PRODUCT BULLETIN

Noise Level Data for VRF 3-pipe SHRM*i* FS Boxes

- ***RBM-Y1123FE***
- ***RBM-Y1803FE***
- ***RBM-Y2803FE***

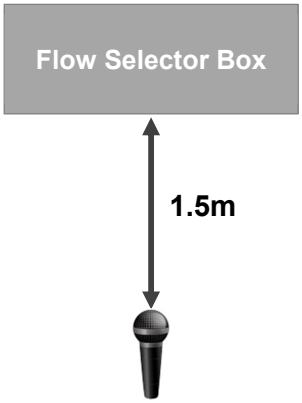
TOSHIBA are pleased to release Sound Pressure noise level data and associated NC curves for VRF 3-pipe SHRM*i* heat recovery multi-intelligence flow selector (FS) boxes.

1. Applied Models

Sound pressure testing has been completed for the following FS boxes:

- RBM-Y1123FE
- RBM-Y1803FE
- RBM-Y2803FE

2. Microphone Position



3. Sound Pressure Measurements & NC Curves

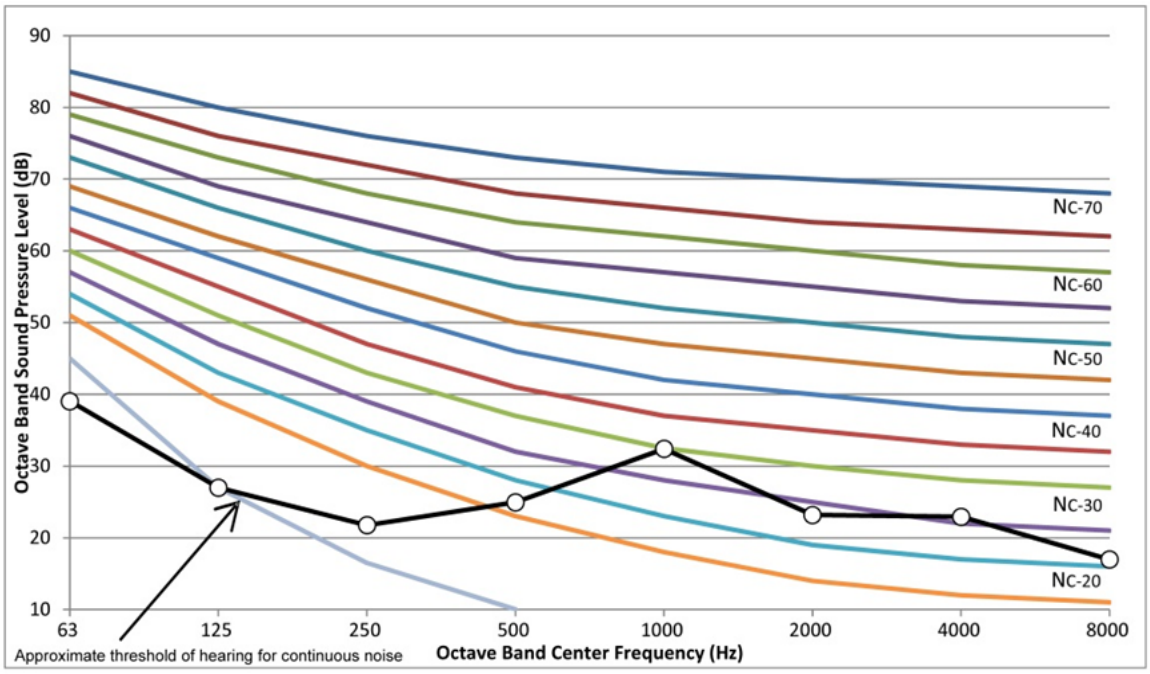
- All sound pressure measurements recorded with system running at stable conditions in both heating and cooling modes
- Heating test conditions: Outdoor 7°CDB/6°CWB Indoor 20°CDB/15°CWB
- Cooling test conditions: Outdoor 35°CDB Indoor 27°CDB/19°CWB

