	2"1/8	770
ECA 08P 9L04 C2	246.44	54	60	5.36	26/52	C	7286	1226	2"1/8	2"1/8	791
ECA 08P 9L05 B2	266.29	55	61	6.70	26/52	D	7288	1226	2"1/8	2"1/8	832
ECA 08P 9L04 C3	268.34	54	60	5.36	21/65	C	7286	1226	2"1/8	2"1/8	853
ECA 08P 9L04 C4	280.14	54	60	5.36	26/78	C	7286	1226	2"1/8	2"1/8	916
ECA 08P 9L05 B3	292.99	55	61	6.70	21/65	D	7288	1226	2"1/8	2"1/8	895
ECA 08P 9L05 B4	302.45	55	61	6.70	26/78	C	7288	1226	2"1/8	2"1/8	957
ECA 08P 9L05 C1	265.43	55	61	6.70	19/39	D	9038	1226	2"1/8	2"1/8	910
ECA 08P 9L06 B1	279.79	56	62	8.04	19/39	D	8690	1226	2"1/8	2"1/8	930
ECA 08P 9L05 C2	308.05	55	61	6.70	26/52	C	9038	1226	2"1/8	2"1/8	990
ECA 08P 9L06 B2	319.55	56	62	8.04	26/52	D	8690	1226	2"1/8	2"1/8	1000
ECA 08P 9L05 C3	335.43	55	61	6.70	32/65	C	9038	1226	2"1/8	2"1/8	1070
ECA 08P 9L05 C4	350.17	55	61	6.70	39/78	C	9038	1226	2"1/8	2"1/8	1150
ECA 08P 9L06 B3	351.58	56	62	8.04	32/65	D	8690	1226	2"1/8	2"1/8	1070
ECA 08P 9L06 B4	362.95	56	62	8.04	39/78	C	8690	1226	2"1/8	2"1/8	1140

Fans : Ø 762/900 mm - 400 V/3/50 Hz Δ : 1350W max. - 4A max (6)
 (1) (2) (3) (4) (5) and (6) see next page.

ECA 08P .P.. ..

(Ø 900 = 700 r.p.m.)

Models	Capa. - R404A	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight
	DT1 = 15K (1)	Lp (2)	Lp (3)	(4)	P/M (5)		length	width	Inlet	Outlet	
	KW	dB(A)	dB(A)	KW tot.	Num.		mm	mm	Ø	Ø	kg
ECA 08P 9P02 B1	93.26	51	57	2.68	6/78	D	1680	2310	7/8"	7/8"	364
ECA 08P 9P02 C1	106.17	51	57	2.68	18/78	D	2030	2310	7/8"	7/8"	382
ECA 08P 9P02 B2	106.52	51	57	2.68	8/104	D	1680	2310	7/8"	7/8"	389
ECA 08P 9P02 B3	117.19	51	57	2.68	10/130	D	1680	2310	7/8"	7/8"	414
ECA 08P 9P02 D1	119.74	51	57	2.68	18/78	D	2380	2310	7/8"	7/8"	414
ECA 08P 9P02 B4	120.98	51	57	2.68	12/156	C	1680	2310	7/8"	7/8"	439
ECA 08P 9P02 C2	123.22	51	57	2.68	10/104	C	2030	2310	7/8"	7/8"	413
ECA 08P 9P02 C3	134.17	51	57	2.68	14/130	C	2030	2310	1"1/8	1"1/8	444
ECA 08P 9P02 D2	135.17	51	57	2.68	20/104	C	2380	2310	1"1/8	1"1/8	452
ECA 08P 9P02 C4	140.07	51	57	2.68	14/156	C	2030	2310	1"1/8	1"1/8	475
ECA 08P 9P02 D3	147.46	51	57	2.68	14/130	C	2380	2310	1"1/8	1"1/8	489
ECA 08P 9P02 D4	154.31	51	57	2.68	26/156	C	2380	2310	1"1/8	1"1/8	527
ECA 08P 9P04 B1	186.52	54	60	5.36	18/78	D	3082	2310	1"1/8	1"1/8	614
ECA 08P 9P04 C1	212.34	54	60	5.36	18/78	D	3782	2310	1"1/8	1"1/8	671
ECA 08P 9P04 B2	213.03	54	60	5.36	20/104	D	3082	2310	1"1/8	1"1/8	664
ECA 08P 9P04 B3	234.39	54	60	5.36	26/130	D	3082	2310	1"3/8	1"3/8	714
ECA 08P 9P04 D1	239.47	54	60	5.36	26/78	D	4482	2310	1"3/8	1"3/8	737
ECA 08P 9P04 B4	241.96	54	60	5.36	26/156	C	3082	2310	1"3/8	1"3/8	764
ECA 08P 9P04 C2	246.44	54	60	5.36	20/104	C	3782	2310	1"3/8	1"3/8	733
