Cassette Multisplit

DC fan cassette type indoor unit

2.6 kW÷5.3 kW

MULTISPLIT





WI-FI READY accessory

INFRARED REMOTE CONTROL included

CONDENSATE DRAIN PUMP

REMOTE ON/OFF INPUT

FRESH AIR INTAKE PROVISION

AUTOMATIC DIAGNOSIS

AUTOMATIC DEFROST

AUTOMATIC SEASON CHANGEOVER

LOUVER POSITION MEMORY

AUTO RE-START

DC INVERTER FAN MOTOR

CONDENSATION CONTROL

FRESH AIR ACTIVATION CONTACT

PRE-ARRANGED SIDE AIR SIZE 71

Accessories



Infrared remote control with wall mount
Included



Smart Wi-Fi Gateway Port
Accessory supplied separately



Airset-C
Accessory supplied separately

			CCST26R1	CCST35R1	CCST53R1	CCST71R
Cooling	Cooling capacity	kW	2,64	3,51	5,27	7,03
		BTU/h	9.000	12.000	18.000	21.000
Heating	Heating capacity	kW	2,93	3,80	5,57	7,62
		BTU/h	10.000	13.000	17.870	26.000
Refrigerant connections	Gas connections	mm / inch	Ø9,53(3/8")	Ø9,53(3/8")	Ø12,7(1/2")	Ø15,9(5/8")
	Liquid connections	mm / inch	Ø6,35(1/4")	Ø6,35(1/4")	Ø6,35(1/4")	Ø9.53(3/8")
Indoor unit heat exchanger	Number		1			
	Nominal air flow rate	m^3/h	580/500/300	620x510x420	720x620x500	1300/1140/1000
	Internal heat exchanger type		Aluminum			
	Nominal outside diameter	mm	7	7	7	7
	Rows	no.	1	1	2	2
	Circuits	no.	2	2	4	4
	Heat exchanger fin		Hydrophilic aluminum			
Electrical data	Power supply	V~, Ph, Hz	230, 1, 50			
	Power input*	W	25	25	40	45
	Current drawn*	A	0,6	0,6	0,7	0,75
Sound data	Indoor unit sound pressure level	dB(A)	37/35,5,/33	42/38,5/31,5	44/41/31,5	50/47,5/42
	Indoor unit sound power level	dB(A)	52	52	55	59
Dimensional data	Net dimensions (W x H x D) **	mm	647x647x50	647x647x50	647x647x50	950x950x55
	Net weight	kg	14,5	16,3	16,3	21,6

(*) Value referred to the indoor unit only
For system power consumption, refer to the outdoor unit nameplate

Cooling test conditions: indoor 27°C d.b. / 19.5°C w.b. - outdoor 35°C d.b. / 24°C w.b.
Heating test conditions: indoor 20°C d.b. - outdoor 7°C d.b. / 6°C w.b.

