

INTRODUCTION

Flow is calculated by measuring the total pressure in the neck of the diffuser, damper position and the diffuser size.

- The user can specify the minimum flow through a diffuser.
- The user can specify the maximum flow through a diffuser.
- The GUI interface displays the total flow and the pressure of the zone in the Diffuser Controller window. The diffusers actual calculated flow or alternatively the approximate calculated flow is presented in the temperature controller window.
- Flow can be measured by all the diffusers in a zone or distributed from a single diffuser.
 - ⇒ The total air flow per zone is calculated by combining the air flow from the individual diffusers in that zone.
 - ⇒ Each diffuser could be fitted individually with an airflow sensor to calculate flow for that zone or...
 - ⇒ The air flow for a zone could be derived from one diffuser fitted with a sensor and the pressure reading distributed to the other diffusers in that zone.

Prerequisites

- Only MCU's loaded with revision 6.xx firmware is upgradable to accommodate flow.
- MCU firmware version 6.08 or above required. [See MCU firmware updating.](#)
- MCU flow coefficient file must be up to date.
- Diffuser controller hardware version 5.5 or above.
- Diffuser controller firmware version 6.14 or above. [See Node firmware updating.](#)

Wizard Features

- The wizard automatically checks the prerequisites and allows the user to enable and set flow limits as well as to set up the distribute feature.
- To enable the air flow display only for a specific zone the following parameters needs to be set for each diffuser:
 - ⇒ 'Pressure Enabled'
 - ⇒ 'Distribute' (optional)
- To enable the air flow display and control for a specific zone the following parameters needs to be set for each diffuser:
 - ⇒ 'Pressure Enabled'
 - ⇒ 'Min Flow' value
 - ⇒ 'Max Flow' value
 - ⇒ 'Min Flow Control' enabled
 - ⇒ 'Max Flow Control' enabled
 - ⇒ 'Distribute' (optional)



FLOW MEASUREMENT SETUP

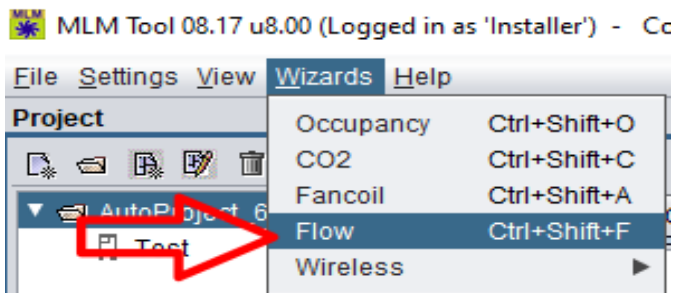
Before setting up flow measurement, ensure your diffusers are connected and zoned. For help go to:

MLM Diffuser - Quick Install Guide: <https://www.youtube.com/watch?v=Q0v6ZoEIOB8>

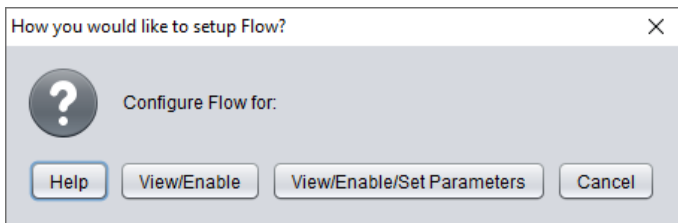
MLM Commissioning Guide: <https://www.youtube.com/watch?v=99V5uaYBZaM>

Diffuser Hardware & Software Commissioning Guide: <https://www.rickardair.com/wp-content/uploads/2022/06/MLM-Diffuser-Hardware-and-Software-Commissioning-Guide-compressed.pdf>

- **Start Wizard**
 - To start the flow wizard go to the 'Wizards' main menu item and select 'Flow'. See below:

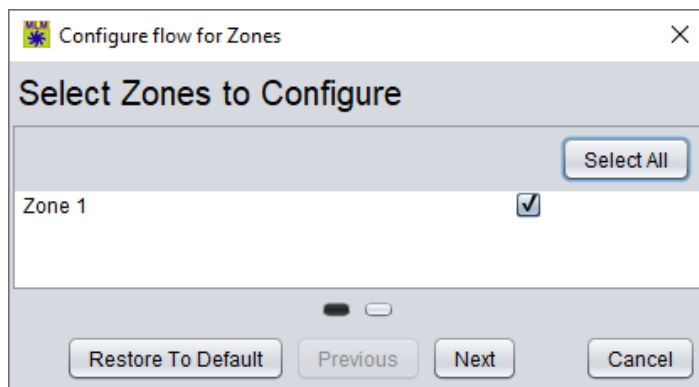


- The following window is displayed:

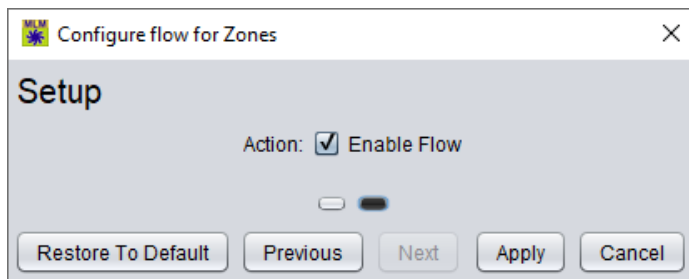


- Four options are available:
 - ⇒ **Help**
 - ◆ Opens Help
 - ⇒ **View/Enable**
 - ◆ Select to view and/or enable flow readings.
 - ◆ When using this option the user is not able to configure minimum flow, maximum flow or selecting flow distribution.
 - ⇒ **View/Enable/Set Parameters**
 - ◆ Use this option to configure the viewing of flow, minimum flow, maximum flow and make use of flow distribution.
 - ⇒ **Cancel**
 - ◆ Cancel the flow wizard

- ⇒ **View/Enable**
 - ◆ After selecting 'View/Enable' the following window is shown:



- ◆ Here you can select the zones whose flow you would like to enable or disable. Select zone 2 as shown above and click next. See next window below:



- ◆ If you would like to enable flow for zone 2, keep the 'Enable Flow' ticked.
- ◆ If you would like to disable flow for zone 2, untick the 'Enable Flow' box.
- ◆ Click apply to configure the diffusers in zone 2 for flow.

View/Enable/Set Parameters

⇒ After selecting this option the following window is shown:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2		MLM 24 VSD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
16034001	2		MLM 24 VCD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
19091862	2	name	MLM 24 VSD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0

⇒ Table contents:

- ◆ This dialog lists all the diffusers for the section (MCU connected to).
- ◆ It shows the the current (online) flow configuration for each diffuser:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2		MLM 24 VSD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.5	11.8
19091862	2	name	MLM 24 VCD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.1	5.3
16034001	2		MLM 24 VSD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	150.0	150.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.4	10.5

- ◇ Pressure Enabled, Min Flow, Min Flow Control, Max Flow, Max Flow Control, Distribute
- ◇ These columns show what the current configuration is on the MLM hardware.
- ◆ To the right of each online column you will find the currently saved (in section) offline values.

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2		MLM 24 VSD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.5	11.8
19091862	2	name	MLM 24 VCD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.1	5.3
16034001	2		MLM 24 VSD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	150.0	150.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.4	10.5

- ◇ New Pressure Enabled, New Min Flow, New Min Flow Control, New Max Flow, New Max Flow Control, New Distribute
- ◇ Only these columns are editable and allows the user to update the flow parameters.

