

# Manual for Installation and Operation

**DTS NO.: 800689**

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- 1) System Integration/Fluid connection
- 2) Mounting housing and hoses
- 3) Filling Instructions
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- 5) Operation

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## **! Note !**

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**Make sure that the right source is connected to the defined connection!**

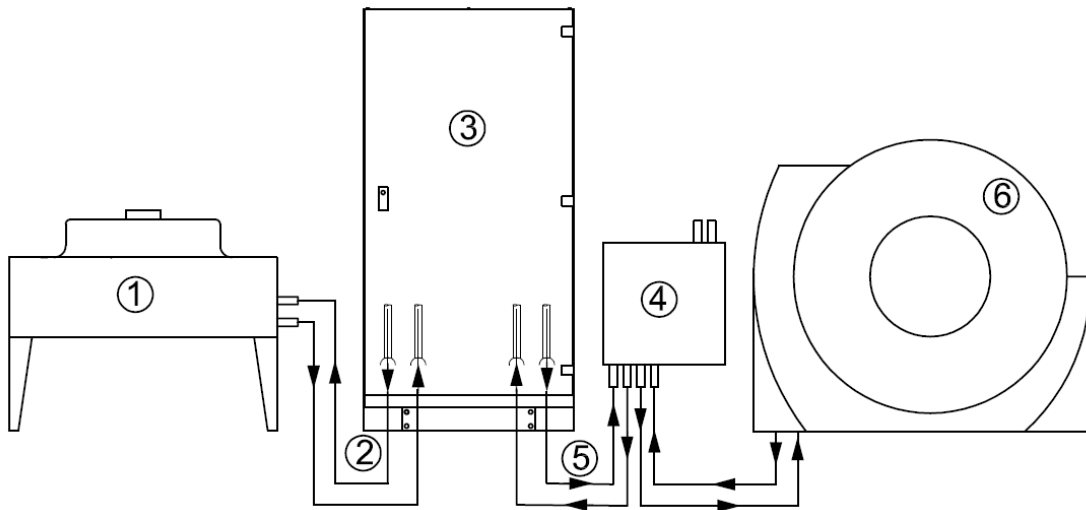
**All connections have to be fixed or closed (if not in use)!**

**The switch over valves have to be positioned either vertical or horizontal!**

**For safe operation make sure that the installation comply with the specification.**

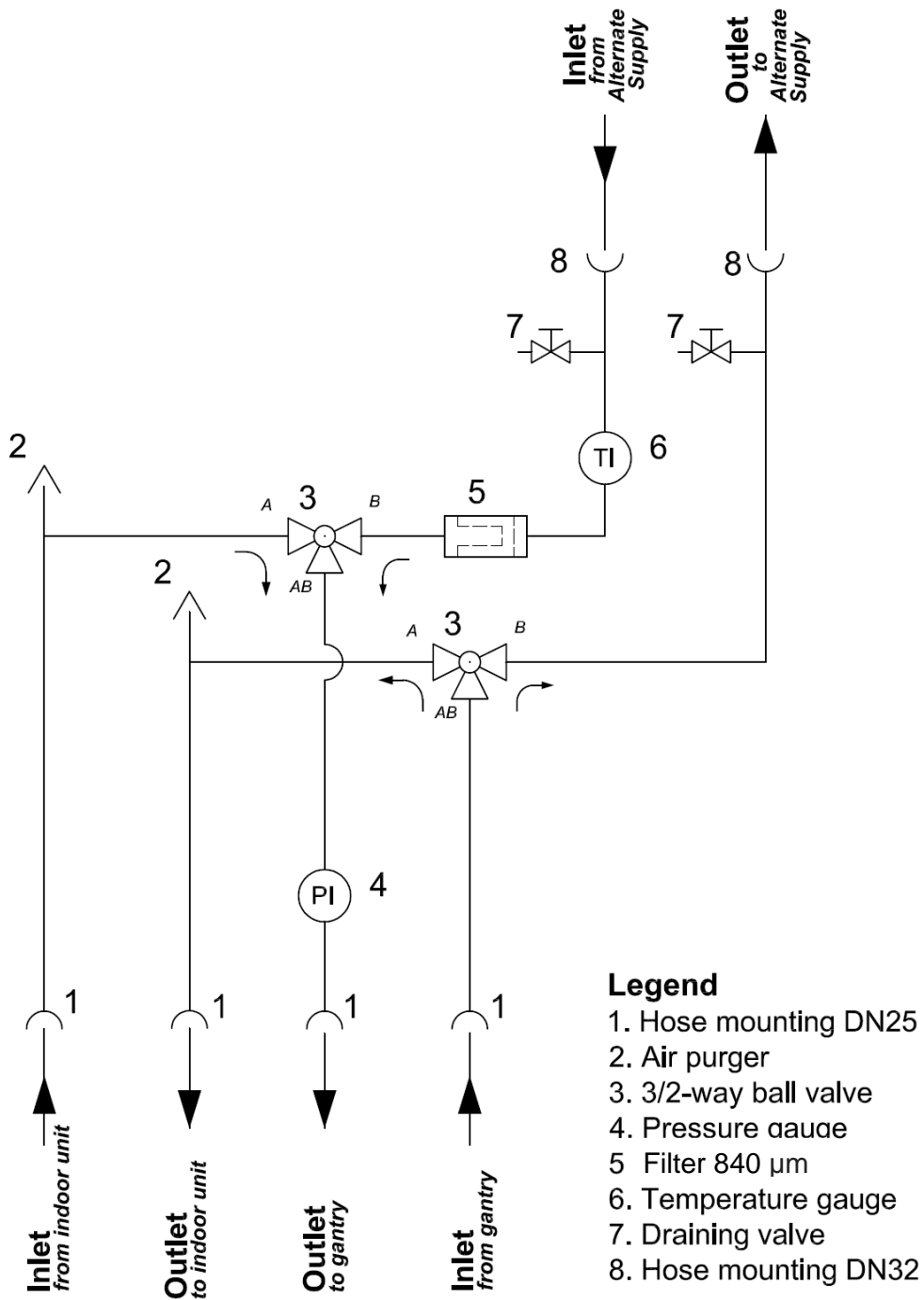
## 1) System Integration / Fluid connection

