

Additional (option) requirement for acoustics performance

It is intended to perform sound intensity measurements on air-source heat pumps in the chamber according to the standards ISO9614-1:2009 and ISO9614-3:2009.

The chamber environmental conditions need to be maintained during the measurements so the space conditioning systems, including the air circulation, should be maintained during such measurements.

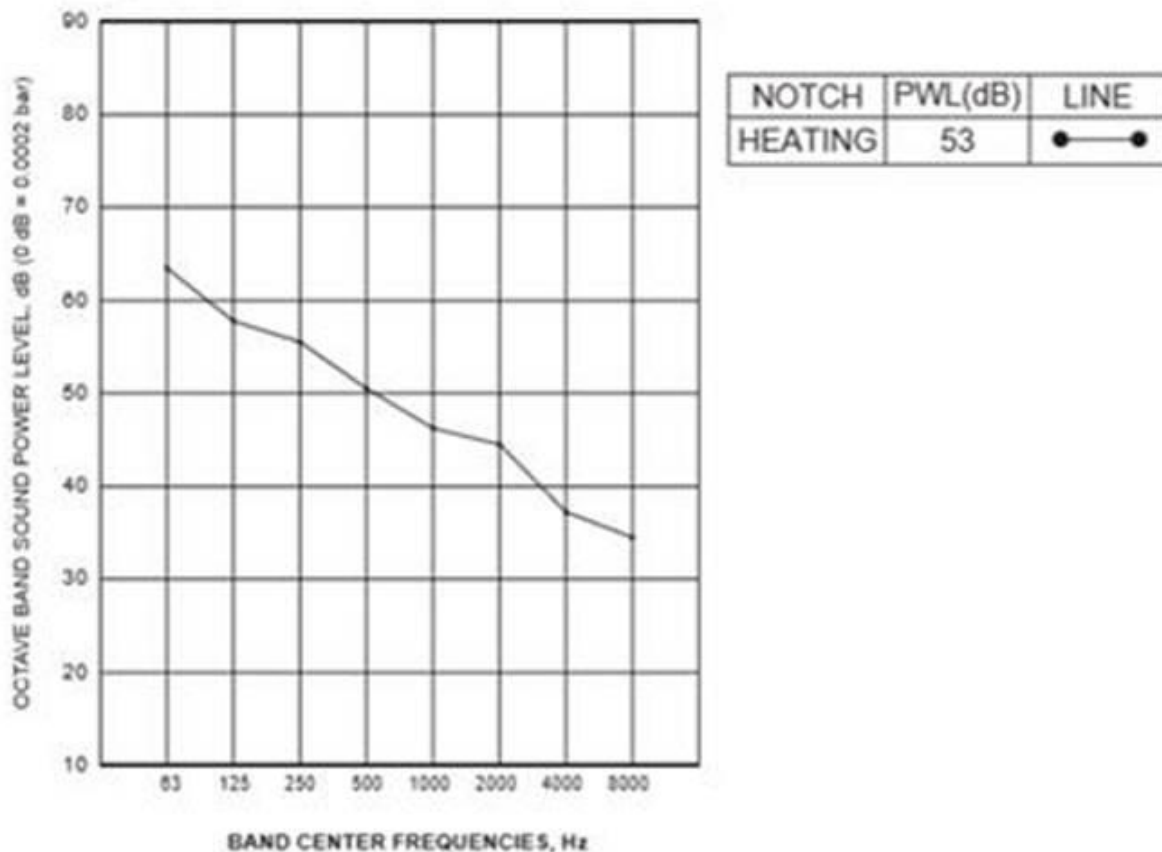
The sound power of a typical air source heat pump is expected to be around 55dB(A).

Frequencies from 63Hz to 8kHz shall be measured.

The likely heat pump dimensions are up to 1m x 0.5m x 1.5m height.

An *example* frequency distribution of a heat pump is given:

5.2 Sound power level



A7/W55

FORM NAME	BAND CENTER FREQUENCIES, Hz								CA
	63	125	250	500	1000	2000	4000	8000	
QUHZ-W40VA	63.3	57.8	55.4	50.5	48.2	44.3	37.2	35.4	53

<dB>

The chamber environment (for example sufficiently low background noise levels and sufficiently high equivalent acoustic absorption area) should be designed such that measurements to the above standards can be made.