Outdoor Multisplit Units

DC inverter multi-split from 2 to 5 indoor units

4.1 kW÷12.3 kW

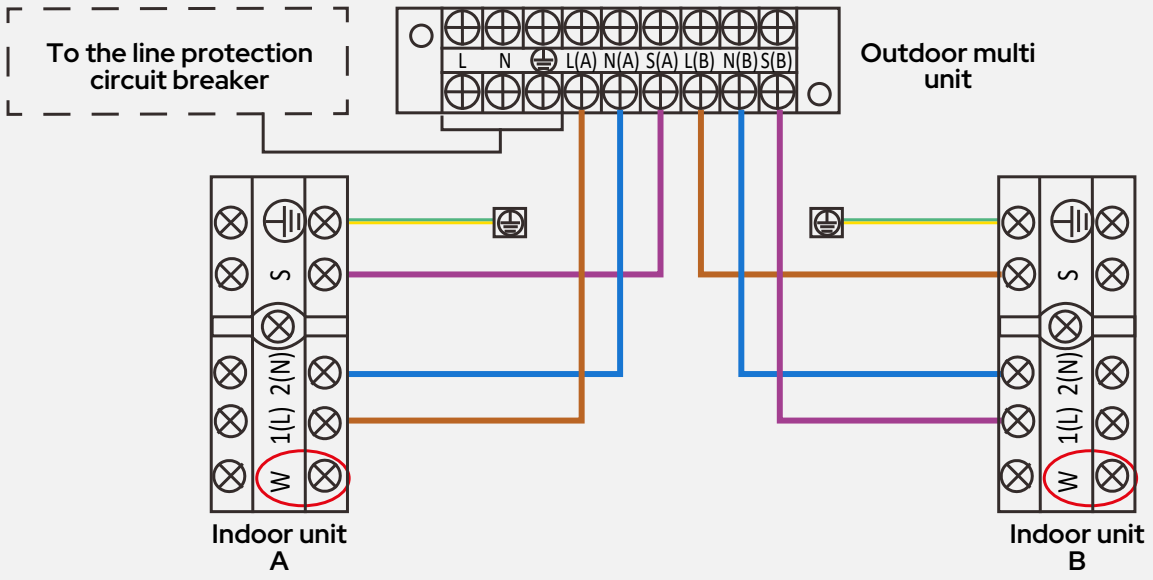
MULTISPLIT



TREATMENT GOLDEN FIN | INVERTER TECHNOLOGY | ON-BOARD UNIT DIAGNOSTICS | OPERATING TEMPERATURE -15/+50°C

- **Golden Fin**: exclusive anti-corrosion coating that enables the finned heat exchanger coil to withstand salty air, rain, and other corrosive elements. In addition, it effectively prevents bacterial growth and improves thermal efficiency. The Golden Fin treatment also guarantees the maintenance of optimal performance over the long term.
- **Inverter compressor**: the inverter compressor ensures high energy efficiency even at partial loads. When individual rooms reach the desired temperature and the power demand decreases, the compressor automatically adapts, ensuring significant energy savings.
- **Flexible sizing**: even when total capacity requirements are high, it is always possible to choose the most suitable multisplit outdoor unit. Depending on the available combinations, the capacity ratio can reach a maximum value of 130%.
- Thanks to the **active power factor control**, the multisplit outdoor units are always able to maintain optimal phase synchronization. The Cosφ value always remains between 0.88 and 0.99.
- **Wide modulation range**: the advanced Inverter technology allows the compressor to modulate the operating frequency from 20 Hz up to 105 Hz, ensuring maximum operating flexibility.
- The **automatic recognition function** makes it possible to resolve any installation errors in which the refrigerant piping and electrical connections between the indoor units and the outdoor unit are not consistent. Simply press the "check switch" button and, after a few minutes, the system will automatically configure itself correctly.
- The multi-split outdoor units are able to maintain a delivered cooling capacity equal to 65% of the nominal capacity even with outdoor temperatures of -15°C. The condensing unit reduces the speed of the outdoor fan to adapt the heat exchange to the prohibitive ambient conditions, while keeping the cooling function active. This feature makes it easy to air-condition rooms in any season.
- **Guaranteed operation**: the multi-split outdoor units continue to operate correctly even when the supply voltage is unstable. Within the supply voltage range from 150 V to 260 V, operation remains stable.
- **On-board unit diagnostics**: when necessary, it is possible to access the on-board unit display to quickly identify any notification codes without needing to access the individual indoor units. Consulting the maintenance manual at the same time simplifies field verification operations.

