

# SUNEX<sup>®</sup>

**A leading manufacturer**  
of innovative solutions based on renewable energy.



MONOBLOC HEAT PUMPS | SPLIT HEAT PUMPS | DOMESTIC HOT WATER HEAT PUMPS | SOLLAR COLLECTORS



SUNEX<sup>®</sup>

Efficient  
**heating**  
and cooling of your home



ENERGY EFFICIENCY CLASS A+++



COMPACT DESIGN



ENVIRONMENTAL FRIENDLY MEDIUM



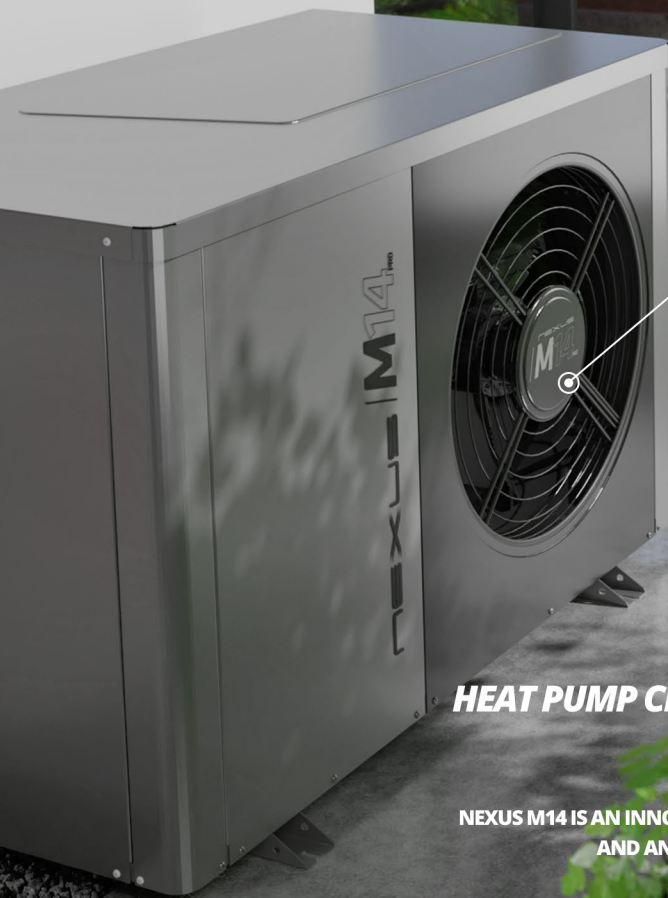
HIGH EFFICIENCY



SILENT OPERATION



CONTROL VIA INTERNET



HEAT PUMP CENTRAL HEATING + D.H.W.

**NEXUS PRO**  
**M14**

NEXUS M14 IS AN INNOVATIVE HEAT PUMP OF THE FUTURE, IT USES THE NATURAL REFRIGERANT R290 AND AN INVERTER COMPRESSOR WHOSE REGULATED OPERATION ALLOWS TO ADJUST THE HEATING POWER TO THE CURRENT HEAT DEMAND OF THE BUILDING.



## Special **advantages**

- › Automation provides **infinite capacity control of the compressor**, fan and circulating pump;
- › The standard control regulates the operation of the heat pump and heating circuits **for central heating and domestic hot water**;
- › **The heat pump can operate in cooling mode**. It is recommended to use this mode in an installation with floor heating systems;
- › It has **built-in temperature and pressure protection** for the refrigerant circuit;
- › **The control system, by regulating the components of the heat pump**, seeks to maintain the parameters of the refrigeration system during operation so that they do not go beyond the acceptable operating range;
- › Evaporator **hydrophilic surface** (evaporator is less vulnerable to icing, effectively defrosts and is better protected against dirt deposits);
- › **Active protection against freezing** of the water circuit also during cooling operation (requires elec. power supply);
- › **Passive antifreeze protection of the water circuit**, without electrical supply (when the water circuit is equipped with a thermostatic antifreeze valve);
- › The ability to operate the heat pump using **the weather control function**;
- › **Hydrophilic-coated** evaporator;
- › The device is equipped with **automatic defrost**.

