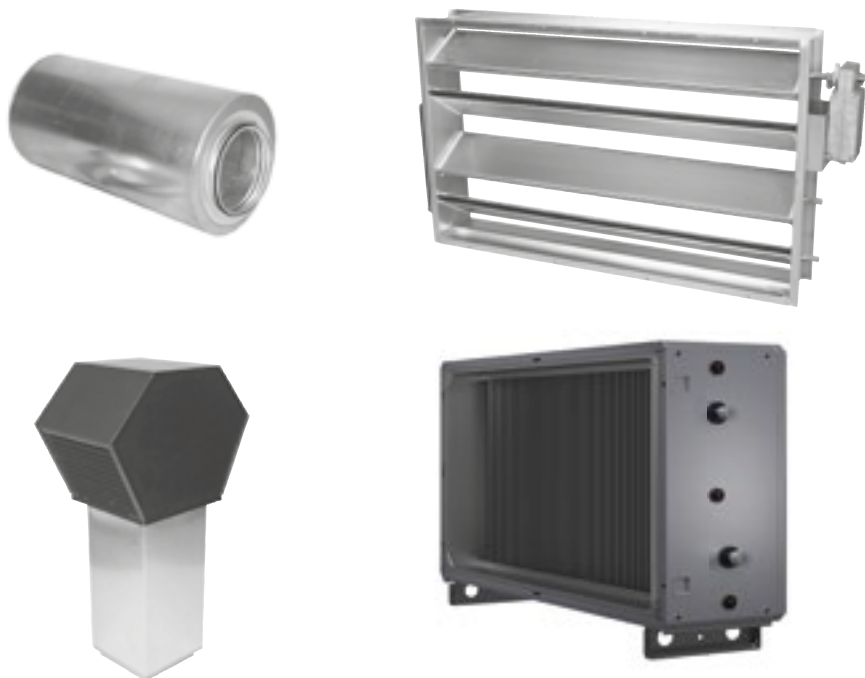


Complements and accessories



Contents

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Complements and Accessories

Unit sections

TCBR Air recirculation section

The air recirculation section is an extra unit section that has damper in the intermediate level.

The air recirculation section is available for the size 011 and larger SILVER C RX, PX and CX units. The air recirculation section is also available for SILVER C RX/PX size 004-008 in split version.

Included in the delivery:

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

Delivery version:

Sizes 004-080: The air recirculation section is fitted to at least one of the other unit sections, see the section entitled: Air Handling Unit/Delivery Configuration RX/PX/CX, sizes 004-080.

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

Work to be carried out at the building site:

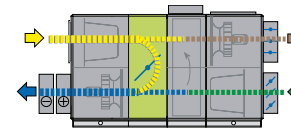
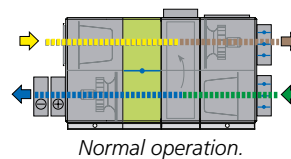
Sizes 004-080: Fitting together/splitting of unit sections to the extent required.

Size 120: Assembly of the air recirculation section to become one unit. The air recirculation section is then fitted together with the other unit sections.

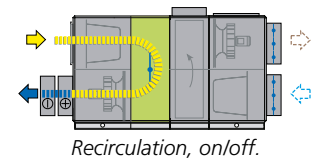
Operation:

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.

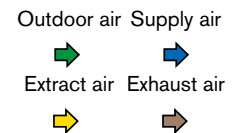
Recirculation, modulating: Can be used for the demand-controlled and economical operation of fans, heating and cooling, especially in buildings in which the load conditions vary.



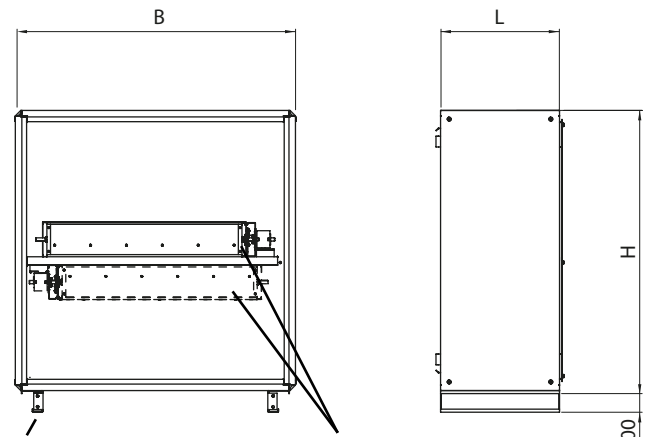
Supply air fan runs at higher speed, outdoor air damper and air recirculation section open whenever required.



Extract air fan stopped, outdoor air and exhaust air dampers fully closed, damper in the air recirculation section fully open.



For SILVER C	B	H	L	kg
004/005	825	920	400	50
007/008	995	1085	400	57
011/012	1199	1295	565	90
014/020	1400	1551	565	103
025/030	1600	1811	565	118
035/040	1990	2159	565	142
050/060	2318	2288	565	168
070/080	2637	2640	565	195
100/120	3340	3340	1070	547



For location/design of base beams, see the corresponding AHU size.

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

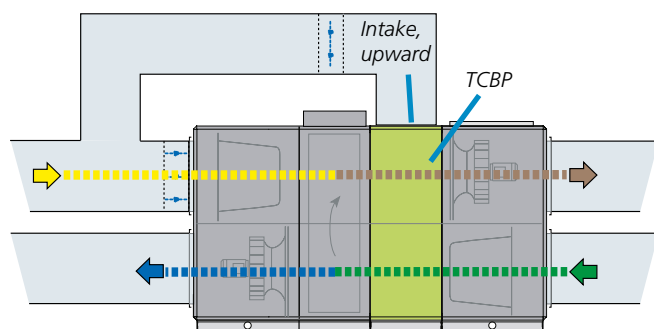
Solutions for fire bypass

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 manage operation for one hour at 70°C.

The bypass section is available for SILVER C RX/PX size 011-080. The bypass section is also available for SILVER C RX/PX size 004-008 in split version.



SILVER C RX, sizes 004-080



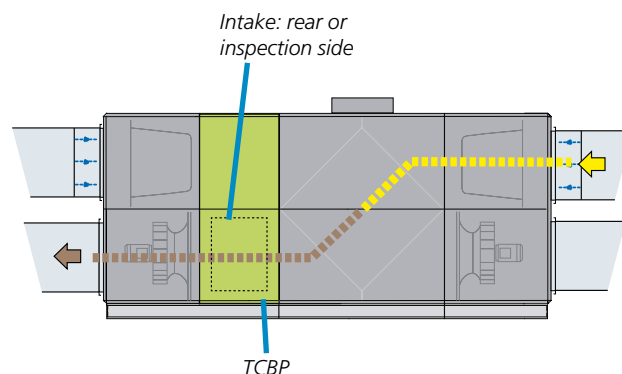
Solution for fire bypass (upward) for SILVER C PX 004-080.

Necessary components required (apart from SILVER C units):

The TCBP air bypass section is supplied fitted together with at least one of the other unit sections, see the section entitled: *Description of the Air Handling Unit/Delivery Configuration RX/PX/CX, sizes 004-080.* The required splitting/fitting together of unit sections is performed 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 004-040



Solution for fire bypass (rear, inspection side or upward) for SILVER C PX 004-040.

Necessary components required (apart from SILVER C units):

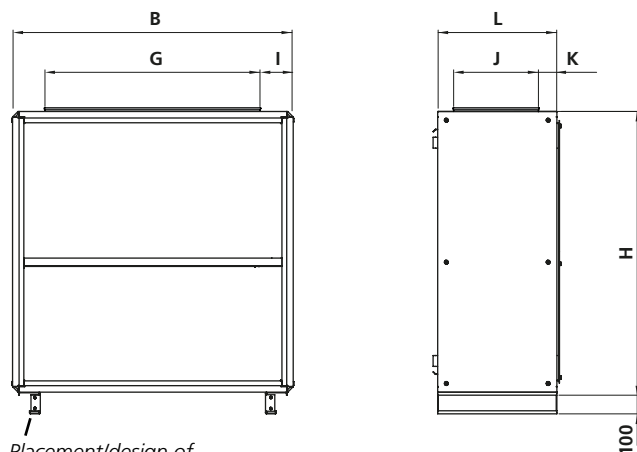
The TCBP air bypass section is fitted together with at least one of the other unit sections, see the section entitled: *Description of the Air Handling Unit/Delivery Configuration RX/PX/CX, sizes 004-080.* Required splitting/fitting together of unit sections is performed at the building site.