Block diagram WCS for SOMATOM Definition Gantry with Siemens Split Chiller System.



- Pos. 1 Outdoor unit
- Pos. 2 Primary circuit
- Pos. 3 Indoor unit
- Pos. 4 Interface Panel 10161883 - optional
- Pos. 5 Gantry Cooling circuit (Secondary circuit)
- Pos. 6 Gantry

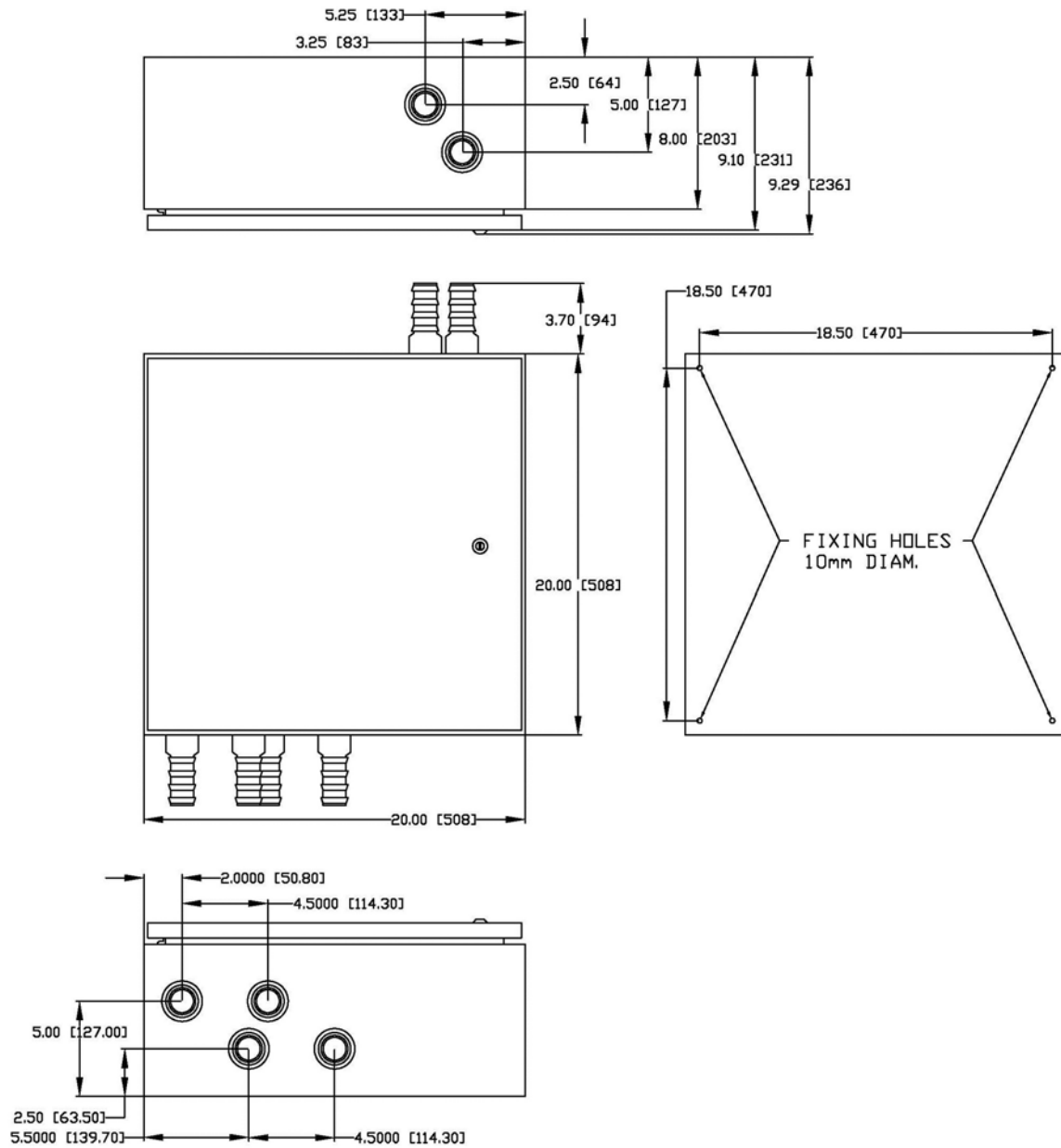
Flow diagram Interface Panel



2) Mounting housing and hoses