## Technical data

### NEXUS M14 PRO

A7/W35 / COP	kW /-	up to 13,6 / up to 5,21
Energy efficiency class W35/W55		A+++ / A++
SCOP „A“ W35/W55	-	5,02 / 3,73
Compressor		Mitsubishi Scroll
Control		Maximum operating current
Cooling		Ja
Min. /Max. operating temp. at cooling	°C	17 / 40
Min. /Max. operating temp. at heating	°C	-25 / 40
Recommended heating water flow rate	m <sup>3</sup> /h	2,35
Operating medium		R290
Amount of operating medium	kg	2,6
Defrosting type		Hot gas
Max. operating pressure of the WT on the water side	bar	6
Sound power L <sub>WA</sub>	dB	57,9
L x W x H	mm	1316 x 1152 x 682
Weight	kg	170
Power supply		400V 3~ 50Hz
Supply cable	mm <sup>2</sup>	5x4,0
Maximum operating current	A	9,2



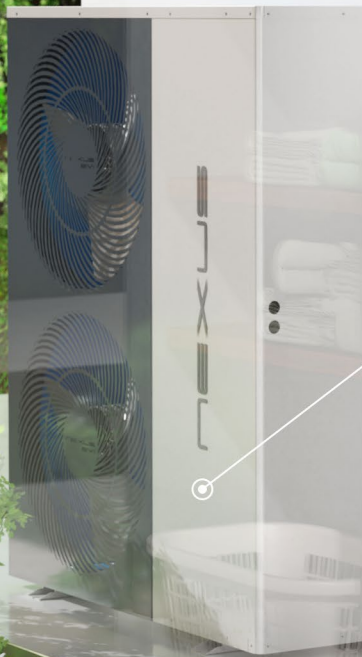
## Locate a pump at your home!

THANKS TO VIRTUAL REALITY, AFTER SCANNING THE CODE YOU WILL BE ABLE TO PLACE THE PUMP ANYWHERE! SEE FOR YOURSELF HOW IT WILL INTEGRATE WITH YOUR HOME.



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SPLIT-DESIGN



EVI TECHNOLOGY



HIGH EFFICIENCY



SILENT OPERATION



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HEAT PUMP CENTRAL HEATING + D.H.W.

**NEXUS SPLIT**

INVERTER SPLIT HEAT PUMPS. THE REFRIGERATION SYSTEM EQUIPPED WITH EVI (ENHANCED VAPOR INJECTION) TECHNOLOGY ENSURES HIGH EFFICIENCY EVEN IN CLASSIC RADIATOR INSTALLATIONS. EQUIPPED WITH COMPONENTS FROM WORLD RENOWNED MANUFACTURERS SUCH AS PANASONIC, GRUNDFOS AND CAREL.



## Special advantages

- › **One of the cheapest ways to heat buildings.**  
The system works even in temperatures of -20°C
- › High operating efficiency and long service life, thanks to the use of components from **renowned global manufacturers**;
- › **An extensive controller** ensures optimum control and protection of the system. The possibility of internet control is available. A wired user interface included as standard.
- › **High comfort of use.** Intuitive and simple operation of the controller;
- › **Equipped with a compressor with stepless efficiency regulation** and a brushless fan with speed control;
- › Evaporator with **hydrophilic surface** (evaporator is less susceptible to icing, defrosts effectively and is better protected against dirt deposits);
- › The split design **eliminates the risk of pipe freezing** during power outages;
- › **EVI rotary compressor** with multi-stage steam discharge;
- › The stable operation of the heat pump allows **high performance with low compressor noise**;
- › Evaporator with **hydrophilic coating**.

## Technical data

		NEXUS SPLIT 10 EVI	NEXUS SPLIT 17 EVI
SCOP (W35)	kWh/kWh	4,56	4,69
SCOP (W55)	kWh/kWh	3,34	3,67
Energy class ( W35)		A+++	A+++
Energy class ( W55)		A++	A++
Compressor		Panasonic (rotary, multi-stage steam injection)	
Expansion valve		electronic CAREL	electronic CAREL
Suction line filter		Ja	Ja
EC fan		Ja	Ja
Central heating circulation pump		Grundfos	Grundfos
Control		CAREL	CAREL
Outdoor temperature	°C	-25 bis zu +45	-25 bis zu +45
Recommended heating water flow rate	m /h	1,69	2,92
Operating medium		R410A	R410A
Operating medium quantity	kg	2	3,4
Defrosting type		hot gas	hot gas
Sound power level	dB	63	62
L x W x H (Outdoor unit)	mm	1110 x 475 x 810	1110 x 475 x 1355
L x W x H (Indoor unit)	mm	550 x 325 x 650	550 x 325 x 650
Weight (Outdoor unit/Indoor unit)		74/52	110/56
Power supply		380-420V 3~ 50Hz	380-420V 3~ 50Hz
Power cable	mm <sup>2</sup>	5x4	5x4
Max operating current (without elec. flow heater)	A	6,74	11,54



