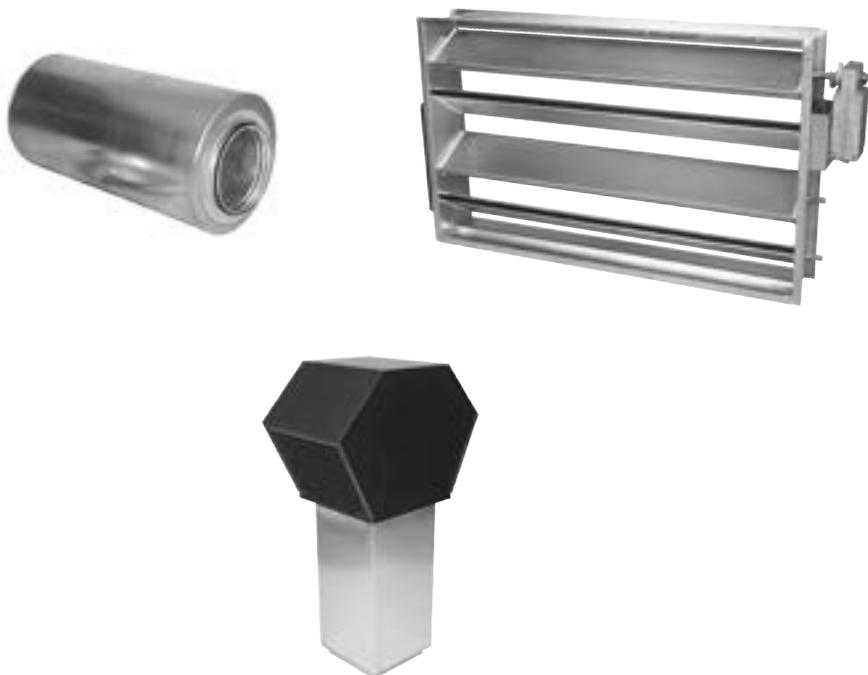


Complements and accessories



Contents

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Complements and accessories

Unit sections

Air recirculation section, TCBS

The TCBS consists of one extra unit section.

The TCBS air recirculation section is available for the size 11 and larger SILVER C RX, PX and CX units.

Included in the delivery:

Air recirculation section with mounted dampers (24 V damper actuators are available as an accessories).

Delivery version:

Sizes 11-40: Air recirculation section as a stand-alone unit section.

Sizes 50-80: The air recirculation section is fitted to one of the unit sections.

Size 120: The air recirculation section is supplied as an individual item in two sections.

Work to be carried out at the building site:

Sizes 11-40: Splitting the SILVER C unit into sections. Installing the air recirculation section.

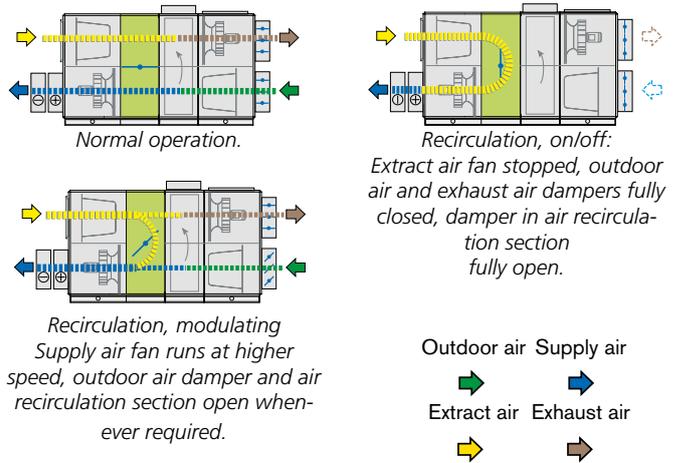
Sizes 50-80: To assemble units according to the delivery version above.

Size 120: Assemble the air recirculation section to become one unit. Then install the air recirculation section together with the other sections of the air handling unit.

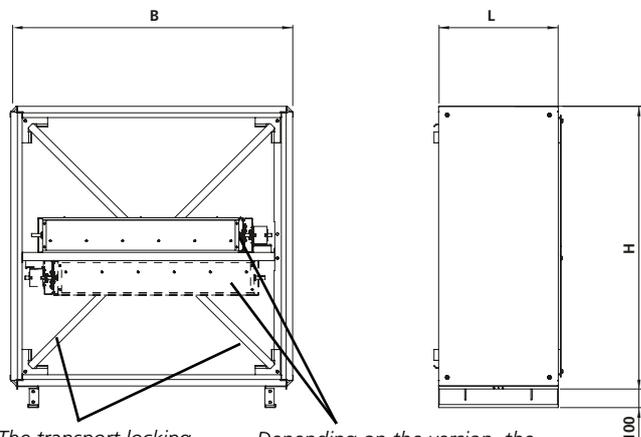
Operation:

Recirculation, on/off: Can be used when it is desirable to heat an unoccupied room with recirculated air; an economic solution for e.g. factory buildings, shopping centres, etc.

Recirculation, modulating: Can be used for the demand-controlled and economical operation of fans, heating and cooling, especially in buildings in which the load conditions vary.



For SILVER C	B	H	L	kg
11/12	1199	1295	550	84
14/20	1400	1395	550	92
25/30	1600	1595	550	103
35/40	1990	1985	550	126
50/60	2318	2253	570	195
70/80	2637	2640	570	205
100/120	3340	3340	1070	580



The transport locking device (SILVER C, sizes 11-40) should be removed during installation.

Depending on the version, the damper can be mounted in the upper or lower level (for SILVER C size 120 the damper is always mounted in the upper level).

Complements and accessories

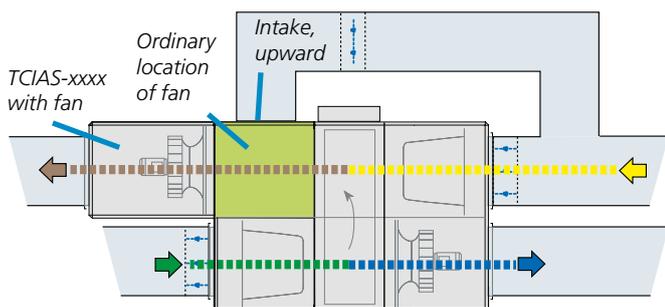
Unit sections

Solutions for fire bypass

The air bypass section is used when you want the extract air to bypass the heat exchanger and filter, e.g. as a component in a system for smoke extraction.

See the example for respective variants/sizes. The fans of the air handling unit are tested for, and can cope with, operation for one hour at 70°C.

SILVER C RX, sizes 04-08

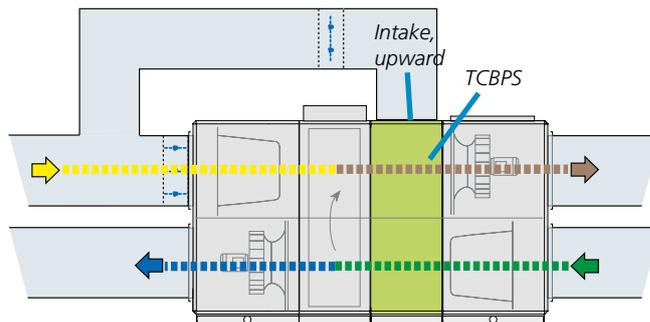


Solution for fire bypass (upward) for SILVER C PX 04-08.

Necessary components/refurbishments required (apart from SILVER C units):

Fan section TCIAS-xxxx, supplied as a stand-alone unit section
 The extract air fan is moved from its ordinary location to the TCIAS-xxx from the factory.
 Intake from above at the ordinary fan location is available from the factory.
 Extra dampers may be required depending on the application.
 Should be controlled via TRITON control and supervisory unit or the like.

SILVER C RX, sizes 11-40

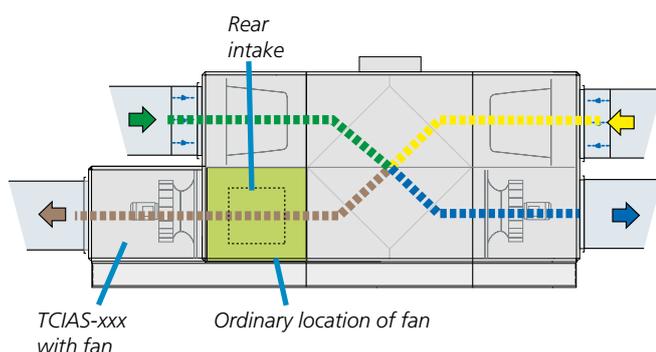


Solution for fire bypass (upward) for SILVER C PX 11-40.

Necessary components required (apart from SILVER C units):

Air bypass section TCBPS, delivered as stand-alone unit section.
 The splitting of AHUs into sections and the installation of air bypass sections must be done at the building site.
 Extra dampers may be required depending on the application.
 Should be controlled via TRITON control and supervisory unit or the like.

SILVER C PX, sizes 04-08

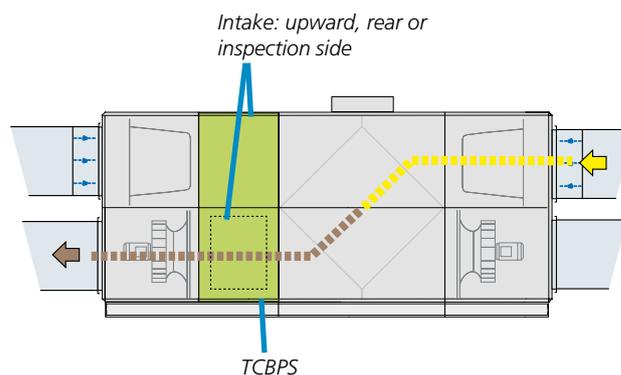


Solution for fire bypass (rear) for SILVER C PX 04-08.

Necessary components/refurbishments required (apart from SILVER C units):

TCIAS-xxx fan section, supplied as a stand-alone unit section
 The extract air fan is moved from its ordinary location to the TCIA-xxx from the factory.
 Rear intake at the ordinary fan location is available from the factory.
 Extra dampers may be required depending on the application.
 Should be controlled via TRITON control and supervisory unit or the like.

SILVER C PX, sizes 11-30



Solution for fire bypass (rear, inspection side or upward) for SILVER C PX 11-30.

Necessary components required (apart from SILVER C units):

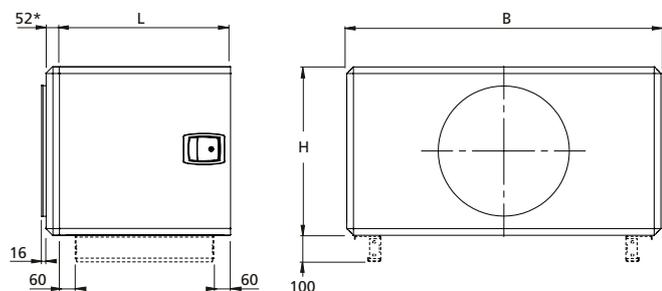
Air bypass section TCBPS-xxxx, supplied as a stand-alone unit section.
 The splitting of AHUs into sections and the installation of air bypass sections must be done at the building site.
 Extra dampers may be required depending on the application.
 Should be controlled via TRITON control and supervisory unit or the like.



Complements and accessories

Unit sections

Fan section TCIAS-xxx

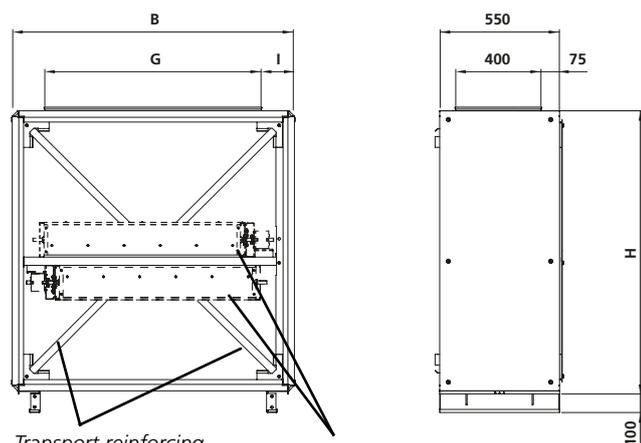


TCIAS-xxx	B	H	L	kg	End connection panel, if required kg
1-05	825	460	723	60	7
1-08	995	542	723	72	10

Connection dimensions to duct:
 TCIAS 05 \varnothing 315
 TCIAS 08 \varnothing 400

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

Air bypass section, TCBPS, intake upward

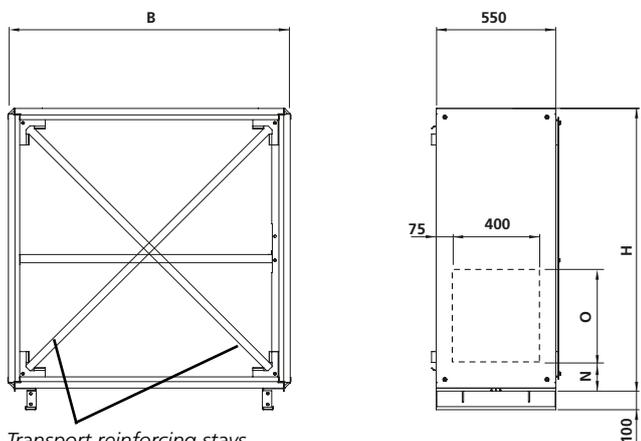


For SILVER C	B	H	G	I	kg
11/12	1199	1295	1000	100	73
14/20	1400	1395	1000	200	82
25/30	1600	1595	1200	200	92
35/40	1990	1985	1400	295	113

Transport reinforcing stays, remove prior to installation.

Damper only in units with the extract air fan in lower level (GPLD PX). Depending on the version, the damper can be mounted in the upper or lower level.

Air bypass section TCBPS-xxxx, rear intake or on inspection side (SILVER C PX)



For SILVER C	B	H	N	O	kg
11/12	1199	1295	110	500	73
14/20	1400	1395	110	500	82
25/30	1600	1595	100	600	92

Transport reinforcing stays (SILVER C, sizes 11-30), remove prior to installation.

Complements and accessories

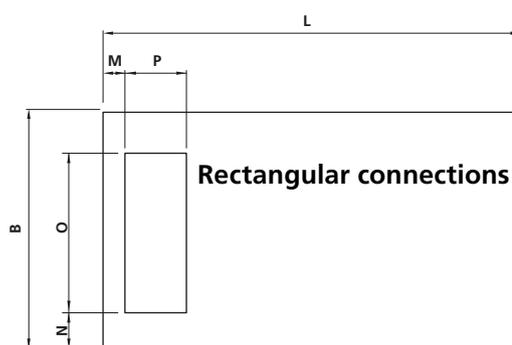
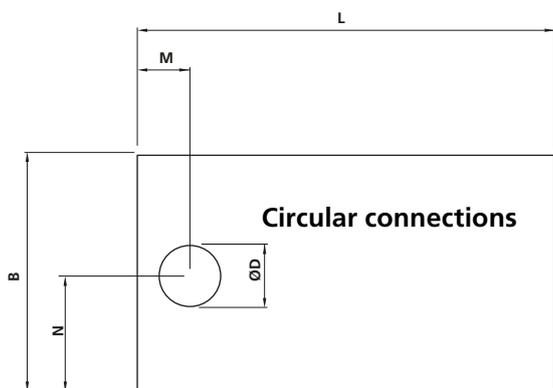
Unit sections

The SILVER C unit duct connection dimensions for fire bypass

SILVER C RX 04-08

The illustration shows the top of the SILVER C unit, without end connection panels and in the right-hand version.

Optional connections, circular or rectangular



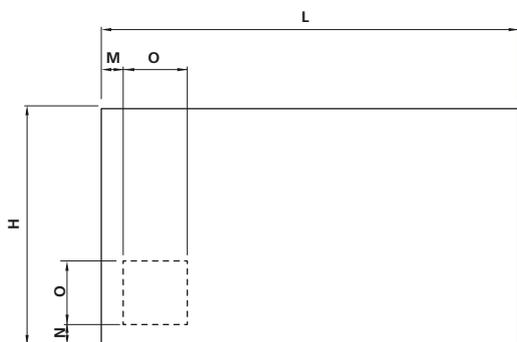
SILVER C	B	L	ØD	M	N
04/05	825	1396	315	230	412
07/08	995	1496	400	255	498

SILVER C	B	L	M	N	O	P
04/05	825	1396	80	112	600	300
07/08	995	1496	55	148	700	400

SILVER C PX 04-08

The illustration shows the SILVER C unit's inspection side, without end connection panels and in the right-hand version.

Rectangular connections:



SILVER C	H	L	M	N	O
04/05	920	1996	135	100	250
07/08	1085	2126	100	90	350

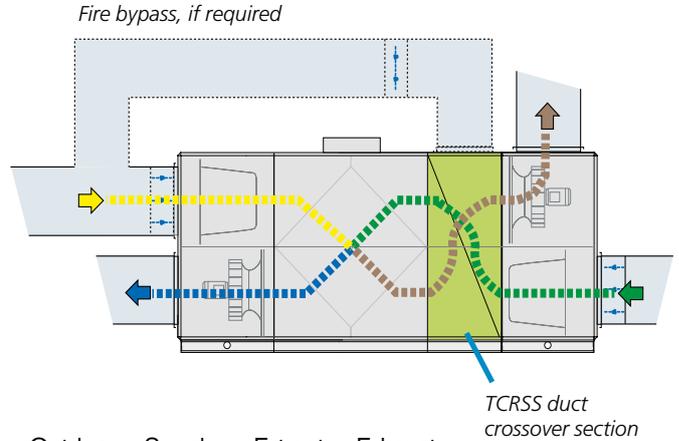
Complements and accessories

Unit sections

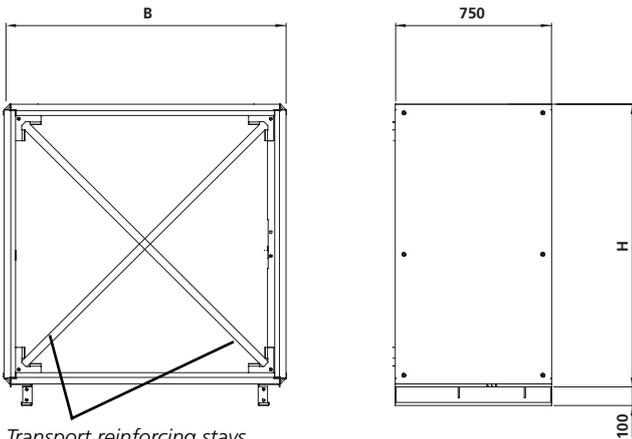
TCRSS duct crossover section

The duct crossover section for the size 11-30 SILVER C PX units is designed for use when you need to have the extract air and/or the supply air fan in the upper level. This may be necessary if space available is restricted or for example when replacing older AHUs with new ones that have fans in the upper level.

It is also possible to use the duct crossover section as a fire bypass.



For SILVER C	B	H	kg
11/12	1199	1295	117
14/20	1400	1395	130
25/30	1600	1595	155

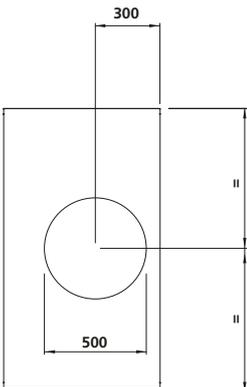


Transport reinforcing stays, remove prior to installation.