ECA 08P 9P04 C3	268.34	54	60	5.36	26/130	C	3782	2310	1"3/8	1"3/8	796
ECA 08P 9P04 D2	270.33	54	60	5.36	26/104	C	4482	2310	1"3/8	1"3/8	812
ECA 08P 9P06 B1	279.78	56	62	8.04	26/78	D	4484	2310	1"3/8	1"3/8	875
ECA 08P 9P04 C4	280.14	54	60	5.36	26/156	C	3782	2310	1"3/8	1"3/8	858
ECA 08P 9P04 D3	294.91	54	60	5.36	26/130	C	4482	2310	1"3/8	1"3/8	887
ECA 08P 9P04 D4	308.62	54	60	5.36	38/156	C	4482	2310	1"3/8	1"3/8	962
ECA 08P 9P06 C1	318.51	56	62	8.04	26/78	D	5534	2310	1"3/8	1"3/8	960
ECA 08P 9P06 B2	319.55	56	62	8.04	26/104	D	4484	2310	1"3/8	1"3/8	950
ECA 08P 9P06 B3	351.58	56	62	8.04	42/130	D	4484	2310	1"5/8	1"5/8	1025
ECA 08P 9P06 B4	362.94	56	62	8.04	38/156	C	4484	2310	1"5/8	1"5/8	1100
ECA 08P 9P06 C2	369.66	56	62	8.04	34/104	C	5534	2310	1"5/8	1"5/8	1054
ECA 08P 9P08 B1	373.05	57	63	10.72	26/78	D	5886	2310	1"5/8	1"5/8	1125
ECA 08P 9P06 C3	402.52	56	62	8.04	42/130	C	5534	2310	1"5/8	1"5/8	1147
ECA 08P 9P06 C4	420.21	56	62	8.04	52/156	C	5534	2310	1"5/8	1"5/8	1241
ECA 08P 9P08 B2	426.07	57	63	10.72	34/104	D	5886	2310	1"5/8	1"5/8	1224
ECA 08P 9P10 B1	466.31	58	64	13.40	38/78	D	7288	2310	1"5/8	1"5/8	1385
ECA 08P 9P08 B3	468.78	57	63	10.72	42/130	D	5886	2310	1"5/8	1"5/8	1324
ECA 08P 9P08 D1	478.94	57	63	10.72	38/78	D	8686	2310	1"5/8	1"5/8	1324
ECA 08P 9P08 B4	483.93	57	63	10.72	52/156	C	5886	2310	2"1/8	2"1/8	1424
ECA 08P 9P08 C2	492.88	57	63	10.72	52/104	C	7286	2310	2"1/8	2"1/8	1374
ECA 08P 9P10 C1	530.86	58	64	13.40	38/78	D	9038	2310	2"1/8	2"1/8	1539
ECA 08P 9P10 B2	532.58	58	64	13.40	52/104	D	7288	2310	2"1/8	2"1/8	1510
ECA 08P 9P08 C3	536.69	57	63	10.72	42/130	C	7286	2310	2"1/8	2"1/8	1499
ECA 08P 9P08 D2	540.66	57	63	10.72	52/104	C	8686	2310	2"1/8	2"1/8	1474
ECA 08P 9P12 B1	559.57	59	65	16.08	38/78	D	8690	2310	2"1/8	2"1/8	1635
ECA 08P 9P08 C4	560.28	57	63	10.72	52/156	C	7286	2310	2"1/8	2"1/8	1624
ECA 08P 9P10 B3	585.97	58	64	13.40	42/130	D	7288	2310	2"1/8	2"1/8	1635
ECA 08P 9P08 D3	589.82	57	63	10.72	64/130	C	8686	2310	2"1/8	2"1/8	1624
ECA 08P 9P10 B4	604.91	58	64	13.40	52/156	C	7288	2310	2"1/8	2"1/8	1760
ECA 08P 9P10 C2	616.10	58	64	13.40	52/104	C	9038	2310	2"1/8	2"1/8	1694
ECA 08P 9P08 D4	617.24	57	63	10.72	78/156	C	8686	2310	2"1/8	2"1/8	1775
ECA 08P 9P12 B2	639.10	59	65	16.08	52/104	D	8690	2310	2"1/8	2"1/8	1785
ECA 08P 9P10 C3	670.86	58	64	13.40	64/130	C	9038	2310	2"1/8	2"1/8	1851
ECA 08P 9P10 C4	700.34	58	64	13.40	78/156	C	9038	2310	2"1/8	2"1/8	2007
ECA 08P 9P12 B3	703.17	59	65	16.08	64/130	D	8690	2310	2"1/8	2"1/8	1935
ECA 08P 9P12 B4	725.89	59	65	16.08	78/156	C	8690	2310	2"1/8	2"1/8	2085

