



LG
2024

AR CONDICIONADO COMERCIAL

 **Megaclima**

— Desde 1993 —

Saving Operation Cost

High Energy Efficiency

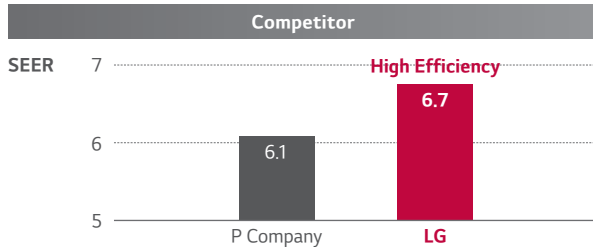


The advanced technologies of LG achieve lower energy consumption, especially in cooling as can be seen from the SEER class given according to ErP Regulations.

Server room need to be operated continuously.

That's why server room owners want to use high energy efficient air conditioning.

LG solution saves annual operation cost for server room due to high SEER.



※ P Company 7.1kW Solution / Outdoor unit : 7.1kW

Indoor unit : 7.1kW Wall mounted unit

※ Performances are based on the following conditions :

- Cooling : Indoor Temp. 27°CDB / 19°CWB, Outdoor Temp. 35°CDB / 24°CWB
- Heating : Indoor Temp. 20°CDB / 15°CWB, Outdoor Temp. 7°CDB / 6°CWB
- Interconnected Pipe is standard length and difference of Elevation (Outdoor - Indoor Unit) is 0m.

LG Server Room Solution

SEER class (ErP regulation)

	2.5kW	3.4kW	5.0kW	6.8kW	8.0kW	9.5kW
SEER	7.0 (A++)	6.6 (A++)	6.8 (A++)	6.7 (A++)	7.0 (A++)	6.1 (A++)
SCOP					4.3 (A+)	3.85 (A+)

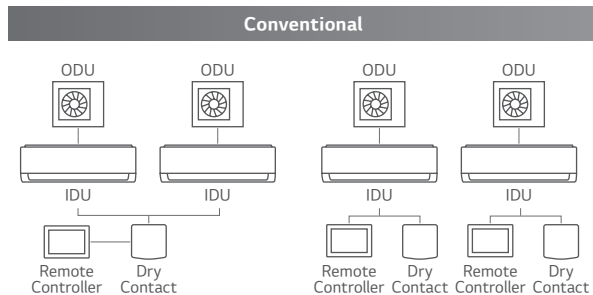
SEER class (ErP regulation)

A+++	SEER≥8.5	B	4.6 ≤ SEER < 5.1
A++	6.1 ≤ SEER < 8.5	C	4.1 ≤ SEER < 4.6
A+	5.6 ≤ SEER < 6.1	D	3.6 ≤ SEER < 4.1
A	5.1 ≤ SEER < 5.6		

Easy Installation

Simplified connection

For small server rooms, LG solution has simple system with only one remote controller. It doesn't need additional control accessories.



• Higher product cost

Conventional system needs dry contact and 3rd party control individual remote controller(s).

• Higher installation cost

Need less labor and time for design, installation, cabling and test.

• Design & Installation difficulties

It is difficult to make if you need to control more indoor units.

LG Server Room Solution



• Lower product cost

Only LG remote controller needed for max.4 ODUs and IDUs.

• Lower installation cost

Need less labor and time for design, installation, cabling and test.

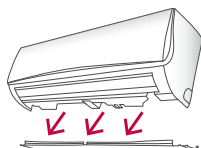
• Easy Design & Installation

It provides easy design and installation because it has simple system with LG controller even in case of more number of ODUs and IDUs(Max.4).

※ MJ09PC, MJ12PC, MJ18PC, MJ24PC combinations are only available

Detachable Bottom Cover

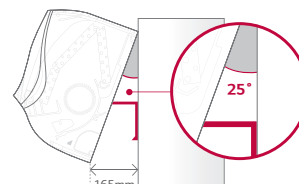
The bottom cover is detachable when needed, making installation easier. Disassembly or additional support of the unit is unnecessary. Installation can be completed by one individual with LG's patented support tool.