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

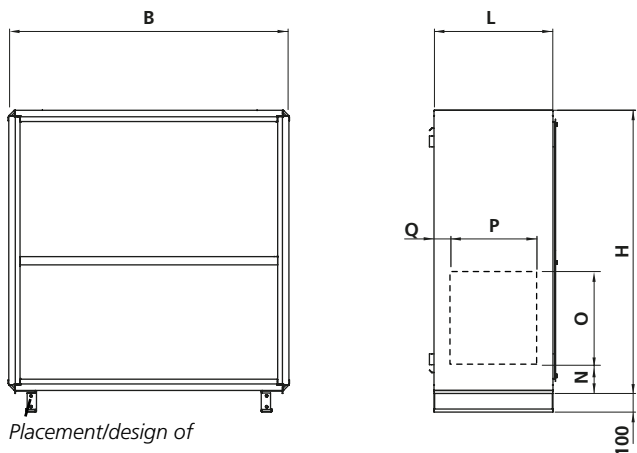
Air bypass section, TCBP, intake upward



Placement/design of the base beam, see the equivalent size of the SILVER C air handling unit.

For SILVER C	B	H	L	G	I	J	K	kg
004/005	825	920	400	500	140	300	30	42
007/008	995	1085	400	650	150	300	30	49
011/012	1199	1295	565	1000	100	400	82.5	87
014/020	1400	1551	565	1000	200	400	82.5	103
025/030	1600	1811	565	1200	200	400	82.5	112
035/040	1990	2159	565	1400	295	400	82.5	123
050/060	2318	2288	565	1600	359	400	82,5	168
070/080	2637	2640	565	1800	418,5	400	82,5	246

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



Placement/design of the base beam, see the equivalent size of the SILVER C air handling unit.

For SILVER C	B	H	L	N	O	P	Q	kg
004/005	825	920	400	77	300	300	30	47
007/008	995	1085	400	130	300	300	30	56
011/012	1199	1295	565	110	500	400	82.5	70
014/020	1400	1551	565	110	500	400	82.5	85
025/030	1600	1811	565	100	600	400	82.5	96
035/040	1990	2159	565	110	800	400	82.5	123

Complements and accessories

Unit sections

TCRS duct crossover section

The duct crossover section for SILVER C PX units is designed for use when you need to have the extract air fan 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.

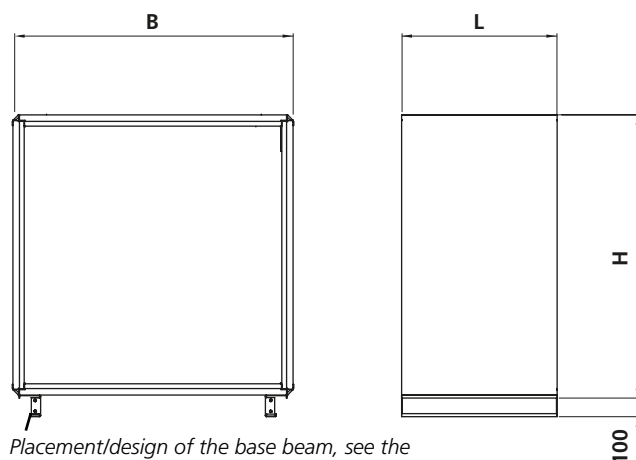
The duct crossover section is available for SILVER C PX size 011-040. The duct crossover section is also available for SILVER C PX size 004-008 in split version.

Delivery version:

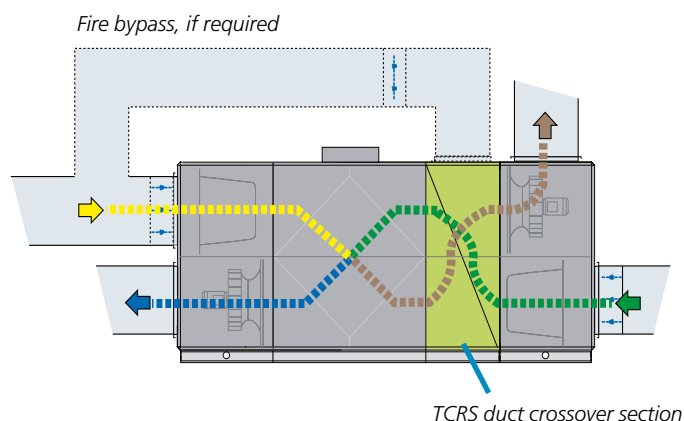
The duct crossover section is fitted to at least one of the other unit sections, see the section entitled: Description of the Air Handling Unit/Delivery Configuration RX/PX/CX, sizes 004-080.

Work to be carried out at the building site:

Fitting together/splitting of unit sections to the extent required.



Placement/design of the base beam, see the equivalent size of the SILVER C air handling unit.



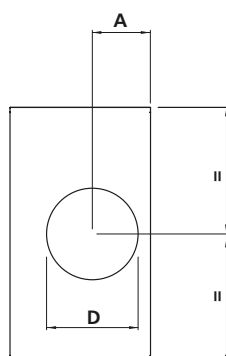
Outdoor air Supply air Extract air Exhaust air

For SILVER C	B	H	L	kg
004/005	825	920	565	66
007/008	995	1085	625	84
011/012	1199	1295	750	120
014/020	1400	1551	750	146
025/030	1600	1811	750	169
035/040	1990	2159	750	248

Duct connection dimensions for fire bypass, if required

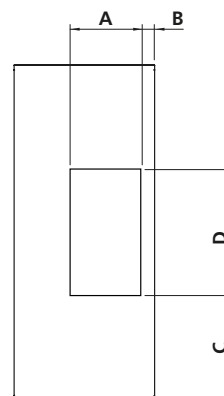
The illustration shows the Duct crossover section viewed from above.

TCRS 005, 020



For SILVER C	A	D
004/005	210	315
007/008	250	400
011/012	300	500
014/020	300	500

TCRS 030, 040



For SILVER C	A	B	C	D
025/030	400	78	450	700
035/040	506	74	592	806

Complements and accessories

Unit sections

TCFE multisection

The multisection is an extra unit section, available in two lengths, with intermediate deck and optional combinations of cover panels/inspection doors on the inspection side, see illustrations on the next page. The cover panels are easy to dismantle.

Up to two multisections can be used in one air handling unit.

The multisection is available for the size 011 and larger SILVER C RX, PX and CX units. The multisection is also available for SILVER C RX/PX size 004-008 in split version. The multisection can be located between the other unit sections of the SILVER C unit. See example below.

The multisection is available, as a special version, with installed accessories from the factory, for example an air heater/air cooler, dampers, etc..

Delivery version:

Sizes 004-080: The multisection is fitted to at least one of the other unit sections, see the section entitled: Description of the Air Handling Unit/Delivery Configuration RX/PX/CX, sizes 004-080.

Size 120: The multisection is supplied as an individual item in two sections.

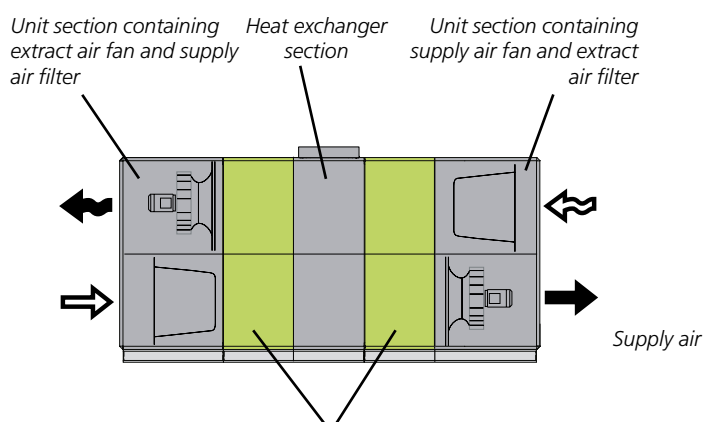
Work to be carried out at the building site:

Sizes 004-080: Fitting together/splitting of unit sections to the extent required.

Size 120: Assembly of the multisection to become one unit. The multisection is then fitted together with the other unit sections.



