

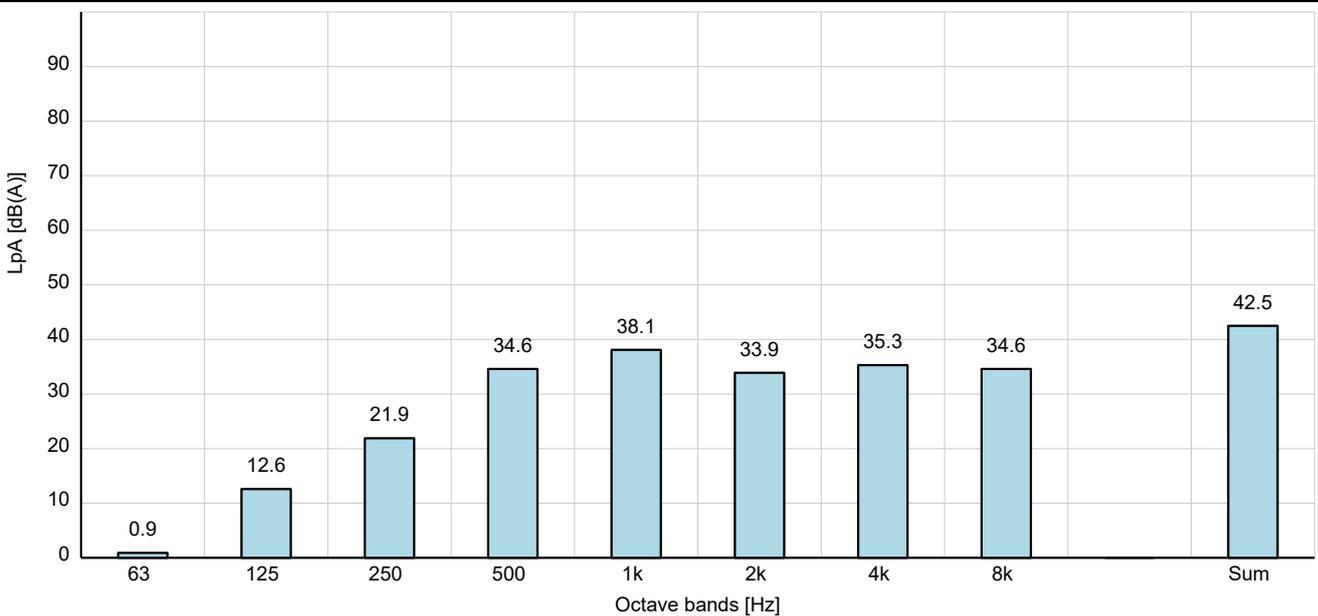
# SOUND MEASUREMENT REPORT

## ISO 3745

<b>Object:</b>	Motor type: MGE90LC	U:	3 x 380-500 [V]
		f:	50/60 [Hz]
		P2:	2.2 [kW]
		n:	4000 - 5900 [rpm]

<b>Test conditions:</b>	Load: No load / Idle	Sound test:	400 [V]
		f:	50 [Hz]
		P2:	0 [kW]
		n:	2000 [rpm]

**Comments:**



**Sound pressure level  $L_{pA}$  : 42.5 [dB(A)]**

Sound power level  $L_{WA}$  : 54.5 [dB(A)]

**Notes:**

- Sound power values  $L_{WA}$  determined according to IEC 60034-9, ISO 3745 and ISO 4871.
  - Associated uncertainty  $K_{WA} = 3$  [dB(A)]
  - "The sum of measured noise emission values and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements".
- Sound power evaluated at rated speed and no load as specified in IEC 60034-9.
  - "The sound power levels, under full load condition, are normally higher than those at no-load. Generally, if ventilation noise is predominant the change may be small; but, if the electromagnetic noise is predominant the change may be significant".
  - Additionally - as outlined in IEC 60034-9 Amendment 1 - an increase in the noise level may also occur on variable speed drives due to increased level of higher harmonics and potential coincidence between these and structural resonances.
- The equivalent sound pressure level  $L_{pA}$  at 1 m distance are determined from the sound power level via ISO 11203 method Q2
  - The observer surface area  $S$  is given by a box shape enveloping the source – and here calculated for a specified distance of 1 m between the source and the observer surface.
  - The emission sound pressure level obtained with this method represents the average sound pressure level over the surface of area  $S$  in environmental conditions approximating to a free field over a reflecting plane".

