

# **AQUABOOST**

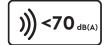
## **Booster Set (Vertical Twin)**

The Aquaboost Vertical Booster Set offers variable speed twin pump units capable of boosting cold water at up to 16 m<sup>3</sup>/h or up to 8.5 bar pressure in light commercial applications.

Aquaboost Booster Sets can be configured for duty-assist or duty-standby modes.





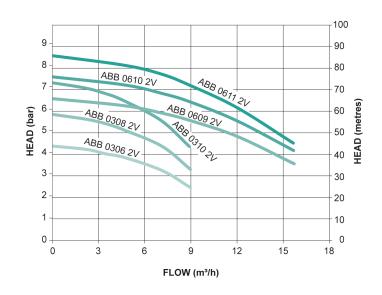


#### **Features**

- 1 year guarantee
- Heads up to 8.5 bar
- Flow rates up to 16 m<sup>3</sup>/h
- Variable speed pump control
- Duty-assist and duty-standby modes
- WRAS approved materials
- Continuously rated operation (S1)
- Stainless steel manifold assembly
- Anti-vibration mounting feet
- 24 litre pressure vessel included

### **Application**

 Cold water pressure and flow boosting in a range of domestic, commercial and industrial applications



#### Standard Product Features

#### Simple to configure intelligent pump controls

Each system is pre-configured to site specifications before leaving our manufacturing facility and requires only minor adjustments to be made during on-site commissioning.

- Variable speed pump control providing constant pressure during variations in water demand
- Start up safe mode reduces chances of pressure surges
- Automatic duty pump rotation
- 3 digit LED system pressure and fault code display, multi-function keys
- Automatic fault condition sensing and error code display
- Volt-free common fault status output



#### High performance, high efficiency pumps

Systems feature two high performance vertically mounted pump units as standard.

- Close coupled multi-stage design
- Stainless steel impellers and diffusers
- Heavy duty oversize motor shaft
- Totally enclosed, fan cooled, suitable for continuous operation
- Three phase, 2-pole induction motor for increased durability and longer life



#### **Duty-Assist and Duty-Standby operation modes**

Duty-Assist mode

• In Duty/Assist mode, if the system set pressure cannot be maintained with one pump running (Duty), the second pump (Assist) will start automatically to meet increased system demands.

Duty-Standby mode

 Only one pump operates at any given time (Duty), the second pump (Standby) is only enabled if a fault condition is detected with the Duty pump.

In both modes, each time an outlet is opened, the Duty pump is alternated, ensuring both pumps are used regularly and extending overall pump lifespan.



#### **Bespoke Options**

#### **Pump Options**

Additional options are available on request utilising up to six pumps per system and a wide range of pump options featuring different duty performance levels.

#### **Advanced Control Systems**

The next generation PCU600 Pump Control Unit utilises advanced data networking and adaptive self-tuning algorithms to provide smooth and effective pump control.

- Automatic duty pump rotation
- Start up safe mode eliminates pressure surges and hydraulic shock following a power outage
- Colour graphic display with back light, multi-function control keys and LED status indicators
- Password protected parameter control
- Engineering help and fault diagnosis display, fault history detailing previous events (time and date stamped)
- Multiple volt-free output contacts signalling system status and fault conditions
- Individual pump status display
- RS485 MODBUS interface
- Emergency pump control override

#### **Ancillaries**

#### **Cold Water Storage Tanks**

An extensive range of standard or bespoke one piece, two piece and sectional panel water storage tanks. Available for either indoor or outdoor installations, pre-insulated and manfuactured from durable Glass Reinforced Plastic (GRP). These superior tanks are WRAS approved and present a long lasting and cost effective solution for the storage of cold water for potable and non-potable applications.

#### **Water Conditioners**

Developed specifically for domestic and commercial plumbing applications, Stuart Water Conditioners feature an unique catalytic alloy core which effectively prevents hard limescale deposits from forming.

The catalytic process treats the water supply as it is used and causes the calcium carbonate to precipitate into microscopic crystals. These crystals then float in suspension in the water without adhering to any surfaces, ensuring that boilers, cylinders and kettles do not scale up and remain efficient whilst continuing to operate efficiently for many years.



