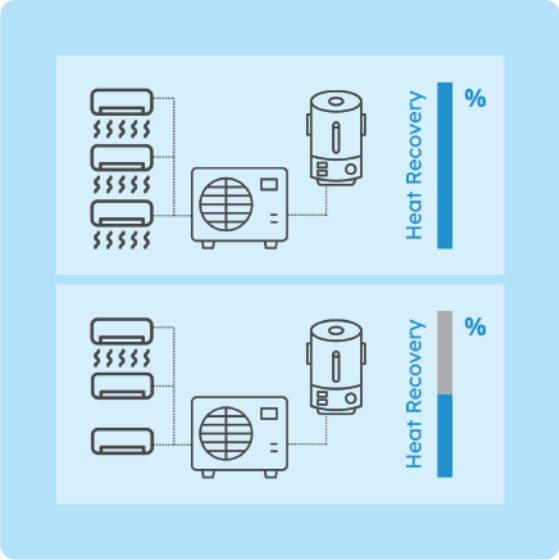
All-in-One system

This is the solution to provide climate comfort and domestic hot water in a fully electric mode, with high energy efficiency, through air-to-air heat pumps



Simple, complete and efficient, thanks to heat recovery

Nexya All-in-One is a complete multisplit system, providing both air conditioning and DHW production (class A+ within a range between A+ and F). The extreme simplicity and flexibility of the system make it the ideal solution for both new buildings and retrofit projects, aimed at making thermal energy consumption more efficient and fully electric. However, completeness and simplicity are not the only strengths: compared to traditional air conditioning and domestic hot water production systems, the parallel operation of the two cooling circuits (comfort and DHW) recovers heat that would normally be expelled by the external unit during cooling, and uses it for the production of DHW in the storage tank. Heat recovery can be total or partial, depending on the thermal power required by the storage tank and the number of internal units active in providing climate comfort.

100 or 190 litre storage tank

The system consists of an external unit, which can be combined with one or more internal units (wall, duct or box) and a DHW storage tank, which connects like any other internal unit. Made of enamelled steel, with 42 mm thick rigid polyurethane foam thermal insulation and a cyclopentane polyurethane external coating, it is available in two versions: 100L wall-mounted model or 190L tower model. Both are equipped with:

- direct expansion exchanger with micro-channel heat transfer technology, which ensures a larger contact area with the water tank than conventional systems;
- 1.5 kW (hanging) and 2 kW (tower) electric heating element, which ensures DHW even in case of system failure, thanks to independent control;
- dual temperature sensors for more accurate temperature control at the top and bottom of the tank;
- electronic expansion valve for timely control;
- on/off contact to start the tank from an external switch, and possibility of interface with BMS, photovoltaic and smartgrid systems as well.

Combined pressure and temperature safety valve (8 bar; 99°C) is standard in the 190L tower version. The sanitary expansion tank is not included in either version (to be provided by the installer).

Operation in all conditions

Nexya All-in-One allows for DHW production up to 55°C (70°C with the electric heating element active) with outdoor temperatures between -15°C and +50°C. Various operating modes are available - Vacation, Hybrid, E-Heater, Economy and Smart Mode - along with a daily and weekly timer for switching on and off. Disinfection cycles are weekly.