**References:**

- (IEC 60034-9, ISO 3745 & 4871)
- (IEC 60064-9; Clause 8)
- (ISO 4871; Section B2)
- (IEC 60034; Clause 5.2)
- (IEC 60034-9; Clause 6, Note 2)
- (IEC 60034-9 amd 1; Clause 7)
- (IEC 60034; Clause 5.2)
- (ISO 11203; Clause 6.2.3)

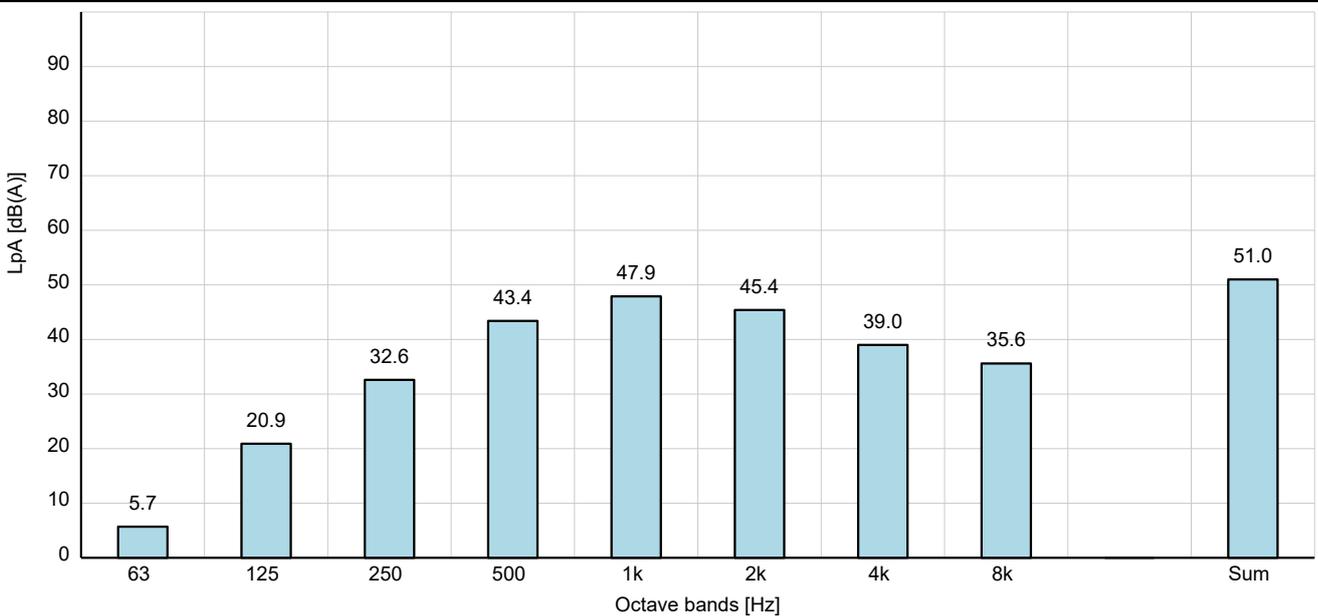
# SOUND MEASUREMENT REPORT

ISO 3745

<b>Object:</b>	Motor type: MGE90LC	U:	3 x 380-500 [V]
		f:	50/60 [Hz]
		P2:	2.2 [kW]
		n:	4000 - 5900 [rpm]

<b>Test conditions:</b>	Load: No load / Idle	Sound test:	400 [V]
		f:	50 [Hz]
		P2:	0 [kW]
		n:	3100 [rpm]

**Comments:**



**Sound pressure level  $L_{pA}$  : 51.0 [dB(A)]**

Sound power level  $L_{WA}$  : 63.5 [dB(A)]

