Lamborghini CALORECLIMA

WALL HUNG SPLIT AIR CONDITIONERS

Ferroli ACADEMY

SMERALDO

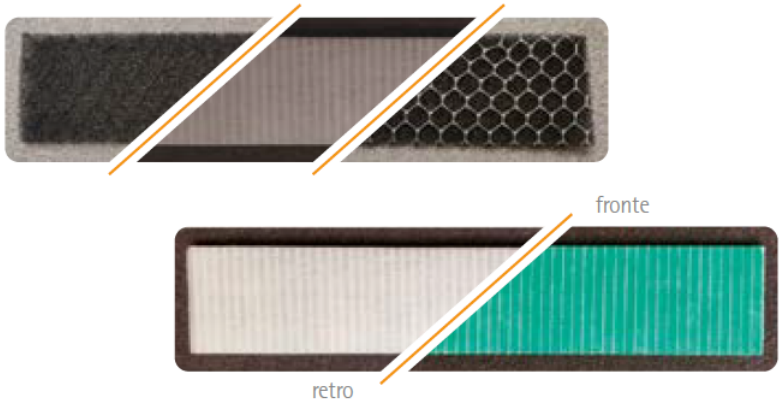
S

M

- *Singlesplit / Multisplit*
- *DC inverter compressor*
- *Cooling and heating (reversible heat pump)*
- *R32 refrigerant*

- ErP Energy **class A++**
- 4 layers **filter** technology for an optimal **air quality**
- Built-in **Ioniser** for user's **wellness**
- **Wi-Fi** connectivity for possible control with dedicated smartphone **APP**
- Compatible with the "Amazon **Alexa**" and "**Google** Home" voice assistants
- Wide range cooling capacity
- Temperature display on board (Indoor unit)
- Direct current inverter technology for **energy saving**
- Design internal unit with high capacity heat exchanger
- Outdoor unit equipped with fitting covers and **sound-absorbent** jacket and heat exchanger with «Gold» **coating** against **corrosion** suitable for installation also near to **sea**
- Easily removable intake grille and filters for quick cleaning
- **Automatic restart** in case of black-out
- Operation mode **Auto** / Night time/ Timer
- Remote control

OPERATING MODE	PARAMETER		INDOOR SIDE	OUTDOOR SIDE
Cooling	Input air max/min temperature (B.S.)	°C	32 / 17	50 / -15
Heating	Input air max/min temperature (B.S.)	°C	30 / 0	30 / -15
All	Power voltage / frequency	V	230±10% / 50±2	



- Biohepa >> Particles
- Active Carbon>> Odours
- Cold Catalyst>> Oxidation of contaminants
- Silver Ion->> Purifying

- New four-layer filter technology that purifies the air and removes gases,odours, formaldehydes, pollutants, bacteria, viruses and fungi from it.
- Super Ioniser that releases millions of ions which, by attracting particles in the air, end up being sucked into the filters and contribute to drastically reduce the presence of viruses and bacteria in the air.