TECHNICAL DATA

NEW

					UI Nexya DHW S5 E 100	UI Nexya DHW S5 E 190
Indoor unit code					02660	02589
Indoor unit EAN code					8021183026603	8021183025897
	Tank features				Enamelled steel	Enamelled steel
	Tank protection from corrosion				Magnesium anode	Magnesium anode
	Electrical power supply			V/F/Hz	Single-phase 220-240/1/50	Single-phase 220-240/1/50
	Nominal tank volume			l	100	190
DHW (EN 16147:2017)	Domestic hot water temperature setting	Tset		°C	55	52
	Domestic hot water reference temperature	θwh		°C	55	52,6
	COPdhw (EN16147: A7/W52)	medium area			2,61	2,62
	COPdhw (EN16147: A14/W52)	hot area			2,51	2,94
	Water heating energy efficiency (area: EU average 812/2013)	θWH		%	108	128
	Maximum volume of mixed water at 40°C	Vmax		l	108	240
	Declared load profile (UNI EN 16147)				M	L
	Energy class				A+	A+
	Heating time	time		h:min	01:30:00	02:30:00
	Maximum water temperature (without/with electric heater)			°C	55/70	55/70
	Energy absorbed during heating time	Weh		kWh	1,5	2,9
	Power consumption in standby	Pes		W	22	50
	Electric heater			kW / A	1,5 / 7,0	2,0 / 9,1
	Sound pressure of the external unit			dB(A)	-	-
	Sound pressure of the external unit			dB(A)	64	64
	Nominal pressure of the domestic hot water boiler			Mpa	0,8	1
DIMEN-SIONS	Dimensions (WxHxD) (without packaging)			mm	555 x 1060 x 500	504 x 1660 x 574
	Weight (without packaging)			kg	45,5	70
	Dimensions (WxHxD) (with packaging)			mm	630 x 1280 x 575	690 x 1860 x 690
	Weight (with packaging)			kg	55,5	92
DIMENSIONS AND LIMITATIONS OF THE COOLING CIRCUIT	Liquid connection pipeline diameter			mm (inch)	1/4" - 6,35	6,35 (1/4")
	Connecting gas pipeline diameter			mm (inch)	3/8" - 9,52	9,52 (3/8")
	Maximum length for an internal unit			m	20	20
	Minimum total piping length			m	5	5
	Maximum difference in height between the internal and external units			m	15	15
	Maximum difference in height between the internal units			m	10	10
	Diameter of connections on the bathroom fixtures			inch	DN15	RC3/4"
ELECTRI-CAL CON-NECTIONS	Electric Heating Element Connection	Pipes			3 x 1,5 mm2	3 x 1,5 mm2
	Storage Tank-Outdoor Unit Connection	Pipes			4 x 1,0 mm2	4 x 1,0 mm2
OPERA-TIONAL LIMITS	External air temperature (min-max)			°C	-15/50	-15/50
	Domestic hot water set point temperature (min-max) - without electric heating element			°C	38 - 55	38 - 55
	Domestic hot water set point temperature (min-max) - with electric heating element			°C	38 - 70	38 - 70

SPLIT AIR-TO-AIR HEAT PUMPS

NEXYA MULTI WALL ALL-IN-ONE

[OS5+IS5]

Size	**27**
Energy class	**A++, A+**
Type	**multisplit**
Filtration	**antidust | activated carbons | catalysts**
Application	**residential**

A unique, even more efficient system

The system consists of an outdoor unit, a DHW storage tank, and up to 3 indoor units. Compared with systems that separately manage air conditioning and DHW production, Nexya All-in-One is more efficient, because it recovers waste heat (during cooling operation) for DHW production and is therefore ideal in both new construction and energy upgrades.

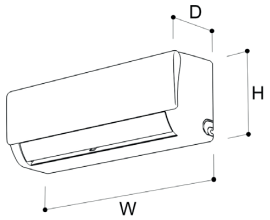
Air Quality Technology

To improve indoor air quality in home environments, the unit is equipped with a triple-stage filtration system that combines a pre-filter (with anti-dust function), an activated carbon filter, effective against odors, and a cold catalytic filter capable of reducing impurities.