Fans : Ø 900 mm - 400 V/3/50 Hz Δ : 1350W max. - 4A max (6)

(1) The capacities are given in kW for R404A refrigerant with DT1 = 15 K. They are equal to the capacities measured in accordance with the CEN EN 327 European draft. 'DT1' represents the difference between the entering air temperature and the condensing temperature considered as being equal to the pressure equivalent of the condenser inlet.
 (2) Sound pressure level in dB(A) measured at 10 meters distance, at fan blade level, in a free field on a reflective plan, given as indicative value. Only the acoustic power and the Lw value, are contractual and usable for the calculation of the sound pressure level data at owner land limits.
 (3) The sound pressure in dB(A) measured at a line-of-sight to reflecting parallelepiped surface distance of 10 meters, is given as an indication only. Values measured under normal working conditions with a clean coil at nominal voltage.
 (4) Power required for all motors.
 (5) Condensers with multicircuits: P = preferred number of circuits (short delivery time), M = maximum number of circuits.
 (6) Setting of overbad protections.

TECHNICAL DATA ...

ECA 12N .L.. ..

(Ø 762 = 660 r.p.m. / Ø 900 = 570 r.p.m.)

Models	Capa. - R404A DT1 = 15K (1)	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight
	kW	Lp (2) dB(A)	Lp (3) dB(A)	(4) kW tot.	P/M (5) Num.		length mm	width mm	Inlet Ø	Outlet Ø	
ECA 12N 7L01 A1	30.44	39	46	0.63	3/39	C	1280	1226	7/8"	7/8"	165
ECA 12N 7L01 A2	34.59	39	46	0.63	4/52	C	1280	1226	7/8"	7/8"	174
ECA 12N 7L01 A3	36.25	39	46	0.63	5/65	C	1280	1226	7/8"	7/8"	183
ECA 12N 9L01 B1	40.96	44	51	0.88	3/39	C	1680	1226	7/8"	7/8"	193
ECA 12N 9L01 B2	45.95	44	51	0.88	4/52	C	1680	1226	7/8"	7/8"	206
ECA 12N 9L01 C1	46.97	44	51	0.88	9/39	C	2030	1226	7/8"	7/8"	215
ECA 12N 9L01 B3	48.90	44	51	0.88	5/65	C	1680	1226	7/8"	7/8"	218
ECA 12N 9L01 C2	52.84	44	51	0.88	5/52	C	2030	1226	7/8"	7/8"	230
ECA 12N 9L01 D1	52.86	44	51	0.88	9/39	C	2380	1226	7/8"	7/8"	239
ECA 12N 9L01 C3	56.39	44	51	0.88	7/65	C	2030	1226	1"1/8	1"1/8	246
ECA 12N 9L01 D2	58.49	44	51	0.88	10/52	C	2380	1226	1"1/8	1"1/8	257
ECA 12N 7L02 A1	60.88	42	48	1.26	9/39	C	2282	1226	7/8"	7/8"	275
ECA 12N 9L01 D3	61.53	44	51	0.88	7/65	C	2380	1226	1"1/8	1"1/8	276
ECA 12N 7L02 A2	69.18	42	48	1.26	10/52	C	2282	1226	1"1/8	1"1/8	293
ECA 12N 7L02 A3	72.50	42	48	1.26	13/65	C	2282	1226	1"1/8	1"1/8	311
ECA 12N 9L02 B1	81.91	47	53	1.75	9/39	C	3082	1226	1"1/8	1"1/8	332
ECA 12N 7L03 A1	91.31	44	50	1.89	13/39	C	3284	1226	1"1/8	1"1/8	397
ECA 12N 9L02 B2	91.89	47	53	1.75	10/52	C	3082	1226	1"1/8	1"1/8	357
ECA 12N 9L02 C1	93.95	47	53	1.75	9/39	C	3782	1226	1"1/8	1"1/8	386
ECA 12N 9L02 B3	97.80	47	53	1.75	13/65	C	3082	1226	1"3/8	1"3/8	382
ECA 12N 7L03 A2	103.77	44	50	1.89	13/52	C	3284	1226	1"1/8	1"1/8	424
ECA 12N 9L02 C2	105.69	47	53	1.75	10/52	C	3782	1226	1"3/8	1"3/8	417
ECA 12N 9L02 D1	105.72	47	53	1.75	13/39	C	4482	1226	1"3/8	1"3/8	434
ECA 12N 7L03 A3	108.76	44	50	1.89	13/65	C	3284	1226	1"3/8	1"3/8	450
ECA 12N 9L02 C3	112.77	47	53	1.75	13/65	C	3782	1226	1"3/8	1"3/8	448
ECA 12N 9L02 D2	116.98	47	53	1.75	13/52	C	4482	1226	1"3/8	1"3/8	471
ECA 12N 9L03 B1	122.87	49	55	2.63	13/39	C	4484	1226	1"3/8	1"3/8	481
ECA 12N 9L02 D3	123.06	47	53	1.75	13/65	B	4482	1226	1"3/8	1"3/8	509
ECA 12N 9L03 B2	137.84	49	55	2.63	13/52	C	4484	1226	1"3/8	1"3/8	519
ECA 12N 9L03 C1	140.92	49	55	2.63	13/39	C	5534	1226	1"3/8	1"3/8	557
ECA 12N 9L03 B3	146.71	49	55	2.63	21/65	C	4484	1226	1"5/8	1"5/8	556
ECA 12N 9L03 C2	158.53	49	55	2.63	17/52	C	5534	1226	1"5/8	1"5/8	604
ECA 12N 9L04 B1	163.83	50	56	3.50	13/39	C	5886	1226	1"5/8	1"5/8	620
ECA 12N 9L03 C3	169.16	49	55	2.63	21/65	C	5534	1226	1"5/8	1"5/8	651
ECA 12N 9L04 B2	183.79	50	56	3.50	17/52	C	5886	1226	1"5/8	1"5/8	670
ECA 12N 9L04 B3	195.61	50	56	3.50	21/65	C	5886	1226	1"5/8	1"5/8	720
ECA 12N 9L05 B1	204.79	51	57	4.38	19/39	C	7288	1226	1"5/8	1"5/8	770
ECA 12N 9L04 C2	211.38	50	56	3.50	26/52	C	7286	1226	2"1/8	2"1/8	791
ECA 12N 9L04 C3	225.55	50	56	3.50	21/65	C	7286	1226	2"1/8	2"1/8	853
ECA 12N 9L05 B2	229.73	51	57	4.38	26/52	C	7288	1226	2"1/8	2"1/8	832
ECA 12N 9L05 B3	244.51	51	57	4.38	21/65	C	7288	1226	2"1/8	2"1/8	895
ECA 12N 9L05 C1	234.86	51	57	4.40	19/39	C	9038	1226	2"1/8	2"1/8	910
ECA 12N 9L06 B1	245.74	52	58	5.28	19/39	C	8690	1226	2"1/8	2"1/8	930
ECA 12N 9L05 C2	264.22	51	57	4.40	26/52	C	9038	1226	2"1/8	2"1/8	990
ECA 12N 9L06 B2	275.68	52	58	5.28	26/52	C	8690	1226	2"1/8	2"1/8	1000
ECA 12N 9L05 C3	281.93	51	57	4.40	32/65	C	9038	1226	2"1/8	2"1/8	1070
ECA 12N 9L06 B3	293.41	52	58	5.28	32/65	C	8690	1226	2"1/8	2"1/8	1070

Fans : Ø 762/900 mm - 400 V/3/50 Hz Y : 890W max. - 2A max (6)

- (1) The capacities are given in kW for R404A refrigerant with DT1 = 15 K. They are equal to the capacities measured in accordance with the CEN EN 327 European draft. "DT1" represents the difference between the entering air temperature and the condensing temperature considered as being equal to the pressure equivalent at the condenser inlet.
- (2) Sound pressure level in dB(A) measured at 10 meters distance, at fan blade level, in a free field on a reflective plan, given as indicative value. Only the acoustic power and the Lw value, are contractual and usable for the calculation of the sound pressure level data at owner land limits.
- (3) The sound pressure in dB(A) measured at a line-of-sight to reflecting parallelepiped surface distance of 10 meters, is given as an indication only. Values measured under normal working conditions with a clean coil at nominal voltage.
- (4) Power required for all motors.
- (5) Condensers with multicircuits: P = preferred number of circuits (short delivery time), M = maximum number of circuits.
- (6) Setting of overbad protections.

OPTIONS ...

ECA ...

	MCI	BYD	BAE	BCC	M60	M25	MTH	IRP	MVZ	REH	RE2	ECB	RAL	CMP	RP1	RP2	RP3	RP4
ECA ...	○	○	○	c.u.	○	○	○	○	○	○	○	○	○	○	○	○	○	○

TECHNICAL DATA ...

ECA 12N .P.. ..

(Ø 900 = 570 r.p.m.)

