

The Grundfos Home Booster is a self-contained cold water booster set, designed for domestic properties where the existing mains water supply is insufficient to meet the demand requirements of pressurised hot and cold water systems. The Home Booster is suitable for most domestic properties with one or two standard bathrooms with standard fittings, or en-suite, and cloakroom, plus other normal household appliances.

The unit features an integral 200 litre storage tank with Type AB air gap, in accordance with Water Byelaws regulations. The high quality stainless steel pump delivers high efficiency, sustained performance, long working life and quiet operation. The Grundfos PM2 controller on/off controls the pump, and also provides dry run protection should the storage tank run out of water.

The Home Booster has been developed to provide a compact and cost-effective solution. It's self-contained and its compact size makes it ideal for domestic installations where space is at a premium, and may be typically installed in a utility room or a garage.

For larger properties, the Max-E Booster should be considered, it is not recommended to install two Home Boosters operating together to achieve increased flow.

Installation is straight forward requiring connection of mains cold water supply, discharge pipe, overflow pipe and electrical connections.

For properties with 4 to 5 occupants, or where the storage tank refills very slowly due to poor mains water pressure, an additional 180 litre water storage slave tank option is available to increase the storage capacity is recommended.



The Home Booster is available in two models:

- **Home Booster 3.0 Bar is fitted with the CM 3-4 I**
- **Home Booster 4.5 Bar is fitted with the CM 3-6 I**

FEATURES

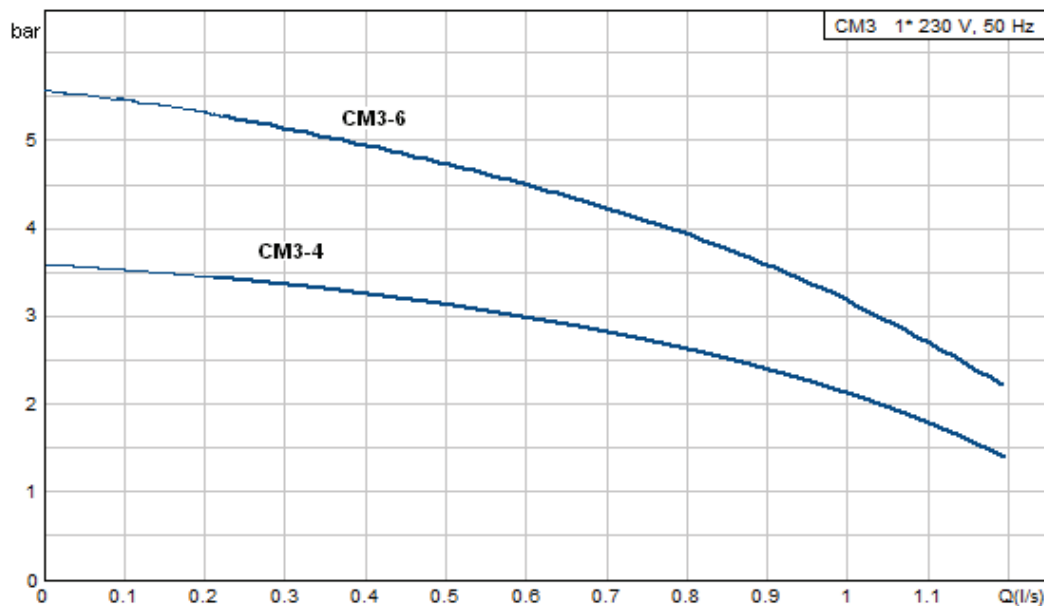
- **Integrated 200 litre storage tank (180 litres useable volume)**
- **Electronically on/off controlled**
- **Nominal performance 3.0 bar or 4.5 bar at 0.5 l/s (depending on model Home Booster 3.0 or 4.5)**
- **Packaged set ready for installation**
- **Dry run protection**
- **WRAS Approved Components**

ELECTRICAL DATA

240V 1ph 50Hz

Home Booster Model	Full Load Current (A)	Starting Current (A)	Input Power (W)	Capacitor Rating (uF)/V
3.0 Bar	2.80	15.6	588	20/400
4.5 Bar	4.00	15.6	870	20/400

PUMP PERFORMANCE



DESCRIPTION

The Home Booster is a single pump booster set with integral cold water storage tank having a nominal capacity of 200 litres, and a useable volume 180 litres. There is provision at the rear of the tank for connection of an additional 180 litre slave tank. The pump is controlled by the Grundfos PM2 Pressure Manager on/off controller. The PM2 has indicators for pressure, pump status and fault, and a reset button.

The PM2 also protects the pump against loss of water, and if the pump becomes air locked or is seized.



OPERATION

The discharge pressure is monitored by a pressure transducer in the PM2 controller, when the pressure falls to the cut-in start pressure, the pump is started. The cut-in pressure setting can be set by DIP switches within the PM2 in 0.5 bar steps.

