

“Midi-Break” - Break Tank & Booster Set – BTMIDI-3A / BTMIDI-2A / BTMIDI-1

Description

Wall mounted break tank and pump assembly with Fluid Category 5 protection by virtue of the integral Type AB air gap complying with BS EN13077: 2003. The set is intended for light industrial use and is housed in a stainless steel cabinet ready for wall mounting in a frost free environment.

The primary purpose is to provide backflow protection in accordance with the new Water Regulations. The Midi-Break also provides cold water at a known outlet pressure. *Where hot water is required – see Ablution Plant – BTHW.*

Three models are available with differing flow characteristics see graph. The Midi-3A is built to a higher specification for commercial use with many additional features – see *Codes & Descriptions*. *For higher flow rates (multiple taps) where a good jet from a hose gun is required or where high daily demand is anticipated use “Boost-A-Break” (model BTAB900, BTAB1200 or BTAB3-10).*

The unit is quiet since the pump is mounted on anti vibration mounts with flexible stainless braided internal hoses. Automatic pump control is by means of a pressure vessel, industrial pressure switch and a flow sensor. This system provides reliable pump operation with the minimal amount of starts. The pump has a “soft start” feature, which avoids water and electrical surges. The pump is protected via low level float switch in the cistern.

Specification

Pressure Supply	10 bar max.
Pressure Supply	1.0 bar dynamic min.
Min. Flow rate	0.04 Lt/s continuous or 0.01 Lt/s for max 5 mins. (<i>below 0.01 Lt/s use 4 Lt min. external pressure vessel – EVUP</i>)
Pressure Outlet	See pressure / flow graph
Temperature	1° - 25° C max.
Approval	WRAS 1112062 (BTMIDI-3A) WRAS 1112063 (BTMIDI-1 / 2A)

Materials

Cabinet / Cistern	Stainless steel 304
Pump (wetted parts)	Brass (regenerative)
Pipes / fittings	Copper / Brass / Stainless

Electrical Specification

Volts/Phase/Frequency	230/1/50
Motor type	Induction (brushless)
IP Rating EN60529	IP15 (cabinet) IP65 (controls)
Power Consumption	550 W (Midi-3A / 2A) 350 W (Midi-1)
Full Load Current	2.3 A (Midi-3A / 2A) 1.6 A (Midi-1)
Rating	Continuous. <i>Where average daily use likely to be >2 hours, we recommend “Boost-A-Break”.</i>

Applications

The following are Fluid Category 5 examples see *Water Regulations (Table 6.1e)* -

- Waste bin washing – use *Midi-3A single tap only*
- Hose union tap – non-domestic – use *Midi-3A single tap*
- Wash-down – animals or any FC 5 – see *“Boost-A-Break”*
- Sinks with hoses
- Bidets – ascending spray – see *Ablution Plant - BTHW*
- Vegetable washing
- Butchery & meat equipment / Slaughterhouse
- Laboratories
- Clothes & Dish washing machines – healthcare premises
- Instantaneous showers and heaters - care premises
- Applications deemed to be Category 5 by water company

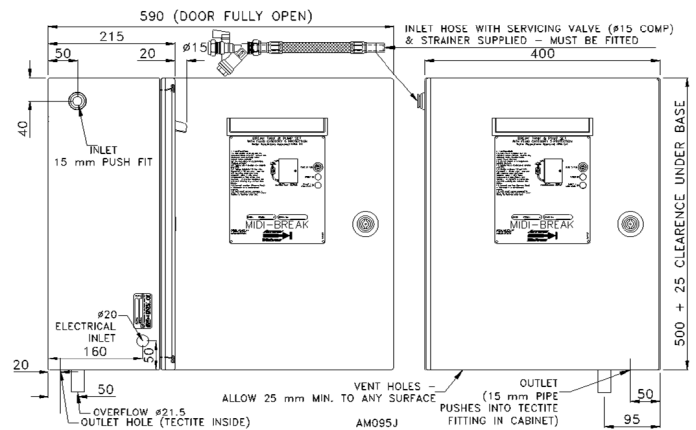


*BTMIDI-3A
Stainless steel cabinet provides neat & tamperproof installation*

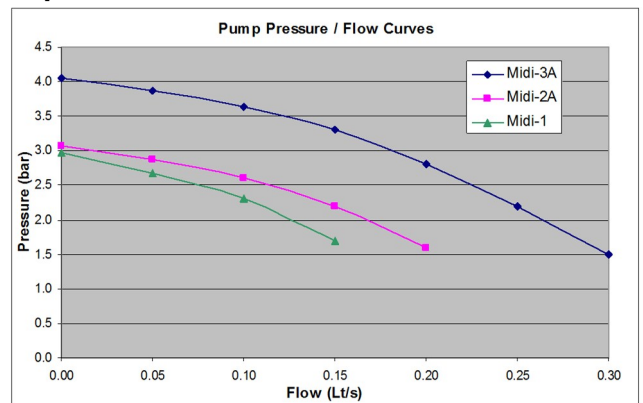
Water Regulations

The Regulations require point of use protection. It is not permissible to use the same Break Tank to serve a bedpan washer (Fluid Category 5) and dishwasher.

