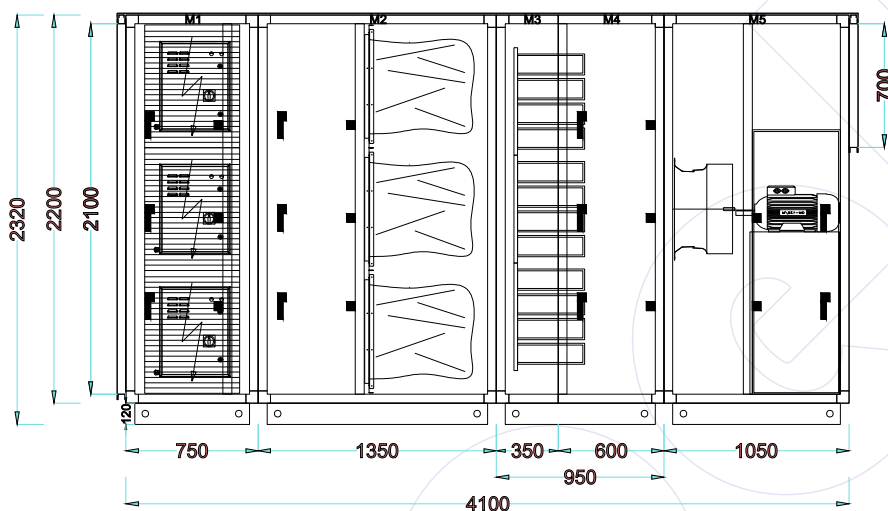
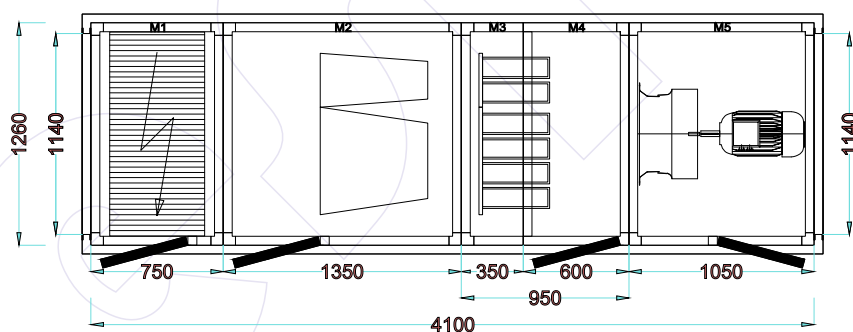


RIGHT VIEW



TOP VIEW



### GENERAL SPECIFICATIONS

**Airflow**

15000 m<sup>3</sup>/h

**Air Velocity**

1,71 m/s

**Fan Model**

RLM E6-5663

**Filter 1**

Electrostatic Filter

**Filter 2**

Bag Filter

**Filter 3**

Activated Carbon Filter

**Model / Frame**

50x50 mm

**Insulation Material**

50 mm Rockwool 70 kg/m<sup>3</sup>

**Outside Sheet Material**

0,8 mm Painted Galvanize

**Inside Sheet Material**

1 mm Galvanize

**Dimensions (mm) (Size+Pedestal)**

W 1260 x H 2320 x L 4100

**Total Weight**

1627 kg

**Base Height**

120 mm

**Motor Power**

7,5 kW

**Total Absorbed Power**

7,14 kW

**Specific Fan Power (SFP Total)**

113,6 W/(m<sup>3</sup>/s)

**ErP Code**

NRVU-UVU

**fs-Pref (W-S)**

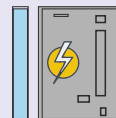
0,88

**External Static Pressure**

500 Pa

### FILTER (M1)

|                      |                                             |                |                                                                                                                                                                                                          |
|----------------------|---------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                | Electrostatic Filter                        | Section weight | 446 kg                                                                                                                                                                                                   |
| Section length       | 750 mm                                      | Pass type      | Single Pass                                                                                                                                                                                              |
| Max. Air flow rate   | 18000 m <sup>3</sup> /h (6000 x 3)          | Efficiency     | 95% single pass DOP Test<br>96% single pass ASHRAE 52.2-2012                                                                                                                                             |
| Design pressure drop | 50 Pa                                       | Drain          | From 0.01 microns - 10 microns<br>1 1/2"                                                                                                                                                                 |
| Case x qty.          | DE60 x 3                                    | Features       | Short circuit, arc protection and auto restore PS.<br>BMS terminals provided<br>Auto power cut-off when door is opened<br>Indicator LEDs for normal or wash indicator<br>Set of Terminals for remote LED |
| Type                 | Plate - Cell                                |                |                                                                                                                                                                                                          |
| Total cell qty.      | 6                                           |                |                                                                                                                                                                                                          |
| Pre-filter           | Metalic Cassette Filter                     |                |                                                                                                                                                                                                          |
| Total power          | 462 W                                       |                |                                                                                                                                                                                                          |
| Voltage              | 1 ph / 220-240 V / 50Hz                     |                |                                                                                                                                                                                                          |
| Ionising voltages    | High Voltage: 12KVdc,<br>Low Voltage: 6KVdc |                |                                                                                                                                                                                                          |