Example



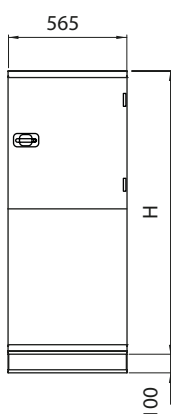
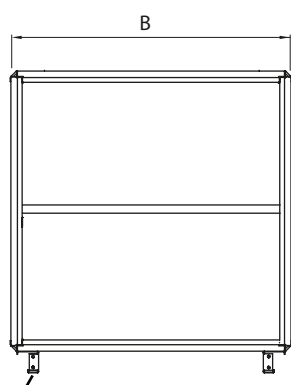
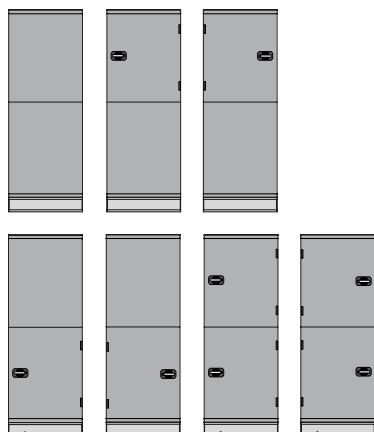
*Up to two multisections can be used for one air handling unit.
The illustration shows possible locations of the multisection.*

Complements and accessories

Unit sections

Possible combinations,
cover panels/inspection doors

Multisection, short (565 mm)

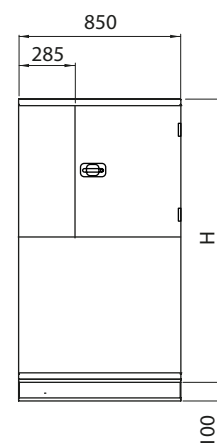
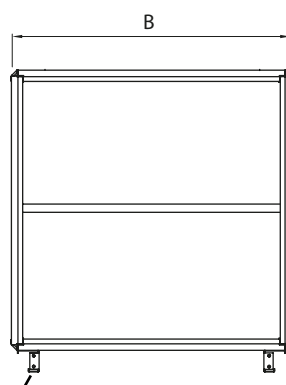
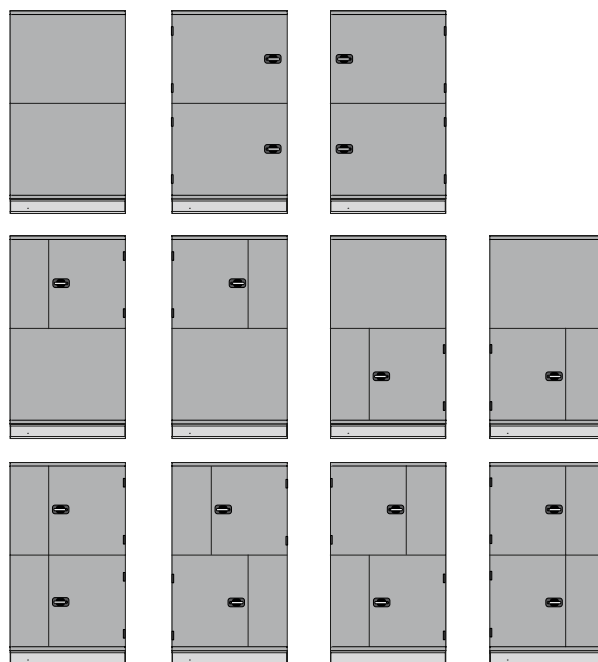


For location/design of base beams,
see the corresponding AHU size.

The possible combinations of cover panels/inspection doors, see above.

For SILVER C	B	H	kg
004/005	825	920	74
007/008	995	1085	77
011/012	1199	1295	90
014/020	1400	1551	104
025/030	1600	1811	119
035/040	1990	2159	143
050/060	2318	2288	189
070/080	2637	2640	258
100/120	3340	3340	492

Multisection, long (850 mm)



For location/design of base beams,
see the corresponding AHU size.

For SILVER C	B	H	kg
004/005	825	920	110
007/008	995	1085	120
011/012	1199	1295	142
014/020	1400	1551	167
025/030	1600	1811	189
035/040	1990	2159	202
050/060	2318	2288	243
070/080	2637	2640	347
100/120	3340	3340	640

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 004/005, 007/008 and 011/012 are fitted with a rubber ring seal.

The duct accessories for SILVER C, sizes 014/020, 025/030, 035/040, 050/060, 070/080 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 **AHU Design** 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.

Installation

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



SILVER C with standard end connection panel:

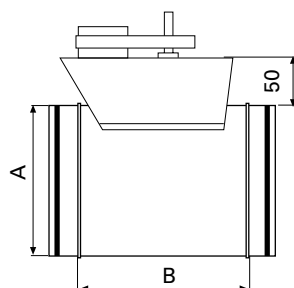
TBSA 100-040, matches SILVER C, sizes 014, 020
 TBSA 120-050, matches SILVER C, sizes 025, 030
 TBSA 140-060, matches SILVER C, sizes 035, 040
 TBSA 160-080, matches SILVER C, sizes 050, 060
 TBSA 180-100, matches SILVER C, sizes 070, 080
 TBSA 240-120, matches SILVER C, sizes 100, 120
 (for air intake 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):

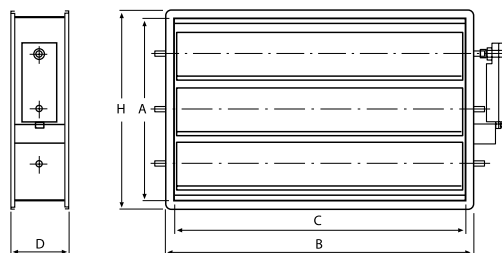
TBSA 060-030, matches SILVER C, sizes 004, 005
 TBSA 080-040, matches SILVER C, sizes 007, 008
 TBSA 100-040, matches SILVER C, sizes 011, 012
 TBSA 120-050, matches SILVER C, sizes 014, 020
 TBSA 140-060, matches SILVER C, sizes 025, 030
 TBSA 160-080, matches SILVER C, sizes 035, 040
 TBSA 180-100, matches SILVER C, sizes 050, 060
 TBSA 240-120, matches SILVER C, sizes 070, 080

SILVER C with standard end connection panel:

TBSA 000-031, matches SILVER C, sizes 004, 005
 TBSA 000-040, matches SILVER C, sizes 007, 008
 TBSA 000-050, matches SILVER C, sizes 011, 012



TBSA	A	B	kg
2-000-031	Ø 315	140	5
2-000-040	Ø 400	210	7
2-000-050	Ø 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
5-100-040	400	1040	1000	120	440	12
4-120-050	500	1240	1200	120	540	15
4-140-060	600	1440	1400	120	640	20
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 004–012 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.

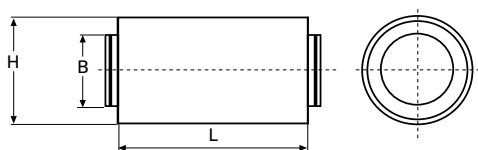


SILVER C with standard end connection panel:

TBDA 000-031, matches SILVER C, sizes 004, 005

TBDA 000-040, matches SILVER C, sizes 007, 008

TBDA 000-050, matches SILVER C, sizes 011, 012



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 004–120 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 014, 020

TBDA 120-050, matches SILVER C, sizes 025, 030

TBDA 140-060, matches SILVER C, sizes 035, 040

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 004, 005

TBDA 080-040, matches SILVER C, sizes 007, 008

TBDA 100-040, matches SILVER C, sizes 011, 012

TBDA 120-050, matches SILVER C, sizes 014, 020

TBDA 140-060, matches SILVER C, sizes 025, 030

TBDA 240-120, matches SILVER C, sizes 070, 080

SILVER C with standard end connection panel:

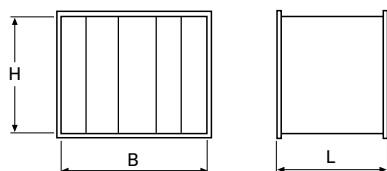
TBDA 160-080, matches SILVER C, sizes 050, 060

TBDA 180-100, matches SILVER C, sizes 070, 080

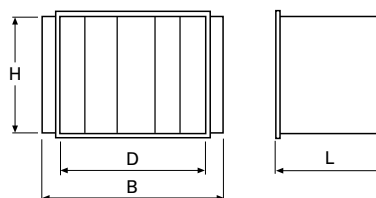
SILVER C with full face connection frame (accessory TBXZ):

TBDA 160-080, matches SILVER C, sizes 035, 040

TBDA 180-100, matches SILVER C, sizes 050, 060



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.

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

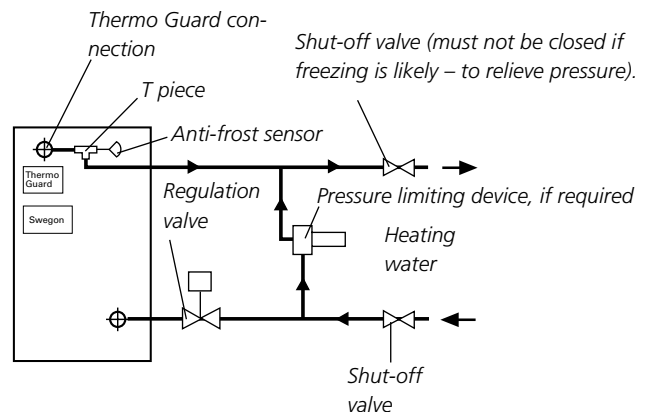
A circulation pump is used for guaranteeing the frost guard function, if air heaters without anti-frost burst protection are used. Supplied with T coupling, non-return valve and adjustment valve.

