



Cell frames for filter inserts



Clamps and continuous seal


 Mounting plate for
activated carbon filter
cartridges

Universal casings

UCA



Installation of filter elements for the separation of coarse and fine dust or gaseous substances

Universal casings for duct installation in single or two-stage construction for pocket filters, Mini Pleat filter panels and filter inserts, activated carbon filter inserts or cartridges

- Highly variable due to different dimensions and space saving, compact casing sizes
- Fitting of particulate filters and/or activated carbon filters in one casing depending on application
- Side maintenance cover with handles and star grip screws for simple filter change (arrangement left or right in airflow direction)
- Optimum sealing when inserting the filter elements due to a foamed, closed cell endless seal of the standard cell frames mounted in the universal casing.
- Simple insertion of the filters into a standard cell frame with 4 spring clips
- Quick installation without additional attachments
- Casing is supplied fully assembled; from size 3.5 × 3.5 (2245 × 2245 mm), the casing is supplied disassembled as a compact container

Optional equipment and accessories

- Stainless steel construction

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General information

Application

- Universal casings for installation into the ductwork of ventilation and air conditioning systems
- Fitting of filter elements for the separation of coarse dust and fine dust and for the adsorption of gaseous odorous substances and contaminants

Variants

- 1SPF: One stage, for coarse and fine dust filters
- 2SPF: Two stages, for coarse and fine dust filters
- 1SAF: One stage, for activated carbon filter cartridges
- 2SAF: Two stages, for fine dust filters and activated carbon filter cartridges

Construction

- GAL: Galvanised steel
- STA: Stainless steel
- R: Maintenance cover right in airflow direction
- L: Maintenance cover left in airflow direction

Nominal sizes

- B × H × T [mm]

Useful additions

- Suitable filter elements to be ordered separately
- Pocket filters made of non-woven chemical fibres (PFC)
- Pocket filters made of non-woven synthetic fibres (PFS)
- Pocket filters made of NanoWave® medium (PFN)
- Pocket filters made of non-woven glass fibres (PFG)
- Mini Pleat filter inserts (MFI)
- Activated carbon filter inserts (ACFI)
- Activated carbon filter cartridges (ACFC)
- Mini Pleat filter panels (MFP, construction PLA)

Construction features

- Side maintenance cover with handles and star grip screws
- Arrangement of the maintenance cover on the left or right depending on the airflow direction
- Mounting plate with openings to accommodate and fix activated carbon filter cartridges
- Standard cell frame with 4 spring clips

Materials and surfaces

- Casing in galvanised sheet steel or stainless steel

Commissioning

- As standard, universal casings are supplied fully assembled
- Delivery from size 3.5 × 3.5 (2245 × 2245 mm, see table), in component form in compact packages complete with connecting material and sealant
- The casing frame with wide sealing surfaces forms the connecting subframe for ducts
- Pressure measurement points for each filter stage are part of the supply package but must be set up on site by others

