

Direct supply unit for Sepcoll 559 series



163 series



cert. n° 0003
ISO 9001

01128/05 GB



Function

The direct supply unit supplies the circuits of the high-temperature heating system or air-conditioning system directly from the outlets of a hydraulic separator/manifold.

This unit has been specifically designed for use with both the external and concealed versions of the separator/distribution manifolds 559 series.

The unit is supplied complete with pre-formed insulation shells, three-speed pump, differential by-pass valve, flow and return temperature gauges on secondary circuit and pressure gauge on the primary inlet, shut-off valves on secondary circuit.

Product range

163620 code Direct supply unit for Sepcoll. Upward flow, right side flow _____ Size 1"
163630 code Direct supply unit for Sepcoll. Upward flow, left side flow _____ Size 1"

Technical specifications

By-pass

Materials: - body: brass EN 1982 CB753S
- spring: stainless steel
- obturator: EPDM
- seals: EPDM

Shut-off valves

Materials: - body: brass EN 12165 CW617N
- seals: EPDM

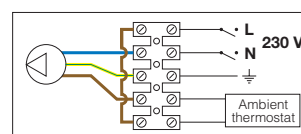
Connecting pipes

Materials: - body: brass EN 12165 CW617N
- seals: non-asbestos fibre

Performance

Medium: water, glycol solutions
Max. percentage of glycol: 30%
Max. inlet temperature on primary: 100°C
Max. working pressure: 10 bar
By-pass setting range: 10-60 kPa (1-6 m w.g.)
Temperature gauge scale: 0-80°C
Pressure gauge scale: 10 bar
Connections: - primary circuit: 1" F with union
- secondary circuit: 1" F
- connection centre distance: 90 mm

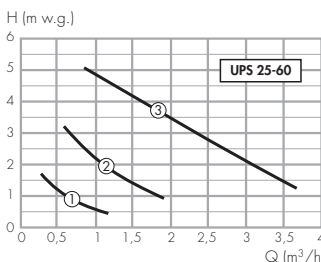
Wiring diagram



Pump

Three-speed pump: model UPS 25/60
Material: - body: cast iron GG 15/20
Electric supply: 230 V - 50 Hz
Max. ambient humidity: 95%
Max. ambient temperature: 80°C
Protection class: IP 44
Pump centre distance: 130 mm
Pump connections: 1 1/2" with union