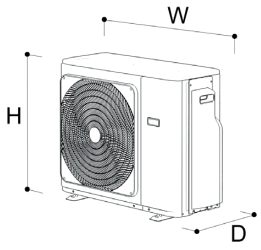
TECHNICAL INFO

- Manual oscillation of horizontal airflow
- Golden Fin treatment on the outdoor unit battery to prevent corrosive weathering.
- Wireless connectivity can be integrated into the wall-mounted indoor unit by easily installing the USB stick (OS Home app), included in the package, while for the kettle it is already integrated (OS Comfort app), with separate management.
- Remote control holder as standard.
- Bracket with pull-down structure to facilitate installation by allowing the indoor unit to be lifted and remain fixed to the wall

DIMENSIONS AND WEIGHT



		9	12	18
W	mm	723	813	975
H	mm	286	289	308
D	mm	199	201	218
WEIGHT	kg	**7,0**	**8,0**	**10,4**



		27
W	mm	946
H	mm	810
D	mm	410
WEIGHT	kg	**64,3**

COMPATIBLE ACCESSORIES

B0999	Wireless control for radiators
B1234	Wireless 4-wire wall control
B1235	Multifunction interface kit

- **Cooling**
- **Heating**
- **Dehumidification**
- **Ventilation**
- **DHW production**
- **Auto Mode**
- **Auto-diagnosis**
- **Auto-restart**
- **Children's Lock**
- **Defrost**
- **Temperature Sensor**
- **Sleep Mode**
- **Vertical swing**
- **Timer**
- **Turbo Mode**

TECHNICAL DATA

					UE Nexya WHR S5 E Quadri Inverter 27
Outdoor unit code					OS-CEMAH27EI
Outdoor unit EAN code					8021183122213
Output power in cooling mode (min/rated/max)		(1)	kW		2,38/7,94/8,73
Output power in heating mode (min/rated/max)		(1)	kW		2,48/8,28/10,3
Absorbed power in cooling mode (min/rated/max)		(1)	kW		0,33/2,19/2,63
Absorbed power in heating mode (min/rated/max)		(1)	kW		0,29/1,93/2,31
Absorption in cooling mode (min/nom/max)		(1)	A		0,7/9,2/12,4
Absorption in heating mode (min/nom/max)		(1)	A		0,6/8,1/11,6
EER		(1)			3,62
COP		(1)			4,29
Maximum power consumption in cooling mode		(2)	kW		5,3
Maximum power consumption in heating mode		(3)	kW		5,3
Energy efficiency class in cooling		(4)			A++
Energy efficiency class in heating mode - Average season		(4)			A+
Energy efficiency class in heating mode - Warmer season		(4)			A+++
Energy efficiency class in heating mode - Cold season		(4)			-
Annual energy consumption in cooling mode		(4)	kWh/year		352
Annual energy consumption in heating mode - Average season		(4)	kWh/year		1972
Annual energy consumption in heating mode - Warmer season		(4)	kWh/year		1809
Annual energy consumption in heating mode - Cold season		(4)	kWh/year		-
PROJECT LOADS (EN 14825) Cooling	Pdesignc	(4)	kW		7,9
Heating - Mid Season	Pdesignh	(4)	kW		6,1
Heating - Hot season	Pdesignh	(4)	kW		7,5
Heating - Cold Season	Pdesignh	(4)	kW		-
SEASONAL EFFICIENCY (EN14825) Cooling	SEER	(4)			7,9
Heating - Mid Season	SCOP (A)	(4)			4,4
Heating - Hot season	SCOP (W)	(4)			5,8
Heating - Cold Season	SCOP (C)	(4)			-
OUTDOOR UNIT Dimensions (WxHxD) (without packaging)			mm		946x810x410
Weight (without packaging)			kg		64,3
Dimensions (WxHxD) (with packaging)			mm		1090x885x500
Weight (with packaging)			kg		68,6
Air flow rate			m³/h		4000
Sound Pressure		(7)	dB(A)		61
Sound power	LWA	(5)	dB(A)		67
COOLING CIRCUIT Liquid connection pipeline diameter			nr inch-mm		4 x 1/4"-6,35
Connecting gas pipeline diameter			nr inch-mm		3 x 3/8"-9,52 + 1 x 1/2"-12,7
Piping length covered by precharge			m		30
Piping recommended minimum length			m		3
Maximum piping length (overall)			m		80
Maximum pipeline length (single pipeline branch)			m		35
Additional refrigerant			g/m		20
Maximum elevation of external unit above internal units			m		15
Maximum elevation of external unit below internal units			m		15
Maximum elevation difference between internal units			m		10
Refrigerant gas	Type	(8)			R32
Global warming potential	GWP				675
Refrigerant preloaded quantity			kg		1,8
Maximum operating pressure (High/Low side)			MPa		4,3/1,7
ELECTRICAL CONNECTIONS External Unit Power Supply			V/F/Hz		Single-phase 220-240/1/50
Maximum Current			A		17
OUTDOOR ENVIRONMENT Operating temperatures in cooling mode (min/max)			°C B.S.		-/+50
Operating temperatures in heating mode (min/max)			°C B.U.		-15/+24