Example wiring diagram Outdoor Multi + 2 Indoor Units



W: not required

			EXT 2M42R	EXT 2M53R	EXT 3M62R	EXT 3M80R1	EXT 4M82R	EXT 4M105R	EXT 5M120R
Connectable indoor units			2	2	3	3	4	4	5
Cooling	Nominal cooling capacity	kW	4,10	5,27	6,29	7,91	8,18	10,54	12,30
		BTU/h	14.000	18.000	21.000	27.000	28.000	36.000	42.000
	Minimum cooling capacity	kW	1,50	2,28	2,0	3,18	2,34	3,64	3,01
		BTU/h	5.100	7.800	6.800	10.850	8.000	12.430	10.300
	Maximum cooling capacity	kW	4,98	5,71	6,59	8,20	10,02	10,84	12,30
		BTU/h	17.000	19.500	22.500	28.000	34.200	37.000	42.000
	Power input	kW	1,27	1,63	1,95	2,45	2,55	3,81	3,81
	Absorbed current	A	5,52	7,10	9,00	13,70	11,00	15,00	16,00
	E.E.R.	W/W	3,23	3,23	3,23	3,23	3,23	3,23	3,23
	S.E.E.R. - Energy Class	W/W	5.6 - A+	6.1 - A++	6.1 - A++	6.1 - A++	6.1 - A++	6.2 - A++	6.1 - A++
Heating	Rated heating capacity	kW	4,39	5,56	6,44	8,20	8,79	10,84	12,30
		BTU/h	15.000	19.000	22.000	28.000	30.000	37.000	42.000
	Minimum heating capacity	kW	1,52	2,40	2,0	2,28	2,37	2,85	3,45
		BTU/h	5.200	8.200	6.800	7.800	8.100	9.730	11.800
	Maximum heating output	kW	4,98	5,74	6,68	8,5	10,49	12,01	12,30
		BTU/h	17.000	19.600	22.800	29.000	35.800	41.000	42.000
	Power input	kW	1,18	1,39	1,78	2,10	2,05	2,76	3,30
	Absorbed current	A	5,15	6,1	8,5	12,5	9,0	12,1	14,6
	C.O.P.	W/W	3,71	3,71	3,71	3,71	4,0	3,93	3,73
	S.C.O.P. Medium range	W/W	3.8 - A	3.8 - A+	4.0 - A+	4.0 - A+	3.8 - A	3.8 - A	3.5 - A
	S.C.O.P. Warm climate zone	W/W	4.6 - A++	5.1 - A+++	4.8 - A++	5.1 - A+++	4.6 - A++	5.2 - A+++	5.1 - A+++
Compressor	Type		Rotary Inverter						
	Number		1						
	Refrigerant oil (type)		ESTER OIL VG74						
	Refrigerant oil (quantity)	ml	440	440	440	670	670	1000	1000
Power supply *	Voltage, Phases, Frequency	V~, Ph, Hz	230, 1, 50						
	Maximum absorbed power	W	2.750	3.050	3.910	4.100	4.150	4.600	4.700
	Maximum absorbed current	A	12	13	17	18	19	21,5	22
Refrigerant	Type		R32						
	Refrigerant quantity	kg	1100	1250	1500	1720	2100	2100	2900
	Refrigerant quantity in tons of CO2 equivalent (GWP)	Ton	675						
	Maximum length with standard charge	m	2x7.5 (15 m)		3x7.5+7.5+7.5 (22.5m)		4x7.5+7.5+7.5 (30m)		5x7.5 (37.5m)
	Additional load	g/m	12 (>15 m)		12 (>22.5m)		12 (>30m)		12 (>37.5m)
	Maximum height difference between outdoor and indoor unit	m	15	15	15	15	15	15	15
	Maximum length with additional charge	m	40	40	60	60	80	80	80
	Maximum length for each unit	m	25	25	30	30	35	35	35
	Height difference between indoor units	m	10	10	10	10	10	10	10
	Minimum recommended line length	m	3,5	3,5	3,5	3,5	3,5	3,5	3,5
	Gas connections (1)	mm	Ø9,53				Ø3x9.53 + 1x12.7		
		inch	3/8"				3x3/8" + 1 x1/2"		
	Liquid connections	mm	Ø6,53				4x Ø6.35		
		inch	1/4"				4x1/4"		5x1/4"
Outdoor unit fans	Type		Axial						
	Number		1						
	Rated power	W	34	34	80	80	120	120	120
	Nominal air flow rate	m^3/h	2100	2100	3000	3000	3800	4000	3850
Operating limits	Outdoor temperature in cooling min/max	°C	-15 / +50						
	Outdoor temperature in heating min/max	°C	-15 / +24						
Sound data	Sound pressure level of outdoor unit	dB(A)	56	54	58	58	61,5	61	64
	Sound power level of outdoor unit	dB(A)	64	65	65	67	67	67	69
Dimensional data	Net dimensions (WxHxD)	mm	877x554x317		895x673x348		1.034x810x403		
	Net weight	Kg	31,8	35,5	46,8	51,1	62,1	68,8	74,1

***** Data required for sizing the wiring and safety devices
Performance data referring to the use of 26-size indoor units, no height difference, pipe length 5 m.(1) Refer to the indoor units table for the piping section.