**Notes:**

- Sound power values  $L_{WA}$  determined according to IEC 60034-9, ISO 3745 and ISO 4871.
  - Associated uncertainty  $K_{WA} = 3$  [dB(A)]
  - "The sum of measured noise emission values and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements".
- Sound power evaluated at rated speed and no load as specified in IEC 60034-9.
  - "The sound power levels, under full load condition, are normally higher than those at no-load. Generally, if ventilation noise is predominant the change may be small; but, if the electromagnetic noise is predominant the change may be significant".
  - Additionally - as outlined in IEC 60034-9 Amendment 1 - an increase in the noise level may also occur on variable speed drives due to increased level of higher harmonics and potential coincidence between these and structural resonances.
- The equivalent sound pressure level  $L_{pA}$  at 1 m distance are determined from the sound power level via ISO 11203 method Q2
  - The observer surface area  $S$  is given by a box shape enveloping the source – and here calculated for a specified distance of 1 m between the source and the observer surface.
  - The emission sound pressure level obtained with this method represents the average sound pressure level over the surface of area  $S$  in environmental conditions approximating to a free field over a reflecting plane".

**References:**

- (IEC 60034-9, ISO 3745 & 4871)
- (IEC 60064-9; Clause 8)
- (ISO 4871; Section B2)
- (IEC 60034; Clause 5.2)
- (IEC 60034-9; Clause 6, Note 2)
- (IEC 60034-9 amd 1; Clause 7)
- (IEC 60034; Clause 5.2)
- (ISO 11203; Clause 6.2.3)

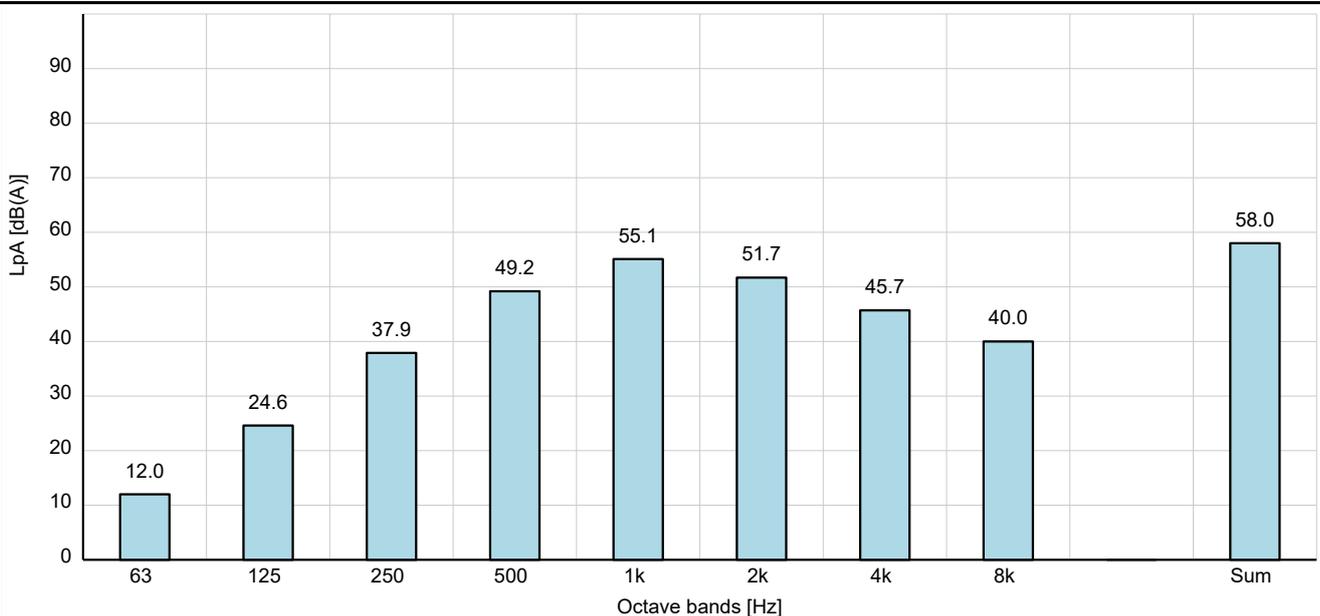
# SOUND MEASUREMENT REPORT

## ISO 3745

<b>Object:</b>	Motor type: MGE90LC	U:	3 x 380-500 [V]
		f:	50/60 [Hz]
		P2:	2.2 [kW]
		n:	4000 - 5900 [rpm]

