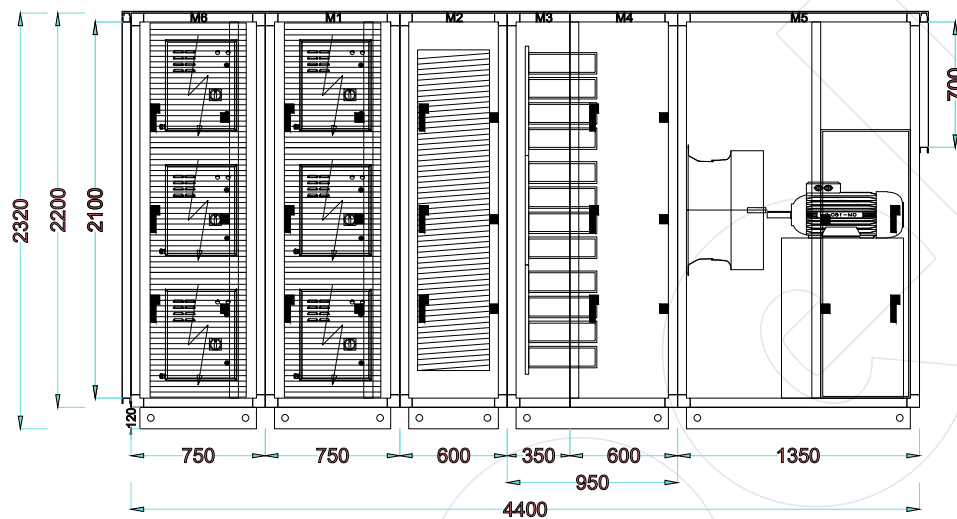
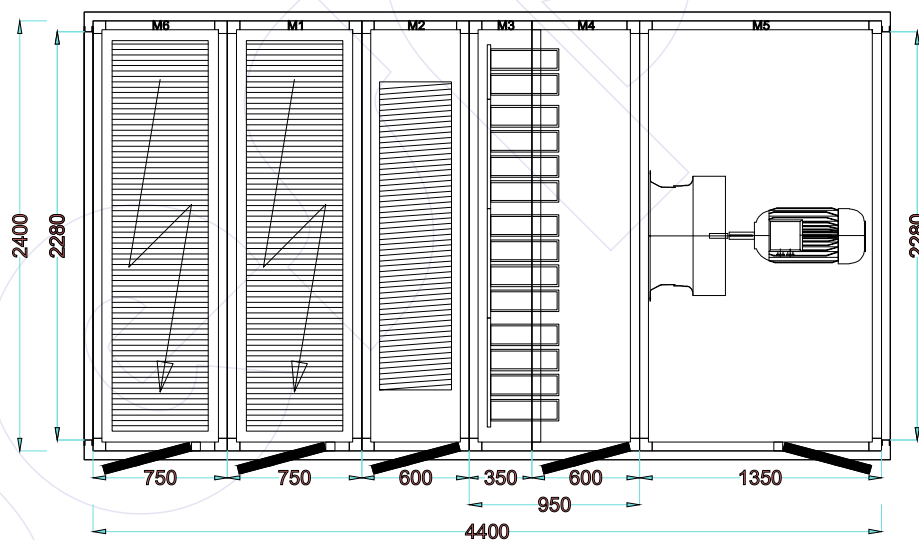


RIGHT VIEW



TOP VIEW



## GENERAL SPECIFICATIONS

**Airflow**  
30000 m<sup>3</sup>/h

**Air Velocity**  
1,73 m/s

**Fan Model**  
RLM E6-7180

**Filter 1**  
Electrostatic Filter

**Filter 2**  
Electrostatic Filter

**Filter 3**  
UVC Ozone Chamber

**Filter 4**  
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 2400 x H 2320 x L 4400

**Total Weight**  
3333 kg

**Base Height**  
120 mm

**Motor Power**  
15 kW

**Total Absorbed Power**  
15,08 kW

**Specific Fan Power (SFP Total)**  
216 W/(m<sup>3</sup>/s)

**ErP Code**  
NRVU-UVU

**fs-Pref (W-S)**  
0,98

**External Static Pressure**  
600 Pa

## FILTER (M6)

|                      |                                             |                |                                                                                                                                                                                                          |  |
|----------------------|---------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Model                | Electrostatic Filter                        | Section weight | 730 kg                                                                                                                                                                                                   |  |
| Section length       | 750 mm                                      | Pass type      | First Pass of Double Pass                                                                                                                                                                                |  |
| Max. Air flow rate   | 30000 m <sup>3</sup> /h (10000 x 3)         | Efficiency     | 95% single pass DOP Test<br>96% single pass ASHRAE 52.2-2012                                                                                                                                             |  |
| Design pressure drop | 50 Pa                                       | Drain          | 1 1/2"                                                                                                                                                                                                   |  |
| Case x qty.          | DE100 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.      | 9                                           |                |                                                                                                                                                                                                          |  |
| Pre-filter           | Metalic Cassette Filter                     |                |                                                                                                                                                                                                          |  |
| Total power          | 693 W                                       |                |                                                                                                                                                                                                          |  |
| Voltage              | 1 ph / 220-240 V / 50Hz                     |                |                                                                                                                                                                                                          |  |
| Ionising voltages    | High Voltage: 12KVdc,<br>Low Voltage: 6KVdc |                |                                                                                                                                                                                                          |  |

