

### CAIS Klima

# PRODUCTS THAT CREATE EXPERIENCES.

The reliability of good work.

The second group of products are listed in AIS KLIMA, a subbrand offering **innovative solutions** for underfloor heating systems.

We have 3 different UFH Systems, each one of them developed to satisfy the customers' different requirements according to the type of installation.

### AIS KLIMA solutions:

- Safer
- Simpler
- More sustainable

### PRODUCTS THAT CREATE VALUE:

- Innovative products.
- Wide range of solutions.
- Energy efficient solutions.
- Save on installation time.



#### **Our AIS KLIMA solutions:**





## AIS KLETT self-adhesive system

## The under floor heating system that liberates your application.

The AIS Klett Self-adhesive system enables an efficient, comfortable and clean installation.

AIS Klett Self-adhesive system set:

**AIS Klett Panel:** smooth panel with insulating base (EPS and graphite) with a surface layer of self-adherent fibres.

AIS Klett Tubing: 7-layer tubing including self-adhesive Velcro taping. Manufactured with PERT material (heat resistant polyethylene), which provides great flexibility and an EVOH intermediate layer that acts as a barrier against oxygen diffusion.

AIS KLETT SELF-ADHESIVE SYSTEM: the underfloor heating system that enables the pipe to be fitted through simple contact.



Supply of panel in a roll that enables quick installation.



System meets the thermal insulation requirements according to UNE EN 1264:2022 standard.



EPS and graphite insulating materials



Self-attaching system: immediate installation, saving up to 40% of installation time.



Circuit-free design.



High use of the insulating panel:
reduction of cuts and greater profitability.



Without tools



AIS Klett graphite systems 25mm and 40mm certified by Aenor according to UNE EN 1264:2022 standard.



#### **AIS KLETT** INSULATION PANEL

AIS REET INS	OLATION PANEL	-		
	Reference	Description	Dimensions	Minimum sales pcs
		ite insulation panel. G EF -adhesive tubing	PS graphite panel	
(6-20)	412.07825N	<ul> <li>For mezzanines, on heated premises.</li> <li>Thermal and acoustic insulating impact and airborne noise</li> </ul>	25-2 mm. 12 x 1 m. tion <sup>R</sup> -value = 0,80 m <sup>2</sup> K/ W ΔLw = 26 dB	12m2
	412.12540N	<ul> <li>For basements on the ground, on NON-heated premises.</li> <li>Thermal insulation</li> </ul>	40-2mm. 8 x 1m. R-value= 1,25 m²K/W	8m2
		insulation panel. EPS whesive tubing	nite panel roll	
	412.05625N	<ul> <li>Thermal and acoustic insulation impact and airborne noise</li> </ul>	25-2mm. 12 x 1m. R-value= 0,56 m²K/W ΔLw = 28 dB	12m2
	AIS UltraSli	m panel roll.		
	412.303046	<ul> <li>Ultra-low profile especially suitable for renovations.</li> <li>With adhesive layer, for direct installation on</li> </ul>	20 x 1,05m. Thickness: 2mm	21m²

existing surface

#### **AIS KLETT** PIPE

Ktett pipe	PE-RT EVOH self-ad	merent natura	it willte colou	•
116.16240	<ul> <li>7-layer tube with anti-oxygen</li> <li>diffusion barrier,</li> </ul>	16 x 2,00	240m	2880m
116.16500	application class 5: underfloor heating and low- temperature	16 x 2,00	500m	3000m

## The most flexible AIS KLIMA solution for your installation.

The AIS Nubs system has individual panels for your **tool-free installation**.

AIS Nubs system set:

**AIS Nubs Panel:** available with EPS finish plasticized or rigid thermoformed EPS.

**AIS PERT-EVOH pipe:** 5-layer pipe manufacture in PERT material (temperature resistant polyethylene) which provides great flexibility and an EVOH intermediate layer that acts as a barrier against oxygen diffusion.

