# **TECHNICAL DATA SHEET**

## **DECIBEL AL-R**

### **Acoustic Louvers DECIBEL AL-R®**

#### **Product Description:**

Acoustic Louvers Model AL-300-R® and AL-600-R® are a single louver attenuating system. The louvers are made of steel sheets, filled with sound absorbing material and one sided cover by perforated metal sheet. This model blends good acoustic performance and aerodynamic characteristics. DECIBEL AL-R® model differs from the standart soundproofing louvers DECIBEL AL-300® and DECIBEL AL- 600® with its aerodynamic shape of the louvers. This shape of the louvers contributes to better airflow.

#### **Technical Specification:**

DECIBEL AL-300-R® and AL-600-R® are used mainly at engine room, ventilation openings, power generator rooms, boiler rooms, cooling towers or any other industrial or HVAC system.

Custom louvers can be produced from aluminum (perforated sheet is galvanized steel).



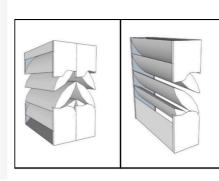
#### **Application:**

DECIBEL AL-R® sound-insulating louvers are specially produced for use in cases where a large amount of air must pass through a louvre and where the installation space is limited. This includes enclosures, generators and cooling / heating systems.

Two standard sizes of DECIBEL AL-R® soundproofing louvers (300 and 600) are produced, each with its own properties in terms of air flow, sound insulation and installation depth. DECIBEL AL-R® can also be produced in non-standard sizes.

#### Sizes:

The standard sizes of the box are 600x1000x1000 or 300x1000x1000 . This makes the attenuators easy to install on facades opening or hang on support metal construction. They can also be stored as standalone screen wall attenuators.



| 25        |           |         |         |               |           |          |              |         |
|-----------|-----------|---------|---------|---------------|-----------|----------|--------------|---------|
| 20        |           |         |         |               |           |          |              |         |
|           |           |         |         |               |           |          |              |         |
| TL(db) 15 |           | James V |         |               |           | •        |              |         |
| 10        |           |         | _       |               |           |          |              |         |
|           |           |         |         |               |           |          |              |         |
| 5 100     | 125 160 2 | 250 315 | 400 500 | ) 630 8<br>Hz | 00 1000 1 | 250 1600 | 2000 2500 31 | 50 4000 |

| Acoustic Performance of AL-300-R: |     |     |      |      |      |      |      |       |  |  |
|-----------------------------------|-----|-----|------|------|------|------|------|-------|--|--|
| Octave band center frequency (Hz) | 63  | 125 | 250  | 500  | 1000 | 2000 | 4000 | 8000  |  |  |
| Transmission Loss (dB)            | 5   | 6   | 9    | 10   | 13   | 10   | 8    | 7     |  |  |
| Aerodynamic Performance AL-300-R: |     |     |      |      |      |      |      |       |  |  |
| Static Pressure Drop (N/m2        | 1,7 | 6,6 | 15,0 | 27,0 | 41,3 | 59,9 | 81,7 | 106,7 |  |  |
| Face Velocity (m/s)               | 0,5 | 1   | 1,5  | 2    | 2,5  | 3    | 3,5  | 4     |  |  |

| Acoustic Performance of AL-600-R: |     |     |      |      |      |      |       |       |  |  |
|-----------------------------------|-----|-----|------|------|------|------|-------|-------|--|--|
| Octave band center frequency (Hz) | 63  | 125 | 250  | 500  | 1000 | 2000 | 4000  | 8000  |  |  |
| Transmission Loss (dB)            | 6   | 9   | 13   | 17   | 23   | 19   | 16    | 15    |  |  |
| Aerodynamic Performance AL-600-R: |     |     |      |      |      |      |       |       |  |  |
| Static Pressure Drop (N/m2        | 2,2 | 8,7 | 22,6 | 40,1 | 63,8 | 92,1 | 121,5 | 163,2 |  |  |
| Face Velocity (m/s)               | 0,5 | 1   | 1,5  | 2    | 2,5  | 3    | 3,5   | 4     |  |  |