

# 3P BT230/570/1000 Booster Tanks

## Variable Speed Combined Pressure Booster & Tank

- **Combined Pump and Storage Tank**
- **Adjustable Pressure**
- **Variable Speed**
- **Low Energy Consumption**
- **Low Noise/Vibration**
- **WRAS Approved Tank**
- **Easy Maintenance and replacement of parts**

## Overview

Quiet and economical supply of pressurised water to multiple points of use within a building. Ideal in domestic and light commercial uses where the enclosed design and low noise and vibration are desirable.

A variable speed inverter runs the pump only as fast as necessary to maintain the desired pressure, achieving high efficiency, minimising noise and vibration and reducing running costs.

The pump motor is protected by the inverter against failure caused by overload/stall conditions and dry running. A slow start and stop of the pump eliminates sudden pipe vibration and water hammer.

Features include adjustable pressure, overcurrent protection, soft start and stop, and connectivity to building management systems.

The WRAS approved water storage tank is quickly filled by a large 1" solenoid valve and the water level in the tank is controlled by safe and reliable 24v low voltage sensors. A display panel clearly shows when the system is powered, filling the tank, or in a fault condition.



Overflow warning and protection is provided by a high level sensor which displays a fault and halts the solenoid valve, providing an additional failsafe mechanism in the event of a failure or jam of a lower sensor.

Designed, and assembled in the UK. With full UK based technical support, rapid spares availability, and spare parts supply from UK stocks.

Full repair/recon service to component level.

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### Features

- *Maintains constant system pressure*
- *WRAS approved water tank*
- *Reliable air cooled inverter with IGBT technology.*
- *High quality stainless steel pumps*
- *Quiet water cooled pump located within the tank for extremely quiet operation*
- *Single sided lid bolt removal (no need to reach backnut on other side)*
- *8 litre stainless steel pressure vessel*
- *Highly accurate digital pressure display*
- *Pump Fault display*
- *Highly visible tank status display & tank level fault warning*
- *Type AB Air Gap available (optional) for compliance with WRAS regulations up to Category 5, BS EN 13077.*
- *System Overpressure Alarm - protects pipework and attached appliances (UV system, etc) from overpressure due to faulty installation or incorrect pressure setting.*
- *620mm wide. Fits through a doorway (230L models only).*
- *Easily replaceable parts, designed for easy maintenance.*

### Adjustable Settings

- *Adjustable pump pressure*
- *Maximum and Minimum Pressure Alarms*
- *Auto-restart after fault on/off*
- *Runtime duration counters for inverter and pump*
- *Adjustable ramp time for soft start/stop*
- *Adjustable Delta start value (deviation from set pressure before the pump starts)*
- *Restore factory default settings*

### Options

- *Remote alarm panel*
- *GSM Remote Alarm by Text Messaging*
- *BMS Connectivity by volt-free output*
- *Fixed speed*

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## Technical Specifications

Physical		BT230	BT570	BT1000
Internal Volume		230 Litre	570 Litre	1000 Litre
Width		620mm	770mm	1180mm
Depth		620mm	970mm	1180mm
Height		1450mm	1650mm	1450mm
Material - Control Panels		Aluminium/HIPS		
Material - Tank		PU Insulated GRP		
Material - Pipes		Brass		
Material - Flexible Hose (Pump connection)		Food Grade PVC, Double Layer with Stainless Steel Reinforcement		
Material - Pressure Vessel		Stainless 304		
Material - Pump Body		Stainless 304		
Material - Impellers		Stainless 304		
Material - Diffusers		Noryl		
Material - Venturi		Noryl		
Material - Pump Shafts		Stainless 420		
Material - Shaft Seals		Ceramic/Graphite		
Material - Body Seals		NBR 70		
Weight (empty)	9031	96 kg	136 kg	161 kg
	10063	99 kg	139 kg	164 kg
	14562	103 kg	143 kg	168 kg
<b>Electrical</b>				
Supply Voltage		220-240Vac 50Hz Single Phase		
Power Consumption		Max 15A		
Pump Output Protection		Overcurrent Dry Run (cosphi) Phase Loss Over/Under Pressure		
Inlet Size		1" BSP		
Outlet Size		1¼" BSP		
Flow Rate	9031	90 litres/minute		
	10063	100 litres/minute		
	14562	145 litres/minute		
Max System Pressure	9031	3.1 Bar		
	10063	6.3 Bar		
	14562	6.2 Bar		

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### Technical Specifications

Recommended Operating Pressure	9031	2.6 Bar
	10063	5 Bar
	14562	5.1 Bar
<b>Pump Inverter</b>		
Type	IGBT, microcontroller generated sine wave by PWM with adjustable carrier frequency	
Display	LCD Monochrome 16x2	
Backlight	Green	
Keypad	Membrane	
BMS	Volt-free contact	
Pressure Control	Variable speed	
Pressure adjustment	Digital via control panel	
Fault detection	Yes	
Pressure Sensing	Electronic, solid state, absolute 0-16bar 4-20mA, Replaceable.	
BMS/Fault Output	Max 240Vac up to 5A	
<b>Level Control</b>		
Level Sensing	Magnetic Reed Switch Floats	
Solenoid Valve	1" BSP, Servo Assisted, Brass body, EPDM seals, 230vac 18w	
Output Voltage	220-240Vac up to 10A	
Sensor Voltage	24Vdc	
<b>Environmental Limits</b>		
Water Temperature	2 - 37°C	
Protection Class - Pumps	IP68 (submersible)	
Protection Class - Controls	IP65	

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