**AIS NUBS SYSTEM:** the most durable AIS KLIMA system for installation.



Its raised height improves heat distribution.



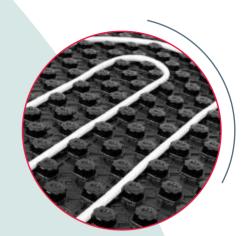
Greater mechanical resistance to compression and footsteps during installation.



Waterproof panel with a protective layer that prevents the passage of moisture from the mortar, for UNE EN 1264:2022 standard.



Fast and tool-free installation: Nubs designed to increase the attaching of the pipe to the panel without the need for clamps.



#### **AIS NUBS INSULATION PANELS**

#### Reference Dimensions Minimum sales pcs

#### **Nubs thermoformed EPS insulation panel**

411.2542 1400 x 800 mm (1,12m²) Base thickness= 20mm.

Total thickness= 42mm. R\,ins\*=0,59 m²K/W 11,2m²

#### **Nubs plasticized EPS insulation panel**

411 2546 · · · · · ·		1350 x 750mm (1,01㎡) Base thickness= 17mm. Total thickness= 46mm. Rins*=0,48 m²K/W	14,17m²	
	411.2563	1350 x 750mm (1,01m)2Base thickness= 34mm.  Base thickness= 63mm, R\ ins*=0.97 m2K/W	9,11m²	

\*Resistance calculated according to UNE EN 1264:2022 standard



#### **Nubs thermoformed panel without insulation**

**411.0020** 1400 x 800 mm (1)2 m<sup>2</sup>) Thickness = 20mm. 22,4m<sup>2</sup>

#### AIS KLIMA PIPE

Reference	Dimensions	Minimum sales pcs	Pallet or pcs per box

### PE-RT EVOH pipe, natural white colour, with anti-oxygen diffusion barrier.

117.16240	16 x 2,00	240m	2880m
117.16500	16 x 2,00	500m	3000m

Reference	Dimensions	Minimum sales pcs	Pallet or pcs per box			
DE V. EVOLUCIO DE CONTROL DE LA CONTROL DE L						

PE-Xa EVOH pipe, natural white colour, with anti-oxygen diffusion barrier.

**113.20500** 20 x 2,00 500m 3500m



Reference	Description	Dimensions	Minimum sales pcs
-----------	-------------	------------	-------------------



• With anti-oxygen diffusion

101.16500 barrier 16 x 2,00 3000m

• PERT-AL-PERT pipe.

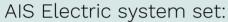




### AIS Electric System

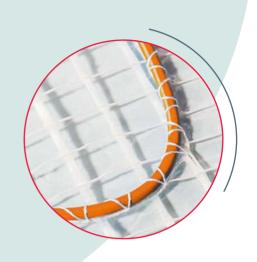
#### AIS KLIMA Heating system.

AIS Electric replaces the pipe with a cable for heat distribution, and the panel with an electric mesh, which allows it to reach a higher temperature in less time.



Available in self-adhesive mesh or aluminium blanket in roll attached to a 3mm-thick heat conducting wire.

**AIS ELECTRIC SYSTEM:** speed and dynamism in your installation.





AIS KLIMA solution with very small thicknesses



Quick installation; selfadhesive mesh supplied in rolls.



Ideal for heating small rooms.



Quick reaction time: enables for maximum thermal comfort in the shortest possible time



#### **ELECTRIC MESH** ROLL

Reference	Description	Dimensión	Ud. mínima de venta
Electric ı	ınderfloor heating.		
413.16030 Under he	<ul> <li>Mesh roll</li> <li>Power 160 W m2,</li> <li>Installation in mortar and under tile flooring.</li> </ul> ating electrical system.	4 m2 (length 8m; wide 0.5m) 3mm cable Available from 0.5m2 to 15m2 (on request, please check	1 pcs.
413.14030	<ul> <li>Aluminium blanket roll.</li> <li>Power 140 W m2.</li> <li>Installation on foam and under wooden or carpet flooring.</li> </ul>	5 m2 (length 10m; wide 0.5m). 3mm cable Available from 1m2 to 12m2 (on request, please check	1 pcs.

