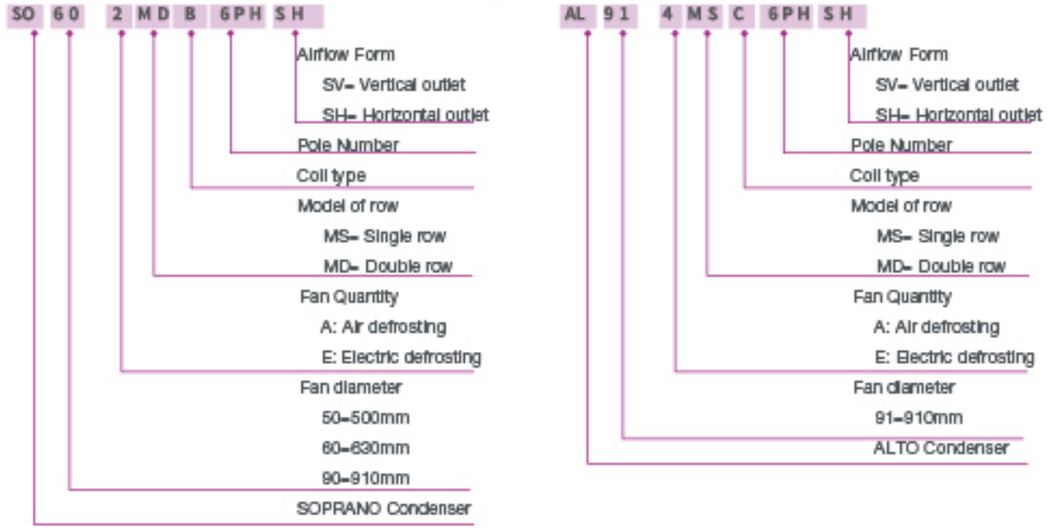
Air Cooled Condenser

Soprano: 500, 630, 910mm fan
Heat exchange capacity (13~353kW)

Alto: 910mm fan
Heat exchange capacity (102~1092kW)

Naming Rule of Air Cooled Condenser



Customer Value

- Many materials and air flow directions are available for various application scenarios
- High heat exchange efficiency, and low operation cost
- Silent running
- Anti-corrosion treatment ensures long service life

Product Features

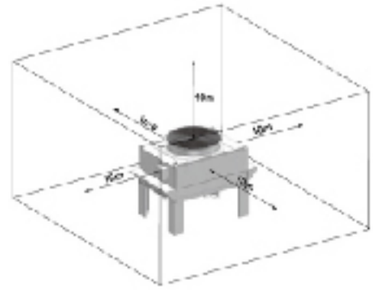
- Coil cover made of pre-coated galvanized steel sheet
- All models either have vertical or horizontal air flow directions
- Copper pipes designed for condensing process, with aluminum fins
- Fans are of Grade F, for double-speed optional, and with high efficiency shielding cases, extremely silent
- Alternative fins can be customized, to resist corrosion from salts or polluted atmosphere
- Unique materials and process assembly technologies, making the products efficient and simple

Performance Advantages

- Fans with double-speed optional, can be customized
- EC axial flow fans optional, energy efficient and silent
- Unique materials and process assembly technologies, making the products efficient and simple

Acoustic Performance

- In accordance with ISO3741 and ISO3744 Standards, sound power classes of vertical outlets of the condensers are tested in standard labs.
- Sound pressure intensity is calculated in accordance with EN 13487 Standard. Sound pressure intensity is based on that in the reference zones in the parallelepiped 10m away from the sound source and parallel to the envelope line.
- Due to sound reflection (against walls or frames, etc.) or environment factors, results obtained at installation site may be different from that in the manuals.
- In addition, sound level decrease function with distance as the independent variable is calculated with theoretical calculus.



Sound Power Correction by Fan Quantity

Fan Quantity	1	2	3	4	5	6	7	8	10	12	14
Correction Factor dB(A)	+0	+3	+5	+6	+7	+8	+9	+9	+10	+11	+12

For example, sound power for S060 4MSB Condenser with four 6PH fans is: 75+6=81dB(A)

Sound Pressure Level and Distance

Fan Distance (m)	5	10	20	30	40	50
Corrected dB(A)	+6	0	-6	-9.5	-12	-14

Fan and Motor

Fan Specifications 400V~3/50Hz

SOPRANO SC50 (Performance data for each fan)						
Fan	Motor	Rotation Speed (rpm)	Wiring	Nominal Power (kW)	Current (A)	Sound Power dB(A)
500 mm	4PH	1390	Delta	0.72	1.41	71
	4PL	1180	Star	0.55	0.95	68
	6PH	930	Delta	0.27	0.69	63
	6PL	800	Star	0.19	0.40	59
	8PH	690	Delta	0.15	0.40	54
	8PL	560	Star	0.09	0.18	50

