

The background of the entire page is a photograph of a modern, white, multi-story building with large glass windows. In the foreground, several large, rectangular, blue thermal solar collectors are mounted on a sloped roof, angled towards the sun. The sky is a clear, bright blue.

Thermal Solar System

Hewalex

— a successful business partner

Hewalex is a Polish family business which has been operating on the market for 35 years now. It was the first company in Poland to start the production of solar collectors, which, thanks to their high quality, were sold to the Western European market in the 1990s.

The Hewalex brand was created by Leszek Skiba. His passion for finding solutions to reduce the use of traditional energy sources in favour of renewable energy ones, which provide users with significant savings and at the same time are harmless to the natural environment, allowed him to build a stable business with a strong position on the renewable energy market.

Growing awareness of the renewable energy in Poland, Hewalex has also expanded its operations on the Polish market. The firm's own research and development, construction facilities as well as a production plant allowed the company to supplement its offer with heat pumps, photovoltaics and the EMS system.



A reliable partner
on the European
market for 35 years



Team of 200 professionals



Research & Development
department and Design
Department



Production capacity: 1000 m²
of collectors per day



Our products are present in 50
countries around the world
in various climate conditions

ISO

ISO 9001 Quality Management
System since 2007



From passion to successful business

Currently, HEWALEX offers complete solutions enabling the use of renewable energy sources: solar collectors, heat pumps, photovoltaics and EMS. Reliability, commitment and responsibility for their products distinguish Hewalex on the market. This has been confirmed by over 250 thousand customers in almost 50 countries around the world who trust Hewalex and use its products to implement their own investments.

„Our mission is to provide customers with solutions enabling them to obtain energy from natural sources, which increase their comfort of life, sense of security and confidence that they care for our planet.”

Leszek Skiba
Founder and CEO



B2B solutions that work for you

We started OEM production in 1993 and it plays an important role in our operations. We provide a long-term and reliable partnership and support throughout the entire sales process.



Long-term OEM partnership with **Hewalex will make your business grow**

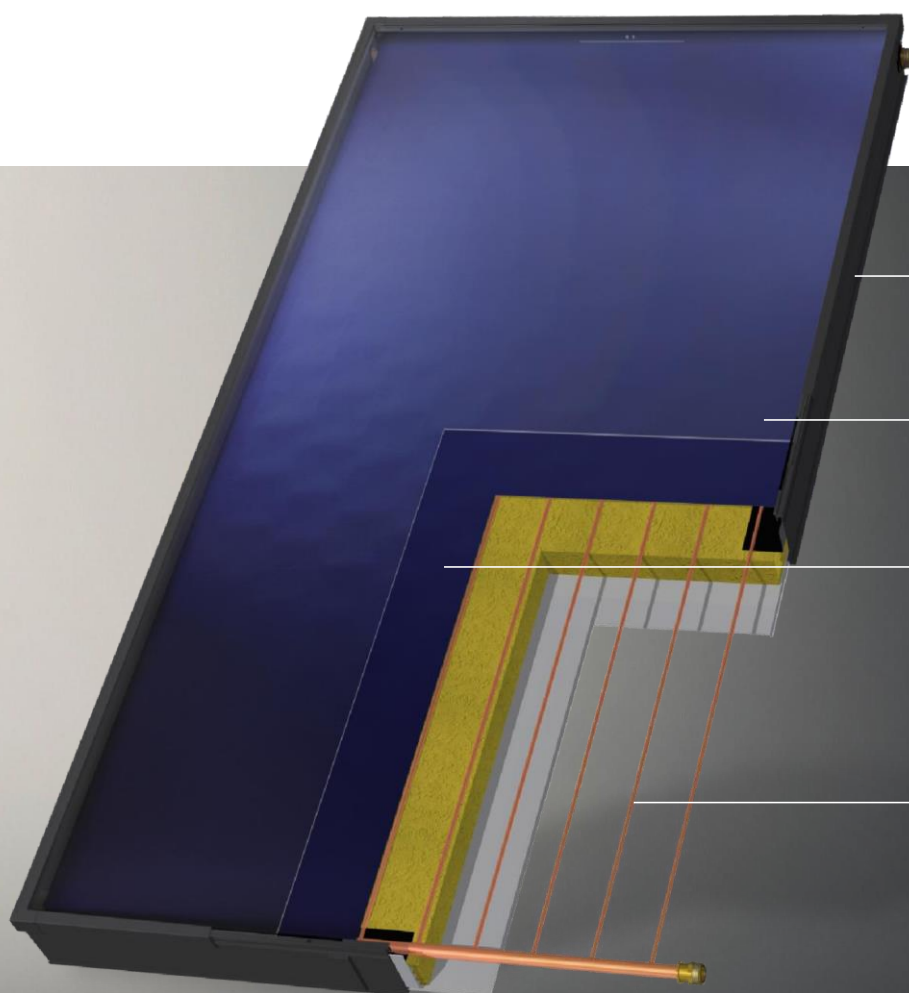
- We guarantee our Partner a dedicated manager who guides him through the entire sales process.
- We provide excellent customer service to our Partners in English, Italian and Spanish.
- We provide technical support in English and German.
- We provide design support.
- We assist in organising transport.
- We offer excellent export packaging of our products.
- We guarantee to respond to your service requests within 72 hours on business days.
- We provide technical training in product assembly.
- We are open to talk about product modifications according to the needs of our Partners.