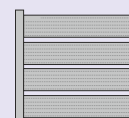
### FILTER (M2)

|                      |                         |                        |                                              |
|----------------------|-------------------------|------------------------|----------------------------------------------|
| Model                | Bag Filter              | Section weight         | 291 kg                                       |
| Section length       | 1350 mm                 | Efficiency class EN779 | F7                                           |
| Max. Air flow rate   | 24000 m <sup>3</sup> /h | Filter frame           | Galvanised steel                             |
| Design pressure drop | 219 Pa                  | Media type             | Meltblown synthetic media                    |
|                      |                         | Max. Operating Temp.   | 93 °C                                        |
|                      |                         | Air velocity           | 2,67 m/s                                     |
|                      |                         | Size / qty.            | 3 pcs. 592x592x610mm<br>3 pcs. 592x287x610mm |



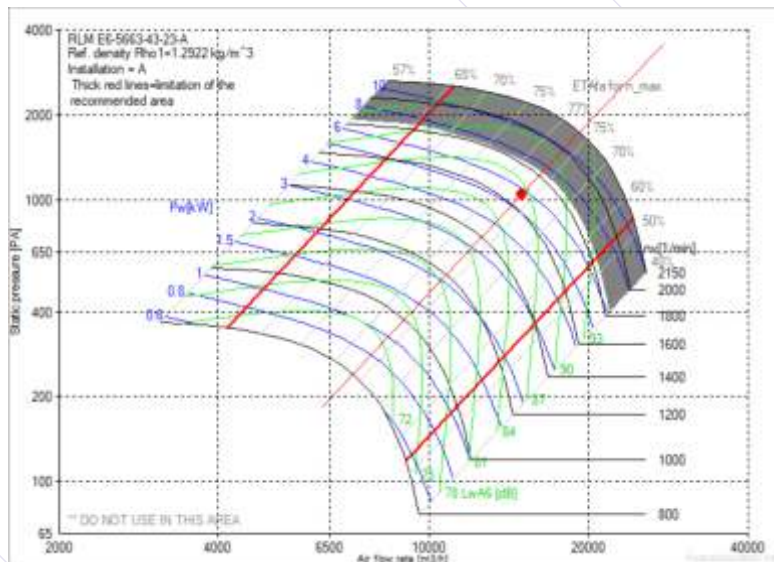
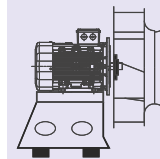
### FILTER (M3/M4)

|                      |                          |                        |                                     |
|----------------------|--------------------------|------------------------|-------------------------------------|
| Model                | Activated Carbon         | Section weight         | 485 kg                              |
| Section length       | 950 mm                   | Carbon type            | Granule AC - 4 mm pellet            |
| Max. Air flow rate   | 15480 m <sup>3</sup> /h  | Carbon weight          | ~3,5 kg per cartridge               |
| Design pressure drop | 272 Pa                   | Max. Relative humidity | 70%                                 |
| Case type            | Cylindrical Cartridge    | Eff. Work. Max. Temp.  | 40°C                                |
| Case material        | Painted Galvanized Steel | Iodine                 | 900 mg/g (AWWA B 600-78)            |
| Gasket               | Epdm                     | Specific surface area  | 1000 m <sup>2</sup> /g              |
| Cartridge dimensions | Ø145 x 600 mm            | Density                | 550 kg/m <sup>3</sup> (ASTM D 2854) |
| Total cartridge qty. | 72 pcs                   | CCI adsorption         | 50% (ASTM D3467)                    |
| Total carbon weight  | 252 kg                   |                        |                                     |



## EXHAUST FAN (M5)

|                                      |                                   |                                      |                       |
|--------------------------------------|-----------------------------------|--------------------------------------|-----------------------|
| <b>Air Flow</b>                      | <b>Motor Type</b>                 | <b>Fan Model</b>                     | <b>Quantity</b>       |
| 15000 m <sup>3</sup> /h              | AC-GM 132 M-4                     | Nicotra-Gebhardt-RLM E6-5663-43-23-A | 1                     |
| <b>Internal Static Pressure</b>      | <b>Motor Po./Pha./Volt./Freq.</b> | <b>Power Margin</b>                  | <b>Section Length</b> |
| 551 Pa                               | 7,5 kW/3P/380V/50V-Hz             | 40,19 %                              | 1050 mm               |
| <b>External Static Pressure</b>      | <b>Motor Speed</b>                | <b>Section Weight</b>                |                       |
| 500 Pa                               | 1500 (1430) rpm                   | 405 kg                               |                       |
| <b>Total Static Pressure</b>         | <b>Fan Bush Number</b>            |                                      |                       |
| 1051 Pa                              | 2012                              |                                      |                       |
| <b>Total Pressure</b>                | <b>Motor Shaft Diameter</b>       |                                      |                       |
| 1119 Pa                              | Ø38 mm                            |                                      |                       |
| <b>Total / Static Efficiency</b>     | <b>Absorbed Power With VFD</b>    |                                      |                       |
| 81,00 / 76,00 %                      | 6,8 kW                            |                                      |                       |
| <b>Motor / Inverter Efficiency</b>   | <b>Running Frequency</b>          |                                      |                       |
| 87,40 / 97,00 %                      | 58,43 Hz (Max. 63,99 Hz)          |                                      |                       |
| <b>Shaft Power / Absorbed Power</b>  | <b>Air Density</b>                |                                      |                       |
| 5,77 / 6,6 kW                        | 1,2 kg/m <sup>3</sup>             |                                      |                       |
| <b>Fan Speed</b>                     | <b>Electrical Current</b>         |                                      |                       |
| 1671 rpm (Max. 1830 rpm)             | 10,33 A (Max. 13,43 A)            |                                      |                       |
| <b>Specific Fan Power (SFPe int)</b> |                                   |                                      |                       |
| 113,6 W/(m <sup>3</sup> /s)          |                                   |                                      |                       |



