

# Direct supply unit for heating and air conditioning systems



01255/17 GB

replaces dp 01255/14 GB

## 165... WYP - 165... UPM series



### Function

The direct supply unit performs the function of **supplying the circuits of heating systems at high temperature or air conditioning systems.**

Complete with high efficiency electronic pump, flow and return temperature gauges on secondary circuit, secondary circuit shut-off valves, pre-formed shell insulation suitable for heating and air conditioning. This unit can be coupled to the SEPCOLL 559 series separator/distribution manifold with 125 mm centre distance connections.



### Product range

#### Upward flow, flow on RH side Downward flow, flow on LH side

Code 165640WYP Direct supply unit for heating and air conditioning systems.  
With Yonos Para 25/6 pump. Centre distance 125 mm. \_\_\_\_\_ size DN 25 (1")

Code 165641UPM Direct supply unit for heating and air conditioning systems.  
With UPML 25-95 pump. Centre distance 125 mm. \_\_\_\_\_ size DN 25 (1")

#### Upward flow, flow on LH side Downward flow, flow on RH side

Code 165650WYP Direct supply unit for heating and air conditioning systems.  
With Yonos Para 25/6 pump. Centre distance 125 mm \_\_\_\_\_ size DN 25 (1")

Code 165651UPM Direct supply unit for heating and air conditioning systems.  
With UPML 25-95 pump. Centre distance 125 mm. \_\_\_\_\_ size DN 25 (1")

### Technical specifications

#### Materials

##### Connecting pipes

Material: Fe 360 steel

##### Check valve

Body: brass EN 12164 CW614N  
Obturator: PPAG40

##### Shut-off valves

Body: brass EN 12165 CW617N

#### Performance

Medium: water, glycol solutions  
Maximum percentage of glycol: 30%  
Maximum working pressure: 1000 kPa (10 bar)  
Minimum working pressure: 80 kPa (0,8 bar)  
Primary inlet working temperature range: 5–100°C  
Connections: - system side: 1" F (ISO 228-1)  
- boiler side: 1 1/2" M (ISO 228-1)  
- connections centre distance: 125 mm

#### Insulation

Material: closed cell expanded PE-X  
Density: - internal part 30 kg/m<sup>3</sup>  
- external part 50 kg/m<sup>3</sup>  
Thermal conductivity (DIN 52612): - at 0°C, 0,038 W/(m·K)  
- at 40°C, 0,045 W/(m·K)

Coefficient of resistance to water vapour diffusion (DIN 52615): >1300  
Working temperature range: 0–100°C  
Reaction to fire (DIN 4102): class B2

#### Pump

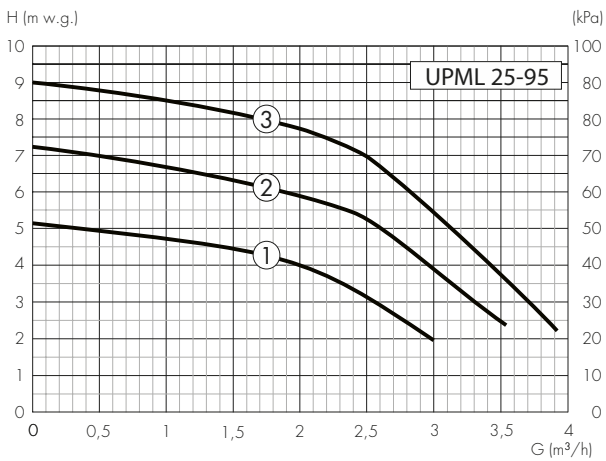
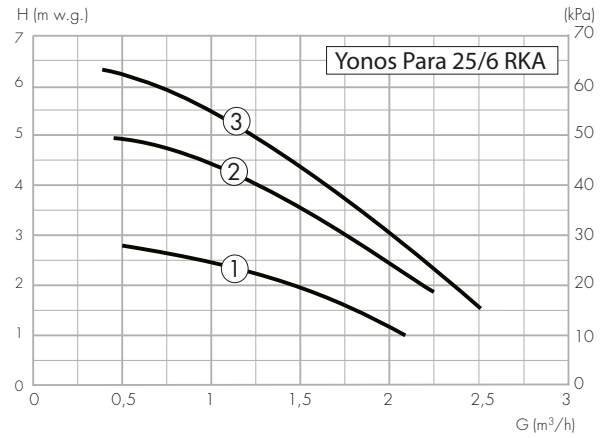
High efficiency pump:  
- code 165...WYP WILO YONOS PARA 25/6 RKA  
- code 165...UPM Grundfos UPML 25-95  
Body: cast iron  
Electric supply: 230 V - 50/60 Hz  
Max. ambient humidity/temperature: see specific instruction sheet  
Protection class: - YONOS PARA 25/6 RKA IPX4D  
- UPML 25-95 IPX2D  
Pump centre distance: 130 mm  
Pump connections: 1 1/2" (ISO 228-1) with nut