Dimensions



Pump Performance



Note – ½” hose gun generally requires 0.3 Lt/s

Options (*not available for BTMIDI-1)

- Automatic tank purge feature (BT-OP2)* To assist with legionella control where applicable – e.g. infrequent use, warm environment, aerosol spray applications. Replenishes water in tank and runs pump for a few seconds every day.
- High level alarm (BTBMS2) Activates fault lamp and BMS relay if tank water level too high e.g. leaking float valve
- Frost protection system (BTFPS2). Recommended for unheated areas such as bins stores. For external installations, specify BTFPS2 and Wall Cover.
- Wall Cover (BTCAB4)-see page 2 (*Not poss with drip tray*)
- Drip Tray (BTDT3) - see page 2 (*Not poss with wall cover*)



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Insulated Wall Cover (BTCAB4)

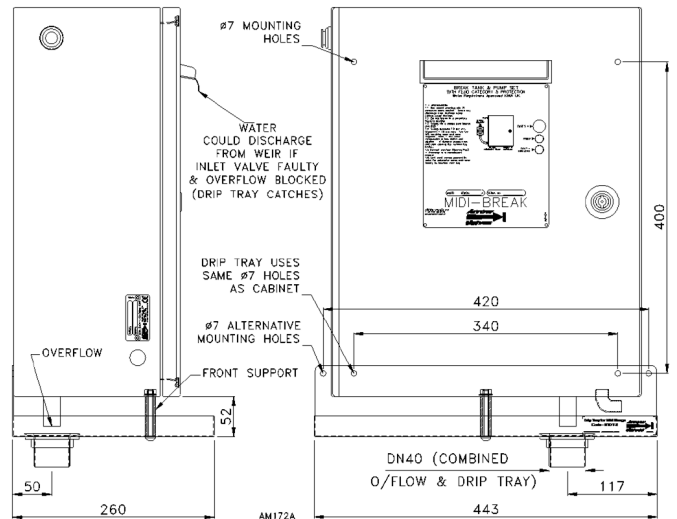
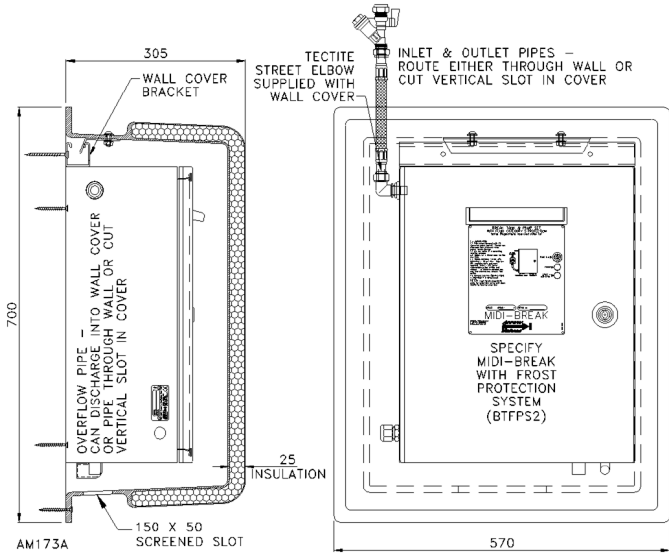
Ideal for bins stores and external installations

Supplied with mounting bracket

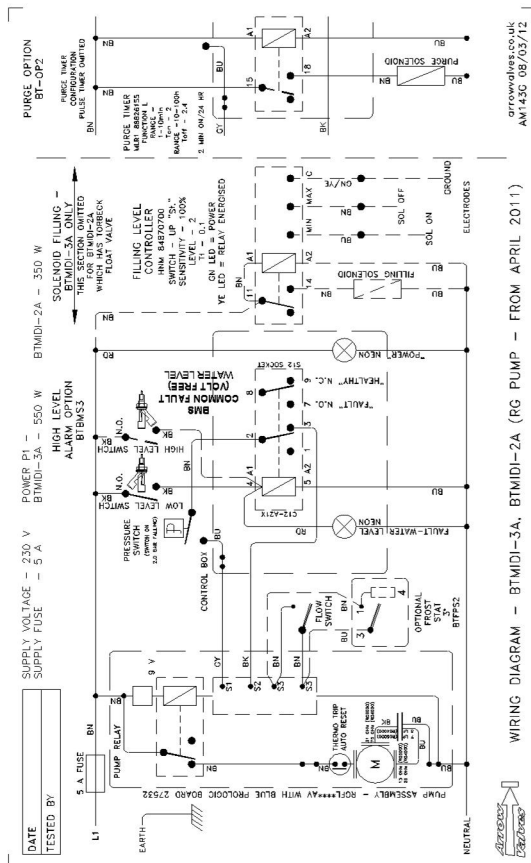
Order with frost protection system (BTFPS2)



Drip Tray (BTDT3)



Wiring Diagram – BTMIDI-2A & 3A See online for BTMIDI-1 diagram



Options

The BTMIDI-3A is normally specified, featuring a reliable tank filling arrangement in place of a Torbeck float valve. The BTMIDI-2A could be considered for low flow rate applications.

Feature	BTMIDI-3A	BTMIDI-2A	BTMIDI-1
Power indicator neon	•	•	
Fault indicator neon	•	•	
BMS fault relay (volt free)	•	•	
Low tank level switch & BMS	•	•	
High output (0.3 Lt/s)	•		
Electronic & Solenoid filling	•		
High level alarm – BTBMS2	Optional	Optional	
Automatic tank purge system /24h	Optional	Optional	
Frost protection system	Optional	Optional	Optional

Codes and Descriptions

Code	Description
BTMIDI-3A	Break Tank & Pump MIDI-3 Advanced 230 V
BTMIDI-2A	Break Tank & Pump MIDI-2 Advanced 230 V
BTMIDI-1	Break Tank & Pump MIDI-1 230 V
BT-OP2	Automatic Tank Purge System /24 h – Midi-2A & 3A
BTBMS3	BTMIDI High Alarm BMS – MIDI-2A & 3A
BTFPS2	BTMIDI Frost Protection System
BTDT3	Drip Tray for Midi range Stainless
BTCAB4	Wall Cover for Midi-Break c/w Brackets

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Arrow Valves Ltd reserve the right to change specifications, design and materials at any time without notice.

All unit-less dimensions in mm.

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