



# AQUAPURA SPLIT DOMESTIC HOT WATER



## **EFFICIENCY & QUALITY** OPERATING PRINCIPLE

There is a cooling liquid that is pumped to an outdoor heat exchanger (evaporator). Here the liquid, with the help of a fan, absorbs the energy from the atmosphere to the temperature differential obtained outdoors. During this process, the liquid changes to a gaseous state. The gaseous state is sucked in by the mechanical part of the system, the compressor. Here it is compressed, the pressure goes up and consequently the liquid temperature increases. After this, the liquid travels to a second inside heat exchanger (condenser) and transfers heat to the water in the cylinder. The fluid goes into liquid state by cooling down. The liquid pressure is reduced due to a strangulation that happens in the expansion valve and the process starts again.

#### PORTUGUESE MANUFACTURING

- 1 Cylinder
- 2 Condenser (Coil)
- **3** Ceramic Resistance + Thermostat + Sensor
- 4 Magnesium Anode (if applicable)
- 5 High Density Insulation
- 6 Split Cover
- 7 Electronic Controller
- 8 Ventilator
- 9 Evaporator
- 10 Expansion Valve
- 1 Unit box
- 12 Compressor



## WALL HANGING DHW HEAT PUMP

- Stainless Steel Cylinder
- Domestic Hot Water at 65°C in Heat Pump mode
- Possible to fit in standard cabinet 600x600 mm
- 160 liters capacity
- Absolute silence in the interior of the house
- Hot Water in less than 3 hours
- Up to 20m between indoor and outdoor unit
- Up to 75% real savings
- Condenser outside the tank







### MAXIMUM RETURN ON INVESTMENT

### DOMESTIC HOT WATER HEAT PUMP

We select the best components and subject our systems to rigorous quality testing to ensure maximum customer satisfaction.

## AQUAPURA SPLIT

The AQUAPURA SPLIT heat pump is a modern, efficient, and clean solution that guarantees comfort in your home, while always respecting the environment. It is a smart way to use natural resources to improve your quality of life; by adopting this solution you will be making a serious commitment to the issue of reducing harmful emissions into our atmosphere, therefore contributing to the natural balance of the planet. It is a solution that adapts to both domestic and industrial use, i.e. for hot water consumption in facilities such as: Hotels Guest houses, Hospitals, Gyms, Etc. The heat pump for AQUAPURA SPLIT is direct-contact condenser technology.

It has two parts: Split-system heat pump which is installed outdoors, DHW heater installed indoor.

The interconnection between the two parts is done with refrigerating connections (up to 20 meters).

The AQUAPURA SPLIT can be used at outdoor temperatures of up to -15°C, allowing for the production of domestic hot water up to  $65^{\circ}$ C just with the compressor, which allows for direct replacement of the existing electric cylinder or water heater.

## ELECTRONIC CONTROLLER DOMESTIC HOT WATER PRODUCTION

The electronic controller that is part of the **AQUAPURA SPLIT** heat pump is a simple and intuitive programmer that allows for:

- The adjustment of the heat pump temperature set point
- The adjustment of the auxiliary coil temperature set point
- Time programming
- The setting of parameters and temperatures



CYLINDER		SPLIT 160 (MURAL)
Capacity	L	160
Dimensions (ø   height)	mm	530/1141
Gross weight	Kg.	32
Material	-	Stainless Steel Duplex 2205
Insulation	-	High density polyurethane (55mm)
Maximum water temperature	°C	80
Maximum operation pressure	bar	7
Thermal loss <sup>1</sup>	kWh/24h	0,94
Protection Index	-	IPX1
Auxiliary coil power	W	1500
Refrigerating connections	pol.	1/4"   3/8"
<sup>1</sup> According to EN12897		

### .....

OUTSIDE UNIT		
Weight	Kg.	33
Refrigerating connections	inch.	1/4"   3/8"
Sound level	dB	54
Power supply	V/Hz	230 / 50
Protection Index	-	IPX1
Absorbed electrical power (HP) (med / max)	$\mathbb{W}$	600 / 900
Thermal power supplied (HP) (med / max)	$\mathbb{W}$	1920 / 3200
Maximum distance between units	m	20 (hight max. 10)
Outdoor operating temperature range	°C	-14 / 43
Refrigerating fluid	type/g	R134a / 1600
Air flow	m³/h	1300
PERFORMANCE		