Solar panels

Hewalex has specialised in designing and production of highly efficient, durable and aesthetic solar collectors for 35 years.



Hewalex collectors have one of the highest efficiency amongst the European manufacturers - annual thermal yield according to Solar Keymark is 1'385 kWh/collector (Würzburg, 50°C) for the KS2600F TLP ACR.



housing: aluminium frame, powder-coated, mineral wool insulated bottom

3.2 mm tempered solar glass, resistant to maximum hailstorms as per EN ISO 9806

absorber consisting of an aluminium plate with a highly selective coating and copper piping, permanently connected to the plate using laser welding technology

harp absorber piping system with headers and four connections, ensuring easy installation and operational safety



Thermal compensators for connection of collectors



Fastening system material: aluminium, stainless steel



Possibility of connecting up to 8 collectors in series



Can be delivered with a 16 mm smooth pipe for connection with compression fittings



10-year warranty

Mounting system

We design and produce easy-to-install mounting systems dedicated to various types of roofs.



Flat plate collector

Technical data

		KS2100F TLP AC	KS2600F TLP AC	KS2100F TLP ACR	KS2600F TLP ACR
Gross area [m ²]		2,06	2,62	2,06	2,62
Absorber area [m ²]		1,93	2,47	1,93	2,47
Aperture area [m ²]		1,93	2,47	1,93	2,47
Dimensions (L x W x H)		2022 x 1019 x 90	2022 x 1295 x 90	2022 x 1019 x 90	2022 x 1295 x 90
Housing		Aluminium profile			
Glazing		3,2 mm tempered solar glass			
Weight (without fluid) [kg]		32,2	39,3	32,7	40
Maximum output power [W]		1550	1972	1630	2073
Optical efficiency related to the gross area [%]		76,4	76,4	80,2	80,2
Optical efficiency related to the aperture [%]		81,6	81	85,6	85,1
Absorber fluid capacity [dm ³]		0,9	1,14	0,90	1.14
Absorptivity [%]		95	95	95	95
Emittance [%]		5	5	5	5
Heat loss coefficients related to the gross area	a1 [W/(m ² K)]	3,17	3,17	3,34	3,34
	a2 [W/(m ² K ²)]	0,012	0,012	0,014	0,014
Heat loss coefficients related to the aperture	a1 [W/(m ² K)]	3,38	3,36	3,56	3,54
	a2 [W/(m ² K ²)]	0,013	0,013	0,015	0,015
Incidence angle modifier IAM 50°		0,95	0,95	0.95	0,95
Gross thermal yield at mean fluid temperature $\vartheta_m = 50^\circ$ (Würzburg) [kWh]		1037	1319	1089	1385
Flow rate minimum/nominal/maximum [l/min.]		1,2 / 1,8 / 2,5	1,5 / 2,2 / 3,0	1,2 / 1,8 / 2,5	1,5 / 2,2 / 3,0
Insulation		Mineral wool			
Stagnation temperature [°C]		210	210	200	200
Maximum operating temperature [°C]		250	250	250	250
Maximum operating pressure [bar]		10	10	10	10
Heat transfer medium		Water-Glycole			
Installation tilt angle range		5° - 90°			
Guarantee		10 years			
Solar Keymark registration number		011-7S2822 F		011-7S2823 F	

Accessories

We design and produce all the elements required to complete the solar system.

