

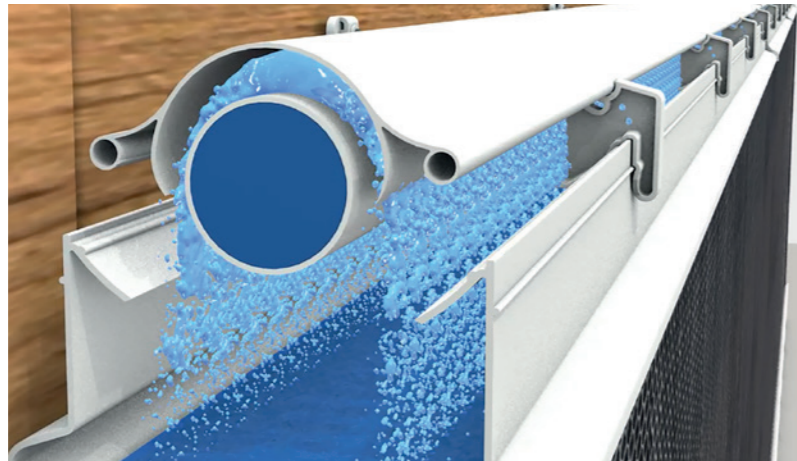
# The BARKU Pad-Climate-System

**BARKU**

As a complete system including all required components, the BARKU Pad Climate System provides livestock buildings, industrial facilities, and greenhouses with the precise climate conditions they need. It is used in environments where highly efficient cooling performance is essential.



The system is supplied as a complete set, including the new Supply Unit 2.0, which incorporates numerous improvements.



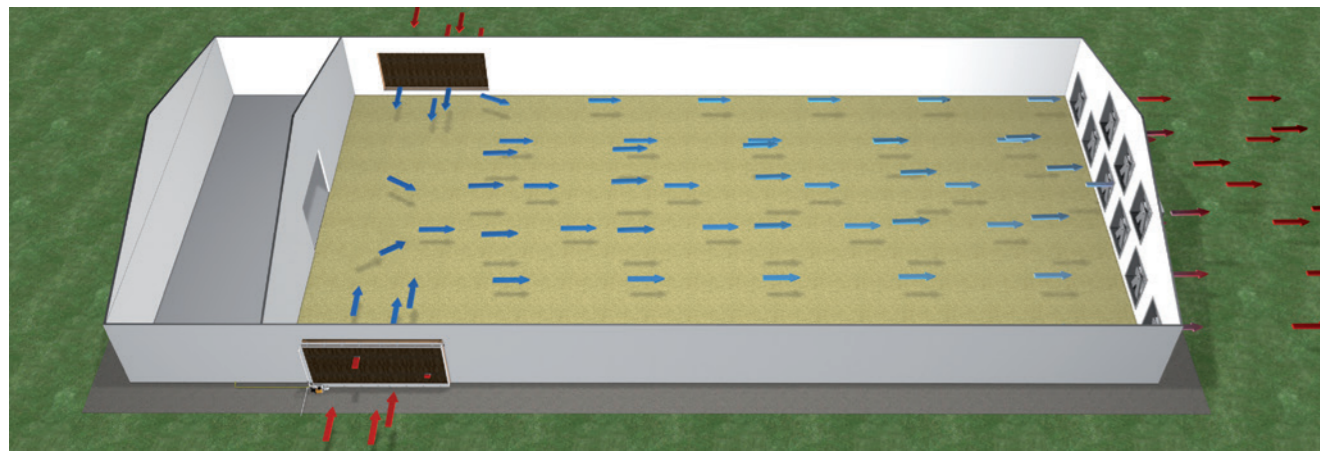
The infinitely adjustable deflector distributes water evenly across the entire pad surface.

## THE TECHNOLOGY OF EVAPORATIVE COOLING

A pump station circulates water through the system and distributes it evenly over the top of the cooling pads via a spray pipe and deflector. The water then flows uniformly over the corrugated surface of the pads. As warm, dry air is drawn through the wetted pads, part of the water evapo-

rates. The energy required for this evaporation is extracted directly from the air in the form of latent heat. As a result, the air leaving the pads is cooled while its humidity increases. The remaining water continuously flushes the pad surface and is collected in a water channel

system. It then flows back to the supply unit and is reused, ensuring effective pad cleaning and stable system performance. This process generates a completely natural cooling effect without the need for external energy input for the evaporation itself.