Installation

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



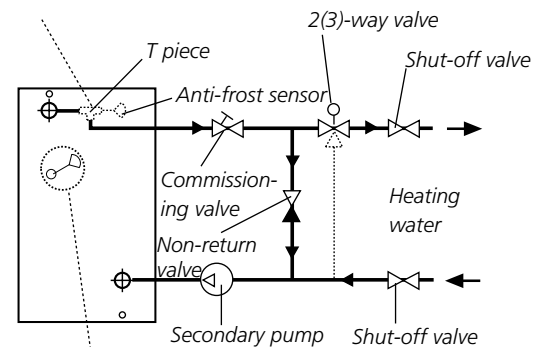
Installation principle *with* Thermo Guard



Installation principle *without* Thermo Guard

Applicable to

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



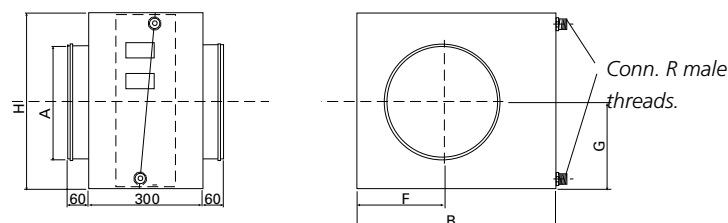
Anti-freeze monitor sensor. Applicable to TBLA 100-040 to 240-120

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

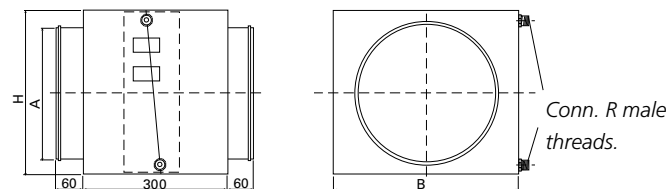


SILVER C with standard end connection panel:
 TBLA 000-031, matches SILVER C, sizes 004, 005
 TBLA 000-040 matches SILVER C, sizes 007, 008
 TBLA 000-050 matches SILVER C, sizes 011, 012

TBLA	A	B	F	G	H	R	kg*
6-000-031-2-1	Ø 315	490	225	192	405	DN20	15
6-000-040-2-1	Ø 400	590	277	250	500	DN25	18
6-000-040-2-2	Ø 400	590	277	250	500	DN25	20
6-000-050-2-1	Ø 500	690	327	300	600	DN25	23
6-000-050-2-2	Ø 500	690	327	300	600	DN25	31

* Excluding water.

With Thermoguard



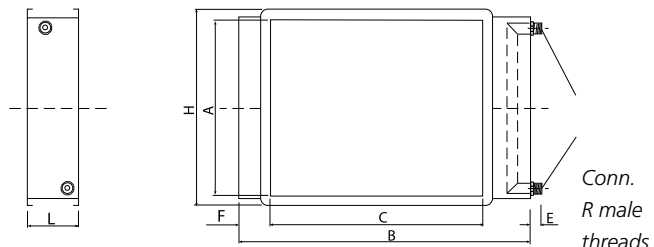
SILVER C with standard end connection panel:
 TBLA 000-031, matches SILVER C, sizes 004, 005
 TBLA 000-040 matches SILVER C, sizes 007, 008
 TBLA 000-050 matches SILVER C, sizes 011, 012

TBLA	A	B	H	R	kg*
4-000-031-1-1	Ø 315	488	428	DN 15	14
4-000-040-1-1	Ø 400	588	528	DN 15	19
4-000-050-1-1	Ø 500	688	628	DN 15	24

* Excluding water.

Complements and accessories

Duct accessories, uninsulated



SILVER C with standard end connection panel:

TBLA 100-040, matches SILVER C, sizes 014, 020

TBLA 120-050, matches SILVER C, sizes 025, 030

TBLA 140-060, matches SILVER C, sizes 035, 040

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

TBLA-1-060-030, matches SILVER C, sizes 004, 005

TBLA-1-080-040, matches SILVER C, sizes 007, 008

TBLA-1-100-040, matches SILVER C, sizes 011, 012

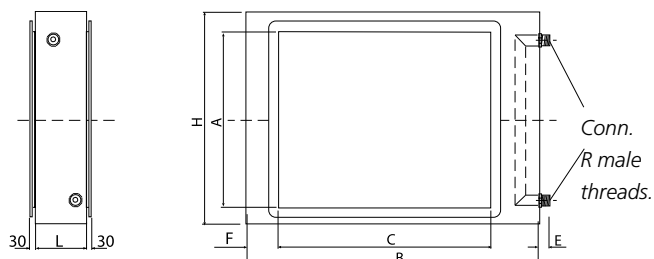
TBLA-1-120-050, matches SILVER C, sizes 014, 020

TBLA-1-140-060, matches SILVER C, sizes 025, 030

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 014, 020

TBLA 120-050, matches SILVER C, sizes 025, 030

TBLA 140-060, matches SILVER C, sizes 035, 040

TBLA 160-080, matches SILVER C, sizes 050, 060

TBLA 180-100, matches SILVER C, sizes 070, 080

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 011, 012

TBLA 120-050, matches SILVER C, sizes 014, 020

TBLA 140-060, matches SILVER C, sizes 025, 030

TBLA 160-080, matches SILVER C, sizes 035, 040

TBLA 180-100, matches SILVER C, sizes 050, 060

TBLA 240-120, matches SILVER C, sizes 070, 080

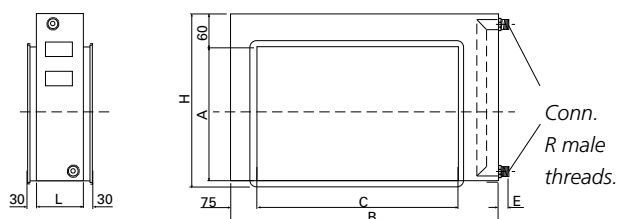
Without Thermoguard

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



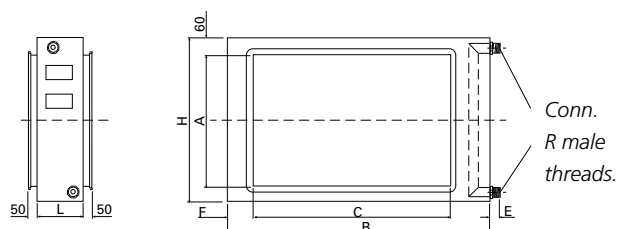
SILVER C with full face connection frame (accessory TBXZ):
 TBLA 060-030, matches SILVER C, sizes 004, 005
 TBLA 080-040, matches SILVER C, sizes 007, 008

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 014, 020
 TBLA 120-050, matches SILVER C, sizes 025, 030
 TBLA 140-060, matches SILVER C, sizes 035, 040
 TBLA 160-080, matches SILVER C, sizes 050, 060
 TBLA 180-100, matches SILVER C, sizes 070, 080
 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 011, 012
 TBLA 120-050, matches SILVER C, sizes 014, 020
 TBLA 140-060, matches SILVER C, sizes 025, 030
 TBLA 160-080, matches SILVER C, sizes 035, 040
 TBLA 180-100, matches SILVER C, sizes 050, 060
 TBLA 240-120, matches SILVER C, sizes 070, 080

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.

Complements and accessories

Duct accessories, uninsulated

Air heater TBCE/TBRE, electric

Air heater TBCE/TBRE is used for reheating of the supply air or for certain preheating needs of outdoor air.

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

The integrated thyristor is controlled via signals 0 - 10V. The air heater is equipped with four, five or six series-coupled overheating protections.

Technical data

Uninsulated casing made of galvanized sheet steel.

Air heater TBCE/TBRE is available in several capacity variants.

The electrical equipment conforms to the provisions of Degree of Protection IP44.

The air heater is approved for operating temperatures, in the surroundings and the air stream, from -25°C to +40°C.

Installation

TBCE 000-031, 000-040 and 000-050: The end panel on the connection side can be dismantled for inspection and connection.

For air heaters with circular duct connection, the distance from or to a duct bend, damper, filter or the like, should be at least the distance that is equivalent to double (triple recommended) the diameter of the duct. For air heaters with a rectangular duct connection the distance should be at least the equivalent to the air heater's diagonal dimension (double recommended), i.e. from corner to corner in the duct section of the air heater. Otherwise there is risk that the airflow through the air heater will be non-uniform, involving risk that the overheat protection device will trip.