Cooling test conditions: indoor 27°C d.b. / 19.5°C w.b. – outdoor 35°C d.b. / 24°C w.b. – Heating test conditions: indoor 20°C d.b. – outdoor 7°C d.b. / 6°C w.b.
For system power consumption, refer to the outdoor unit nameplate

Commercial Monosplit Cassette

DC fan cassette type indoor unit

2.1 kW÷5.3 kW

COMMERCIAL





WI-FI READY accessory
INFRARED REMOTE CONTROL included
CONDENSATE DRAIN PUMP
REMOTE ON/OFF INPUT
FRESH AIR INTAKE PROVISION
AUTOMATIC DIAGNOSIS
AUTOMATIC DEFROST
AUTOMATIC SEASON CHANGEOVER
LOUVER POSITION MEMORY
AUTO RE-START
DC INVERTER FAN MOTOR
CONDENSATION CONTROL
FRESH AIR ACTIVATION CONTACT
COMPATIBLE WITH PARALLEL SYSTEM
PREPARED FOR SIDE AIR SIZES 71 TO 176

Accessories



Infrared remote control with wall mount
Included



Smart Wi-Fi Gateway Port
Accessory supplied separately



Airset-C
Accessory supplied separately

			CCST26R1	CCST35R1	CCST53R1	CCST71R
Cooling	Cooling capacity	kW	2,64	3,51	5,27	7,03
		BTU/h	9.000	12.000	18.000	21.000
	Electrical power input *	kW	0,81	1,01	1,63	2,32
	Current drawn *	A	3,6	4,45	7,2	10,2
	S.E.E.R.	W/W	6.3 - A++	6.6 - A++	6.3 - A++	6.2 - A++
Heating	Heating capacity	kW	2,93	3,80	5,57	7,62
		BTU/h	10.000	13.000	17.870	26.000
	Electrical power input *	kW	0,95	1,01	1,54	1,90
	Current drawn *	A	4,2	4,73	6,8	8,50
	S.C.O.P. Medium range	W/W	4.1 - A+	4.1 - A+	4.0 - A+	4.0 - A+
	S.C.O.P. Warm climate zone	W/W	5.1 - A+++	5.1 - A+++	4.8 - A++	5.1 - A+++
Indoor unit fans	Number		1			
	Nominal air flow rate	m^3/h	580/500/300	620/510/420	720/620/500	1300/1140/1000
Indoor unit heat exchanger	Internal heat exchanger type		Aluminum			
	Nominal outside diameter	mm	7	7	7	7
	Rows	no.	1	1	2	2
	Circuits	no.	2	2	4	4
	Heat exchanger fin		Hydrophilic aluminum			
Electrical data	Power supply	V~, Ph, Hz	230, 1, 50			
Sound data	Sound pressure level	dB(A)	37/35,5,/33	42/37,5/34,5	45,4/44/39	50/47,5/42
	Sound power level	dB(A)	52	52	55	59
Pipe length		m	≤ 25	≤ 25	≤ 30	≤ 50
Height difference between units		m	≤ 10	≤ 10	≤ 20	≤ 25
Refrigerant line diameters	Gas connections	mm	Ø9,53	Ø9,53	Ø12,7	Ø15,9
		inch	3/8"	3/8"	1/2"	5/8"
	Liquid connections	mm	Ø6,35	Ø6,35	Ø6,35	Ø9.53
		inch	1/4"	1/4"	1/4"	3/8"
Dimensional data	Net dimensions (WxHxD)	mm	647x647x50	647x647x50	647x647x50	950x950x55
	Net weight	kg	14,5	16,3	16,3	21,6

(*) Value refers to the sum of the power input of the outdoor unit + indoor unit (separate power supplies)
(1) Combined with single-phase outdoor unit
Cooling test conditions: indoor 27°C d.b. / 19.5°C w.b. - outdoor 35°C d.b. / 24°C w.b.
Heating test conditions: indoor 20°C d.b. - outdoor 7°C d.b. / 6°C w.b.