Pump unit designed and manufactured by HEWALEX

Alex HX10 is an innovative pump unit which ensures the following:

- **operational reliability** through careful selection and limiting the fittings used to the required minimum,
- **compact structure** facilitating installation in situations where space for installation is limited,
- **modular design** allowing the installer to choose the location of the pressure gauge, safety valve and connections of the solar pipe and expansion vessel and ensuring,
- **easy, quick and convenient installation,**
- **simple filling and reliable venting/bleeding** of the installation,
- **easy servicing,** limited to the replacement of only the damaged element,
- high level **aesthetics and minimalist form,**
- **minimising the negative impact on the natural environment** by reducing energy consumption at the production stage and the possibility of recycling the materials used.

Alex HX10 is a pump unit:

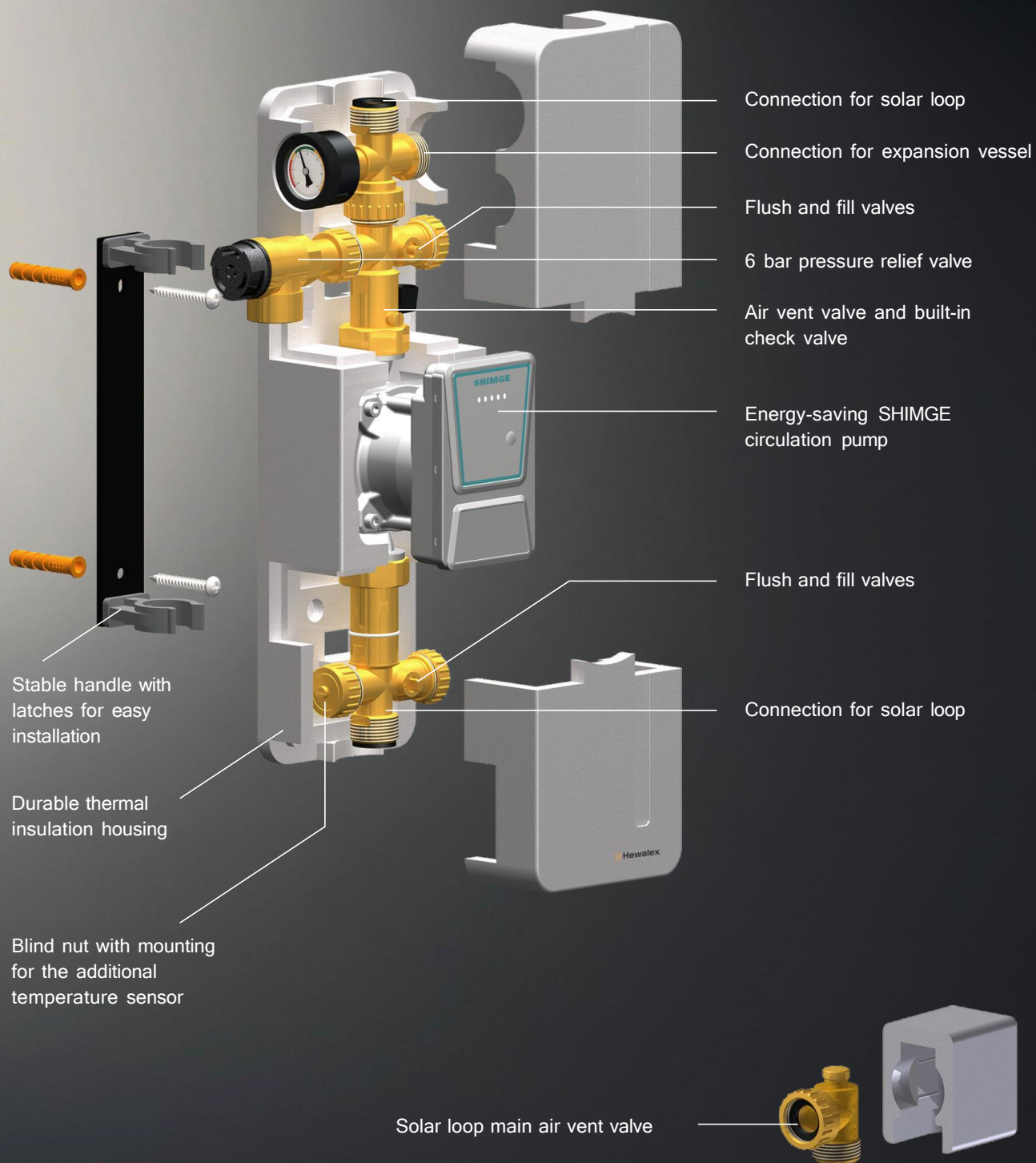
- designed to operate solar installations with a collector area of **up to 16 m²,**
- having **compact dimensions** (37.5x11.5x13 cm),
- with the option to configure connection fittings, which shortens the assembly time, **improves the aesthetics of workmanship and shortens the required length of pipes,**
- **equipped with a SHIMGE pump** dedicated to solar systems, with the ability to service the electronics without dismantling the pump and interfering with the hydraulic system,
- **compatible with any solar controllers available on the market,** however the innovative **MiniSOL** controller, a product of Hewalex, is particularly **recommended.**