SMERALDO S

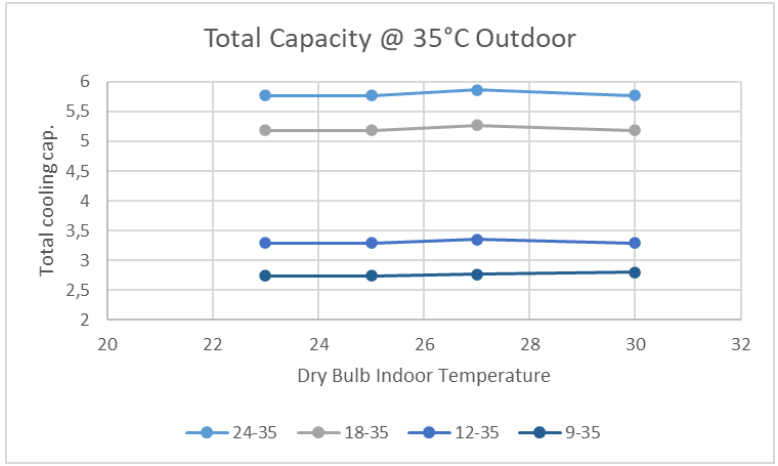
MODEL			09	12	18	24
Power supply		V-Ph-Hz	220/240 V - 1 phase - 50Hz			
Cooling power [1]	nominal	W	2,770	3,350	5,270	5,860
	min-max	W	908 ~ 3,398	1,113 ~ 4,160	3,390 ~ 5,830	2,080 ~ 7,910
Power absorbed in cooling	nominal	W	769	1,021	1,550	1,787
	min-max	W	100 ~ 1,240	130 ~ 1,580	560 ~ 2,050	420 ~ 3,150
Current absorbed in cooling	nominal	A	3.34	4.44	6.70	7.77
	min-max	A	0.4 ~ 5.4	0.5 ~ 6.9	2.4 ~ 8.9	1.8 ~ 13.8
EER ref. Standard EN14511 (nominal)			3.60	3.28	3.40	3.28
Cooling	SEER		6.30	6.10	7.40	6.10
	PdesignC	kW	2.80	3.60	5.20	7.00
	Class ErP		A++	A++	A++	A++
Thermal power [2]	nominal	W	2,930	3,570	4,970	6,000
	min-max	W	820 ~ 3,369	1,084 ~ 4,220	3,100 ~ 5,850	1,610 ~ 7,910
Power absorbed in heating	nominal	W	733	963	1,298	1,608
	min-max	W	120 ~ 1,200	100 ~ 1,680	780 ~ 2,000	300 ~ 2,750
Current absorbed in heating	nominal	A	3.18	4.19	5.64	6.99
	min-max	A	0.5 ~ 5.2	0.4 ~ 6.9	3.4 ~ 8.7	1.3 ~ 12.2
COP ref. Standard EN14511 (nominal)			3.99	3.71	3.83	3.73
Heating Moderate climate zone	SCOP		4.00	4.00	4.00	4.00
	PdesignH	kW	2.60	2.70	4.10	4.80
	Class ErP		A+	A+	A+	A+
	Tbiv / Tol	°C	-7 / -15	-7 / -15	-7 / -15	-7 / -15
Heating Warm climate zone	SCOP		5.10	5.10	5.10	4.80
	PdesignH	kW	2.60	2.50	4.40	5.80
	Class ErP		A+++	A+++	A+++	A++
	Tbiv / Tol	°C	2 / -15	2 / -15	2 / -15	2 / -15
Maximum power absorbed		W	2,150	2,150	2,500	3,500
Maximum current absorbed		A	10	10	13	15.5
Inrush current		A	Negligible thanks to inverter technology			
Indoor unit	Air flow rate (max-med-min)	m³/h	466 / 360 / 325	540 / 430 / 314	840 / 680 / 540	980 / 817 / 662
	Sound pressure [3] (max-med-min)	dB(A)	38.5 / 32 / 25	40.5 / 34.5 / 25	42.5 / 36 / 26	45 / 40.5 / 36
	Sound pressure (max)	dB(A)	54	55	56	59
	Air flow rate	m³/h	1,750	1,800	2,100	3,500
Outdoor unit	Sound pressure [3]	dB(A)	55.5	56	56	59
	Sound power	dB(A)	62	63	63	67
Refrigerant gas	Type / GWP		R32 / 675			
	Load quantity	kg	0.55	0.55	1.08	1.42
Liquid / gas line connections		inches	1/4" - 3/8"	1/4" - 3/8"	1/4" - 1/2"	3/8" - 5/8"
Maximum length refrigeration lines		m	25	25	30	50
Maximum height difference		m	10	10	20	25
CODE	**INDOOR UNIT**		**2CP001HL**	**2CP001IL**	**2CP001JL**	**2CP001KL**
	OUTDOOR UNIT		**2CP001LL**	**2CP001ML**	**2CP001NL**	**2CP0010L**