Models	Capa. - R404A	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight
	DT1 = 15K (1)	Lp (2)	Lp (3)	(4)	P/M (5)		length	width	Inlet	Outlet	
	kW	dB(A)	dB(A)	kW tot.	Num.		mm	mm	Ø	Ø	kg
ECA 12N 9P02 B1	81.91	47	53	1.75	6/78	C	1680	2310	7/8"	7/8"	364
ECA 12N 9P02 B2	91.89	47	53	1.75	8/104	C	1680	2310	7/8"	7/8"	389
ECA 12N 9P02 C1	93.95	47	53	1.75	18/78	C	2030	2310	7/8"	7/8"	382
ECA 12N 9P02 B3	97.80	47	53	1.75	10/130	C	1680	2310	7/8"	7/8"	414
ECA 12N 9P02 C2	105.69	47	53	1.75	10/104	C	2030	2310	7/8"	7/8"	413
ECA 12N 9P02 D1	105.72	47	53	1.75	18/78	C	2380	2310	7/8"	7/8"	414
ECA 12N 9P02 C3	112.77	47	53	1.75	14/130	C	2030	2310	1"1/8	1"1/8	444
ECA 12N 9P02 D2	116.98	47	53	1.75	20/104	C	2380	2310	1"1/8	1"1/8	452
ECA 12N 9P02 D3	123.06	47	53	1.75	14/130	B	2380	2310	1"1/8	1"1/8	489
ECA 12N 9P04 B1	163.83	50	56	3.50	18/78	C	3082	2310	1"1/8	1"1/8	614
ECA 12N 9P04 B2	183.79	50	56	3.50	20/104	C	3082	2310	1"1/8	1"1/8	664
ECA 12N 9P04 C1	187.89	50	56	3.50	18/78	C	3782	2310	1"1/8	1"1/8	671
ECA 12N 9P04 B3	195.61	50	56	3.50	26/130	C	3082	2310	1"3/8	1"3/8	714
ECA 12N 9P04 C2	211.38	50	56	3.50	20/104	C	3782	2310	1"3/8	1"3/8	733
ECA 12N 9P04 D1	211.44	50	56	3.50	26/78	C	4482	2310	1"3/8	1"3/8	737
ECA 12N 9P04 C3	225.55	50	56	3.50	26/130	C	3782	2310	1"3/8	1"3/8	796
ECA 12N 9P04 D2	233.96	50	56	3.50	26/104	C	4482	2310	1"3/8	1"3/8	812
ECA 12N 9P06 B1	245.74	52	58	5.25	26/78	C	4484	2310	1"3/8	1"3/8	875
ECA 12N 9P04 D3	246.11	50	56	3.50	26/130	B	4482	2310	1"3/8	1"3/8	887
ECA 12N 9P06 B2	275.68	52	58	5.25	26/104	C	4484	2310	1"3/8	1"3/8	950
ECA 12N 9P06 C1	281.84	52	58	5.25	26/78	C	5534	2310	1"3/8	1"3/8	960
ECA 12N 9P06 B3	293.41	52	58	5.25	42/130	C	4484	2310	1"5/8	1"5/8	1025
ECA 12N 9P06 C2	317.07	52	58	5.25	34/104	C	5534	2310	1"5/8	1"5/8	1054
ECA 12N 9P08 B1	327.66	53	59	7.00	26/78	C	5886	2310	1"5/8	1"5/8	1125
ECA 12N 9P06 C3	338.32	52	58	5.25	42/130	C	5534	2310	1"5/8	1"5/8	1147
ECA 12N 9P08 B2	367.57	53	59	7.00	34/104	C	5886	2310	1"5/8	1"5/8	1224
ECA 12N 9P08 B3	391.22	53	59	7.00	42/130	C	5886	2310	1"5/8	1"5/8	1324
ECA 12N 9P10 B1	409.57	54	60	8.75	38/78	C	7288	2310	1"5/8	1"5/8	1385
ECA 12N 9P08 C2	422.76	53	59	7.00	52/104	C	7286	2310	2"1/8	2"1/8	1374
ECA 12N 9P08 D1	422.87	53	59	7.00	38/78	C	8686	2310	1"5/8	1"5/8	1324
ECA 12N 9P08 C3	451.09	53	59	7.00	42/130	C	7286	2310	2"1/8	2"1/8	1499
ECA 12N 9P10 B2	459.47	54	60	8.75	52/104	C	7288	2310	2"1/8	2"1/8	1510
ECA 12N 9P08 D2	467.91	53	59	7.00	52/104	C	8686	2310	2"1/8	2"1/8	1474
ECA 12N 9P10 C1	469.73	54	60	8.75	38/78	C	9038	2310	2"1/8	2"1/8	1539
ECA 12N 9P10 B3	489.02	54	60	8.75	42/130	C	7288	2310	2"1/8	2"1/8	1635
ECA 12N 9P12 B1	491.49	55	61	10.50	38/78	C	8690	2310	2"1/8	2"1/8	1635
ECA 12N 9P08 D3	492.22	53	59	7.00	64/130	B	8686	2310	2"1/8	2"1/8	1624
ECA 12N 9P10 C2	528.44	54	60	8.75	52/104	C	9038	2310	2"1/8	2"1/8	1694
ECA 12N 9P12 B2	551.36	55	61	10.50	52/104	C	8690	2310	2"1/8	2"1/8	1785
ECA 12N 9P10 C3	563.87	54	60	8.75	64/130	C	9038	2310	2"1/8	2"1/8	1851
ECA 12N 9P12 B3	586.83	55	61	10.50	64/130	C	8690	2310	2"1/8	2"1/8	1935

Fans : Ø 900 mm - 400 V/3/50 Hz Y : 890W max. - 2A max (6)

- (1) The capacities are given in kW for R404A refrigerant with DT1 = 15 K. They are equal to the capacities measured in accordance with the CEN EN 327 European draft. 'DT1' represents the difference between the entering air temperature and the condensing temperature considered as being equal to the pressure equivalent of the condenser inlet.
- (2) Sound pressure level in dB(A) measured at 10 meters distance, at fan blade level, in a free field on a reflective plan, given as indicative value. Only the acoustic power and the Lw value, are contractual and usable for the calculation of the sound pressure level data at owner land limits.
- (3) The sound pressure in dB(A) measured at a line-of-sight to reflecting parallelepiped surface distance of 10 meters, is given as an indication only. Values measured under normal working conditions with a clean coil at nominal voltage.
- (4) Power required for all motors.
- (5) Condensers with multicircuits: P = preferred number of circuits (short delivery time). M = maximum number of circuits.
- (6) Setting of overbad protections.

OPTIONS ...

ECA ...

	MCI	BYD	BAE	BCC	M60	M25	MTH	IRP	MVZ	REH	RE2	ECB	RAL	CMP	RP1	RP2	RP3	RP4
ECA ...	○	○	○	c.u.	○	○	○	○	○	○	○	○	○	○	○	○	○	○

ECA 12P .L.. ..

(Ø 762 = 450 r.p.m. / Ø 900 = 430 r.p.m.)