Despite the visible structure typical of a one-way group, this group has the full functionality of a two-way group. **This was achieved through an innovative method of separating and removing air from the installation.** A heat exchanger in a solar heater was used as a separator where a significant reduction in the flow facilitates the separation of air bubbles from the liquid. For this purpose, as an integral element of the pump group, a specially designed vent valve is provided, mounted at the outlet of the upper stub of the heat exchanger (coil). The position of the solar pipe dependent on the valve design retains the separated air in the exchanger, which can then be removed from the installation and additionally eliminates the gravitational circulation of the solar fluid inside the pipe.

The pump group does not have a standard built-in flow meter, which results from the assumption of using information about the flow rate based on the PWM feedback signal of the circulation pump. In the case it is necessary to use a controller without this option, a rotameter or an electronic impulse flowmeter mounted directly to the lower stub of the pump group is offered.

ALEX HX10 construction



MiniSOL controller

The MiniSOL controller is a PLUG & PLAY solution designed to control the operation of an installation in which solar collectors are connected to a single heat receiver. The controller cooperates with a circulation pump controlled by the PWM_{in} signal and uses the PWM_{out} feedback signal to read the pump operating status and the current flow value.

MiniSOL is distinguished by an advanced, innovative operation algorithm that automatically adjusts the operating parameters of the circulation pump to the size of the installation and to dynamically changing sunlight conditions. **Thanks to this, it is possible to achieve high solar energy reception efficiency.**



The carried out analysis on the use of controllers with very wide operating capabilities by customers in the field of various configurations of solar installations simultaneously connected to many additional devices shows that only a small percentage of customers use the above-mentioned additional functions of the controller. In practice, **for most users of solar installations, the MiniSOL controller is the optimal choice.**

An innovation in the MiniSOL controller is the abandonment of the built-in display in favour of an application available on mobile devices. This definitely facilitates the operation of the installation for the user and enables remote assistance by an installer or our customer service.

Thanks to the Wi-Fi module installed in the MiniSOL controller, it is possible to select controller operation in three modes via the application:



direct connection
of the controller via
a mobile device,



logging in the router and
operating it from anywhere
within the Wi-Fi range of
your home network,



creating an account and
remote access from
anywhere, and additionally
the possibility of operation
via a web application.



Creating an account allows you to use driver software updates, e.g. when the manufacturer introduces new functionalities.

Via the mobile application in the MiniSOL controller you can activate:

- **holiday function** - turning off the heating during your absence and switching to the protection mode against collector overheating,
- **protection of collectors against overheating,**
- **protection of collectors against freezing** when the installation is filled with water.

For users who do not want to use the application, the operating status of the circulation pump and the flow value can be read based on the signals sent by the red and green diodes visible on the controller housing.

In the case of the MiniSOL controller, the method of installation and switching on by directly inserting it into a standard 230V power socket is also innovative.



The MiniSOL controller has been designed in a simple form and is limited in structure to only the necessary elements, primarily with ecology in mind, just as the offered ALEX HX10 pump group, which we recommend to use along with the MiniSOL controller.

The application is available for Android and iOS systems in the following languages: **EN, ES, DE, IT, PL.**



Hewalex Sp. z o.o. Sp. K.
Słowackiego 33
43-502 Czechowice-Dziedzice
POLAND
mobile: +48 32 214 17 10

export@hewalex.pl
hewalex@hewalex.pl
www.hewalex.pl