2.1) Mounting housing of the Interface Panel

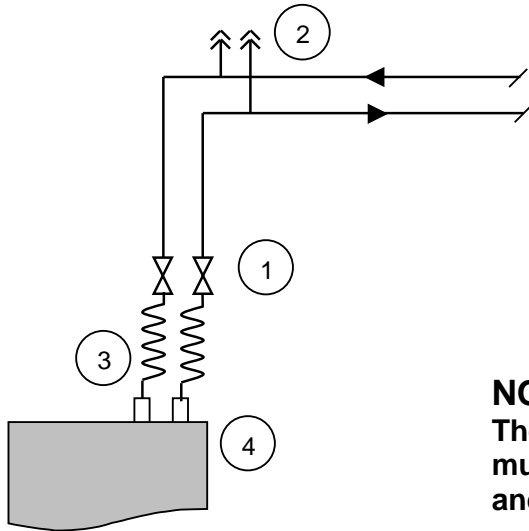
Dimensions Interface Panel



3) Specification Alternate Supply

3.1) Recommendations for the alternate supply connection

Closed cooling water system

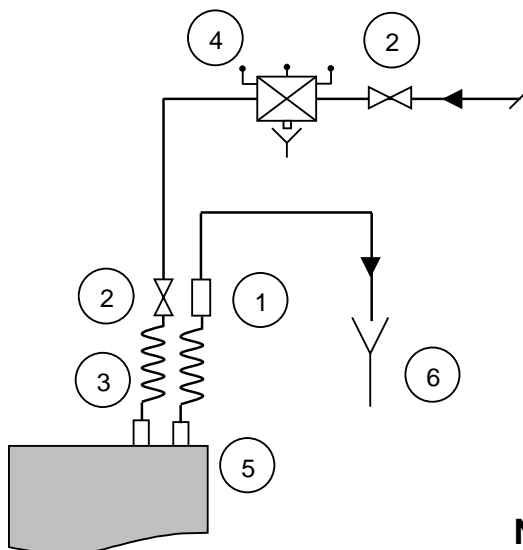


Legend

- 1. Shut-off valve
- 2. Air bleeder
- 3. Connection Hoses Dim. 5/4"
- 4. Interface Panel – Alternate Connection