SOPRANO SC60 (Performance data for each fan)						
Fan	Motor	Rotation Speed (rpm)	Wiring	Nominal Power (kW)	Current (A)	Sound Power dB(A)
630 mm	6PH	1330	Delta	1.25	2.48	75
	6PL	1070	Star	0.84	1.42	70
	8PH	890	Delta	0.60	1.20	67
	8PL	690	Star	0.40	0.68	61

SOPRANO SC90/ALTO AL91 (Performance data for each fan)						
Fan	Motor	Rotation Speed (rpm)	Wiring	Nominal Power (kW)	Current (A)	Sound Power dB(A)
910 mm	6PH	895	Delta	2.48	5.15	77
	6PL	685	Star	1.57	2.90	71
	8PH	650	Delta	1.15	2.78	70
	8PL	475	Star	0.64	1.36	63
	12PH	420	Delta	0.41	1.13	59
	12PL	305	Star	0.21	0.48	50

SOPRANO SC90/ALTO AL91 (Performance data of EC fans)						
Fan	Motor	Rotation Speed (rpm)	Wiring	Nominal Power (kW)	Current (A)	Sound Power dB(A)
910 mm	6PH/6PL	450~895	/	2.10	3.20	79

*Motor parameters in this table are from EBM

Air Cooled Condenser Technical Parameters

Energy Efficiency Grade

Grade	Energy Consumption	R
A	Extremely low	R>110
B	Very low	70<R<110
C	Low	45<R<70
D	Medium	30<R<45
E	High	R<30

R=Heat Extraction Rate (ENV327 Working Conditions) / Motor energy consumption

Heat Extraction Rate

Nominal Capacity in the manual is rated and calculated based on the temperature / pressure working conditions when refrigeration condensing gas starts to condensate (reaches dew point).

As some refrigerant (R407A or R407C) has obvious temperature glide, the saturation vapor temperature and saturation liquid temperature are different. The heat of such refrigerant is rated and calculated at the same saturation vapor temperature rather the mean of the saturation vapor and liquid temperature.

Quick Select

If you multiply the Nominal Capacity with the factor below, you will get the Nominal Capacity in other working conditions (Correction factor only allows interpolation not extrapolation):

Working Medium Correction Factor:

Working Medium	R134a	R22	R404A	R507	R407A	R407C
F1	0.93	0.96	1.00	1.00	0.82	0.85

Temperature Difference ⊿T Correction Factor:

⊿T		8K	10K	12K	15K	17K	20K
F2	R22,R507,R134a,R404A	0.53	0.67	0.80	1.00	1.13	1.33
	R407A,R407C	0.46	0.62	0.77	1.00	1.15	1.39

Ambient Temperature Correction Factor:

Ambient Temperature °C	15	20	25	30	35	40	45	50
F3	1.034	1.019	1	0.98	0.96	0.94	0.923	0.906

Altitude Correction Factor:

Altitude m	0	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600
F4	1	0.986	1.00	1.00	0.92	0.85	0.918	0.904	0.891	0.877	0.863	0.85	0.836	0.823

Fin Spacing Correction Factor:

Fin Spacing 2.54mm	SOPRANO	ALTO
F5	0.95	0.96

Air Cooled Condenser Technical Parameters - SO 50 - Single Row

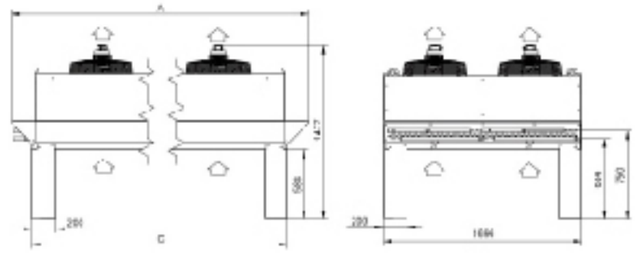
	Model	SO50 1MSA		SO50 1MSB		SO50 2MSA		SO50 2MSB		SO50 3MSA		SO50 3MSB	
	Fan	1 x Ø 500		1 x Ø 500		2 x Ø 500		2 x Ø 500		3 x Ø 500		3 x Ø 500	
4PH /4PL	Wiring	4PH	4PL	4PH	4PL	4PH	4PL	4PH	4PL	4PH	4PL	4PH	4PL
	Nominal Capacity *	29	26	36	32	59	52	72	64	88	77	108	96
	Air Volume [m³/h]	6665	5645	7665	6495	13330	11290	15330	12990	19995	16935	22995	19485
	Sound Pressure Level dB(A) 10m	52	48	52	48	55	51	55	51	57	52	57	52
	Energy Efficiency Grade	D	C	C	C	D	C	C	C	D	C	C	C
	Inlet Pipe	7/8"		7/8"		1"1/8		1"1/8		1"1/8		1"3/8	
	Drain Pipe	7/8"		7/8"		1"1/8		1"1/8		1"1/8		1"3/8	
6PH /6PL	Wiring	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL
	Nominal Capacity *	21	18	26	21	42	37	52	43	63	56	78	64
	Air Volume [m³/h]	4300	3630	4990	4215	8600	7260	9980	8430	12900	10890	14970	12645
	Sound Pressure Level dB(A) 10m	38	35	38	35	41	38	40	38	42	39	42	39
	Energy Efficiency Grade	B	B	B	A	B	B	B	A	B	B	B	A
	Inlet Pipe	5/8"		7/8"		7/8"		1"1/8		1"1/8		1"1/8	
	Drain Pipe	5/8"		7/8"		7/8"		1"1/8		1"1/8		1"1/8	
8PH /8PL	Wiring	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL
	Nominal Capacity *	16	13	20	17	32	27	41	34	48	40	61	51
	Air Volume [m³/h]	2935	2360	3635	2920	5870	4720	7270	5840	9805	7080	10905	8760
	Sound Pressure Level dB(A) 10m	32	29	32	29	35	32	35	32	37	34	36	34
	Energy Efficiency Grade	B	A	A	A	B	A	A	A	B	A	A	A
	Inlet Pipe	5/8"		5/8"		7/8"		7/8"		7/8"		1"1/8	
	Drain Pipe	5/8"		5/8"		7/8"		7/8"		7/8"		1"1/8	
	Surface Area	49		73		97		146		146		220	
	Refrigerant Circuit Volume	8		11		14		20		20		30	
	Net Weight (without refrigerant)	98		117		163		201		227		295	
	Dimension A mm	1168		1543		1920		2670		2671		3796	
	Dimension C mm	814		1189		1566		2316		2317		3442	

