

TECHNICAL BULLETIN

PRODUCT: GB162 MODULATING PUMP GROUP

GB162 MODULATING PUMP GROUP, EuP AND 3RD PARTY PUMP USE FOR SINGLE BOILERS.

What is changing?

With the requirements of the EuP (Energy using Products directive) coming into force on 1st January 2013, the existing three speed pump group 7-114-080 will no longer be sold, although spare parts will still be available for the time being.

The EuP directive requires stand alone circulators to have an Energy Efficiency Index (EEI) of 0.27 after 1st January 2013, meaning that only pumps meeting these requirements will be able to be used when installing a new boiler.

How to comply with the EuP?

By using the GB162 modulating pump group you will be complying with the EuP directive and have the benefit that no additional set up or adjustments are necessary for the pump, since the pump is controlled automatically from the boiler control.

What if I have an existing pump that I want to use?

Only if the existing pump meets the requirements of the EuP and has an EEI of at least 0.27 can it be considered for reuse. Careful consideration should be given however before assuming that an existing pump will be the right choice for the new boiler and that its use will be economical.

To clarify the pump is suitable; please use the data in table 1 to cross reference with the pump manufacturer.

It is important to note that the pump must not exceed a flow rate of 5m³/hr, and the power consumption is no greater than 200 watts as this is the maximum capacity of the GB162.

Restricted height situations

In cases where the boiler room dimensions do not allow a pump group to be installed underneath the boiler, the boiler connection set 7-095-692 must be used with a separate pump meeting the requirements of the EuP. The information supplied in table 1 can be used by a pump manufacturer to select a suitable pump.

Connection set

When using a suitably sized 3rd party pump, the boiler connection set 7-095-692 must be used to make the connection to the boiler, this set includes isolation valves for the flow and return. In addition to this set, a 4 bar PRV, pressure gauge expansion vessel (to BS6644), non-return valve, fill point, drain cock, balancing valve and a flow meter will all be required. We recommend that consideration is given to the economy of buying the necessary separate items and the labour time to set up an independent modulating pump as opposed to buying the pump the group complete.

A power connection plug accessory 7-747-023-983 will be necessary for the pump power connection to the boiler.

Reference should be made to the pump manufacturer's instructions to ensure the modulating pump is correctly set for the duty.

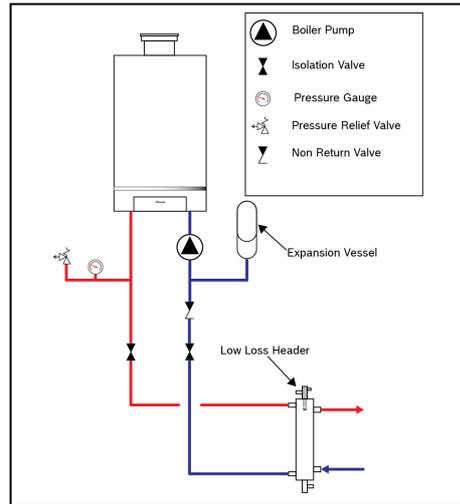


Fig. 1: GB162 Hydraulic Arrangement

GB162 Model	65kW	80kW	100kW
Output @ 50/30	65	84.5	99.5
Flow Rate (L/Hr)	2,795	3,633	4278
Boiler Resistance (mbar)	140	232	315
Isolation Valve* Resistance (mbar)	< 1	< 1	< 1
Check Valve** Resistance (mbar)	< 1	< 1	< 1
Balancing Valve*** Resistance (mbar)	200	40	50

Table 1: Boiler data to assist correct pump sizing

The above table gives some of the information a pump manufacturer will require to be able to correctly size a suitable pump, the boiler flow rate and resistance has been calculated based upon the boiler being used with a system design of 50/30°C as this is when the boiler would reach maximum output. The additional valves within the table are to give an idea of resistance the pump must also overcome; the values are for guidance only. The pump manufacturer may have generic values that can be used for each item that has resistance the pump has to deal with.

*Isolation valve information based on Pegler PB500MF 1½"

**Check valve information based on Spirax LCV1 1½"

***Balancing valve (with flow meter) based on Tacosetter AV23 1½"

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