Maintenance

- Easy filter change through side maintenance cover

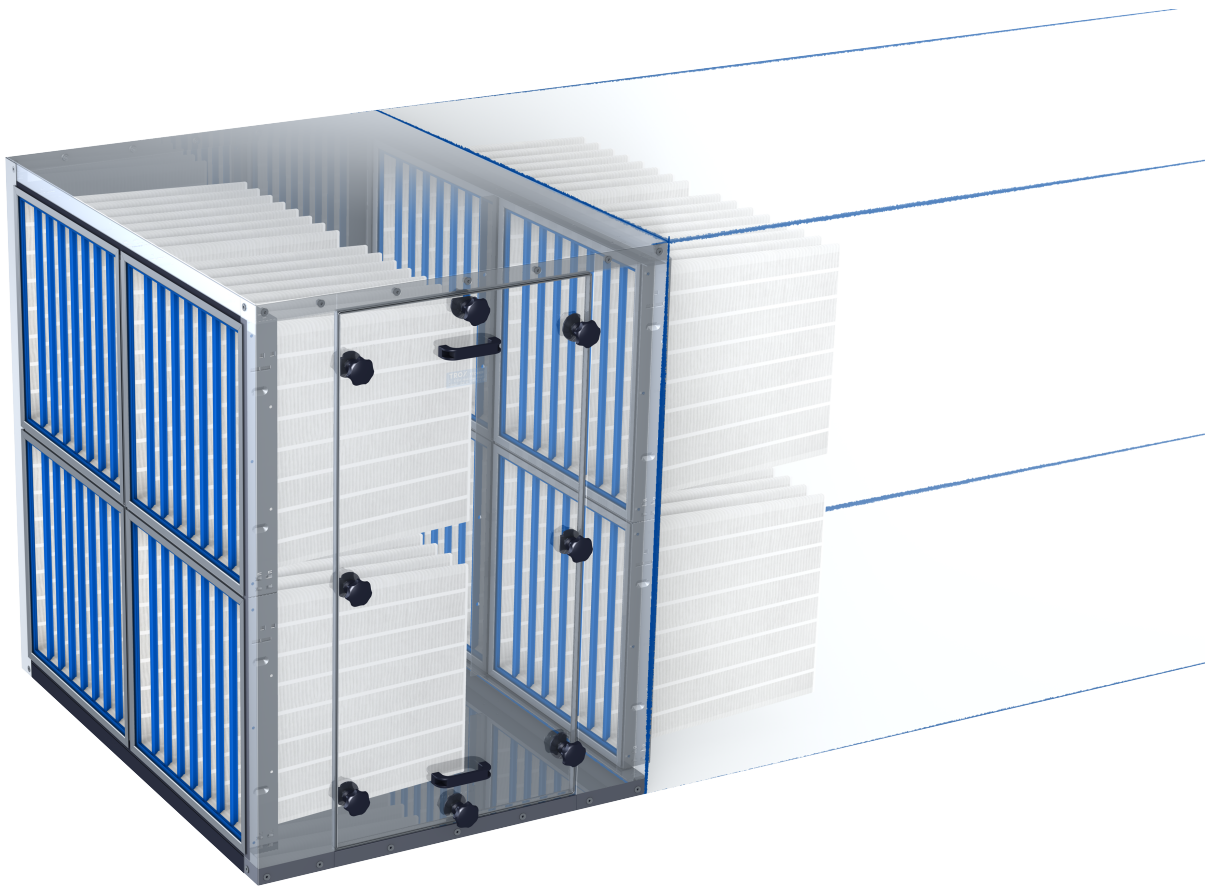
Function

Note:

The mounting frame for the filter inserts can be installed both on the downstream side and on the upstream side of the casing. In view of the recommendations of VDI 6022 and VDI 3803, however, installation should always be on the downstream side.

This defines the positioning of the maintenance cover in airflow direction left or right. For filters that stand out due to their design and length, the space required in the connected ductwork must be provided.

For two-stage constructions 2SPF and 2SAF: The first filter stage is changed in its clean-air side area.

Schematic illustration of the UCA-2SPF

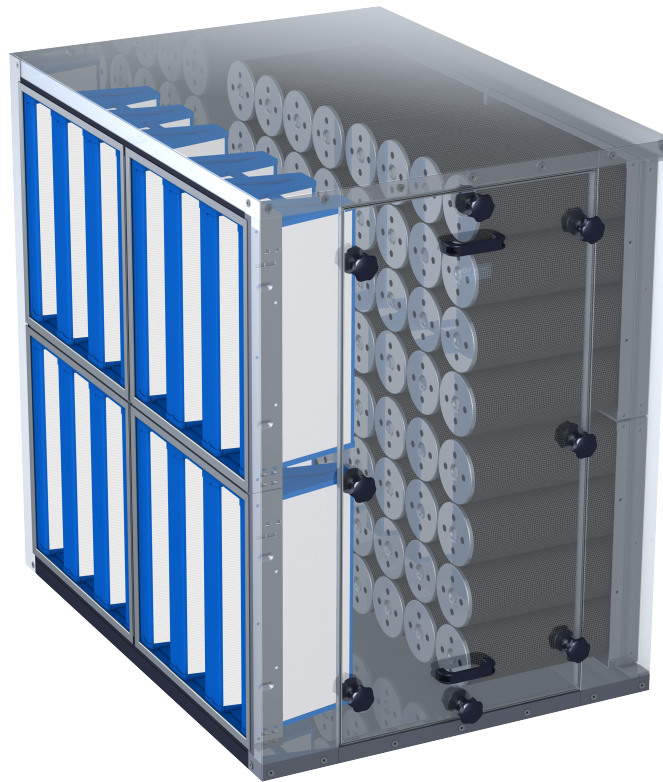
Example of variant UCA-2SPF, with pocket filters as first and second filter stages. When using pocket filters as second filter stage, the space required for the filters in the connected ductwork must be accounted for.