The right system for any facility size: The BARKU Pad Climate System is flexible, scalable, and highly efficient. Its robust construction and straightforward installation make it an ideal solution for buildings located in hot climate zones. Designed for reliable evaporative cooling, it ensures stable performance in livestock barns, greenhouses, and industrial environments.

## SYSTEM OVERVIEW

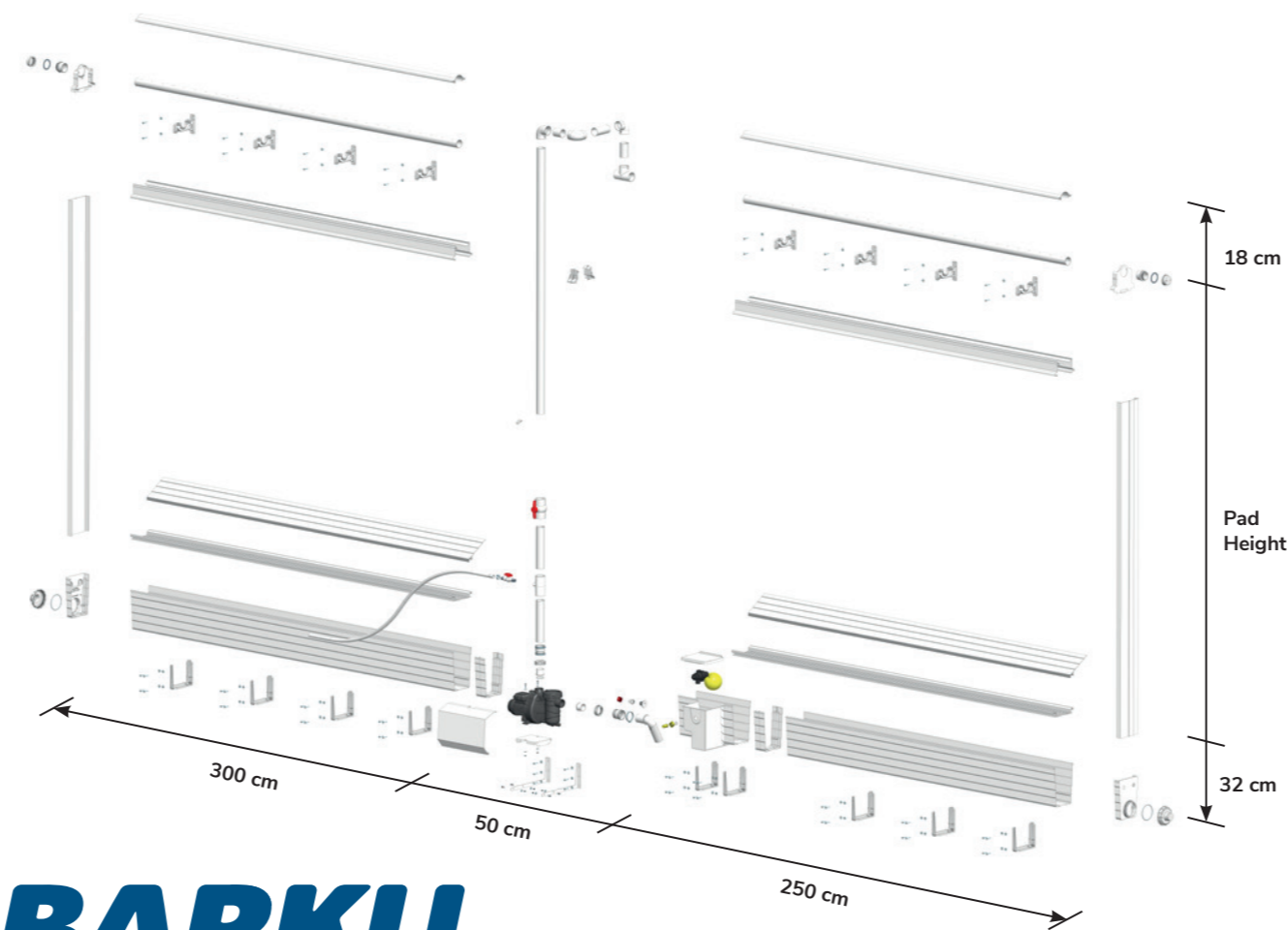
The system is available in the following versions:

Item No.	Standard Basis Sets
013207	3m-Pad System 6" Basic Set SU2.0, 3m BA4, 1~230V-50Hz
013208	6m-Pad System 6" Basic Set SU2.0, 6m BA4, 1~230V-50Hz
013209	12m-Pad System 6" Basic Set SU2.0, 12m BA11, 1~230V-50Hz
013210	18m-Pad System 6" Basic Set SU2.0, 18m BA11, 1~230V-50Hz
013211	24m-Pad System 6" Basic Set SU2.0, 24m BA11, 1~230V-50Hz
013212	30m-Pad System 6" Basic Set SU2.0, 30m BA25, 1~230V-50Hz
013213	36m-Pad System 6" Basic Set SU2.0, 36m BA25, 1~230V-50Hz
013214	42m-Pad System 6" Basic Set SU2.0, 42m BA25, 1~230V-50Hz

All Sets also available in versions with **4 inch Pads**.

### Available pumps:

- 1~230V 50Hz
- 1~230V 60 Hz
- 3~230/400V 50Hz
- 3~230/400V 60Hz
- 1~230/115 60Hz DualVoltage
- 3~200/346V 60H



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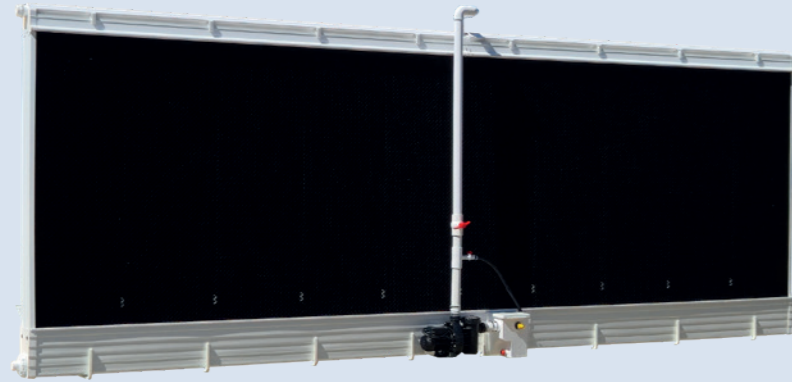


**PAD-CLIMATE-SYSTEM**  
for evaporative cooling

# Key Benefits – From Installation to Operation

# BARKU

The Pad-Climate-System is a simple, highly flexible, environmentally friendly, and cost-effective solution for efficient evaporative cooling and air humidification in livestock buildings, industrial facilities, and greenhouses. In combination with the proven BARKU plastic pad, the BARKU Pad Climate System delivers high cooling performance with reduced static pressure loss.

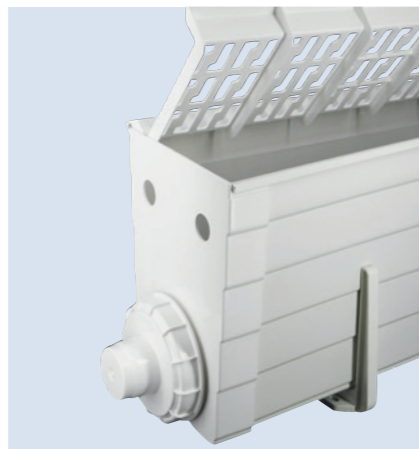


## THE FOLLOWING ADVANTAGES HIGHLIGHT ITS SUITABILITY FOR A WIDE RANGE OF APPLICATIONS:

- All components are made of stainless steel or UV-resistant PVC, ensuring long-term corrosion protection.
- Fast and easy installation.
- The water trough ensures optimal water supply for maximum system performance without the need for an external water tank.
- Water flow is continuously adjustable.
- The deflector design with an integrated hinge system provides ideal water distribution across the entire pad length.
- Water distribution on the deflector can be optimized by adjusting the spray angle.
- Robust, well-engineered system components ensure long-lasting, trouble-free operation.
- Available for pad thicknesses of 4 or 6 inches.
- Flexible construction for heights up to 2.5 m and lengths up to 42 m.
- Easy cleaning thanks to the click-system components and simple disassembly.