**NOTE**  
The alternate cold water circuit must obtain a pressure vessel and a safety relief valve!

Open water systems, e.g. drinking water



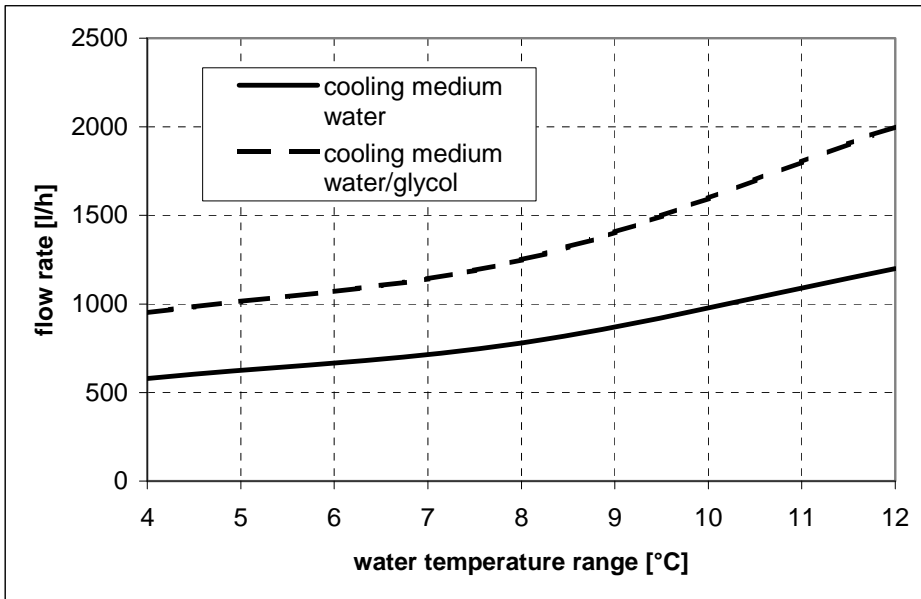
Legend

- 1. Pipe Hose Adapter
- 2. Shut-off valve
- 3. Connection Hoses Dim. 5/4"
- 4. Backflow Preventer
- 5. Interface Panel – Alternate Connection
- 6. Free drainage or collecting tank

**NOTE**  
Drinking water installations must comply with the national standard and regulations !

3.2) Temperature and pressure data

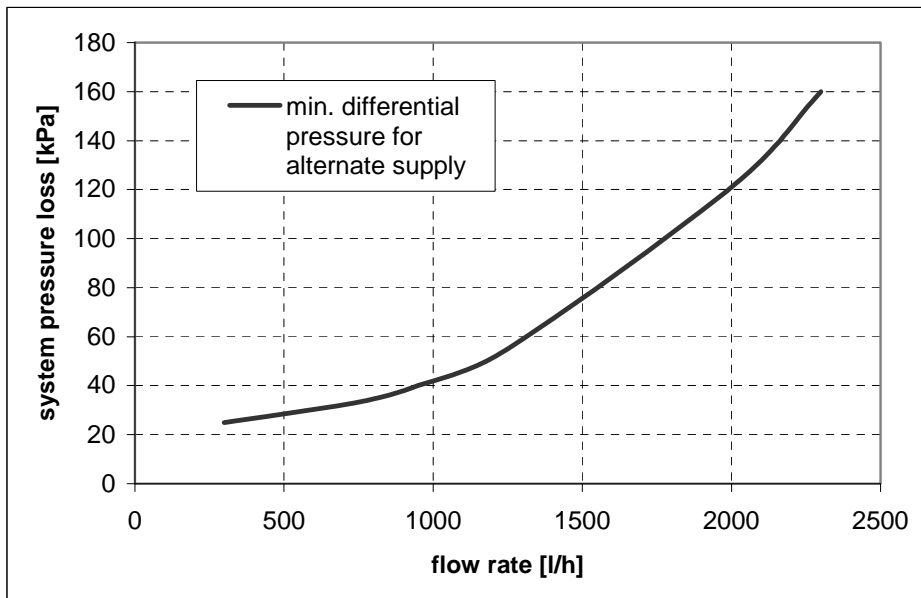
To assure a safe gantry operation attend the following minimum requirements for the alternate supply in addition of the available temperature of the alternate cold water supply:



**! Note !**

Water temperature below 4°C or above 12°C is not allowed!