## FILTER (M1)

|                      |                                             |                |                                                                                                                                                                                                          |  |
|----------------------|---------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Model                | Electrostatic Filter                        | Section weight | 721 kg                                                                                                                                                                                                   |  |
| Section length       | 750 mm                                      | Pass type      | Second Pass of Double Pass                                                                                                                                                                               |  |
| Max. Air flow rate   | 30000 m <sup>3</sup> /h (10000 x 3)         | Efficiency     | 98% double pass DOP Test<br>99% double pass ASHRAE 52.2-2012                                                                                                                                             |  |
| Design pressure drop | 50 Pa                                       | Drain          | 1 1/2"                                                                                                                                                                                                   |  |
| Case x qty.          | DE100 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.      | 9                                           |                |                                                                                                                                                                                                          |  |
| Pre-filter           | Metalic Cassette Filter                     |                |                                                                                                                                                                                                          |  |
| Total power          | 693 W                                       |                |                                                                                                                                                                                                          |  |
| Voltage              | 1 ph / 220-240 V / 50Hz                     |                |                                                                                                                                                                                                          |  |
| Ionising voltages    | High Voltage: 12KVdc,<br>Low Voltage: 6KVdc |                |                                                                                                                                                                                                          |  |

## FILTER (M2)

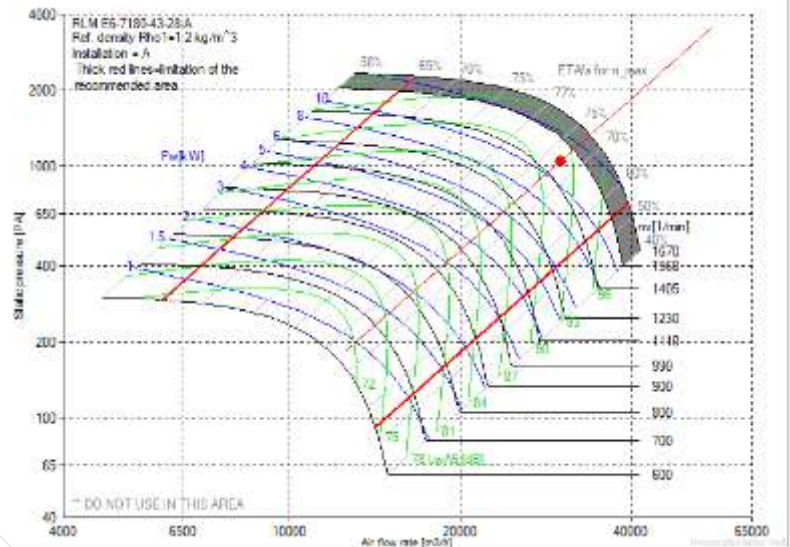
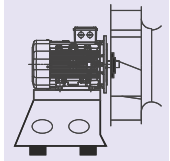
|                      |                                     |                |             |  |
|----------------------|-------------------------------------|----------------|-------------|--|
| Model                | UVC Ozone Chamber                   | Section weight | 247 kg      |  |
| Section length       | 600 mm                              | Ballast type   | D-PH2-2/75  |  |
| Max. Air flow rate   | 30000 m <sup>3</sup> /h (10000 x 3) | Ballast qty.   | 30          |  |
| Design pressure drop | 25 Pa                               | Total power    | 1650 W      |  |
| Case x qty.          | DOZ-100-10B x 3                     | Voltage        | 230V - 50Hz |  |
| Lamp type            | D-GPH1148                           | Rated life     | 9000 hours  |  |
| Lamp qty.            | 30                                  |                |             |  |
| Tube diameter        | 15mm                                |                |             |  |
| Arc length           | 1068mm                              |                |             |  |
|                      |                                     |                |             |  |

## FILTER (M3/M4)

|                      |                          |                        |                                     |  |
|----------------------|--------------------------|------------------------|-------------------------------------|--|
| Model                | Activated Carbon         | Section weight         | 899 kg                              |  |
| Section length       | 950 mm                   | Carbon type            | Granule AC - 4 mm pellet            |  |
| Max. Air flow rate   | 36120 m <sup>3</sup> /h  | Carbon weight          | ~3,5 kg per cartridge               |  |
| Design pressure drop | 254 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. | 168 pcs                  | CCI adsorption         | 50% (ASTM D3467)                    |  |
| Total carbon weight  | 588 kg                   |                        |                                     |  |