※ This contents of page will be updated later. (Saving operation cost / Easy installation)

Installation Support Clip

A support clip creates adequate space between the wall and the unit for easier installation.



Stable & Reliable Operation

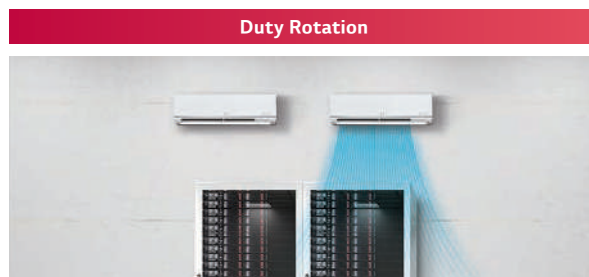
Duty Rotation

Operates more than 2 sets of indoor units alternatively at every set time of operation interval. Rotation interval can be set from 1h to 999h freely.



Air Conditioners' Overworking

- Reducing air conditioner's life time
- Reducing compressor's life expectancy
- The service cost may increase due to air conditioner's overworking



Stable & Safe Operation

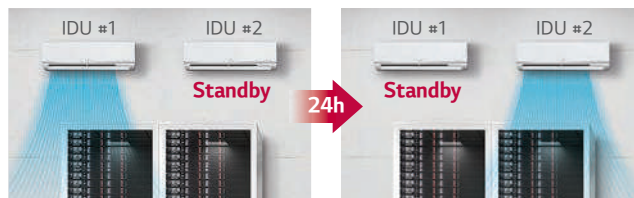
- Stable operation due to indoor units take turns
- Less breakdown and keeping server room operation
- Increase air conditioner's life expectancy
- Rotation interval can be set from 1h to 999h freely.

Operation Scenario

When the number of the indoor units : 2

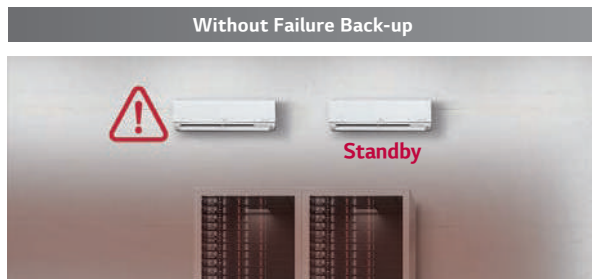
If the interval time is set 24h(default),

- ① While IDU #1 operates during interval time, IDU #2 is on standby.
- ② IDU #2 operates next 24 hours, and IDU #1 is on standby.



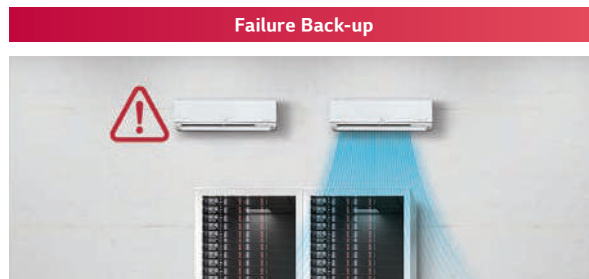
Failure Back-up

If systems in operation have error and stop, the standby unit starts operation automatically.



Server can be Shut Down

- Server room overheated and server can be shut down.
- Probability of increased service cost
- Need manual monitoring and operation for failure



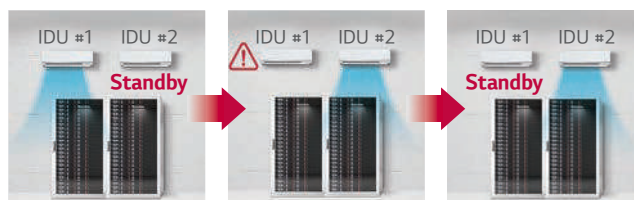
Stable & Safe Operation

- Stable operation because the operation error can be covered by failure back-up operation
- Continue server operations and decrease risk
- Protect server from overheating
- Less manual work

Operation Scenario

When the number of the indoor units : 2

- ① When duty rotation is enabled, IDU #1 is in operation and IDU #2 is on standby.
- ② If an error occurs on IDU #1, standby unit starts operation.
- ③ After the error is cleared, IDU #2 goes back to standby.