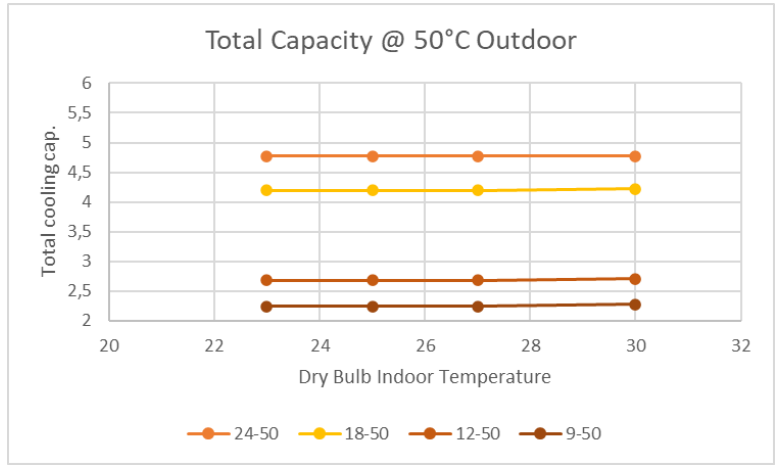
SMERALDO S

	Insulation rate			Total cooling capacity @ max Fan Speed	
	High (20W/mq)	Medium (35W/mq)	Low (60W/mq)	Nom @35°C	Max @35°C
SMERALDO S	mq			kW	
9	51-62	29-35	17-20	2,8	3,4
12	62-77	35-44	20-25	3,4	4,2
18	97-107	55-61	32-35	5,3	5,8
24	108-146	62-83	36-48	5,9	7,9

	Insulation rate			Total cooling capacity @ max Fan Speed	
	High (20W/mq)	Medium (35W/mq)	Low (60W/mq)	Nom @50°C	Max @50°C
SMERALDO S	mq			kW	
9	41-50	23-28	13-16	2,2	2,7
12	49-61	28-35	16-20	2,7	3,3
18	77-86	44-49	25-28	4,2	4,7
24	88-117	50-66	29-39	4,8	6,3

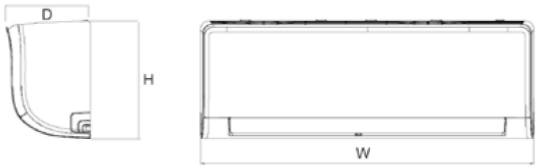
SMERALDO S


Total Capacity @ 35°C Outdoor
Total cooling cap.
6
5,5
5
4,5
4
3,5
3
2,5
2
20
22
24
26
28
30
32
Dry Bulb Indoor Temperature
24-35
18-35
12-35
9-35


Total Capacity @ 50°C Outdoor
Total cooling cap.
6
5,5
5
4,5
4
3,5
3
2,5
2
20
22
24
26
28
30
32
Dry Bulb Indoor Temperature
24-50
18-50
12-50
9-50

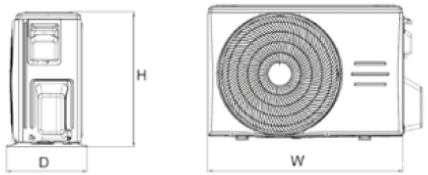
SMERALDO S

Indoor unit



MODEL	W mm	H mm	D mm	Weight kg
9	726	291	210	8,0
12	835	295	208	8,7
18	969	320	241	11,2
24	1083	336	244	13,6

Outdoor unit



MODEL	W mm	H mm	D mm	Weight kg
9	720	495	270	23,5
12	720	495	270	23,7
18	874	554	330	33,5
24	955	673	342	43,9