Model Code	Mode	Sound Pressure (dBA)	Sound Pressure (dBC)
RBM-Y1123FE	Heating	34.1	48.6
	Cooling	29.5	45.6
RBM-Y1803FE	Heating	42.0	45.6
	Cooling	40.2	46.0
RBM-Y2803FE	Heating	43.0	47.3
	Cooling	46.3	48.5

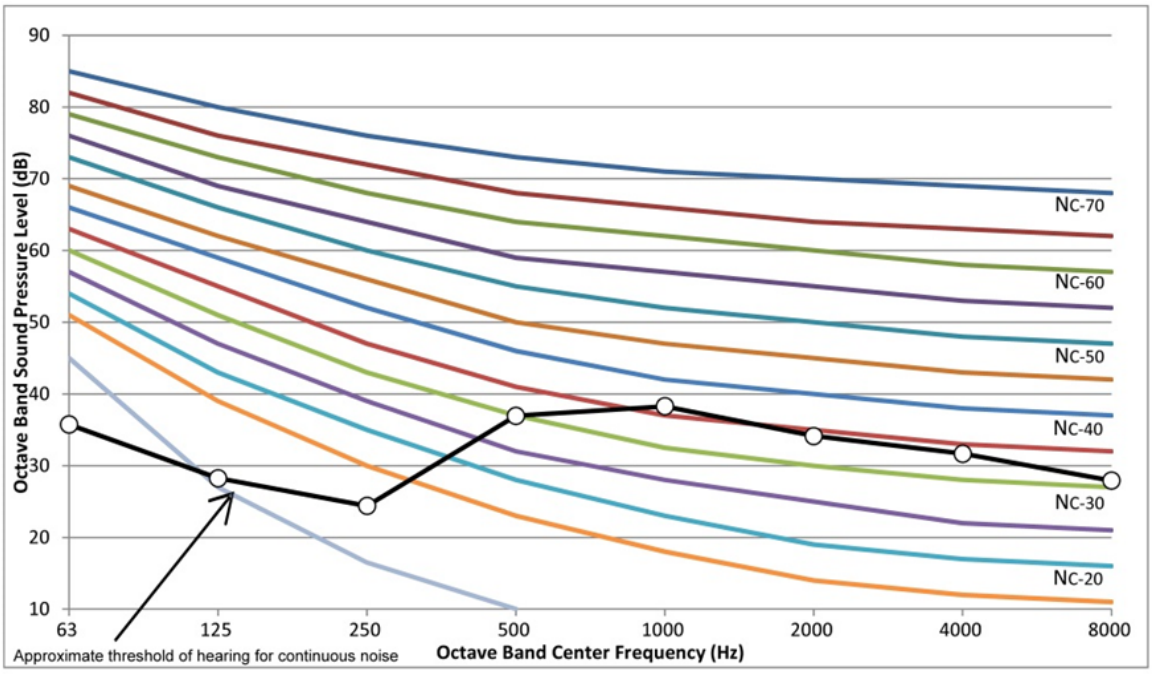
RBM-Y1123FE Sound Pressure Results

Model Code	Mode	Sound Pressure (dBA)	Sound Pressure (dBC)
RBM-Y1123FE	Heating	34.1	48.6
	Cooling	29.5	45.6