#### Temperature gauges

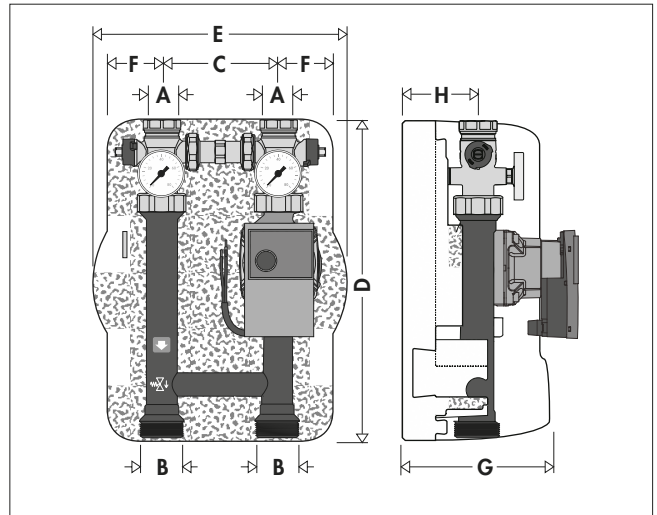
Double scale: 0–80°C (32–176°F)

### Head available at the unit connections

Test performed with constant pressure control



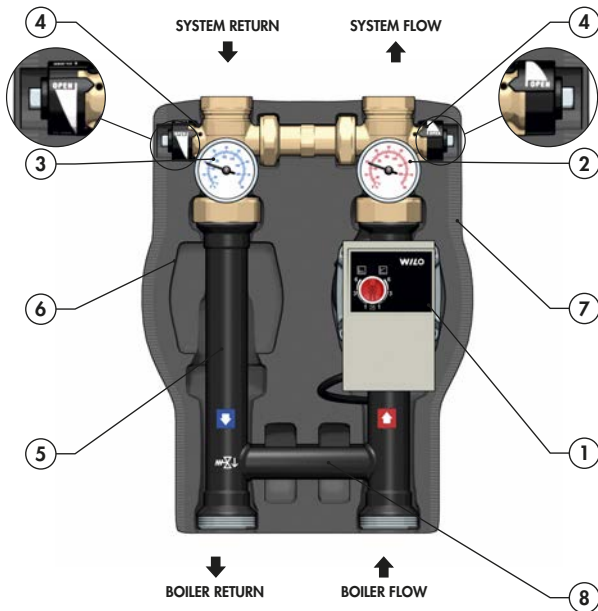
### Dimensions



Codice	DN	A	B	C	D	E	F	G	H	Massa (kg)
1656.0 WYP	25	1"	1 1/2"	125	380	255	55	145	35	6,0
1656.1 UPM	25	1"	1 1/2"	125	360	235	55	145	35	7,0