Dimension data tolerance is +/-10mm. Weight data tolerance is +/-15kg. The value is related to the part options selected.
* Heat extraction rate is based on the condition of condensation temperature of 40°C and heat transfer temperature difference of 15K, and the refrigerant is R404A.

Air Cooled Condenser Technical Parameters - SO 50 - Double Row

	Model	SO50 2MDA		SO50 2MDB		SO50 4MDA		SO50 4MDB		SO50 6MDA		SO50 6MDB	
	Fan	2 x Ø 500		2 x Ø 500		4 x Ø 500		4 x Ø 500		6 x Ø 500		6x Ø 500	
4PH /4PL	Wiring	4PH	4PL	4PH	4PL	4PH	4PL	4PH	4PL	4PH	4PL	4PH	4PL
	Nominal Capacity *	59	52	72	64	117	103	144	128	175	154	216	191
	Air Volume [m³/h]	13330	11290	15330	12990	26660	22580	30660	25980	39990	33870	45990	38970
	Sound Pressure Level dB(A) 10m	55	51	55	51	58	54	58	54	60	55	60	55
	Energy Efficiency Grade	D	C	C	C	D	C	C	C	D	C	C	C
	Inlet Pipe	2x7/8"		2x7/8"		2x1"1/8		2x1"1/8		2x1"1/8		2x1"3/8	
	Drain Pipe	2x7/8"		2x7/8"		2x1"1/8		2x1"1/8		2x1"1/8		2x1"3/8	
6PH /6PL	Wiring	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL
	Nominal Capacity *	42	37	52	43	84	74	104	86	126	111	156	128
	Air Volume [m³/h]	8600	7260	9980	8430	17200	14520	19960	16860	25800	21780	29940	25290
	Sound Pressure Level dB(A) 10m	41	38	40	38	43	41	43	40	45	42	45	42
	Energy Efficiency Grade	B	B	B	A	B	B	B	A	B	B	B	A
	Inlet Pipe	2x5/8"		2x7/8"		2x7/8"		2x1"1/8		2x1"1/8		2x1"1/8	
	Drain Pipe	2x5/8"		2x7/8"		2x7/8"		2x1"1/8		2x1"1/8		2x1"1/8	
8PH /8PL	Wiring	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL
	Nominal Capacity *	32	27	41	34	63	54	81	68	95	80	122	102
	Air Volume [m³/h]	5870	4720	7270	5840	11740	9440	14540	11680	17610	14160	21810	17520
	Sound Pressure Level dB(A) 10m	35	32	35	32	38	35	38	35	39	37	39	37
	Energy Efficiency Grade	B	A	A	A	B	A	A	A	B	A	A	A
	Inlet Pipe	2x5/8"		2x5/8"		2x7/8"		2x7/8"		2x7/8"		2x1"1/8	
	Drain Pipe	2x5/8"		2x5/8"		2x7/8"		2x7/8"		2x7/8"		2x1"1/8	
	Surface Area	98		146		194		292		292		440	
	Refrigerant Circuit Volume	15		21		29		41		41		60	
	Net Weight (without refrigerant)	162		195		282		348		399		498	
	Dimension A mm	1168		1543		1920		2670		2671		3796	
	Dimension C mm	814		1189		1566		2316		2317		3442	

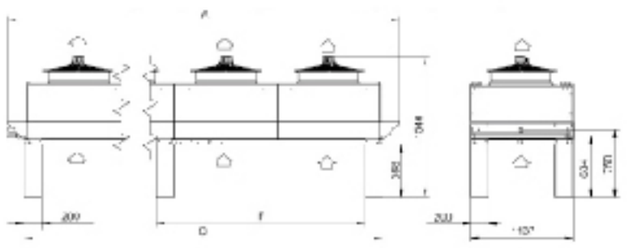
Dimension data tolerance is +/-10mm. Weight data tolerance is +/-15kg. The value is related to the part options selected.
* Heat extraction rate is based on the condition of condensation temperature of 40°C and heat transfer temperature difference of 15K, and the refrigerant is R404A.