Electrical connection. **Power must be supplied directly from the electrical distribution box. An isolating switch is recommended.**



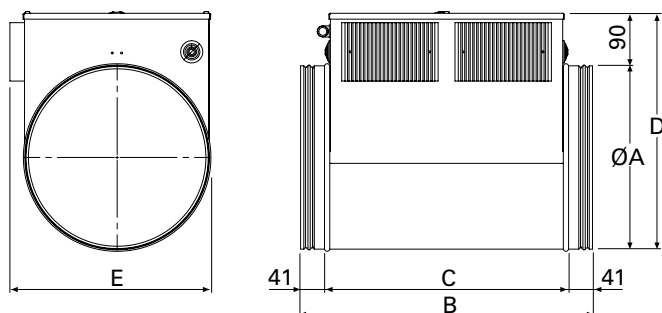
TBCE



TBRE

Complements and accessories

Duct accessories, uninsulated



SILVER C with standard end connection frame:

TBCE 000-031, corresponds to SILVER C sizes 004, 005

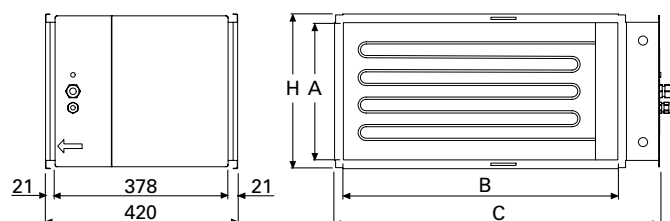
TBCE-000-040, corresponds to SILVER C sizes 007, 008

TBCE-000-050, corresponds to SILVER C sizes 011, 12

TBCE	ø A	B	C	D	E	kg
-1-000-031-002-2	315	375	293	405	344	8
-1-000-031-004-1	315	375	293	405	344	9
-1-000-031-004-2	315	375	293	405	344	9
-1-000-031-007-1	315	500	418	405	344	10.5
-1-000-031-007-2	315	500	418	405	344	10.5
-1-000-031-010-1	315	500	418	405	344	11.5
-1-000-031-010-2	315	500	418	405	344	11.5
-1-000-040-004-1	400	375	293	490	428	10.5
-1-000-040-004-2	400	375	293	490	428	10.5
-1-000-040-007-1	400	500	418	490	428	12.5
-1-000-040-007-2	400	500	418	490	428	12.5
-1-000-040-012-1	400	630	548	490	428	15
-1-000-040-012-2	400	630	548	490	428	15
-1-000-040-018-1	400	770	688	490	428	19.5
-1-000-040-018-2	400	770	688	490	428	19.5
-1-000-050-006-1	500	375	293	590	528	12.5
-1-000-050-006-2	500	375	293	590	528	12.5
-1-000-050-012-1	500	630	548	590	528	17.5
-1-000-050-012-2	500	630	548	590	528	17.5
-1-000-050-021-1	500	880	798	590	528	26
-1-000-050-021-2	500	880	798	590	528	26
-1-000-050-027-1	500	1150	1068	590	528	33
-1-000-050-027-2	500	1150	1068	590	528	33

Complements and accessories

Duct accessories, uninsulated



SILVER C with standard end connection frame:

TBRE 100-040, corresponds to SILVER C sizes 014, 020

TBRE 120-050, corresponds to SILVER C sizes 025, 030

TBRE 140-060, corresponds to SILVER C sizes 035, 040

TBRE 160-080, corresponds to SILVER C sizes 050, 060

TBRE 180-100, corresponds to SILVER C sizes 070, 080

TBRE 240-120, corresponds to SILVER C sizes 100, 120

SILVER C with full face end connection panel (accessory TBXZ):

TBRE 060-030, corresponds to SILVER C sizes 004, 005

TBRE 080-040, corresponds to SILVER C sizes 007, 008

TBRE 100-040, corresponds to SILVER C, size 011, 012

TBRE 1200-500 corresponds to SILVER C sizes 014, 020

TBRE 1400-600 corresponds to SILVER C, size 025/30

TBRE 1600-800 corresponds to SILVER C, size 035/040

TBRE 1800-1000 corresponds to SILVER C, size 050/060

TBRE 2400-1200 corresponds to SILVER C, size 070/080

TBRE	A	B	C	H	kg
1-060-030	300	600	710	338	15 - 18
1-080-040	400	800	880	438	19 - 25
1-100-040	400	1000	1084	438	22 - 37
1-120-050	500	1200	1285	538	25 - 42
1-140-060	600	1400	1482	638	31 - 51
1-160-080	800	1600	1737	838	38 - 63
1-180-100	1000	1800	2017	1038	48 - 76
1-240-120	1200	2400	2521	1238	59 - 96

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.

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

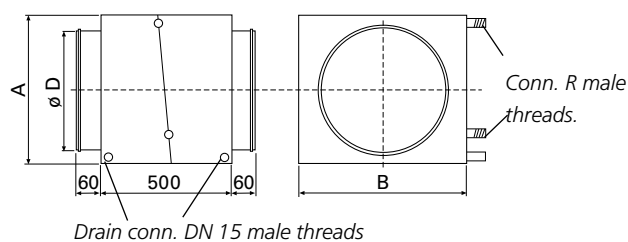
Duct accessories, uninsulated

SILVER C with standard end connection panel:

TBKA 000-031, matches SILVER C, sizes 004, 005

TBKA 000-040, matches SILVER C, sizes 007, 008

TBKA 000-050, matches SILVER C, sizes 011, 012



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

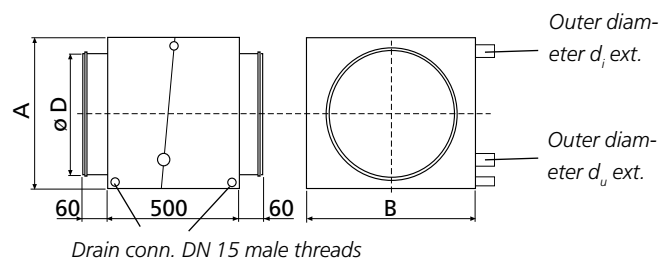
* Excl. cooling agent

SILVER C with standard end connection panel:

TBKC 000-031, matches SILVER C, sizes 004, 005

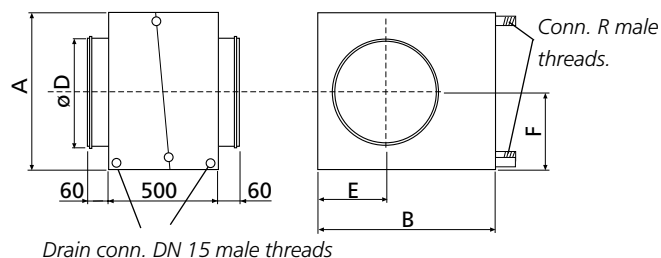
TBKC 000-040, matches SILVER C, sizes 007, 008

TBKC 000-050, matches SILVER C, sizes 011, 012



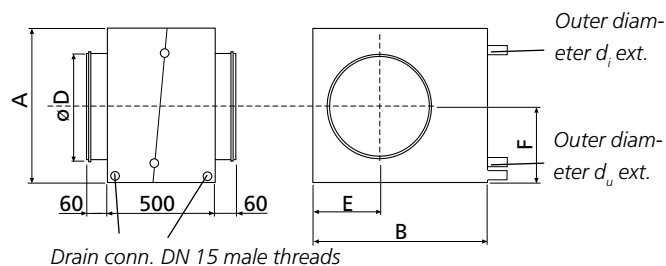
TBKC	A	B	D	d _i	d _u	kg*
4-000-031-1-1	430	490	315	12	12	37

* 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

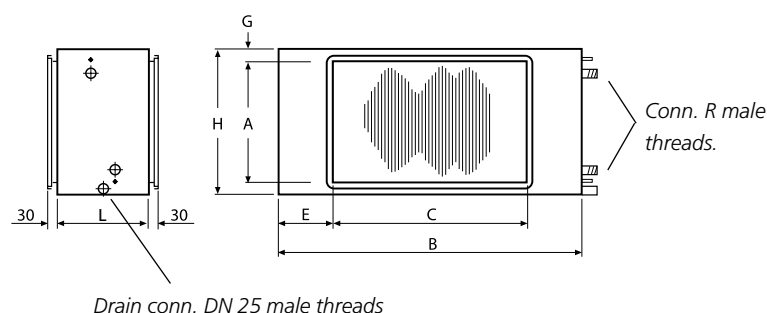


TBKC	A	B	D	E	F	d _i	d _u	kg*
3-000-040-1-1	455	590	400	255	228	12	22	28
4-000-050-1-1	575	690	500	295	288	22	22	50
3-000-050-3-1	755	770	500	358	378	22	42	46

