DATA SHEET

BIO 55 G 1F Load Unit

Main Features	
Application	BIO 55 G 1F Insulated Load Unit is used to connect a heating system with a hydronic fireplace or solid fuel boiler and a hot water storage tank. The return water temperature to boiler is kept at 55°C min. by a load valve in order to prevent low-temperature corrosion in the boiler. The output of the heating system is controlled by regulating the boiler output – e.g. by switching on/off a pellet-fired boiler.
Description	**The Load Unit includes:** ● two Grundfos UPM3 Flex AS 25-75 circulation pumps (with the possibility of control by a PWM signal or by selecting a pump performance curve), ● TSV3BM load valve with automatic bypass balancing protecting a boiler against low-temperature corrosion by keeping the min. return water temperature to boiler at 55 °C, ● two ball valves with drain valve for shutting off and draining the heating systém, ● check valve integrated in the ball valve body located at in reverse from the heating system, ● two ball valves and a drain valve to shut off the boiler circuit, ● two drain valves to drain the load unit, ● two ball valves permitting to shut off the HW storage tank circuit (included in supply), ● lever for ball valves, ● four thermometers, ● outlets to connect a hot water storage tank and alternative outlets to connect optional accessories.
Working fluid	Water, antifreeze heat-transfer fluid for heating systems.
Installation	Vertically on a wall using the installation kit.
Connections	2 x G 1" F to a heating system 2 x G 1" F to a boiler circuit 2 x G 1" F to a hot water storage tank 2 x G 1/2" F alternative outlets to connect optional accessories (if you do not need to use the outputs, they can be plugged with the enclosed plugs)
Max. boiler output	38 kW Δt 20 K
Max. HS output	38 kW Δt 20 K
Code	**17502**

R E G U L U S spol. s r. o. Czech Republic
Do Koutů 1897/3, 143 00 Praha 4
Tel.: +420 241 764 506
Fax: +420 241 763 976
E-mail: rsales@regulus.eu
Web: www.regulus.eu

DATA SHEET

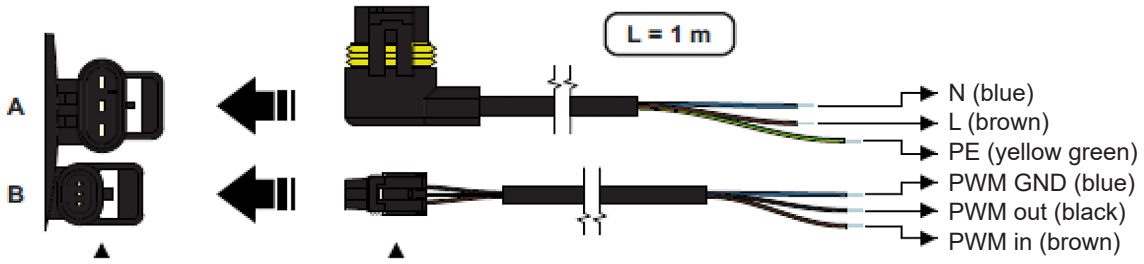
BIO 55 G 1F Load Unit

Data for BIO 55 G 1 F Load Unit	
Fluid working temperature	5–95 °C
Max. working pressure	6 bar
Min. working pressure	0.5 bar
Ambient temperature	5–40 °C
Max. relative humidity	80 %, non condensing
Power supply	230 V, 50 Hz from external controller
Max. load unit power input	120 W
IP rating	IP 20
Insulation material	EPP RG 60 g/l
Overall dimensions (L x W x D)	640 x 250 x 350 mm
Total weight	15.5 kg

Accessories*		Code
CSE OTS ZV G	Pump station with check valve	15042
Magnet Filterball 1"	MAGNET FILTERBALL 1" Ball valve with filter and magnet	17405

