

# **Humidity Calibrator HMK15**



# **EASY AND RELIABLE CALIBRATION**

No measuring instrument stays accurate by itself. It is essential that the functioning is checked against a reference from time to time. With Vaisalas humidity calibrator HMK15 calibration and spot checking of humidity probes and transmitters is easy and reliable.

The operating principle of the HMK15 is based on the fact that a saturated salt solution generates a certain relative humidity in the air above it. The reading of the humidity probe or transmitter can then be adjusted accordingly. Many leading laboratories use this generally accepted and reliable method. Usually two or three different salt solutions are used which are chosen according to the application.

The HMK15 can be ordered with certified and ready dosed salts. A sample calibration is made from each batch in Vaisala's Measurement Standards Laboratory (MSL). Please, turn over for detailed information on these salts.

## **CALIBRATED THERMOMETER**

HMK15 can be ordered with a thermometer which is used for measuring the temperature during the calibration. The thermometer can contain either mercury (accuracy  $\pm\,0.3\,^{\circ}\text{C}$ ) or red capillary liquid (accuracy  $\pm\,1.0\,^{\circ}\text{C}$ ). The mercury thermometer has been calibrated in Vaisala's MSL and can also be used for checking temperature measurement accuracy of the transmitter. Thermometers with red capillary liquid have been calibrated by the manufacturer.

Vaisala's Measurement Standards Laboratory is a FINAS accredited calibration laboratory. FINAS is a member of the EA (the European co-operation for Accreditation).



K008 (EN45001) (ISO/IEC Guide 25)

### **HUMIDITY CALIBRATOR HMK15**

The standard HMK15 consists of the following parts:

- two salt chambers with chamber covers and transit covers
- base plate
- thermometer:

Vaisala calibrated mercury thermometer (19728HM) or thermometer with red capillary liquid (calibration by manufacturer, code 25130HM)

• measurement cup and mixing spoon

#### **OPTIONS:**

•	certified and rea	ady dosed salts	order code:	total uncer
	LiCl salt	11 %RH	19729HM	±1.3 %RH
	MgCl <sub>2</sub> salt	33 %RH	19730HM	±1.2 %RH
	NaCl salt	75 %RH	19731HM	±1.5 %RH
	K <sub>2</sub> SO <sub>4</sub> salt	97 %RH	19732HM	±2.0 %RH

ion exchanged water 19767HM
extra salt chambers 19766HM
carrying bag HM27032



#### **HMK15 ORDER FORM**

	HMK15								
Salt chamber	two salt chambers A								
	three salt chambers B								
LiClsalt	noLiCl	0							
	LiCl (11 %RH) for one chamber	1							
	LiCl (11 %RH) for two chambers	2							
MgCl <sub>2</sub> salt	noMgCl <sub>2</sub>		0						
-	MgCl <sub>2</sub> (33%RH) for one chamber		1						
	MgCl <sub>2</sub> (33%RH) for two chambers		2						
NaCl salt	no NaCl			0					
	NaCl (75 %RH) for one chamber			1					
	NaCl (75%RH) for two chambers			2					
K <sub>2</sub> SO <sub>4</sub> salt	no K <sub>2</sub> SO <sub>4</sub>				0				
	$K_2SO_4$ (97 %RH) for one chamber				1				
	$K_2SO_4$ (97 %RH) for two chambers				2				
Ion exchanged water	no water					Α			
	water for three chambers					В			
Carrying bag	nobag						0		
	carrying bag						1		
Thermometer	with mercury							1	
	with red capillary liquid							2	]
Manual (language)	no manual								A
	English								В
	French								С
	German								D
	Finnish								Е

A typical order code would be:

 ${\rm HMK15\,A\,1\,0\,1\,0\,B\,0\,1\,B}$ 