* Excl. cooling medium

Complements and accessories

Duct accessories, uninsulated



SILVER C with standard end connection panel:

TBKA 100-040, matches SILVER C, sizes 014, 020
 TBKA 120-050, matches SILVER C, sizes 025, 030
 TBKA 140-060, matches SILVER C, sizes 035, 040
 TBKA 160-080, matches SILVER C, sizes 050, 060
 TBKA 180-100, matches SILVER C, sizes 070, 080
 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 004, 005
 TBKA 080-040, matches SILVER C, sizes 007, 008
 TBKA 100-040, matches SILVER C, sizes 011, 012
 TBKA 120-050, matches SILVER C, sizes 014, 020
 TBKA 140-060, matches SILVER C, sizes 025, 030
 TBKA 160-080, matches SILVER C, sizes 035, 040
 TBKA 180-100, matches SILVER C, sizes 050, 060
 TBKA 240-120, matches SILVER C, sizes 070, 080

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

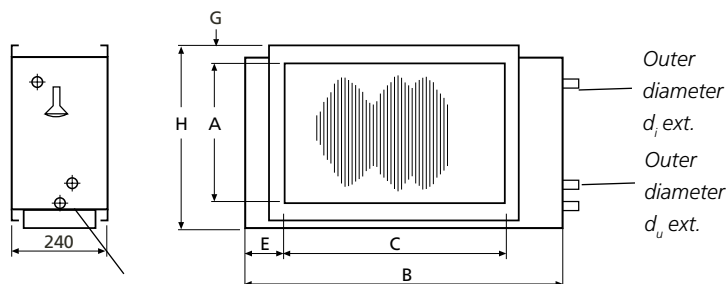
* Excl. cooling agent

** 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 014, 020

TBKC 120-050, matches SILVER C, sizes 025, 030

TBKC 140-060, matches SILVER C, sizes 035, 040

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

TBKC 100-040, matches SILVER C, sizes 011, 012

TBKC 120-050, matches SILVER C, sizes 014, 020

TBKC 140-060, matches SILVER C, sizes 025, 030

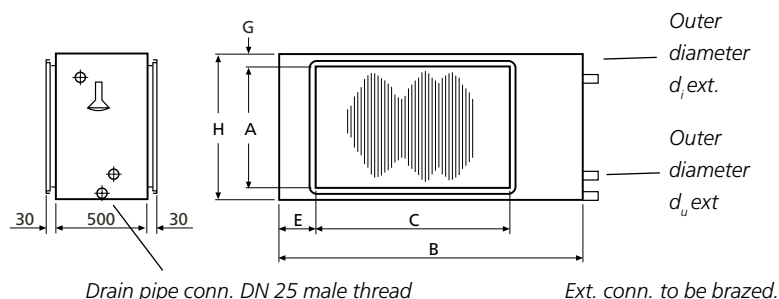
TBKC	A	B	C	E	G	H	d _i	d _u	kg*
3-100-040-0-1	400	1154	1000	49	19	461	22	28	24
3-100-040-0-2	400	1154	1000	49	19	461	12/16	16/22	25
3-120-050-0-1	500	1394	1200	49	19	561	28	35	33
3-120-050-0-2	500	1394	1200	49	19	561	16/28	22/35	34
3-140-060-0-1	600	1594	1400	49	19	661	28	35	41
3-140-060-0-2	600	1594	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 014, 020

TBKC 120-050, matches SILVER C, sizes 025, 030

TBKC 140-060, matches SILVER C, sizes 035, 040

TBKC 160-080, matches SILVER C, sizes 050, 060

TBKC 180-100, matches SILVER C, sizes 070, 080

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 004, 005

TBKA 080-040, matches SILVER C, sizes 007, 008

TBKC 100-040, matches SILVER C, sizes 011, 012

TBKC 120-050, matches SILVER C, sizes 014, 020

TBKC 140-060, matches SILVER C, sizes 025, 030

TBKC 160-080, matches SILVER C, sizes 035, 040

TBKC 180-100, matches SILVER C, sizes 050, 060

TBKC 240-120, matches SILVER C, sizes 070, 080

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 004-080.

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

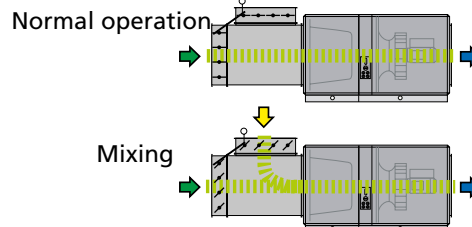
Example 1, two dampers

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.

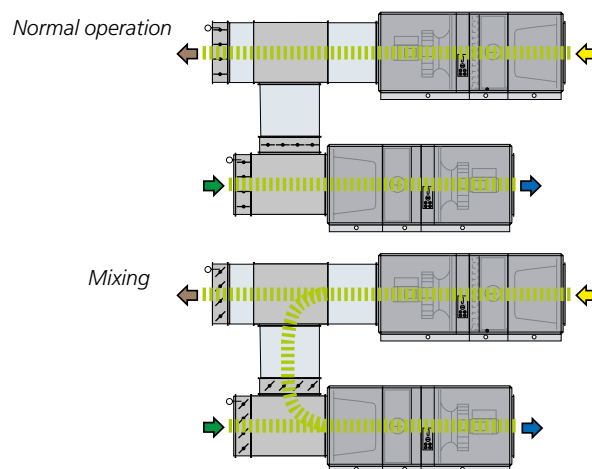
Example 2, three dampers

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)

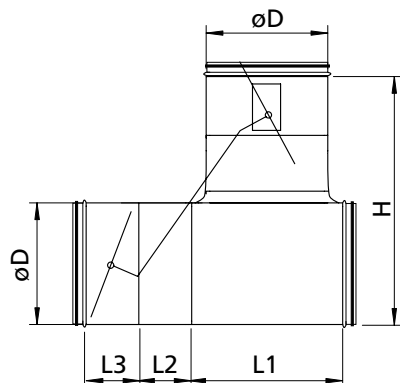


Outdoor air Extract air Supply air Exhaust air

Complements and accessories

Duct accessories, uninsulated

Two dampers



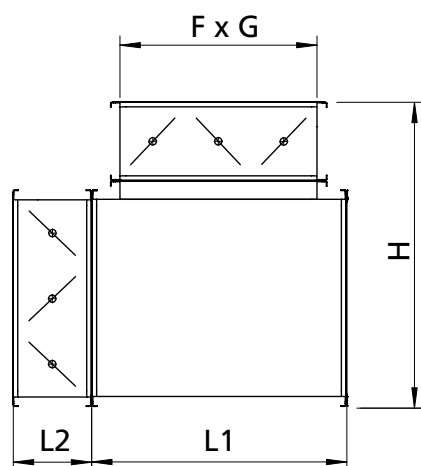
SILVER C with standard end connection panel:
 TBBD 000-031, matches SILVER C, size 004/005
 TBBD 000-040, matches SILVER C, size 007/008
 TBBD 000-050, matches SILVER C, size 011/012

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 014/020
 TBBD 120-050, matches SILVER C, size 025/030
 TBBD 140-060, matches SILVER C, size 035/040
 TBBD 160-080, matches SILVER C, size 050/060
 TBBD 180-100, matches SILVER C, size 070/080

SILVER C with full face connection frame (accessory TBXZ):
 TBBD 060-030, matches SILVER C, sizes 004, 005
 TBBD 080-040, matches SILVER C, sizes 007, 008
 TBBD 100-040, matches SILVER C, sizes 011, 012
 TBBD 120-050, matches SILVER C, sizes 014, 020
 TBBD 140-060, matches SILVER C, sizes 025, 030
 TBBD 160-080, matches SILVER C, sizes 035, 040
 TBBD 180-100, matches SILVER C, sizes 050, 060

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

Prefilter, 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.

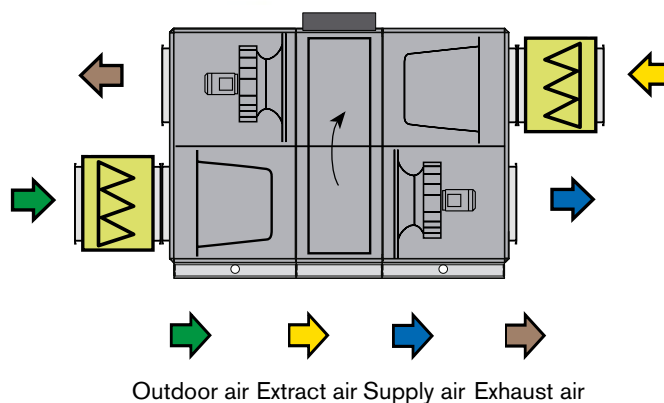
Technical data

The TBFA has uninsulated casing made of galvanized sheet steel. Insulated inspection door.