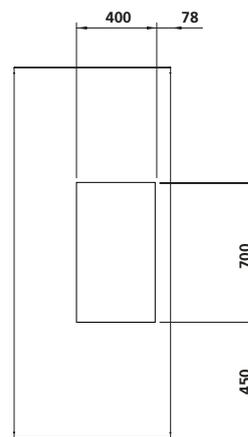
Duct connection dimensions for fire bypass, if required

The illustration shows the duct crossover section viewed from above.

TCRSS 12, 20



TCRSS 30



Complements and accessories

Duct accessories, uninsulated

Common for duct accessories

The duct accessories must be positioned outside the SILVER C unit in the ductwork. The unique Wing+ fans in the SILVER C air handling unit also make it possible to connect duct accessories directly to the SILVER C unit's duct connections without pressure losses or non-uniform air distribution.

SILVER C with standard end connection panel:

The duct accessories for SILVER C, sizes 04/05, 07/08 and 11/12 are fitted with a rubber ring seal.

The duct accessories for SILVER C, sizes 14/20, 25/30, 35/40, 50/60, 70/80 and 100/120 are equipped with connection frames for slip-clamp jointing (slip-clamps must be ordered separately).

Type METU connection frames are available as accessories. Insulating, if required, must be done at the site.

SILVER C with full face connection frames:

Full face connection frames are available as accessories for further reduction of the pressure drop in the ventilation system. See the section on Mechanical equipment.

The duct accessories are equipped with connection frame for slip-clamp jointing (slip clamps must be ordered separately). Insulating, if required, must be done at the site.

Other particulars for sizing can be obtained by using the **ProUnit** air handling unit selection program.

Complements and accessories

Duct accessories, uninsulated

TBSA damper

The TBSA 000-031, 000-040, 060-030 and 080-040 dampers are used as shut-off dampers or boosting dampers. Other sizes can also be used for other applications.

Shut-off dampers are normally used if the air handling unit is idle during some period, for example at night, or if an air heater for hot water without anti-frost bursting protection is used.

Can be mounted in a horizontal or vertical duct.

The damper can be selected without damper actuator or complete with damper actuator for 24 V. The actuator can be selected with spring return or on/off actuation. TBSA 000-050 and TBSA 100-040 – 250-080 are also available with an actuator of modulating type with spring return.

Technical data

Circular dampers made of galvanised sheet steel, rectangular dampers made of aluminium-zinc plated sheet steel. Tightness class 3 to EN 1751.

Rectangular dampers are journaled in nylon bushings.

Installation

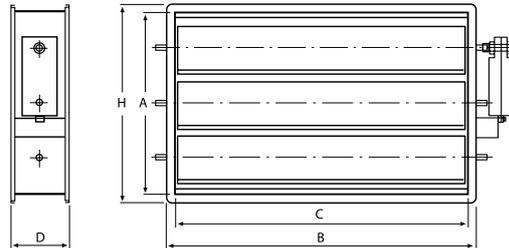
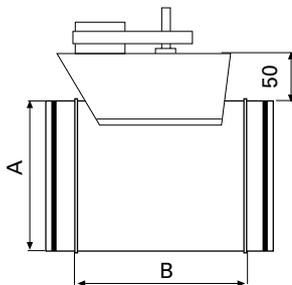
Connect the control system and power supply wiring to the damper actuator.



SILVER C with standard end connection panel:
 TBSA 100-040, matches SILVER C, sizes 14, 20
 TBSA 120-050, matches SILVER C, sizes 25, 30
 TBSA 140-060, matches SILVER C, sizes 35, 40
 TBSA 160-080, matches SILVER C, sizes 50, 60
 TBSA 180-100, matches SILVER C, sizes 70, 80
 TBSA 240-120, matches SILVER C, sizes 100, 120
 (for air intake resp. fan outlet for forward air discharge)
 TBSA 250-080, matches SILVER C, sizes 100, 120
 (for fan outlet for upward air discharge)

SILVER C with full face connection frame (accessory TBXZ):
 TBSA 060-030, matches SILVER C, sizes 04, 05
 TBSA 080-040, matches SILVER C, sizes 07, 08
 TBSA 100-040, matches SILVER C, sizes 11, 12
 TBSA 120-050, matches SILVER C, sizes 14, 20
 TBSA 140-060, matches SILVER C, sizes 25, 30
 TBSA 160-080, matches SILVER C, sizes 35, 40
 TBSA 180-100, matches SILVER C, sizes 50, 60
 TBSA 240-120, matches SILVER C, sizes 70, 80

SILVER C with standard end connection panel:
 TBSA 000-031, matches SILVER C, sizes 04, 05
 TBSA 000-040, matches SILVER C, sizes 07, 08
 TBSA 000-050, matches SILVER C, sizes 11, 12



TBSA	A	B	kg
2-000-031	∅ 315	140	5
2-000-040	∅ 400	210	7
2-000-050	∅ 500	210	8

TBSA	A	B	C	D	H	kg
4-060-030	300	640	600	220	340	10
4-080-040	400	840	800	220	440	15
4-100-040	400	1040	1000	220	440	20
4-120-050	500	1240	1200	220	540	25
4-140-060	600	1440	1400	220	640	32
4-160-080	800	1640	1600	220	840	42
4-180-100	1000	1840	1800	220	1040	63
4-240-120	1200	2440	2400	220	1240	105
4-250-080	800	2540	2500	220	840	93

Complements and accessories

Duct accessories, uninsulated

TBDA Unit sound attenuator

TBDA 000-031, 000-040 and 000-050

The TBDA 000-031, 000-040 and 000-050 sound attenuators are circular sound attenuators for the SILVER C in sizes 04–12 with standard end connection panel and are intended for installation in the ductwork.

Technical data

Galvanized sheet steel.

Sound attenuating material consisting of 100 mm thick long-fibred glass wool slabs that offer excellent sound attenuation, especially in the mid-frequencies. Glass wool covered with a layer of EUROLON that withstands substantially higher air velocities and mechanical strain than staple fibre. Sound attenuating material covered with perforated sheet steel outside the EUROLON layer.

Installation

Provision for inspection and cleaning must be guaranteed.

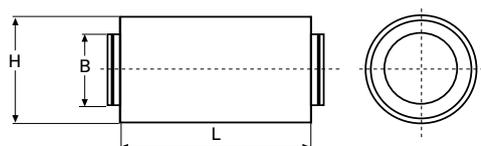


SILVER C with standard end connection panel:

TBDA 000-031, matches SILVER C, sizes 04, 05

TBDA 000-040, matches SILVER C, sizes 07, 08

TBDA 000-050, matches SILVER C, sizes 11, 12



TBDA	B	H	L	kg
1-000-031	315	520	915	19,5
1-000-040	400	600	1200	29,5
1-000-050	500	700	1200	63

Complements and accessories

Duct accessories, uninsulated

TBDA Unit sound attenuator

TBDA 060-030 to 240-120

The TBDA 060-030 to 240-120 sound attenuators for the SILVER C in sizes 04–120 are rectangular and are intended for installation in the ductwork or directly to air handling units with standard end connection panel or full face connection frame.

Technical data

Galvanized sheet steel.

Sound absorption material of type Cleanolon-AL. Cleanolon-AL consists of mineral wool covered with perforated aluminium foil. Type approved with regard to suitability for cleaning, emissions and fibre entrainment. The material conforms to the provisions of Surface Layer Class 1 (the highest class).

Installation

Provision for inspection and cleaning must be guaranteed.



TBDA-1060-030
TBDA-1-080-040
TBDA-1-100-040
TBDA-1-120-050
TBDA-1-140-060
TBDA-1-240-120

TBDA-1-160-080
TBDA-1-180-100



SILVER C with standard end connection panel:

- TBDA 100-040, matches SILVER C, sizes 14, 20
- TBDA 120-050, matches SILVER C, sizes 25, 30
- TBDA 140-060, matches SILVER C, sizes 35, 40
- TBDA 240-120, matches SILVER C, sizes 100, 120

SILVER C with full face connection frame (accessory TBXZ):

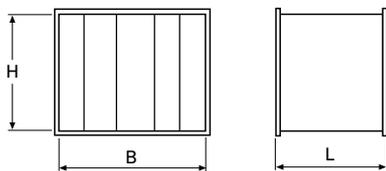
- TBDA 060-030, matches SILVER C, sizes 04, 05
- TBDA 080-040, matches SILVER C, sizes 07, 08
- TBDA 100-040, matches SILVER C, sizes 11, 12
- TBDA 120-050, matches SILVER C, sizes 14, 20
- TBDA 140-060, matches SILVER C, sizes 25, 30
- TBDA 240-120, matches SILVER C, sizes 70, 80

SILVER C with standard end connection panel:

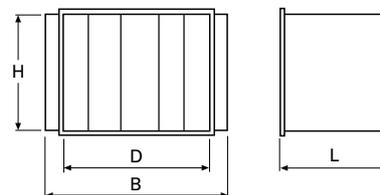
- TBDA 160-080, matches SILVER C, sizes 50, 60
- TBDA 180-100, matches SILVER C, sizes 70, 80

SILVER C with full face connection frame (accessory TBXZ):

- TBDA 160-080, matches SILVER C, sizes 35, 40
- TBDA 180-100, matches SILVER C, sizes 50, 60



TBDA	B	H	L	kg
1-060-030	600	300	650	13
1-080-040	800	400	650	22
1-100-040	1000	400	650	26
1-120-050	1200	500	650	33
1-140-060	1400	600	650	39
1-240-120	2400	1200	1250	180



TBDA	B	D	H	L	kg
1-160-080	1800	1600	800	650	72
1-180-100	2000	1800	1000	1250	115

Complements and accessories

Duct accessories, uninsulated

TBLA Air heater, for hot water

The TBLA air heater uses hot water as the heating medium for post-heating the supply air.

The air heater can be installed for horizontal or vertical airflow.

The TBLA air heater, capacity variant 1, is available with Thermo Guard anti-frost tension protection.

Technical data

Uninsulated casing made of galvanized sheet steel.
Environmental Class C4.

Finned-tube heat exchangers fabricated of copper tubes and profiled aluminium fins. The headers and the pipe-work to the water connections are made of copper. The male threaded pipe connections are made of brass.

The TBLA air heater is available in two capacity variants. Capacity variant 2 produces the highest capacity.

All the air heaters are equipped with individual plugs for venting and drainage. A separate connection is provided for an anti-frost monitor sensor.

Valve set

The TBVA Valve set consisting of a 2(3)-way valve including actuator can be ordered.

Extra accessories

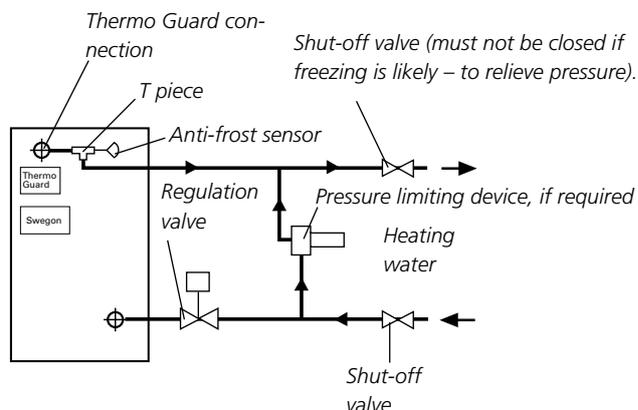
A circulation pump is used for guaranteeing the frost guard function, if air heaters without anti-frost burst protection are used. Supplied with T coupling, non-return valve and adjustment valve.

Installation

Provision for inspection and cleaning must be guaranteed.
Electrical connection.



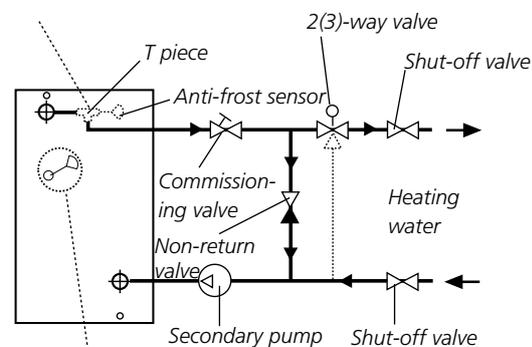
Installation principle *with* Thermo Guard



Installation principle *without* Thermo Guard

Applicable to

TBLA 000-031 000-040, 000-050 060-030 and 080-040



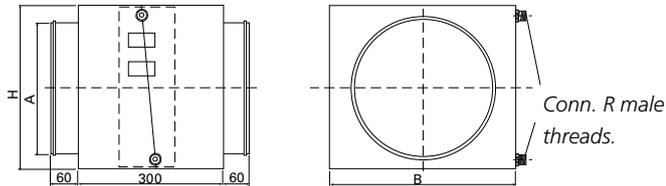
Anti-freeze monitor sensor. Applicable to TBLA 100-040 to 240-120

1) The anti-frost sensor for the TBLA sizes 000-031, 000-040, 000-050, 060-030 and 080-040 should be fitted to a T-piece on the return pipework and for the TBLA sizes 000-040 to 240-120 in the connection on the air heater.

Complements and accessories

Duct accessories, uninsulated

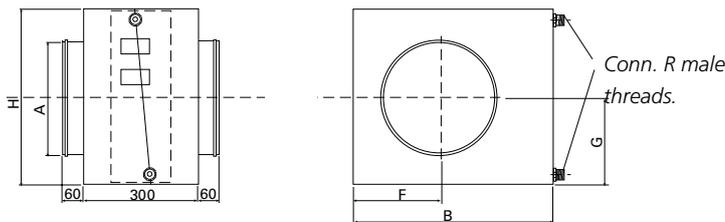
Without Thermoguard



TBLA	A	B	H	R	kg*
5-000-031-2-1	Ø 315	490	405	DN15	17

* Excluding water.

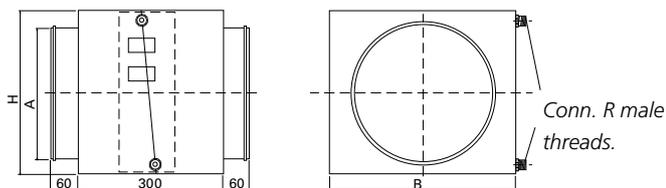
SILVER C with standard end connection panel:
 TBLA 000-031, matches SILVER C, sizes 04, 05
 TBLA 000-040 matches SILVER C, sizes 07, 08
 TBLA 000-050 matches SILVER C, sizes 11, 12



TBLA	A	B	F	G	H	R	kg*
5-000-040-2-1	Ø 400	590	255	250	500	DN20	22
5-000-040-2-2	Ø 400	590	255	250	500	DN20	18
5-000-050-2-1	Ø 500	690	295	300	600	DN20	18
5-000-050-2-2	Ø 500	690	295	300	600	DN25	30

* Excluding water.

With Thermoguard



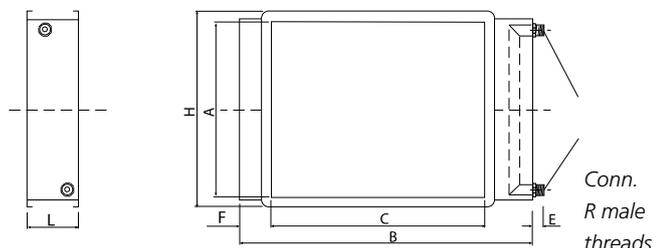
TBLA	A	B	H	R	kg*
4-000-031	Ø 315	488	428	DN 15	14
4-000-040	Ø 400	588	528	DN 15	19
4-000-050	Ø 500	688	628	DN 15	24

* Excluding water.

SILVER C with standard end connection panel:
 TBLA 000-031, matches SILVER C, sizes 04, 05
 TBLA 000-040 matches SILVER C, sizes 07, 08
 TBLA 000-050 matches SILVER C, sizes 11, 12

Complements and accessories

Duct accessories, uninsulated



SILVER C with standard end connection panel:
 TBLA 100-040, matches SILVER C, sizes 14, 20
 TBLA 120-050, matches SILVER C, sizes 25, 30
 TBLA 140-060, matches SILVER C, sizes 35, 40

SILVER C with full face connection frame (accessory TBXZ):
 TBLA-1-060-030, matches SILVER C, sizes 04, 05
 TBLA-1-080-040, matches SILVER C, sizes 07, 08
 TBLA-1-100-040, matches SILVER C, sizes 11, 12
 TBLA-1-120-050, matches SILVER C, sizes 14, 20
 TBLA-1-140-060, matches SILVER C, sizes 25, 30

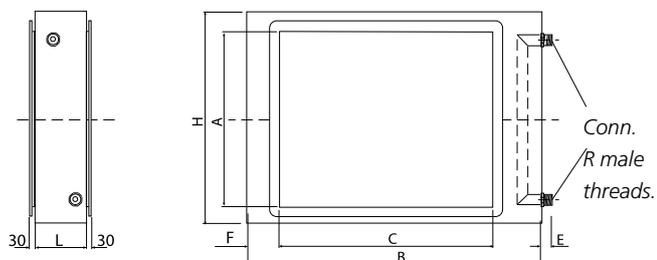
Without Thermoguard

TBLA	A	B	C	E	H	L	R	F	kg*
4-060-030-2-1	300	728	600	80	338	148	DN15	47	6
4-060-030-2-2	300	728	600	80	338	148	DN15	47	7
4-080-040-2-1	400	928	800	80	438	148	DN15	47	8
4-080-040-2-2	400	928	800	80	438	148	DN15	47	10
4-100-040-2-1	400	1119	1000	90	438	148	DN15	40	14
4-100-040-2-2	400	1126	1000	90	438	170	DN20	40	18
4-120-050-2-1	500	1319	1200	90	538	148	DN15	40	17
4-140-060-2-1	600	1526	1400	90	638	148	DN20	40	23

* Excluding water.

SILVER C with standard end connection panel:
 TBLA 100-040, matches SILVER C, sizes 14, 20
 TBLA 120-050, matches SILVER C, sizes 25, 30
 TBLA 140-060, matches SILVER C, sizes 35, 40
 TBLA 160-080, matches SILVER C, sizes 50, 60
 TBLA 180-100, matches SILVER C, sizes 70, 80
 TBLA 240-120, matches SILVER C, sizes 100, 120

SILVER C with full face connection frame (accessory TBXZ):
 TBLA 100-040, matches SILVER C, sizes 11, 12
 TBLA 120-050, matches SILVER C, sizes 14, 20
 TBLA 140-060, matches SILVER C, sizes 25, 30
 TBLA 160-080, matches SILVER C, sizes 35, 40
 TBLA 180-100, matches SILVER C, sizes 50, 60
 TBLA 240-120, matches SILVER C, sizes 70, 80



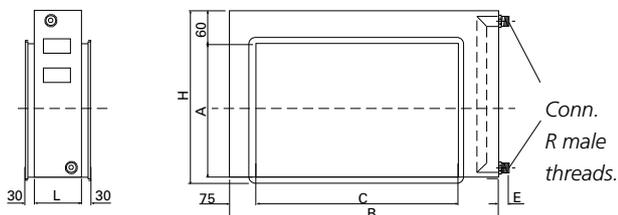
Without Thermoguard

TBLA	A	B	C	E	H	L	R	F	kg*
4-100-040-2-3	400	1250	1000	85	605	300	DN25	125	53
4-120-050-2-2	500	1590	1200	85	700	300	DN20	195	72
4-120-050-2-3	500	1590	1200	85	755	300	DN32	195	78
4-140-060-2-2	600	1815	1400	85	840	300	DN25	208	94
4-140-060-2-3	600	1850	1400	85	880	300	DN32	225	101
4-160-080-2-1	800	2210	1600	85	1020	300	DN25	280	97
4-160-080-2-2	800	2210	1600	85	1020	300	DN32	274	114
4-160-080-2-3	800	2210	1600	85	1020	300	DN50	259	127
4-180-100-2-1	1000	2530	1800	85	1220	300	DN25	340	127
4-180-100-2-2	1000	2530	1800	85	1220	300	DN32	329	152
4-180-100-2-3	1000	2530	1800	85	1220	300	DN50	319	168
4-240-120-2-1	1200	3240	2400	85	1520	300	DN40	389	187
4-240-120-2-2	1200	3240	2400	85	1520	300	DN50	374	235
4-240-120-2-3	1200	3240	2400	85	1520	300	DN65	358	264

* Excluding water.