Air Cooled Condenser Technical Parameters - SO 60 - Single Row

	Model	SO60 1MSB		SO60 1MSC		SO60 2MSB		SO60 2MSC		SO60 3MSB		SO60 3MSC		SO60 4MSB		SO60 4MSC	
	Fan	1 x Ø 630		1 x Ø 630		2x Ø 630		2 x Ø 630		3 x Ø 630		3 x Ø 630		4 x Ø 630		4 x Ø 630	
6PH /6PL	Wiring	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL
	Nominal Capacity *	45	39	54	49	89	77	108	99	134	116	161	147	179	154	215	197
	Air Volume [m³/h]	10290	8410	11790	9745	20580	16820	23580	19490	30870	25230	35370	29235	41160	33640	47160	38980
	Sound Pressure Level dB(A) 10m	52	47	52	47	55	50	55	49	57	51	57	51	58	52	58	52
	Energy Efficiency Grade	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C
	Inlet Pipe	7/8"		7/8"		1"3/8		1"3/8		1"5/8		1"5/8		1"5/8		2"1/8	
	Drain Pipe	7/8"		7/8"		1"3/8		1"3/8		1"5/8		1"5/8		1"5/8		2"1/8	
8PH /8PL	Wiring	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL
	Nominal Capacity *	34	29	43	36	69	58	87	73	103	96	130	108	137	115	173	145
	Air Volume [m³/h]	7160	5650	8760	6890	14320	11300	17520	13780	21480	16950	26290	20670	29640	22600	35040	27560
	Sound Pressure Level dB(A) 10m	40	34	40	34	43	37	43	37	45	39	45	38	46	40	46	40
	Energy Efficiency Grade	C	B	B	B	C	B	B	B	C	B	B	B	C	B	B	B
	Inlet Pipe	7/8"		7/8"		1"1/8		1"3/8		1"3/8		1"5/8		1"5/8		1"5/8	
	Drain Pipe	7/8"		7/8"		1"1/8		1"3/8		1"3/8		1"5/8		1"5/8		1"5/8	
	Surface Area	96		127		190		254		286		381		381		508	
	Refrigerant Circuit Volume	14		18		27		35		41		53		53		72	
	Net Weight (without refrigerant)	141		183		247		297		351		428		468		526	
	Dimension A mm	1543		1918		2670		3420		3796		4921		4922		6422	
	Dimension C mm	1189		1564		2316		3066		3442		4567		4568		6068	
	Dimension F mm	-		-		-		-		-		-		2296		3036	

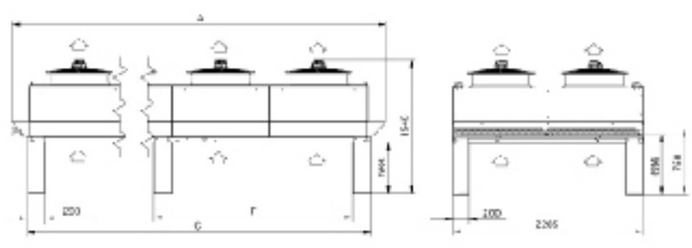
Dimension data tolerance is +/-10mm. Weight data tolerance is +/-15kg. The value is related to the part options selected.
* Heat extraction rate is based on the condition of condensation temperature of 40°C and heat transfer temperature difference of 15K, and the refrigerant is R404A.