Models	Capa. - R404A	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight
	DT1 = 15K (1)	Lp (2)	Lp (3)	(4)	P/M (5)		length	width	Inlet	Outlet	
	kW	dB(A)	dB(A)	kW tot.	Num.		mm	mm	Ø	Ø	kg
ECA 12P 7L01 A1	24.18	29	36	0.33	3/39	B	1280	1226	7/8"	7/8"	165
ECA 12P 7L01 A2	25.94	29	36	0.33	4/52	B	1280	1226	7/8"	7/8"	174
ECA 12P 9L01 B1	35.07	34	41	0.45	3/39	B	1680	1226	7/8"	7/8"	193
ECA 12P 9L01 B2	38.33	34	41	0.45	4/52	B	1680	1226	7/8"	7/8"	206
ECA 12P 9L01 C1	40.03	34	40	0.45	9/39	B	2030	1226	7/8"	7/8"	215
ECA 12P 9L01 C2	43.79	34	40	0.45	5/52	B	2030	1226	7/8"	7/8"	230
ECA 12P 9L01 D1	44.14	34	40	0.45	9/39	B	2380	1226	7/8"	7/8"	239
ECA 12P 9L01 D2	48.05	34	40	0.45	10/52	B	2380	1226	1"1/8	1"1/8	257
ECA 12P 7L02 A1	48.36	32	38	0.66	9/39	B	2282	1226	7/8"	7/8"	275
ECA 12P 7L02 A2	51.88	32	38	0.66	10/52	B	2282	1226	1"1/8	1"1/8	293
ECA 12P 9L02 B1	70.14	37	43	0.90	9/39	B	3082	1226	1"1/8	1"1/8	332
ECA 12P 7L03 A1	72.53	34	40	0.99	13/39	B	3284	1226	1"1/8	1"1/8	397
ECA 12P 9L02 B2	76.65	37	43	0.90	10/52	B	3082	1226	1"1/8	1"1/8	357
ECA 12P 7L03 A2	77.82	34	40	0.99	13/52	B	3284	1226	1"1/8	1"1/8	424
ECA 12P 9L02 C1	80.06	37	43	0.90	9/39	B	3782	1226	1"1/8	1"1/8	386
ECA 12P 9L02 C2	87.59	37	43	0.90	10/52	B	3782	1226	1"3/8	1"3/8	417
ECA 12P 9L02 D1	88.29	37	43	0.90	13/39	B	4482	1226	1"3/8	1"3/8	434
ECA 12P 9L02 D2	96.10	37	43	0.90	13/52	B	4482	1226	1"3/8	1"3/8	471
ECA 12P 9L03 B1	105.21	39	45	1.35	13/39	B	4484	1226	1"3/8	1"3/8	481
ECA 12P 9L03 B2	114.98	39	45	1.35	13/52	B	4484	1226	1"3/8	1"3/8	519
ECA 12P 9L03 C1	120.10	39	45	1.35	13/39	B	5534	1226	1"3/8	1"3/8	557
ECA 12P 9L03 C2	131.38	39	45	1.35	17/52	B	5534	1226	1"5/8	1"5/8	604
ECA 12P 9L03 D1	132.43	39	45	1.35	19/39	B	6584	1226	1"5/8	1"5/8	629
ECA 12P 9L04 B1	140.28	40	46	1.80	13/39	B	5886	1226	1"5/8	1"5/8	620
ECA 12P 9L04 B2	153.30	40	46	1.80	17/52	B	5886	1226	1"5/8	1"5/8	670
ECA 12P 9L04 C1	160.13	40	46	1.80	19/39	B	7286	1226	1"5/8	1"5/8	729
ECA 12P 9L04 C2	175.18	40	46	1.80	26/52	B	7286	1226	2"1/8	2"1/8	791
ECA 12P 9L05 B1	175.36	41	47	2.25	19/39	B	7288	1226	1"5/8	1"5/8	770
ECA 12P 9L05 B2	191.63	41	47	2.25	26/52	B	7288	1226	2"1/8	2"1/8	832
ECA 12P 9L05 C1	200.16	41	47	2.25	19/39	B	9038	1226	2"1/8	2"1/8	910
ECA 12P 9L06 B1	210.43	42	48	2.70	19/39	B	8690	1226	2"1/8	2"1/8	930
ECA 12P 9L05 C2	218.97	41	47	2.25	26/52	B	9038	1226	2"1/8	2"1/8	990
ECA 12P 9L06 B2	229.95	42	48	2.70	26/52	B	8690	1226	2"1/8	2"1/8	1000

Fans : Ø 762/900 mm - 400 V/3/50 Hz Δ : 500W max. - 1.8A max (6)

ECA 16P .L.. ..

(Ø 762 = 380 r.p.m. / Ø 900 = 320 r.p.m.)

Models	Capa. - R404A	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight
	DT1 = 15K (1)	Lp (2)	Lp (3)	(4)	P/M (5)		length	width	Inlet	Outlet	
	kW	dB(A)	dB(A)	kW tot.	Num.		mm	mm	Ø	Ø	kg
ECA 16P 7L01 A1	21.20	19	26	0.20	3/39	B	1280	1226	7/8"	7/8"	165
ECA 16P 9L01 B1	27.92	24	31	0.24	3/39	A	1680	1226	7/8"	7/8"	193
ECA 16P 9L01 C1	32.00	24	30	0.24	9/39	A	2030	1226	7/8"	7/8"	215
ECA 16P 9L01 D1	35.13	24	30	0.24	9/39	A	2380	1226	7/8"	7/8"	239
ECA 16P 7L02 A1	42.39	22	28	0.39	9/39	B	2282	1226	7/8"	7/8"	275
ECA 16P 9L02 B1	55.84	27	33	0.48	9/39	A	3082	1226	1"1/8	1"1/8	332
ECA 16P 7L03 A1	63.59	24	30	0.59	13/39	B	3284	1226	1"1/8	1"1/8	397
ECA 16P 9L02 C1	63.99	27	33	0.48	9/39	A	3782	1226	1"1/8	1"1/8	386
ECA 16P 7L03 A2	65.59	24	30	0.59	13/52	A	3284	1226	1"1/8	1"1/8	424
ECA 16P 9L02 D1	70.26	27	33	0.48	13/39	A	4482	1226	1"3/8	1"3/8	434
ECA 16P 9L03 B1	83.76	29	35	0.72	13/39	A	4484	1226	1"3/8	1"3/8	481
ECA 16P 9L03 C1	95.99	29	35	0.72	13/39	A	5534	1226	1"3/8	1"3/8	557
ECA 16P 9L03 D1	105.40	29	35	0.72	19/39	A	6584	1226	1"5/8	1"5/8	629
ECA 16P 9L04 B1	111.69	30	36	0.96	13/39	A	5886	1226	1"5/8	1"5/8	620
ECA 16P 9L04 C1	127.99	30	36	0.96	19/39	A	7286	1226	1"5/8	1"5/8	729
ECA 16P 9L05 B1	139.61	31	37	1.20	19/39	A	7288	1226	1"5/8	1"5/8	770
ECA 16P 9L05 C1	159.98	31	37	1.20	19/39	A	9038	1226	2"1/8	2"1/8	910
ECA 16P 9L06 B1	167.53	32	38	1.44	19/39	A	8690	1226	2"1/8	2"1/8	930

Fans : Ø 762/900 mm - 400 V/3/50 Hz Y : 280W max. - 0.8A max (6)

(1) (2) (3) (4) (5) and (6) see next page.

ECA 12P .P.. ..