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# Domestic hot water

preparation with heat pumps



**SIMPLE AND FAST ASSEMBLY**



**HIGH ENERGY EFFICIENCY**



**HIGH SAFETY LEVEL**



**CONTROL POSSIBILITY OF AN ELECTRIC HEATER**



**CONTROLLABLE CIRCULATION PUMP**



**TEMPERATURE SETTINGS FOR A SPECIFIC DAY OF THE WEEK**

**DHW HEAT PUMP | GELBI**

AN AIR-SOURCE HEAT PUMP REDUCES THE COST OF HEATING DOMESTIC WATER TO A MINIMUM. WITH GELBI IT IS POSSIBLE TO GET HOT WATER UP TO THREE TIMES CHEAPER THAN WITH CLASSIC ELECTRIC WATER HEATERS.



## Special advantages

- > **Possibility to operate a photovoltaic system** or a second-zone energy tariff by means of an additional potential-free contact or a time program;
- > Control function of the external **electric heater installed in the tank**;
- > **PZH (Polish national Institute of Hygiene)** approval for heat pump components in contact with domestic water;
- > Installation: **indoors**;
- > **High level of safety** through pressure and temperature protection of the refrigeration system;
- > Evaporator with **hydrophilic surface** (evaporator is less susceptible to icing, defrosts effectively and is better protected against dirt deposits);
- > Adjustable feet for mounting on a flat surface **or the possibility of using a special wall mount**;
- > **Domestic hot water heating** in the DHW buffer (version D4.2).

## Technical data

		<b>GELBI 4.1</b>	<b>GELBI 4.2</b>
Dimensions (diameter / height)	mm	661 / 585	661 / 585
Diameter of air ducts	mm	250	250
Connections		IT ¾"	IT ¾"
Refrigerant	kg	R134a / 0,60	R134a / 0,80
Heat medium		Water or a mixture of water and glycol (up to 50%)	Water or a mixture of water and glycol (up to 50%)
Maximum pressure on the water side	bar	6	6
Operating temperature	°C	-7 up to +43	-7 up to +43
Max. domestic hot water temperature	°C	55	55
Acoustic power	dB	57	57
Power supply		1/N/PE ~220-240V/50Hz	1/N/PE ~220-240V/50Hz
COP		for A15/W10-55: 3,0	for A15/W10-55: 3,09
		for A20/W10-55: 3,3	for A20/W10-55: 3,42
Rated thermal power	kW	for A20/W10-55: 1,5	for A20/W10-55: 2,85
Energy class		A+	A+
Water load profile		L	XL
Weight	kg	46	45


Perfect  
**cooperation**  
with FISH-Tanks



High-performance heat



Corrosion protection with enamel layer and magnesium anode



Large inspection opening for easy cleaning





SUNEX®

## Water heating with solar collectors



ALUMINUM-COPPER ABSORBER  
IN DOUBLE HARP ARRANGEMENT



2 CONNECTIONS



ALUMINUM FRAME,  
BENT FROM ONE PIECE



TEMPERED  
SOLAR GLASS

SOLAR COLLECTORS / **AMX**

SOLAR COLLECTORS CAN PROVIDE UP TO TWO-THIRDS OF THE ANNUAL DEMAND FOR HOT WATER. DUE TO THEIR COMPACT DESIGN AND LOW INVESTMENT COSTS, THEY ARE OFTEN USED TO HEAT DOMESTIC HOT WATER.



## Special advantages

- > Flat plate solar collector with two connections and aluminum-copper absorber in a double harp arrangement. **Ensures maximum heat yield;**
- > The natural aluminum color of the collector housing and the dark blue-black hue of the solar absorber visible through the solar glass, **refine the appearance of any roof;**
- > The AMX collector has been tested at the INTA Research Laboratory in Spain; it carries the **Solar Keymark quality mark;**
- > The AMX collector has an absorber that uses a highly innovative plate-to-tube connection technology that is currently the only one of its kind on the market. This enables **t**;
- > Specially developed aluminum Mounting Sets ensure that the collectors **can be installed quickly and safely** on any roof with any type of roofing;
- > Due to the excellent absorber and the highly thermally insulated construction of the AMX collector, a very high performance is achieved both **in summer and in winter;**
- > **Quality warranty** - solar collectors as well as other components of the whole system undergo strict factory production control;
- > **High absorption and low emission** of solar radiation allows maximum thermal yield of the solar collector.