## EXHAUST FAN (M5)

|                                      |                                   |                                      |                       |
|--------------------------------------|-----------------------------------|--------------------------------------|-----------------------|
| <b>Air Flow</b>                      | <b>Motor Type</b>                 | <b>Fan Model</b>                     | <b>Quantity</b>       |
| 30000 m <sup>3</sup> /h              | AC-GM 160 L-4                     | Nicotra-Gebhardt-RLM E6-7180-43-28-A | 1                     |
| <b>Internal Static Pressure</b>      | <b>Motor Po./Pha./Volt./Freq.</b> | <b>Power Margin</b>                  | <b>Section Length</b> |
| 444 Pa                               | 15 kW/3P/380V/50V-Hz              | 26,05%                               | 1350 mm               |
| <b>External Static Pressure</b>      | <b>Motor Speed</b>                | <b>Section Weight</b>                |                       |
| 600 Pa                               | 1500 (1460) rpm                   | 735 kg                               |                       |
| <b>Total Static Pressure</b>         | <b>Fan Bush Number</b>            |                                      |                       |
| 1044 Pa                              | 2517                              |                                      |                       |
| <b>Total Pressure</b>                | <b>Motor Shaft Diameter</b>       |                                      |                       |
| 1144 Pa                              | Ø42 mm                            |                                      |                       |
| <b>Total / Static Efficiency</b>     | <b>Absorbed Power With VFD</b>    |                                      |                       |
| 80,00 / 73,00 %                      | 13,69 kW                          |                                      |                       |
| <b>Motor / Invertor Efficiency</b>   | <b>Running Frequency</b>          |                                      |                       |
| 89,50 / 97,00 %                      | 50,65 Hz (Max. 53,42 Hz)          |                                      |                       |
| <b>Shaft Power / Absorbed Power</b>  | <b>Air Density</b>                |                                      |                       |
| 11,9 / 13,3 kW                       | 1,2 kg/m <sup>3</sup>             |                                      |                       |
| <b>Fan Speed</b>                     | <b>Electrical Current</b>         |                                      |                       |
| 1479 rpm (Max. 1560 rpm)             | 20,81 A (Max. 26,23 A)            |                                      |                       |
| <b>Specific Fan Power (SFPe int)</b> |                                   |                                      |                       |
| 216 W/(m <sup>3</sup> /s)            |                                   |                                      |                       |



Exhaust Fan Sound Power Level (dB)

| Hz                 | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 | LwA-tot |     |
|--------------------|------|------|------|------|------|------|------|------|---------|-----|
| <b>Outlet Side</b> | 86,0 | 91,0 | 87,0 | 87,0 | 87,0 | 84,0 | 82,0 | 79,0 | 92,0    | dBA |
| <b>Inlet Side</b>  | 86,0 | 91,0 | 86,0 | 83,0 | 81,0 | 79,0 | 77,0 | 74,0 | 87,0    | 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> |
| 15 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/EPA dirtiness info
- UVC/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

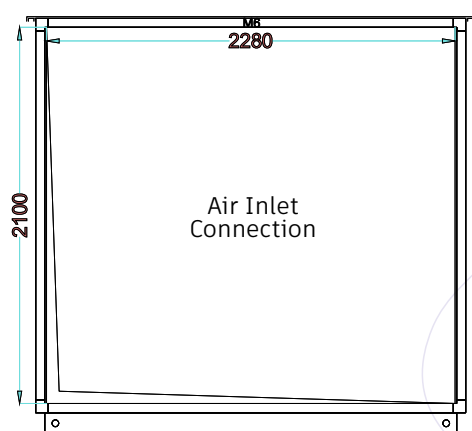
## SOUND POWER LEVEL (dB)

| Frequency Hz                        | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 | LwA-tot |     |
|-------------------------------------|------|------|------|------|------|------|------|---------|-----|
| Airborne Sound Power Level          | 72,0 | 60,0 | 56,0 | 53,0 | 50,0 | 45,0 | 37,0 | 61,5    | dBA |
| Air Outlet Induct Sound Power Level | 91,0 | 87,0 | 87,0 | 87,0 | 84,0 | 82,0 | 79,0 | 92,0    | dBA |
| Air Inlet Induct Sound Power Level  | 67,0 | 62,0 | 62,0 | 57,0 | 60,0 | 58,0 | 55,0 | 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**  
30000 m<sup>3</sup>/h

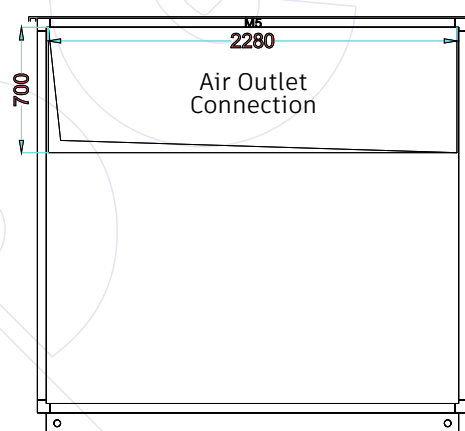
**Air Velocity**  
1,74 m/s

**Dimensions**  
W 2280 mm x H 2100 mm

**Connection Type**  
Flange

**Pressure Drop**  
0 Pa

**Control**  
No



**Airflow**  
30000 m<sup>3</sup>/h

**Air Velocity**  
5,22 m/s

**Dimensions**  
W 2280 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