(Ø 900 = 430 r.p.m.)

Models	Capa. - R404A DTI = 15K (1)	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight kg
	kW	Lp (2) dB(A)	Lp (3) dB(A)	(4) kW tot.	P/M (5) Num.		length mm	width mm	Inlet Ø	Outlet Ø	
ECA 12P 9P02 B1	70.14	37	43	0.90	6/78	B	1680	2310	7/8"	7/8"	364
ECA 12P 9P02 B2	76.65	37	43	0.90	8/104	B	1680	2310	7/8"	7/8"	389
ECA 12P 9P02 C1	80.06	37	43	0.90	18/78	B	2030	2310	7/8"	7/8"	382
ECA 12P 9P02 C2	87.59	37	43	0.90	10/104	B	2030	2310	7/8"	7/8"	413
ECA 12P 9P02 D1	88.29	37	43	0.90	18/78	B	2380	2310	7/8"	7/8"	414
ECA 12P 9P02 D2	96.10	37	43	0.90	20/104	B	2380	2310	1"1/8	1"1/8	452
ECA 12P 9P04 B1	140.28	40	46	1.80	18/78	B	3082	2310	1"1/8	1"1/8	614
ECA 12P 9P04 B2	153.30	40	46	1.80	20/104	B	3082	2310	1"1/8	1"1/8	664
ECA 12P 9P04 C1	160.13	40	46	1.80	18/78	B	3782	2310	1"1/8	1"1/8	671
ECA 12P 9P04 C2	175.18	40	46	1.80	20/104	B	3782	2310	1"3/8	1"3/8	733
ECA 12P 9P04 D1	176.57	40	46	1.80	26/78	B	4482	2310	1"3/8	1"3/8	737
ECA 12P 9P04 D2	192.20	40	46	1.80	26/104	B	4482	2310	1"3/8	1"3/8	812
ECA 12P 9P06 B1	210.43	42	48	2.70	26/78	B	4484	2310	1"3/8	1"3/8	875
ECA 12P 9P06 B2	229.95	42	48	2.70	26/104	B	4484	2310	1"3/8	1"3/8	950
ECA 12P 9P06 C1	240.19	42	48	2.70	26/78	B	5534	2310	1"3/8	1"3/8	960
ECA 12P 9P06 C2	262.76	42	48	2.70	34/104	B	5534	2310	1"5/8	1"5/8	1054
ECA 12P 9P06 D1	264.86	42	48	2.70	38/78	B	6584	2310	1"5/8	1"5/8	1059
ECA 12P 9P08 B1	280.57	43	49	3.60	26/78	B	5886	2310	1"5/8	1"5/8	1125
ECA 12P 9P08 B2	306.60	43	49	3.60	34/104	B	5886	2310	1"5/8	1"5/8	1224
ECA 12P 9P08 C1	320.26	43	49	3.60	38/78	B	7286	2310	1"5/8	1"5/8	1250
ECA 12P 9P08 C2	350.35	43	49	3.60	52/104	B	7286	2310	2"1/8	2"1/8	1374
ECA 12P 9P10 B1	350.71	44	50	4.50	38/78	B	7288	2310	1"5/8	1"5/8	1385
ECA 12P 9P08 D1	353.15	43	49	3.60	38/78	B	8686	2310	1"5/8	1"5/8	1324
ECA 12P 9P10 B2	383.26	44	50	4.50	52/104	B	7288	2310	2"1/8	2"1/8	1510
ECA 12P 9P08 D2	384.39	43	49	3.60	52/104	B	8686	2310	2"1/8	2"1/8	1474
ECA 12P 9P10 C1	400.32	44	50	4.50	38/78	B	9038	2310	2"1/8	2"1/8	1539
ECA 12P 9P12 B1	420.85	45	51	5.40	38/78	B	8690	2310	2"1/8	2"1/8	1635
ECA 12P 9P10 C2	437.94	44	50	4.50	52/104	B	9038	2310	2"1/8	2"1/8	1694
ECA 12P 9P12 B2	459.91	45	51	5.40	52/104	B	8690	2310	2"1/8	2"1/8	1785

Fans : Ø 900 mm - 400 V/3/50 Hz Δ : 500W max - 1,8A max (6)

ECA 16P .P.. ..

(Ø 900 = 320 r.p.m.)