### Note:

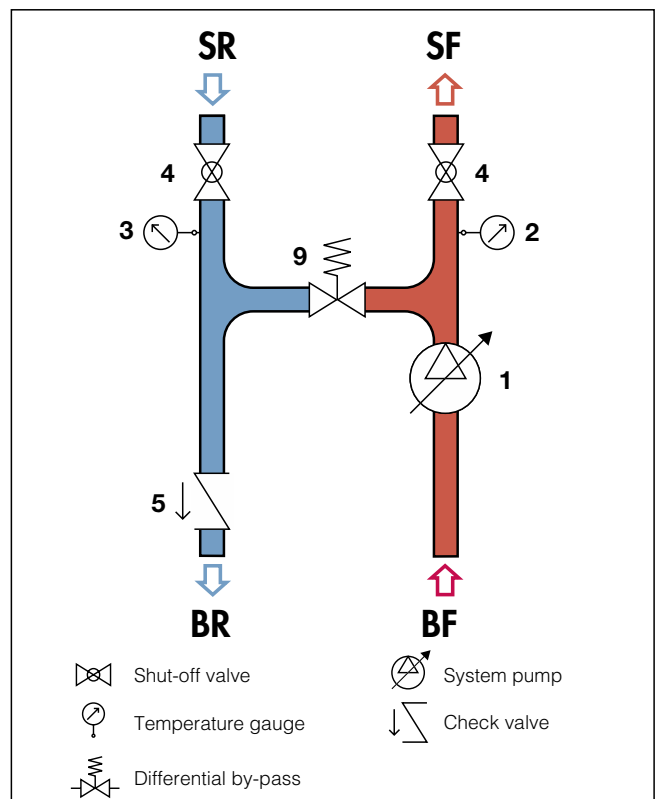
The pumps can operate with constant or proportional pressure control, which adapts the performance to the system requirements. For further details, see the installation instruction sheet of the pumps supplied in the package.



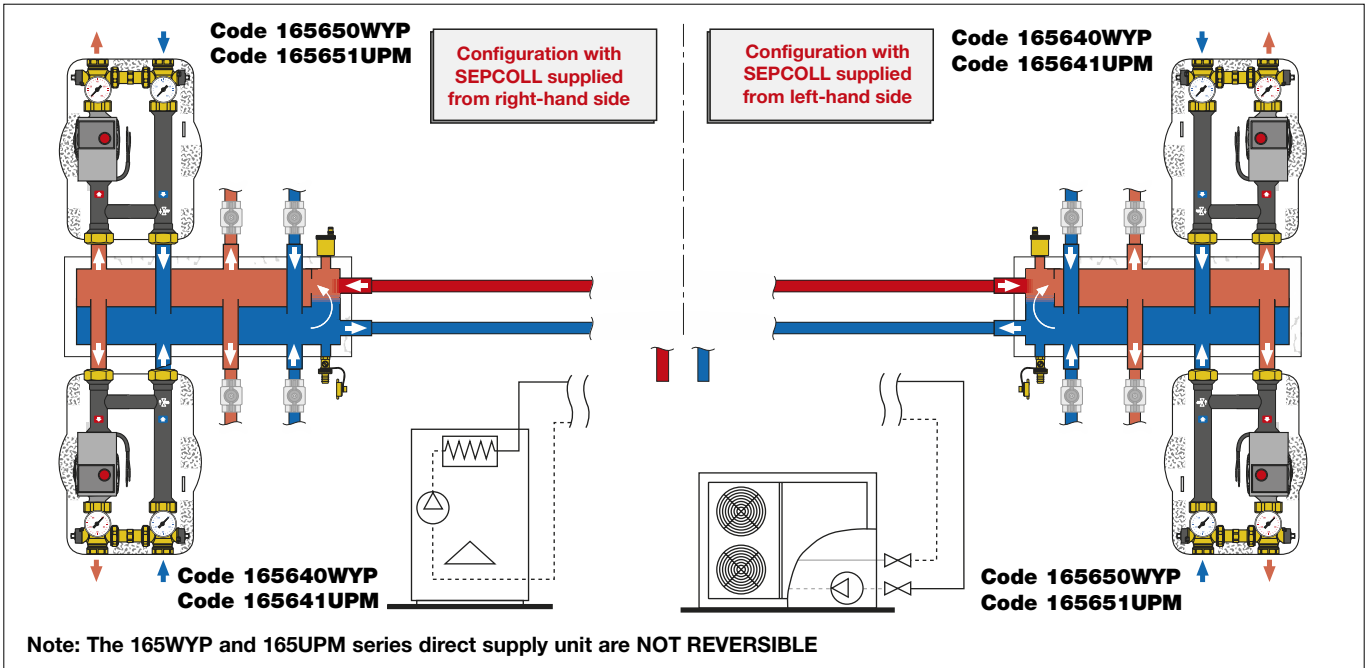
### Characteristic components

- 1 High-efficiency pump WILO YONOS PARA 25/6 RKA or Grundfos UPML 25-95 pump
- 2 Flow temperature gauge
- 3 Return temperature gauge
- 4 Secondary circuit shut-off valves
- 5 Connecting pipe (with check valve)
- 6 Operating spanner for shut-off valves on secondary circuit
- 7 Insulation
- 8 Structural element (spacer)
- 9 Optional differential by-pass (see tech. broch. 01237)