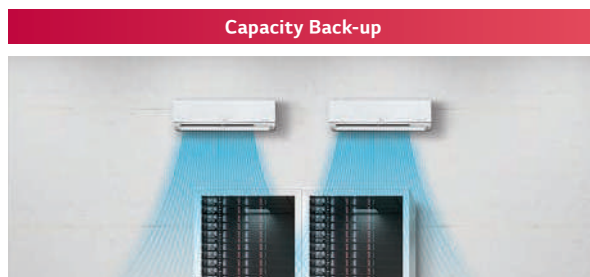
Capacity Back-up

When the difference between the cooling set temperature and the current room temperature is higher than the set temperature difference of capacity back-up, the standby unit operates. When the temperature difference reaches to the set temperature difference, it goes back to the normal duty rotation.



Server can be Overheated

- Sometimes server room can be overheated because of server overload
- Server can be shut down when they overheat continuously
- Air conditioners overload
- Need manual controls for additional cooling



Stable & Safe Operation

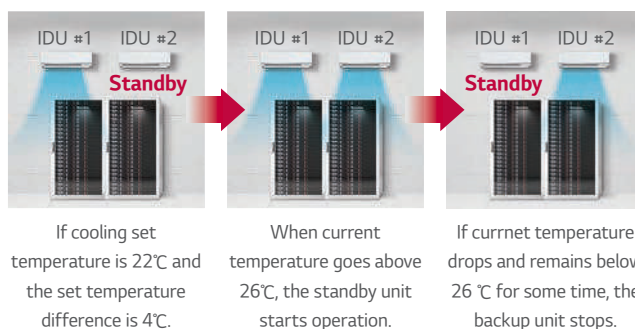
- Stable operation due to the over capacity by back-up operation
- Prevent air conditioners from overload
- Protect server from overheating
- No need for manual controls as they protect from overheating automatically

Operation Scenario

When the number of the indoor units : 2

The set temperature difference is A, and the difference between the cooling set temperature and the current room temperature is B,

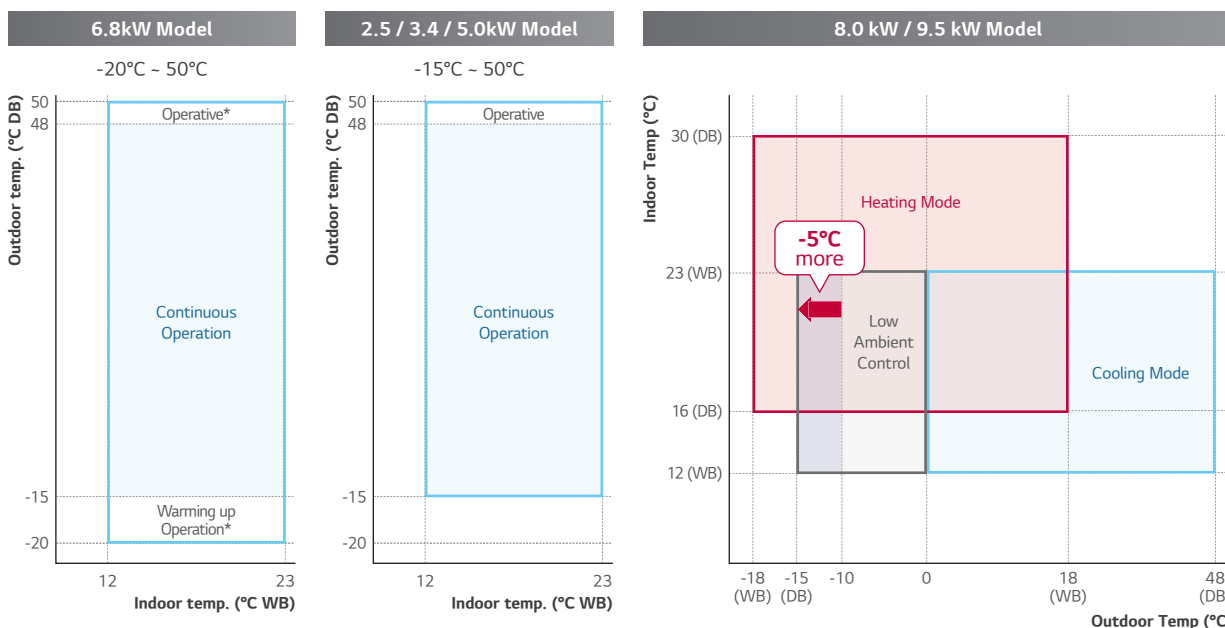
- 1 When duty rotation is enabled, IDU #1 is in operation and IDU #2 is on standby.
- 2 If B is higher than A, the standby unit starts operation.
- 3 When B goes down and remains below A for some time, The backup unit stops and goes back to standby mode.