Commercial Monosplit Cassette

DC fan cassette type indoor unit

2.1 kW÷5.3 kW

COMMERCIAL





WI-FI READY accessory

INFRARED REMOTE CONTROL included

CONDENSATE DRAIN PUMP

REMOTE ON/OFF INPUT

FRESH AIR INTAKE PROVISION

AUTOMATIC DIAGNOSIS

AUTOMATIC DEFROST

AUTOMATIC SEASON CHANGEOVER

LOUVER POSITION MEMORY

AUTO RE-START

DC INVERTER FAN MOTOR

CONDENSATION CONTROL

FRESH AIR ACTIVATION CONTACT

COMPATIBLE WITH PARALLEL SYSTEM

PREPARED FOR SIDE AIR SIZES 71 TO 176

			CCST105R(1)	CCST105R	CCST130R	CCST176R
Cooling	Cooling capacity	kW	10,55	10,01	14,07	15,24
		BTU/h	33.950	34.160	44.110	53.000
	Electrical power input *	kW	3,95	3,04	4,65	5,00
	Current drawn *	A	17,5	6,5	8,1	8,6
	S.E.E.R.	W/W	6.7 - A++	6.7 - A++	6.1 - A++	6.3 - A++
Heating	Heating capacity	kW	11,14	11,14	16,12	18,17
		BTU/h	38.000	38.000	52.670	62.000
	Electrical power input *	kW	3,00	3,00	4,58	5,55
	Current drawn *	A	13,50	5,0	8,00	9,60
	S.C.O.P. Medium range	W/W	4.0 - A+	4.0 - A+	4.0 - A+	4.0 - A+
	S.C.O.P. Warm climate zone	W/W	5.1 - A+++	5.1 - A+++	5.0 - A++	5.1 - A+++
Indoor unit fans	Number		1			
	Nominal air flow rate	m^3/h	1700/1550/1380	1700/1550/1380	1970/1780/1580	2000/1850/1650
Indoor unit heat exchanger	Internal heat exchanger type		Aluminum			
	Nominal outside diameter	mm	7	7	7	7
	Rows	no.	3	3	3	3
	Circuits	no.	10	10	10	10
	Heat exchanger fin		Hydrophilic aluminum			
Electrical data	Power supply	V~, Ph, Hz	230, 1, 50			
Sound data	Sound pressure level	dB(A)	51/49/46	51/49/46	52,5/50,5/48	54,5/52/49,5
	Sound power level	dB(A)	63	63	65	66
Pipe length		m	≤ 75	≤ 75	≤ 75	≤ 75
Height difference between units		m	≤ 30	≤ 30	≤ 30	≤ 30
Refrigerant line diameters	Gas connections	mm	Ø15,9	Ø15,9	Ø15,9	Ø15,9
		inch	5/8"	5/8"	5/8"	5/8"
	Liquid connections	mm	Ø9.53	Ø9.53	Ø9.53	Ø9.53
		inch	3/8"	3/8"	3/8"	3/8"
Dimensional data	Net dimensions (WxHxD)	mm	950x950x55	950x950x55	950x950x55	950x950x55
	Net weight	kg	27,2	27,2	29,3	29,3

(*) Value refers to the sum of the power input of the outdoor unit + indoor unit (separate power supplies)
(1) Combined with single-phase outdoor unit
Cooling test conditions: indoor 27°C d.b. / 19.5°C w.b. - outdoor 35°C d.b. / 24°C w.b. Heating test conditions: indoor 20°C d.b. - outdoor 7°C d.b. / 6°C w.b.