# AIS KLIMA Common Features



#### **INSTALLATION ACCESSORIES**

Reference	Dimensions	Minimum calco nos
Reference	Dimensions	Minimum sales pcs
AIS KLIMA Pane	l joint adhesive tape	
412.4866	Roll 48mmx 66m	1 pcs.
Anti-humidity fi	lm	
420.5012	4mx25m. Thickness 0,2mm.	100m2
Self-adhesive e	dging strip with plastic apron	
420.150850	150mm x 8mm x 50m	50m
Guiding elbow f	or pipe	
412.1418	14mm-18mm	25 pcs.
412.2022	20mm	25 pcs.
Reference	Minimum sales pcs	
	ve for mortar. 25 Kg	



### AIS KLIMA Regulation and Control

#### THERMOSTATIC REGULATION

1	21	10	ı	
T.	OTO	Bil	W.	

#### Programmable digital thermostat

• For electric underfloor **423.220003** • heating.

Includes soil probe and temperature limitation.

80,5 x 80,5 x 42,5mm.

1 pcs



#### Wired room thermostat

Reference

•Heating only.

•230V. 421.0014 1 pcs. •Installation of 3x1.5mm hose is recommended.



#### Wired room thermostat F-C

•Heating/Cooling.

•230V. 422.3012

•Installation of 4x1.5mm hose is recommended.

1 pcs.

Reference Description



#### Wired programmable digital thermostat

- Heating/Cooling
- LCD Screen 58x34mm.

422.34230

 Programming for weekdays, weekends or entire week.

• Up to 28 memories.

• Installation of 4x1.5mm hose is

recommended.

#### Wireless programmable digital thermostat

•Heating/Cooling.

·Battery powered. 422.5080

•LCD Screen 58x34mm. ·Local and remote operation by

webApp.



#### Wireless room thermostat

• Heating/Cooling.

 Battery powered. 422,5081

• Local and remote operation by webApp

1 pcs.

1 pcs.



#### THERMOSTATIC REGULATION

		•		
	Reference	Description	Minimum sales pcs	
	Thermostatic actuator			
A STREET OF THE	421.1114L	<ul> <li>For regulating the underfloor heating-cooling circuit.</li> <li>Includes connector and cable.</li> <li>230V.</li> </ul>	1 pcs.	
	Thermost	atic actuator with micro		
	422.5090	<ul> <li>Thermostatic actuator 230 V</li> <li>4 wires with micro.</li> <li>For regulating the underfloor heating-cooling circuit.</li> <li>Includes connector and cable.</li> <li>230V.</li> </ul>	1 pcs.	
	Wired con	nection panel. Supply 230 V.		
	422.3222	• For 6 areas- 12 actuators	1 pcs.	
The second of the second	422.3223	• For 10 areas- 18 actuators	1 pcs.	
	Wireless o	connection panel		
	422.5073	<ul><li>Wireless. 4 areas - 6 actuators.</li><li>Supply 230 V.</li></ul>	1 pcs.	



422.5073	<ul><li>Wireless. 4 areas - 6 actuators.</li><li>Supply 230 V.</li><li>Control by webApp.</li></ul>	1 pcs.
422.5074	<ul><li>Wireless. 8 areas - 12 actuators.</li><li>Supply 230 V.</li><li>Control by webApp.</li></ul>	1 pcs.