Exhaust Fan Sound Power Level (dB)

| Hz          | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 | LwA-tot |     |
|-------------|------|------|------|------|------|------|------|------|---------|-----|
| Outlet Side | 81,0 | 86,0 | 82,0 | 82,0 | 82,0 | 79,0 | 77,0 | 74,0 | 87,0    | dBA |
| Inlet Side  | 78,0 | 84,0 | 81,0 | 78,0 | 76,0 | 74,0 | 72,0 | 69,0 | 82,0    | dBA |

\*The fan system effect is taken into account in the fan performance  
\*The fan calculated for wet conditions

## CONTROL BOARD

|                                       |
|---------------------------------------|
| <b>HMI Touch Screen (Room)</b>        |
| 7" HMI Box                            |
| <b>Variable Frequency Drive (VFD)</b> |
| 7,5 kW                                |
| <b>Main Controller (PLC)</b>          |
| Yes                                   |

### Standard Specifications

- BMS integration (Modbus RTU, Modbus TCP/IP, BACnet IP)
- Variable fan speed control
- Electrostatic Filter/Bag dirtiness info
- Activated carbon filter integrity monitor (Time Counter)
- Door switch info
- Adaptation to fire safety system / fire mode
- Air volume set, monitoring and control from the room HMI Box
- Detailed daily and weekly time scheduling

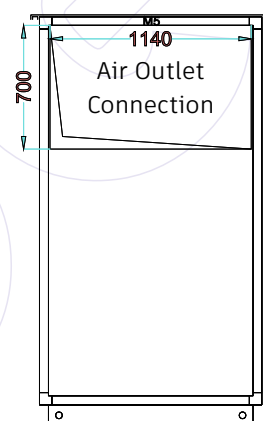
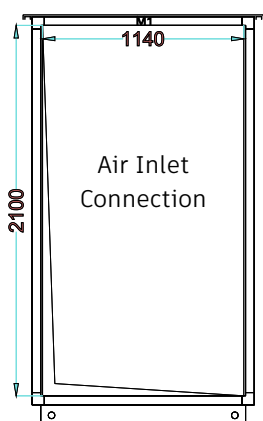
## SOUND POWER LEVEL (dB)

| Frequency Hz                        | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 | LwA-tot |     |
|-------------------------------------|------|------|------|------|------|------|------|---------|-----|
| Airborne Sound Power Level          | 67,0 | 55,0 | 51,0 | 48,0 | 45,0 | 40,0 | 32,0 | 56,5    | dBa |
| Air Outlet Induct Sound Power Level | 86,0 | 82,0 | 82,0 | 82,0 | 79,0 | 77,0 | 74,0 | 87,0    | dBa |
| Air Inlet Induct Sound Power Level  | 65,0 | 62,0 | 59,0 | 57,0 | 59,0 | 57,0 | 54,0 | 65,0    | dBa |

## CASING ACOUSTICAL INSULATION [dB]

| Frequency Hz | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |     |
|--------------|------|------|------|------|------|------|------|-----|
|              | 19,0 | 27,0 | 31,0 | 34,0 | 34,0 | 37,0 | 42,0 | dBa |

## AIR CONNECTIONS



### Airflow

15000 m<sup>3</sup>/h

### Air Velocity

1,74 m/s

### Dimensions

W 1140 mm x H 2100 mm

### Connection Type

Flange

### Pressure Drop

0 Pa

### Control

No

### Airflow

15000 m<sup>3</sup>/h

### Air Velocity

5,22 m/s

### Dimensions

W 1140 mm x H 700 mm

### Connection Type

Flange

### Pressure Drop

10 Pa

### Control

No

## OPTIONS (non-standard)

- Electric motor out of air stream
- Special control scenarios on request
- Temperature or VOC control
- Motorized damper for inlet/outlet connections
- Damper modulation of ecology unit
- Fire damper
- Rain louver
- Bulkhead light
- IOT Module (4G or Ethernet)
- Silencer unit