Commercial Monosplit Outdoor Units

DC inverter

3.5 kW÷16.1 kW

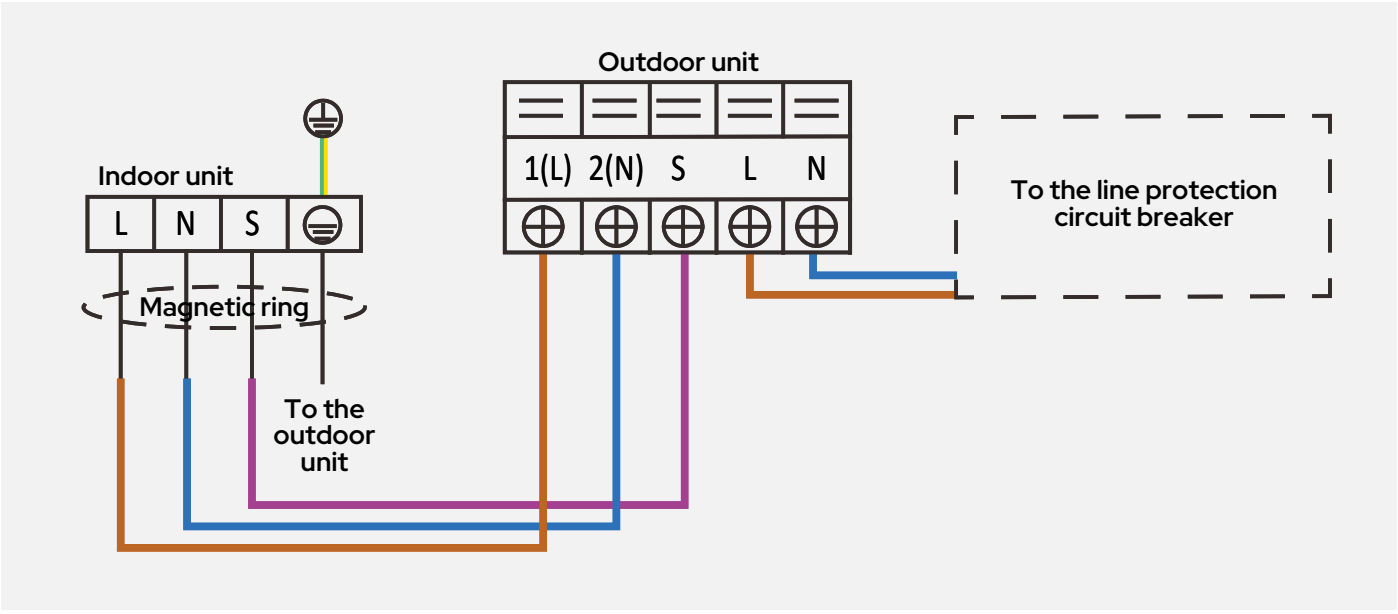
COMMERCIAL

TREATMENT GOLDEN FIN | INVERTER TECHNOLOGY | ON-BOARD UNIT DIAGNOSTICS | OPERATING TEMPERATURE -15/+50°C



- **Golden Fin**: exclusive anti-corrosion coating that enables the finned heat exchanger coil to withstand salty air, rain, and other corrosive elements. In addition, it effectively prevents bacterial growth and improves thermal efficiency. The Golden Fin treatment also guarantees the maintenance of optimal performance over the long term.
- **Inverter compressor**: the inverter compressor ensures high energy efficiency even at partial loads. When individual rooms reach the desired temperature and the power demand decreases, the compressor automatically adapts, ensuring significant energy savings.
- Thanks to the **active power factor control**, the multisplit outdoor units are always able to maintain optimal phase synchronization. The Cosφ value always remains between 0.88 and 0.99.
- **Wide modulation range**: the advanced Inverter technology allows the compressor to modulate the operating frequency from 20 Hz up to 105 Hz, ensuring maximum operating flexibility.
- **Guaranteed operation**: commercial outdoor units operate normally even when the supply voltage is unstable.
- **On-board unit diagnostics**: when necessary, it is possible to access the on-board unit display to quickly identify any notification codes without needing to access the individual indoor units. Consulting the maintenance manual at the same time simplifies field verification operations.
- **High performance**: The outdoor unit electronics are cooled by the refrigerant gas to significantly improve the performance and stability of the outdoor unit in the presence of high ambient temperatures. This technology can improve heat dissipation by up to 500%. The electrical panel of the outdoor unit has been equipped with as many as 4 ventilation grilles for better heat dissipation. The new compressor ensures stable performance even under high outdoor temperature conditions (models 71 to 176 only).