#### HYDRAULIC REGULATION

	Reference	Description	Dimensions
2	2-way motorized zoı	ne valve 230V	
	422.6223034	3/4" M-M	1 pcs.
	422.62230100	1" M-M	1 pcs.
	Differential pressure	by-pass valve 0.25bar	
	422.6025100	1" M-M	1 pcs.
	Direct supply and m	ixing unit at fixed point	
	422.6000	-	1 pcs



#### MANIFOLDS AND CABINETS







tandard manif	old cabinet	
422.435110	43x71x11-15 cm (2-3 circuits)	1 pcs.
422.535110	53x71x11-15 cm (4-5 circuits)	1 pcs.
422.680110	68x71x11-15 cm (6-8 circuits)	1 pcs.
422.835110	83x71x11-15 cm (9-11 circuits)	1 pcs.
422.1035110	103x71x11-15 cm (12-15 circuits) 1 p	
.ow-depth mar 422.435082	nifold cabinet 43x71x08-13 cm (2-3 circuits)	1 pcs.
422.535082	53x71x08-13 cm (4-5 circuits)	1 pcs.
422.680082	68x71x08-13 cm (6-8 circuits)	1 pcs.
422.835082	83x71x08-13 cm(9-11 circuits)	1 pcs.
422.1035082	103x71x08-13 cm (12-15 circuits)	1 pcs.

422.1002	2 circuits	1 pcs.
422.1003	3 circuits	1 pcs.
422.1004	4 circuits	1 pcs.
422.1005	5 circuits	1 pcs.
422.1006	6 circuits	1 pcs.
422.1007	7 circuits	1 pcs.
422.1008	8 circuits	1 pcs.
422.1009	9 circuits	1 pcs.
422.1010	10 circuits	1 pcs.
422.1011	11 circuits	1 pcs.
422.1012	12 circuits	1 pcs.

**Composition:** Return manifold with thermostatic valves, automatic drain and drain tap. Flow manifold with flowmeter (0.1 to 5 l/min), automatic drain and drain tap. 1" red and blue ball valves with thermometers. Isophonic clamps ¾ Male plug eurocone outlet. Separation of 50mm outputs. Does not include adapters.



#### MANIFOLDS AND CABINETS





Reference

■ Body 1".

Connection to main pipe in 11/4"M.
Supply and return circuits 3/4"M. 422.122

1 pcs.



#### AIS Air additional circuit module.

■ Body 1". 422.111

• Connection to supply and return circuits 3/4" M.

Description

1 pcs.



#### Set of 2 ball valves for plastic modular manifold

421.114100 11/4" H swivel fitting - 1" H.









Reference	Dimensions	Minimum sales pcs	Pallet or pcs per box
Eurocone adapt	er for PEX and PERT pipe		
421.8162034	16 x 2,00 - 3/4"	2 pcs.	50 pcs.
421.8202034	20 x 2,00 - 3/4"	2 pcs.	50 pcs.
Eurocone adapt	er for multilayer pipe		
421.70316	16 x 2,00 - 3/4"	2 pcs.	50 pcs.



#### MANIFOLDS AND BOXES



Reference	Dimensions	Minimum pcs sale	Pallet or pcs per box
Manifold hou	sing boxes for sanitary ap	plication	
420.901	300x350x90mm	1 pcs.	-
420.902	300x430x90mm	1 pcs.	-
420.903	300x530x90mm	1 pcs	-
420.904	300v630v90mm	1 ncc	



#### Simple manifold for sanitary application with conical seat

420.357342	3/4" x 1/2" M 2outputs	1 pcs.	10 pcs.
420.357343	3/4" x 1/2" M 3outputs	1 pcs.	8 pcs.
420.357344	3/4" x 1/2" M 4outputs	1 pcs.	8 pcs.





#### Simple manifold for sanitary application with flat seat

420.305402	3/4" x 1/2" M 2outputs	1 pcs.	6 pcs.
420.305403	3/4" x 1/2" M 3outputs	1 pcs.	5 pcs.



#### Manifold with regulation valves for sanitary application

420.3TG05402	3/4" x 1/2" M 2outputs	1 pcs.	5 pcs.
420.3TG05403	3/4" x 1/2" M 3outputs	1 pcs.	5 pcs.