Complements and accessories

Duct accessories, uninsulated

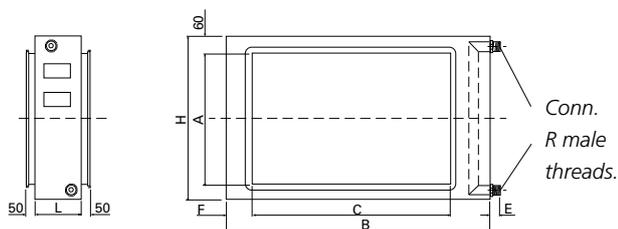


SILVER C with full face connection frame (accessory TBXZ):
 TBLA 060-030, matches SILVER C, sizes 04, 05
 TBLA 080-040, matches SILVER C, sizes 07, 08

With Thermoguard

TBLA	Capacity variant 1							
	B	H	L	A	C	E	R	kg*
4-060-030-1-1	789	381	180	300	600	125	DN15	13
4-080-040-1-1	989	481	180	400	800	125	DN15	18

* Excluding water.



SILVER C with standard end connection panel:
 TBLA 100-040, matches SILVER C, sizes 14, 20
 TBLA 120-050, matches SILVER C, sizes 25, 30
 TBLA 140-060, matches SILVER C, sizes 35, 40
 TBLA 160-080, matches SILVER C, sizes 50, 60
 TBLA 180-100, matches SILVER C, sizes 70, 80
 TBLA 240-120, matches SILVER C, sizes 100, 120

With Thermoguard

TBLA	Capacity variant 1								
	B	H	L	A	C	E	F	R	kg*
4-100-040	1213	580	210	400	1000	100	100	DN15	50
4-120-050	1568	680	210	500	1200	100	100	DN20	68
4-140-060	1818	820	210	600	1400	100	100	DN20	90
4-160-080	2173	1020	300	800	1600	100	254	DN25	121
4-180-100	2493	1195	300	1000	1800	100	310	DN32	159
4-240-120	3154	1510	300	1200	2400	100	356	DN50	195

* Excluding water.

SILVER C with full face connection frame (accessory TBXZ):
 TBLA 100-040, matches SILVER C, sizes 11, 12
 TBLA 120-050, matches SILVER C, sizes 14, 20
 TBLA 140-060, matches SILVER C, sizes 25, 30
 TBLA 160-080, matches SILVER C, sizes 35, 40
 TBLA 180-100, matches SILVER C, sizes 50, 60
 TBLA 240-120, matches SILVER C, sizes 70, 80

Complements and accessories

Duct accessories, uninsulated

TBKA Air cooler (water), TBKC (direct expansion)

The TBKA/TBKC air coolers are used for cooling the supply air with chilled water or evaporative refrigerant as the cooling medium.

The TBKA/TBKC air cooler is available in several capacity variants that cover existing needs for the corresponding size of SILVER C unit.

The air cooler must be installed for horizontal airflow.

Technical data

Uninsulated casing made of galvanized sheet steel. Environmental Class C4.

The TBKA/TBKC air coolers are composed of copper tubes and profiled aluminium fins. The TBKA has headers and water connections made of copper/brass, with male connection threads. The TBKC has headers and distributor tubes made of copper. The connections are designed for brazed joints.

Valve set

The TBVA Valve set consisting of a 2(3)-way valve including actuator can be ordered.

Installation

TBKA/TBKC 000-031, 000-040 and 000-050: The end panel on the connection side can be dismantled for inspection and connection. TBKA/TBKC 060-030 to 240-120: Provision for inspection and cleaning must be guaranteed.

Connecting the drainage pipework.

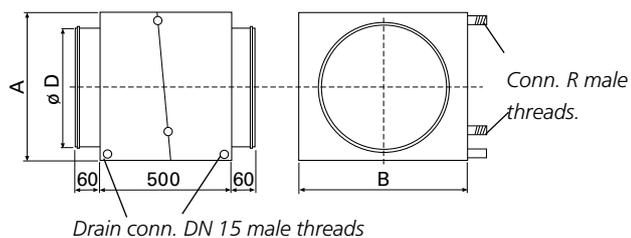
Electrical connection.



Complements and accessories

Duct accessories, uninsulated

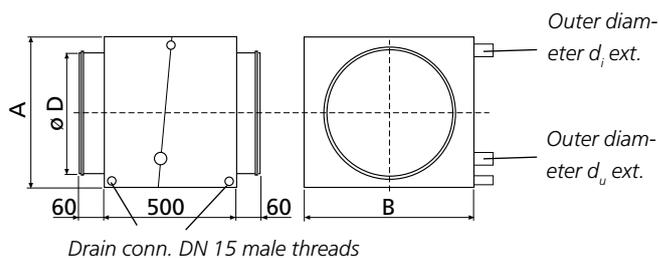
SILVER C with standard end connection panel:
 TBKA 000-031, matches SILVER C, sizes 04, 05
 TBKA 000-040, matches SILVER C, sizes 07, 08
 TBKA 000-050, matches SILVER C, sizes 11, 12



TBKA	A	B	D	R	kg*
5-000-031-1	430	490	315	DN15	37
5-000-031-2	430	490	315	DN20	39

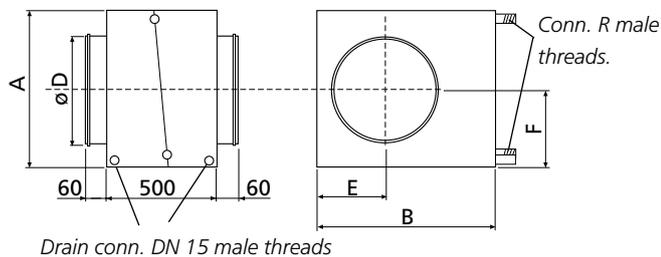
* Excl. cooling agent

SILVER C with standard end connection panel:
 TBKC 000-031, matches SILVER C, sizes 04, 05
 TBKC 000-040, matches SILVER C, sizes 07, 08
 TBKC 000-050, matches SILVER C, sizes 11, 12



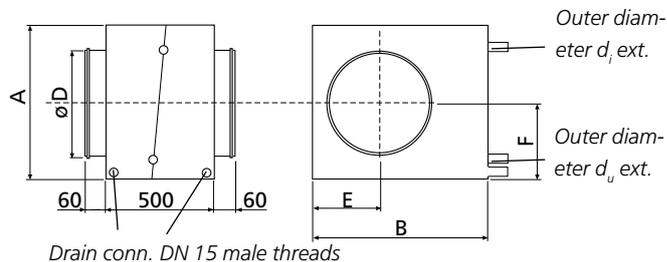
TBKC	A	B	D	d _i	d _u	kg*
4-000-031-1-1	430	490	315	12	12	37

* Excl. cooling medium



TBKA	A	B	D	E	F	R	kg*
5-000-040-1	475	590	400	255	238	DN20	36
5-000-040-2	475	590	400	255	238	DN20	38
5-000-050-1	575	690	500	295	288	DN25	50
5-000-050-2	575	690	500	295	288	DN25	54
4-000-050-5	755	770	500	358	378	DN25	44
4-000-050-6	755	770	500	358	378	DN32	52

* Excl. cooling agent

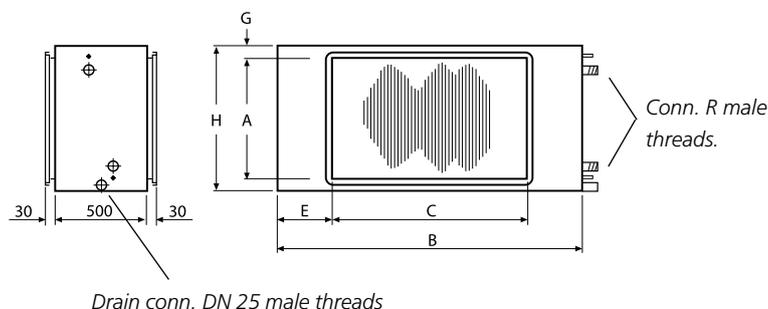


TBKC	A	B	D	E	F	d _i	d _u	kg*
3-000-040-1-1	455	590	400	255	228	12	22	28
4-000-050-1-1	575	690	500	295	288	22	22	50
3-000-050-3-1	755	770	500	358	378	22	42	46

* Excl. cooling medium

Complements and accessories

Duct accessories, uninsulated



SILVER C with standard end connection panel:
 TBKA 100-040, matches SILVER C, sizes 14, 20
 TBKA 120-050, matches SILVER C, sizes 25, 30
 TBKA 140-060, matches SILVER C, sizes 35, 40
 TBKA 160-080, matches SILVER C, sizes 50, 60
 TBKA 180-100, matches SILVER C, sizes 70, 80
 TBKA 240-120, matches SILVER C, sizes 100, 120

SILVER C with full face connection frame (accessory TBXZ):
 TBKA 060-030, matches SILVER C, sizes 04, 05
 TBKA 080-040, matches SILVER C, sizes 07, 08
 TBKA 100-040, matches SILVER C, sizes 11, 12
 TBKA 120-050, matches SILVER C, sizes 14, 20
 TBKA 140-060, matches SILVER C, sizes 25, 30
 TBKA 160-080, matches SILVER C, sizes 35, 40
 TBKA 180-100, matches SILVER C, sizes 50, 60
 TBKA 240-120, matches SILVER C, sizes 70, 80

TBKA	A	B	C	E	G	H	R	kg*
5-060-030-1	300	754	600	47	19	361	DN15	13
5-060-030-2	300	754	600	47	19	361	DN20	15
5-060-030-3	300	754	600	47	19	361	DN20	17
5-080-040-1	400	954	800	47	19	461	DN20	19
5-080-040-2	400	954	800	47	19	461	DN25	22
5-080-040-3	400	954	800	47	19	461	DN25	26
5-100-040-0	400	527	1000	77	64	1225	DN32	52
5-100-040-1	400	1295	1000	148	113	625	DN32	58
5-100-040-2	400	1295	1000	148	113	625	DN32	60
5-100-040-3	400	1295	1000	148	113	625	DN32	64
5-120-040-4**	400	1495	1200	148	113	625	DN40	82
5-120-050-0	500	623	1200	62	62	1425	DN32	70
5-120-050-1	500	1595	1200	198	168	835	DN40	80
5-120-050-2	500	1595	1200	198	168	835	DN50	90
5-120-050-3	500	1595	1200	198	168	835	DN50	100
5-140-050-4**	500	1790	1400	195	168	835	DN50	122
5-140-060-0	600	723	1400	62	62	1625	DN32	91
5-140-060-1	600	1885	1400	243	170	940	DN50	106
5-140-060-2	600	1885	1400	243	170	940	DN50	118
5-140-060-3	600	1885	1400	243	170	940	DN65	134
5-160-060-4**	600	2085	1600	243	170	940	DN65	154
5-160-080-1	800	1794	1600	47	19	846	DN32	66
5-160-080-2	800	2180	1600	290	110	1020	DN50	174
5-160-080-3	800	2180	1600	290	110	1020	DN50	223
5-160-080-4	800	2180	1600	290	110	1020	DN65	211
5-180-100-1	1000	1994	1800	47	19	1051	DN50	88
5-180-100-2	1000	2500	1800	350	110	1220	DN65	232
5-180-100-3	1000	2500	1800	350	110	1220	DN65	228
5-180-100-4	1000	2500	1800	350	110	1220	DN65	250
5-240-120-1	1200	2644	2400	47	19	1256	DN65	138
5-240-120-2	1200	3210	2400	405	160	1520	DN65	309
5-240-120-3	1200	3210	2400	405	160	1520	DN80	406
5-240-120-4	1200	3210	2400	405	160	1520	DN100	454

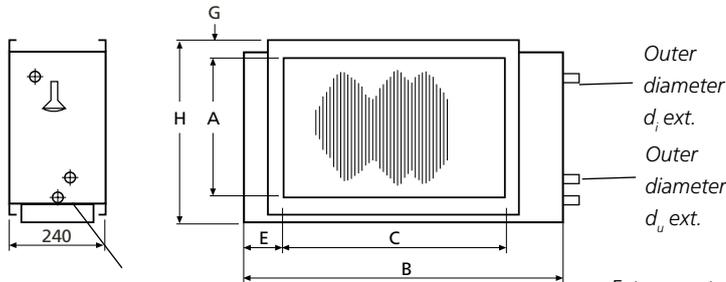
* Excl. cooling agent

** The connection dimensions of the coil are not the same as those of the SILVER C unit. Some form of transition piece must be installed between the air handling unit and the air cooler.

Complements and accessories

Duct accessories, uninsulated

Capacity variant 0



Drain conn. DN 25
male threads

Ext. conn. to be brazed.

SILVER C with standard end connection frame:
TBKC 100-040, matches SILVER C, sizes 14, 20
TBKC 120-050, matches SILVER C, sizes 25, 30
TBKC 140-060, matches SILVER C, sizes 35, 40

SILVER C with full face connection frame (accessory TBXZ):
TBKC 100-040, matches SILVER C, sizes 11, 12
TBKC 120-050, matches SILVER C, sizes 14, 20
TBKC 140-060, matches SILVER C, sizes 25, 30

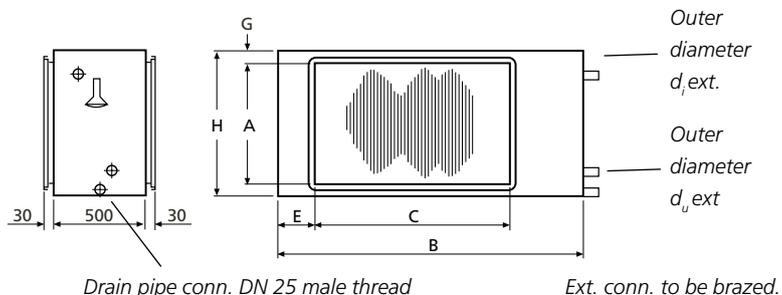
TBKC	A	B	C	E	G	H	d _i	d _u	kg*
3-100-040-0-1	400	1154	1000	49	19	461	22	28	24
3-100-040-0-2	400	1154	1000	49	19	461	12/16	16/22	25
3-120-050-0-1	500	1394	1200	49	19	561	28	35	33
3-120-050-0-2	500	1394	1200	49	19	561	16/28	22/35	34
3-140-060-0-1	600	1594	1400	49	19	661	28	35	41
3-140-060-0-2	600	1594	1400	49	19	661	22/28	28/35	42

* Excl. cooling agent

Complements and accessories

Duct accessories, uninsulated

Capacity variants 1 – 3



SILVER C with standard end connection frame:
 TBKC 100-040, matches SILVER C, sizes 14, 20
 TBKC 120-050, matches SILVER C, sizes 25, 30
 TBKC 140-060, matches SILVER C, sizes 35, 40
 TBKC 160-080, matches SILVER C, sizes 50, 60
 TBKC 180-100, matches SILVER C, sizes 70, 80
 TBKC 240-120, matches SILVER C, sizes 100, 120

SILVER C with full face connection frame (accessory TBXZ):
 TBKA 060-030, matches SILVER C, sizes 04, 05
 TBKA 080-040, matches SILVER C, sizes 07, 08
 TBKC 100-040, matches SILVER C, sizes 11, 12
 TBKC 120-050, matches SILVER C, sizes 14, 20
 TBKC 140-060, matches SILVER C, sizes 25, 30
 TBKC 160-080, matches SILVER C, sizes 35, 40
 TBKC 180-100, matches SILVER C, sizes 50, 60
 TBKC 240-120, matches SILVER C, sizes 70, 80

TBKC	A	B	C	E	G	H	d_i	d_u	kg*
3-060-030-1-1	300	880	600	62	50	401	12	19	10
3-060-030-2-1	300	880	600	62	50	401	22	22	11
3-060-030-3-1	300	880	600	62	50	401	22	28	13
3-080-040-1-1	400	1080	800	62	50	501	22	22	15
3-080-040-2-1	400	1080	800	62	50	501	22	28	17
3-080-040-3-1	400	1080	800	62	50	501	28	28	20
3-100-040-1-1	400	1350	1000	175	112,5	650	28	35	81
3-100-040-1-2	400	1350	1000	175	112,5	650	16/22	22/28	84
3-100-040-2-1	400	1350	1000	175	112,5	650	28	35	86
3-100-040-2-2	400	1350	1000	175	112,5	650	16/22	22/28	89
3-120-050-1-1	500	1590	1200	195	170	840	28	35	108
3-120-050-1-2	500	1590	1200	195	170	840	16/28	22/35	112
3-120-050-2-1	500	1590	1200	195	170	840	35	42	116
3-120-050-2-2	500	1590	1200	195	170	840	22/28	28/35	121
3-120-050-3-1	500	1590	1200	195	170	840	35	42	123
3-120-050-3-2	500	1590	1200	195	170	840	22/35	28/42	128
3-140-060-1-1	600	1950	1400	275	175	950	35	42	147
3-140-060-1-2	600	1950	1400	275	175	950	22/28	28/35	152
3-140-060-2-1	600	1950	1400	275	175	950	35	42	156
3-140-060-2-2	600	1950	1400	275	175	950	22/28	28/35	161
3-140-060-3-1	600	1950	1400	275	175	950	42	54	169
3-140-060-3-2	600	1950	1400	275	175	950	28/35	35/42	175
3-160-080-1-1	800	1794	1600	47	19	861	35	42	55
3-160-080-1-2	800	1794	1600	47	19	861	22/28	28/35	56
3-160-080-2-1	800	2210	1600	305	110	1020	42	54	181
3-160-080-2-2	800	2210	1600	305	110	1020	28/35	35/42	182
3-160-080-3-1	800	2210	1600	305	110	1020	35	54	199
3-160-080-3-2	800	2210	1600	305	110	1020	22/28	35/42	200
3-180-100-1-1	1000	1994	1800	47	19	1061	42	54	80
3-180-100-1-2	1000	1994	1800	47	19	1061	28/35	35/42	81
3-180-100-2-1	1000	2530	1800	365	110	1220	54	76	237
3-180-100-2-2	1000	2530	1800	365	110	1220	28/42	35/54	238
3-180-100-3-1	1000	2530	1800	365	110	1220	42	76	254
3-180-100-3-2	1000	2530	1800	365	110	1220	28/35	42/54	255
3-240-120-1-1	1200	2594	2400	47	19	1261	42	54	121
3-240-120-1-2	1200	2594	2400	47	19	1261	28/35	35/42	122
3-240-120-2-1	1200	3240	2400	420	160	1520	42	76	383
3-240-120-2-2	1200	3240	2400	420	160	1520	28/35	42/54	384
3-240-120-3-1	1200	3240	2400	420	160	1520	42	76	413
3-240-120-3-2	1200	3240	2400	420	160	1520	28/35	42/54	415

* Excl. cooling agent

Complements and accessories

Duct accessories, uninsulated

TBBD Mixing Section

The TBBD mixing section is available for the SILVER C SD in sizes 04-80.