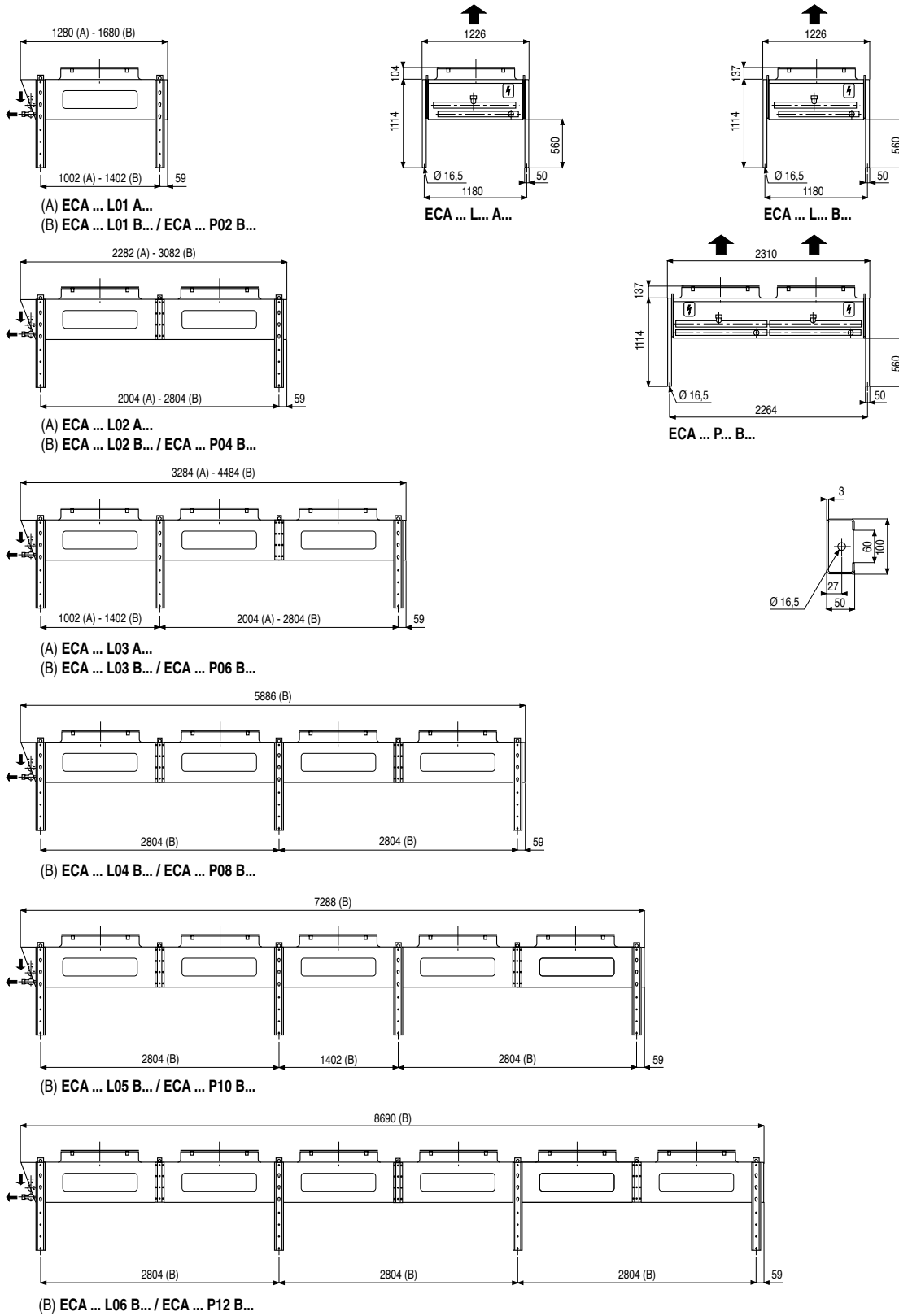
Models	Capa. - R404A DTI = 15K (1)	Acoustic		Motors		Energy efficiency class	Dimensions		Connections		Weight kg
	kW	Lp (2) dB(A)	Lp (3) dB(A)	(4) kW tot.	P/M (5) Num.		length mm	width mm	Inlet Ø	Outlet Ø	
ECA 16P 9P02 B1	55.84	27	33	0.48	6/78	A	1680	2310	7/8"	7/8"	364
ECA 16P 9P02 C1	63.99	27	33	0.48	18/78	A	2030	2310	7/8"	7/8"	382
ECA 16P 9P02 D1	70.26	27	33	0.48	18/78	A	2380	2310	7/8"	7/8"	414
ECA 16P 9P04 B1	111.69	30	36	0.96	18/78	A	3082	2310	1"1/8	1"1/8	614
ECA 16P 9P04 C1	127.99	30	36	0.96	18/78	A	3782	2310	1"1/8	1"1/8	671
ECA 16P 9P04 D1	140.53	30	36	0.96	26/78	A	4482	2310	1"3/8	1"3/8	737
ECA 16P 9P06 B1	167.53	32	38	1.44	26/78	A	4484	2310	1"3/8	1"3/8	875
ECA 16P 9P06 C1	191.98	32	38	1.44	26/78	A	5534	2310	1"3/8	1"3/8	960
ECA 16P 9P06 D1	210.79	32	38	1.44	38/78	A	6584	2310	1"5/8	1"5/8	1059
ECA 16P 9P08 B1	223.37	33	39	1.92	26/78	A	5886	2310	1"5/8	1"5/8	1125
ECA 16P 9P08 C1	255.97	33	39	1.92	38/78	A	7286	2310	1"5/8	1"5/8	1250
ECA 16P 9P10 B1	279.22	34	40	2.40	38/78	A	7288	2310	1"5/8	1"5/8	1385
ECA 16P 9P08 D1	281.06	33	39	1.92	38/78	A	8686	2310	1"5/8	1"5/8	1324
ECA 16P 9P10 C1	319.97	34	40	2.40	38/78	A	9038	2310	2"1/8	2"1/8	1539
ECA 16P 9P12 B1	335.06	35	41	2.88	38/78	A	8690	2310	2"1/8	2"1/8	1635

Fans : Ø 900 mm - 400 V/3/50 Hz Y : 280W max - 0,8A max (6)

- (1) The capacities are given in kW for R404A refrigerant with DTI = 15 K. They are equal to the capacities measured in accordance with the CEN EN 327 European draft. 'DTI' represents the difference between the entering air temperature and the condensing temperature considered as being equal to the pressure equivalent of the condenser inlet.
- (2) Sound pressure level in dB(A) measured at 10 meters distance, at fan blade level, in a free field on a reflective plan, given as indicative value. Only the acoustic power and the Lw value, are contractual and usable for the calculation of the sound pressure level data of owner land limits.
- (3) The sound pressure in dB(A) measured at a line-of-sight to reflecting parallelepiped surface distance of 10 meters, is given as an indication only. Values measured under normal working conditions with a clean coil at nominal voltage.
- (4) Power required for all motors.
- (5) Condensers with multicircuits: P = preferred number of circuits (short delivery time). M = maximum number of circuits.
- (6) Setting of overbad protections.

