

## Sound power level and Spectrum

### FW01 FN/TV

Sound Power Levels dB(A)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Global Lw
Max.	24.8	39.1	41.7	38.4	33.7	21.6	15.6	<b>45</b>
Med.	19.4	34.1	35.9	30.3	24.3	15.8	15.4	<b>39</b>
Min.	13.6	29.7	29.0	22.0	16.2	15.2	15.2	<b>33</b>

### FW02 FN/TV

Sound Power Levels dB(A)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Global Lw
Max.	28.8	42.7	45.8	43.6	39.3	29.9	17.2	<b>50</b>
Med.	22.9	37.8	40.7	36.2	30.3	19.6	15.4	<b>44</b>
Min.	18.0	33.1	35.4	29.1	22.7	15.5	15.3	<b>38</b>

### FW03 FN/TV

Sound Power Levels dB(A)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Global Lw
Max.	27.8	40.9	43.5	40.4	34.0	23.4	18.0	<b>47</b>
Med.	23.0	36.0	37.9	33.0	25.7	18.4	16.6	<b>41</b>
Min.	15.6	28.8	28.8	22.0	17.2	16.0	15.6	<b>33</b>

### FW04 FN/TV

Sound Power Levels dB(A)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Global Lw
Max.	31.7	45.4	47.7	45.4	41.7	32.0	19.2	<b>52</b>
Med.	23.6	37.6	39.8	34.2	28.7	21.6	16.5	<b>43</b>
Min.	17.8	31.8	31.5	24.4	17.2	16.5	15.4	<b>35</b>

### FW06 FN/TV

Sound Power Levels dB(A)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Global Lw
Max.	36.1	49.3	51.4	50.6	47.4	39.1	24.7	<b>56</b>
Med.	28.9	43.0	45.2	42.3	38.1	28.1	17.9	<b>49</b>
Min.	23.7	37.4	39.8	34.4	28.6	21.9	16.8	<b>43</b>

### FW08 FN/TV

Sound Power Levels dB(A)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Global Lw
Max.	39.0	53.2	54.8	53.7	51.8	45.4	34.2	<b>60</b>
Med.	33.6	47.9	49.2	47.7	45.0	36.3	23.9	<b>54</b>
Min.	26.7	40.7	41.1	39.3	34.5	24.8	20.1	<b>46</b>

### FW10 FN/TV

Sound Power Levels dB(A)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Global Lw
Max.	44.5	58.0	60.1	60.4	58.4	53.6	46.3	<b>66</b>
Med.	38.5	51.7	54.8	53.5	51.5	45.3	34.7	<b>59</b>
Min.	28.8	43.2	44.8	42.6	39.1	29.6	21.9	<b>49</b>

**Conditions of measurements** in case of (M) models the sound power is calculated **WITHOUT** any additional inlet or outlet grill or plenum!

4TW60017-1A (Sheet 2/2)

To calculate the sound pressure you must define some conditions and use this formula

$$L_p = L_w - 10 \times \log_{10} \left( \frac{4\pi \times d^2}{Q} \right)$$

Where:

Q = direction factor: is Q=4 if the FCU is installed near 2 walls (vertical or floor-ceiling), Q=2 if the FCU is installed near 1 wall (at floor or ceiling but faraway the 2nd wall)

d = distance (mt) from the sound source and the measure point

LP = Sound pressure (dBA)

Lw = Sound power (dBA)