Air Cooled Condenser Technical Parameters - SO 60 - Double Row

	Model	SO60 2MDB		SO60 2MDC		SO60 4MDB		SO60 4MDC		SO60 6MDB		SO60 6MDC	
	Fan	2 x Ø 630		2 x Ø 630		4 x Ø 630		4x Ø 630		6 x Ø 630		6 x Ø 630	
6PH /6PL	Wiring	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL
	Nominal Capacity *	90	77	108	99	179	155	215	197	268	231	322	295
	Air Volume [m³/h]	20580	16820	23850	19490	41160	33640	47160	38980	61740	50460	70740	58470
	Sound Pressure Level dB(A) 10m	55	50	55	50	58	52	58	52	60	54	60	54
	Energy Efficiency Grade	D	C	D	C	D	C	D	C	D	C	D	C
	Inlet Pipe	2x7/8"		2x7/8"		2x1"3/8		2x1"3/8		2x1"5/8		2x1"5/8	
	Drain Pipe	2x7/8"		2x7/8"		2x1"3/8		2x1"3/8		2x1"5/8		2x1"5/8	
8PH /8PL	Wiring	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL
	Nominal Capacity *	69	58	87	73	137	115	173	145	205	172	259	217
	Air Volume [m³/h]	14320	11300	17520	13780	29640	22600	35040	27560	42960	33900	52560	41340
	Sound Pressure Level dB(A) 10m	43	37	43	37	46	40	46	40	48	41	47	41
	Energy Efficiency Grade	C	B	B	B	C	B	B	B	C	B	B	B
	Inlet Pipe	2x7/8"		2x7/8"		2x1"1/8		2x1"3/8		2x1"3/8		2x1"5/8	
	Drain Pipe	2x7/8"		2x7/8"		2x1"1/8		2x1"3/8		2x1"3/8		2x1"5/8	
	Surface Area	190		254		381		508		572		761	
	Refrigerant Circuit Volume	27		35		54		70		82		106	
	Net Weight (without refrigerant)	243		283		438		523		630			
	Dimension A mm	1543		1918		2670		3420		3796		4921	
	Dimension C mm	1189		1564		2316		3066		3442		4567	
	Dimension F mm	-		-		-		-		-		-	

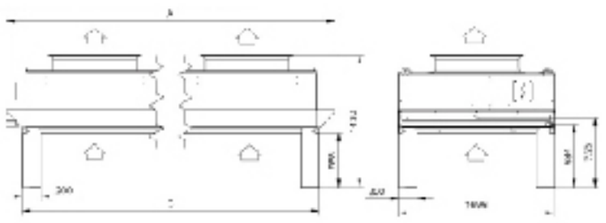
Dimension data tolerance is +/-10mm. Weight data tolerance is +/-15kg. The value is related to the part options selected.
* Heat extraction rate is based on the condition of condensation temperature of 40°C and heat transfer temperature difference of 15K, and the refrigerant is R404A.



Air Cooled Condenser Technical Parameters - SO 90 - Single Row

	Model	SO90 1MSC		SO90 1MSD		SO90 1MSE		SO90 2MSC		SO90 2MSD		SO90 2MSE		SO90 3MSC		SO90 3MSD	
	Fan	1 x Ø 910		1 x Ø 910		1 x Ø 910		2 x Ø 910		2 x Ø 910		2 x Ø 910		3 x Ø 910		3 x Ø 910	
6PH /6PL	Wiring	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL
	Nominal Capacity *	106	89	118	98	128	106	212	177	235	196	255	212	317	266	353	294
	Air Volume [m³/h]	26125	20405	27490	21395	28235	22110	52250	40810	54980	42790	56470	44220	78375	61215	82470	64185
	Sound Pressure Level dB(A) 10m	55	47	55	47	55	47	58	50	57	50	57	50	59	52	59	51
	Energy Efficiency Grade	D	C	C	C	C	C	D	C	C	C	C	C	D	C	C	C
	Inlet Pipe	1"3/8		1"5/8		1"5/8		2"1/8		2"1/8		2"1/8		2"1/8		2"1/8	
	Drain Pipe	1"3/8		1"5/8		1"5/8		2"1/8		2"1/8		2"1/8		2"1/8		2"1/8	
8PH /8PL	Wiring	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL
	Nominal Capacity *	88	73	96	79	104	85	176	145	192	157	208	170	264	217	288	236
	Air Volume [m³/h]	20240	15455	20900	15950	21560	16445	40480	30910	41800	31900	43120	32890	60720	46365	62700	47850
	Sound Pressure Level dB(A) 10m	46	36	45	36	45	36	48	39	48	39	48	39	50	41	50	40
	Energy Efficiency Grade	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
	Inlet Pipe	1"3/8		1"3/8		1"3/8		2"1/8		2"1/8		2"1/8		2"1/8		2"1/8	
	Drain Pipe	1"3/8		1"3/8		1"3/8		2"1/8		2"1/8		2"1/8		2"1/8		2"1/8	
12PH /12PL	Wiring	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL
	Nominal Capacity *	63	48	68	51	73	55	126	96	136	103	146	110	189	144	204	155
	Air Volume [m³/h]	12650	8800	13035	9135	13530	9515	25300	17600	26070	18270	27060	19030	37950	26400	39105	27405
	Sound Pressure Level dB(A) 10m	34	26	34	26	34	26	37	29	37	29	37	28	39	30	39	30
	Energy Efficiency Grade	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
	Inlet Pipe	1"1/8		1"1/8		1"3/8		1"5/8		1"5/8		1"5/8		2"1/8		2"1/8	
	Drain Pipe	1"1/8		1"1/8		1"3/8		1"5/8		1"5/8		1"5/8		2"1/8		2"1/8	
	Surface Area	195		244		293		390		488		586		586		732	
	Refrigerant Circuit Volume	29		38		44		60		72		85		87		105	
	Net Weight (without refrigerant)	251		289		319		469		542		610		681		794	
	Dimension A mm	1918		2293		2668		3420		4170		4920		4921		6046	
	Dimension C mm	1564		1939		2314		3066		3816		4566		4567		5692	

Dimension data tolerance is +/-10mm. Weight data tolerance is +/-15kg. The value is related to the part options selected.
* Heat extraction rate is based on the condition of condensation temperature of 40°C and heat transfer temperature difference of 15K, and the refrigerant is R404A.



