













# New Heat Pump in R32, eco-friendly refrigerant

Up to 75% less CO<sub>2</sub> equivalent emissions in the environment with respect to machines in R410a

with low GWP.



Code	Model
0XHK4SWD	IDOLA S 3.2 04
0XHK6SWD	IDOLA S 3.2 06
0XHK8SWD	IDOLA S 3.2 08
OXHKASWD	IDOLA \$ 3.2 10
OXHKCSWD	IDOLA \$ 3.2 12
OXHKESWD	IDOLA \$ 3.2 14
OXHKGSWD	IDOLA \$ 3.2 16
OXHLCSWD	IDOLA \$ 3.2 12T
OXHLESWD	IDOLA \$ 3.2 14T
0XHLGSWD	IDOLA S 3.2 16T

# Idola S 3.2

#### Split system reversible heat pump with DC inverter compressor

- New range of Full Inverter split system heat pumps with R32 eco-friendly refrigerant. The range consists of an Outdoor Unit housing the most important elements of the refrigeration circuit, from the compressor to the air-side heat exchanger, which will be connected with the refrigerant pipes to the Indoor Unit.
- The Indoor Unit on the other hand houses the main components of the heat source's water circuit, with the pre-installation of all essential parts such as the high-performance circulator and expansion tank, to allow safe, fast and practical installation.
- It is supplied standard with an electrical integration of 3kW for single
  phase models, and 6kW for threephase models. Installing a split system
  also offers the undeniable advantage of avoiding the problem of freezing,
  even at the lowest temperatures (up to -25°C) and in the absence of
  electricity (the only real problem with anti-freeze heating elements in
  outdoor packaged machines).
- All units satisfy the most extreme winter/summer heating/cooling needs with the capacity to produce hot water up to 65°C, making them ideal for practically all heating systems, whether radiant, with fan coil units
- or radiators, including the production of domestic hot water (DHW)
  through an external water cylinder. Lamborghini CaloreClima's new Full
  Inverter design uses DC inverter modulation on the machine's 3 main
  powerconsuming components, i.e., the compressor, fan, and pump. This
  allows modulation of the distributed power by finely tracking the heat load,
  thus allowing very high energy efficiency and important power savings for
  the end user
- Moreover, Lamborghini CaloreClima's Full Inverter design reduces the inrush current, avoiding power grid fluctuations and thus improving the mission time of components. The noise levels are among the lowest in the market, and it can be used either as a stand-alone or integrated with other heat sources, for example a boiler
- All units are supplied with a temperature probe for a DHW cylinder (not supplied, to be assembled by the installer) and an outdoor air temperature probe (pre-assembled on the Outdoor Unit) for temperature regulation in both heating and cooling.

#### Accessories

	DESCRIPTION	CODE
42	Connect CRP. Evolutionary remote control with programmable thermostat function. Can manage up to 7 additional CRP ZONES in 2 separate zones. Also accessible via App	013054XD
	Connect CRP Zones. Zone thermostat with RF connection to Connect CRP. Wall-mounted or table-top installation, powered with 2 x AA batteries	013055XD

DESCRIPTION	CODE
System flow temperature probe or for hybrid solar/ hybrid system integration	2CP000NF
Rubber vibration dampers for outdoor unit	2CP000ZF