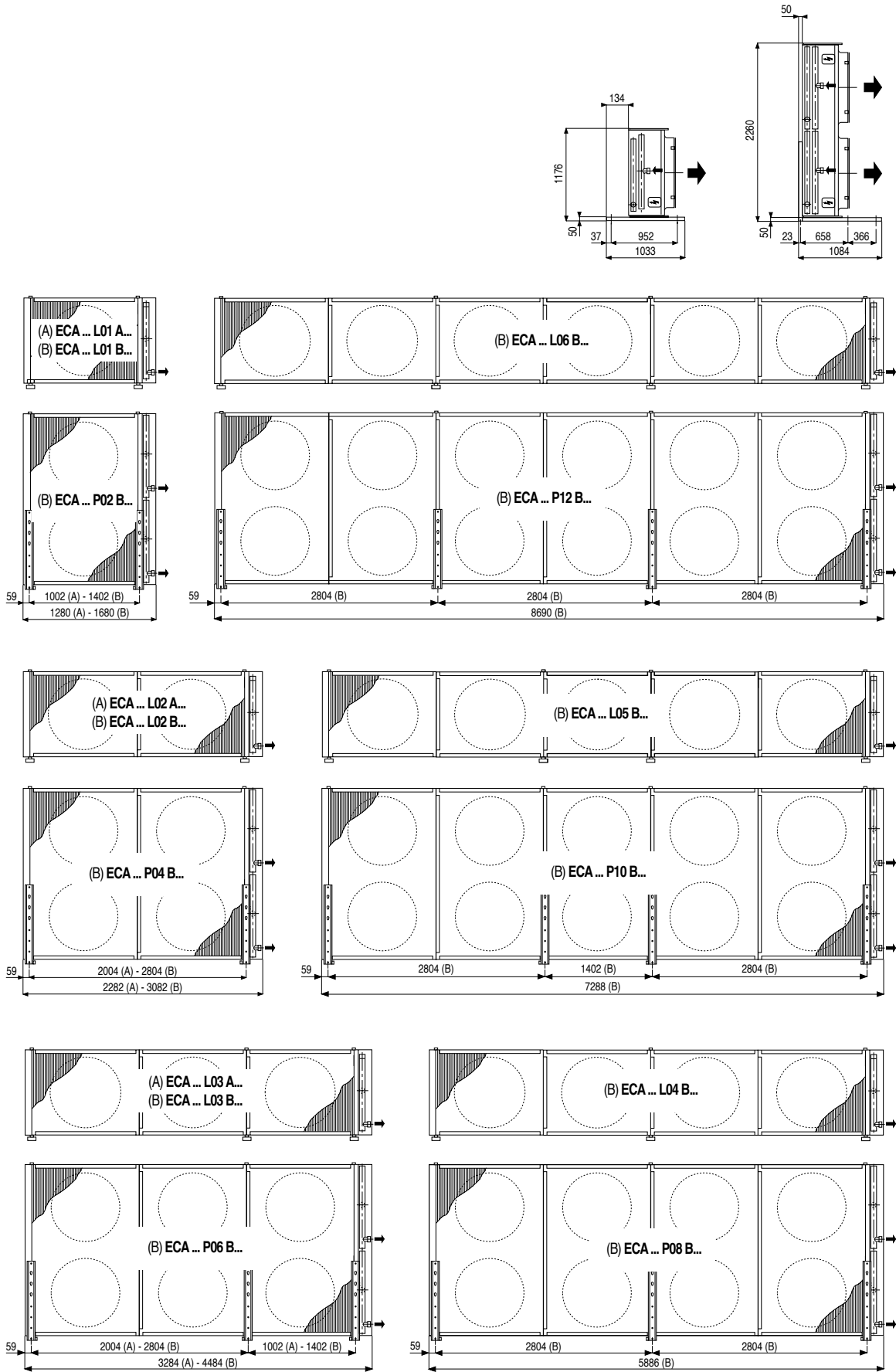
TYPE OF MODULE : A - B

VERTICAL AIR FLOW



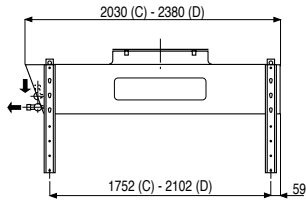
TYPE OF MODULE : A - B

HORIZONTAL AIR FLOW

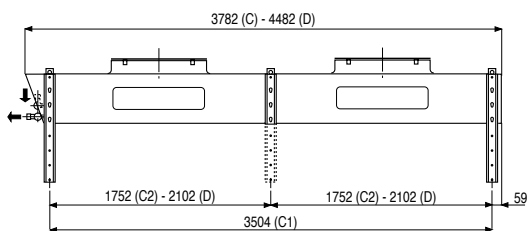
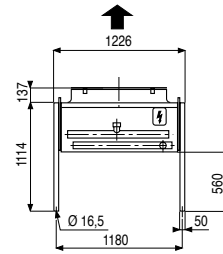


TYPE OF MODULE : C - D

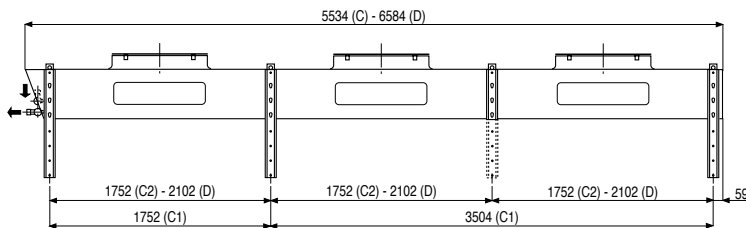
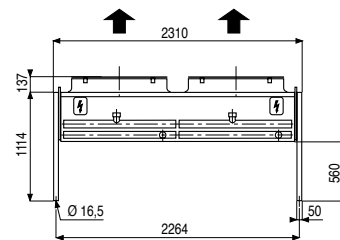
VERTICAL AIR FLOW



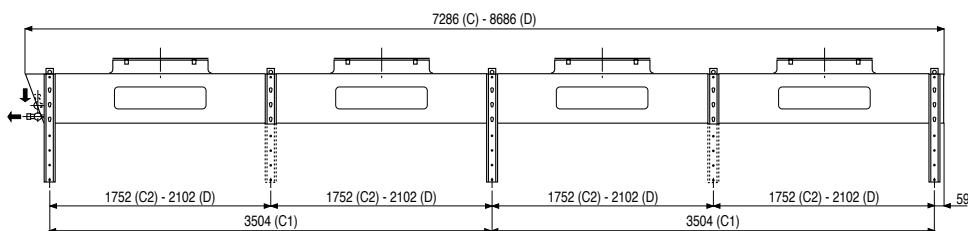
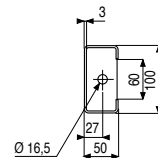
(C) ECA ... L01 C... / ECA ... P02 C...
(D) ECA ... L01 D... / ECA ... P02 D...



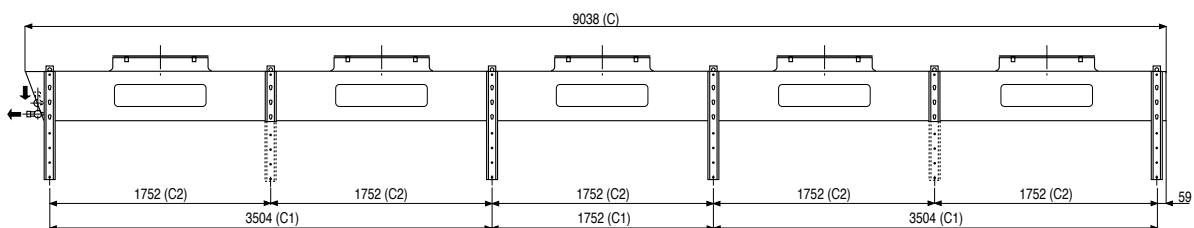
(C1) ECA ... L02 C... (C2) ECA ... P04 C...
(D) ECA ... L02 D... / ECA ... P04 D...



(C1) ECA ... L03 C... (C2) ECA ... P06 C...
(D) ECA ... L03 D... / ECA ... P06 D...



(C1) ECA ... L04 C... (C2) ECA ... P08 C...
(D) ECA ... L04 D... / ECA ... P08 D...



(C1) ECA ... L05 C... (C2) ECA ... P10 C...

TYPE OF MODULE : C - D

HORIZONTAL AIR FLOW