Air Cooled Condenser Technical Parameters - AL91 - Single Row

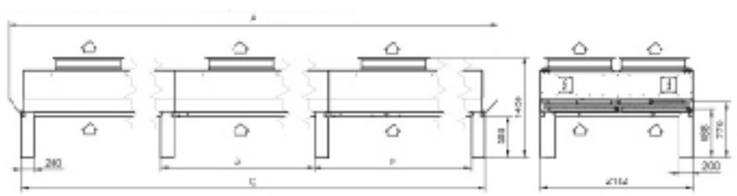
	Model	AL91 3MSC		AL91 3MSD		AL91 3MSE		AL91 4MSC		AL91 4MSD		AL91 4MSE	
	Fan	3 x Ø 910		3 x Ø 910		3 x Ø 910		4 x Ø 910		4 x Ø 910		4 x Ø 910	
6PH /6PL	Wiring	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL
	Nominal Capacity *	224	190	273	231	326	275	299	253	364	308	434	366
	Air Volume [m³/h]	70455	54180	80850	62205	85800	66000	93940	72240	107800	82940	114400	88000
	Sound Pressure Level dB(A) 10m	64	57	64	57	64	57	66	58	66	58	66	58
	Energy Efficiency Grade	D	D	D	C	D	C	D	D	D	C	D	C
	Inlet Pipe	2"1/8		2"1/8		2"1/8		2"5/8		2"5/8		2"5/8	
	Drain Pipe	2"1/8		2"1/8		2"1/8		2"5/8		2"5/8		2"5/8	
8PH /8PL	Wiring	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL
	Nominal Capacity *	182	153	214	178	253	207	242	204	285	237	337	276
	Air Volume [m³/h]	50490	38775	55440	42570	58410	44880	67320	51700	73920	56760	77880	59840
	Sound Pressure Level dB(A) 10m	50	41	50	40	50	40	51	42	51	41	51	41
	Energy Efficiency Grade	C	B	C	B	B	B	C	B	C	B	B	B
	Inlet Pipe	2"1/8		2"1/8		2"1/8		2"1/8		2"5/8		2"5/8	
	Drain Pipe	2"1/8		2"1/8		2"1/8		2"1/8		2"5/8		2"5/8	
12PH /12PL	Wiring	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL
	Nominal Capacity *	131	102	152	119	180	138	175	136	202	158	240	184
	Air Volume [m³/h]	31020	22110	34650	24750	37290	26565	41360	29480	46200	33000	49720	35420
	Sound Pressure Level dB(A) 10m	39	30	39	30	39	30	40	31	40	31	40	31
	Energy Efficiency Grade	B	A	A	A	A	A	B	A	A	A	A	A
	Inlet Pipe	1"5/8		2"1/8		2"1/8		2"1/8		2"1/8		2"1/8	
	Drain Pipe	1"5/8		2"1/8		2"1/8		2"1/8		2"1/8		2"1/8	
	Surface Area	498		623		748		665		831		997	
	Refrigerant Circuit Volume	69		84		101		91		111		132	
	Net Weight (without refrigerant)	557		654		740		742		872		986	
	Dimension A mm	4921		6046		7171		6422		7922		9422	
	Dimension C mm	4567		5692		6817		6068		7568		9068	
	Dimension F mm	-		-		2285		3036		3786		4536	
	Dimension G mm	-		-		-		-		-		-	

Dimension data tolerance is +/-10mm. Weight data tolerance is +/-15kg. The value is related to the part options selected.
* Heat extraction rate is based on the condition of condensation temperature of 40°C and heat transfer temperature difference of 15K, and the refrig
is R404A.