RBM-Y1123FE NC Curve - Heating Mode



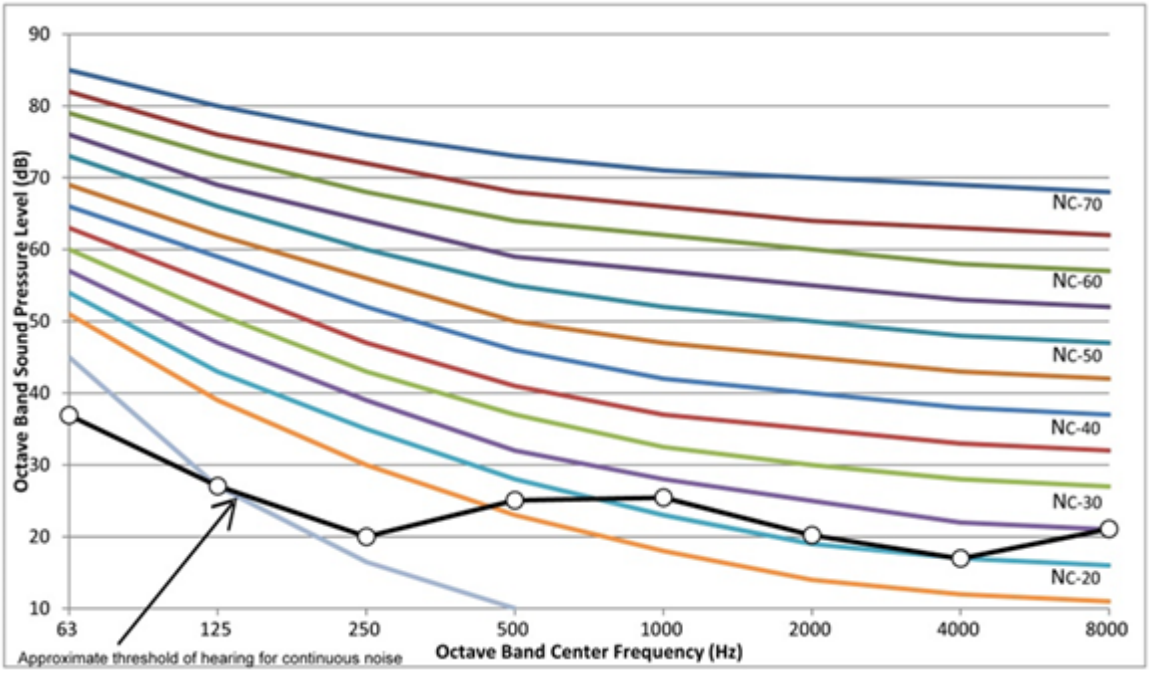
RBM-Y1123FE NC Curve - Cooling Mode



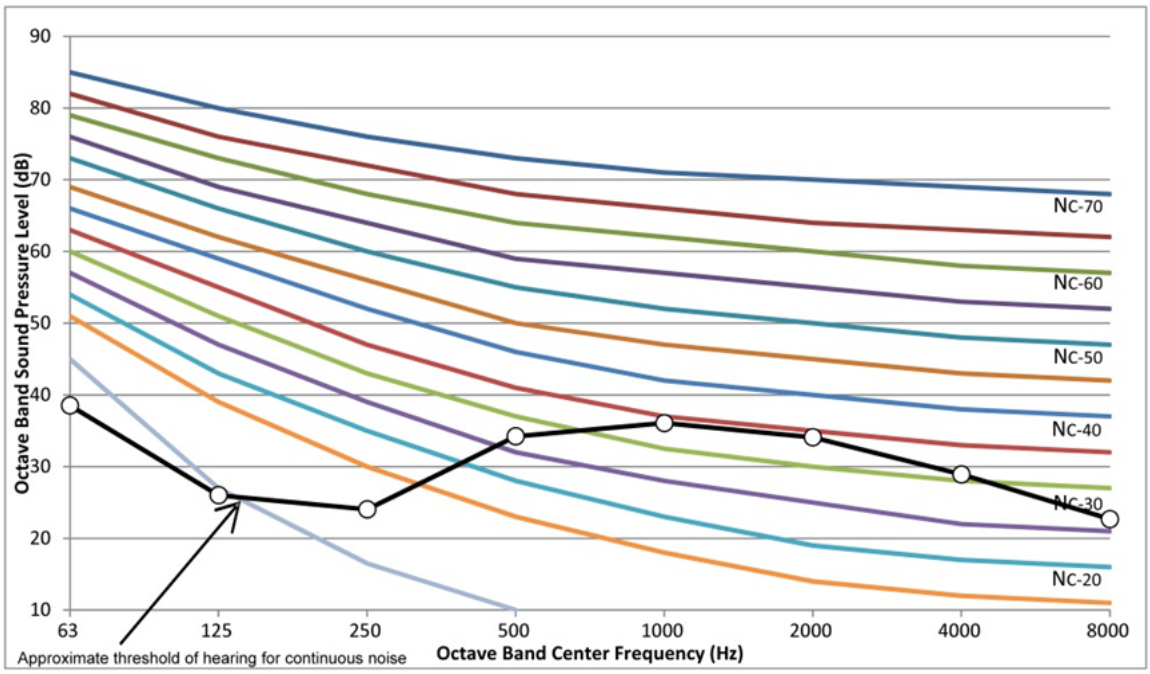
RBM-Y1803FE Sound Pressure Results

Model Code	Mode	Sound Pressure (dBA)	Sound Pressure (dBC)
RBM-Y1803FE	Heating	42.0	45.6
	Cooling	40.2	46.0