<b>Test conditions:</b>	Load: No load / Idle	Sound test:	400 [V]
		f:	50 [Hz]
		P2:	0 [kW]
		n:	4000 [rpm]

**Comments:**



**Sound pressure level  $L_{pA}$  : 58.0 [dB(A)]**

Sound power level  $L_{WA}$  : 70.0 [dB(A)]

**Notes:**

- Sound power values  $L_{WA}$  determined according to IEC 60034-9, ISO 3745 and ISO 4871.
  - Associated uncertainty  $K_{WA} = 3$  [dB(A)]
  - "The sum of measured noise emission values and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements".
- Sound power evaluated at rated speed and no load as specified in IEC 60034-9.
  - "The sound power levels, under full load condition, are normally higher than those at no-load. Generally, if ventilation noise is predominant the change may be small; but, if the electromagnetic noise is predominant the change may be significant".
  - Additionally - as outlined in IEC 60034-9 Amendment 1 - an increase in the noise level may also occur on variable speed drives due to increased level of higher harmonics and potential coincidence between these and structural resonances.
- The equivalent sound pressure level  $L_{pA}$  at 1 m distance are determined from the sound power level via ISO 11203 method Q2
  - The observer surface area  $S$  is given by a box shape enveloping the source – and here calculated for a specified distance of 1 m between the source and the observer surface.
  - The emission sound pressure level obtained with this method represents the average sound pressure level over the surface of area  $S$  in environmental conditions approximating to a free field over a reflecting plane".

**References:**

- (IEC 60034-9, ISO 3745 & 4871)
- (IEC 60064-9; Clause 8)
- (ISO 4871; Section B2)
- (IEC 60034; Clause 5.2)
- (IEC 60034-9; Clause 6, Note 2)
- (IEC 60034-9 amd 1; Clause 7)
- (IEC 60034; Clause 5.2)
- (ISO 11203; Clause 6.2.3)