## EASY INSTALLATION

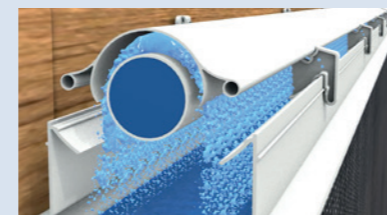
- All adhesive and connection components are included in the delivery.
- Only PVC adhesive and standard installation tools are required.
- All system components can be either glued or plugged together; only the supplied wall brackets require tool-based installation.
- The system length can be adjusted to the desired dimension by shortening individual elements.



## WATER SUPPLY VIA BARKU DEFLECTOR

The specially developed BARKU water deflector ensures exceptionally uniform water distribution across the entire length of the pad system. Multiple deflectors can be connected to each other without tools using watertight connectors.

Water distribution on the deflector can be optimized by adjusting the spray angle. The water flow is infinitely adjustable, allowing precise regulation of the required water volume. If desired, wires can be inserted into the pre-existing holes between the water deflector and the pad to prevent birds and pests from nesting inside the system.



## WATER DISTRIBUTION

The deflector profile features an optimized geometry that ensures ideal water distribution. This design enables a uniform water flow across all pads. Both the water volume and the distribution pattern can be continuously adjusted.



## INSPECTION AND MAINTENANCE

The specially designed deflector profile, featuring an integrated hinge system, provides convenient access for quick inspections and simplified cleaning procedures.

## SUPPLY UNIT 2.0

The newly developed Supply Unit 2.0 is designed for installation in a central position within the pad system but can also be mounted at the end of the system with minimal adjustments.

### Advantages of the new Supply Unit 2.0:

- Reduced need for adhesive connections
- Lower pump position for improved suction performance
- Faster filling of the riser and distribution lines
- Fewer pipe bends, resulting in lower pressure loss
- New suction inlet prevents vortex formation beneath the float valve



The supply unit is delivered as a complete package, including all required piping accessories, as well as the mounting bracket and pump.

The Supply Unit is the core component of the BARKU Pad Climate System.

### Technical Features:

- All required components are included, including the self-priming pump and the float valve.
- Suitable for both 4-inch and 6-inch pads.
- Automatic fresh-water supply when the water level falls below the set threshold.
- Integrated filter for removing dirt and sediment.
- Bleed-off valve for automatic system cleaning by partially draining old water and replenishing it with fresh water.



## BLEED-OFF VALVE

The bleed-off valve ensures a continuous discharge of contaminated water, providing a steady supply of fresh water to the system. This prevents excessive mineral buildup and reduces the risk of deposits caused by overly polluted water.

## WATER TANK

The water tank developed by BARKU contains the entire water volume required for the system, eliminating the need for any additional tanks. The covered water channel (available in 4-inch and 6-inch versions) protects the system from vermin and prevents contamination of both the pad system and the pump unit. In addition, bonding the water channel components instead of using gaskets ensures long-term watertightness of the Pad Climate System.



