

FLOW BOX CIRCU Series

Domestic hot water mixing units

Technical Data Sheet



Description

FLOW BOX CIRCU Series units are pre-assembled devices installed at the outlet of the domestic hot water tank. They are designed for recirculation of the return flow of domestic hot water from inlets of sinks or showers with the hot water on the supply line thereby supplying instant hot water immediately upon opening the tap. Thanks to the presence of an **MMV-C Series** mixing valve, it is possible to set the temperature of the mixed water and hold it constant when flowing to the domestic hot water users: taps, showers, etc.



FLOWBOX CIRCU

Pre-assembled domestic hot water mixing and circulation unit complete with anti-scald thermostatic mixer valve, shut-off valve with built-in thermometer, check valves and EPP insulation.

Type	Part No.	Weight (Kg)
FB CIRCU PRO 15-1/65BR	10084639	7.5

Main specifications

Maximum operating pressure	10 bar
Maximum operating temperature	85°C

Pump characteristics

Power supply	200 – 240 Vac
Frequency	50/60 Hz
Power rating	2 – 27 W
IP	44
Degree of protection	I

Thermostatic valve features

Maximum static pressure	10 bar
Operating pressure	0.2-5 bar
Recommended max. differential pressure	1 bar
Hot water inlet	52÷85°C
Cold water inlet	5÷20°C
Mixing temperature range	30÷65°C
Minimum temperature differential between hot water inlet and mixed water outlet	10°C

Application and operation

The units are used in systems where hot water needs to be instantly available on demand, and where the flow temperature of the domestic hot water to the various users needs to be kept constant.

As shown in the figure, the flow line from the storage tank is connected to the inlet valve on the mixing valve branch.

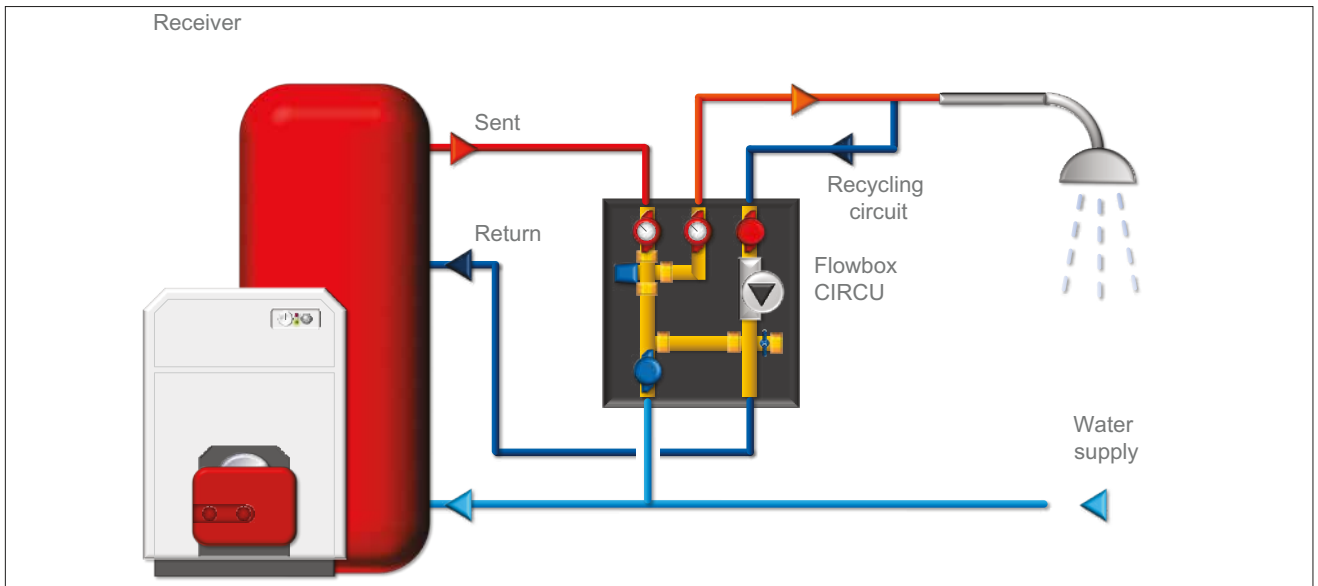
The mixed water outlet should be connected to the supply line of the domestic hot water circuit.

The ratio between the pressure differential of the hot water inlet and the mixed water outlet as well as that between the cold water inlet and mixed water outlet should be 5:1 at the most.

The recirculated water return circuit should be connected to the inlet of the pump suction line. If any hot water is consumed, the pump sends the recirculation water to the mixing valve cold water supply line or to the tank. The lower part of the unit is also provided with the connection for domestic cold water supplied by the mains.