The mixing section can be used when it is desirable use recirculated air for completely or partially heating a building while it is unoccupied.

The TBBD consists of a spiral tubular T-piece (sizes 000-031 – 000-050) or a rectangular duct with three connections for slip-clamp jointing (sizes 060-030 – 080-100).

The spiral duct joints (sizes 000-031 – 000-050) in required quantity and the sets of slip clamps (sizes 060-030 – 080-100) respectively are included in the supply.

The mounted damper actuators (24 V) are available as optional extras. These have modulated action.

The mixing section can be ordered with two or three dampers depending on its range of application. See the example on the next page.

Additional equipment required: Supply air handling units should be equipped with an air heater.

Work to be carried out at the building site: Installation the mixing section to the air handling unit/duct. Install dampers for the mixing section or duct Electrical connection. Install insulation conforming to local regulations



Complements and accessories

Duct accessories, uninsulated

Circular duct connections

Example 1, two dampers

The mixing section consists of two unmounted dampers, two joints and one spiral tubular T-piece. The connecting rod for the common damper motor is included in the supply.

Example 2, three dampers

As example 1 + one unmounted damper with its own damper motor, two joints and one spiral tubular T-piece.

Rectangular duct connections

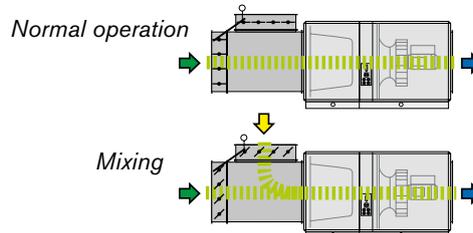
Example 1, two dampers

The mixing section consists of two unmounted dampers and one rectangular duct with three connections for slip-clamp jointing. The connecting rod for the common damper motor is included in the supply of sizes 060-030 – 120-050. Dampers in sizes 140-060 – 180-100 each have their own damper motor. The mixing section can be installed for connection on the right-hand or left-hand side.

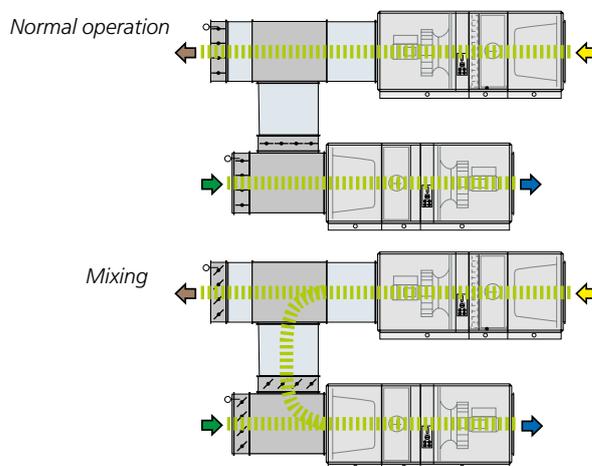
Example 2, three dampers

As example 1 + one unmounted damper with its own damper motor and one rectangular duct with three connections for slip-clamp jointing.

Example 1 (two dampers)



Example 2 (three dampers)

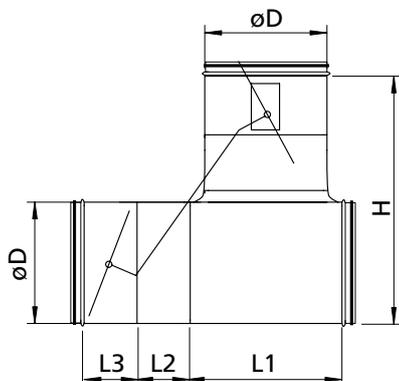


Outdoor air Extract air Supply air Exhaust air

Complements and accessories

Duct accessories, uninsulated

Two dampers



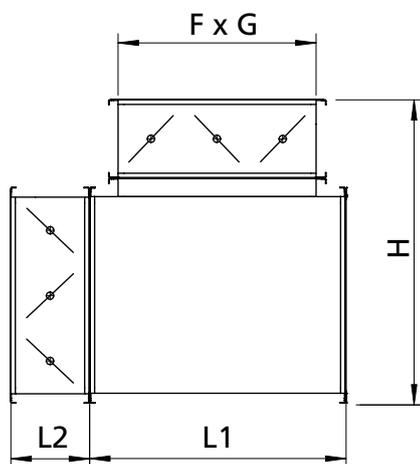
SILVER C with standard end connection panel:
 TBBD 000-031, matches SILVER C, size 04/05
 TBBD 000-040, matches SILVER C, size 07/08
 TBBD 000-050, matches SILVER C, size 11/12

TBBD	L1	L2	L3	H	øD
000-031	363	140	140	620	315
000-040	510	180	210	825	400
000-050	552	180	210	930	500

Three dampers

The dimensions of the component parts supplied by Swegon can be read in the sketch to the left.

Two dampers



SILVER C with standard end connection panel:
 TBBD 100-040, matches SILVER C, size 14/20
 TBBD 120-050, matches SILVER C, size 25/30
 TBBD 140-060, matches SILVER C, size 35/40
 TBBD 160-080, matches SILVER C, size 50/60
 TBBD 180-100, matches SILVER C, size 70/80

SILVER C with full face connection frame (accessory TBXZ):
 TBBD 060-030, matches SILVER C, sizes 04, 05
 TBBD 080-040, matches SILVER C, sizes 07, 08
 TBBD 100-040, matches SILVER C, sizes 11, 12
 TBBD 120-050, matches SILVER C, sizes 14, 20
 TBBD 140-060, matches SILVER C, sizes 25, 30
 TBBD 160-080, matches SILVER C, sizes 35, 40
 TBBD 180-100, matches SILVER C, sizes 50, 60

TBBD	L1	L2	H	F x G
060-030	420	220	570	300 x 600
080-040	520	220	670	400 x 800
100-040	520	220	670	400 x 1000
120-050	620	220	770	500 x 1200
140-060	720	220	870	600 x 1400
160-080	920	220	1070	800 x 1600
180-100	1120	220	1270	1000 x 1800

Three dampers

The dimensions of the component parts supplied by Swegon can be read in the sketch to the left.

Complements and accessories

Duct accessories, uninsulated

Pre-filter, TBFA

Pre-filter should be installed in the outdoor air duct and/or the extract air duct.

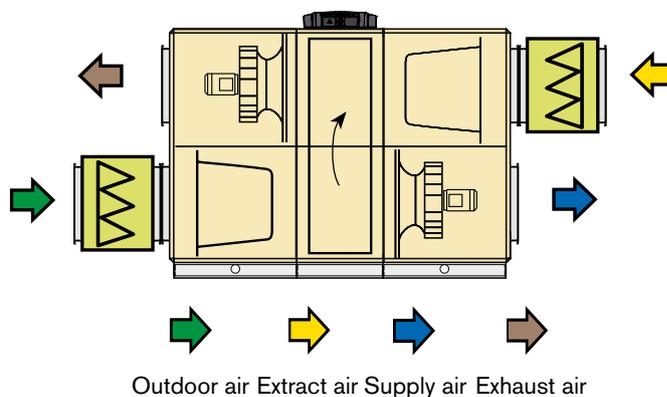
The pre-filter is used in ventilation systems, in which the extract air and/or the outdoor air is heavily polluted and it is desirable to prevent the fine filter inside the SILVER C unit from becoming clogged after a short period of use.

Technical data

The TBFA has uninsulated casing made of galvanized sheet steel. Insulated inspection door. The filters are of woven aluminium type or Class G3 compact filters.

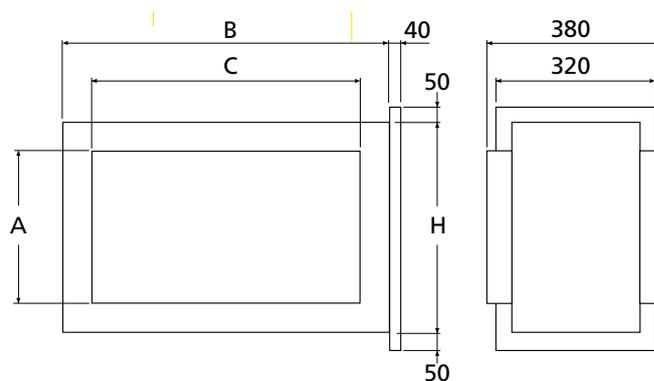
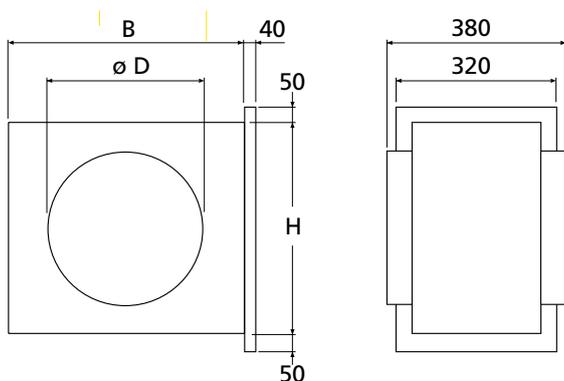
Installation

Provision for inspection and cleaning must be guaranteed. Install insulation conforming to local regulations



TBFA 000-031, matches SILVER C, sizes 04, 05
 TBFC 000-040, matches SILVER C, sizes 07, 08
 TBFA 000-050, matches SILVER C, sizes 11, 12

TBFA 100-040, matches SILVER C, sizes 14, 20
 TBFA 120-050, matches SILVER C, sizes 25, 30
 TBFA 140-060, matches SILVER C, sizes 35, 40
 TBFA 160-080, matches SILVER C, sizes 50, 60
 TBFA 180-100, matches SILVER C, sizes 70, 80
 TBFA 240-120, matches SILVER C, sizes 100, 120



TBFA	B	D	H	kg
000-031	500	315	500	18
000-040	600	400	600	22
000-050	900	500	600	24

TBFA	A	B	C	H	kg
100-040	400	1200	1000	600	26
120-050	500	1500	1200	600	36
140-060	600	1800	1400	900	48
160-080	800	2475	1600	1000	59
180-100	1000	2400	1800	1200	68
240-120	1200	3000	2400	1800	140

Complements and accessories

Duct accessories, in insulated casing

Common for duct accessories in an insulated casing

The duct accessories are to be positioned outside the SILVER C unit. The unique Wing+ fans in the SILVER C air handling unit also make it possible to connect duct accessories directly to the SILVER C unit's duct connection without pressure losses or non-uniform air distribution.

Duct accessories in an insulated casing must be used if the unit is installed outdoors.

Duct accessories for the SILVER C are equipped with bolted joints and/or expansion-type locking devices for docking them to the air handling unit and/or other duct accessories.

One duct accessory can be mounted on top of another duct accessory.

Other particulars for sizing can be obtained by using the ProUnit air handling unit selection program.

Complements and accessories

Duct accessories, in insulated casing

Damper section, TCSAS

The TCSAS dampers are used as shut-off dampers or forced airflow dampers. Sizes 12-120 can also be used for other applications.

Shut-off dampers are normally used if the air handling unit is idle during some period, for example at night, or if an air heater for hot water without anti-frost bursting protection is used.

To be installed for horizontal airflow.

The damper can be selected without damper actuator or complete with damper actuator for 24 V. The actuator can be selected with spring return or on/off actuation. TCSAS sizes 12-120 are also available with modulating type actuator with spring return.

Technical data

Insulated casing. External and internal material: aluminium-zinc plated sheet steel. Environmental Class C4. Ductwork leakage class 3 to EN 1751.

The dampers are journalled in nylon bushings.

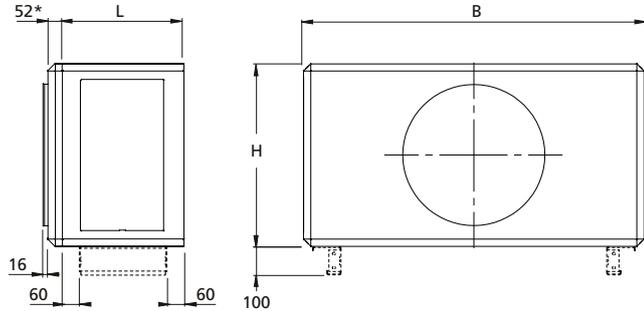
Installation

The damper section should be mounted directly against the air handling unit or insulated duct accessory.



Complements and accessories

Duct accessories, in insulated casing

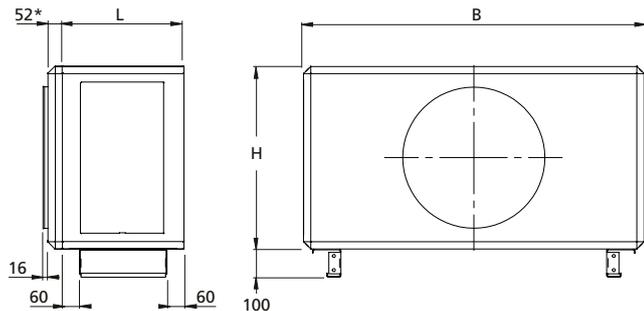


Connection dimensions to duct:
 TCSAS 05 ∅ 315
 TCSAS 08 ∅ 400

Base beams are optional.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCSAS	B	H	L	kg	End connection panel, if required kg
1-05	825	460	353	33	7
1-08	995	542	353	38	10

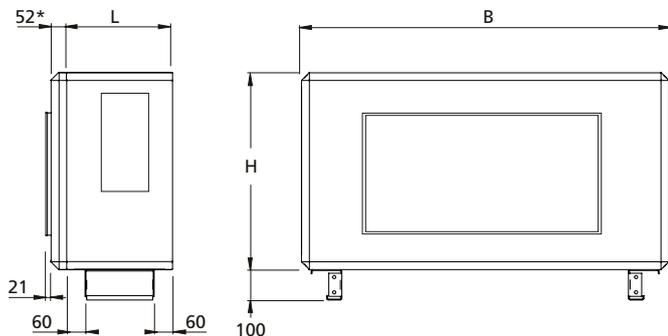


Connection dimensions to duct:
 TCSAS 12 ∅ 500

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCSAS	B	H	L	kg	End connection panel, if required kg
1-12	1199	648	353	52	13



Connection dimensions to duct:
 TCSAS 20 1000 x 400 mm
 TCSAS 30 1200 x 500 mm
 TCSAS 40 1400 x 600 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

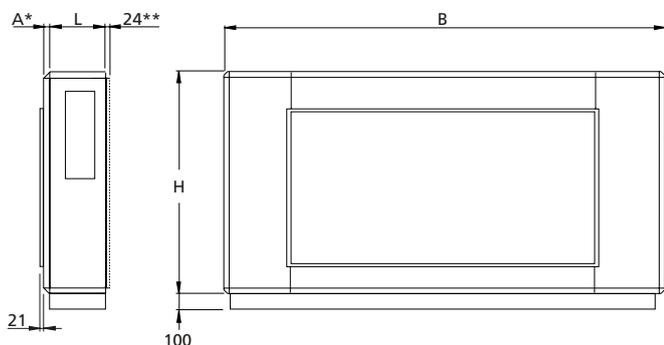
TCSAS	B	H	L	kg	End connection panel, if required kg
1-20	1400	776 ¹⁾ /620 ²⁾	353	66 ¹⁾ /61 ²⁾	19 ¹⁾ /15 ²⁾
1-30	1600	906 ¹⁾ /690 ²⁾	353	74 ¹⁾ /66 ²⁾	23 ¹⁾ /17 ²⁾
1-40	1990	1080 ¹⁾ /906 ²⁾	353	92 ¹⁾ /86 ²⁾	31 ¹⁾ /26 ²⁾

¹⁾ When mounting on outlet.

²⁾ When mounting on inlet.

Complements and accessories

Duct accessories, in insulated casing



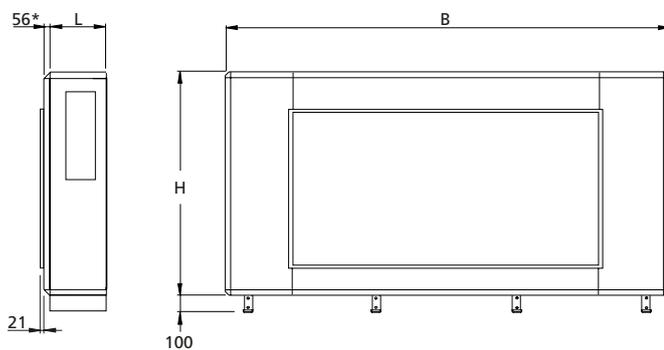
Connection dimensions to duct:
 TCSAS 60 1600 x 800 mm
 TCSAS 80 1800 x 1000 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

** Applies to size 60 only.

TCSAS	B	H	L	A	kg	End connection panel, if required kg
1-60	2318	1127	377	28	142	31
2-80	2637	1320	381	52	191	38



Connection dimensions to duct:
 TCSAS 120 2400 x 1200 mm

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCSAS	B	H	L	kg	End connection panel, if required kg
1-120	3340	1620	500	337	59

Complements and accessories

Duct accessories, in insulated casing

Spacer section, TCGAS/ Inspection section, TCIAS

The TCGAS spacer section/TCIAS inspection section is used when provision for spacing or inspection is required.

The TCIAS inspection section is available in two variants, with inspection door the entire length of the section (sizes 05-120), or split cover panel/inspection door (sizes 05-40).

The spacer section/inspection section must be installed for horizontal airflow.

Technical data

Insulated casing. External and internal material: aluminium-zinc plated sheet steel. Environmental Class C4.

Installation

The spacer section/inspection section should be fitted directly to the air handling unit or other insulated duct accessory.

Provision for inspection and cleaning the spacer section must be guaranteed. The cover panel is easy to remove.



Spacer section, TCGAS

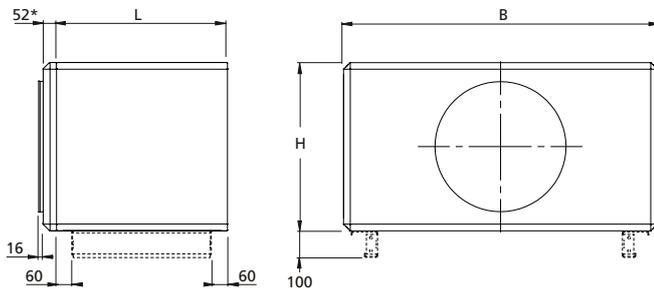


Inspection section, TCIAS.
Inspection door the entire length of the section.