Air Cooled Condenser Technical Parameters - AL91 - Single Row

	Model	AL91 5MSC		AL91 5MSD		AL91 5MSE		AL91 6MSC		AL91 6MSD	
	Fan	5 x Ø 910		5 x Ø 910		5 x Ø 910		6 x Ø 910		6 x Ø 910	
6PH /6PL	Wiring	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL
	Nominal Capacity *	373	316	455	385	543	458	448	379	546	462
	Air Volume [m³/h]	117425	90300	134750	103675	143000	110000	140910	108360	161700	124410
	Sound Pressure Level dB(A) 10m	67	59	67	59	67	59	67	60	67	60
	Energy Efficiency Grade	D	D	D	C	D	C	D	D	D	C
	Inlet Pipe	2"5/8		2"5/8		2"5/8		2"5/8		2"5/8	
	Drain Pipe	2"5/8		2"5/8		2"5/8		2"5/8		2"5/8	
8PH /8PL	Wiring	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL
	Nominal Capacity *	303	255	356	296	421	344	363	306	427	355
	Air Volume [m³/h]	84150	64825	92400	70950	97350	74800	100980	77550	110880	85140
	Sound Pressure Level dB(A) 10m	52	42	52	42	51	42	52	43	52	43
	Energy Efficiency Grade	C	B	C	B	C	B	C	B	C	B
	Inlet Pipe	2"5/8		2"5/8		2"5/8		2"5/8		2"5/8	
	Drain Pipe	2"5/8		2"5/8		2"5/8		2"5/8		2"5/8	
12PH /12PL	Wiring	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL
	Nominal Capacity *	218	170	253	198	300	230	262	203	303	237
	Air Volume [m³/h]	51700	38850	57750	41250	62150	44275	62040	44220	69300	49500
	Sound Pressure Level dB(A) 10m	41	32	40	32	40	32	41	33	41	33
	Energy Efficiency Grade	B	A	A	A	A	A	B	A	A	A
	Inlet Pipe	2"1/8		2"1/8		2"5/8		2"5/8		2"5/8	
	Drain Pipe	2"1/8		2"1/8		2"5/8		2"5/8		2"5/8	
	Surface Area	831		1038		1246		997		1246	
	Refrigerant Circuit Volume	111		137		162		132		162	
	Net Weight (without refrigerant)	960		1090		1233		1098		1295	
	Dimension A mm	7924		9799		11674		9426		11676	
	Dimension C mm	7570		9444		11320		9072		11322	
	Dimension F mm	3036		3787		4536		3037		3787	
	Dimension G mm	1502		1876		2252		3003		3753	

Dimension data tolerance is +/-10mm. Weight data tolerance is +/-15kg. The value is related to the part options selected.
* Heat extraction rate is based on the condition of condensation temperature of 40°C and heat transfer temperature difference of 15K, and the refrigerant is R404A.



Air Cooled Condenser Technical Parameters - AL91 - Double Row

	Model	AL91 4MDC		AL91 4MDD		AL91 4MDE		AL91 6MDC		AL91 6MDD		AL91 6MDE		AL91 8MDC	
	Fan	4 x Ø 910		4 x Ø 910		4 x Ø 910		6 x Ø 910		6 x Ø 910		6 x Ø 910		8 x Ø 910	
6PH /6PL	Wiring	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL
	Nominal Capacity *	300	254	364	308	434	368	448	380	546	462	652	550	598	506
	Air Volume [m³/h]	93840	72240	107800	82940	114400	88000	140910	108360	161700	124410	171600	132000	187980	144480
	Sound Pressure Level dB(A) 10m	60	53	60	53	60	53	62	54	62	54	62	54	63	56
	Energy Efficiency Grade	D	D	D	C	D	C	D	D	D	C	D	C	D	D
	Inlet Pipe	2x1"5/8		2x2"1/8		2x2"1/8		2x2"1/8		2x2"1/8		2x2"1/8		2x2"5/8	
	Drain Pipe	2x1"5/8		2x2"1/8		2x2"1/8		2x2"1/8		2x2"1/8		2x2"1/8		2x2"5/8	
8PH /8PL	Wiring	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL
	Nominal Capacity *	252	204	286	238	338	276	364	306	428	356	506	414	494	408
	Air Volume [m³/h]	67320	51700	73920	56760	77880	59840	100980	77550	110880	85140	116820	89760	134640	103400
	Sound Pressure Level dB(A) 10m	51	42	51	42	51	42	53	43	53	43	53	43	54	45
	Energy Efficiency Grade	C	B	C	B	B	B	C	B	C	B	B	B	C	B
	Inlet Pipe	2x1"5/8		2x1"5/8		2x1"5/8		2x2"1/8		2x2"1/8		2x2"1/8		2x2"1/8	
	Drain Pipe	2x1"5/8		2x1"5/8		2x1"5/8		2x2"1/8		2x2"1/8		2x2"1/8		2x2"1/8	
12PH /12PL	Wiring	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL
	Nominal Capacity *	176	136	202	158	240	184	262	204	304	238	360	276	350	272
	Air Volume [m³/h]	41360	29480	46200	33000	49720	35420	62040	44220	69300	49500	74580	53130	82720	58960
	Sound Pressure Level dB(A) 10m	40	32	40	31	40	31	42	33	42	33	41	33	43	34
	Energy Efficiency Grade	B	A	A	A	A	A	B	A	A	A	A	A	B	A
	Inlet Pipe	2x1"3/8		2x1"5/8		2x1"5/8		2x1"5/8		2x2"1/8		2x2"1/8		2x2"1/8	
	Drain Pipe	2x1"3/8		2x1"5/8		2x1"5/8		2x1"5/8		2x2"1/8		2x2"1/8		2x2"1/8	
	Surface Area	660		831		997		997		1246		1495		1330	
	Refrigerant Circuit Volume	92		117		137		137		169		202		181	
	Net Weight (without refrigerant)	685		796		894		1000		1168		1320		1338	
	Dimension A mm	3420		4170		4920		4921		6046		7171		6422	
	Dimension C mm	3066		3916		4566		4567		5692		6817		6068	
	Dimension F mm	-		-		-		-		-		2285		3036	
	Dimension G mm	-		-		-		-		-		-		-	

