

# Matrix Mini

pressurisation unit



**altecnic**

# Matrix Mini pressurisation unit



## Introduction

The Altecnic Matrix Mini digital pressurisation units represents the next generation of automatic pressure maintenance solutions for heating and chilled water systems.

The units are capable of monitoring and maintaining the design pressure in sealed water systems.

The Matrix Mini units are exceptionally easy to install and commission and are contained in a compact and robust enclosure suitable for wall mounting.

Matrix Mini digital pressurisation units are available with one (duty) or two (duty-standby) solenoid piston pumps.

The unique microprocessor controller and pressure transducer enable the system to be controlled easily with a volt-free boiler interlock connection.

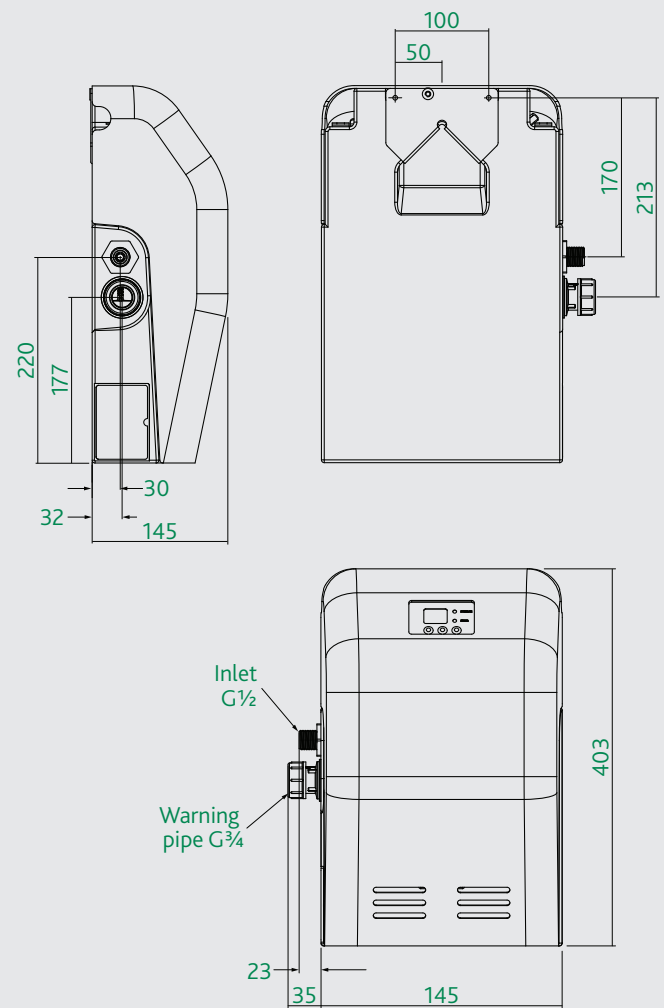
The Matrix Mini unit is designed for use in large domestic or commercial sealed heating systems.

They can also be used in chilled water systems, refrigeration units and industrial cooling systems.

## Features

- Compact design
- Wall mounted
- 3.0 bar pressure
- 2 litre tank capacity
- Digital control system and LED display
- Automated system pressure maintenance
- Outlet configurable for left or right hand side connection with flexible hose (supplied)
- Single (duty) or twin pump (duty-standby) configurations
- High recovery water tank fill valve 12 l/min @ 1 bar
- WRAS compliant Category 5 backflow protection, Type AB air gap, weir overflow and warning pipe
- 2 year guarantee
- Patent application submitted

## Dimensions



All dimensions shown in mm unless otherwise stated.