Schematic illustration of the UCA-2SPF



Example of variant UCA-2SPF, with pocket filters as a first filter stage and Mini Pleat filter inserts as second filter stage.

Schematic illustration of the UCA-2SAF



Example of variant UCA-2SAF, with Mini Pleat filter inserts as a first filter stage and activated carbon filter cartridges as second filter stage.

Specification text

This specification text describes the general characteristics of the product. Texts for variants can be generated with our Easy Product Finder design program.

Specification text

Universal casings type UCA for installation into the ductwork of ventilation and air conditioning systems. Fitting of filter elements for the separation of coarse dust and fine dust and for the adsorption of gaseous odorous substances and contaminants.

Universal casings are available as one-stage or two-stage construction; side maintenance cover with handles and star grip screws. Arrangement of the maintenance cover optionally on the left or right, depending on the airflow direction. Universal casing consisting of either a standard cell frame for the fitting of filter elements (one stage or two stages) or of mounting plates for the fitting of activated carbon filter cartridges (one stage) or mounting plates and standard cell frames (two-stage). Standard cell frame with 4 clamping elements for secure sealing between the frame and the filter element. Fitting of activated carbon filter cartridges with bayonet fixing. The casing frame with its wide sealing surfaces forms the connecting subframe for ducts. Pressure measurement points are part of the supply package but must be set up on site by others.

Materials and surfaces

- Casing in galvanised sheet steel or stainless steel

Construction

- GAL: Galvanised steel
- STA: Stainless steel
- R: Maintenance cover right in airflow direction
- L: Maintenance cover left in airflow direction

Order code

UCA – **1SPF** – **GAL** / **1325 × 1630 × 650** / **R**
| | | | |
1 **2** **3** **4** **5**

1 Type**UCA** Universal casings**STA** Stainless steel**2 Variant****1SPF** One stage for particulate filters**2SPF** two stages for particulate filters**1SAF** One stage for activated carbon filters**2SAF** two stages for activated carbon filters and particulate filters**4 Nominal size [mm]**

B × H × T

5 Maintenance cover**R** On the right in airflow direction**L** on the left in airflow direction**3 Material****GAL** Galvanised steel**UCA-1SPF-GAL/1325×1630×650/R****Variant**

One stage for particulate filters

Material

Galvanised steel

Nominal size

1325 × 1630 × 650 mm

Maintenance cover

On the right in airflow direction

Variants

Universal casing, variant UCA-1SPF



One-stage with standard cell frame

Universal casing, variant UCA-2SPF



Two-stage with standard cell frame

Universal casing, variant UCA-1SAF



One-stage with mounting plates

Universal casing, variant UCA-2SAF

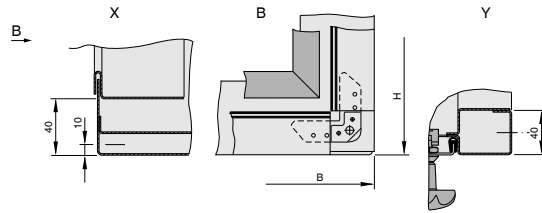
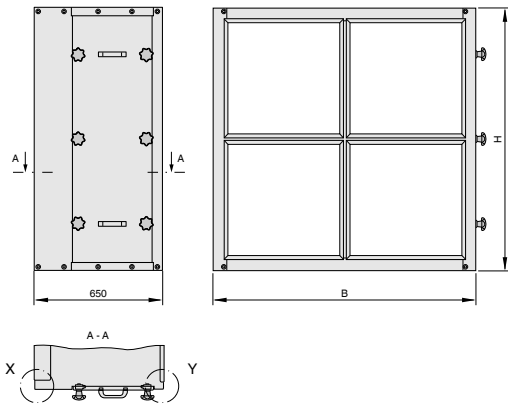


Two-stage with standard cell frame and mounting plates

Dimensions

UCA-1SPF

Detail X, Y, view B



Arrangement of the maintenance cover on the left or right depending on the airflow direction. For universal casings with H = 2245 mm or H = 2555 mm, the cover height is 1845 mm.

