



Ruimte	Rooster	Roosterstype	Roosterstand	Roostersituatie	Temperatuur [C]	Ontwerp debiet [m3/h]	Gemeten debiet [m3/h]
VERKOOP	TOEVOER 1	STH1	20MM	SCHOON	+24,4	+55,0	+54,5
	TOEVOER 2	STH	10MM	SCHOON	+24,9	+55,0	+22,4
	TOEVOER 3	STH1	5MM	SCHOON	+25,1	+55,0	+13,9
	TOEVOER 4	VST	20MM	SCHOON	+24,5	+55,0	+54,5
	AFVOER 1	STB	5	VERVUID	+26,0	-55,0	-67,0
	AFVOER 2	STB	5	VERVUID	+25,9	-55,0	-76,9
	AFVOER 3	STB	5	VERVUID	+25,7	-55,0	-75,1
	AFVOER 4	STB	5	VERVUID	+26,4	-55,0	-44,2
SPREEKKAMER	TOEVOER 1	VST1	20MM	SCHOON	+24,8	+50,0	+49,2
	AFVOER 1	STB	5	VERVUID	+25,0	-50,0	-61,8
DIRECTIE	TOEVOER 1	STH	20MM	SCHOON	+25,0	+50,0	+55,4
	AFVOER 1	STB	5	VERVUID	+26,1	-50,0	-68,6
RDAC	TOEVOER 1	VST	20MM	ONBEREIKB	+23,2	+50,0	+56,4

Datasheet

DIFFiner PC software

DIFFiner is PC software designed for use with the DIFF Automatic air volume flow meter. Together they provide a simple and very accurate solution for surveying and reporting of ventilation systems in residential and commercial buildings.

Observator Instruments are the first manufacturer to offer this unique solution. Together with the DIFF, the PC-software DIFFiner is supplied complete with a 2 GB SD card. The SD card serves as the memory card for the Diff Automatic.

The DIFF Automatic with pressure compensation can be used for calibrating, adjusting and the accurate balancing of air supply rates and exhaust rates at grilles in housing and utilities (e.g. heat recovery systems). Remember it is the technique of balancing pressure across the Diff Automatic that ensures high levels of accuracy. Applications for this

technology and instrumentation are far reaching.

Features

- Easy to use
- Fast and accurate measurement
- Quick and efficient
- High efficiency reduces on site costs
- Readings sent to internal data base which can be downloaded to PC
- Data convertible to Excel
- Ideal for measuring and commissioning heat recovery systems
- Compatible with Windows XP, Windows Vista, Windows 7 and Windows 8



MEASUREMENT REPORT DIFF

Project	DEMO	Project number	12345
Client	OBSERVATOR	DIFF number	Diff-00702
Executed by	Ben	Date	2-4-2019
Remarks	n.a.		

Building	Building 1	Fan type	1
Fan position supply	3	Fan position exhaust	3
Design result [m3/h]	+53,7	Measured result [m3/h]	+28,0
Design supply [m3/h]	+329,7	Measured supply [m3/h]	+312,1
Design exhaust [m3/h]	-276,1	Measured exhaust [m3/h]	+284,1
Remarks	none		

Room	Grille	Grille type	Grille position	Grille situation	Temperature [°C]	Design flow [m3/h]	Measured flow [m3/h]
BEDROOM1	Supply1	1	2 mm	GOOD	21,1	+50,0	50,7
	Exhaust1	1	2mm	DIRTY	21,1	-70,0	-68,5
BATHROOM	Supply1	1	2mm	GOOD	20,2	+55,0	53,7
	Exhaust1	1	2 mm	DIRTY	20,2	-65,0	-60,4
TOILET 1	Supply1	1	2mm	GOOD	20,6	+47,0	+50,3
	Exhaust1	1	5mm	DIRTY	20,6	-60,0	-59,8
STUDY	Supply1	1	2mm	GOOD	21,3	+35,0	+33,8
	Exhaust1	1	5mm	GOOD	21,3	-55,0	-56,0
BEDROOM2	Supply1	1	2mm	GOOD	21,4	+35,0	+33,8
	Supply2	1	2 mm	GOOD	21,1	+47,0	+50,3
	Exhaust1	1	2mm	GOOD	21,1	-65,0	-60,4
BEDROOM3	Supply1	1	2mm	GOOD	20,2	+55,0	53,7
	Exhaust1	1	2mm	GOOD	20,2	-65,0	-60,4
	Supply1	1	2mm	GOOD	20,6	+50,0	50,7
TOILET 2	Exhaust1	1	2mm	GOOD	20,6	+47,0	+50,3
	Exhaust2	1	5mm	DIRTY	20,6	-60,0	-59,8
	Supply1	1	2mm	GOOD	21,3	+35,0	+33,8
PANTRY	Exhaust1	1	5mm	GOOD	21,3	-55,0	-56,0
	Supply1	1	2mm	GOOD	21,4	+35,0	+33,8
LIVING	Supply2	1	2 mm	GOOD	21,1	+47,0	+50,3
	Exhaust1	1	2mm	GOOD	21,1	-65,0	-60,4
	Supply1	1	2mm	GOOD	20,2	+55,0	53,7
KITCHEN	Supply2	1	5mm	GOOD	20,6	+47,0	+50,3
	Exhaust1	1	2mm	GOOD	21,3	-55,0	-56,0
	Exhaust2	1	2mm	GOOD	21,3	-65,0	-60,4
	Supply1	1	2mm	GOOD	21,3	-65,0	-60,4

How does it work?

A data base is created using the DIFF PC software and copied onto the SD card for use with the Diff Automatic. This measurement reporting facility can be found in the menu of your DIFF under [STORAGE].

1. Insert the SD card into your PC and start DIFFiner. Select the SD card. Then create the project name. Enter as much known data as required. Create a database of fan speed, room types, grill type, grill positions and external influences.
2. Then fill in house or building design data, such as the design airflows. Using the button [NEW] at the bottom of the screen designate the zone/area being tested or select a zone/area from a previously created database. Design data can be created from another similar file. This has created the Project.
3. When ready insert the SD card in the DIFF Automatic(side of the display). Select [STORAGE] and select the [PROJECT] and the desired house or desired [BUILDING] (address, zip code + house number or name).
4. Now select the position of the Fans of the ventilation unit and then select the room to be measured.
5. Then choose the inlet or outlet grill to be measured.
6. The design flow and the measured values are shown. At this point the position and type of the grill can still be changed within the data base.



7. Measurements can be repeated if desired. When ready measurement results are saved by pressing the [ENTER] key.

8. The data base can be viewed. The following are displayed:

- a) Measured and design total flow rates.
- b) Resultant balance of pressure through the Diff Automatic. This resultant should always be zero. Remember: the Diff Automatic self-adjusts to ensure a zero pressure drop through the instrument. Over or under pressure drops through Diff automatic are displayed.
9. When measurements are finished, take the SD card from the DIFF Automatic and place it in the PC. Enter DIFFiner and select the desired [PROJECT].
10. Print if required.
11. Company details and logo can be added to the measurement reports.
12. Print a report in HTML format or export to Excel. Multiple reports of several houses or buildings can be created. Select the required house(s) and or building(s) to view data
13. By selecting [PROJECT], [OPEN], [EXPORT] the project (.diff file) can be stored to another location. It is also possible to [IMPORT] a .diff file. As a precaution, DIFFiner will automatically create another project name when importing this preventing corruption of existing data. "Measurement Reports" using measurements and or imported data can be created. Distribution of reports can be directed straight from the PC. Efficient, cost effective and above all accurate data readily available to all.



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