### Hydraulic diagram



## Installation



## Accessories



**559331**  
**SEPCOLL 3+1.**

Hydraulic separator-manifold for heating and air conditioning systems.

Centre distance: 125 mm.

Steel body, PN 6.

With insulation.

1 1/4" F main connections.

1 1/2" outlet connections with captive nut:

three at the top and one at the bottom (can be inverted).

Working temperature range: 0–100°C.

Complete with mounting brackets.

**Maximum recommended flow rates at inlets to SEPCOLL 559 series separator**

Outlets	Primary	Secondary (total)
2	2 m <sup>3</sup> /h	5 m <sup>3</sup> /h
3+1	2,5 m <sup>3</sup> /h	6 m <sup>3</sup> /h



**559320**  
**SEPCOLL 2.**

Hydraulic separator-manifold for heating and air conditioning systems.

Steel body, PN 6.

With insulation.

1" F main connections. Outlet connections: two 1 1/2" connections at top with captive nut.

Working temperature range: 0–100°C.

Complete with mounting brackets.

### Connection union

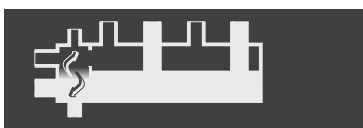
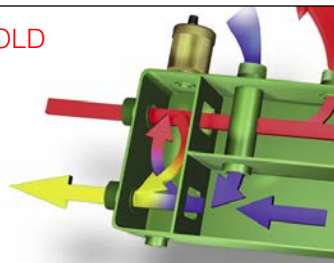


**165002**

Female union with captive nut, complete with seal for 165, 166 and 167 series units.

Connections: 1 1/2" F with captive nut x 1" F.