#### The control system

- The user interface comes with Capsense technology with a 2.8" graphic display, ensuring easy and extremely simple user interaction with the product. The on-board machine interface easily communicates with the new smart Connect CRP systems, which can manage up to 8 thermostats (7 Connect CRP Zones + 1 Connect CRP with all programmable thermostat functions) divided into 2 zones, one direct and one mixed. The main control functions include:
- MODBUS PROTOCOL for smart control via an external BMS.
- HEATING AND COOLING with the heat pump as the only heat source. Full Inverter modulation means the setpoints can be maintained in both heating and cooling, thus optimising consumption for the user. The temperature curve setting (standard) can improve comfort and further reduce consumption.
- DOMESTIC HOT WATER PRODUCTION (DHW). When the DHW
  Temperature probe (to be installed on the external cylinder, not
  supplied with the machine) falls below a certain value, the machine
  enters DHW mode, that is, Heating with dedicated Setpoint. 3-way
  diverter valve supplied standard.
- SMART GRID INPUT FROM PHOTOVOLTAIC SYSTEM AND GRID. The unit is equipped with 2 digital contacts to manage an input from a photovoltaic system and the grid. These are the famous Smart Grid contacts used to optimise consumption and save on bills. The first contact (EVU) tells the heat pump when the photovoltaic system is producing: the heat pump increases the DHW setpoint with the aim of improving self-consumption (where the user has the best earnings). The contact toward the grid (SG) warns the heat pump when the electrical power costs more (if allowed by the operator), which will then be limited in accordance with customised settings. We invite you to read the manuals for more details.
- REMOTE CONTROL VIA APP. Available for iOS and Android using the Connect CRP (optional) DHW
- CYLINDER HEATING ELEMENT. In DHW mode, the unit manages a heating element inserted in the cylinder as an integration, antilegionella function, or reserve source in case of a failure.
- FAST DHW. A function making it possible to give priority to DHW
  production by activating all available power sources, to bring the DHW
  cylinder to the setpoint in the shortest possible time.
- ANTI-LEGIONELLA FUNCTION. Allows the setting of weekly antilegionella cycles. In order for it work effectively, a heating element must be installed on the DHW cylinder or integrated boiler.
- **SILENT MODE.** When activated, reduces the maximum compressor frequency and fan speed so as to significantly reduce noise levels. Available with 2 different levels and programmable in daily time slots (for example at night).
- ON/OFF from external contact. The unit can be activated and deactivated via an external contact (for example a zone thermostat): in this case the operating mode will follow the controller settings.
- WARM/COOL from external contacts. The unit can receive an external summer/winter switching signal (for example from a zone thermostat).
- ECO. Dedicated setpoint for "Eco" mode. Settable with a daily time slot
- WEEKLY HOURLY PROGRAMMING. The Connect CRP (optional) allows differentiated hourly programming for each day of the week, defining the mode (COOL/WARM/DHW) and operating setpoints for each time slot.
- ANTI-FREEZE PROTECTION. Heat pump operation in heating mode with the circulator set to ON and eventually an electric booster.

#### 2.8" GRAPHIC INTERFACE WITH CAPSENSE TECHNOLOGY





OUTDOOR UNIT	4	6	8	10	12	14	16	12T	14T	16T		
Power supply		V-ph-Hz	220/240-1-50 380/415-3-50						)			
No. compressors / No. refrigera	ation circuits	n°	1 x DC Twin Rotary / 1 circuit									
Exchanger type		-	finned coil									
No. and type of fans		-					1 x D(	C axial				
Refrigerant type / GWP		-					R32 / G	WP 675				
Factory refrigerant charge ***		kg	1,5 1,65					1,	84			
Refrigeration lines (max length/v	ert. lift) ***	m		30 / 20								
SWL - Sound power	A7W35	dB(A)	55	58	59	60	65	65	69	65	65	69
level in heating *	Max	dB(A)	60	61	61	62	65	65	69	65	65	69
	Sil. 1 / Sil. 2	dB(A)	56 / 53	56 / 53	57 / 55	58 / 55	62/56	62/56	63 / 56	62/56	62 / 56	63 / 56
SWL - Sound power	A35W18	dB(A)	56	58	60	60	64	64	69	64	64	69
level in cooling *	Max	dB(A)	60	61	61	62	65	65	69	65	65	69
	Sil. 1 / Sil. 2	dB(A)	55 / 52	57 / 54	57 / 54	58 / 54	62 / 56	62 / 56	63 / 56	62 / 56	62 / 56	63 / 56
Maximum input current A			12	14	16	17	25	26	27	10	11	12
Net weight	weight kg 58 77 96				112							

INDOOR UNIT		10	16	16T			
Power supply	V-ph-Hz	220/240-1-50	)	380/415-3-50			
Exchanger type	-	Br	razed stainless steel plate type				
System expansion tank volume	I	10					
System water safety valve calibration	bar	3					
Minimum system water content	I	40					
Internal backup heater	kW	3		6			
SWL - Sound power level indoor unit	dB(A)	42 43					
Maximum input current	А	14 10					
Net weight	kg	34 36 37					