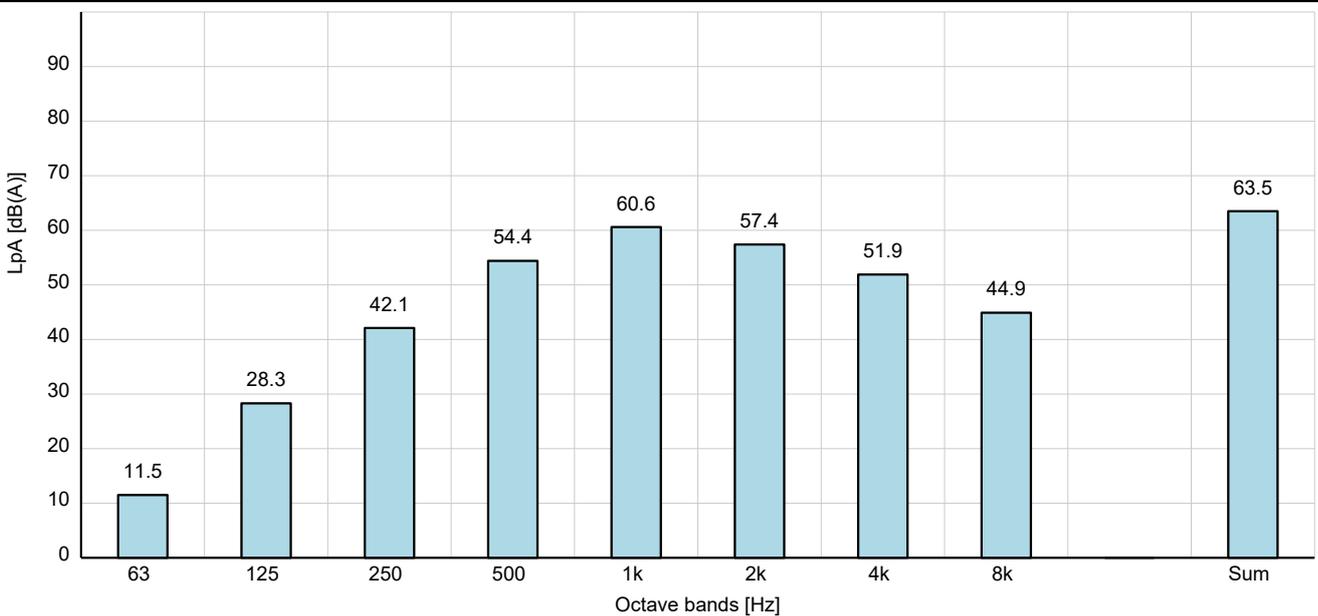
# SOUND MEASUREMENT REPORT

ISO 3745

<b>Object:</b>	Motor type: MGE90LC	U:	3 x 380-500 [V]
		f:	50/60 [Hz]
		P2:	2.2 [kW]
		n:	4000 - 5900 [rpm]

<b>Test conditions:</b>	Load: No load / Idle	Sound test:	400 [V]
		f:	50 [Hz]
		P2:	0 [kW]
		n:	4850 [rpm]

**Comments:**



**Sound pressure level  $L_{pA}$  : 63.5 [dB(A)]**

Sound power level  $L_{WA}$  : 75.5 [dB(A)]

**Notes:**

- Sound power values  $L_{WA}$  determined according to IEC 60034-9, ISO 3745 and ISO 4871.
  - Associated uncertainty  $K_{WA} = 3$  [dB(A)]
  - "The sum of measured noise emission values and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements".
- Sound power evaluated at rated speed and no load as specified in IEC 60034-9.
  - "The sound power levels, under full load condition, are normally higher than those at no-load. Generally, if ventilation noise is predominant the change may be small; but, if the electromagnetic noise is predominant the change may be significant".
  - Additionally - as outlined in IEC 60034-9 Amendment 1 - an increase in the noise level may also occur on variable speed drives due to increased level of higher harmonics and potential coincidence between these and structural resonances.
- The equivalent sound pressure level  $L_{pA}$  at 1 m distance are determined from the sound power level via ISO 11203 method Q2
  - The observer surface area  $S$  is given by a box shape enveloping the source – and here calculated for a specified distance of 1 m between the source and the observer surface.
  - The emission sound pressure level obtained with this method represents the average sound pressure level over the surface of area  $S$  in environmental conditions approximating to a free field over a reflecting plane".

**References:**

- (IEC 60034-9, ISO 3745 & 4871)
- (IEC 60064-9; Clause 8)
- (ISO 4871; Section B2)
- (IEC 60034; Clause 5.2)
- (IEC 60034-9; Clause 6, Note 2)
- (IEC 60034-9 amd 1; Clause 7)
- (IEC 60034; Clause 5.2)
- (ISO 11203; Clause 6.2.3)