Inspection section, TCIAS.
Split cover panel/inspection door.

Spacer section, TCGAS



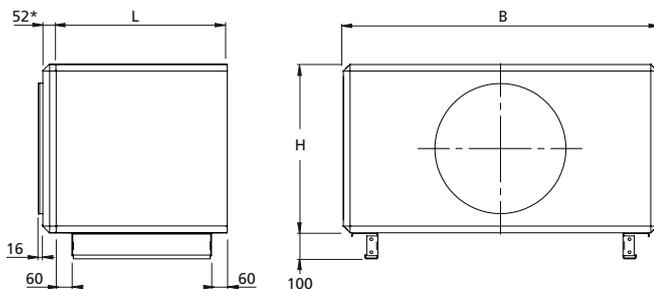
Connection dimensions to duct:

- TCGAS 05 ø 315
- TCGAS 08 ø 400

The base beams are optional.

* If several duct accessories are arranged in succession, the end connection panel is supplied on the duct accessory farthest out facing the ductwork only.

TCGAS	B	H	L	kg	End connection panel, if required kg
2-05	825	460	723	38	7
2-08	995	542	723	46	10



Connection dimensions to duct:

- TCGAS 12 ø 500

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

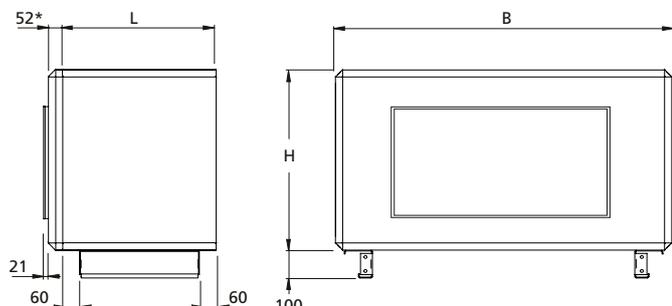
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCGAS	B	H	L	kg	End connection panel, if required kg
2-12	1199	648	723	61	13

Complements and accessories

Duct accessories, in insulated casing

Spacer section, TCGAS

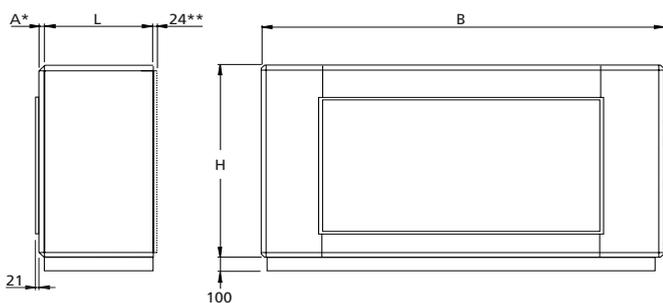


Connection dimensions to duct:
 TCGAS 20 1000 x 400 mm
 TCGAS 30 1200 x 500 mm
 TCGAS 40 1400 x 600 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.
 * If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCGAS	B	H	L	kg	End connection panel, if required kg
2-20	1400	776 ¹⁾ /620 ²⁾	723	71 ¹⁾ /66 ²⁾	19 ¹⁾ /15 ²⁾
2-30	1600	906 ¹⁾ /690 ²⁾	723	79 ¹⁾ /74 ²⁾	23 ¹⁾ /17 ²⁾
2-40	1990	1080 ¹⁾ /906 ²⁾	723	96 ¹⁾ /91 ²⁾	31 ¹⁾ /26 ²⁾

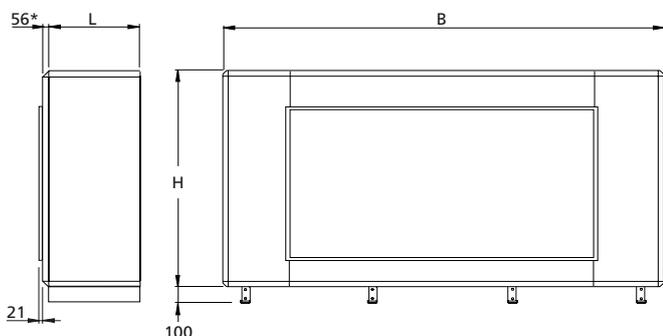
¹⁾ When mounting on outlet.
²⁾ When mounting on inlet.



Connection dimensions to duct:
 TCGAS 60 1600 x 800 mm
 TCGAS 80 1800 x 1000 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.
 * If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.
 ** Size 60 only

TCGAS	B	H	L	A	kg	End connection panel, if required kg
1-60	2318	1127	617	28	118	31
2-80	2637	1320	617	52	139	38



Connection dimensions to duct:
 TCGAS 120 2400 x 1200 mm

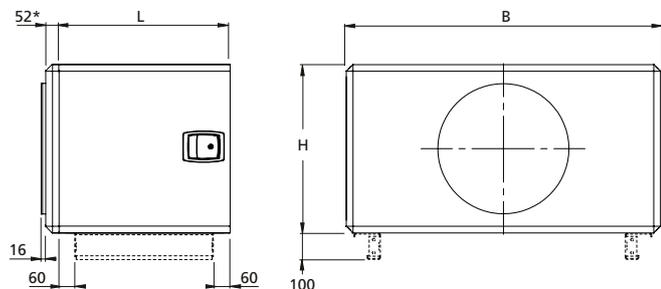
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCGAS	B	H	L	kg	End connection panel, if required kg
1-120	3340	1620	720	243	59

Complements and accessories

Duct accessories, in insulated casing

Inspection section, TCIAS, inspection door in the entire length of the section.

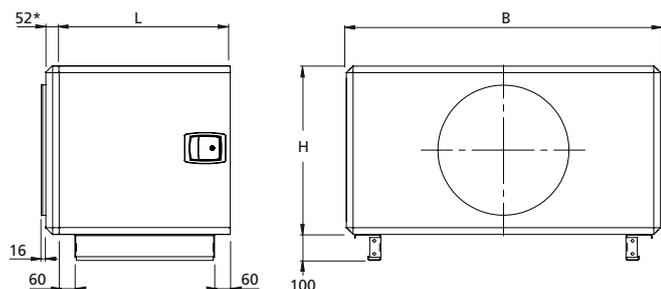


Connection dimensions to duct:
 TCIAS 05 ø 315
 TCIAS 08 ø 400

Base beams are optional.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIAS	B	H	L	kg	End connection panel, if required	
					kg	
1-05	825	460	723	40	7	
1-08	995	542	723	47	10	

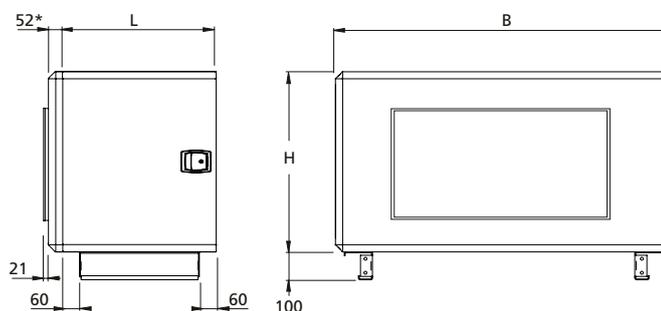


Connection dimensions to duct:
 TCIAS 12 ø 500

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIAS	B	H	L	kg	End connection panel, if required	
					kg	
1-12	1199	648	723	62	13	



Connection dimensions to duct:
 TCIAS 20 1000 x 400 mm
 TCIAS 30 1200 x 500 mm
 TCIAS 40 1400 x 600 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIAS	B	H	L	kg	End connection panel, if required	
					kg	
1-20	1400	776 ¹⁾ /620 ²⁾	723	74 ¹⁾ /67 ²⁾	19 ¹⁾ /15 ²⁾	
1-30	1600	906 ¹⁾ /690 ²⁾	723	82 ¹⁾ /75 ²⁾	23 ¹⁾ /17 ²⁾	
1-40	1990	1080 ¹⁾ /906 ²⁾	723	98 ¹⁾ /93 ²⁾	31 ¹⁾ /26 ²⁾	

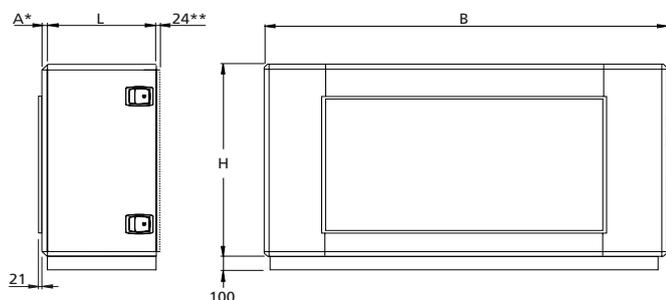
¹⁾ When mounting on outlet.

²⁾ When mounting on inlet.

Complements and accessories

Duct accessories, in insulated casing

Inspection section, TCIAS, inspection door in the entire length of the section.



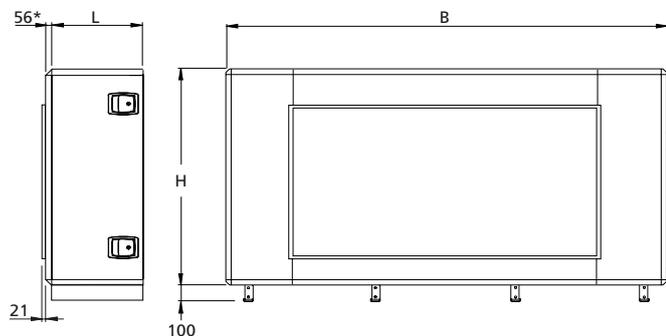
Connection dimensions to duct:
 TCIAS 60 1600 x 800 mm
 TCIAS 80 1800 x 1000 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

** Size 60 only

TCIAS	B	H	L	A	kg	End connection panel, if required kg
1-60	2318	1127	542	28	114	31
1-80	2637	1320	542	52	136	38



Connection dimensions to duct:
 TCIAS 120 2400 x 1200 mm

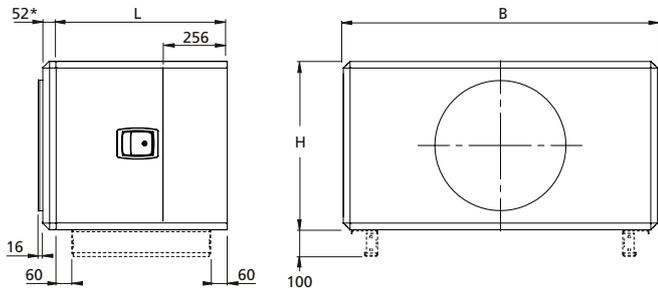
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIAS	B	H	L	kg	End connection panel, if required kg
1-120	3340	1620	500	211	59

Complements and accessories

Duct accessories, in insulated casing

TCIAS inspection section, split cover panel/inspection door

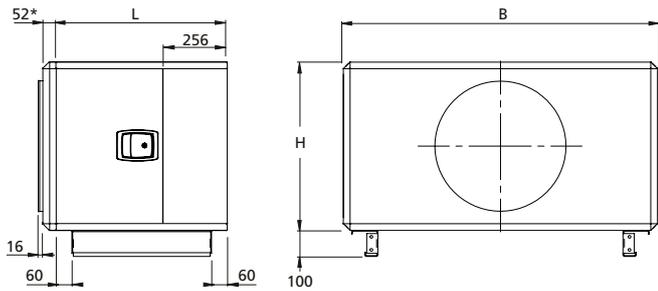


Connection dimensions to duct:
 TCIAS 05 ø 315
 TCIAS 08 ø 400

The base beams are optional.

* If several duct accessories are arranged in succession, the end connection panel is supplied on the duct accessory farthest out facing the ductwork only.

TCIAS	B	H	L	kg	End connection panel, if required kg
1-05	825	460	723	40	7
1-08	995	542	723	47	10

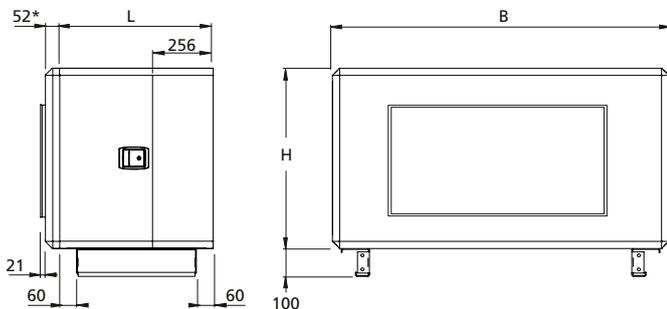


Connection dimensions to duct:
 TCIAS 12 ø 500

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIAS	B	H	L	kg	End connection panel, if required kg
1-12	1199	648	723	62	13



Connection dimensions to duct:
 TCIAS 20 1000 x 400 mm
 TCIAS 30 1200 x 500 mm
 TCIAS 40 1400 x 600 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIAS	B	H	L	kg	End connection panel, if required kg
1-20	1400	776 ¹⁾ /620 ²⁾	723	74 ¹⁾ /67 ²⁾	19 ¹⁾ /15 ²⁾
1-30	1600	906 ¹⁾ /690 ²⁾	723	82 ¹⁾ /75 ²⁾	23 ¹⁾ /17 ²⁾
1-40	1990	1080 ¹⁾ /906 ²⁾	723	98 ¹⁾ /93 ²⁾	31 ¹⁾ /26 ²⁾

¹⁾ When mounting on outlet.
²⁾ When mounting on inlet.

Complements and accessories

Duct accessories, in insulated casing

Unit sound attenuator, TCDAS

The TCDAS sound attenuators are rectangular sound attenuators designed for mounting directly against the air handling unit.

To be installed for horizontal airflow.

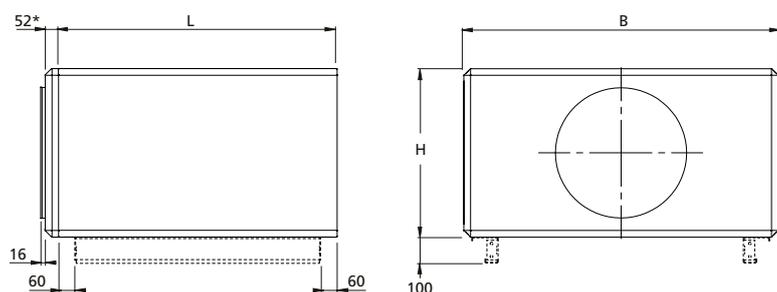
Technical data

Insulated casing. External and internal material: aluminium-zinc plated sheet steel. Environmental Class C4. Sound absorption material of type Cleanolon-AL. Cleanolon-AL consists of mineral wool covered with perforated aluminium foil. Type approved with regard to suitability for cleaning, emissions and fibre entrainment. The material conforms to the provisions of Surface Layer Class 1 (the highest class).



Installation

The sound attenuator should be mounted directly against the air handling unit or insulated duct accessory. Provision for inspection and cleaning must be guaranteed.



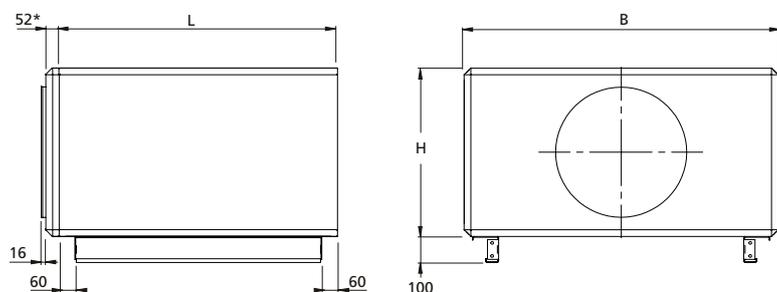
Connection dimensions to duct:

- TCDAS 05 \varnothing 315
- TCDAS 08 \varnothing 400

Base beams are optional.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCDAS	B	H	L	kg	End connection panel, if required kg
1-05	825	460	948	63	7
1-08	995	542	948	74	10



Connection dimensions to duct:

- TCDAS 12 \varnothing 500

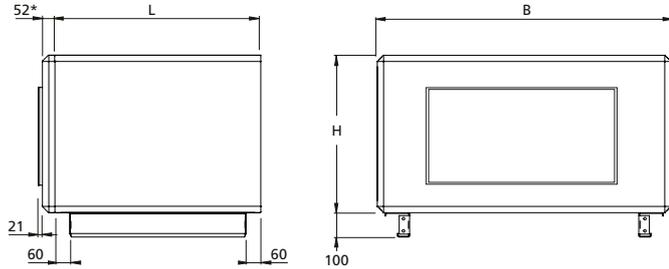
The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCDAS	B	H	L	kg	End connection panel, if required kg
1-12	1199	648	948	97	13

Complements and accessories

Duct accessories, in insulated casing



Connection dimensions to duct:
 TCDAS 20 1000 x 400 mm
 TCDAS 30 1200 x 500 mm
 TCDAS 40 1400 x 600 mm

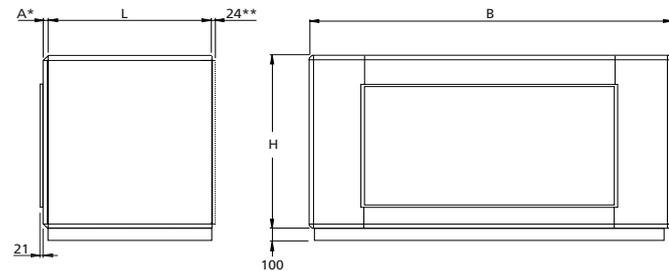
The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCDAS	B	H	L	kg	End connection panel, if required kg
1-20	1400	776 ¹⁾ /620 ²⁾	948	120 ¹⁾ /106 ²⁾	19 ¹⁾ /15 ²⁾
1-30	1600	906 ¹⁾ /690 ²⁾	948	143 ¹⁾ /124 ²⁾	23 ¹⁾ /17 ²⁾
1-40	1990	1080 ¹⁾ /906 ²⁾	948	187 ¹⁾ /168 ²⁾	31 ¹⁾ /26 ²⁾

¹⁾ When mounting on outlet.

²⁾ When mounting on inlet.



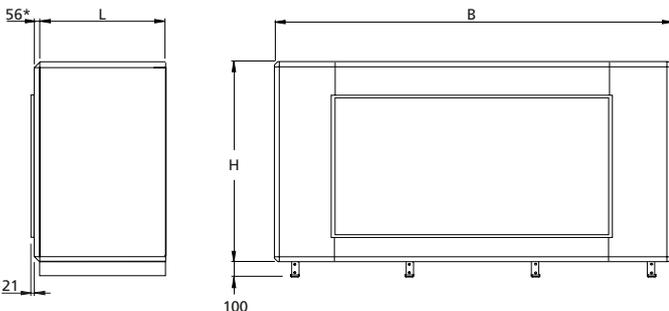
Connection dimensions to duct:
 TCDAS 60 1600 x 800 mm
 TCDAS 80 1800 x 1000 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

** Size 60 only

TCDAS	B	H	L	A	kg	End connection panel, if required kg
1-60	2318	1127	972	28	245	31
2-80	2637	1320	972	52	288	38



Connection dimensions to duct:
 TCDAS 120 2400 x 1200 mm

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCDAS	B	H	L	kg	End connection panel, if required kg
1-120	3340	1620	1070	443	59

Complements and accessories

Duct accessories, in insulated casing

Air heater, TCLAS, hot water

The TCLAS air heaters are used for reheating the supply air. The heaters use hot water as the heating medium.