※ Duty rotation, capacity back-up, failure back-up function will be available from 2021.2Q - Applied models : MJ09PC, MJ12PC, MJ18PC, MJ24PC only

Wide Operational Range

In case of the server room, continuous cooling is required all year round, and outdoor unit must be stable in the outdoor harsh cold temperature. LG Single split has wide operation range in cooling down continuously from -15°C and up to 48°C.



* Warming up operation and operative means that the outdoor unit operates to reach the range of continuous operating, however it may not operate continuously due to safety or protection logic.

STANDARD INVERTER (R32)**MJ09PC / MJ12PC**

LG participates in the ECP programme for EUROVENT AC program.
Check ongoing validity of certification
: www.eurovent-certification.com

UUA1 ULO

COMBINATION				9	12
Capacity	Cooling	Min. / Rated / Max.	kW	1.50 / 2.50 / 3.20	1.50 / 3.50 / 4.00
	Heating	Min. / Rated / Max.	kW	1.80 / 3.20 / 3.70	1.80 / 4.00 / 4.40
Power Input	Cooling	Min. / Rated / Max.	kW	0.30 / 0.58 / 0.84	0.33 / 0.97 / 1.48
	Heating	Min. / Rated / Max.	kW	0.30 / 0.71 / 0.85	0.33 / 1.00 / 1.48
Running Current	Cooling	Rated	A	2.60	4.40
	Heating	Rated	A	3.20	4.50
EER / COP			kWh / kWh	4.30 / 4.50	3.60 / 4.00
SEER / SCOP			kWh / kWh	7.00 / 4.00	6.60 / 4.00
P Design	Cooling @ 35°C		kW	2.5	3.5
	Heating @-10°C		kW	2.8	2.8
Seasonal Energy Label		Cooling / Heating	-	A++ / A+	A++ / A+
Annual Energy Consumption		Cooling / Heating	kWh	125 / 980	186 / 980
Dehumidification Rate			ℓ/h	1.90	1.90
ODU Sound Pressure Level	Cooling	Rated	dB(A)	49	49
	Heating	Rated	dB(A)	52	52
ODU Sound Power Level	Cooling	Rated	dB(A)	65	65
	Heating	Rated	dB(A)	-	-
Piping Connections	Liquid	Outer Dia.	mm (inch)	Ø 6.35 (1/4)	Ø 6.35 (1/4)
	Gas	Outer Dia.	mm (inch)	Ø 9.52 (3/8)	Ø 9.52 (3/8)
	Connections Method			Flare	Flare
Operation Range (Outdoor)	Cooling	Min. / Max.	°C	-15 / 50	-15 / 50
	Heating	Min. / Max.	°C	-20 / 18	-20 / 18
INDOOR				MJ09PC NSJ	MJ12PC NSJ
Power Supply			Ø / V / Hz	1 / 220-240 / 50	1 / 220-240 / 50
Power Input			Min. / Nom. / Max.	W	11 / 18 / 30
Air Flow Rate			H / M / L	m³/min	7.6 / 6.2 / 4.8
Dimensions			Body	W x H x D	mm
				818 x 316 x 189	818 x 316 x 189
Weight	Body		kg (lbs)	8.2 (18.1)	8.2 (18.1)
	Shipping		kg (lbs)	10.2 (22.5)	10.2 (22.5)
Sound Pressure Level			Cooling	H / M / L	dB(A)
				36 / 32 / 27	38 / 34 / 29
Sound Power Level			Cooling	Max.	dB(A)
				56	56
Piping Connections			Drain	O.D. / I.D.	mm
				Ø 21.5 / 16.0	Ø 21.5 / 16.0
OUTDOOR				UUA1 ULO	
Power Supply			Ø / V / Hz	1 / 220-240 / 50	
Circuit Breaker			Min.	A	
Power Supply Cable (included Earth)				No. x mm²	
				3C x 1.5	
Dimensions			Net	W x H x D	
				mm	
				770 x 545 x 288	
Weight			Net	kg	
				33.3	
Compressor			Type	-	
				Twin Rotary	
Refrigerant	Type		-	R32	
	GWP (Global Warming Potential)		-	675	
	Precharged Amount		kg	1.0	
	t-CO ₂ eq.		-	0.675	
	Control		-	EEV	
	Additional Charging Volume		g/m	20	
	Air Flow Rate		Rated	m³/min x No.	
				28 x 1	
Total Piping Length			Min. / Max.	m	
				5.0 / 30.0	
Piping Elevation			IDU-ODU	Max..	
				m	
				30	