Enable flow viewing for Zone 2

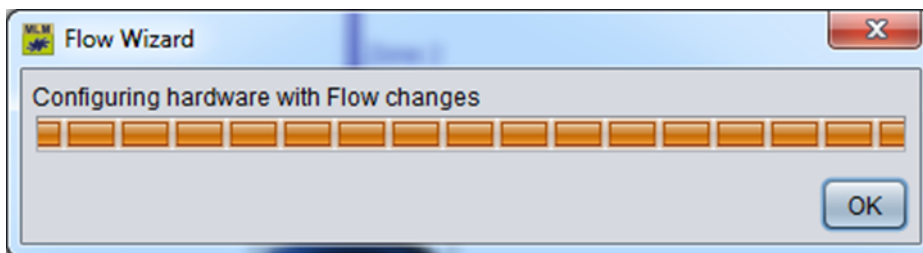
⇒ To enable flow for zone 2 click the 'New Pressure Enabled' tickbox for any diffuser in zone 2. See below:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2		MLM 24 VSD Variable V...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
16034001	2		MLM 24 VCD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
19091862	2	name	MLM 24 VSD Variable V...	<input type="checkbox"/>	<input type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0

⇒ After selecting this tick box, the table will change as follow:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2		MLM 24 VSD Variable V...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50.0	50.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0
16034001	2		MLM 24 VCD Variable V...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0
19091862	2	name	MLM 24 VSD Variable V...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50.0	50.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0

- ◆ The wizard automatically selects all the other tick boxes in zone 2. Disabling any of the ticks in zone 2 will also deselect all the ticks for that specific zone.
- ⇒ To save this new configuration in the projects section and write the changes to the hardware, click on the 'Save Offline To Online' button.
- ⇒ The dialog closes and the following dialog is shown while the hardware is being updated:



⇒ When the flow wizard is re-opened and the 'View/Enable/Set Parameters' option is selected the table will show the following:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2	MLM 24 VSD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.3	9.1
19091862	2	name MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.3	7.8
16034001	2	MLM 24 VSD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	150.0	150.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.3	9.3

⇒ You will now notice that the 'Pressure Enabled' and 'Pressure Enabled New' Columns for zone 2 match. See below:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2	MLM 24 VSD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.3	9.1
19091862	2	name MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.3	7.8
16034001	2	MLM 24 VSD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	150.0	150.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.3	9.3

• **Enable flow minimum value and control for Zone 2**

⇒ To enable minimum flow control on a diffuser two settings need to be configured.

- ◆ 'New Min Flow'. To edit the value double click the cell. See below:
- ◆ 'New Min Flow Control'. See below:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2	MLM 24 VSD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
19091862	2	name MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
16034001	2	MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0

⇒ Click on the 'Save Offline To Online' button.

⇒ Reopen the wizard again. See below:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2	MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
19091862	2	name MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
16034001	2	MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0

⇒ The diffuser will now control the disk position for a minimum flow of 30 liters per second.

• **Enable flow maximum value and control for Zone 2**

⇒ See 'Enable flow minimum value and control for Zone 2'

• **Enable Distribute for Zone 2**

⇒ It is possible to distribute the pressure value in one diffuser to all diffusers in the same zone to calculate a total flow.

⇒ Open the 'Configure Flow Setup' window. See below:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
12060139	2	MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
19091862	2	name MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
16034001	2	MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0

⇒ Say you would like diffuser '19091862' to measure flow and distribute the value to the other diffuser in zone 2.

⇒ Select the 'New Distribute' tick for diffuser '19091862' as shown below:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
16034001	2	MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
12060139	2	MLM 24 VCD Variable V...		<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
19091862	2	name MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0

⇒ Notice that the 'New Pressure Enabled' ticks for all the other diffusers in the zone is cleared.