Example wiring diagram Outdoor Mono Commercial (single-phase) + Indoor

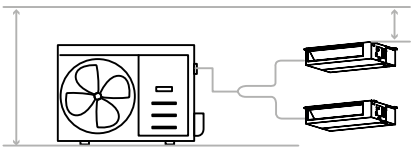


			UECS 26R2	UECS 35R	UECS 53R	UECS 71R2	UECS 105R-1	UECS 105R	UECS 130R2	UECS 176R2
Compressor	Type		Rotary Inverter							
	Number		1							
	Refrigerant oil (type)		ESTER OIL VG74							
	Refrigerant oil (quantity)	ml	300	300	440	620	1000	1000	1400	1400
Power supply	Power supply	V~, Ph, Hz	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	380, 3, 50	380, 3, 50	380, 3, 50
Refrigerant	Type		R32							
	Refrigerant quantity	kg	650	710	1150	1400	2400	2400	2900	3200
	Refrigerant quantity in tons of CO2 equivalent (GWP)	Ton	675							
	Maximum length with standard charge	m	5	5	5	5	5	5	5	5
	Additional load	g/m	12	12	12	24	24	24	24	24
	Maximum height difference between outdoor and indoor unit	m	10	10	20	25	30	30	30	30
	Maximum length with additional charge	m	25	25	30	50	75	75	75	75
	Height difference between indoor units	m	10	10	20	25	30	30	30	30
	Gas connections (1)	mm	Ø9.53		Ø12.7	Ø15.9				
		inch	3/8”		1/2”	5/8”				
	Liquid connections	mm	Ø6.35			Ø9.53				
		inch	1/4”			3/8”				
Outdoor unit fans	Type		Axial							
	Number		1							
	Nominal air flow rate	m^3/h	2.200	2.200	2.100	3.500	4.000	4.000	5.600	7.500
Operating limits	Outdoor temperature in cooling min/max	°C	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50
	Outdoor temperature in heating min/max	°C	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24	-20 / +24
Sound data	Sound pressure level outdoor unit	dB(A)	53,5	55,5	59	60	60	65	64,5	64
	Sound power level outdoor unit	dB(A)	62	53,6	59	60	63	63	63,5	75
Dimensional data	Net dimensions (WxHxD)	mm	835x555x274		874x554x 307	955x675x 325	1,030x810x410		1.073x975x397	
	Net weight	Kg	24,6	24,6	32,5	41,9	80,5	66,9	90	92

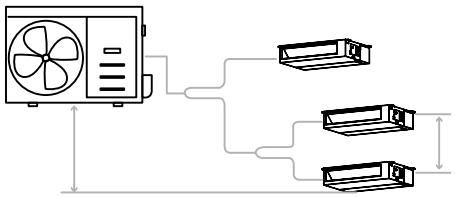
Performance data referring to the use of 26-size indoor units, no height difference, pipe length 5 m.
(1) Refer to the indoor units table for the piping section.
Cooling test conditions: indoor 27°C d.b. / 19.5°C w.b. – outdoor 35°C d.b. / 24°C w.b. – Heating test conditions: indoor 20°C d.b. – outdoor 7°C d.b. / 6°C w.b.
For system power consumption, refer to the outdoor unit nameplate

Parallel Systems

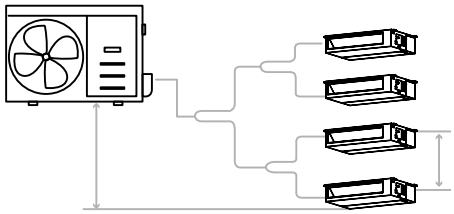
Double parallel system



Triple parallel system



Four-unit parallel system



Refer to the dedicated page of the following catalogue for details.