

## PRODUCT BULLETIN

### Sound Power Measurements for ESTIA Outdoor Units

- *Fixed compressor frequency*
- *Maximum compressor frequency*
- *NTLN (night time low noise)*
- *50% capacity demand*
- *75% capacity demand*

**TOSHIBA** are pleased to confirm the sound power values for our existing ESTIA outdoor unit model range.

#### 1. Applicable Models

Sound power testing was completed on the following ESTIA outdoor units:

- ♦ HWS-804H-E1
- ♦ HWS-1104H-E1
- ♦ HWS-1404H-E1
- ♦ HWS-P804HR-E1
- ♦ HWS-P1104HR-E1
- ♦ HWS-1104H8-E1
- ♦ HWS-1404H8-E1
- ♦ HWS-1604H8-E1



#### 2. Sound Power Measurements

- ♦ All sound power measurements were completed with the systems running in the following conditions for heating and cooling mode:
  - Compressor frequency fixed at rated Hz
  - Maximum compressor Hz
  - Night time low noise (NTLN) operation
  - 50% capacity demand (using TCB-KB0S2E accessory)
  - 75% capacity demand (using TCB-KB0S2E accessory)

NOTE: Sound power data for 50% and 75% power peak must be used as "REFERENCE ONLY" due to the method of system control used when the TCB-KB0S2E accessory is fitted

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: - [general.enquiries@toshiba-ac.com](mailto:general.enquiries@toshiba-ac.com)

### 3. Compressor Frequency Fixed at Rated Hz

Fixed Operation								
Model HWS -	804H-E1	1104H-E1	1404H-E1	P804HR-E1	P1104HR-E1	1104H8-E1	1404H8-E1	1604H8-E1
Heating Rated Hz (dBA)	65.90	63.70	65.30	62.40	63.10	62.40	63.90	65.30
Cooling Rated Hz (dBA)	64.10	65.20	65.90	62.50	64.70	64.90	64.30	64.80

- Heating test conditions: Outdoor: 7°CDB/6°CWB, Indoor: 20°CDB/15°CWB
- Cooling test conditions: Outdoor: 35°CDB/-, Indoor: 27°CDB/19°CWB

### 4. Maximum Compressor Frequency

Maximum Operation								
Model HWS -	804H-E1	1104H-E1	1404H-E1	P804HR-E1	P1104HR-E1	1104H8-E1	1404H8-E1	1604H8-E1
Heating Max Hz (dBA)	65.10	65.00	67.20	66.20	66.80	63.90	64.70	66.00
Cooling Max Hz (dBA)	65.60	65.60	67.20	63.20	65.30	65.20	65.40	65.20

- Heating test conditions: Outdoor: 7°CDB/6°CWB, Indoor: 20°CDB/15°CWB
- Cooling test conditions: Outdoor: 35°CDB/-, Indoor: 27°CDB/19°CWB

### 5. Night time low noise (NTLN) operation

NTLN Operation								
Model HWS -	804H-E1	1104H-E1	1404H-E1	P804HR-E1	P1104HR-E1	1104H8-E1	1404H8-E1	1604H8-E1
Heating NTLN Hz (dBA)	63.40	61.90	61.40	59.50	59.40	58.80	58.10	58.80
Cooling NTLN Hz (dBA)	63.30	61.90	62.00	60.20	59.20	58.70	58.90	58.40

- Heating test conditions: Outdoor: 7°CDB/6°CWB, Indoor: 20°CDB/15°CWB
- Cooling test conditions: Outdoor: 35°CDB/-, Indoor: 27°CDB/19°CWB

## 6. 50% power peak (using TCB-KB0S2E)

50% power peak Operation								
Model HWS -	804H-E1	1104H-E1	1404H-E1	P804HR-E1	P1104HR-E1	1104H8-E1	1404H8-E1	1604H8-E1
Heating 50% Hz (dBA)	64.60	63.60	63.10	62.60	62.50	63.90	64.40	65.50
Cooling 50% Hz (dBA)	63.00	63.70	64.20	62.50	63.30	64.20	63.60	64.20

- Heating test conditions: Outdoor: 7°CDB/6°CWB, Indoor: 20°CDB/15°CWB
- Cooling test conditions: Outdoor: 35°CDB/-, Indoor: 27°CDB/19°CWB

## 7. 75% power peak (using TCB-KB0S2E)

75% power peak Operation								
Model HWS -	804H-E1	1104H-E1	1404H-E1	P804HR-E1	P1104HR-E1	1104H8-E1	1404H8-E1	1604H8-E1
Heating 75% Hz (dBA)	64.60	63.60	63.10	62.60	62.50	63.90	64.40	65.50
Cooling 75% Hz (dBA)	63.00	63.70	64.20	62.50	63.30	64.20	63.60	64.20

- Heating test conditions: Outdoor: 7°CDB/6°CWB, Indoor: 20°CDB/15°CWB
- Cooling test conditions: Outdoor: 35°CDB/-, Indoor: 27°CDB/19°CWB