



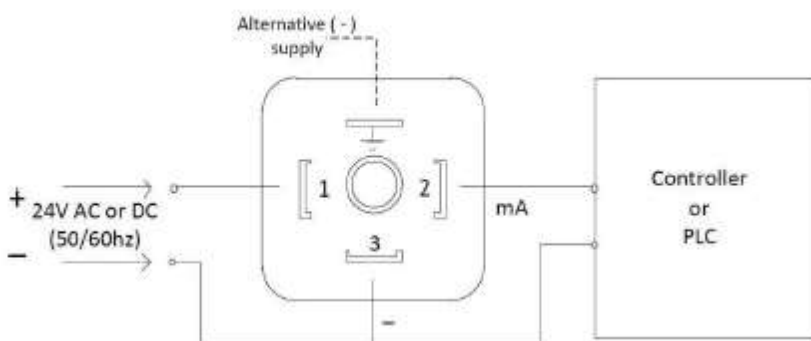
How to set the correct Refrigerant and signal damping in the AKS41 modern version HBT-L



Today you can order the modern AKS41 with a level indication bare of without .Next to the output of 4-20 mA is the level also direct visible with the led indicating.

The Liquid level indicator is suitable for the follow refrigerants. The factory setting is NH3 (R717) and R718 (H2O) – The sensor is suitable for R22/ R507 – R404A- R134A- R744.

Electrical connections:



To select the correct refrigerant follow the instructions:

Important Note: the calibration push pushbutton must be activated, before the supply power is connected- otherwise the signal damping will be changed.

Please follow the instructions.

Step 1: To get in the refrigeration selection mode – push the calibration pushbutton and keep it pressed while connection the 24V/ plug –than release the pushbutton.

Step 2: After releasing the push calibration button -observe the present refrigerant setting and measure the current setting by the out-put signal 4- 20 mA - all refrigerants come in the sequence (the factory setting is NH3- R717 or R718)



Refrigerant	Indication of the green led	Out signal ~
R717- R718 (Factory setting)	1 Flash	5 mA
R22/R507	2 Flashes	6 mA
R404A	3 Flashes	7 mA
R134A	4 Flashes	8 mA
R744	5 Flashes	9 mA

Step 3:

Activate the calibration button to select the correct refrigerant.

Step 4:

When the current corresponds to the required refrigerant, wait for 10 seconds until the green led is constant illuminate (not flashing). This indicates that the required refrigerant has been selected.

Step 5:

To leave the setting mode isolate the voltage to the level transmitter by disconnection the plug from the transmitter.

Go through step 1, 2 and 5 if you wish to control the setting.

Signal Damping:

The factory setting is 15 seconds. The damping setting can be changed by activating the callibration switch over a range of 1 till 120 seconds. The setting can be changed while the system is in operation.

Procedure for singnal damping:

Step 1 :

Connect the power supply

Step 2:

Push the calibration button or each second by which you what ti increase the damping.

or example; 1 push = 1 second, 2pushes = 2 seconds 120 pushes = 120 seconds , 121 pushes = 120 seconds.

10 seconds after the last push, the value will be saved in the memory and the green led will start flashing again. After 10 seconds, a futher push will start 1 second signal damping again.(if the damping is too high restart the procedure rom step 1 again.



Min and max level setting

Calibration is required if:

- The default setting does not fit and the min/ max calibration points have to be adjusted. The factory setting is 0% (free of liquid – 4 mA – Max level 100% -20 mA – the max / min points can be set to any value.
- The liquid level sensor is used in liquid , which is not covered in pre-settings
- The electronic head is replaced on a existing rod

Adjusting the min level :

1. Bring the liquid level to the desired minimum level.
2. Press the calibration pushbutton and keep it activated for approx 5 seconds, until the green led stops flashing.
3. Activate, within 10 seconds , the calibration button once.

The green led is illuminating for few seconds and then start flashing. The output is 4 mA and the sensor is in normal operation.

Adjusting the max. level

1. Bring the liquid to the desired maximum level.
2. Press the calibration button for approx 5 seconds, until the green led stops flashing.
3. Activate, within 10 seconds the calibration button two times with 1 second in between.

The green led is illuminate for few seconds and then starts flashing. The out put is 20 mA and the sensor is on normal operation.

Important note: if the calibration button is not activated within 10 seconds, the calibration mode will be left and the sensor is in normal operation.

Reset to factory settings

The sensor can always be reset to factory settings,by:

1. Press the calibration button and keep it activated for 20 seconds until the green led starts flashing.
2. Release the calibration button.
3. When the red led start flashing , the reset to factory settings is completed.