



**NEW**

# WP3HR

now also  
available  
for **65 bar!**

**t<sub>c</sub> up to 100°C**

**High pressure  
float regulators for  
heat pumps**



**TH.WITT  
Kältemaschinenfabrik  
GmbH**

Lukasstraße 32 · 52070 Aachen, Germany  
Tel. +49 (0)2 41 1 82 08-0  
Fax +49 (0)2 41 1 82 08-490  
info@th-witt.com

**th-witt.com**

**$t_c$   
up to  
100°C**



# WP3HR

## now also available for 65 bar!

**Heat pump systems with ammonia become even easier to install and more effective!**

Utilising the high compressor discharge temperatures it is now possible to install the proven energy effective WITT WP3HR in a 65 bar execution. Therefore hot water temperatures above 80°C are possible.

**The mechanical design ensures the WITT WP3HR will give trouble-free operation.**

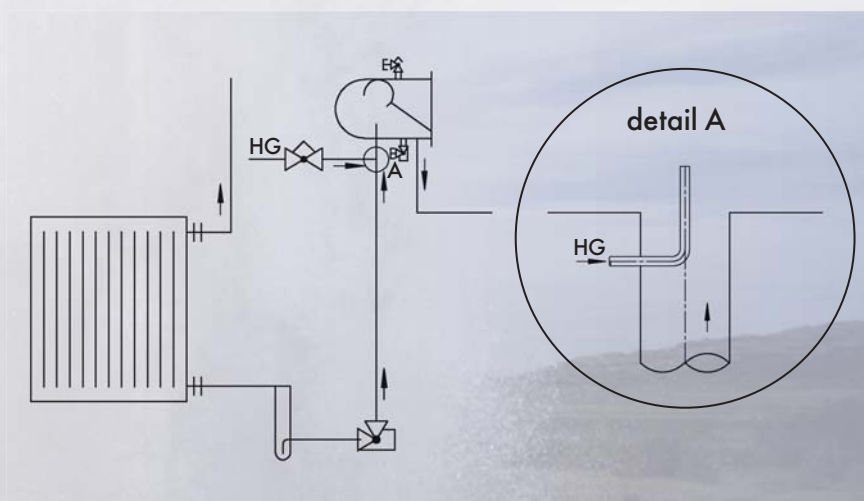
## Hints for planning

### Installation of the WPHR

The WPHR model utilizes a pressure compensated ball float that is open to free gas bubbles underneath. The lifting of the ball has to be supported by a small amount of these gas bubbles.

In order to create this small amount of flash gas the regulator shall be placed 1-3 m above the condenser outlet connection.

If it is not possible to place the regulator above the condenser, alternatively a small amount of gas can be injected into the inlet connection. A small hot gas line with regulating valve is connected immediately in front of the regulator inlet. The regulating valve should be opened only to such a degree that a small amount of gas can collect inside the float ball. Once this gas is collected the valve can be closed. During stand-still periods this gas may condense and a small amount of new gas needs to be injected again to lift the float ball.



### Function of the low pressure nozzle

The integrated low pressure nozzle will purge a small amount of gas to the low pressure side. Therefore the function of the low pressure nozzle is important for the proper operation of the WPHR and the nozzle orifice must never be closed.

### Commissioning and operation

Like with all high side float regulators it is important to purge the system sufficiently before operation can commence. When too much gas or non-condensables are present, the correct operation is interrupted. It is always recommended to correctly purge the refrigeration system to avoid the condensing temperature increases and energy is wasted.

The WPHR operates mechanically and therefore does not require any commissioning work or adjustments.