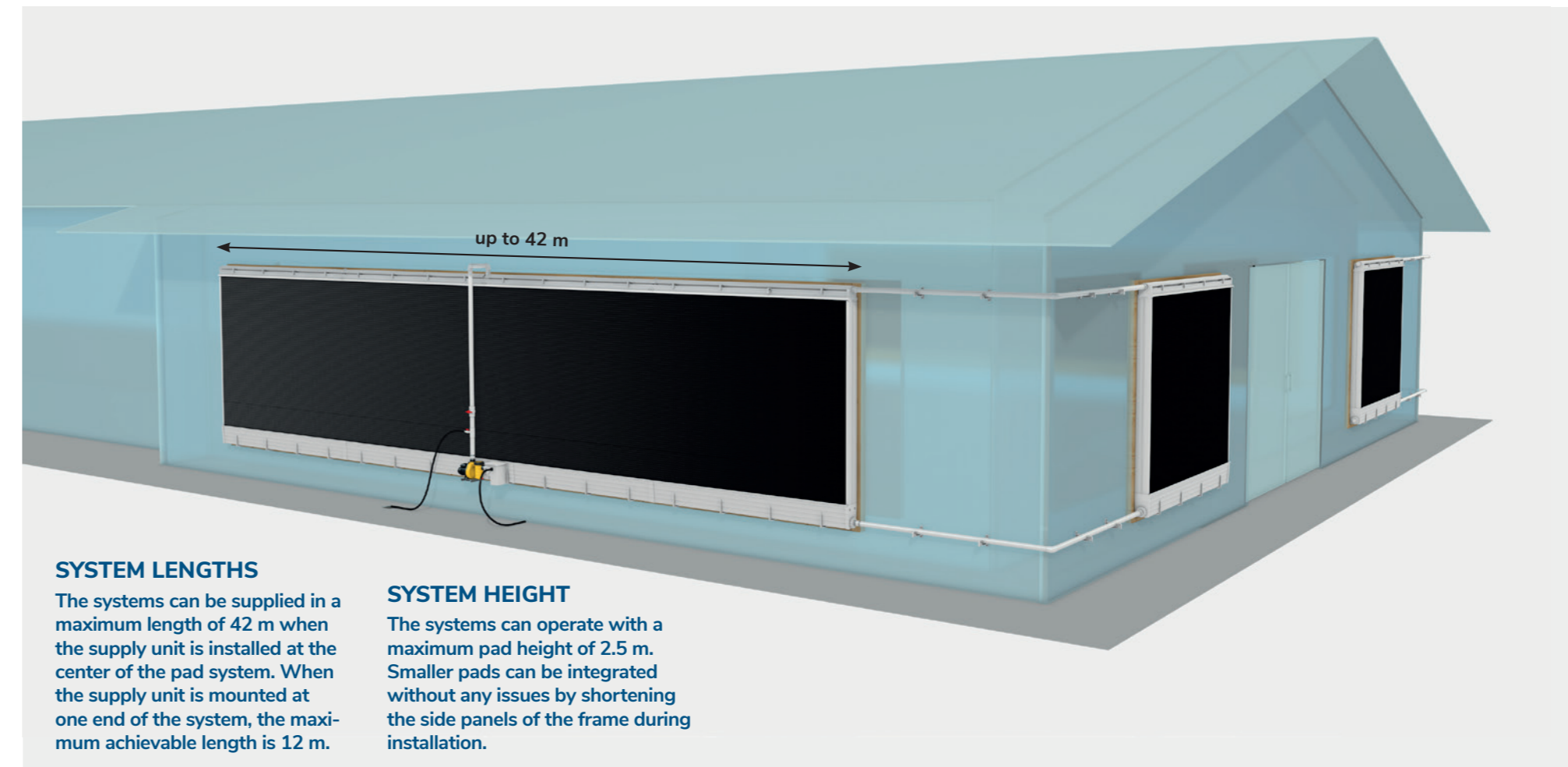
## WATER STORAGE

The water channel and the integrated storage reservoir contain all the water required for the system, eliminating the need for any external water tank.



## LIDS FOR THE WATER STORAGE

Water returns into the specially designed pad lids. These lids also prevent mice and rats from entering the system, ensuring clean and hygienic operation.



## SYSTEM LENGTHS

The systems can be supplied in a maximum length of 42 m when the supply unit is installed at the center of the pad system. When the supply unit is mounted at one end of the system, the maximum achievable length is 12 m.

## SYSTEM HEIGHT

The systems can operate with a maximum pad height of 2.5 m. Smaller pads can be integrated without any issues by shortening the side panels of the frame during installation.