



Braukmann CBU146

Compact Booster Unit

To ensure the quality of drinking water according to EN 1717

APPLICATION

Speed controlled compact booster unit with a vertical high-pressure pump as a safety device to separate potable water from category 5 fluids according to EN 1717.

Fully automatic, fully wired Compact Booster Unit with modular design comprising a single pump system and a buffer tank for the hygienic separation of potable water and category 5 fluids according to EN 1717, on a common base frame.

The modular design makes it possible to disconnect modules for installation in buildings with limited space.

The system is switched on and off regulated by pressure, the flow rate is controlled via frequency inverter.

APPROVALS

- CE

SPECIAL FEATURES

- Pre-assembled, ready for installation
- No risk of microbial contamination due to hygienic separation of potable water from non-potable water
- Flow rate regulation per frequency inverter
- Easy installation due to modular construction and draining with integrated siphon trap
- Reliable operation due to buffer tank with usable volume according to EN 806-2



TECHNICAL DATA

Separation of systems as a means to protect potable water from being contaminated by fluids of the category 5 according to EN 1717.

Media	
Pump Medium:	Non-portable water Without aggressive, abrasive and solid components
Flow rate:	see Chapter Dimensions
Pumping head:	Adjustable within the range of pump characteristics, preset to 60 m see chapter Dimensions
Pressure values	
Nominal pressure p:	PN 16
Inlet pressure:	1.5 - 8 bar (depending upon the model)
Operating temperatures	
Medium temperature:	up to 30 °C
Ambient temperature	up to 40 °C
Specifications	
Supply voltage:	3/PE, AC 400 V, 50 Hz

MATERIALS

Pump

Part:	Material:
Inlet housing	Stainless steel
End housing	Stainless steel
Hydraulics	Stainless steel
Seal	FPM 80
Sliding bearing	Aluminium oxide
Floating ring seal	according to EN 12756
Floating ring	Silicon carbide
Counter ring	Hard coal
Elastomer	EPDM

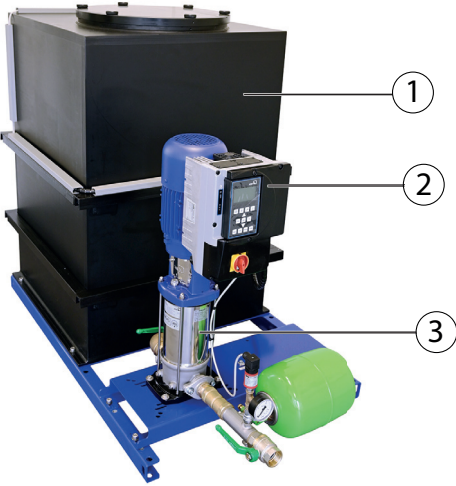
Hydraulic components

Part:	Material:
Pipeline	Chrome steel
Switching device	Steel, lacquered
Control tank	Connection made of stainless steel
Membrane	Suitable for potable water

Shut-off valves

Part:	Material:
Housing	Spheroidal cast iron
Butterfly disc	Stainless steel
Bellows ring material	EPDM-XV
Buffer tank	Polyethylene
Check valve	Cast steel

CONSTRUCTION

Overview	Components	Materials
	<p>1 Speed-controlled compact booster unit with:</p> <ul style="list-style-type: none"> • One normal sucking, vertical high-pressure rotary pump with all components in contact with the medium • High efficiency motor with frequency inverter, energy efficiency class IE4 according to IEC-CD 60034 - 30 ED. 2 • Check valve • Shut-off valve on the inlet and outlet sides • Diaphragm expansion vessel on the outlet side as vessel • Pressure sensor on the pressure side • Vibration damper between pump and base frame • Pressure gauge display • Shut-off valve, lockable • Piping • The system is connected to the installation pipeline with G1 1/4", G2" or G2 1/2" (depending on version) • Base frame <p>2 Self-cooled frequency converter adapted on the motor</p> <ul style="list-style-type: none"> • Refer to instructions of frequency inverter <p>3 Buffer tank:</p> <ul style="list-style-type: none"> • Non-circular, free overflow according to EN 13077, Type AB • Drainage connection with integrated siphon trap: DN100 for CBU146-32A-060 and CBU146-40A-060 DN150 for CBU146-50A-060, CBU146-65A-060, CBU146-65B-060 and CBU146-80B-060 • Tank volume according to DIN 1988-500 or individual approved • Potable water backfeed via float valve, suitable for potable water 	<ul style="list-style-type: none"> • Stainless steel • Stainless steel • Coated steel
Not depicted components:		
<p>Switch cabinet consists of:</p> <ul style="list-style-type: none"> • Power supply connection via 3/N/PE, AC 400V, 50Hz • Lockable emergency stop main switch (repair switch) • LED, green for normal function, yellow for warning, red for alarm and description text in the display. • Motor protection device (included in the frequency inverter) • Terminal strip/clamps with labels for all connections • Plug connectors to connect easily with the electrical equipment fitted to the supply container 		
<p>Messages sent via potential-free contact for</p> <ul style="list-style-type: none"> • Alarms and warnings • Pump run indicator 		

TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

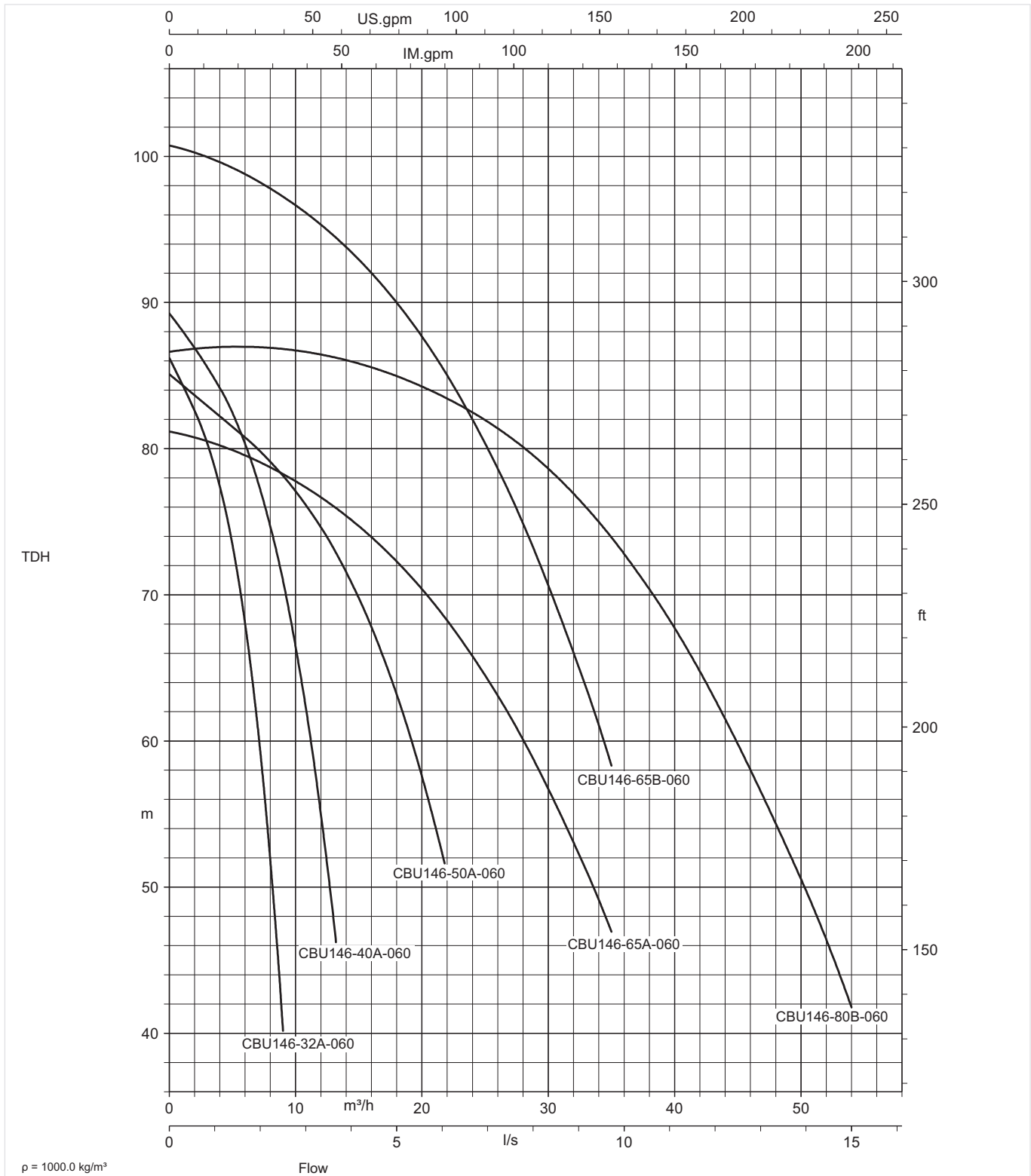
The following parameters apply during transportation and storage:

Parameter	Value
Environment:	clean, dry and dust free
Max. ambient temperature:	up to 40 °C
Max. ambient relative humidity:	60 % *

*non condensing

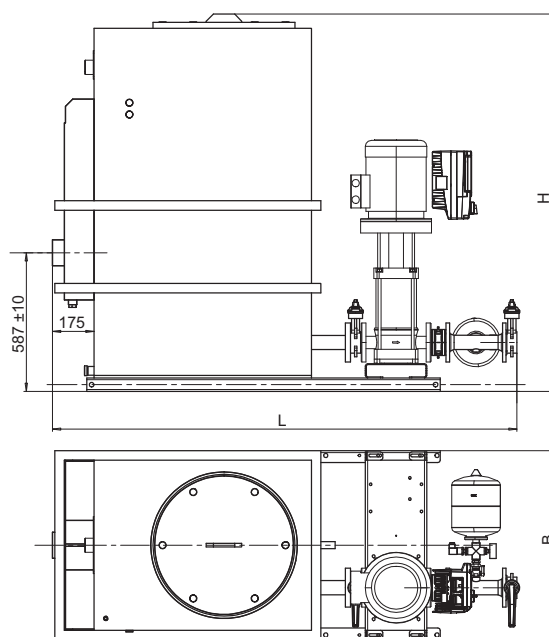
TECHNICAL CHARACTERISTICS

Pressure drop characteristics



DIMENSIONS

Overview



Parameter		Values						
Length:	[L]	mm	1543	1600	1965	1990	1990	2000
Width:	[B]		800	800	800	800	800	800
Height:	[H]		1185	1185	1600	1600	1600	1600
Weight:		kg	195	218	324	346	444	411

Noise expectancy values

Refer to pump manual for noise value of the pump.

Authorised environmental conditions

Ambient temperature	5°C ...40°C
Relative air humidity	max. 60% r.h. at 40 °C ambient temperature

ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

Options

		CBU146-32A-060	CBU146-40A-060	CBU146-50A-060	CBU146-65A-060	CBU146-65B-060	CBU146-80B-060
Volumetric flow rate Qmin:	m ³ /h	0.6	1.1	1.6	4.0	4.0	4.6
Volumetric flow rate Qmax:		7.0	11.0	19.0	28.0	34.0	43.0
max. pump head*	m	86	89	85	81	100	86
Connection:	Inlet	G1 ¹ / ₄ "	G1 ¹ / ₄ "	G2"	G2"	G2 ¹ / ₂ "	G2 ¹ / ₂ "
	Pump	DN32	DN40	DN50	DN65	DN65	DN80
Nominal performance:	P ₂ kW	2.2	3.0	5.5	7.5	11.0	15.0
Usable volume:	l	350	350	540	540	540	540

* Pump head is depending on the flow rate. See characteristic curves on following pages.

Spare Parts

Overview	Description	Dimension	Part No.
	1 Pump Movitec		
	V 0609 B	DN32	0904149
	V 1008 B	DN40	0904150
	VF 1506 B	DN50	0904151
	VF 2504 B	DN65A	0904152
	VF 2505 B	DN65B	0904153
	VF 4004-2 B	DN80	0904154
	2 Pressure sensor	all	0904155
	3 Pressure gauge	all	0904156
	4 Float switch	all	0904157
	5 Check valve		
	1 1/4"	DN32 and DN40	0904158
		DN50	0904159
		DN65	0904160
		DN80	0904161
	6 Shut-off valve		
	1 1/4"	DN32 and DN40	0904162
	1 1/2"	DN32 and DN40	0904163
		DN50	0904164
		DN65	0904165
		DN80	0904166
	7 Shut-off valve		
	Pump drive 2.2 kW	DN32	0904167
	Pump drive 3 kW	DN40	0904168
	Pump drive 5.5 kW	DN50	0904169
	Pump drive 7.5 kW	DN65A	0904170
	Pump drive 11 kW	DN65B	0904171
	Pump drive 15 kW	DN80	0904172



Manufactured for
and on behalf of
Pittway Sàrl, Z.A., La Pièce 4,
1180 Rolle, Switzerland
by its authorised representative
Ademco 1 GmbH

For more information
homecomfort.resideo.com/europe
Ademco 1 GmbH, Hardhofweg 40,
74821 MOSBACH, GERMANY
Phone: +49 6261 810
Fax: +49 6261 81309