** Not included in supply, shall be ordered separately!*

Electrical Wiring

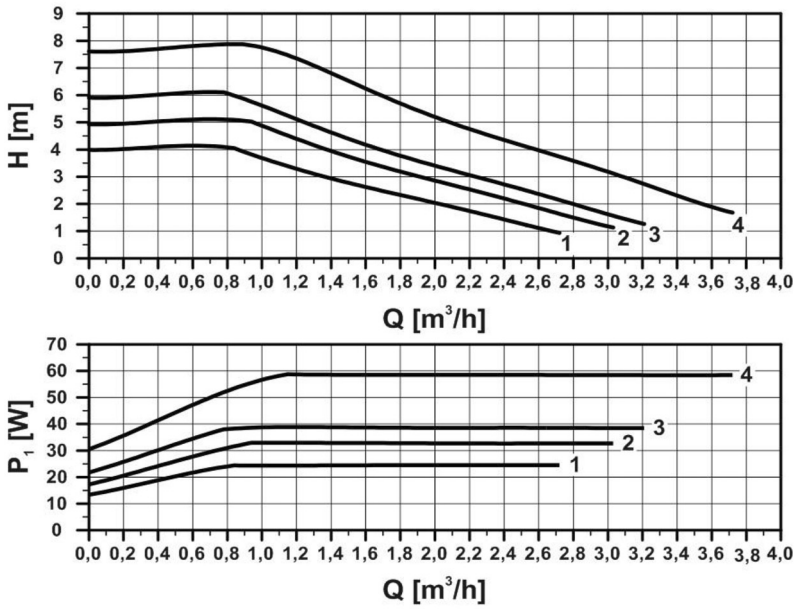


power supply (A)
and signal (B) sockets

power supply (A)
and signal (B) connectors

Pump performance curves

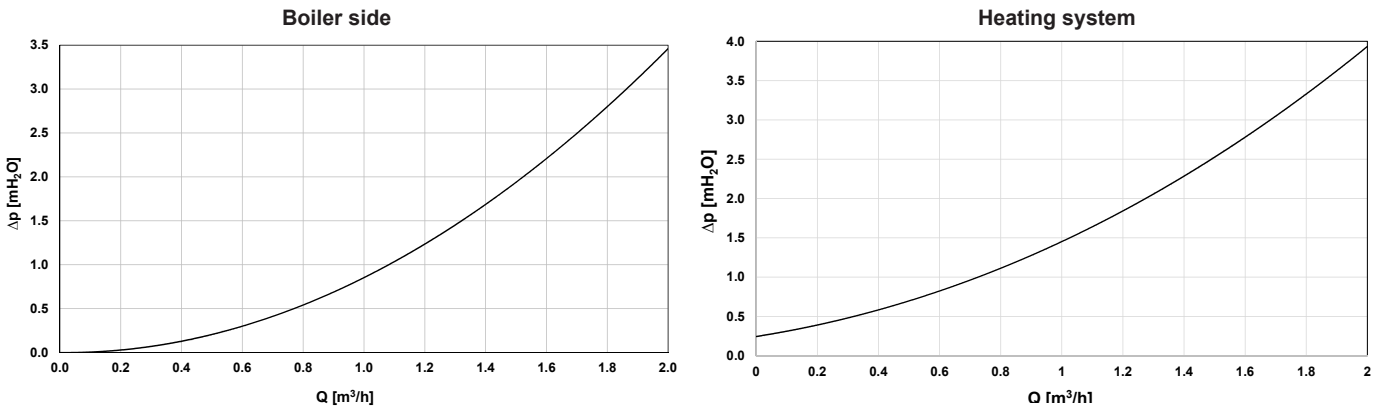
Curve	Max. H (upper graph)	Max. P_1 (lower graph)
1	4.0 m	25 W
2	5.0 m	33 W
3	6.0 m	39 W
4	7.5 m	60 W



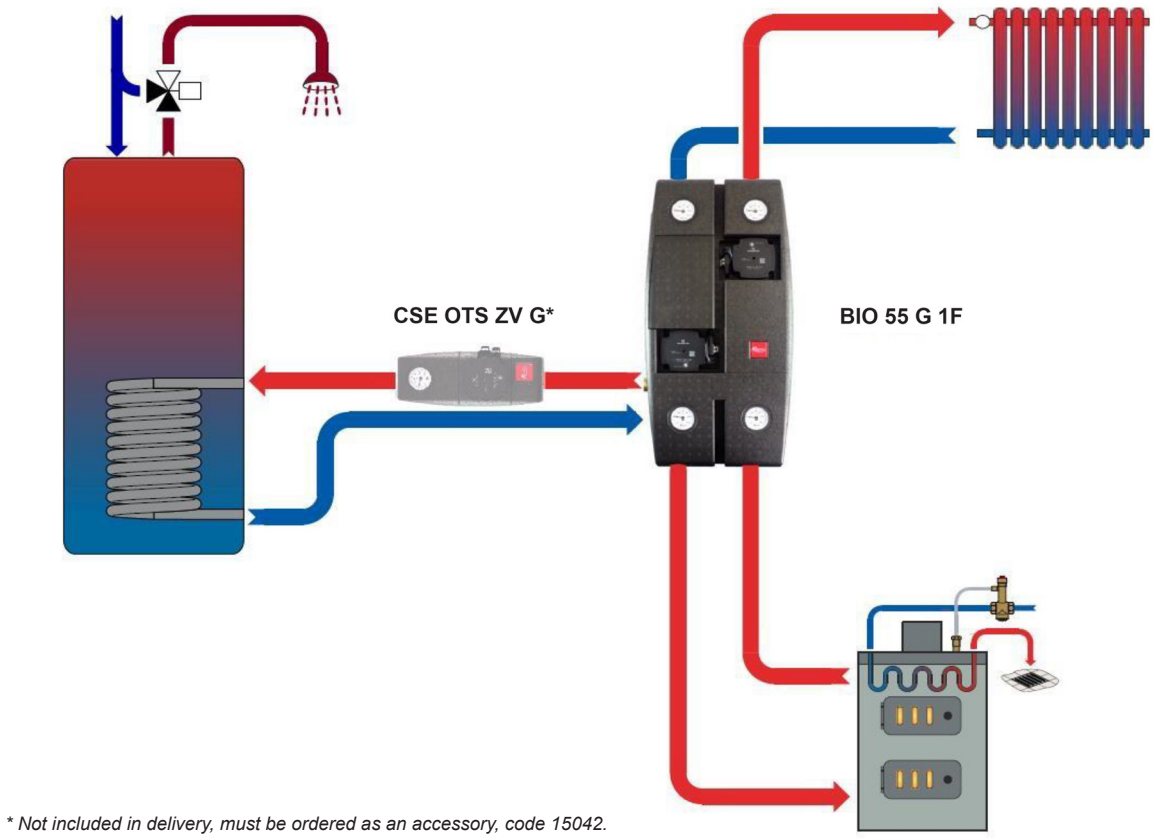
DATA SHEET

BIO 55 G 1F Load Unit

Pump Station Pressure Drop Graph



Connection Diagram



** Not included in delivery, must be ordered as an accessory, code 15042.*