**421.034** 3/4" H 1 pcs. 500 pcs.



#### Adapter for sanitary and regulation manifold

**421.80316** 16x2,00 - 1/2" 2 pcs. 250 pcs.

#### MANIFOLDS AND BOXES

Reference Dimensions	Minimum pcs sale	Pallet or pcs per box
----------------------	------------------	-----------------------

#### Eurocone adapter (exclusively for multilayer tubing)



421.70316	16x2,00 - 3/4"	2 pcs.	200 pcs.
421.70820	20x2,25 - 3 <b>A</b> "	2 pcs.	200 pcs.
421.708201	20x2,00 - 3/4"	2 pcs.	250 pcs.

#### **Jack - Socket Adaptor**



1/2"H - 3**4**"M

1 pcs.

100 pcs.



Reference	Dimensions	Minimum pcs sale	
1" stainless s	teel manifolds with drain	- eurocone outlets 3/4" M	
422.1204	4 outputs 3/4" M	1 pcs.	
422.1205	5 outputs 3/4 M	1 pcs.	
422.1206	6 outputs 3/4" M	1 pcs.	
422.1207	7 outputs 3/4" M	1 pcs.	
422.1208	8 outputs 3/4" M	1 pcs.	
422.1209	9 outputs 3/4" M	1 pcs.	
422.1210	10 outputs 3/4" M	1 pcs.	
422.1211	11 outputs 3/4" M	1 pcs.	
422.1212	12 outputs 3/4" M	1 pcs.	



Reference Dimensions Minimum pcs sale Palle	et or pcs per box
---	-------------------

#### Red and blue heating manifold ball valves

421.23434

3/4" M-H

1 pcs.

10 pcs.





M	

Reference	Dimensions	Minimum pcs sale	Pallet or pcs per box
Reusable fitt	ing for pressure te	st	
360.101612	16x2,00 - 1/2"H	10 pcs.	200 pcs.
360.102012	20x2,25 -1/2"H	10 pcs.	200 pcs
360.102512	25x2,50 -1/2"H	10 pcs.	170 pcs.
360.103212	32x3,00 - 1/2"H	10 pcs.	100 pcs.
360.104012	40x4,00 - 1/2"H	10 pcs.	60 pcs.
Spare O-ring			
283.16	16mm	10 pcs.	200 pcs.
283.20P	20mm	10 pcs.	200 pcs.



283.16	16mm	10 pcs.	200 pcs.
283.20P	20mm	10 pcs.	200 pcs.
283.25P	25mm	10 pcs.	200 pcs.
283.32P	32mm	10 pcs.	200 pcs.
283.40P	40mm	10 pcs.	200 pcs.



#### Attache case 16 to 32mm inserts

**360.1000P** 16-32mm 1 pcs.



Reference	Description	Minimum pcs sale

1 pcs.

#### Handle for beveling tool

**360.000** Made of stainless steel



Referencia	Dimensions	Minimum pcs sale			
Beveling ins	Beveling insert 16 to 75mm				
360.0016	16x2,00	1 pcs.			
360.0020	20x2,25/20x200	1 pcs.			
360.0025	25x2,50	1 pcs.			
360.0032	32x3,00	1 pcs.			
360.1040	40x4,00	1 pcs.			
360.1050	50x4,50	1 pcs.			
360.1063	63x6,00	1 pcs.			
360.1075	75x7,50	1 pcs.			



عا	2	0	
	10	6	

#### Dimensions Minimum pcs sale

#### Pipe cutter with calibration arbour

360.61632 16 a 26mm 1 pcs.



#### Spare shear blades

360.616260 1 pcs..

	9

#### **Cutter for PEX and Multilayer pipe**

360.81640	Up to diam. 40mm	1 pcs.
360.81675	Up to diam. 75mm	1 pcs.

Minimum pcs sale



#### Spare blade

Reference

360.816400	Up to diam. 40 mm	1 pcs.
360.816750	Up to diam. 75 mm	1 pcs.



#### Triple beveling tool

360.162025 16 - 20 - 25mm 1 pcs.