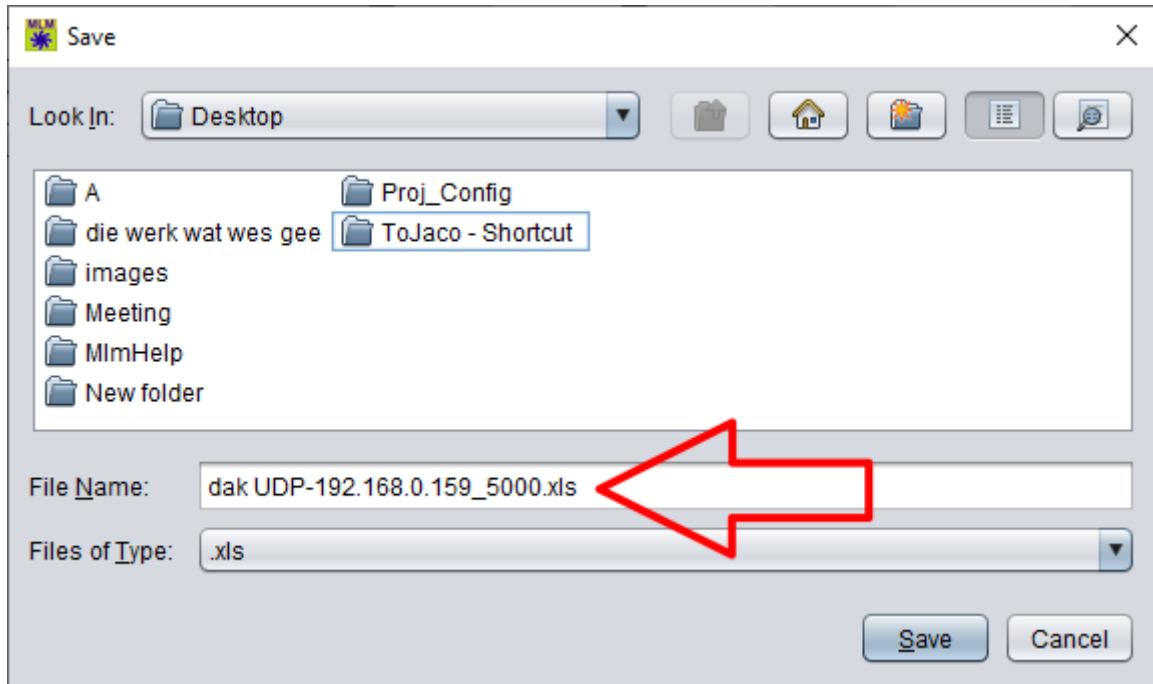
⇒ Click on the 'Save Offline To Online' button to configure distribution from '19091862' for this zone.

• **Saving settings to Excel file**

⇒ To save a backup of your current configuration click on the 'Save' button as shown below:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
16034001	2	MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
12060139	2	MLM 24 VCD Variable V...		<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
19091862	2	name MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0

⇒ A save dialog is shown:



⇒ Notice that a file name is generated starting with the section name followed with the connection address. See above.

⇒ The following .xls file is generated:

Serial	Zone	Name	Type	sure	Ena	ressure	EMin	Floww	Min Fl	Flow	Colin	Flow	CMax	Floww	Max Fl	Flow	Coax	Flow	Oistributw	Distrib	Pressure	Flow
16034001	1		ble Volume	false	false	30.0	30.0	false	false	50.0	50.0	false	false	false	false	false	false	0.0	0.0			
12060139	2		ble Volume	false	false	0.0	0.0	false	false	0.0	0.0	false	false	false	false	false	false	0.0	0.0			
19091862	2	name	ble Volume	true	true	30.0	30.0	false	false	50.0	50.0	false	false	true	true	true	0.0	0.0				