SMERALDO M

Outdoor unit*			18-2	27-3	28-4
Power supply		V-Ph-Hz	220/240 V - 1 phase - 50Hz		
Cooling power (1)	nominal	W	5,275	7,915	8,205
	min-max	W	2,225 ~ 5,570	3,025 ~ 8,500	2,490 ~ 10,255
Power absorbed in cooling	nominal	W	1,635	2,450	2,500
	min-max	W	690 ~ 2,000	230 ~ 3,250	150 ~ 3,340
Current absorbed in cooling	nominal	A	7.1	11.2	10.9
	min-max	A	3.2 ~ 9.0	2.1 ~ 14.7	1.3 ~ 14.5
EER ref. Standard EN14511 (nominal)			3.23	3.23	3.23
Cooling	SEER		6.1	6.1	7
	PdesignC	kW	5.3	7.9	8.2
	Class ErP		A++	A++	A++
Thermal power (2)	nominal	W	5,570	8,205	8,790
	min-max	W	2,340 ~ 5,625	2,200 ~ 8,500	1,605 ~ 10,140
Power absorbed in heating	nominal	W	1,500	2,210	2,400
	min-max	W	600 ~ 1,780	330 ~ 2,960	280 ~ 3,200
Current absorbed in heating	nominal	A	6.6	10.1	10.4
	min-max	A	2.80 ~ 7.95	2.6 ~ 13.5	1.98 ~ 14.0
COP ref. Standard EN14511 (nominal)			3.71	3.71	3.71
Heating Moderate climate zone	SCOP		4.0	4.0	4.0
	PdesignH	kW	4.5	5.7	6.8
	Class ErP		A+	A+	A+
	Tbiv / Tol	°C	-7 / -15	-7 / -15	-7 / -15
Heating Warm climate zone	SCOP		5.1	5.1	5.1
	PdesignH	kW	5	6	6.8
	Class ErP		A+++	A+++	A+++
	Tbiv / Tol	°C	2 / -15	2 / -15	2 / -15
Maximum power absorbed		W	3,050	4,100	4,150
Maximum current absorbed		A	13	18	19
Inrush current		A	Negligible thanks to inverter technology		
Outdoor unit	Air flow rate	m^3/h	2,100	3,000	3,800
	Sound pressure (3)	dB(A)	54	55	63.0
	Sound power	dB(A)	65	68	68
Refrigerant gas	Type / GWP		R32 /675		
	Load quantity	kg	1.25	1.85	2.1
CODE			**2CP001PL**	**2CP001RL**	**2CP001SL**

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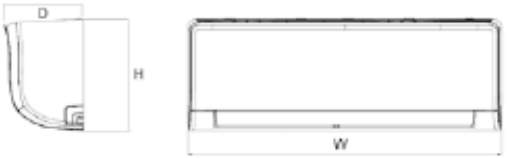
Indoor unit		9	12	18
Cooling performance	W	2,640	3,515	5,275
Thermal performance	W	2,930	3,810	5,570
Air flow rate (max-med-min)	m^3/h	520 / 460 / 330	530 / 400 / 350	800 / 600 / 500
Sound pressure (max-med-min-slo)	dB(A)	37 / 32 / 22 / 20	37 / 32 / 22 / 21	41 / 37 / 31 / 20
Sound pressure (max)	dB(A)	54	56	56
Liquid / gas line connections	inches	1/4" - 3/8"	1/4" - 3/8"	1/4" - 1/2"
CODE		**2CP001HL**	**2CP001IL**	**2CP001JL**

(1) External air temperature = 35°C D.B. • Room air temperature = 27°C D.B. / 19°C W.B. - (2) External air temperature = 7°C D.B. / 6°C W.B. • Room air temperature = 20°C D.B. - (3) Sound pressure measured at a distance of 1 m: E.U. in open area, I.U. in 100 m^3 room with 0.5 second reverberation time * Nominal data, check combinations on the following pages

Indoor unit



MODEL	W mm	H mm	D mm	Weight kg
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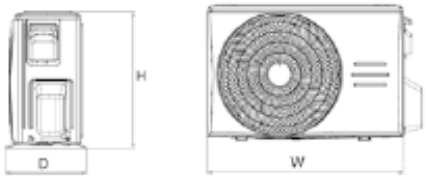
18	969	320	241	11,2

Outdoor unit



MODEL	W mm	H mm	D mm	Weight kg
18-2	805	554	330	35,0
27-3	890	673	342	48,0
28-4	946	810	410	62,1

SMERALDO M

Table of possible combinations

Outdoor unit	Indoor unit connected					
	1	2		3		4
18-2	9K	9K+9K	-	non previsto		non previsto
	12K	9K+12K	-			
	18K	12K+12K	-			
27-3	9K	9K+9K	12K+12K	9K+9K+9K	9K+12K+12K	non previsto
	12K	9K+12K	12K+18K	9K+9K+12K	12K+12K+12K	
	18K	9K+18K	-	9K+9K+18K	-	
28-4	9K	9K+9K	12K+12K	9K+9K+9K	9K+12K+12K	9K+9K+9K+9K
	12K	9K+12K	12K+18K	9K+9K+12K	12K+12K+12K	9K+9K+9K+12K
	18K	9K+18K	18K+18K	9K+9K+18K	-	-

NB:

- combinations for which the total power required by the indoor units is compatible with the nominal power of the outdoor unit.
- combinations for which the total power required by the indoor units is higher than the nominal power of the outdoor unit. In the event of a simultaneous request for power by all the units connected, the power available for the individual units will be in line with the indications given in the previous table.