Head available at the unit connections



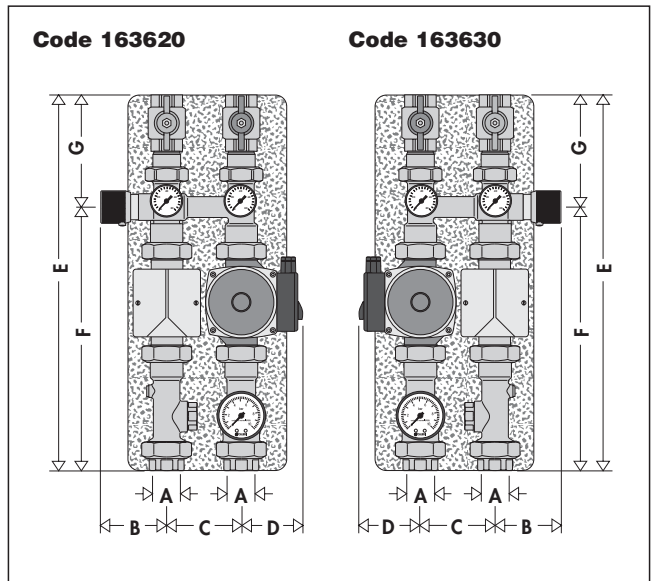
Power consumption

Speed	I (A)	P (W)	n (r.p.m.)
3	0,40	90	1800
2	0,30	65	1100
1	0,20	45	700

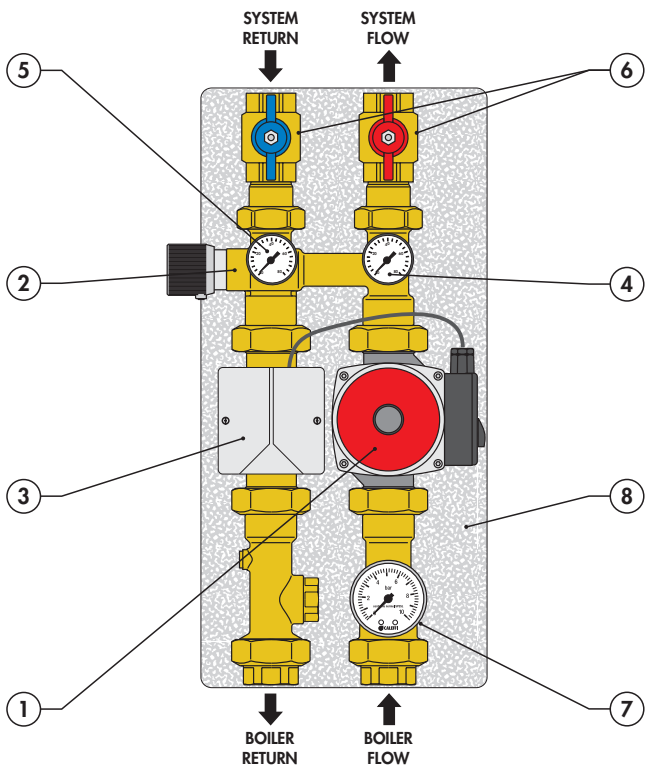
Insulation technical specifications

Material:	closed cell expanded PEX
Thickness:	20 mm
Density:	- inner part 30 Kg/m ³ - outer part 50 Kg/m ³
Thermal conductivity (DIN 52612):	- at 0°C 0,038 W/(m·K) - at 40°C 0,045 W/(m·K)
Coefficient of resistance to the diffusion of vapour (DIN 52615):	> 1.300
Temperature range:	0-100°C
Reaction to fire (DIN 4102):	B2 class

Dimensions



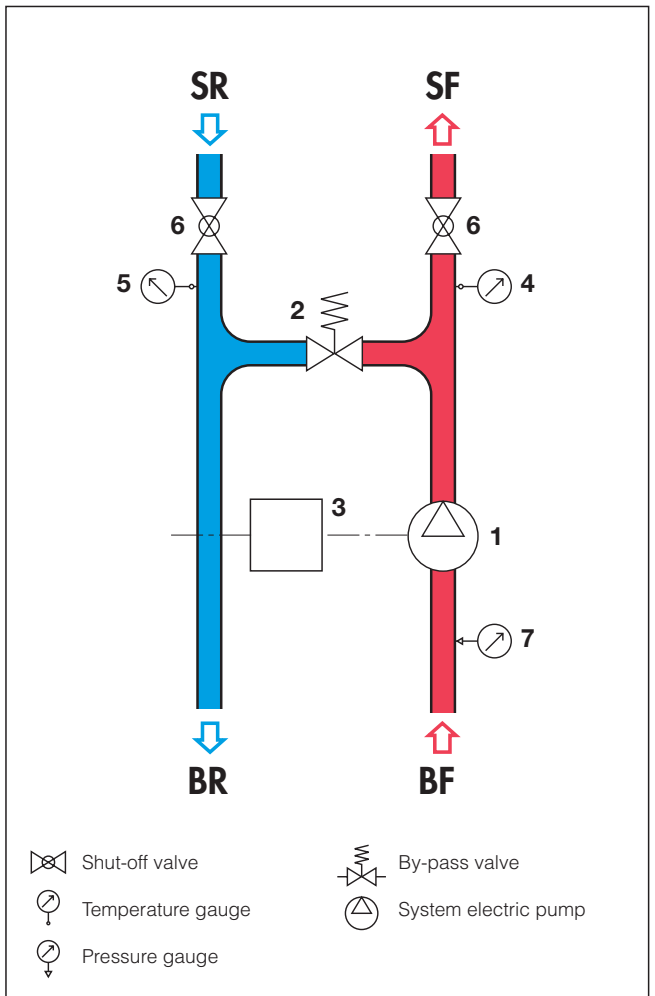
Code	A	B	C	D	E	F	G	Weight (kg)
163620	1"	95	90	77	460	320	140	7,5
163630	1"	95	90	77	460	320	140	7,5