Examples of easy connection to other units or ductwork.

UCA-1SPF – Dimensions [mm] and weights [kg]

* Delivered disassembled as compact package.

287 × 287 not available in combination with filter inserts (MFI, ACFI)

Filter elements to be ordered separately. In case of larger volume flow rates, 2 units are combined side by side. Arrangement of the maintenance covers for filter change on the right and left. All weights are net, without packaging.

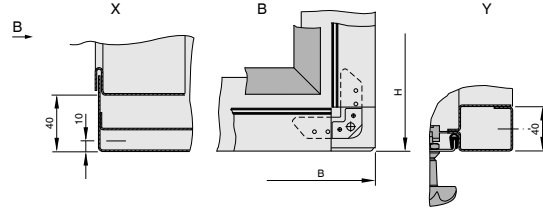
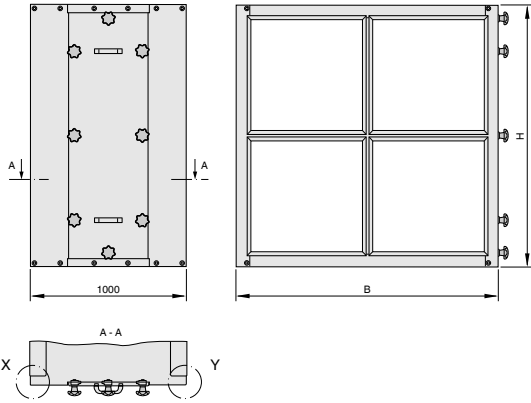
Nominal size			No. of cell frames		No. of filter elements				~ Weight [kg]
B	H	T	horizontal	vertical	592 × 592	287 × 592	592 × 287	287 × 287	
405	710	650	0.5	1		1			25
710	710	650	1	1	1				31
710	1015	650	1	1.5	1		1		42
710	1325	650	1	2	2				49
710	1630	650	1	2.5	2		1		58
710	1940	650	1	3	3				68
710	2245	650	1	3.5	3		1		73
710	2555	650	1	4	4				86
1015	710	650	1.5	1	1	1			38
1015	1015	650	1.5	1.5	1	1	1	1	51
1015	1325	650	1.5	2	2	2			60
1015	1630	650	1.5	2.5	2	2	1	1	70
1015	1940	650	1.5	3	3	3			83
1015	2245	650	1.5	3.5	3	3	1	1	90
1015	2555	650	1.5	4	4	4			105
1325	710	650	2	1	2				43
1325	1015	650	2	1.5	2		2		58
1325	1325	650	2	2	4				66
1325	1630	650	2	2.5	4		2		78
1325	1940	650	2	3	6				89
1325	2245	650	2	3.5	6		2		97
1325	2555	650	2	4	8				112
1630	710	650	2.5	1	2	1			50
1630	1015	650	2.5	1.5	2	1	2	1	67
1630	1325	650	2.5	2	4	2			77
1630	1630	650	2.5	2.5	4	2	2	1	91
1630	1940	650	2.5	3	6	3			104
1630	2245	650	2.5	3.5	6	3	2	1	113
1630	2555	650	2.5	4	8	4			131



Nominal size			No. of cell frames		No. of filter elements				~ Weight [kg]
B	H	T	horizontal	vertical	592 × 592	287 × 592	592 × 287	287 × 287	
1940	710	650	3	1	3				60
1940	1015	650	3	1.5	3		3		74
1940	1325	650	3	2	6				83
1940	1630	650	3	2.5	6		3		99
1940	1940	650	3	3	9				111
1940	2245	650	3	3.5	9		3		122
1940	2555	650	3	4	12				138
2245	710	650	3.5	1	3	1			63
2245	1015	650	3.5	1.5	3	1	3	1	84
2245	1325	650	3.5	2	6	2			94
2245	1630	650	3.5	2.5	6	2	3	1	114
2245	1940	650	3.5	3	9	3			125
2245	2245 *	650	3.5	3.5	9	3	3	1	140
2245	2555 *	650	3.5	4	12	4			157
2555	710	650	4	1	4				68
2555	1015	650	4	1.5	4		4		91
2555	1325	650	4	2	8				100
2555	1630	650	4	2.5	8		4		122
2555	1940	650	4	3	12				132
2555	2245 *	650	4	3.5	12		4		146
2555	2555 *	650	4	4	16				164

UCA-2SPF

Detail X, Y, view B



Arrangement of the maintenance cover on the left or right depending on the airflow direction. For universal casings with H = 2245 mm or H = 2555 mm, the cover height is 1845 mm.