Lamborghini CALORECLIMA

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UE	UI	Good mq	Medium m2	Poor m2
18-2	1	37	21	13
		52	29	19
	2	79	44	28
		79	44	28
		79	44	28
27-3	2	79	44	28
		89	49	32
		101	56	36
		93	52	33
		101	56	36
	3	117	65	42
		117	65	42
		117	65	42
		117	65	42
28-4	2	79	44	28
		89	49	32
		108	60	39
		96	53	34
		108	60	39
		111	62	40
	3	105	59	38
		116	64	41
		116	64	41
		116	64	41
		116	64	41
		116	64	41
	4	121	67	76
		121	67	73

Performance in cooling mode

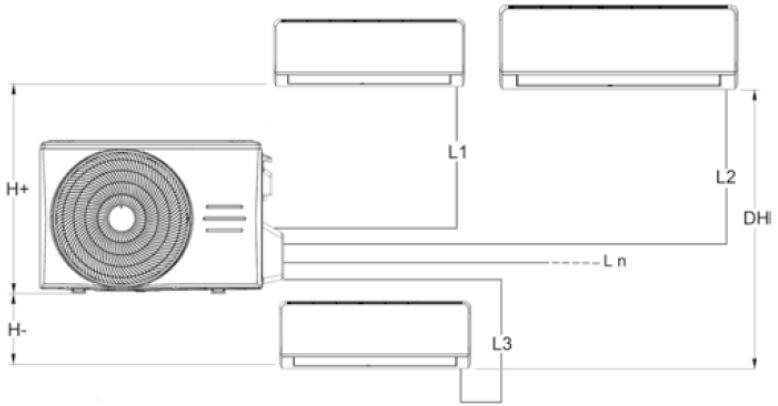
EU	IU	Combination	Partial capacity (kW) Room A	B	C	D	Total capacity in cooling (kW) Min	Nom	Max	Power absorbed Total (kW) Min	Nom	Max	Current absorbed Total (A) Min	Nom	Max	EER Nom	SEER	Energy class
18-2	1	9	2.50	—	—	—	1.43	2.50	3.20	0.35	0.75	0.93	1.52	3.24	4.06	3.35	—	—
		12	3.50	—	—	—	1.43	3.50	3.90	0.35	1.08	1.29	1.52	4.68	5.62	3.25	—	—
	2	9+9	2.65	2.65	—	—	2.12	5.30	6.41	0.54	1.64	2.05	2.35	7.13	8.92	3.23	6.1	A++
		9+12	2.27	3.03	—	—	2.12	5.30	6.41	0.54	1.64	2.05	2.35	7.13	8.92	3.23	6.1	A++
		12+12	2.65	2.65	—	—	2.12	5.30	6.41	0.54	1.64	2.05	2.35	7.13	8.92	3.23	6.1	A++
27.3	2	9+9	2.65	2.65	—	—	2.21	5.30	7.11	0.64	1.64	2.45	2.76	7.13	10.63	3.23	5.6	A+
		9+12	2.57	3.43	—	—	2.21	6.00	7.51	0.64	1.86	2.57	2.76	8.08	11.17	3.23	5.6	A+
		9+18	2.27	4.53	—	—	2.21	6.80	7.90	0.64	2.09	2.69	2.76	9.10	11.70	3.25	5.6	A+
		12+12	3.15	3.15	—	—	2.21	6.30	7.66	0.64	1.94	2.64	2.76	8.45	11.48	3.24	5.6	A+
		12+18	2.72	4.08	—	—	2.21	6.80	7.90	0.64	2.09	2.69	2.76	9.10	11.70	3.25	5.6	A+
	3	9+9+9	2.63	2.63	2.63	—	2.77	7.90	8.69	0.76	2.45	2.91	3.30	10.63	12.65	3.23	6.1	A++
		9+9+12	2.37	2.37	3.16	—	2.77	7.90	8.69	0.76	2.45	2.91	3.30	10.63	12.65	3.23	6.1	A++
		9+12+12	2.15	2.87	2.87	—	2.77	7.90	8.69	0.76	2.45	2.91	3.30	10.63	12.65	3.23	6.1	A++
		12+12+12	2.63	2.63	2.63	—	2.77	7.90	8.69	0.76	2.45	2.91	3.30	10.63	12.65	3.23	6.1	A++
28.4	2	9+9	2.65	2.65	—	—	2.05	5.30	6.81	0.63	1.64	2.28	2.76	7.13	9.93	3.23	5.1	A
		9+12	2.57	3.43	—	—	2.05	6.00	6.97	0.63	1.86	2.41	2.76	8.08	10.49	3.23	5.1	A