To be installed for horizontal airflow.

Technical data

Insulated casing. External and internal material: aluminium-zinc plated sheet steel. Environmental Class C4.

Finned-tube heat exchangers fabricated of copper tubes and profiled aluminium fins. The headers and the pipe-work to the water connections are made of copper. The male threaded pipe connections are made of brass.

The TCLAS air heaters are available in three capacity variants. Capacity variant 1 provides the lowest capacity and capacity variant 3 provides the highest capacity.

All the air heaters are equipped with individual plugs for venting and drainage. A separate connection is provided for an anti-frost monitor sensor.

Valve set

The TBVA Valve set consisting of a 2(3)-way valve including actuator can be ordered.

Extra accessories

A circulation pump is used for guaranteeing the frost guard function, if air heaters without anti-frost burst protection are used. Supplied with T coupling, non-return valve and adjustment valve.

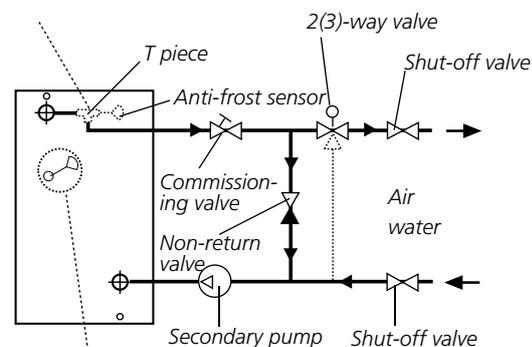
Installation

The air heater should be mounted directly against the air handling unit or insulated duct accessory. Provision for inspection and cleaning must be guaranteed.



Basic Installation Diagram

Applicable to
TCLAS 05-12

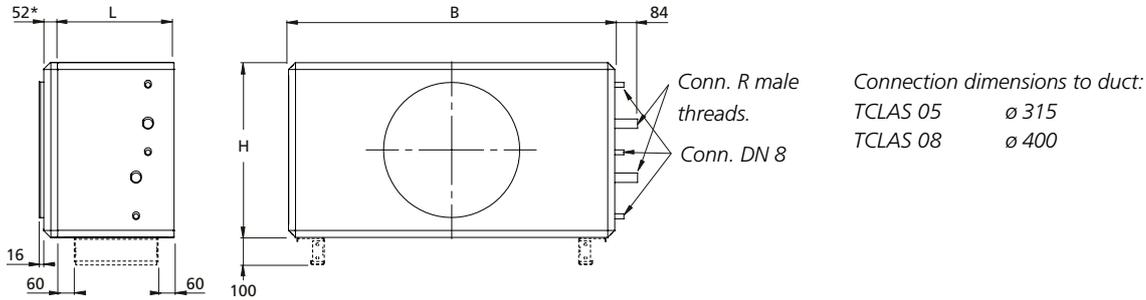


Anti-freeze monitor sensor. Applicable to TCLAS 14-120

1) The anti-frost protection sensor for the size 05-12 TCLAS should be installed in the T-piece on the return pipework and for the size 14-120 TCLAS in the connection on the air heater.

Complements and accessories

Duct accessories, in insulated casing

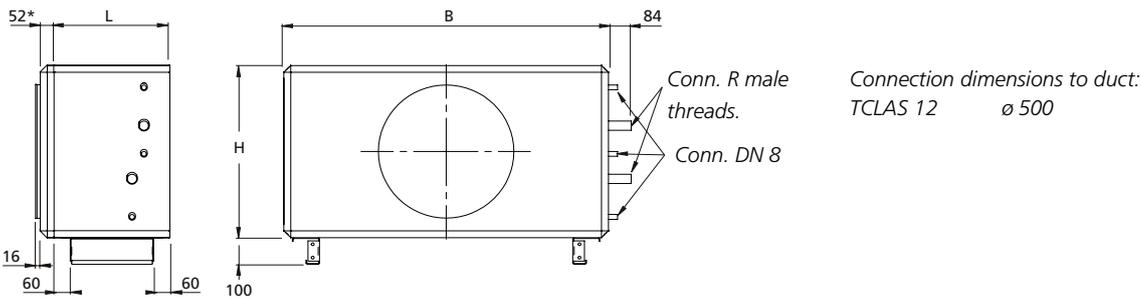


The base beams are optional.

* If several duct accessories are arranged in succession, the end connection panel is supplied on the duct accessory farthest out facing the ductwork only.

TCLAS	B	H	L	Cap. variant 1		Cap. variant 2		Cap. variant 3		End connection panel, if required kg
				R	kg ¹⁾	R	kg ¹⁾	R	kg ¹⁾	
1-05	825	460	353	DN15	25	DN15	26	DN20	27	7
1-08	995	542	353	DN15	31	DN20	32	DN20	34	10

¹⁾ Not filled with water.

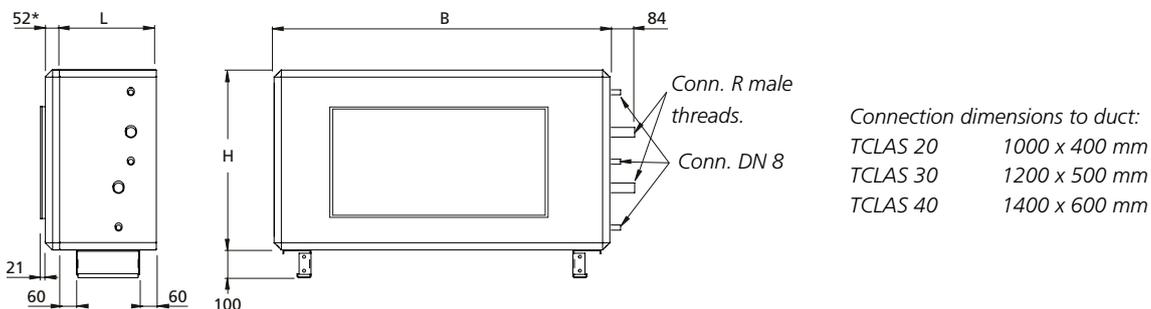


The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCLAS	B	H	L	Cap. variant 1		Cap. variant 2		Cap. variant 3		End connection panel, if required kg
				R	kg ¹⁾	R	kg ¹⁾	R	kg ¹⁾	
1-12	1199	648	428	DN20	49	DN20	52	DN25	56	13

¹⁾ Not filled with water.



The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

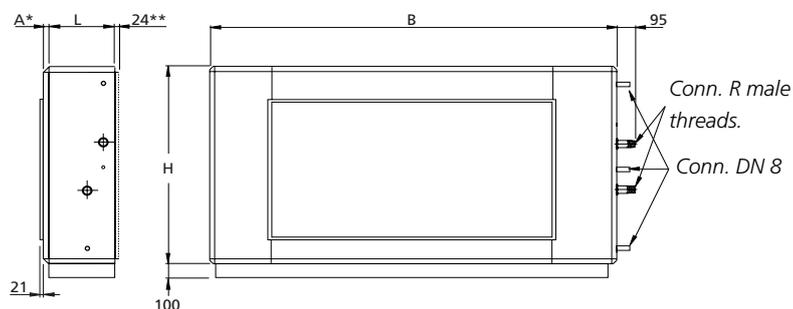
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCLAS	B	H	L	Cap. variant 1		Cap. variant 2		Cap. variant 3		End connection panel, if required kg
				R	kg ¹⁾	R	kg ¹⁾	R	kg ¹⁾	
1-20	1400	776	353	DN20	51	DN25	57	DN25	62	19
1-30	1600	906	353	DN25	61	DN32	69	DN32	77	23
1-40	1990	1080	428	DN32	87	DN40	99	DN40	113	31

¹⁾ Not filled with water.

Complements and accessories

Duct accessories, in insulated casing



Connection dimensions to duct:
 TCLAS 60 1600 x 800 mm
 TCLAS 80 1800 x 1000 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

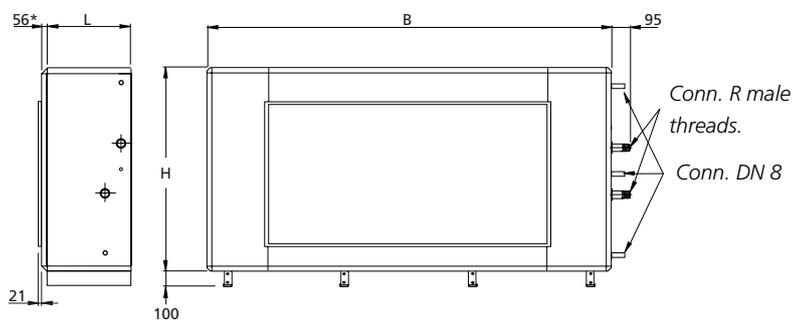
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

** Applies to size 60 only.

TCLAS	B	H	L	A	Cap. variant 1			Cap. variant 2			Cap. variant 3			End connection panel, if required kg
					R	kg ¹⁾	kg ²⁾	R	kg ¹⁾	kg ²⁾	R	kg ¹⁾	kg ²⁾	
2-60	2318	1127	542	28	DN32	152	111	DN50	171	111	DN50	185	111	31
3-80	2637	1320	542	52	DN50	190	135	DN65	214	135	DN65	236	135	38

¹⁾ Including casing, not filled with water.

²⁾ Casing only.



Connection dimensions to duct:
 TCLAS 120 2400 x 1200 mm

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCLAS	B	H	L	Cap. variant 1			Cap. variant 2			Cap. variant 3			End connection panel, if required kg
				R	kg ¹⁾	kg ²⁾	R	kg ¹⁾	kg ²⁾	R	kg ¹⁾	kg ²⁾	
1-120	3340	1620	720	DN50	339	256	DN65	384	256	DN65	429	256	59

¹⁾ Including casing, not filled with water.

²⁾ Casing only.

Complements and accessories

Duct accessories, in insulated casing

Air cooler, TCKAS (water), TCKCS (direct expansion)

The TCKAS/TCKCS air coolers are used for cooling the supply air with chilled water or evaporative refrigerant as the cooling medium.

The TBKAS/TBKCS air coolers are available in several capacity variants that cover existing needs for the corresponding size of SILVER C unit.

The TCKAS air coolers are equipped with connections for insertion sensors and can be used as a multi-purpose coil (cooling and heating).

To be installed for horizontal airflow.

Technical data

Insulated casing. External and internal material: aluminium-zinc plated sheet steel. Environmental Class C4.

The TCKAS/TCKCS air coolers are composed of copper tubes and profiled aluminium fins. The TCKAS have headers and water connections made of copper/brass, with male connection threads. The TCKCS have headers and distributor tubes made of copper. The connections are designed for brazed joints.

Valve set

The TBVA Valve set consisting of a 2(3)-way valve including actuator can be ordered.

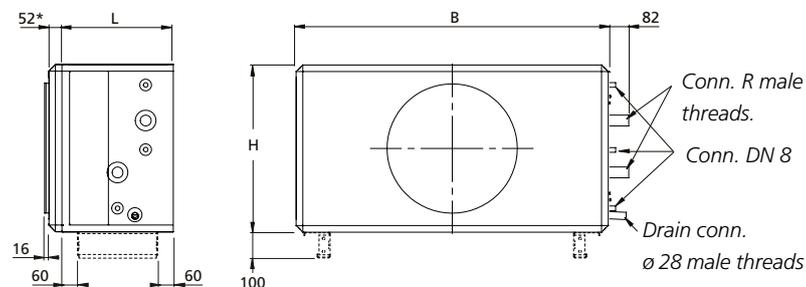
Installation

The air cooler should be mounted directly against the air handling unit or insulated duct accessory. Provision for inspection and cleaning must be guaranteed. Connecting the drainage pipework.



Complements and accessories

Duct accessories, in insulated casing



Connection dimensions to duct:

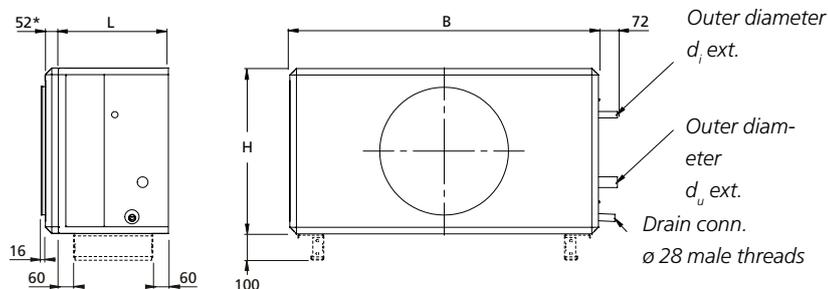
TCKAS 05	ø 315
TCKAS 08	ø 400

Base beams are optional.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCKAS	B	H	Capacity variant 1			Capacity variant 2			Capacity variant 4			End connection panel, if required kg
			L	R	kg ¹⁾	L	R	kg ¹⁾	L	R	kg ¹⁾	
3-05	825	460	428	DN20	40	428	DN25	42	593	DN25	55	7
3-08	995	542	428	DN25	49	428	DN25	53	593	DN32	80	10

¹⁾ Excl. cooling agent



Connection dimensions to duct:

TCKCS 05	ø 315
TCKCS 08	ø 400

Base beams are optional.

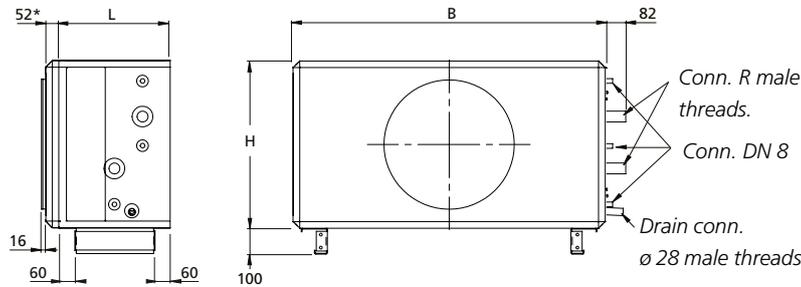
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCKCS	B	H	L	Capacity variant 1			Capacity variant 2			End connection panel, if required kg
				d _i	d _u	kg ¹⁾	d _i	d _u	kg ¹⁾	
3-05	825	460	428	1/2"	22	40	5/8"	28	42	7
3-08	995	542	428	5/8"	28	49	5/8"	35	53	10

¹⁾ Excl. cooling agent

Complements and accessories

Duct accessories, in insulated casing



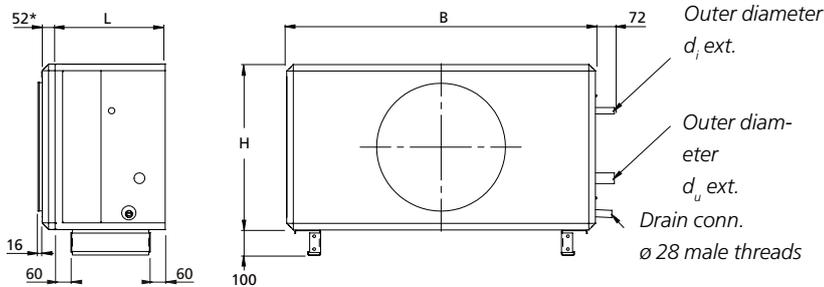
Connection dimensions to duct:
TCKAS 12 ø 500

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCKAS	B	H	Capacity variant 1			Capacity variant 2			Capacity variant 4			End connection panel, if required kg
			L	R	kg ¹⁾	L	R	kg ¹⁾	L	R	kg ¹⁾	
3-12	1199	648	428	DN25	66	422	DN32	73	593	DN40	99	13

¹⁾ Excl. cooling agent



Connection dimensions to duct:
TCKCS 12 ø 500

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

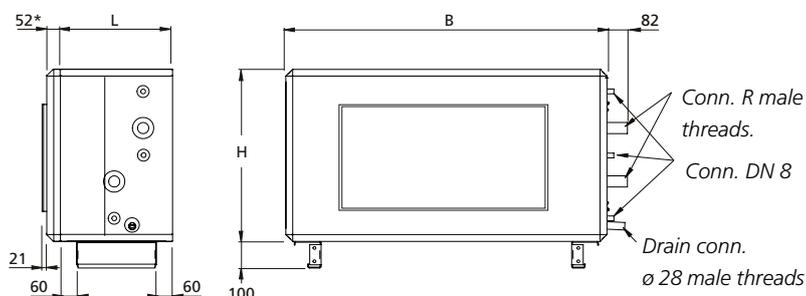
TCKCS	B	H	L	Capacity variant 1			Capacity variant 2			End connection panel, if required kg
				d _i	d _u	kg ²⁾	d _i	d _u	kg ²⁾	
3-12	1199	648	428	5/8" ¹⁾	35 ¹⁾	66 ¹⁾	19 ¹⁾	42 ¹⁾	73 ¹⁾	13

¹⁾ If there are two sections: depending on the division of sections

²⁾ Not charged with refrigerant.

Complements and accessories

Duct accessories, in insulated casing



Connection dimensions to duct:

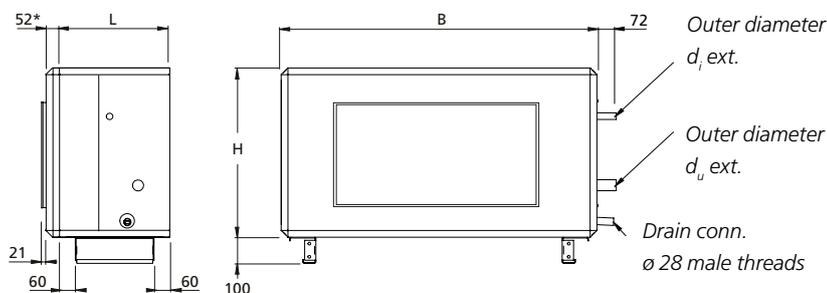
TCKAS 20	1000 x 400 mm
TCKAS 30	1200 x 500 mm
TCKAS 40	1400 x 600 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCKAS	B	H	Cap. variant 1			Cap. variant 2			Cap. variant 3			Cap. variant 4			End connection panel, if required kg
			L	R	kg ¹⁾										
4-20	1400	776	468	DN32	85	468	DN32	94	593	DN40	114	593	DN50	123	19
4-30	1600	906	468	DN32	103	468	DN40	117	593	DN50	143	593	DN60	158	23
4-40	1990	1080	468	DN40	136	468	DN50	158	593	DN65	193	593	DN80	217	31

¹⁾ Excl. cooling agent



Connection dimensions to duct:

TCKCS 20	1000 x 400 mm
TCKCS 30	1200 x 500 mm
TCKCS 40	1400 x 600 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

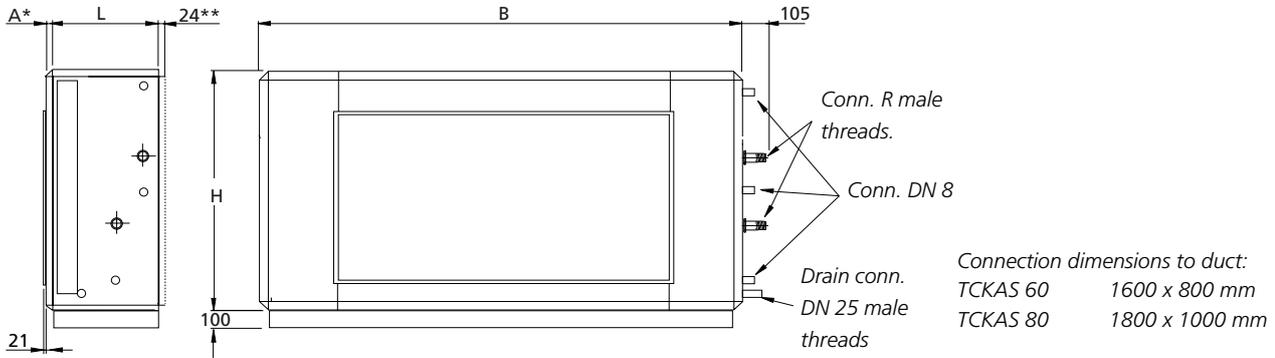
TCKCS	B	H	L	Capacity variant 1			Capacity variant 2			End connection panel, if required kg
				d _i	d _u	kg ²⁾	d _i	d _u	kg ²⁾	
3-20	1400	776	468	22 ¹⁾	42 ¹⁾	30 ¹⁾	28 ¹⁾	54 ¹⁾	39 ¹⁾	19
3-30	1600	906	468	28 ¹⁾	54 ¹⁾	44 ¹⁾	28 ¹⁾	54 ¹⁾	56 ¹⁾	23
3-40	1990	1080	468	28 ¹⁾	54 ¹⁾	63 ¹⁾	28 ¹⁾	54 ¹⁾	83 ¹⁾	31

¹⁾ If there are two sections: depending on the division of sections

²⁾ Not charged with refrigerant.