Examples of easy connection to other units or ductwork.

UCA-2SPF – Dimensions [mm] and weights [kg]

* Delivered disassembled as compact package.

287 × 287 not available in combination with filter inserts (MFI, ACFI)

Filter elements to be ordered separately. In case of larger volume flow rates, 2 units are combined side by side. Arrangement of the maintenance covers for filter change on the right and left. All weights are net, without packaging.

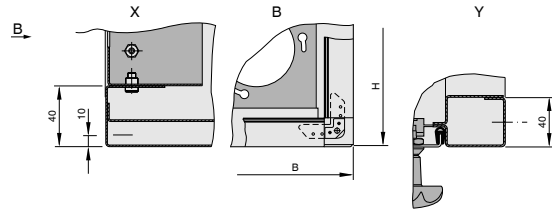
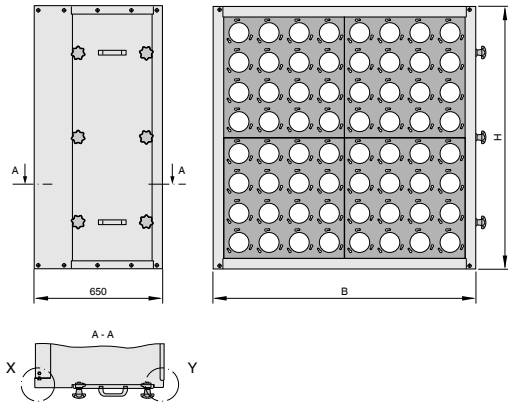
Nominal size			No. of cell frames		No. of filter elements				~ Weight [kg]
B	H	T	horizontal	vertical	592 × 592	287 × 592	592 × 287	287 × 287	
405	710	1000	0.5	1		2			36
710	710	1000	1	1	2				46
710	1015	1000	1	1.5	2		2		63
710	1325	1000	1	2	4				74
710	1630	1000	1	2.5	4		2		88
710	1940	1000	1	3	6				99
710	2245	1000	1	3.5	6		2		113
710	2555	1000	1	4	8				124
1015	710	1000	1.5	1	2	2			54
1015	1015	1000	1.5	1.5	2	2	2	2	74
1015	1325	1000	1.5	2	4	4			86
1015	1630	1000	1.5	2.5	4	4	2	2	102
1015	1940	1000	1.5	3	6	6			114
1015	2245	1000	1.5	3.5	6	6	2	2	131
1015	2555	1000	1.5	4	8	8			143
1325	710	1000	2	1	4				63
1325	1015	1000	2	1.5	4		4		85
1325	1325	1000	2	2	8				96
1325	1630	1000	2	2.5	8		4		113
1325	1940	1000	2	3	12				126
1325	2245	1000	2	3.5	12		4		144
1325	2555	1000	2	4	16				156
1630	710	1000	2.5	1	4	2			78
1630	1015	1000	2.5	1.5	4	2	4	2	103
1630	1325	1000	2.5	2	8	4			116
1630	1630	1000	2.5	2.5	8	4	4	2	136
1630	1940	1000	2.5	3	12	6			149
1630	2245	1000	2.5	3.5	12	6	4	2	166
1630	2555	1000	2.5	4	16	8			183
1940	710	1000	3	1	6	0	0	0	90
1940	1015	1000	3	1.5	6	0	6	0	118
1940	1325	1000	3	2	12	0	0	0	132
1940	1630	1000	3	2.5	12	0	6	0	155