### SEPARATOR + MANIFOLD



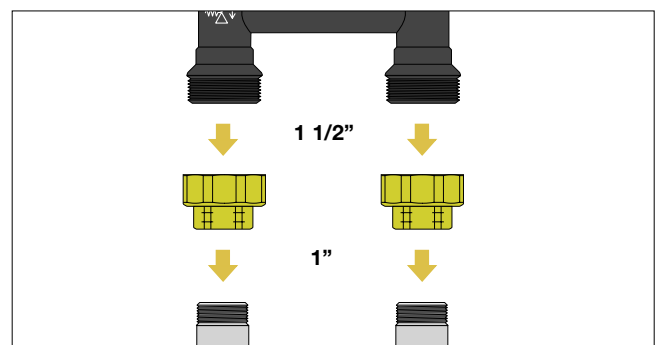
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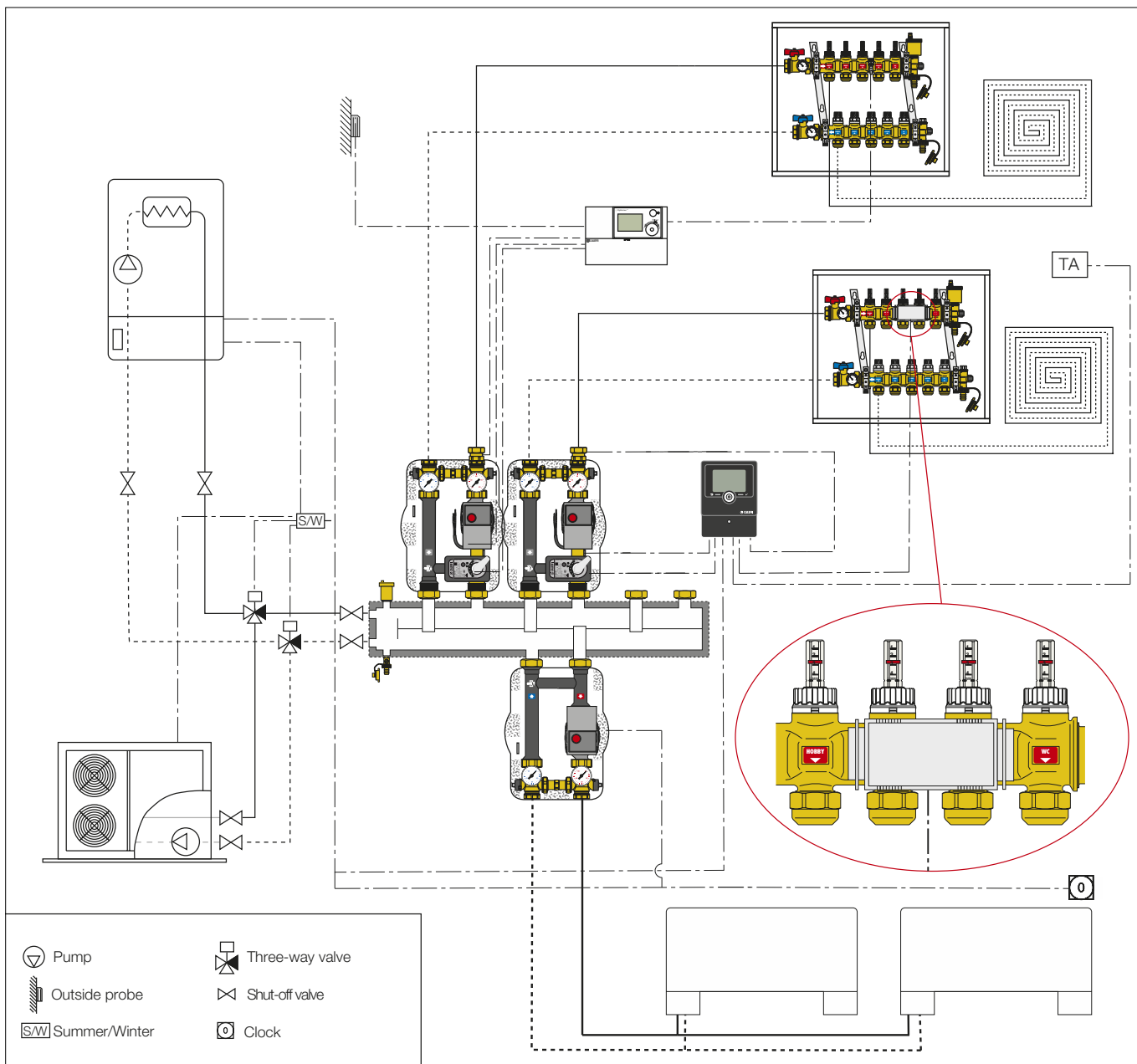
### Installation example

The union with captive nut allows installation of the 165 series unit on any 1" M pipe.



For further information about available accessories, see tech broch. 01237

## Application diagrams



## SPECIFICATION SUMMARY

### 165... WYP - 165... UPM series

Direct supply unit for heating and air conditioning systems, can be coupled to SEPCOLL 559 series. Configuration with upward flow and flow on RH side (or upward flow and flow on LH side). Connections to primary circuit 1 1/2" M (ISO 228-1). Connections to secondary circuit 1" F (ISO 228-1). Connection centre distance 125 mm. Primary inlet working temperature range 5–100°C. Maximum working pressure 1000 kPa (10 bar). Minimum working pressure 80 kPa (0,80 bar). Complete with: YONOS PARA 25/6 RKA (UPML 25-95) high efficiency pump, protection class IPX4D (UPML 29-95 IPX2D). Temperature gauges with double scale 0–80°C (32–176°F). Secondary circuit shut-off valves. Connection pipe in Fe 360 steel. Check valve with brass body, obturator in PPAG40. With pre-formed shell insulation in closed-cell expanded PEX for heating and air conditioning applications.

### Code 165002

Female union with captive nut, complete with seal. Connections 1 1/2" F x 1" F (ISO 228-1).

### Code 165006

Pair of offset tailpieces. 1 1/2" F x 1" F connections (ISO 228-1) with captive nut. Centre distance 105–145 mm.

*We reserve the right to make changes and improvements to the products and related data in this publication, at any time and without prior notice.*