NEW NEW NEW

TECHNICAL DATA

				UI Nexya S5 E Inverter 9	UI Nexya S5 E Inverter 12	UI Nexya S5 E Inverter 18
Indoor unit code				OS-SANQH09EI	OS-SANQH12EI	OS-SANQH18EI
Indoor unit EAN code				8021183123722	8021183123753	8021183123784
Indoor Unit Power Supply			V/F/Hz	220-240/1/50	220-240/1/50	220-240/1/50
Nominal cooling capacity		(1)	kW	2,64	3,52	5,27
Nominal heating capacity		(1)	kW	2,93	3,81	4,97
INDOOR UNIT Dimensions (WxHxD) (without packaging)			mm	723x286x199	813x289x201	975x308x218
Weight (without packaging)			kg	7,0	8,0	10,4
Dimensions (WxHxD) (with packaging)			mm	780x343x265	870x343x265	1050x365x285
Weight (with packaging)			kg	9,2	10,3	13,4
Indoor air flow rate in cooling mode (min/average/max)			m³/h	285-360-510	370-450-600	470-600-800
Indoor air flow rate in heating mode (min/average/max)			m³/h	285-360-510	370-450-600	470-600-800
Sound pressure (silent/min/med/max)		(6)	dB(A)	/-24-34-38	/-25-32-38	/-33-35-43
Sound power		(5)	dB(A)	54	56	58
PIPING DIMENSIONS Liquid connection pipeline diameter			inch - mm	1/4" - 6,35	1/4" - 6,35	1/4" - 6,35
Connecting gas pipeline diameter			inch - mm	3/8" - 9,52	3/8" - 9,52	1/2" - 12,7
INDOOR ENVIRONMENT Operating temperatures in cooling mode (min/max)			°C B.S.	+16/+32	+16/+32	+16/+32
Operating temperatures in heating mode (min/max)			°C B.S.	0/+30	0/+30	0/+30

(1) The data refers to the EN 14511 Standard
(2) Cooling test conditions: indoor temperature DB 32°C - WB 26°C; outdoor temperature DB 37°C
(3) Heating test conditions: indoor temperature DB 27°C; outdoor temperature DB 3°C - WB 2°C
(4) The data refers to the EN 14825 Standard
(5) The data refers to the EN 12102 Standard
(6) Test conditions: semi-anechoic chamber, unit positioned in free-field conditions, measuring instrument positioned at 1 metre, centred with respect to the internal unit and 0.8 metres below it
(7) Test conditions: semi-anechoic chamber, unit positioned in free-field conditions, measuring instrument positioned at a distance of 1 metre at a height of 1 metre
(8) Non-hermetically sealed equipment containing fluorinated GAS with a GWP equivalent of 675
The declared data refers to one of the combinations capable of achieving the highest energy class. For the energy class and performance of the individual combinations, refer to the selection tables on the website www.olimpiasplendid.it and to the energy labels of the specific combination (range between A+++ and D). The actual power consumption of the product, in conditions of real use, may differ from what is indicated. The data is subject to changes and modifications without prior notice.