ModvBox

MODULAR MULTI-ZONE DISTRIBUTION BOX FOR WALL-MOUNTED GAS BOILERS

Code without insulation box: **402554-04M-HW**
Code with insulation box: **402554ISO-04M-HW**

Modular multi-zone distribution box for wall-mounted gas boilers. The extremely compact construction allows up to three circuits to be hydraulically connected in a total width of just 450 mm.
The primary circuit towards the boiler includes 2 shut-off valves 1" male, distribution manifold with integrated hydraulic separator for powers up to 50 kW. The separator allows the primary circuit to be hydraulically disconnected from the secondary circuit and allows greater volumetric circulation of the heat transfer fluid in use with respect to what circulates in the boiler. At the same time the return temperature in the boiler is reduced, thus guaranteeing an increase in the efficiency of the plant. Air vent valve and deaeration chamber. IP55 junction box to facilitate electrical wiring. The distribution box, white RAL 9010 powder coated, can be installed on the wall, recessed or inside a hanging cupboard.

For heating with wall-mounted gas boiler

In photo, an example of configuration with pump units, unmixed, mixed motorized and mixed fixed point, with and without insulation box.

Technical features

- Max flow rate in primary circuit up to 2 m^3/h;
- Primary circuit connections: 1" male; center distance 270 mm;
- Dimensions: (LxDxH) 450x160x550 mm;
- Internal insulation box in EPP (where provided);
- Max power: 50 kW – Max 6 bar;
- Pressure drop separator: 0.2 mH_2O at the flow rate of 2000 l/h;
- Pressure drop distribution manifold (low loss header): 0.3 mH_2O at the flow rate of 1500 l/h for each circuit.

The modular system allows to choose between three types of pump units:

- **Unmixed**
- **Mixed motorized**
- **Mixed fixed point**

The pump units, with 70 mm center distance and 3/4" female connection in use, can be connected to the distribution manifold at will, by number and position among those available, thus creating a configuration that is always appropriate to the context. Each zone is supplied with a **Wilo Para 15-130/6 SC** circulating pump (other heads available on request). Each pump unit, in addition to the circulating pump, is equipped with a DN20 shut-off valve for both the supply and return, 0°C-120°C thermometer and non-return valve which can be excluded in case of system maintenance. Each valve has a probe holder if the boiler electronics requires it.

Unmixed circuit

Nominal power of 35 kW (with ΔT=20 K)
at the flow rate of 1500 l/h
(residual head 3.5 mH_2O)
Kvs value: 6.0
Centre distance 70 mm
PN 10, max temperature 95°C
3/4" female connections

CE

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402554-P6

Mixed motorized circuit

Nominal power of 30 kW (with ΔT=20 K)
at the flow rate of 1300 l/h
(residual head 3.5 mH_2O)
Kvs value: 4.0
230V 3-point servomotor, 105 s;
proportional 0-10V on request.
Centre distance 70 mm
PN 10, max temperature 95°C
3/4" female connections

CE

Code:
402554-M3-P6-TRM

Mixed fixed point circuit

Nominal power of 25 kW (with ΔT=20 K)
at the flow rate of 1100 l/h
(residual head 3.5 mH_2O)
Kvs value: 3.0
Temperature adjustable from 20°C to 45°C; other temperatures on request.
Centre distance 70 mm
PN 10, max temperature 95°C
3/4" female connections

CE

Code:
402554-F3-P6