• Loading settings from Excel file

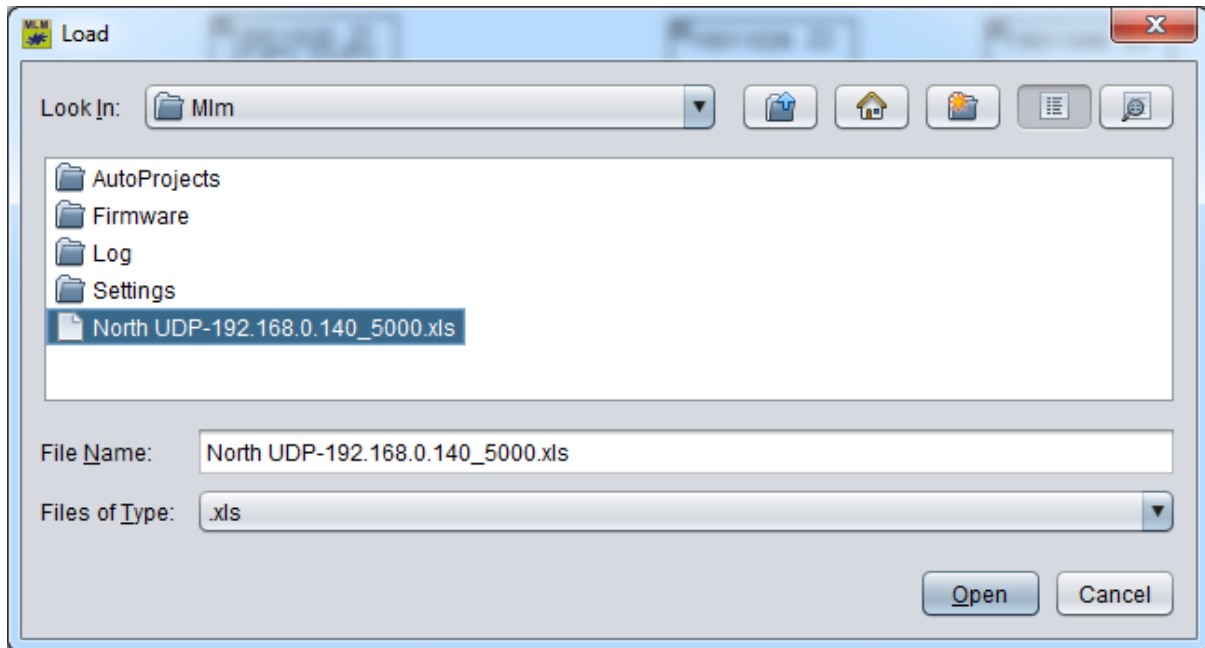
- ⇒ By using the generated template above, the flow parameter can be configured offline and then loaded into the section later.
- ⇒ When a new section is being commissioned, it is advised to initially save this template file, edit the contents and then upload to the diffuser network.
- ⇒ Edit the Excel file (using MS Excel) on disk as shown below:

Serial	Zone	Name	Type	sure	Ena	New Pressure	Enabled	Min Floww	Min Fl	Flow	Colin	Flow	C	Max Flow	New Max Flow	Max Flow	Control	New Max Flow	Control	Oistributw	Distrib	Pressure	Flow
16034001	1		ble Volume	false	TRUE	30.0	30.0	false	false	50.0	70	false	TRUE	false	false	false	false	0.0	0.0				
12060139	2		ble Volume	false	false	0.0	0.0	false	false	0.0	0.0	false	false	false	false	false	false	false	false	true	true	0.0	0.0
19091862	2	name	ble Volume	true	true	30.0	30.0	false	false	50.0	50.0	false	false	false	false	false	false	false	false	true	true	0.0	0.0

- ⇒ Note: When loading an Excel file the column names must correspond to the example shown above.
- ⇒ Click on the 'Load Button' as shown:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
16034001	2	MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
12060139	2	MLM 24 VCD Variable V...		<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
19091862	2	name MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0

- ⇒ Now select the excel file that was changed on disk:



- ⇒ After loading the file the flow configuration in the table will look as follow:

Serial	Zone	Name	Type	Pressure Enabled	New Pressure Enabled	Min Flow	New Min Flow	Min Flow Control	New Min Flow Control	Max Flow	New Max Flow	Max Flow Control	New Max Flow Control	Distribute	New Distribute	Pressure	Flow
16034001	1	MLM 24 VCD Variable V...		<input type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	70.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
12060139	2	MLM 24 VCD Variable V...		<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.0	0.0
19091862	2	name MLM 24 VCD Variable V...		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	30.0	30.0	<input type="checkbox"/>	<input type="checkbox"/>	50.0	50.0	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0	0.0

- ⇒ Click 'Offline To Online' to apply the changes to the hardware.
- ⇒ Your diffuser network will now contain the same configuration as specified in the Excel file.