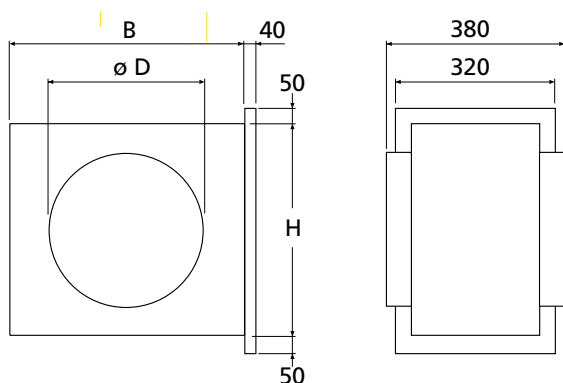
The filters are of woven aluminium type or Class G3 compact filters.

Installation

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

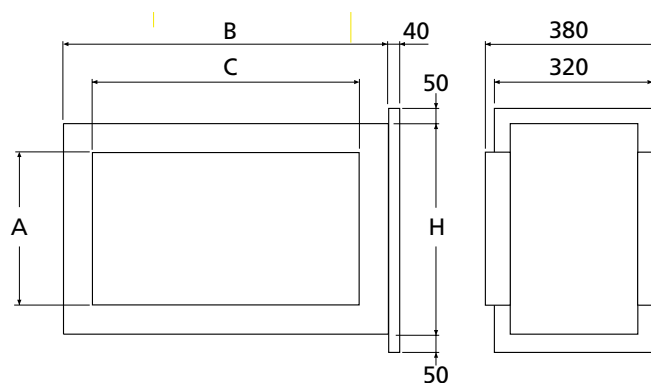


TBFA 000-031, matches SILVER C, sizes 004, 005
 TBFC 000-040, matches SILVER C, sizes 007, 008
 TBFA 000-050, matches SILVER C, sizes 011, 012



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

TBFA 100-040, matches SILVER C, sizes 014, 020
 TBFA 120-050, matches SILVER C, sizes 025, 030
 TBFA 140-060, matches SILVER C, sizes 035, 040
 TBFA 160-080, matches SILVER C, sizes 050, 060
 TBFA 180-100, matches SILVER C, sizes 070, 080
 TBFA 240-120, matches SILVER C, sizes 100, 120



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 AHU Design air handling unit selection program.

Complements and accessories

Duct accessories, in insulated casing

Damper section, TCSA

The TCSA dampers are used as shut-off dampers or forced airflow dampers. Sizes 012-120 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. TCSA sizes 012-120 are also available with modulating type actuator with spring return.

Technical data

Insulated casing. The outer skin is made of galvanized sheet steel, re-painted in Swegon's own grey metallic paint (closest comparable RAL colour: 9007). The inner skin is made of aluminium-zinc plated sheet steel. Environmental Class C4.

Ductwork leakage class 3 to EN 1751.

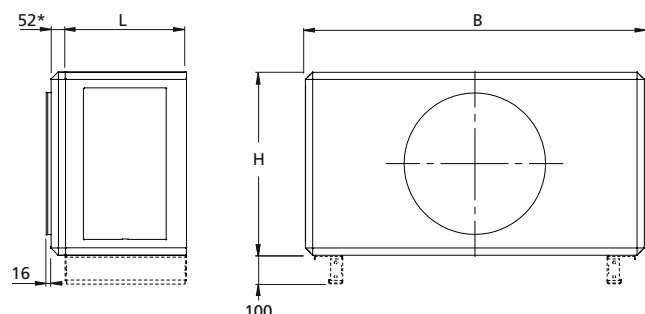
Installation

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:

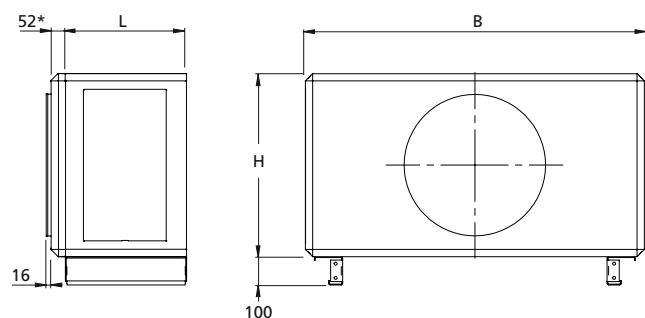
TCSA 005 \varnothing 315

TCSA 008 \varnothing 400

Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.

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

TCSA	B	H	L	kg	End connection panel, if required kg
-005	825	460	400	41	7
-008	995	542,5	400	47	10



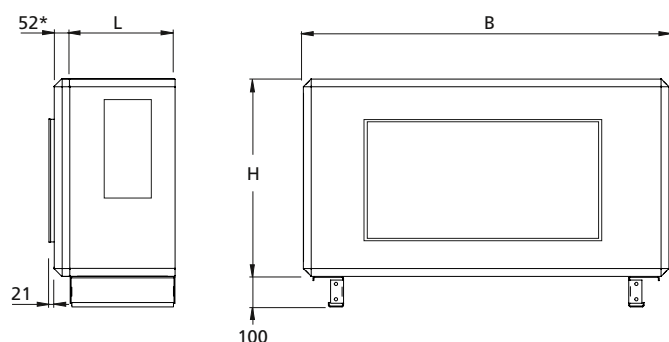
Connection dimensions to duct:

TCSA 012 \varnothing 500

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCSA	B	H	L	kg	End connection panel, if required kg
-012	1199	647,5	400	60	13



Connection dimensions to duct:

TCSA 020 1000 x 400 mm

TCSA 030 1200 x 500 mm

TCSA 040 1400 x 600 mm

TCSA 060 1600 x 800 mm

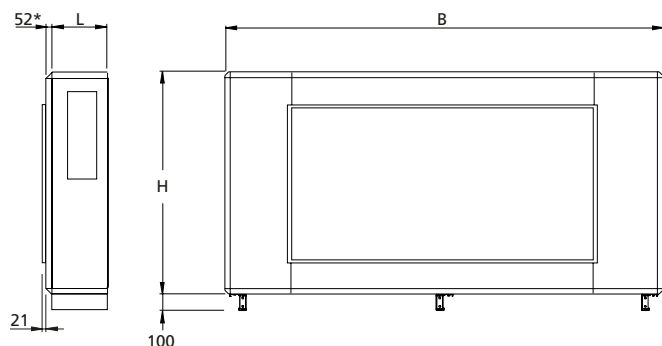
Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCSA	B	H	L	kg	End connection panel, if required kg
-020	1400	775,5	400	65	19
-030	1600	905,5	400	75	23
-040	1990	1079,5	400	93	34
-060	2318	1144	400	142	34

Complements and accessories

Duct accessories, in insulated casing

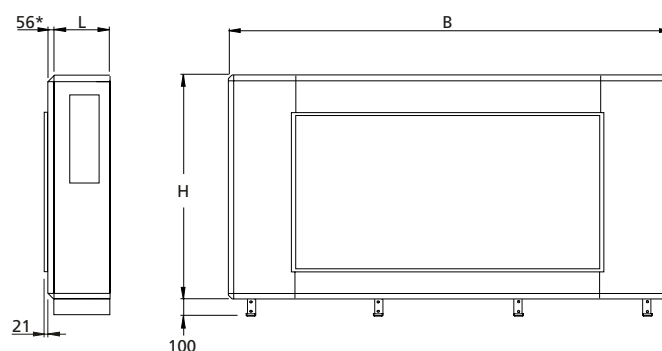


Connection dimensions to duct:
TCSA 080 1800 x 1000 mm

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCSA	B	H	L	kg	End connection panel, if required kg
-080	2637	1320	400	192	40



Connection dimensions to duct:
TCSA 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.

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

Complements and accessories

Duct accessories, in insulated casing

Spacer section, TCGA/

Inspection section, TCIA

The TCGA spacer section/TCIA inspection section is used when provision for spacing or inspection is required.

The TCIA inspection section is available in two variants, with inspection door the entire length of the section (sizes 005-120), or split cover panel/inspection door (sizes 005-040).