Minimum differential pressure for alternate supply:



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**! Note !**


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Alternate supply operation pressure shall not exceed 5 bar!

Data table

<b>Alternate water temperature</b>	<b>°C / °F</b>	<b>4</b>	39,2	<b>8</b>	46,4	<b>12</b>	53,6
<b>Water flow rate*<sup>1</sup></b>	<b>l/h / gpm</b>	<b>580</b>	3,1	<b>780</b>	4,4	<b>1200</b>	11
<b>System pressure drop*<sup>2</sup></b>	<b>kPa / psi</b>	<b>30</b>	4,4	<b>34</b>	4,9	<b>51</b>	7,4
<b>Water/glycol flow rate*<sup>1</sup></b>	<b>l/h / gpm</b>	<b>950</b>	4,2	<b>1250</b>	8,4	<b>2000</b>	8,8
<b>System pressure drop*<sup>2</sup></b>	<b>kPa / psi</b>	<b>36</b>	5,2	<b>52</b>	7,5	<b>121</b>	17,5

\*<sup>1</sup> data referring to a height of location up to 1.500m above sea level

\*<sup>2</sup> system pressure drop includes the interface panel, the gantry cooling module and the 40m hose line

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**! Note !**


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**For a safe gantry operation supplied by the alternate source, make sure that water temperature and pressure comply with the minimum requirements.**

**To be assure of the correct water flow rate it is advisable to install a flow meter with regulator into the alternate supply.**

#### 4) Filling Instructions

Closed cold water supply:

- Set the valves to main supply
- Connect your water source to one of the filling & draining valves
- Fill the system to the recommended operating pressure
- Vent the system

Drinking water supply:

- Make sure that your system is filled up to the closed shut-off valve right prior to the Interface Panel
- If the flow pressure of your open water system is greater or equal than 5 bar (72.5 psi), venting is not necessary

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**! Note !**

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**Make sure that the return line of the alternate supply is well tightened!**



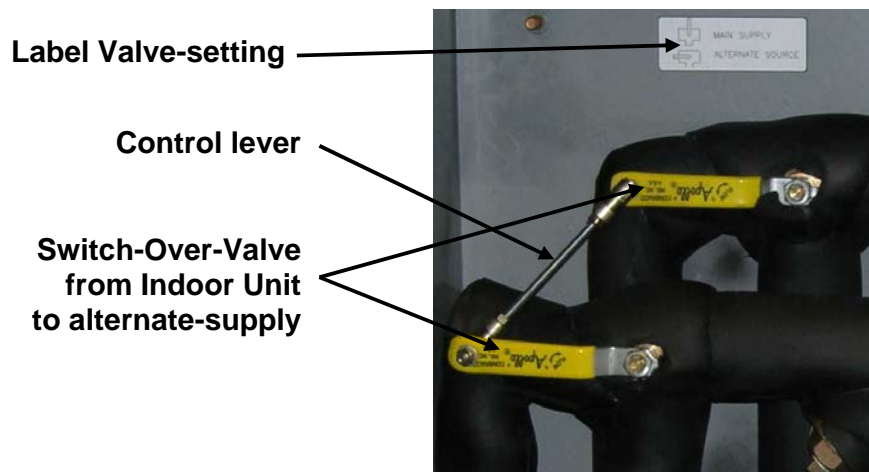
## 5) Operation

The Interface Panel is intended to be used to switch over between two cold water sources.

The allowed fluids are water and water/glycol-mixtures up to 40%.

The valves shall only be positioned vertical or horizontal as described on the label "Valve-setting".

Otherwise no safe operation can be warranted!



### Switch Over procedure from position Indoor Unit supply:

1. Turn off the main switch of the indoor unit
2. Make sure that the alternate supply is connected, filled and proper vented.
3. Switch over to Alternate Supply by using the control lever
4. Turn on pump or open shut-off valve of the alternate supply and check the pressure and temperature

### Switch Over procedure from position Alternate supply:

1. Make sure that the supply from indoor unit is connected, filled and proper vented.
2. Turn off pump or shut all shut-off valves of the alternate supply
3. Reduce to system pressure to 2 bar, if it is higher!
4. Switch over to the supply from the indoor unit
5. Turn on the main switch indoor unit

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**! Note !**

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Make sure that the system pressure is not higher than 2 bar, when switch over from alternate to indoor unit supply!

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**END OF MANUAL**

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