STANDARD INVERTER (R32)

MJ18PC / MJ24PC



LG participates in the ECP programme for EUROVENT AC program.
Check ongoing validity of certification
: www.eurovent-certification.com

UUB1 U20

UUC1 U40



WALL MOUNTED

COMMERCIAL
SINGLE SPLIT

COMBINATION				18	24
Capacity	Cooling	Min. / Rated / Max.	kW	2.00 / 5.00 / 7.00	2.70 / 6.80 / 7.70
	Heating	Min. / Rated / Max.	kW	2.30 / 5.80 / 6.10	3.00 / 6.90 / 7.24
Power Input	Cooling	Min. / Rated / Max.	kW	0.30 / 1.39 / 2.63	0.40 / 2.00 / 2.57
	Heating	Min. / Rated / Max.	kW	0.30 / 1.71 / 1.96	0.40 / 2.33 / 2.50
Running Current	Cooling	Rated	A	6.30	9.10
	Heating	Rated	A	7.70	10.60
EER / COP			kWh / kWh	3.61 / 3.40	3.40 / 3.00
SEER / SCOP			kWh / kWh	6.80 / 4.00	6.70 / 3.90
P Design	Cooling @ 35°C		kW	5.0	6.8
	Heating @ -10°C		kW	4.1	5.0
Seasonal Energy Label		Cooling / Heating	-	A++ / A+	A++ / A
Annual Energy Consumption		Cooling / Heating	kWh	257 / 1,365	355 / 1,795
Dehumidification Rate			ℓ/h	3.35	3.50
ODU Sound Pressure Level	Cooling	Rated	dB(A)	47	48
	Heating	Rated	dB(A)	52	52
ODU Sound Power Level	Cooling	Rated	dB(A)	63	65
	Heating	Rated	dB(A)	-	-
Piping Connections	Liquid	Outer Dia.	mm (inch)	Ø 6.35 (1/4)	Ø 9.52 (3/8)
	Gas	Outer Dia.	mm (inch)	Ø 12.7 (1/2)	Ø 15.88 (5/8)
	Connections Method			Flare	Flare
Operation Range (Outdoor)	Cooling	Min. / Max.	°C	-15 / 50	-20 / 50
	Heating	Min. / Max.	°C	-20 / 18	-20 / 18
INDOOR				MJ18PC NSK	MJ24PC NSK
Power Supply			Ø / V / Hz	1 / 220-240 / 50	1 / 220-240 / 50
Power Input			Min. / Nom. / Max. W	26 / 39 / 60	27 / 45 / 60
Air Flow Rate			H / M / L m³/min	15.8 / 12.4 / 10.0	16.9 / 12.8 / 10.4
Dimensions			Body W x H x D mm	975 x 354 x 209	975 x 354 x 209
Weight	Body		kg (lbs)	10.9 (24.0)	11.5 (25.4)
	Shipping		kg (lbs)	13.9 (30.6)	14.5 (32.0)
Sound Pressure Level			Cooling H / M / L dB(A)	44 / 38 / 34	46 / 41 / 36
Sound Power Level			Cooling Max dB(A)	59	65
Piping Connections			Drain O.D. / I.D. mm	Ø 21.5 / 16.0	Ø 21.5 / 16.0
OUTDOOR				UUB1 U20	UUC1 U40
Power Supply			Ø / V / Hz	1 / 220-240 / 50	1 / 220-240 / 50
Circuit Breaker			Min A	20	25
Power Supply Cable (included Earth)			No. x mm²	3C x 2.5	3C x 2.5
Dimensions			Net W x H x D mm	870 x 650 x 330	950 x 834 x 330
Weight			Net kg	44.5	57.7
Compressor			Type	Twin Rotary	Twin Rotary
Refrigerant	Type		-	R32	R32
	GWP (Global Warming Potential)		-	675	675
	Precharged Amount		kg	1.2	1.9
	t-CO ₂ eq.		-	0.810	1.283
	Control		-	EEV	EEV
	Additional Charging Volume		g/m	20	40
	Air Flow Rate	Rated	m³/min x No.	50 x 1	58 x 1
Total Piping Length			Min. / Max. m	5.0 / 35.0	5.0 / 50.0
Piping Elevation			IDU-ODU Max. m	30	30