Complements and accessories

Duct accessories, in insulated casing



The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

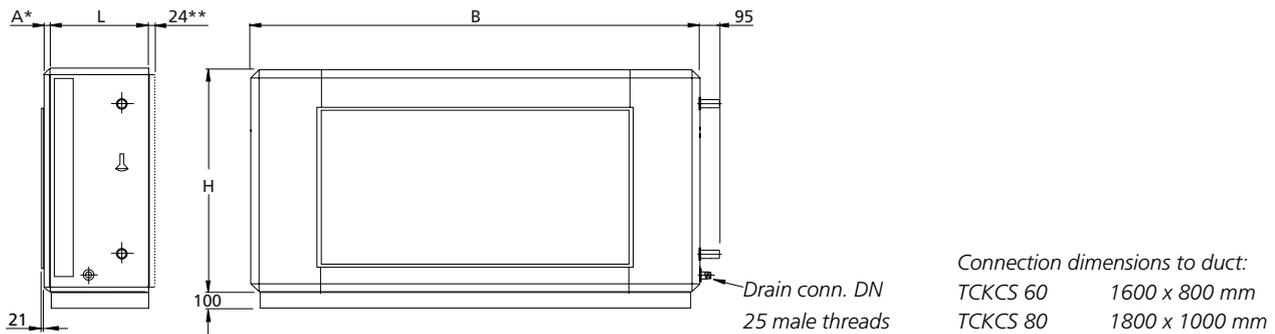
** Size 60 only

TCKAS	B	H	L	A	Cap. variant 1			Cap. variant 2			Cap. variant 3			Cap. variant 4			End connection panel, if required kg
					R	kg ¹⁾	kg ²⁾										
3-60	2318	1127	542	28	DN65	202	111	DN65	214	111	-	-	111	-	-	111	31
3-80	2637	1320	542	52	DN65	268	135	DN65	282	135	DN65	302	135	DN65	324	135	38

TCKAS	B	H	L	A	Cap. variant 5			Cap. variant 6			End connection panel, if required kg
					R	kg ¹⁾	kg ²⁾	R	kg ¹⁾	kg ²⁾	
3-60	2318	1127	542	28	DN65	229	111	DN65	245	111	31

¹⁾ Including casing, not charged with refrigerant.

²⁾ Casing only.



The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

** Size 60 only

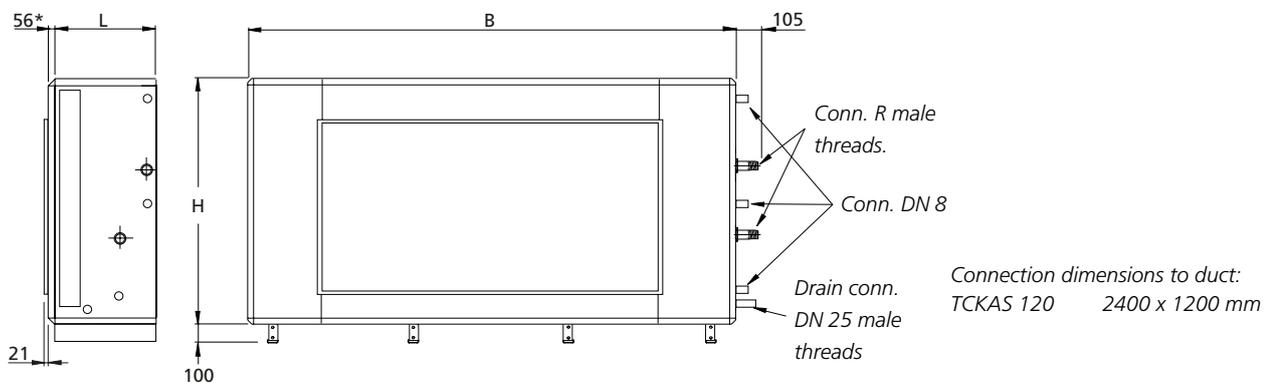
TCKCS	B	H	L	A	Cap. variant 1		Cap. variant 2		Cap. variant 3		End connection panel, if required kg
					kg ¹⁾	kg ²⁾	kg ¹⁾	kg ²⁾	kg ¹⁾	kg ²⁾	
4-60	2318	1127	542	28	207-213	111	223-233	111	237-252	111	31
4-80	2637	1320	542	52	264-280	135	290-316	135	314-332	135	38

¹⁾ Including casing, not charged with refrigerant.

²⁾ Casing only.

Complements and accessories

Duct accessories, in insulated casing



* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCKAS	B	H	L	Cap. variant 1			Cap. variant 2			Cap. variant 3			Cap. variant 4			End connection panel, if required kg
				R	kg ¹⁾	kg ²⁾	R	kg ¹⁾	kg ²⁾	R	kg ¹⁾	kg ²⁾	R ³⁾	kg ¹⁾	kg ²⁾	
3-120	3340	1620	720	DN65	417	260	DN80	464	260	DN80	516	260	DN100	571	260	59

¹⁾ Including casing, not charged with refrigerant.

²⁾ Casing only.

³⁾ The flange is included.

Complements and accessories

Duct accessories, in insulated casing

Final filter section, TCFBS

The TCFBS final filter section should be installed in ventilation systems where further filtration of the supply air is required.

Install the final filter section in the supply air downstream of the air handling unit.

To be installed for horizontal airflow.

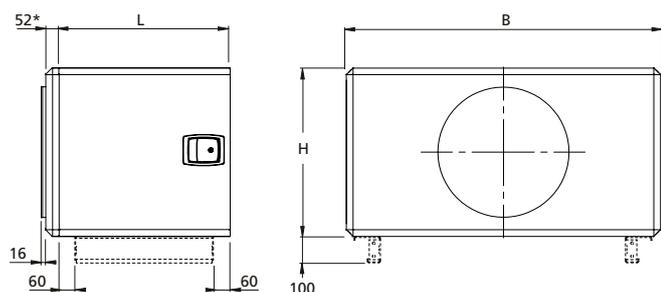
Technical data

Insulated casing. External and internal material: aluminium-zinc plated sheet steel. Environmental Class C4. Bag filters to filter class F7 or F9 can be selected.

Installation

The final filter section should be mounted directly against the air handling unit or an insulated duct accessory.

Provision for inspection and cleaning must be guaranteed.



Connection dimensions to duct:

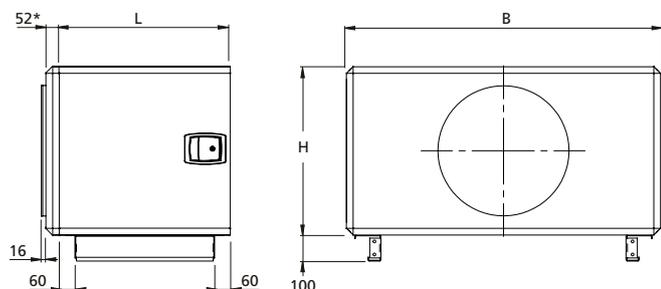
TCFBS 05 \varnothing 315

TCFBS 08 \varnothing 400

The base beams are optional.

* If several duct accessories are arranged in succession, the end connection panel is supplied on the duct accessory farthest out facing the ductwork only.

TCFBS	B	H	L	kg	End connection panel, if required kg
1-05	825	460	723	51	7
1-08	995	542	723	59	10



Connection dimensions to duct:

TCFBS 12 \varnothing 500

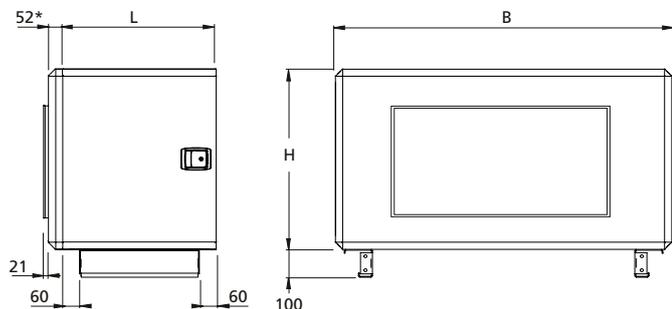
The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCFBS	B	H	L	kg	End connection panel, if required kg
1-12	1199	648	723	72	13

Complements and accessories

Duct accessories, in insulated casing

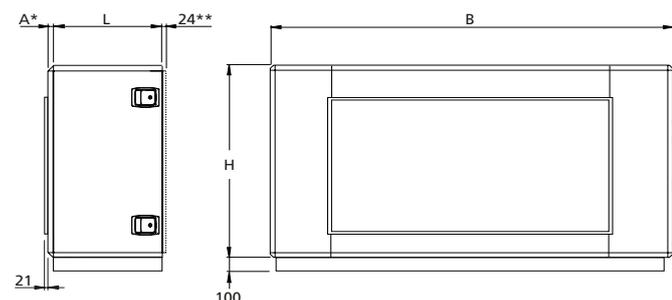


Connection dimensions to duct:
 TCFBS 20 1000 x 400 mm
 TCFBS 30 1200 x 500 mm
 TCFBS 40 1400 x 600 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCFBS	B	H	L	kg	End connection panel, if required
					kg
1-20	1400	776	723	88	19
1-30	1600	906	723	109	23
1-40	1990	1080	723	136	31



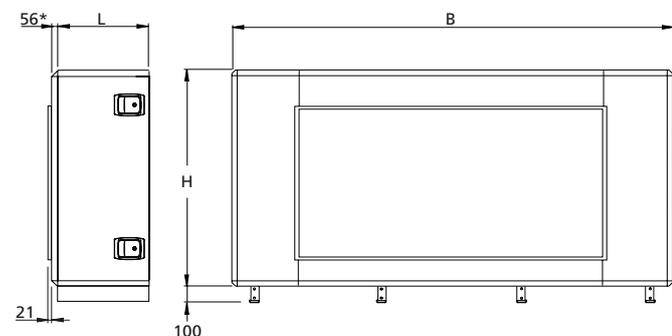
Connection dimensions to duct:
 TCFBS 60 1600 x 800 mm
 TCFBS 80 1800 x 1000 mm

The base frame is always supplied in assembled condition. If the duct accessory is fitted to the upper ductwork, above the duct accessory fitted to the lower ductwork, remove the base beams to the extent necessary, at the building site.

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

** Size 60 only

TCFBS	B	H	L	A	kg	End connection panel, if required
						kg
1-60	2318	1127	764	28	193	31
1-80	2637	1320	760	52	222	38



Connection dimensions to duct:
 TCFBS 120 2400 x 1200 mm

* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCFBS	B	H	L	kg	End connection panel, if required
					kg
1-120	3340	1620	720	343	59

Complements and accessories

Duct accessories, in insulated casing

TBFK Carbon filter section

The TBFK has activated carbon filter medium designed for improving the air quality indoors by adsorbing gaseous, harmful or foul-smelling substances from the air.

Note that we cannot guarantee one hundred percent elimination of odours due to variations in the impurities and mixtures of various chemical substances arrested in the filter.

The carbon filter cartridges are disposable. They are seated in mounting frames and can be locked in their bayonet socket by simply turning them by hand. The cartridges contain a filter mat made of polyester, which encloses the activated carbon.

The frame construction consists of 38 mm galvanized square profiled sections, painted in RAL 7032. The profiled sections are held together by plastic corner pieces.

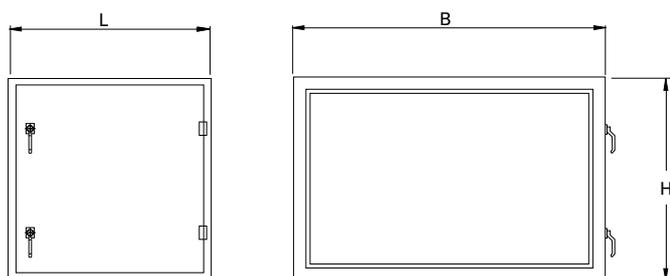
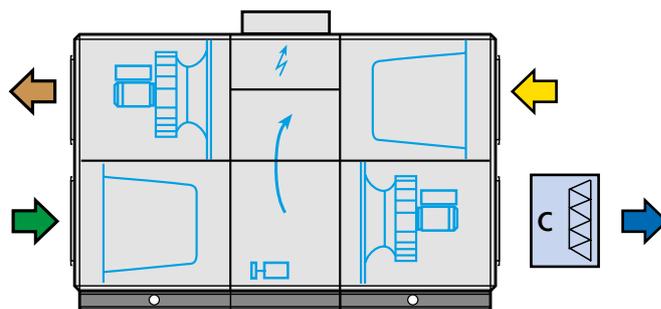
The outer and inner skins of the cover panels and inspection doors consist of galvanized sheet steel. Intervening 45 mm thick thermal and sound-attenuating insulation.

Cover panels can be removed from the unit.

Inspection doors have hinges and handle.

Installation

The TBFK carbon filter has a connection frame for slip-clamp jointing designed for installation in the ductwork; see illustration.



Note that the TBFK carbon filter is available in six sizes and that the slip-clamp connection dimensions follow the connection dimensions of the SILVER C units.

TBFK	Slip clamps, width x height	B	H	L	kg without cartridges	Number of cartridges:	kg without cartridges
017	850 x 350	1039	546	763	75	17	113
024	1100 x 500	1259	656	763	89	24	143
036	1300 x 600	1459	756	763	104	36	185
050	1600 x 700	1759	906	763	120	50	233
072	1800 x 800	1946	1026	763	144	72	307
098	2100 x 1000	2306	1206	763	172	98	393

Complements and accessories

Roof hoods and exterior wall hoods

Common for all roof hoods

The hoods are made of aluminium-zinc plated sheet steel covered with a Plastisol (black) surface coating that conforms to Environmental Class C4.

The roof ducts are made of galvanized sheet steel. Lined inside with 50 mm thick insulation to Fire-resistance Class EI30, with a surface covering of type-approved synthetic woven fabric. Two angle brackets for connection to the relevant roof slope are included.

The hoods for the size 04-12 SILVER C units have circular duct connection fitted with type-approved rubber ring seal for jointing to spiral ductwork.

The hoods for the size 14-40 SILVER C units have rectangular duct connection for slip-clamp joint connection.

TBHA Outdoor Air Hood

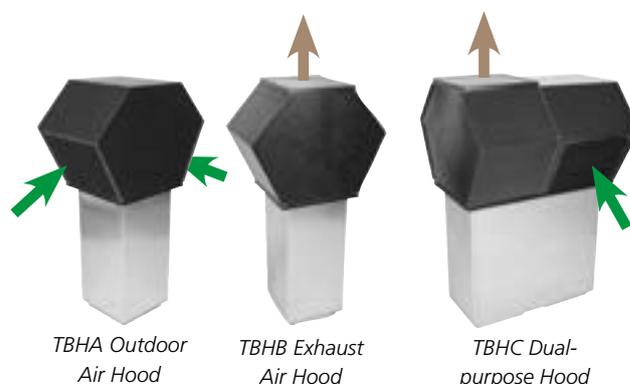
Designed for the intake of outdoor air. The design of the hood makes it difficult for snow and rain drops to enter the hood with the incoming air. The hood is hinged and has air intake louvres on both sides. For SILVER C, sizes 04-40.

TBHB Exhaust Air Hood

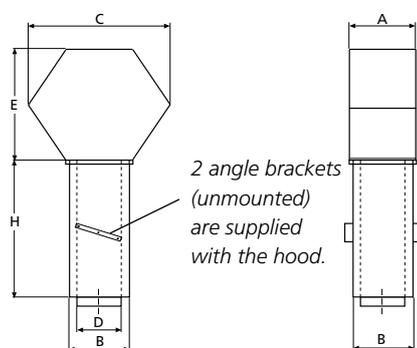
Designed for the discharge of exhaust air. The hood can be opened on hinges and is equipped with air deflectors that effectively direct the exhaust air upward and give the air high discharge velocity. To achieve low pressure drop, the air deflectors are rounded off on both their long sides. The hoods are equipped with effective provision for drainage. For SILVER C, sizes 04-40.

TBHC Dual-purpose Hood

The TBHC is a combination of TBHA outdoor air hood and TBHB exhaust air hood and is available for the size 04-12 SILVER C units only.