#### **Battery Press Machine Box + Machine + Battery + Charger**

360.316751 Up to diam 16 a 75mm 1 pcs.







	·	
Reference	Dimensions	Minimum pcs sale
Press Jaws		
360.316	Ø 16	1 psc.
360.320	Ø 20	1 psc.
360.325	Ø 25	1 psc.
360.332	Ø 32	1 psc.
360.340	Ø 40	1 psc.
360.350	Ø 50	1 psc.
360.363	Ø 63	1 psc.
360.375 *	Ø 75	1 psc.

\*Includes U75 pressing tongs and adapter tongs. They can also be supplied separately. Please check.\*

#### **Battery Press Machine - Box + Machine + Battery + Charger**



360.516321

Up to diam 16 a 40mm

1 psc.

#### **Mini U Press Jaws**



360.516	Ø 16	1 psc.
360.520	Ø 20	1 psc.
360.525	Ø 25	1 psc.
360.532	Ø 32	1 psc.
360.540	Ø 40	1 psc.

#### Pressure machine battery charger



Battery charger 360.3111

	Reference	Dimensions	Minimum pcs sale
--	-----------	------------	------------------

#### Li-ion spare battery 3.0 Ah

360.3121 Battery Li-ion14,4V - 30Ah 1 pcs.



#### **Network connection module for press**

360.313 Red connection module 230V 1 pcs.



Reference	Dimensions	Minimum pcs sale

#### Hand crimping tool from 16 to 32mm, U-type jaws

360.41632 Up to 16 a 32mm 1 pcs.



#### **Internal Tubing Bending Spring**

360.2016	16x2,00	1 pcs.
360.2020	20x2,25	1 pcs.
360.2025	25x2,50 ó 26x300	1 pcs.



#### **External Tubing Bending Spring**

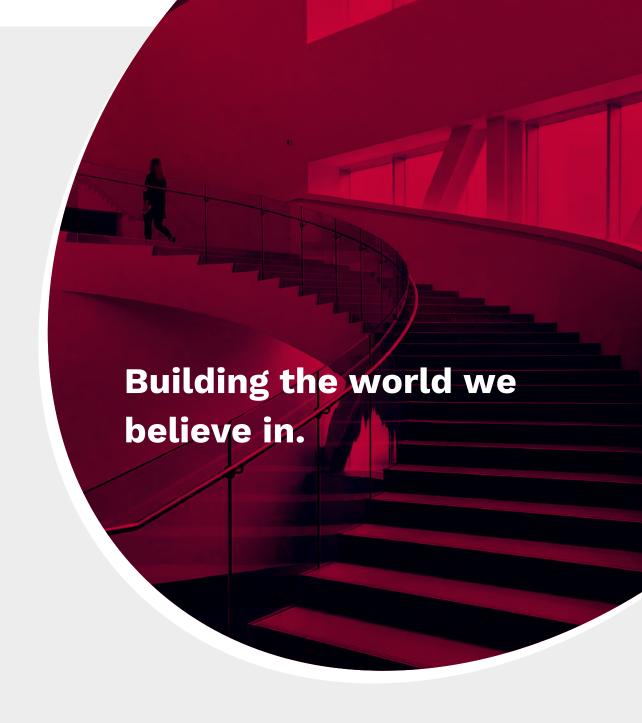
360.2116	16x2,00	1 pcs.
360.2120	20x2,25/20x200	1 pcs.
360.2125	25x2,50	1 pcs.
360.2132	32x3,00	1 pcs.

Reference	Dimensions	Minimum pcs sale	Pallet or pcs per box



#### Ergonomic unwinder with rollers and bag

Height 870 - 1122mm Ø 360.1014340 1 ud. 1 pcs.. ext 1140mm Ø int 360mm



#### Multicapas Industrial, S.L

- Travesía del Encinar, 3,4,5. Pol Ind Monte Boyal 45950 Casarrubios del Monte (Toledo)
- **(** +34 918 171 8 84 **(** 9 +34 617 430 093
- info@aisoutnovation.com

www.aisoutnovation.com