<sup>\*</sup> SWL = Sound power level, considering 1x10-12 W with unit operating in conditions: A7W35 = source: air in 7°C d.b. 6°C w.b. / system: water in 30°C out 35°C. A35W18 = source: air in 35°C d.b. / system: water in 23°C out 18°C Max = at maximum conditions in heating/cooling mode Sil. 1 = if silent level 1 active in heating / cooling mode Sil. 2 = if silent level 2 active in heating / cooling mode. The Total sound power level in dB(A) is measured in accordance with standard ISO 9614. \*\* For combination with outdoor units mod. 4-6, an adapter from 3/8" SAE to 1/4" SAE is supplied for the liquid line Ø 6.35. \*\*\* The factory refrigerant charge allows a maximum refrigeration line length of 15 metres. It is possible to reach 30 metres by integrating the charge during installation.

# **Performances**

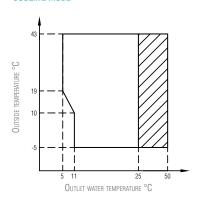
PE	RFORMANCE DATA		4	6	8	10	12	14	16	12T	14T	16T
	Nominal heat output	kW	4.20	6.35	8.40	10.0	12.1	14.5	15.9	12.1	14.5	15.9
ស	Nominal input power	kW	0.82	1.28	1.63	2.02	2.44	3.15	3.53	2.44	3.15	3.53
A7W35	СОР	W/W	5.10	4.95	5.15	4.95	4.95	4.60	4.50	4.95	4.60	4.50
×	Water flow rate	l/h	722	1092	1445	1720	2081	2494	2735	2081	2494	2735
	External static pressure	kPa	81	76	61	47	58	42	34	58	42	34
	Nominal heat output	kW	4.30	6.30	8.30	10.0	12.3	14.1	16.0	12.3	14.1	16.0
젼	Nominal input power	kW	1.13	1.70	2.16	2.67	3.32	3.92	4.57	3.32	3.92	4.57
A7W45	СОР	W/W	3.80	3.70	3.85	3.75	3.70	3.60	3.50	3.70	3.60	3.50
×	Water flow rate	I/h	740	1084	1428	1720	2116	2425	2752	2116	2425	2752
	External static pressure	kPa	81	76	62	47	57	45	33	57	45	33
	Designed cooling capacity	kW	4.50	6.50	8.30	9.90	12.0	12.9	13.6	12.0	12.9	13.6
8	Nominal input power	kW	0.82	1.35	1.64	2.18	3.04	3.49	3.77	3.04	3.49	3.77
A35W18	EER	W/W	5.50	4.80	5.05	4.55	3.95	3.70	3.61	3.95	3.70	3.61
₩	Water flow rate	I/h	774	1118	1428	1703	2064	2322	2563	2064	2322	2563
	External static pressure	kPa	80	75	62	48	58	49	40	59	49	40
	Designed cooling capacity	kW	4.70	6.50	7.45	8.20	11.5	12.4	14.0	11.5	12.4	14.0
_	Nominal input power	kW	1.36	2.17	2.22	2.52	4.18	4.96	5.60	4.18	4.96	5.60
A35W7	EER	W/W	3.45	3.00	3.35	3.25	2.75	2.50	2.50	2.75	2.50	2.50
¥	Water flow rate	l/h	808	1118	1281	1410	1978	2133	2408	1978	2133	2408
	External static pressure	kPa	80	75	68	63	61	56	46	61	56	46

The values refer to a unit without any optionals or accessories. Data declared pursuant to **EN 14511: EER** (Energy Efficiency Ratio) = ratio of cooling power to input power **COP** (Coefficient Of Performance) ratio of heat output to input power **A7W35** = source: air in 7°C d.b. 6°C w.b. / system: water in 30°C out 35°C **A7W45** = source: air in 7°C d.b. 6°C w.b. / system: water in 40°C out 45°C **A35W18** = source: air in 35°C d.b. / system: water in 12°C out 18°C **A35W7** = source: air in 35°C d.b. / system: water in 12°C out 7°C