		9+18	2.43	4.87	—	—	2.05	7.30	7.54	0.63	2.26	2.79	2.76	9.83	12.14	3.23	5.1	A
		12+12	3.25	3.25	—	—	2.05	6.50	7.38	0.63	2.01	2.49	2.76	8.75	10.82	3.23	5.1	A
		12+18	2.92	4.38	—	—	2.05	7.30	7.54	0.63	2.26	2.79	2.76	9.83	12.14	3.23	5.1	A
		18+18	3.75	3.75	—	—	2.05	7.50	7.54	0.63	2.32	2.79	2.76	10.10	12.14	3.23	5.1	A
	3	9+9+9	2.37	2.37	2.37	—	2.62	7.10	8.45	0.76	2.20	2.94	3.31	9.56	12.80	3.23	5.6	A+
		9+9+12	2.34	2.34	3.12	—	2.62	7.80	8.45	0.76	2.41	2.94	3.31	10.50	12.80	3.23	5.6	A+
		9+9+18	1.95	1.95	3.90	—	2.62	7.80	8.45	0.76	2.41	2.94	3.31	10.50	12.80	3.23	5.6	A+
		9+12+12	2.13	2.84	2.84	—	2.62	7.80	8.45	0.76	2.41	2.94	3.31	10.50	12.80	3.23	5.6	A+
		9+12+18	1.80	2.40	3.60	—	2.62	7.80	8.45	0.76	2.41	2.94	3.31	10.50	12.80	3.23	5.6	A+
		12+12+12	2.60	2.60	2.60	—	2.62	7.80	8.45	0.76	2.41	2.94	3.31	10.50	12.80	3.23	5.6	A+
	4	9+9+9+9	2.05	2.05	2.05	2.05	2.87	8.20	9.92	0.86	2.54	3.17	3.75	11.04	13.80	3.23	7.0	A++
		9+9+9+12	1.89	1.89	1.89	2.52	2.87	8.20	9.92	0.86	2.54	3.17	3.75	11.04	13.80	3.23	7.0	A++

SMERALDO M

LIMITS ON LENGTH AND HEIGHT DIFFERENCE OF COOLING PIPES

The length of the cooling pipes between the indoor and outdoor units must be the shortest possible and is, in any case, limited by the maximum values in height difference between the two units.

With the decrease in the difference in height between the units (H1,H2) and the length of the pipes (L), the load loss will be limited, thus increasing the overall performance of the machine. Observe the limits indicated in the following tables.



Outdoor unit			18-2	27-3			28-4			
Diameter	Liquid	“	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”	1/4”
	Gas	“	3/8”	3/8”	3/8”	3/8”	3/8”	3/8”	3/8”	1/2”
Tot. maximum length		m	40	60			80			
Maximum length single unit		m	25	30			35			
Maximum height difference	H+	m	15	15			15			
	H-	m	15	15			15			
	DH	m	10	10			10			
Total maximum length of pipes with standard load		m	7.5	7.5			7.5			
Additional quantity of refrigerant per metre		g/m	12	12	12	12	12	12	12	24