Dimension data tolerance is +/-10mm. Weight data tolerance is +/-15kg. The value is related to the part options selected.
* Heat extraction rate is based on the condition of condensation temperature of 40°C and heat transfer temperature difference of 15K, and the refrigerant is R404A.

Air Cooled Condenser Technical Parameters - AL91 - Double Row

	Model	AL91 8MDD		AL91 8MDE		AL91 10MDC			AL91 10MDD		AL91 10MDE		AL91 12MDC		AL91 12MDD	
	Fan	8 x Ø 910		8 x Ø 910		10 x Ø 910			10x Ø 910		10 x Ø 910		12 x Ø 910		12 x Ø 910	
6PH /6PL	Wiring	6PH	6PL	6PH	6PL	6PH	6PL		6PH	6PL	6PH	6PL	6PH	6PL	6PH	6PL
	Nominal Capacity *	728	616	868	732	748	632		910	770	1096	916	896	758	1092	924
	Air Volume [m³/h]	215600	165880	229800	176000	234850	180600		269500	207350	286000	220000	281820	216720	323400	248820
	Sound Pressure Level dB(A) 10m	63	55	63	55	64	56		64	56	64	56	65	57	64	57
	Energy Efficiency Grade	D	C	D	C	D	D		D	C	D	C	D	D	D	C
	Inlet Pipe	2x2"5/8		2x2"5/8		2x2"5/8			2x2"5/8		2x2"5/8		2x2"5/8		2x2"5/8	
	Drain Pipe	2x2"5/8		2x2"5/8		2x2"5/8			2x2"5/8		2x2"5/8		2x2"5/8		2x2"5/8	
8PH /8PL	Wiring	8PH	8PL	8PH	8PL	8PH	8PL		8PH	8PL	8PH	8PL	8PH	8PL	8PH	8PL
	Nominal Capacity *	570	474	674	552	606	510		712	592	842	688	726	612	854	710
	Air Volume [m³/h]	147840	113520	155760	119680	168300	129250		194800	141900	194700	148600	201960	155100	221760	170280
	Sound Pressure Level dB(A) 10m	54	44	54	44	55	45		55	45	54	45	55	46	55	46
	Energy Efficiency Grade	C	B	B	B	C	B		C	B	B	B	C	B	C	B
	Inlet Pipe	2x2"5/8		2x2"5/8		2x2"5/8			2x2"5/8		2x2"5/8		2x2"5/8		2x2"5/8	
	Drain Pipe	2x2"5/8		2x2"5/8		2x2"5/8			2x2"5/8		2x2"5/8		2x2"5/8		2x2"5/8	
12PH /12PL	Wiring	12PH	12PL	12PH	12PL	12PH	12PL		12PH	12PL	12PH	12PL	12PH	12PL	12PH	12PL
	Nominal Capacity *	404	295	490	368	436	340		506	396	600	460	524	406	606	474
	Air Volume [m³/h]	92400	66000	99440	70840	103400	73700		115500	82500	124300	88550	124080	88440	139600	99000
	Sound Pressure Level dB(A) 10m	43	34	42	34	44	35		43	35	43	35	44	36	44	35
	Energy Efficiency Grade	A	A	A	A	B	A		A	A	A	A	B	A	A	A
	Inlet Pipe	2x2"1/8		2x2"1/8		2x2"1/8			2x2"1/8		2x2"5/8		2x2"5/8		2x2"5/8	
	Drain Pipe	2x2"1/8		2x2"1/8		2x2"1/8			2x2"1/8		2x2"5/8		2x2"5/8		2x2"5/8	
	Surface Area	1662		1994		1662			2077		2492		1994		2492	
	Refrigerant Circuit Volume	222		263		222			273		324		263		324	
	Net Weight (without refrigerant)	1548		1740		1657			1930		2169		1973		2297	
	Dimension A mm	7922		9422		7924			9799		11674		9426		11676	
	Dimension C mm	7568		9068		7570			9445		11320		9072		11322	
	Dimension F mm	3786		4536		3036			3787		4536		3037		3787	
	Dimension G mm	-		-		1502			1876		2252		3003		3753	

Dimension data tolerance is +/-10mm. Weight data tolerance is +/-15kg. The value is related to the part options selected.
* Heat extraction rate is based on the condition of condensation temperature of 40°C and heat transfer temperature difference of 15K, and the refrigerant is R404A.