

Data Sheet

Thermostatic Sensors RAS-C

Application



RAS-C 5023 & 5040



RAS-C 5041 & 5061



RAS-C 5042

The RAS-C series is a programme of thermostatic radiator sensors, which covers all central and district heating systems.

RAS-C sensors are self-actuating proportional controllers with a small P-band, designed for use in 2-pipe domestic heating systems.

RAS-C sensors are equipped with a snap-lock mechanism, which ensures quick, firm and long lasting mounting onto the valve body, without the use of any tools.

All RAS-C sensors incorporates a Frost Protection Setting.

Furthermore, the RAS-C range includes models with features for positive shut-off and for temperature limitation to provide the customer with maximum flexibility.

RAS-C 5042 is equipped with 2 m of ultra-thin capillary tube, coiled up within the remote sensor housing. After sensor mounting capillary tube is pulled out to the required length.

The RAS-C construction is particularly robust, with both end-stop strength limits and sensor bending force limits being substantially above the requirements of the European Standard EN 215.

Ordering and Specifications

RAS-C thermostatic sensors

Type	Sensor	Colour	Features	Setting range ¹⁾	Code no.
RAS-C 5023 ³⁾	Built-in	Black/White	Temp. limitation	8 - 28 °C	013G5023
RAS-C 5040 ³⁾	Built-in	Black/White	Positive shut-off		013G5040
RAS-C 5041 ³⁾	Built-in	White	Positive shut-off		013G5041
RAS-C 5042 ³⁾	Remote ²⁾	Black/White	Capillary tube, 2 m		013G5042
RAS-C 5061	Built-in	White	Temp. limitation		013G5061

¹⁾ Temperatures stated for $X_p = 2K$, i.e. the valve is closed at 2 °C higher room temperature.

²⁾ The remote sensor is delivered with 2 m of capillary tube coiled up within the sensor. When mounting the sensor, only the capillary tube required is uncoiled.

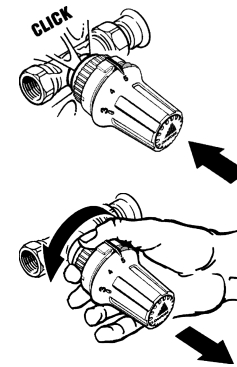
³⁾ Manufactured to the highest standards, and are approved to the European standard EN 215.

Mounting

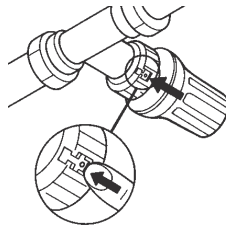
The Danfoss snap-on coupling is easy to mount and requires no use of tools, once the valve cover has been removed.

The sensor is fitted to the valve by applying a gentle pressure. When the sensor is in place, the snap-on mechanism is activated and the sensor has been correctly mounted.

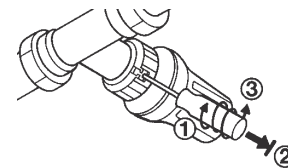
If mounting and dismounting are carried out again, the mechanism must be tightened manually by turning the tightening ring.



Theft Protection

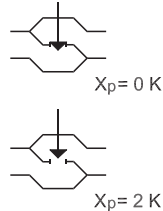


After mounting the sensor, press in the theft protection clip. The sensor is now locked to the valve.



To remove the theft protection without damaging the sensor, use Danfoss special tool: Code no. 013G1231

Setting the Temperature



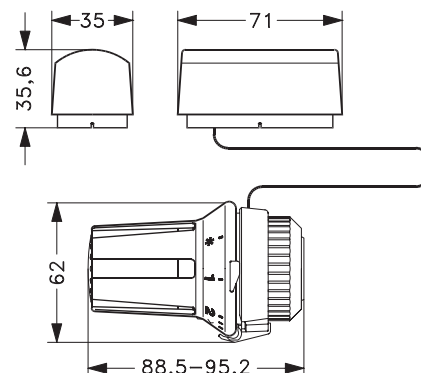
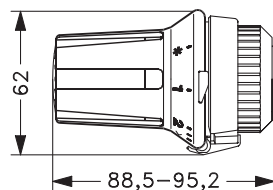
* = Frost protection setting

	10	14	18	22	26	30 °C
0	*	1	2	3	4	5
	8	12	16	20	24	28 °C

The required room temperature is set by turning the setting dial. The temperature scales show the correlation between scale values and the room temperature. The temperature values stated are for guidance only as the obtained room temperature will often be influenced by installation conditions.

The temperature scales are stated according to European standards at $X_p = 2^\circ\text{C}$. This means that the radiator thermostats close at a sensor temperature which is 2°C higher than stated on the temperature scales.

Dimensions



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