The flow switch within the PM2 continues to run the pump until there is a no flow condition, the pump is then stopped after a small delay.

An 8 litre pressure vessel is incorporated into the unit to maintain pressure while the pump is off to prevent unnecessary starts due to small draw-offs.

The discharge pressure can be regulated if required by installing a separate pressure reducing valve.

MAXIMUM OPERATING CONDITIONS

The Grundfos Home Booster unit has been designed for:

Liquid temperature range: +3 to +40 °C
 Ambient temperature: up to +40 °C
 Sound pressure level: 65 dB(A)

Maximum closed valve discharge pressure

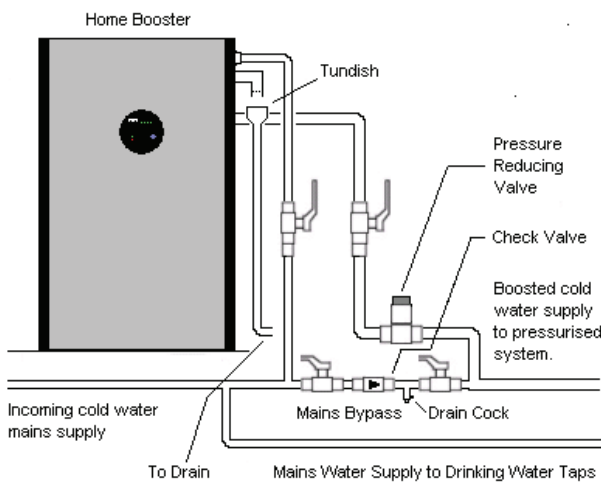
Home Booster 3.0 Bar: 3.6 bar
 Home Booster 4.5 Bar: 5.6 bar

TYPICAL OPERATING DUTIES

Home Booster 3.0 Bar: 3.0 bar at 0.5 l/s 2.0 bar at 0.8 l/s
 Home Booster 4.5 Bar: 4.5 bar at 0.5 l/s 3.0 bar at 0.8 l/s

INSTALLATION

1. The unit should be sited in a dry, well ventilated but frost-free position where it will not be subjected to extremes of temperature.



The above installation diagram is for guidance only.

2. The unit should be installed on a solid flat surface to adequately support the weight of the water tank, and to help reduce noise/vibration.

Ensure that there is sufficient clearance, 0.5m on the right hand side and above, and lighting around the unit to allow for service and maintenance operations to take place safely without obstruction.

3. The bypass arrangement must be installed strictly in accordance with the Water Byelaws Regulations. The bypass should be drained when not in use to prevent stagnation. A bypass must not be installed if pumping a non potable CAT 5 contaminated liquid.

4. Attention should be given to the possibility of water leakage from the unit during commissioning or service activities, in order to prevent possible damage to the surrounding area.

It is not recommended to fit the Home Booster in a loft or attic space.

FOUNDATION

The Home Booster unit should be installed on a solid base, which is both level and flat to avoid distortion of the base.

SERVICE CONNECTIONS

Mains cold water: ½" BSPM
 Overflow: 22mm solvent weld
 Discharge: 22mm push fit
 Connection for slave tank: 2" BSPF
 Mains power cable: 5m x 1.5mm² 3 core
 Mains cable supplied with a 5A fused mains plug.

MATERIALS OF CONSTRUCTION

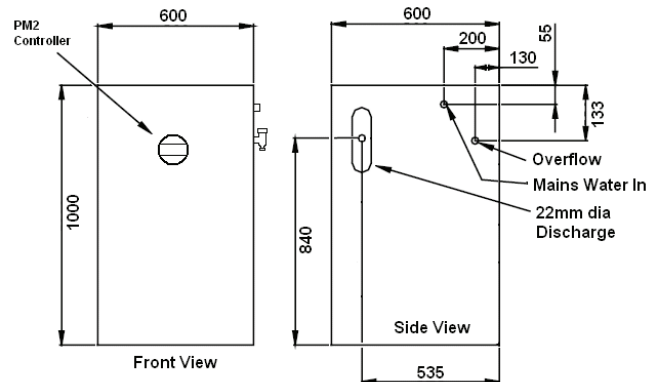
Tank: Polypropylene
 Pipe work fittings: Brass/Copper
 Internal pipe work: Copper
 Pump wetted parts: Stainless steel 304 grade
 Pressure vessel: Steel body, with butyl rubber diaphragm

PRODUCT CODES

Home Booster 3.0 Bar: MD300200
 Home Booster 4.5 Bar: MD450200
 Slave Tank: MCST0200

DIMENSIONS (mm)

The Slave Tank has the same overall dimensions as the Home Booster.



Home Booster model:	3.0 Bar	4.5 Bar
Dry Weight:	63 kg	66 kg
Wet Weight:	243 kg	246 kg
Shipping Weight:	65 kg	68 kg

Slave Tank

Dry Weight:	30 kg
Wet Weight:	210 kg
Shipping Weight:	52 kg