STANDARD INVERTER (R32)**US30F / US36F**

LG participates in the ECP programme for EUROVENT AC program.
Check ongoing validity of certification
: www.eurovent-certification.com

UUC1 U40**UUD1 U30****UUD3 U30**

COMBINATION				30	36	36
Capacity	Cooling	Min. / Rated / Max.	kW	3.2 / 8.0 / 9.0	3.8 / 9.5 / 12.5	3.8 / 9.5 / 12.5
	Heating	Min. / Rated / Max.	kW	3.6 / 9.0 / 10.0	4.3 / 10.8 / 13.4	4.3 / 10.8 / 13.4
Power Input (Set)	Cooling	Min. / Rated / Max.	kW	0.50 / 2.28 / 3.17	0.30 / 2.57 / 3.91	0.30 / 2.57 / 3.91
	Heating	Min. / Rated / Max.	kW	0.50 / 2.5 / 3.20	0.50 / 2.77 / 3.77	0.50 / 2.77 / 3.77
Running Current	Cooling	Rated	A	10.1	11.4	4.1
	Heating	Rated	A	11.1	12.2	4.4
EER / COP			kWh / kWh	3.51 / 3.60	3.70 / 3.90	3.70 / 3.90
SEER / SCOP			kWh / kWh	7.0 / 4.3	6.10 / 3.85	6.10 / 3.85
Pdesign	Cooling @ 35°C		kW	8	9.5	9.5
	Heating @ -10°C		kW	5.4	8.7	8.7
Seasonal Energy Label	Cooling / Heating		-	A++ / A+	A++ / A	A++ / A
Annual Energy Consumption	Cooling / Heating		kWh	400 / 1,758	545 / 3,164	545 / 3,164
Dehumidification Rate			l/h	2.9	3.8	3.8
ODU Sound Pressure Level	Cooling / Heating	Rated	dB(A)	50 / 52	50 / 50	50 / 50
ODU Sound Power Level	Cooling	Rated	dB(A)	68	66	66
Piping Connections	Liquid		mm (inch)	Ø9.52 (3/8)	Ø9.52 (3/8)	Ø9.52 (3/8)
	Gas		mm (inch)	Ø15.88 (5/8)	Ø15.88 (5/8)	Ø15.88 (5/8)
	Connections Method		-	Flared	Flared	Flared
Operation Range (Outdoor)	Cooling	Min. / Max.	°C	-20 ~ 50	-20 ~ 52	-20 ~ 52
	Heating	Min. / Max.	°C	-20 ~ 18	-25 ~ 18	-25 ~ 18
INDOOR				US30F NR0	US36F NR0	US36F NR0
Power Supply			Ø / V / Hz	1 / 220-240 / 50	1 / 220-240 / 50	1 / 220-240 / 50
Power Input (IDU)		H / M / L	W	47 / 42 / 36	65 / 47 / 42	65 / 47 / 42
Air Flow Rate		H / M / L	m3/min	21 / 17 / 13	25 / 21 / 17	25 / 21 / 17
Dimensions	Body	W x H x D	mm	1,200 x 360 x 265	1,200 x 360 x 265	1,200 x 360 x 265
Weight	Body		kg	18.3	18.3	18.3
Sound Pressure Level	Cooling	H / M / L	dB(A)	46.0 / 42.0 / 38.0	51.0 / 46.0 / 42.0	51.0 / 46.0 / 42.0
Sound Power Level	Cooling	Max.	dB(A)	62	65	65