RBM-Y1803FE NC Curve - Heating Mode



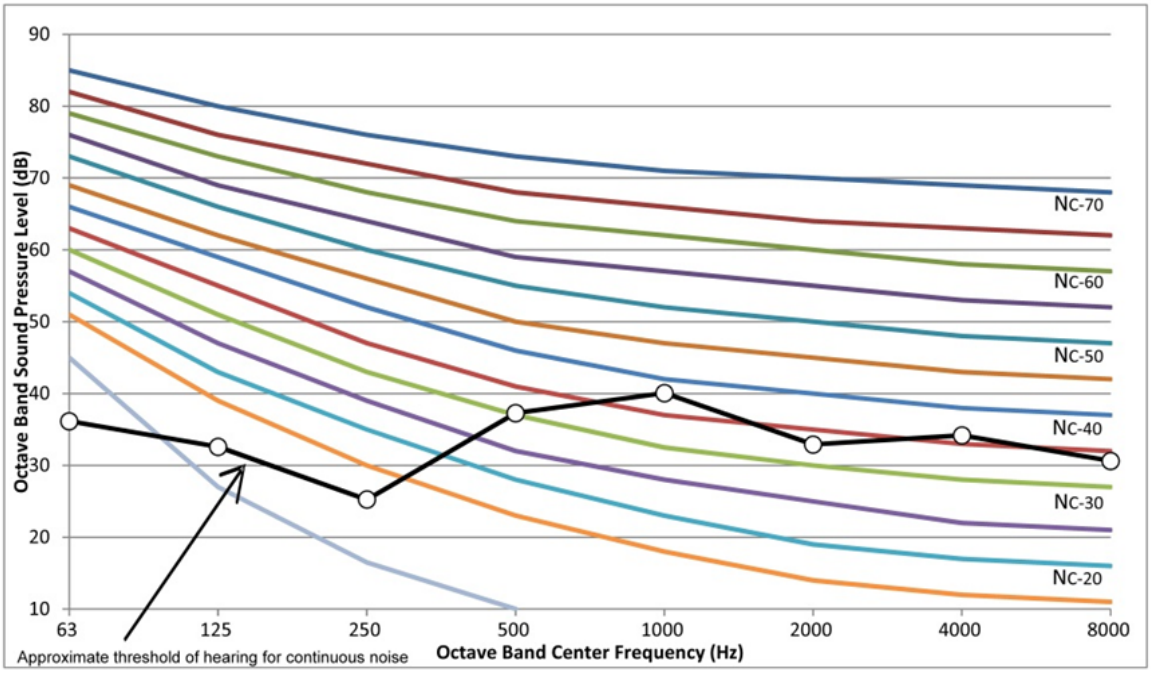
RBM-Y1803FE NC Curve - Cooling Mode



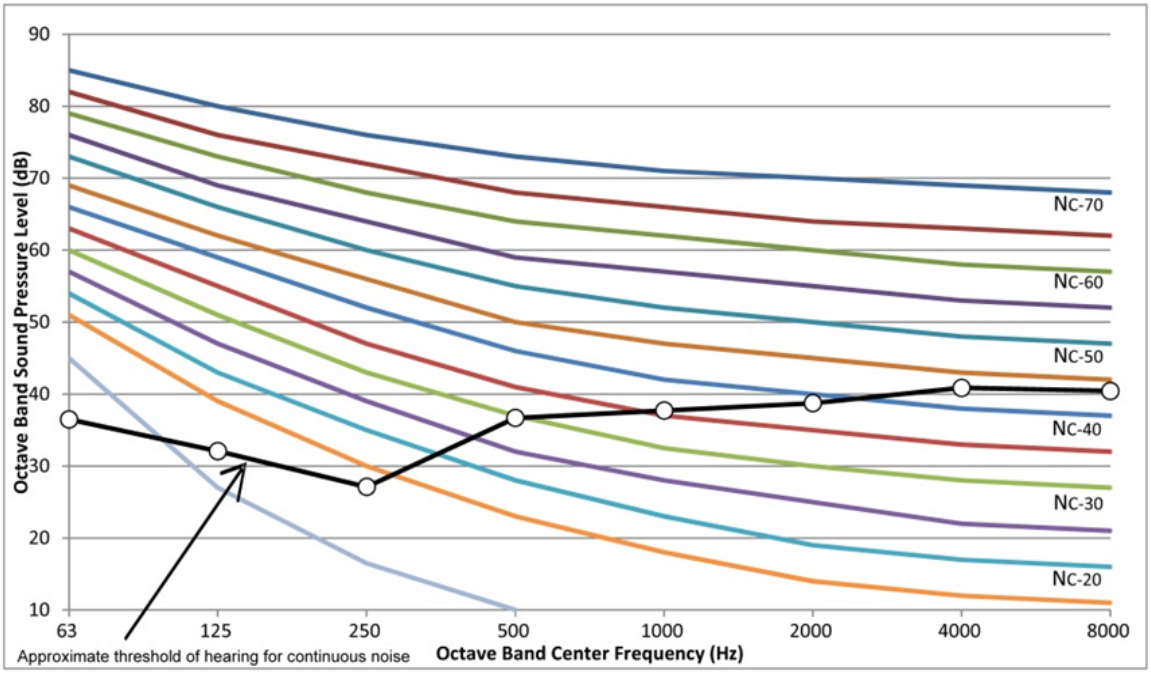
RBM-Y2803FE Sound Pressure Results

Model Code	Mode	Sound Pressure (dBA)	Sound Pressure (dBC)
RBM-Y2803FE	Heating	43.0	47.3
	Cooling	46.3	48.5

RBM-Y2803FE NC Curve - Heating Mode



RBM-Y2803FE NC Curve - Cooling Mode



4. General Cautions when Installing in Quiet Locations

In most cases noise generated from the flow selector box is below background noise levels, however, the box incorporates solenoid valves that can generate additional noise in functions such as when switching between cooling and heating modes, oil recovery, balancing of pressures and during defrost. The noise emitted during the process of mode operation change status, during defrost and pressure equalisation will be higher than the measured data recorded at stable operating conditions for both heating and cooling.

It is recommended to avoid installing the flow selector boxes in location where quiet background noise levels are required, some examples are:

- Hotel bedrooms, patient consulting rooms and libraries.
- Rooms that do not have a fixed ceiling to block and or absorb noise to the occupied space.
- Rooms that have an aperture within the ceiling, for example a supply or return air grille.

When installing flow selector boxes where quiet background noise levels are essential FS boxes must be separated from the indoor fan coil unit to prevent generated valve and refrigerant noise from being transmitted or emitted to occupied spaces. Flow selector boxes can be installed up to 15m away from the indoor fan coil unit(s) and it is recommended in these circumstances that the FS boxes should be located for example, in a corridor ceiling or area where noise is not a concern.

For further information please contact our customer support team on 0870 843 0333, your local representative, your supplier of TOSHIBA products or email any enquiries to: -
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