## Technical data

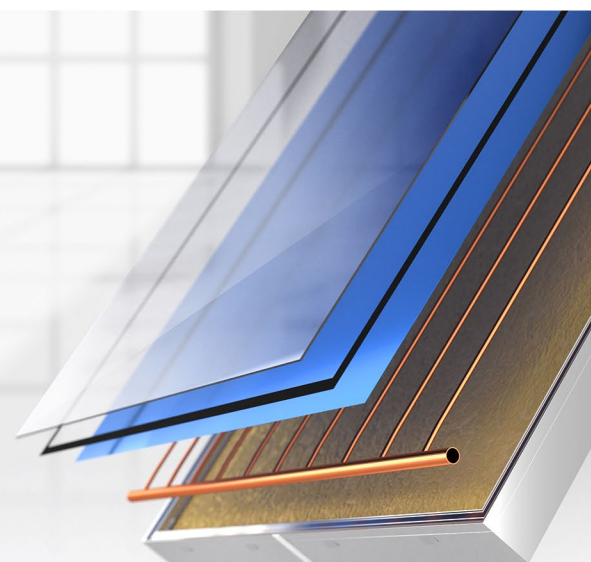
### AMX 2.0

Length	1907 mm
Width	1067 mm
Height	90 mm
Weight	34,7 kg
Gross area	2,03 m <sup>2</sup>
Aperture area	1,84 m <sup>2</sup>
Absorber area	1,84 m <sup>2</sup>
Absorption factor	0,95 ± 0,01
Emission factor	0,05 ± 0,02
Absorber capacity	1,31 l
Heat medium	propylene glycol+water / glycerin+water
Type of insulation	Mineral wool
Thickness of insulation	40 mm
Type of glass	Solar glass
Transmittance $\eta_0$	80%
Efficiency $a_1$	4,16 [W/m <sup>2</sup> K]
Efficiency $a_2$	0,004 [W/m <sup>2</sup> K <sup>2</sup> ]

## Reliable collector structure

The AMX collector uses modern aluminum frame bending technology. The technology consists in making **the main frame from a single profile** cut without unnecessary welds.

**Tempered solar glass** with high solar radiation transmittance guarantees high thermal efficiency and resistance to adverse weather conditions.



OUTDOOR UNIT  
**NEXUS SPLIT EVI**  
10/17

# Why a **SUNEX** heating room?



**All equipment**  
from one manufacturer



**Factory** integrated  
system



**Full compatibility**  
- for efficient and  
trouble-free operation



**One equipment  
supplier** - faster  
and more efficient  
maintenance



**Wide product  
range** - flexible  
solutions for every  
installation



INDOOR UNIT  
**NEXUS SPLIT EVI**  
10/17

PUMP GROUPS  
**GPO/GPO S**

DISTRIBUTOR  
**R-GPO**

D.H.W. TANK  
**FISH S15**

BUFFER TANK  
**FISH S4**

Some examples of  
**SUNEX heating room components**

HEAT PUMP  
**NEXUS SPLIT EVI**  
10/17

Split heat pumps with EVI technology for efficient operation even in systems with conventional radiators (higher efficiency at low outdoor temperatures).

D.H.W. TANKS  
**FISH S15**

Tanks with two or one heat exchanger with increased surface area. They allow the most efficient heating of domestic hot water by the heat pump.

BUFFER TANKS  
**FISH S4**

The tanks allow buffering the heat in the heating system. PUR polyurethane foam insulation provides excellent thermal insulation.

PUMP GROUPS  
**GPO/GPO S**

Pump groups are compact devices whose task is to enforce and regulate the flow of heating water in a central heating system.

DISTRIBUTORS  
**R-GPO**

A smart and aesthetically pleasing solution to increase the number of heating circuits without additional pipes and armatures in the central heating system.



SUNEX®

© SUNEX GmbH



+49 3588 2239442



[kontakt@sunex-deutschland.de](mailto:kontakt@sunex-deutschland.de)



[www.sunex-deutschland.de](http://www.sunex-deutschland.de)