# Matrix Mini pressurisation unit

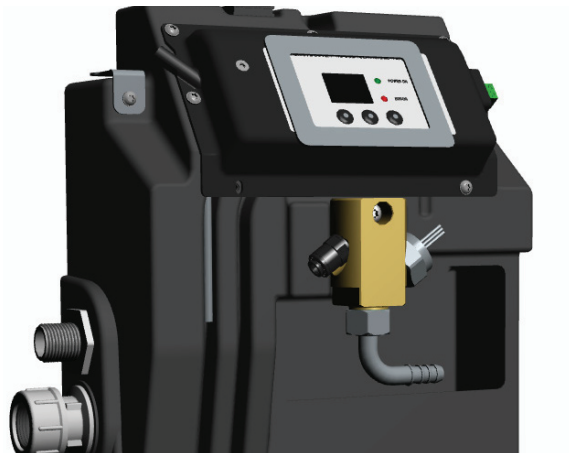
## Technical Specification

Pump Model		Matrix Mini 130D 121-1001	Matrix Mini 230D 121-1002
General	Guarantee	2 years	
Features	System capacity	Up to 6,000 litres	
	Mounting	Wall mounted	
	Pumps	1	2
	System fill mode	-	-
	Pump control system	✓	✓
	Control interface	✓	✓
	Dry run protection	✓	✓
	Noise	60 Db(A)	60 Db(A)
	Fluid category	CAT 5 (type AB air gap with weir)	
	IP rating	IPX2	
Performance	Maximum head (normally closed valve)	3 bar / 300 kPa	
	Maximum flow	1 l/min	
	Maximum inlet pressure (tank fill valve)	7 bar / 700 kPa	
	Maximum working pressure	6 bar / 600 kPa	
	Ambient air temperature	Min 4°C / Max 40°C	
	Min./Max. water temperature	Min 4°C / Max 23°C	
Water tank	Usable capacity	2 litres	
	Fill rate	12 l/min	
Connections	Cold water inlet	G½ male	
	Cold water outlet	15mm compression	
	Overflow - compression	G¾ (Ø19 -Ø23 pipe)	
Materials	Break tank	Polyethylene	
	Front cover	Acrylic capped ABS	
	Pump head	PA66/POM	
	Pump seal	NBR	
Pump	Pump type	Solenoid piston	
	Duty rating	Int 30 mins on/ 30 mins off (S3)	Continuous (S1)
	Motor type	-	
Electrical	Power supply/ phase/ frequency	230V - Single phase - 50 Hz	
	Current - Full load	0.5 A	
	Power consumption	100 W	
	Fuse rating	5 A	
	Power cable - pre-wired	1.5 m	
Physical	Depth	145 mm	
	Width	293 mm	
	Height	403 mm	
	Empty weight	3.6 kg	4.2 kg
	Filled weight	6.6 kg	7.2 kg

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## Features

### Break Tank



Altecnic digital pressurisation units feature a robust single piece moulded polyethylene water tank.

- 2 litre usable capacity
- Torbeck side entry fill valve (WRAS approved)
- High flow fill rate 12 l/min @ 1 bar
- Category 5 fluid backflow risk compatible
- Type AB air gap, weir overflow and overflow warning pipe

### Pressurisation Pumps



The pressurisation units are available with one or two highly reliable solenoid-piston pumps.

- Single (duty) or twin (duty-standby) pump options
- 3.0 bar pump
- Twin pump systems feature cyclic operation, balancing usage based on running time

### Pressure Transducer Monitoring & Control



A closed loop control system featuring a pressure transducer enables precise system pressure monitoring and system top-up.

- Precise pressure monitoring
- Software pressure control in 0.1 bar increments
- Pump dry run protection

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## Features continued

### System Connectivity



Volt-free contacts enable connection to external alarms and systems.

- Volt-free contact output for boiler interlock

### Digital Control System



Featuring an advanced microprocessor control system designed specifically for the range of Altecnic Matrix Mini pressurisation units.

- LED display, power on and error status LEDs
- Automated pressure maintenance

### Easy Installation & Maintenance Access



Altecnic Matrix Mini pressurisation units are simple to install and are wall mounted using the wall hanging bracket supplied.

A single screw and snap-fit fastenings make access for maintenance remarkably easy.

- Durable high gloss ABS moulded cover
- Dual Lock™ and single screw cover fastening

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