Tapping profile	-	L
COP <sup>2</sup>	-	3,75
COP 3	-	3,26
Amount of water removed at 40°C	L	194
Energy efficiency class	-	A+
Energetic efficiency	%	135
Annual electricity consumption	kWh/year	759

<sup>2</sup> A14/Δt35, EN16147 | <sup>3</sup> EN16147: Water heating from 10°C to 54°C (air temperature 14°C)

#### Equipment: INDOOR UNIT SPLIT 160



### Equipment: OUTDOOR UNIT SPLIT 160 | 250 | 300 | 500





Front view





DIMENSIONS mm	SPLIT 160 (MURAL)
A	1141
BØ	530
С	550
D	750
E	235
F	275
G	220

DIMENSIONS mm	OUTDOOR UNIT	
А	804	
В	555	
С	302	
D	452	
E	137	

CYLINDER		SPLIT 250 I/IX	SPLIT 300 I/IX	SPLIT 500 I/IX	
Capacity	L	250 / 245	300 / 295	455 / 445	
Dimensions (ø   height)	mm	580 / 1540	650 / 1400	650 / 2020	
Gross weight	Kg.	46 / 51	50 / 55	73 / 95	
Material	-		Stainless Steel AISI444		
Insulation	-	High density polyurethane (55mm)			
Corrosion protection	-	Magnesium anode 1" 1/4 (if applicable)			
Maximum water temperature	°C		80		
Maximum operation pressure	bar		7		
Thermal loss <sup>1</sup>	kWh/24h	1,01	1,17	1,81	
Coil (ø   length)	m	0,025   10	0,025   10	0,025   24	
Coil thermal power <sup>2</sup>	kW	20	20	54	
Protection Index	-		IPX1		
Auxiliary coil power	$\sim$	1500	1500	2200	
Refrigerating connections	pol.	1/4"   3/8"	1/4"   3/8"	1/4"   3/8"	
<sup>1</sup> According to EN12897   <sup>2</sup> Primary circuit (Te=90°C; Ts=80°C); DHW circuit (Te=10°C; Ts=60°C)					
OUTSIDE UNIT					
Weight	Kg.		33		
Refrigerating connections	inch.		1/4"   3/8"		
Sound level	dB		54		
Power supply	V/Hz		230 / 50		
Protection Index	-		IPX1		
Absorbed electrical power (HP) (med / max)	$\mathbb{W}$		600 / 900		
Thermal power supplied (HP) (med / max)	$\mathbb{W}$		1920 / 3200		
Maximum distance between units	m		20 (hight max. 10)		
Outdoor operating temperature range	°C		-14 / 43		
Refrigerating fluid	type/g		R134a / 1600		
Air flow	m³/h		1300		
PERFORMANCE					
Tapping profile	-	XL	XL	XXL	
COP 3	-	3,4	3,4	3,5	
Amount of water removed at 40°C	L	323	362	599	
Energy efficiency class	-	A+	A+	A+	
Energetic efficiency	%	139	143	139	
Annual electricity consumption	kWh/year	1203	1170	1549	
<sup>3</sup> EN16147: Water heating from 10°C to 54°C (air temperature 14°C)					

DIMENSIONS mm	SPLIT 250 I/IX	SPLIT 300 I/IX	SPLIT 500 I/IX
А	131	107	102
В	231	236	635
С	435	436	1525
D	690	636	782
E	840	855	1093
F	1025	1065	1770
G	1325	1190	1937
Н	1540	1400	2020
1	Ø 580	Ø 650	Ø 650
J	688	758	758



Front Connections

Equipment: SPLIT 300 Rear Connections

Equipment: SPLIT 500 Rear Connections

G. Hot water

This flyer has been created for information purposes only and does not constitute a contractual offer for ENERGIE EST Lda. ENERGIE EST Lda. has compiled the contents of this flyer to the best of its knowledge. No express or implied guarantee is given regarding the completeness, accuracy, reliability or fitness for a particular purpose of its content and the products and services it presents. Specifications are subject to change without notice. ENERGIE EST Lda. explicitly rejects any direct or indirect damages, in its broadest sense, resulting from or related to the use and/or interpretation of this flyer. RIV0/2023



Project co-financed by:









Zona Industrial de Laúndos Lote 48, 4570-311 Laúndos Póvoa de Varzim, Portugal EMAIL energie@energie.pt SITE www.energie.pt

Follow us on: ENERGIE PORTUGAL Γ

Authorized dealer