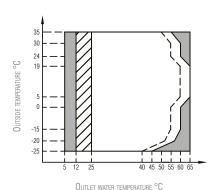
# Operating limits

#### **COOLING MODE**



Operation range by heat pump with possible limitation and protection

#### **HEATING MODE**

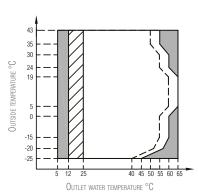


Operation range by heat pump with possible limitation and protection

If IBH (backup heater) /AHS (boiler) setting is valid, only IBH/AHS turns on If IBH/AHS setting is invalid, only heat pump turns on

 Maximum inlet water temperature line for heat pump operation

#### DHW MODE



Operation range by heat pump with possible limitation and protection

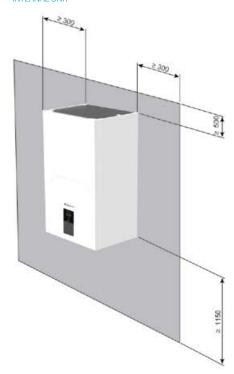
If IBH (backup heater) /AHS (boiler) setting is valid, only IBH/AHS turns on If IBH/AHS setting is invalid, only heat pump turns on

 Maximum inlet water temperature line for heat pump operation

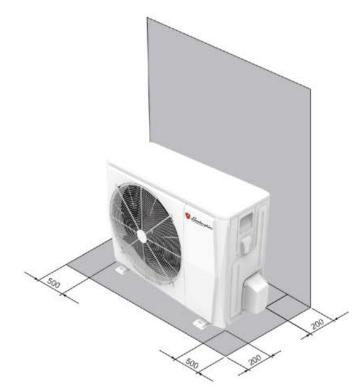
NOTE FOR DHW MODE: outlet water temperature is the temperature of the water produced by the unit and not the DHW temperature available to the user; the DHW temperature is in fact a function of this parameter and of the coil surface of the DHW boiler.

#### Minimum operating spaces (mm)

## INTERNAL UNIT

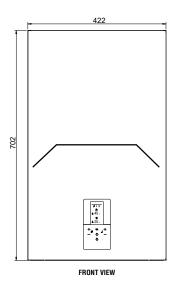


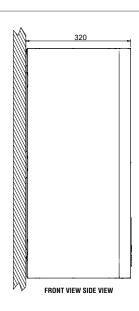
### **EXTERNAL UNIT**

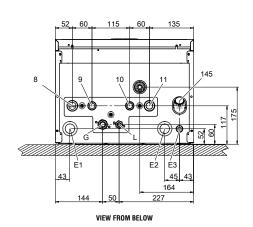




# **Indoor unit footprint (in mm)**





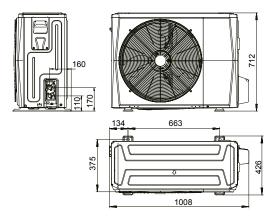


#### **KEY**

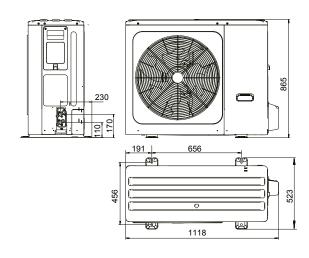
- 8 System outlet Ø 1"
- 9 DHW outlet Ø 3/4"
- **10** DHW inlet Ø 3/4"
- 11 System inlet Ø 1"
- 145 Water pressure gauge
- **G** Gas line Ø 15.88 (5/8")
- **L\*** Liquid line Ø 9.52 (3/8")
- E1 Cable gland for signal cables
- **E2** Cable gland for power cables
- E3 Power cable with cable gland

# Outdoor unit footprint (in mm)

mod. 4 - 6



mod. 8 - 10 - 12 - 12T - 14 - 14T - 16 - 16T



MODELS		4	6	8	10	12	14	16	12T	14T	16T	
Packaging (WxHxD)	mm	1065x8	00x485	1190x970x560								
Packaging weight	kg	6		94		114			130			

<sup>\*</sup> For combination with outdoor units mod. 4-6, an adapter from 3/8" SAE to 1/4" SAE is supplied for the liquid line  $\emptyset$  6.35.