Characteristic components

- 1 Three-speed pump UPS 25-60
- 2 Differential by-pass valve
- 3 Wiring box
- 4 Secondary flow temperature gauge
- 5 Secondary return temperature gauge
- 6 Secondary circuit shut-off valves
- 7 Pressure gauge
- 8 Insulation

Hydraulic diagram

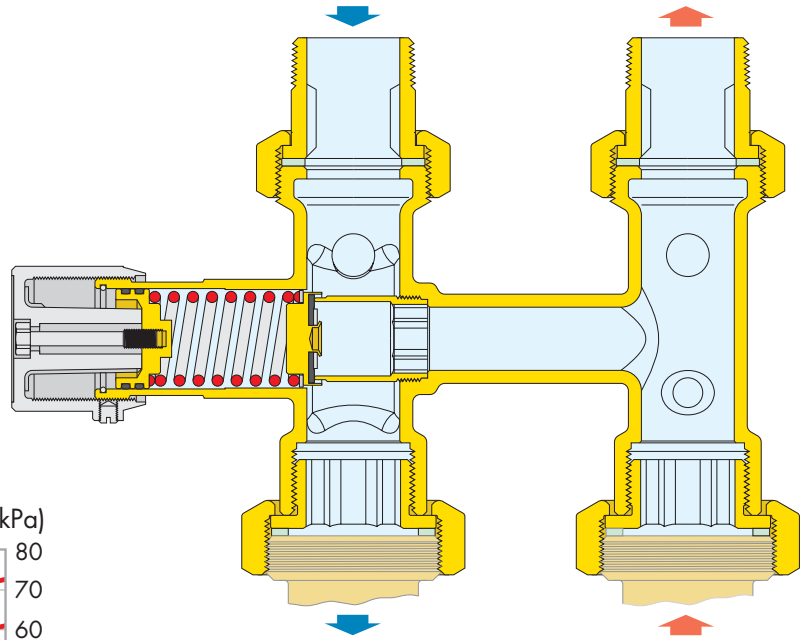


- Shut-off valve
- By-pass valve
- Temperature gauge
- System electric pump
- Pressure gauge

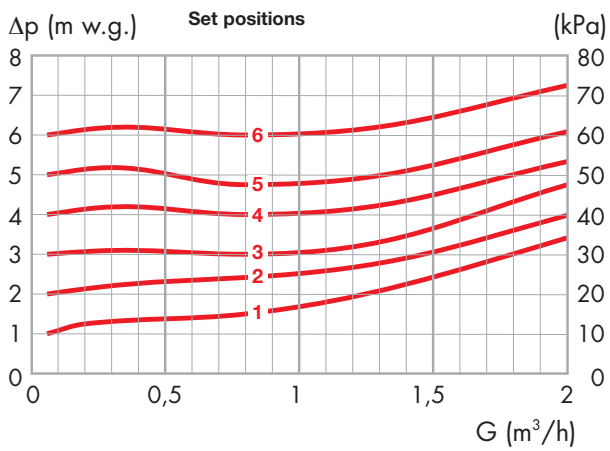
Differential by-pass

The differential by-pass valve is used to control the total head in the secondary supply circuit. When the set differential pressure value is reached, the obturator opens and allows fluid to pass from the flow to the return circuit, keeping the pressure differential at the set value.

