



Product Data Sheet 13/02/2023

The BOSS Direct G4 is the latest in pumpless digital pressurisation technology for light commercial and residential buildings. It's a slim, wall-mounted pumpless topup pressurisation unit, with a top-up flow rate of up to 14 l/min depending on the mains or boosted mains, water pressure. It is designed to be connected directly to a building's incoming water supply using the included flexible hose. It is there to fill and maintain the pressure of a heating or chilled water system without the need for a pump.

The unit comes with a user-friendly controller that displays all operating and error conditions comprehensively and conveniently. It features extensive data storage for online and offline analysis, microprocessor control, and self-learning algorithms with a graphical display. It comes with MODBUS RTU and BACnet communication protocols as standard and has its key operating parameters password protected.

Prior to order and installation,
please refer to
www.bssboss.co.uk/boss-direct-g4
for the latest status with your
Water Authority

Product features

- Silent, pumpless pressurisation unit.
- Fills system from empty.
- Onscreen service reminder (12 months).
- Colours: Grey (RAL7016) and Red (RAL3002).
- Password protected.
- Pressure setting in 0.1 bar increments.
- Flood protection (Runtime limiter and excessive activation logging).
- Volt free contact: Common alarm (N/C or N/O), fully programmable for specific alarms customisable via control unit).
- Extensive data storage for online or offline analysis.
- Advanced technology ensures the lowest power consumption, long service life and easy maintenance.
- Microprocessor control, self-learning with graphical display.
- Max. flow rate of 14 l/min.
- Connects directly to the mains (boosted) water mains, via included flexible hose (L= 400 mm).

Advantages

- Universal connection to drain fits 22 mm copper compression, 32 mm PP push fit and 32 mm PP solvent weld discharge pipe to BS 5254 or BS EN1451.
- The user-friendly control unit displays all operating and error conditions in a logical and convenient way.
- Four status LED indicators.
- System safety valve monitoring.
- Expansion vessel health monitoring.
- Leak detection.
- Usage monitor, logs, and counters.
- MODBUS RTU and BACnet Communication Protocol via RS485.
- 2 year warranty against manufacturing defects, can be extended to 5 years with a service contract.
- Can be combined with Flamconnect Remote Service (Please check with your local sales office for availability).
- Two 40 cm flexible hoses (for mains and sealed system connection) included for easy installation.
- Pre-approved in Severn Trent Water and Jersey Water Authority areas. For approval in other areas
 please consult with your local Water Authority and seek technical support from BSS Technical Teams
 if required.





5 Years

Warranty



Technical Specifications

Maximum operating conditions

- System temperature range at point of connection: 5 °C / 90 °C.
- Ambient temperature range: 5 °C / 45 °C.
- Max. system pressure: 10.0 bar.
- Min. / max. delivery pressure: 0.5 6.0 bar.
- Pressure rating: PN 10.Protection class: IP44.
- Relative humidity 95% non-condensing.

Certifications and Standards Applied

- Pre-approved in Severn Trent Water and Jersey Water Authority areas. For approval in other areas
 please consult with your local Water Authority and seek technical support from BSS Technical Teams
 if required.
- PED 2014/68/EU Sound Engineering Practice.
- IEE Electrical Safety Guidance.
- EMC 2004/108/EC.
- BS 7074 Parts 1 to 3.
- BSRIA Guide BG82:2022
- Machinery Directive 2006/42/EC, UK Supply of Machinery (Safety) Regulations 2008.
- Electronic Components have been tested and comply with the EMC Directives,
- UK EMC Regulations 2016.
- EN 61000-6-2: Generic Standards Immunity standard for industrial
- environments.
- EN 61000-6-3: Generic Standards Emission standard for residential,
- commercial and light industrial environment.
- Low Voltage Directive 2014/35, Electrical Equipment (Safety) Regulations 2016.
- UKCA / CE marked components, where applicable.
- WRAS approved check valve.
- IP44 (BS EN60529) rated controller.

Materials of construction

Cabinet: Mild steel CR4 Powder Coated

Drain manifold: PA66 GF30

Check-valves: POM

Filter: POM

Connections: Inlet and outlet manifold: DZR Brass / Tundish: PA66 GF30

• Pipework: Stainless steel braided Flexible hose / EPDM / Copper

Finish: Powder coatedValves: Brass / PTFE

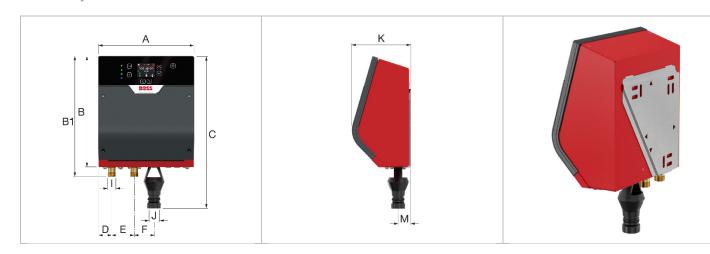
| Description | | BOSS Direct G4 | | |
|-------------------------------|-------------------|------------------|--|--|
| Order Code | | 03510596 | | |
| Connections | System (mm) | 15 (Compression) | | |
| | Mains Supply (mm) | 15 (Compression) | | |
| | Drain / Tundish* | ¾" BSP | | |
| Standby Power Consumption [W] | | 2 | | |
| Full Load Current [A] | | 0.3 | | |
| Weight [Kg] | | 4 | | |

^{* 22} mm copper compression, 32 mm PP push fit and 32 mm PP solvent weld.

03510596 BOSS Direct G4



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Dimensions

| Туре | Dimensions | | | | | | | | | | |
|-----------------------|------------|------|------|------|------|------|------|-------|--------|------|------|
| | Α | В | B1 | С | D | E | F | 1 | J | K | M |
| | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [BSP] | [mm] | [mm] | [mm] |
| BOSS Direct G4 | 225 | 262 | 284 | 359 | 32 | 53 | 46 | 1/2" | 22/32* | 141 | 30 |

^{* 22} mm copper compression, 32 mm PP push fit and 32 mm PP solvent weld.

Classification General Data

Etim Group Pressure increase/decrease
Etim Class Central heating refill installation

Product Name BOSS Direct G4

Brand BSS

Article Number 03510596

Attributes

Suitable for membrane pressure expansion tank

Yes

Connections External thread ½" BSPP (ISO 228-1)

Nominal diameter ½" (15mm)

Outer pipe diameter (supply) 15mm

Outer pipe diameter (system) 15mm

With Filter Yes

With automatic air vent Yes

Inlet pressure range (mains/boosted supply)

O.5 to 6 bar

Maximum operating pressure (system)

Drain tundish

Yes

Automatic filling function Yes Filling capacity 840 l/h Category of system separation Other With Pressure reducer No Suitable for softening No Maximum inlet temperature 45 °C 90 °C Maximum system temperature Suitable for full demineralisation No Suitable for pH value stabilisation No

With pressure gauge Yes (Digital onscreen)

Suitable for fixed installation Yes