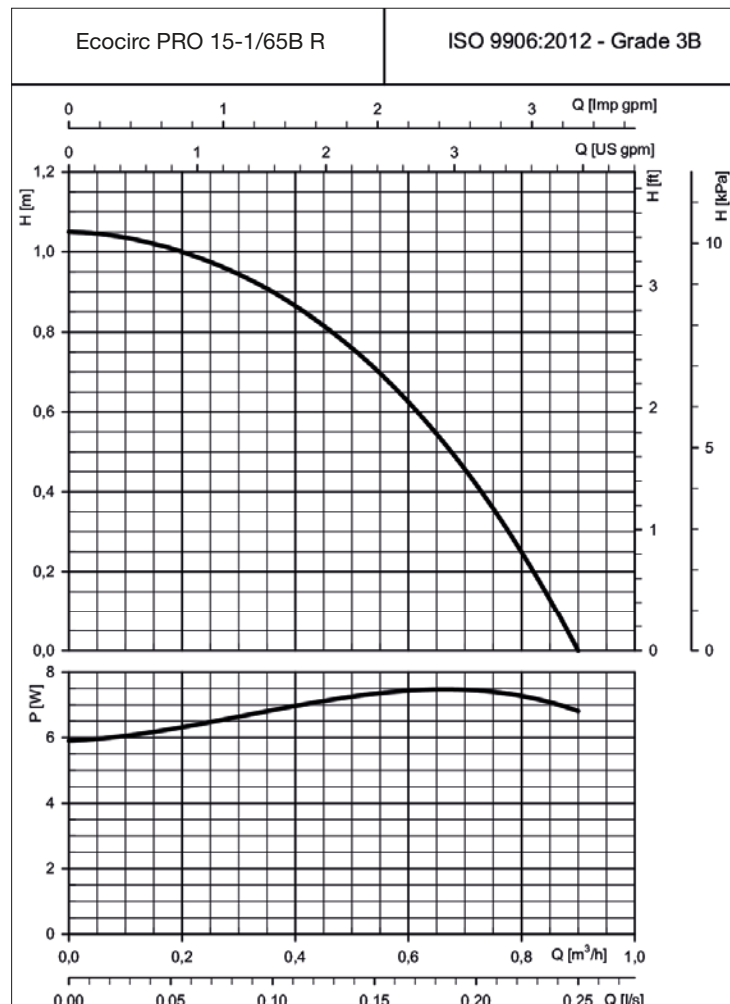
The pump temperature sensor limits operation of the pump stopping it when reaching the temperature set by the selector switch on the pump body. Thanks to a control timer, the system allows energy to be saved by preventing the pump from working continuously.

Installation diagram

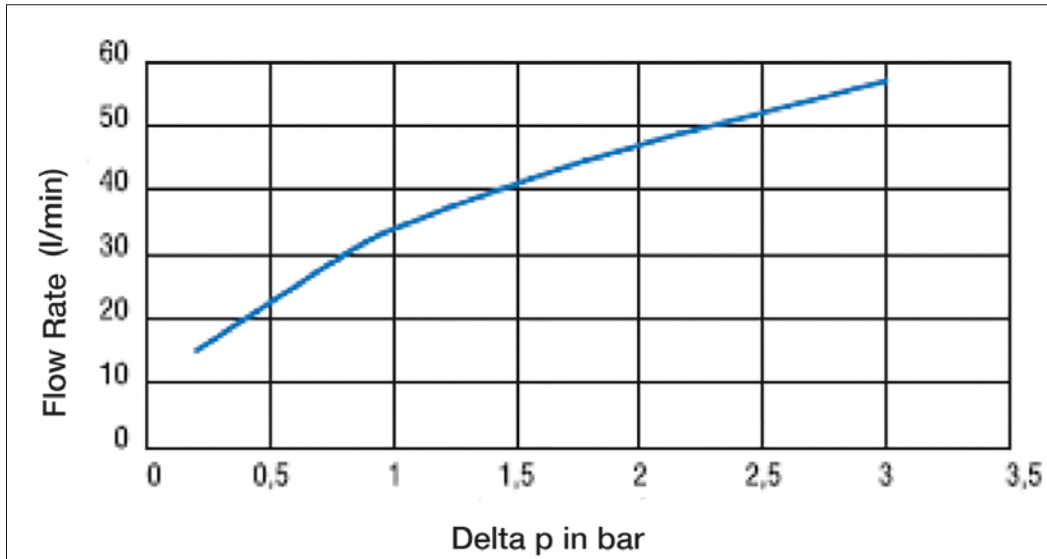


Charts

The following chart plots the pressure drops against the flow rates of the circulation device installed in the unit.

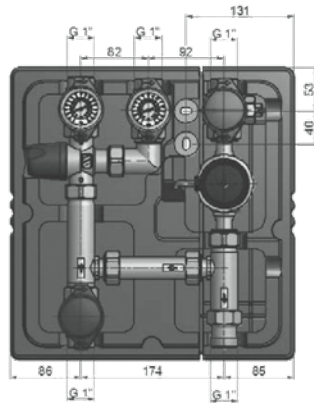


Also given is the flow rate curve of the mixing valve with the hot water and cold water inlets when balanced.



Overall dimensions (mm)

FLOWBOX CIRCU



Specification text

FLOW BOX CIRCU Series

Pre-assembled domestic hot water mixing and circulation unit **FLOW BOX CIRCU Series** – WATTS brand – complete with anti-scald thermostatic mixer valve, shut-off valve with built-in thermometer, check valves and EPP insulation. 1" connection.

The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding.

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