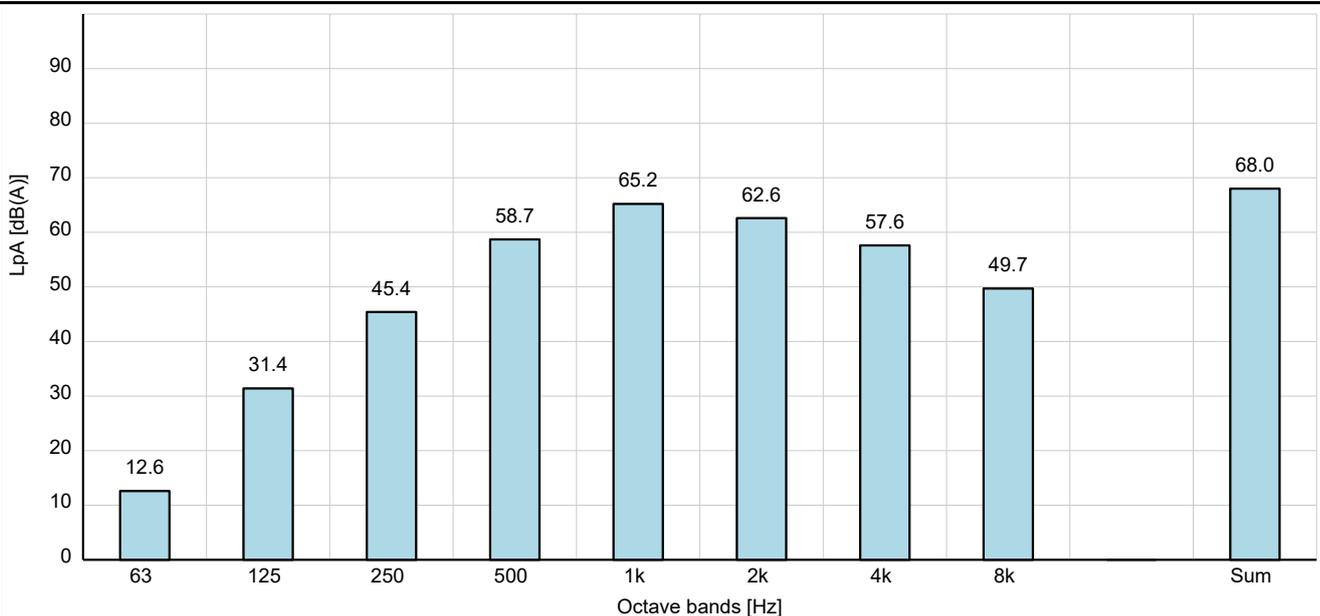
# SOUND MEASUREMENT REPORT

ISO 3745

<b>Object:</b>	Motor type: MGE90LC	U:	3 x 380-500 [V]
		f:	50/60 [Hz]
		P2:	2.2 [kW]
		n:	4000 - 5900 [rpm]

<b>Test conditions:</b>	Load: No load / Idle	Sound test:	400 [V]
		f:	50 [Hz]
		P2:	0 [kW]
		n:	5900 [rpm]

**Comments:**



**Sound pressure level  $L_{pA}$  : 68.0 [dB(A)]**

Sound power level  $L_{WA}$  : 80.5 [dB(A)]

**Notes:**

- Sound power values  $L_{WA}$  determined according to IEC 60034-9, ISO 3745 and ISO 4871.
  - Associated uncertainty  $K_{WA} = 3$  [dB(A)]
  - "The sum of measured noise emission values and its associated uncertainty represents an upper boundary of the range of values which is likely to occur in measurements".
- Sound power evaluated at rated speed and no load as specified in IEC 60034-9.
  - "The sound power levels, under full load condition, are normally higher than those at no-load. Generally, if ventilation noise is predominant the change may be small; but, if the electromagnetic noise is predominant the change may be significant".
  - Additionally - as outlined in IEC 60034-9 Amendment 1 - an increase in the noise level may also occur on variable speed drives due to increased level of higher harmonics and potential coincidence between these and structural resonances.
- The equivalent sound pressure level  $L_{pA}$  at 1 m distance are determined from the sound power level via ISO 11203 method Q2
  - The observer surface area  $S$  is given by a box shape enveloping the source – and here calculated for a specified distance of 1 m between the source and the observer surface.
  - The emission sound pressure level obtained with this method represents the average sound pressure level over the surface of area  $S$  in environmental conditions approximating to a free field over a reflecting plane".

**References:**

- (IEC 60034-9, ISO 3745 & 4871)
- (IEC 60064-9; Clause 8)
- (ISO 4871; Section B2)
- (IEC 60034; Clause 5.2)
- (IEC 60034-9; Clause 6, Note 2)
- (IEC 60034-9 amd 1; Clause 7)
- (IEC 60034; Clause 5.2)
- (ISO 11203; Clause 6.2.3)