Nominal size			No. of cell frames		No. of filter elements				~ Weight [kg]
B	H	T	horizontal	vertical	592 × 592	287 × 592	592 × 287	287 × 287	
1940	1940	1000	3	3	18	0	0	0	167
1940	2245	1000	3	3.5	18	0	6	0	188
1940	2555	1000	3	4	24	0	0	0	202
2245	710	1000	3.5	1	6	2			102
2245	1015	1000	3.5	1.5	6	2	6	2	133
2245	1325	1000	3.5	2	12	4			148
2245	1630	1000	3.5	2.5	12	4	6	2	171
2245	1940	1000	3.5	3	18	6			186
2245	2245 *	1000	3.5	3.5	18	6	6	2	210
2245	2555 *	1000	3.5	4	24	8			225
2555	710	1000	4	1	8				112
2555	1015	1000	4	1.5	8		8		144
2555	1325	1000	4	2	16				159
2555	1630	1000	4	2.5	16		8		180
2555	1940	1000	4	3	24				199
2555	2245 *	1000	4	3.5	24		8		224
2555	2555 *	1000	4	4	32				239

UCA-1SAF

Detail X, Y, view B



Arrangement of the maintenance cover on the left or right depending on the airflow direction. For universal casings with H = 2245 mm or H = 2555 mm, the cover height is 1845 mm.

Examples of easy connection to other units or ductwork.

UCA-1SAF – Dimensions [mm] and weights [kg]

* Delivered disassembled as compact package.

Filter elements to be ordered separately. In case of larger volume flow rates, 2 units are combined side by side. Arrangement of the maintenance covers for filter change on the right and left. All weights are net, without packaging.

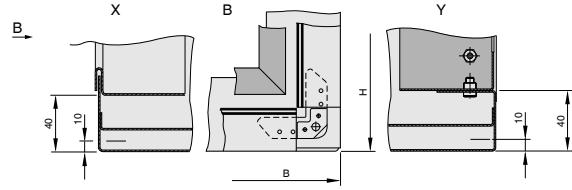
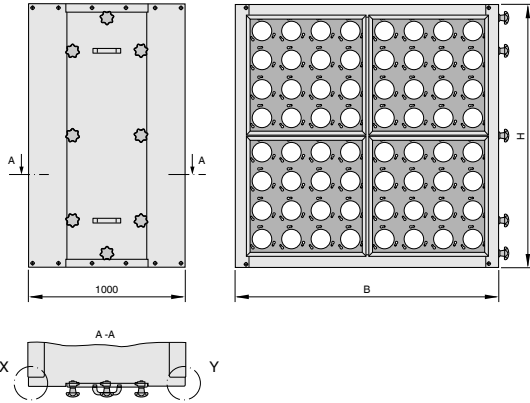
Nominal size			No. of mounting plates		No. of cartridges	~ Weight [kg]
B	H	T	horizontal	vertical		
405	710	650	0.5	1	8	28
710	710	650	1	1	16	35
710	1015	650	1	1.5	24	47
710	1325	650	1	2	32	57
710	1630	650	1	2.5	40	66
710	1940	650	1	3	48	78
710	2245	650	1	3.5	56	84
710	2555	650	1	4	64	100
1015	710	650	1.5	1	24	43
1015	1325	650	1.5	2	48	69
1015	1630	650	1.5	2.5	60	82
1015	1940	650	1.5	3	72	96
1015	2245	650	1.5	3.5	84	105
1015	2555	650	1.5	4	96	122
1325	710	650	2	1	32	51
1325	1015	650	2	1.5	48	68
1325	1325	650	2	2	64	80
1325	1630	650	2	2.5	80	94
1325	1940	650	2	3	96	108
1325	2245	650	2	3.5	112	118
1325	2555	650	2	4	128	136
1630	710	650	2.5	1	40	60
1630	1015	650	2.5	1.5	60	80
1630	1325	650	2.5	2	80	93
1630	1630	650	2.5	2.5	100	110
1630	1940	650	2.5	3	120	126
1630	2245	650	2.5	3.5	140	137
1630	2555	650	2.5	4	160	159
1940	710	650	3	1	48	69
1940	1015	650	3	1.5	72	89
1940	1325	650	3	2	96	102
1940	1630	650	3	2.5	120	121
1940	1940	650	3	3	144	137
1940	2245	650	3	3.5	168	151



Nominal size			No. of mounting plates		No. of cartridges	~ Weight [kg]
B	H	T	horizontal	vertical		
1940	2555	650	3	4	192	172
2245	710	650	3.5	1	56	75
2245	1015	650	3.5	1.5	84	100
2245	1325	650	3.5	2	112	116
2245	1630	650	3.5	2.5	140	135
2245	1940	650	3.5	3	168	156
2245	2245 *	650	3.5	3.5	196	175
2245	2555 *	650	3.5	4	224	196
2555	710	650	4	1	64	82
2555	1015	650	4	1.5	96	109
2555	1325	650	4	2	128	125
2555	1630	650	4	2.5	160	149
2555	1940	650	4	3	192	167
2555	2245 *	650	4	3.5	224	185
2555	2555 *	650	4	4	256	209

UCA-2SAF

Detail X, Y, view B



Arrangement of the maintenance cover on the left or right depending on the airflow direction. For universal casings with H = 2245 mm or H = 2555 mm, the cover height is 1845 mm.

