

Commissioning centre

a cost-effective method for central control



Overview

HERZ commissioning centres provide a cost-effective method for the central control of building services consumers.

Modern system designers are always looking for cost-effective ways to improve commissioning and the to maximize efficiency. Valve manufacturers have developed various products over the years aimed at improving energy efficiency and saving on installation costs. Entrepreneurs have also used various prefabrication methods in tenders to reduce assembly and commissioning costs.

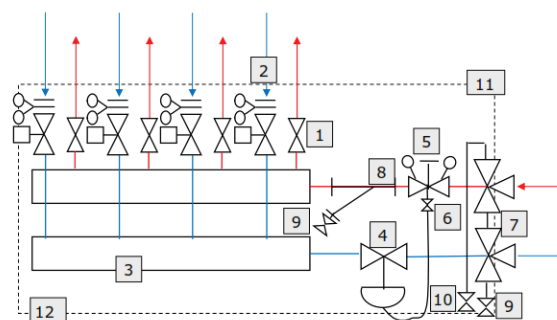
With today's focus on energy conservation, designers are trying to keep costs to a minimum by using variable volume heating and cooling systems. The use of dynamic control valves such as pressure independent control and balancing valves and differential pressure controllers ensures that these requirements are met and flow rates are constantly controlled as required by modern room temperature control systems.

The BG 12/2011 guideline for energy-efficient pumping systems from the British testing and certification institute Building Services Research and Information Association (BSRIA) clearly points out that when using pressure-independent control and regulating valves (differential-pressure-independent combi valve volume flow controller) on building services consumers in systems with variable flow rates, significant energy savings are possible. The guide also emphasizes the importance of using differential pressure controllers in branches when static control and balancing valves are used on building services equipment and that energy savings in systems with variable flow rates can be greatly increased by placing the differential pressure controllers as close as possible to the control valves of the building services consumers they serve. The guide also recommends the use of pre-engineered assemblies that are close to the service control valves and ensure that a constant pressure differential is maintained across all service branch lines.



The HERZ commissioning centre was designed to have a central point for the commissioning of several consumers, e.g. fan convectors, cooling surfaces, etc. suitable for heating and cooling water. All installed valves are HERZ standard products, so that quality and reliability are guaranteed.

Variants are available with manual balancing valves or thermostatic control valves with a fixed measuring orifice or pressure-independent control valves (PICV) that regulate the consumer circuits. A differential pressure controller is built into the primary side of the commissioning center and ensures a constant differential pressure across the individual consumers. The commissioning centre is delivered in a diffusion-tight insulated steel box and can be used for cooling systems. The box is available with left or right connection.

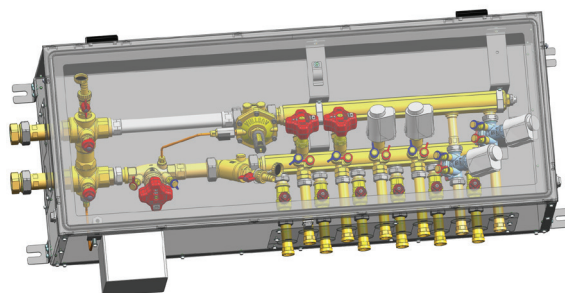
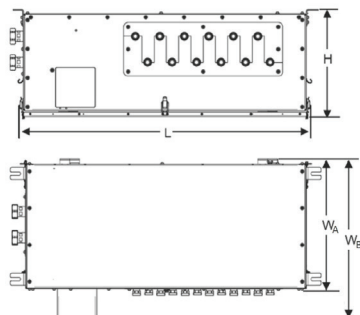


Nr.	Part	Number
1	Ball valve	2190
2	Balancing valve	4017
2	Control and regulation valve	7217 V
2	PICV	4006 SMART
3	Distributor	N/A
4	Differential pressure controller	4002
4	Differential pressure controller with integrated zone valve	4002 FIX-TS
4	Metering orifice	4000
5	Balancing valve	4217
6	Ball valve for impulse line	4007-78
7	3-way ball valve	2414
8	Mud flaps	4111
9	Drain valve	2512
10	Vent valve	N/A
11	Box	N/A
12	Insulation	N/A

Position 2, 4 & 5 are options depending on the one used variant.

☑ Dimensions

The commissioning center has isolating valves in all flow connections and regulating / control valves in all return connections with a strainer attached to the main flow inlet. A drain valve is mounted on the strainer to allow the strainer basket to be cleaned in the field without the need to disassemble the strainer basket. 3-way ball valves allow rinsing and separation processes to be carried out. The commissioning center also has quick vent valves.



	4-way	6-way
L	913	1073
H	300	300
W_A	430	430
W_B	524	524

☑ HERZ differential pressure control valves

HERZ differential pressure controller **4002** is positioned above the distributor and dimensioned according to the requirements of the system, available up to 150 kPa and continuously adjustable.

The HERZ **4002 FIX-TS** combination valve is a differential pressure controller with a fixed differential pressure, preset to 23 kPa. The permanently set differential pressure control valve has an integrated actuator for 2-point drives and can therefore be used as a zone valve.

4002 FIX-TS



4002



4017



4006



☑ HERZ control and regulating valves

HERZ **7217-V** control and regulation valve with fixed metering orifice. The combined control valve can be equipped with 2-point and modular drives. The valve is ideal for fan coil units and other consumers that provide the control function and also flow regulation with high accuracy and good repeatability. The valve is also available in a low flow version. The HERZ **4017** double regulating and commissioning valve with fixed measuring orifice. The control valve has a control and blocking function with high accuracy and good repeatability. The valve is also available in a low flow version.

☑ HERZ Pressure-independent control valves (PICV)

The HERZ **4006 SMART** valve is a pressure-independent control and regulation valve (differential-pressure-independent combination valve volume flow controller) that is specially designed for the regulation of low flow rates that are used in modern systems today, in order to achieve high temperature differences between flow and return lines. Because valve flow is pressure independent and unaffected by increasing pressure differential, it has 100% valve authority. The DN 15 LF valve has a minimum flow rate of 0.0056 kg/s (20 kg/h).

NOTE: further details on the commissioning centres can be found in the corresponding technical data sheets.

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Weil's ohne  nicht geht

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