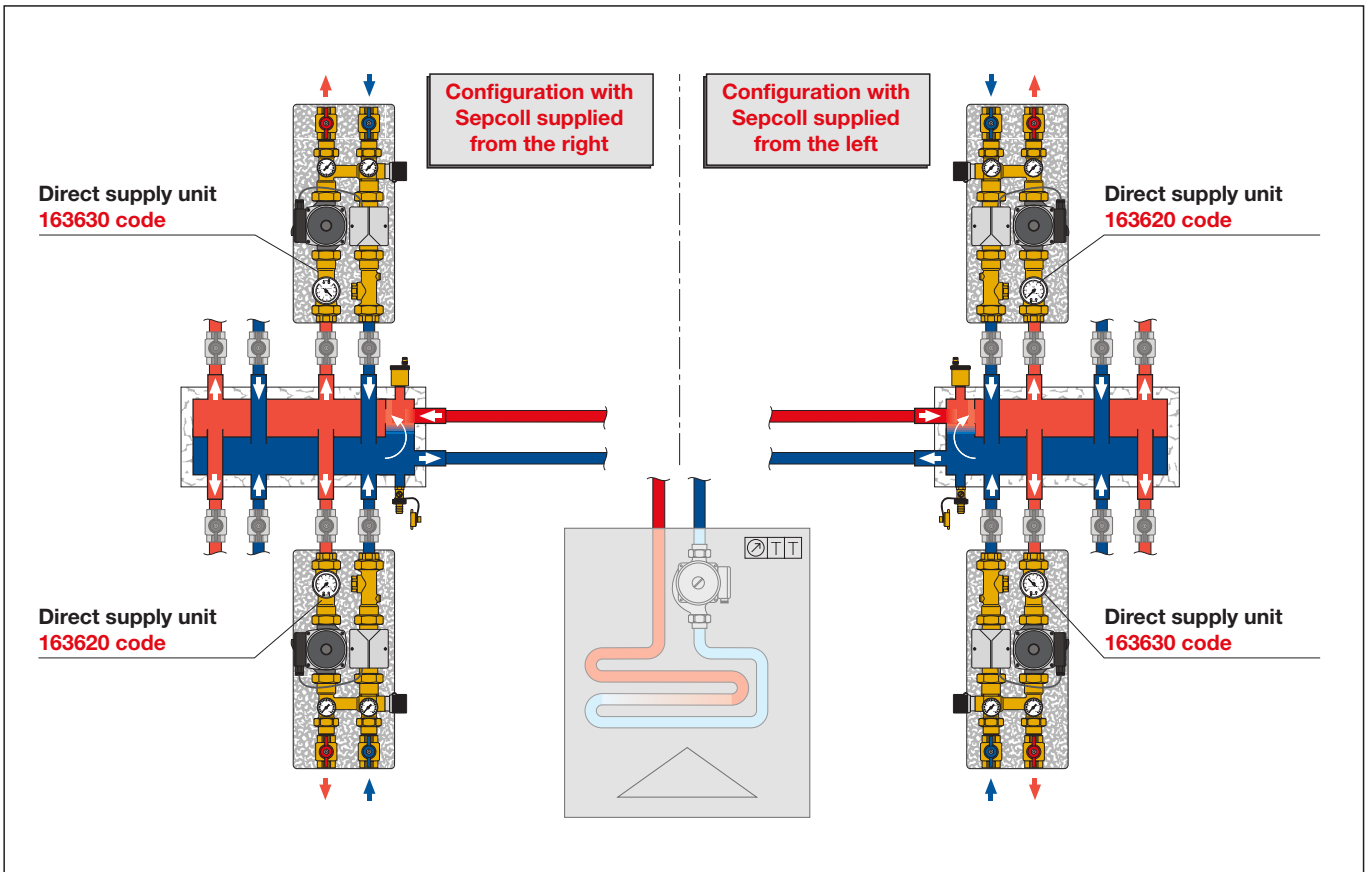
If the individual circuits are shut off by automatic two-way on/off modulating or thermostatic valves, the valve prevents overheating of the pump and excessive velocity of the fluid.