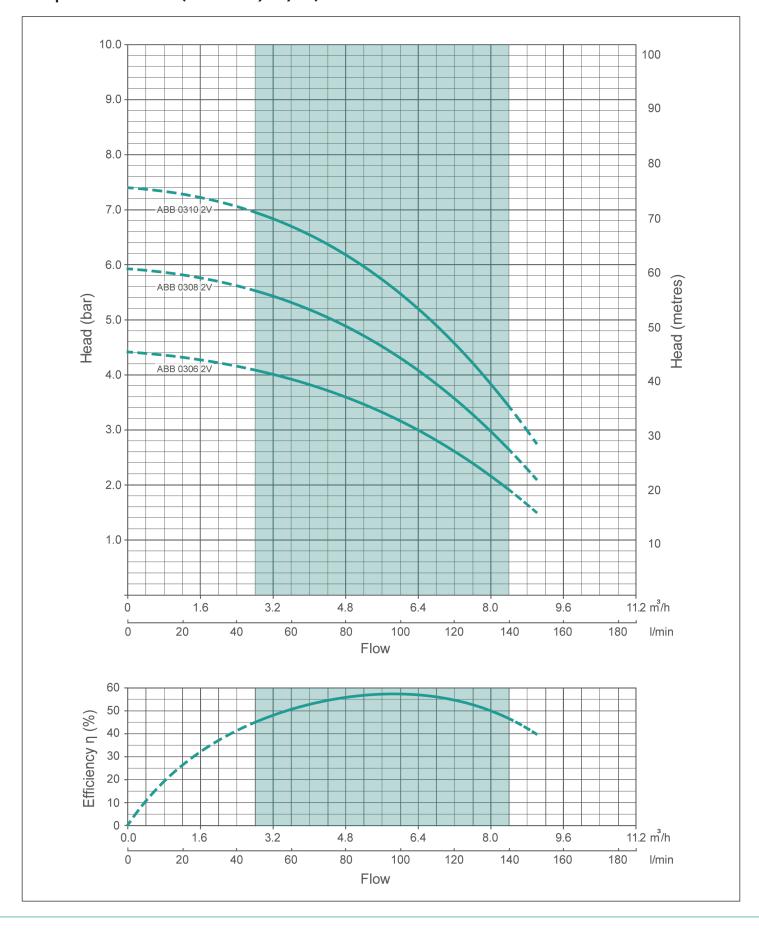




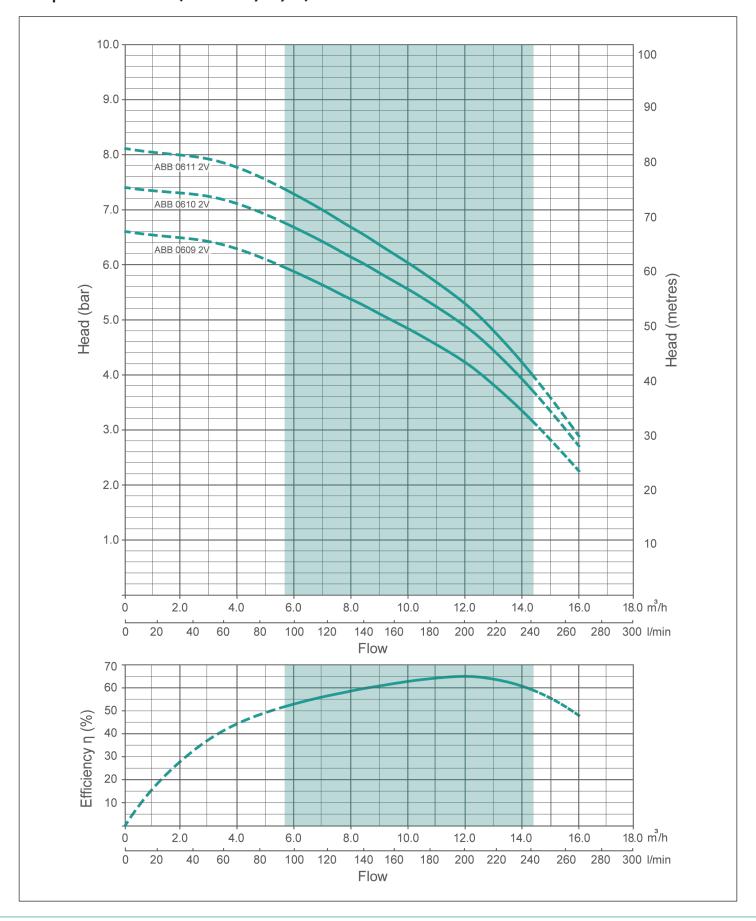




## Pump Characteristic (ABB 0306/08/10)



### Pump Characteristic (ABB 0609/10/11)



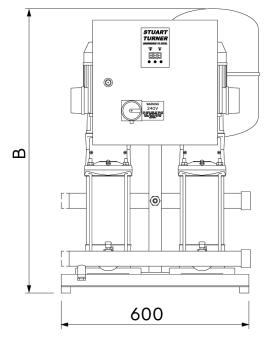
# Technical Specification (ABB 0306/08/10)