Examples of easy connection to other units or ductwork.

UCA-2SAF – Dimensions [mm] and weights [kg]

* Delivered disassembled as compact package.

287 × 287 not available in combination with filter inserts (MFI, ACFI)

Filter elements to be ordered separately. In case of larger volume flow rates, 2 units are combined side by side. Arrangement of the maintenance covers for filter change on the right and left. All weights are net, without packaging.

Nominal size			No. of mounting plates/ cell frames		No. of cartridges	No. of filter elements				~ Weight [kg]
B	H	T	horizontal	vertical		592 × 592	287 × 592	592 × 287	287 × 287	
405	710	1000	0.5	1	8		1			41
710	710	1000	1	1	16	1				51
710	1015	1000	1	1.5	24	1		1		69
710	1325	1000	1	2	32	2				81
710	1630	1000	1	2.5	40	2		1		97
710	1940	1000	1	3	48	3				112
710	2245	1000	1	3.5	56	3		1		125
710	2555	1000	1	4	64	4				137
1015	710	1000	1.5	1	24	1	1			63
1015	1015	1000	1.5	1.5	36	1	1	1	1	83
1015	1325	1000	1.5	2	48	2	2			97
1015	1630	1000	1.5	2.5	60	2	2	1	1	115
1015	1940	1000	1.5	3	72	3	3			131
1015	2245	1000	1.5	3.5	84	3	3	1	1	149
1015	2555	1000	1.5	4	96	4	4			163
1325	710	1000	2	1	32	2	0	0	0	73
1325	1015	1000	2	1.5	48	2		2		95
1325	1325	1000	2	2	64	4				110
1325	1630	1000	2	2.5	80	4		2		129
1325	1940	1000	2	3	96	6				145
1325	2245	1000	2	3.5	112	6		2		166
1325	2555	1000	2	4	128	8				181
1630	710	1000	2.5	1	40	2	1			89
1630	1015	1000	2.5	1.5	60	2	1	2	1	116
1630	1325	1000	2.5	2	80	4	2			132
1630	1630	1000	2.5	2.5	100	4	2	2	1	155
1630	1940	1000	2.5	3	120	6	3			173
1630	2245	1000	2.5	3.5	140	6	3	2	1	194
1630	2555	1000	2.5	4	160	8	4			215
1940	710	1000	3	1	48	3				103
1940	1015	1000	3	1.5	72	3		3		133



Nominal size			No. of mounting plates/ cell frames		No. of cartridges	No. of filter elements				~ Weight [kg]
B	H	T	horizontal	vertical		592 × 592	287 × 592	592 × 287	287 × 287	
1940	1325	1000	3	2	96	6				151
1940	1630	1000	3	2.5	120	6		3		176
1940	1940	1000	3	3	144	9				195
1940	2245	1000	3	3.5	168	9		3		210
1940	2555	1000	3	4	192	12				237
2245	710	1000	3.5	1	56	3	1			116
2245	1015	1000	3.5	1.5	84	3	1	3	1	149
2245	1325	1000	3.5	2	112	6	2			169
2245	1630	1000	3.5	2.5	140	6	2	3	1	193
2245	1940	1000	3.5	3	168	9	3			218
2245	2245 *	1000	3.5	3.5	196	9	3	3	1	145
2245	2555 *	1000	3.5	4	224	12	4			265
2555	710	1000	4	1	64	4				127
2555	1015	1000	4	1.5	96	4		4		162
2555	1325	1000	4	2	128	8				183
2555	1630	1000	4	2.5	160	8		4		203
2555	1940	1000	4	3	192	12				234
2555	2245 *	1000	4	3.5	224	12		4		264
2555	2555 *	1000	4	4	256	16				284