Piping Connections	Drain	O.D. / I.D.	mm	Ø21.5 / 16.0	Ø21.5 / 16.0	Ø21.5 / 16.0
OUTDOOR				UUC1 U40	UUD1 U30	UUD3 U30
Power Supply			Ø / V / Hz	1 / 220-240 / 50	1 / 220-240 / 50	3 / 380-415 / 50
Circuit Breaker		Min.	A	25	40	20
Power Supply Cable (Included Earth)			No x mm ³	3C x 2.5	3C x 6.0	5C x 2.5
Dimensions	Net	W x H x D	mm	950 x 834 x 330	950 x 1,380 x 330	950 x 1,380 x 330
Weight	Net		kg	57.7	85	85
Compressor	Type		-	Twin Rotary	Inverter Scroll	Inverter Scroll
Refrigerant	Type		-	R32	R32	R32
	GWP (Global Warming Potential)		-	675	675	675
	Precharged Amount		kg	1.9	3.0	3.0
	t-CO ₂ eq		-	1.283	2.025	2.025
	Additional Charge (After 7.5m)		g/m	40	40	40
Fan	Air Flow Rate	Rated	m ³ /min x No.	58 x 1	55 x 2	55 x 2
Total Piping Length		Min. / Max.	m	5 / 50	5 / 85	5 / 85
Piping Elevation	IDU - ODU	Max.	m	30	30	30

Note :

- Due to our policy of innovation some specifications may be changed without notification.
- Performances are based on the following conditions (It is accordance with EN14511)
 - Cooling : Indoor Ambient Temp 27°C DB / 19°C WB, Outdoor Ambient Temp 35°C DB / 24°C WB
 - Heating : Indoor Ambient Temp 20°C DB / 15°C WB, Outdoor Ambient Temp 7°C DB / 6°C WB
 - Interconnected Pipe is standard length and difference of Elevation (Outdoor - Indoor Unit) is 0m.
- Sound Level Values are measured at Noise Measuring chamber accordance with standard. Therefore, these values depend on the ambient conditions and values are normally higher in actual operation.
- This product contains fluorinated greenhouse gases. (R32)



Megaclima
— DESDE 1993 —



video 2"



**Apresentação
Megaclima**

video 4"



**Academia
Megaclima**

video 7"



**Por dentro da
Megaclima**

30 Anos na climatização e tratamento de ar

Delegação de Lisboa
Tel: 219 151 792
lisboa@megaclima.pt

Delegação de Queluz
Tel: 219 250 028
queluz@megaclima.pt

Serviços Centrais

Rua Francisco Ribeirinho, 28

Centro Empresarial Abrunheira
Abrunheira 2710-736 Sintra
www.megaclima.pt

— Escritório 11
Tel: 219 253 300
geral@megaclima.pt