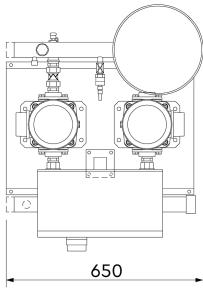
Aquaboost Model			ABB 0306 2V-SPC/M 50 Hz 47118	ABB 0308 2V-SPC/M 50 Hz 47119	ABB 0310 2V-SPC/M 50 Hz 47120	
General		Guarantee	1 year			
		WRAS approval		Approved materials		
		Approvals	CE			
Features		Pump control system	Variable speed / pressure transducer			
		Pump control mode	Duty-assist / Duty-standby			
		Dry run protection	✓	✓	✓	
		Anti-vibration mounts	✓	✓	✓	
		Pressure vessel	24 litres			
		Pump check valve(s)	✓	✓	✓	
		Noise	<70 dB(A)			
Performance	:	Maximum head (closed valve)	4.4 bar	5.8 bar	7.4 bar	
		Maximum flow rate	9 m³/h			
		Minimum static inlet pressure	0.1 bar			
		Maximum static inlet pressure	1 bar			
		Maximum statiic outlet	1.3 bar			
		Maximum working pressure*	1600 kPa (16 bar)			
		Maximum ambient air temperature	40 °C			
		Min / Max water temperature	Min 4 °C / Max 23 °C			
Connections	;	Manifold inlet	G 1½ M			
		Manifold outlet	G 1½ M			
Manifold		Manifold construction		Stainless steel		
		Pump isolation valves	Full bore, lever			
Pump		Pump type	Centrifugal multistage			
		Pump body	Stainless steel			
		Impeller	Stainless steel			
		Mechanical seal	EPDM / Carbon / Ceramic			
		Motor type	Induction (current overload sensor)			
		Duty rating	Continuous (S1)			
Electrical		Power supply / phase / frequency	16 A 230 V a.c./1/50 Hz			
	dı	Current per pump (full load)	2.6 Amps	2.9Amps	4.2 Amps	
	Per Pump	Power consumption (per pump)	0.55 kW	0.75 kW	1.1 kW	
		Fuse rating (pump)	10 Amps			
Physical		Enclosure protection	IP55			
		Width	600 mm			
		Depth	650 mm			
		Height	1250 mm			
		Weight (including fittings)	110 Kg	120 Kg	125 Kg	

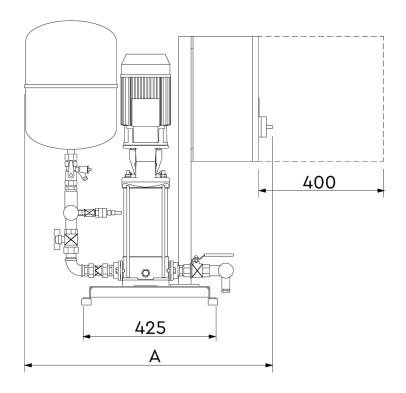
# Technical Specification (ABB 0609/10/11)

Aquaboost Model			ABB 0609 2V-SPC/M 50 Hz 47121	ABB 0610 2V-SPC/M 50 Hz 47122	ABB 0611 2V-SPC/M 50 Hz 47123	
General		Guarantee	1 year			
		WRAS approval	Approved materials			
		Approvals	CE			
Features		Pump control system	Variable speed / pressure transducer			
		Pump control mode	Duty-assist / Duty-standby			
		Dry run protection	✓	✓	✓	
		Anti-vibration mounts	✓	✓	✓	
		Pressure vessel	24 litres			
		Pump check valve(s)	✓	✓	✓	
		Noise	<70 dB(A)			
Performance		Maximum head (closed valve)	6.6 bar	7.4 bar	8.1 bar	
		Maximum flow rate	16 m³/h			
		Minimum static inlet pressure	0.1 bar			
		Maximum static inlet pressure	1 bar			
		Maximum statiic outlet	1.3 bar			
		Maximum working pressure*	1600 kPa (16 bar)			
		Maximum ambient air temperature		40 °C		
		Min / Max water temperature	Min 4 °C / Max 23 °C			
Connections		Manifold inlet	G 2 M			
		Manifold outlet	G 2 M			
Manifold		Manifold construction		Stainless steel		
		Pump isolation valves	Full bore, lever			
Pump		Pump type	Centrifugal multistage			
		Pump body	Stainless steel			
		Impeller	Stainless steel			
		Mechanical seal	EPDM / Carbon / Ceramic			
		Motor type	Induction (current overload sensor)			
		Duty rating	Continuous (S1)			
Electrical		Power supply / phase / frequency	16 A 230 V a.c./1/50 Hz			
	dı	Current per pump (full load)	5.2 Amps	8.0 Amps	8.0 Amps	
	Per Pump	Power consumption (per pump)	1.5 kW	2.2 kW	2.2 kW	
		Fuse rating (pump)	10 Amps			
Physical	•	Enclosure protection	IP55			
,		Width	600 mm			
		Depth	725 mm			
		Height	1300 mm			
		Weight (including fittings)	130 Kg	135 Kg	140 Kg	

### **Dimensions**







Pump Description	Dim. 'A'	Dim. 'B'
ABB 0306 2V-SPC/M	800 mm	950 mm
ABB 0308 2V-SPC/M	800 mm	950 mm
ABB 0310 2V-SPC/M	800 mm	950 mm
ABB 0609 2V-SPC/M	825 mm	975 mm
ABB 0610 2V-SPC/M	825 mm	975 mm
ABB 0611 2V-SPC/M	825 mm	975 mm

Stuart Turner Limited reserves the right to amend specifications without notice.