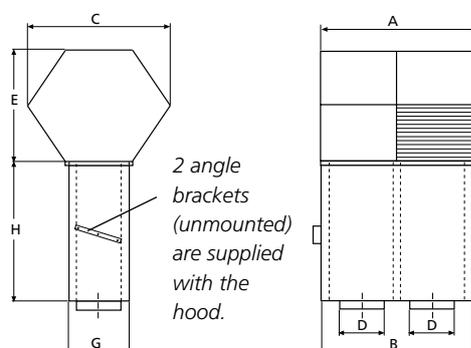


TBHA Outdoor air hood and TBHB Exhaust air hood



For SILVER C	A	B	C	D	E	H	kg
04/05	500	400	850	Ø315	620	800	31
07/08	600	500	950	Ø400	620	800	44
11/12	820	700	1300	Ø500	850	1200	129
14/20	820	700	1300	600	850	1200	129
25 - 40	1120	1000	1700	900	1150	1200	148

TBHC Dual-purpose Hood



For SILVER C	A	B	C	D	E	H	G	kg
04/05	1000	900	850	Ø315	620	800	400	70
07/08	1200	1100	950	Ø400	620	800	500	100
11/12	1600	1500	1300	Ø500	850	1200	700	290

Complements and accessories

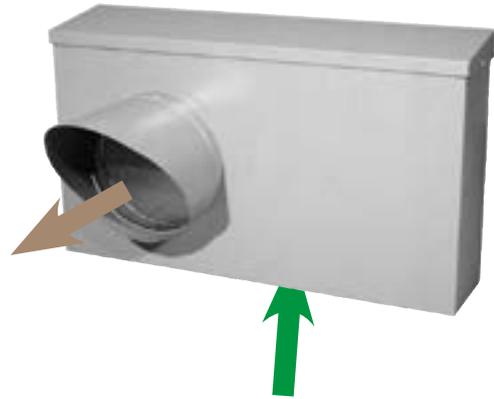
Roof hoods and exterior wall hoods

TBHE Exterior wall hood

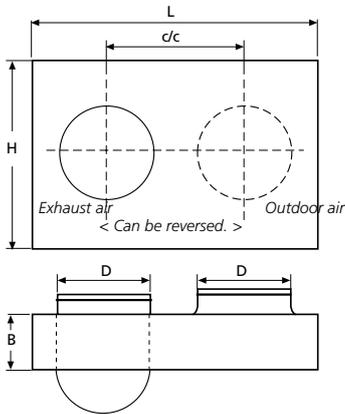
Designed for the admission of outdoor air and the discharge of exhaust air. The exhaust air is horizontally discharged through a circular wire mesh grille at the front of the hood. Outdoor air is admitted through a wire mesh grille at the bottom of the hood.

This design effectively prevents short-circuit flow between the outdoor air/exhaust air. For SILVER C, sizes 04-12.

The TBHE exterior wall hoods are made of aluminium-zinc plated sheet steel covered with a Plastisol (light grey) surface coating that conforms to Environmental Class C4.



TBHE Exterior wall hood



For SILVER C	B	c/c	D	H	L	kg
04/05	200	420	Ø315	520	950	11
07/08	250	500	Ø400	580	1150	15
11/12	300	600	Ø500	750	1350	20

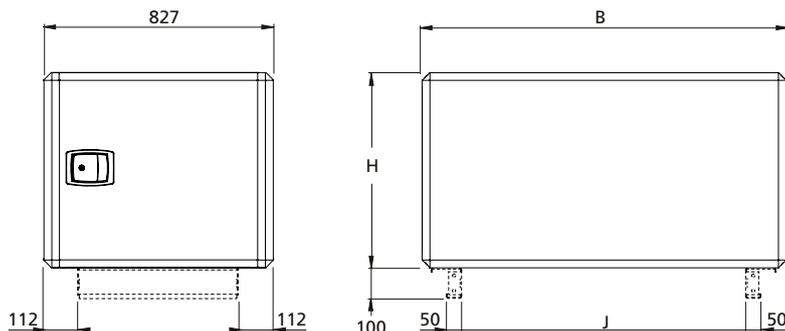
TCWP Component box

The TCWP component box is intended for the incorporation of components which must be protected from weather or mechanical damage. Typical components are valves, actuators, etc.

The component box is enclosed on all sides and has an inspection door that can be selected as a right-hung or left-hung door.

A roof is available as an accessory for outdoor installation.

The cutting of openings for e.g. pipes and electric cables, if required, must be done at the building site.



Size	B	H	J	kg
05	825	460	561	54
12	1199	648	935	88
30	1600	906	1336	128
40	1990	1080	1726	160

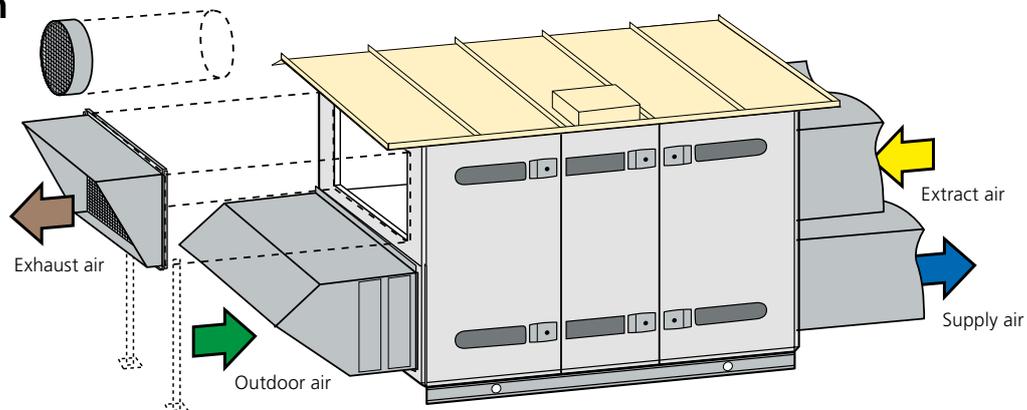
The base beams are optional extras for the size 05 (Standard on the other sizes).

Complements and accessories

Outdoor installation

The SILVER C units can be installed outdoors if they are fitted with the roof, air intake section and exhaust air hood accessories.

The SILVER C air handling units with the fan outlet/inlet positioned on the top of the unit cannot be fitted with a roof.



General

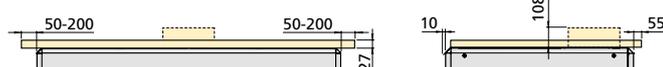
The SILVER C air handling units, including the TCBSR air recirculation section accessory, can be installed outdoors. This presupposes that the roof, air intake section and exhaust air hood accessories are used. SILVER C air handling units cannot be installed outdoors in applications that call for the fan outlet/inlet to be positioned on the top of the unit.

TBTB Roof

The roof is supplied in kit form, complete with the necessary assembly parts and sealing strips. The cover plates for all the door handles are included as standard.

Visible parts are made of sheet steel painted in a beige colour tone (NCS S2005-Y30R).

Dimensions



TBTF Intake air section with pre-filter (sizes 04-40)

The TBTF intake air section is made of aluminium-zinc plated sheet steel. The intake air section has a fixed grille and has a hole for drainage. The intake air section has rectangular dimensions and the air handling unit is supplied without the end connection for intake air (so-called Full face). The intake air section has a flange with predrilled holes and is meant to be secured by means of screws to the air handling unit. It is possible to order a filter and damper installed in the air intake section. The filter is a compact filter type that conforms to filter class G2, and also works as a water separator. Damper actuators can be ordered with spring return or with modulating function.

TBTA Intake air section (sizes 50-120)

The TBTA exhaust air hood is made of aluminium-zinc plated sheet steel. The exhaust air hood is equipped with a protective screen. For air handling units with standard end connection frame, the exhaust air hoods are circular for unit sizes 04–12 and rectangular with slip-clamp connection for the other unit sizes (slip clamps are included). For air handling units with full face connection frames, the exhaust air hoods are always rectangular with slip-clamp connection (slip clamps are included). The exhaust air hood of the size 50-120 SILVER C units is supplied in loose parts, the other components are assembled.

TBTA Exhaust air hood

The TBTA exhaust air hood is made of aluminium-zinc plated sheet steel. The exhaust air hood is equipped with protective netting. The hood is circular for sizes 04-12 and rectangular with slip-clamp connection for the other sizes (the slip clamps are included).

Duct accessories

The duct accessories should be insulated and weather-proofed to the extent necessary. The enclosure classes and permissible ambient temperatures of any actuators included must be taken into consideration. See the instructions for the corresponding accessory. If necessary, ensure that the required protection is arranged. Water-tight protective bags for valve actuators are available as accessories. The protective bag has a zip fastener and is made of polyester with internal plastic coating.

Installation tips

SILVER C units should if possible be installed where the most favourable conditions exist from a weather point of view.

The ductwork for supply air and extract air must be insulated in accordance with applicable local standards.

Swegon recommends moving the exhaust air hood a distance from the air handling unit by fitting a straight length of duct between them, especially if the exhaust air leaves the air handling unit from its lower level. This will prevent the risk of exhaust air leaking to the outdoor air and the risk of water entering the ventilation system.

Complements and accessories

Mechanical Equipment

SILVER C, sizes 04/05 and 07/08

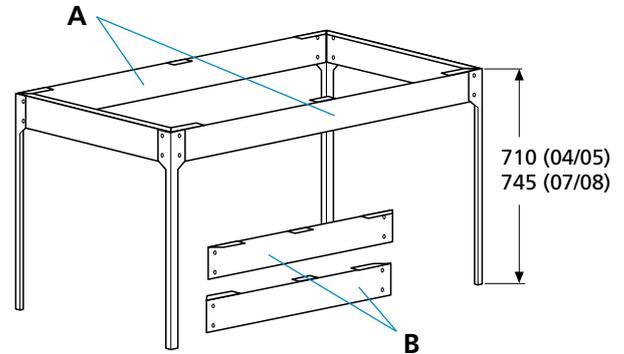
Support stand

SILVER C RX, rotary heat exchanger

SILVER C SD, supply air and extract air handling units

Specially designed stand. The height of the stand makes it possible to install ducts under the air handling unit.

The stand is made of galvanized sheet steel profiled sections. The stand is supplied in assembly kit form. The long sides (A in the illustration) are used for horizontal installation and the shorter sides (B) are used for vertical installation.



Stand for the SILVER C RX/SD, sizes 04/05 and 07/08.

Set of support legs

SILVER C PX, plate heat exchanger

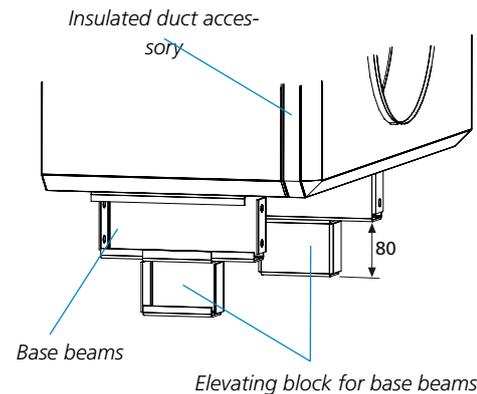
Specially designed set of legs, the height (745 mm, all sizes) of which makes it possible to arrange ducts under the air handling unit.

The set of legs consists of four legs made of galvanized sheet steel profiled sections. The legs are secured by means of bolts under the air handling unit.

Elevating block for base beams

SILVER C PX, plate heat exchanger

The base beams of the SILVER C PX air handling units, sizes 04-08 are 180 mm high and the base beams of the insulated duct accessories are 100 mm high. Elevating blocks (80 mm) must be fitted under base beams to elevate the insulated duct accessory and align it with the air handling unit.



Cover holder

The cover holder facilitates the servicing and maintenance of vertically installed units. It consists of a mechanic stay with latch and is supplied in unmounted condition.

SILVER C CX/SD, sizes 14/20, 25/30, 35/40, 50/60, 70/80, 100/120

Droplet eliminator

To prevent the condensate from being entrained by the air flow at velocities exceeding 3 m/s, coil heat exchangers can be equipped with droplet separator on the extract air side.

The material in the droplet eliminator is GLASdek, which is fire resistant and highly absorbent. The pressure drop across the droplet collector is low. On delivery, the droplet eliminator is mounted.

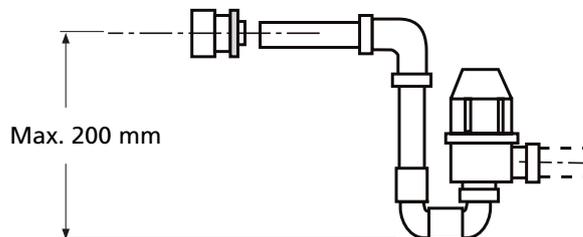
Complements and accessories

Mechanical Equipment

SILVER C, all sizes

Water trap

Water trap for the drain branch of plate heat exchangers and coil heat exchangers. Supplied with a set of connection fittings. The pipe from the water trap must be run without reduction in pipe dimension to a floor gully.



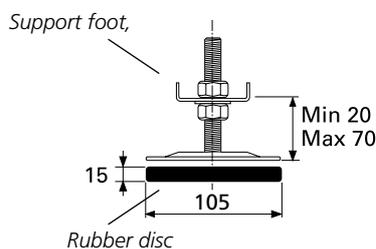
Support foot,

Adjustable support foot for taking up unevenness or sloping of the floor. The support foot should be mounted on the base beam of the air handling unit.

For the SILVER C in sizes 04/05, 07/08, 11/12, 14/20, 25/30 and 35/40, at least 6 support feet are recommended.

For the SILVER C in sizes 50/60 and 70/80, at least 12 support feet are recommended.

For the SILVER C in size 100/120, at least 24 support feet are recommended.



Rubber disc

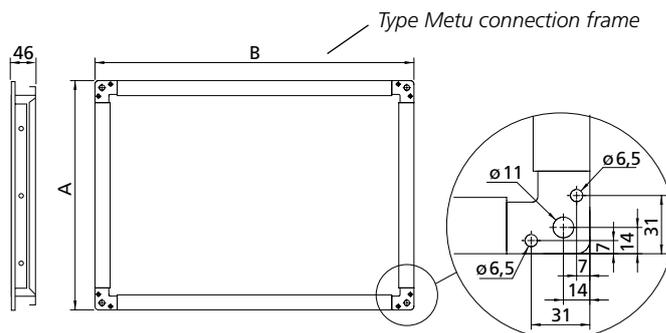
Designed to be glued under the support foot.

Slip-clamp jointing flanges

Set of slip clamps in appropriate lengths for one joint.

Metu connection

Type METU connection frame with set of bolts, 30 mm wide flange.



For SILVER C	A	B	kg
14/20	458	1058	5
25/30	558	1258	5.5
35/40	658	1458	6,5
50/60	858	1658	8
70/80	1058	1858	9
100/120	1258	2458	12

Complements and accessories

Mechanical equipment

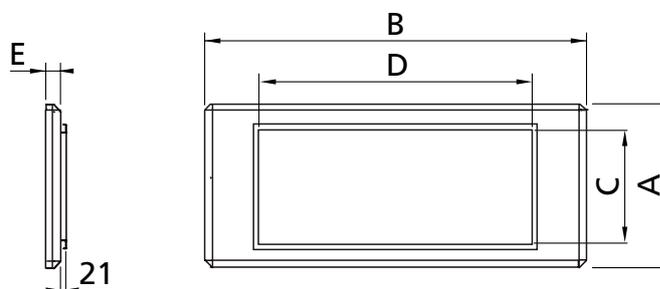
SILVER C, all sizes

End connection panel, SILVER C full face

End connection panel for transition between SILVER C in full face version and uninsulated duct accessories or duct. Version as standard SILVER C end connection panel.

Duct accessory with duct connection size corresponding to that of the end connection panel's duct connection size can be ordered (does not apply to sizes 100/120). See section on Uninsulated duct accessories.

The end connection panels are supplied mounted on SILVER C units.



C x D correspond to the connection dimensions of the duct

For SILVER C RX/ PX/CX	A	B	C	D	E	kg
04/05	460	825	300	600	52	7
07/08	542	995	400	800	52	10
11/12	647	1199	400	1000	52	13
14/20 fan	775	1400	500	1200	52	19
14/20 filter	620	1400	500	1200	52	15
25/30 fan	905	1600	600	1400	52	23
25/30 filter	690	1600	600	1400	52	17
35/40 fan	1080	1990	800	1600	52	31
35/40 filter	905	1990	800	1600	52	26
50/60	1126	2318	1000	1800	52	31
70/80	1320	2637	1200	2400	52	38
100/120	1620	3340	1500	3100	56	59

For SILVER C SD	A	B	C	D	E	kg
04/05	490	825	300	600	52	7
07/08	575	995	400	800	52	10
11/12	648	1199	400	1000	52	13
14/20	806	1400	500	1200	52	20
25/30	1026	1600	600	1400	52	25
35/40	1126	1990	800	1600	52	33
50/60	1320	2318	1000	1800	52	31
70/80	1320	2637	1200	2400	52	38
100/120	1620	3340	1500	3100	56	59

Complements and accessories

TBXZ Pipework package

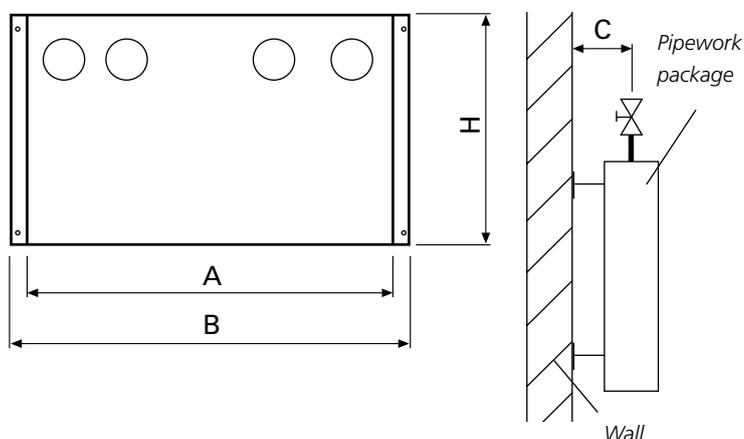
The pipework package is used for the SILVER C SD with coil heat exchanger and the SILVER C CX. The floor stand for the pipework package is available as an accessory. With the floor stand, the height from floor level to the thermometers on the installed pipework package is approx. 1480 mm.

Included in the delivery: The pipework package is supplied complete with insulated sheet-metal casing, pump, control valve with actuator, expansion vessel with safety valve and manometer as well as shut-off valves, thermometers, filling valve, commissioning valve and air purging valve. Wall mounting bracket

The following are not included in the delivery:

Control system and temperature sensors. Supplied by the controls supplier. The temperature sensor should be of strap-on type.

Work to be carried out at the building site: Install the shunt, pump and expansion vessel at an appropriate place. Pipe route with insulated pipes to the air handling unit and between shunt, pump and expansion vessel. Electrical connection. Filling water mixed with glycol.



GOLD/SILVER C Sizes	TBXZ-42 Size	A	B	H	C
11/12	12	601	669	415	130
14/20	20	601	669	415	130
25/30	30	772	839	530	128
35/40	40	772	839	530	128
50/60	60	772	839	530	128
70/80	80	772	839	530	128
100/120	120	937	1003	640	141

Hand-held micro terminal, fan motor control system

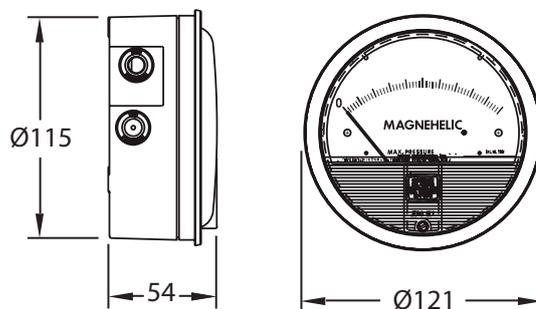
The hand-held micro terminal is used for setting the motor parameters of the SILVER C.



Manometer Magnehelic, TBXZ

Measures the pressure drop across the filter (700 Pa) or fan (1,500 Pa). Casing painted in grey tone. Hoses are supplied with the manometer.

Can be mounted flush or on surface.



Weight: approx. 600 g

U-tube manometer, TBXZ

Measures the pressure drop across the filter or fan. 0-1200 Pa, Hoses are supplied with the manometer. 180 x 30 mm.