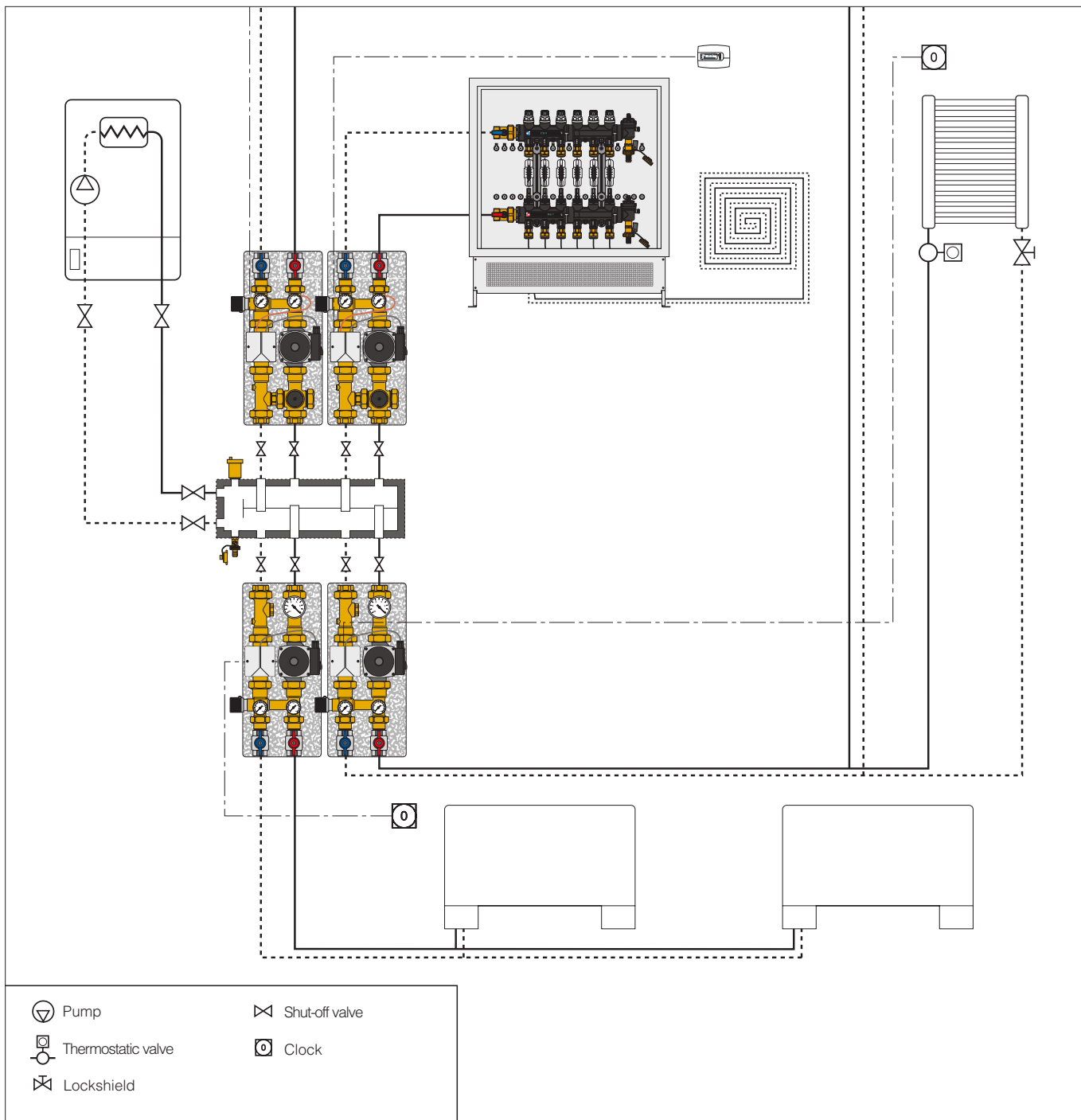
By-pass hydraulic characteristics



Installation



Application diagram



SPECIFICATION SUMMARIES

163620 / 163630 codes

Direct supply unit for Sepcoll 559 series. Configuration with upward flow and right side flow (or left side flow). 1" F union connections on primary circuit. 1" F connections on secondary circuit. Centre distance between primary and secondary circuit connections: 90 mm. Maximum temperature at inlet of primary circuit: 100°C. Maximum working pressure: 10 bar. Complete with: UPS 25-60 three-speed pump, 230 V - 50 Hz power supply, maximum ambient temperature: 80°C, protection class: IP 44; temperature gauge scale: 0-80°C; pressure gauge: 0-10 bar; differential by-pass valve, brass body, stainless steel spring, setting range: 10-60 kPa; shut-off valves on secondary circuit. With pre-formed insulation shells in closed cell expanded PEX.

We reserve the right to change our products and their relevant technical data, contained in this publication, at any time and without prior notice.