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

Technical data

Insulated casing. The outer skin is made of galvanized sheet steel, re-painted in Swegon's own grey metallic paint (closest comparable RAL colour: 9007). The inner skin is made of 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, TCGA

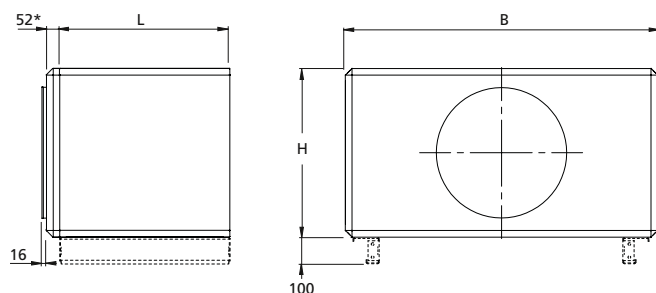


TCIA inspection section.
Inspection door the entire length of the section.



TCIA inspection section.
Split cover panel/inspection door.

Spacer Section, TCGA



Connection dimensions to duct:

TCGA 005 \varnothing 315

TCGA 008 \varnothing 400

Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.

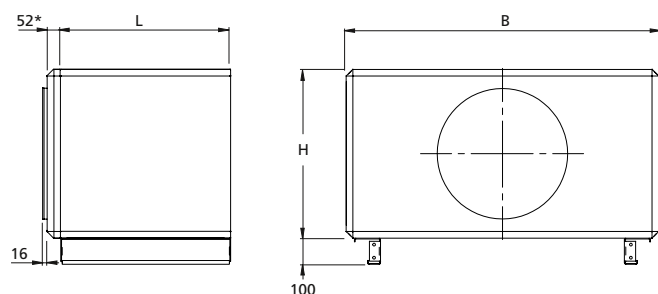
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCGA	B	H	L	kg	End connection panel, if required kg
-005	825	460	565	37	7
-005	825	460	850	54	7
-008	995	542,5	565	43	10
-008	995	542,5	850	63	10

Complements and accessories

Duct accessories, in insulated casing

Spacer Section, TCGA

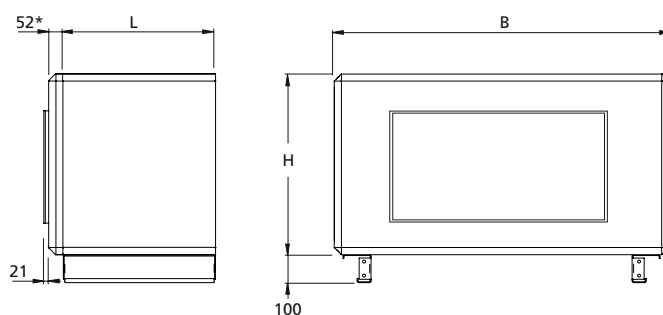


Connection dimensions to duct:
TCGA 012 $\varnothing 500$

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCGA	B	H	L	kg	End connection panel, if required kg
-012	1199	647,5	565	52	13
-012	1199	647,5	850	74	13



Connection dimensions to duct:
TCGA 020 1000 x 400 mm
TCGA 030 1200 x 500 mm
TCGA 040 1400 x 600 mm
TCGA 060 1600 x 800 mm

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

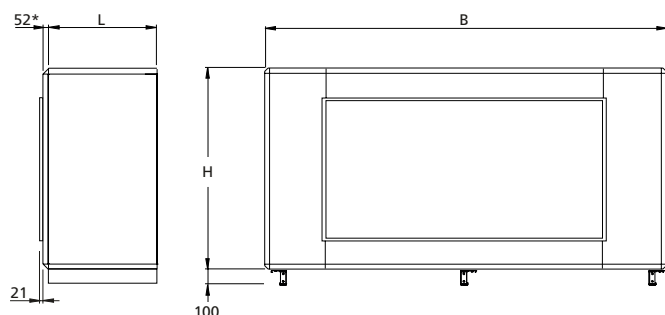
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCGA	B	H	L	kg	End connection panel, if required kg
-020	1400	775,5	565	61	19
-020	1400	775,5	850	86	19
-030	1600	905,5	565	69	23
-030	1600	905,5	850	96	23
-040	1990	1079,5	565	78	34
-040	1990	1079,5	850	113	34
-060	2318	1144	565	110	34
-060	2318	1144	850	141	34

Complements and accessories

Duct accessories, in insulated casing

Spacer Section, TCGA

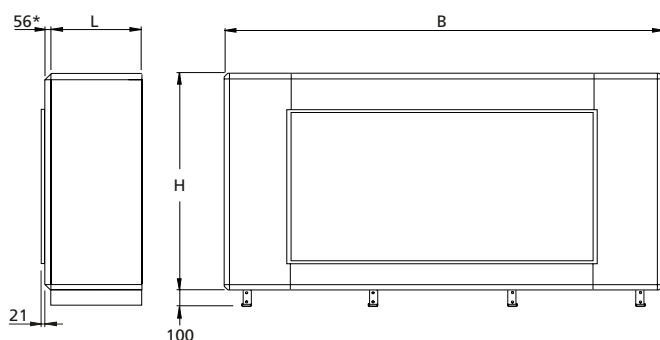


Connection dimensions to duct:
TCGA 080 1800 x 1000 mm

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCGA	B	H	L	kg	End connection panel, if required kg
-080	2637	1320	565	129	40
-080	2637	1320	850	174	40



Connection dimensions to duct:
TCGA 120 2400 x 1200 mm

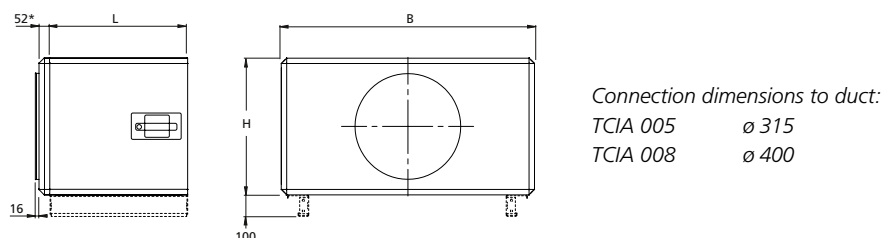
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCGA	B	H	L	kg	End connection panel, if required kg
-120	3340	1620	720	244	59

Complements and accessories

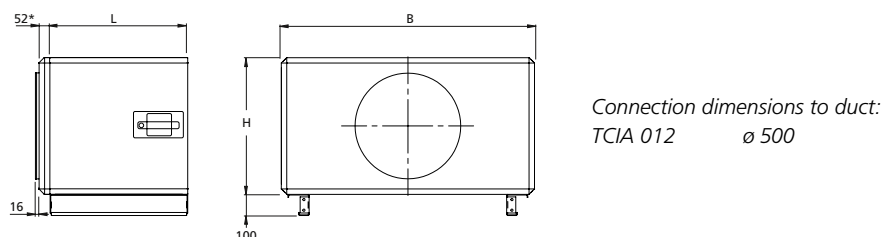
Duct accessories, in insulated casing

The TCIA inspection section, inspection door in the entire length of the section



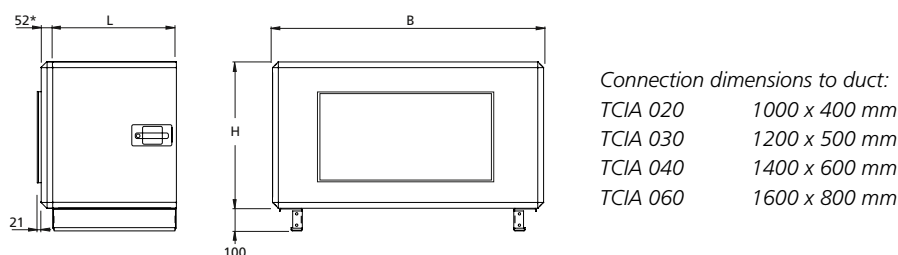
Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.
 * If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIA	B	H	L	kg	End connection panel, if required kg
-005	825	460	565	37	7
-005	825	460	850	54	7
-008	995	542,5	565	43	10
-008	995	542,5	850	63	10



Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.
 * If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIA	B	H	L	kg	End connection panel, if required kg
-012	1199	647,5	565	52	13
-012	1199	647,5	850	74	13



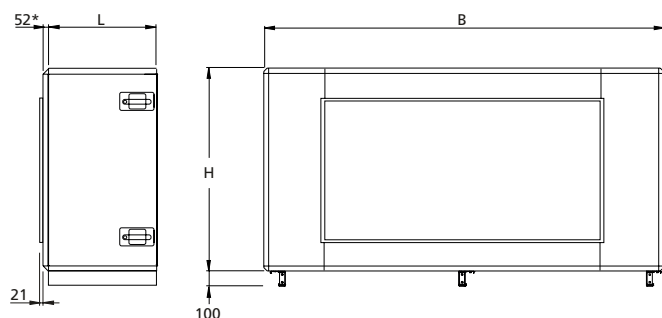
Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.
 * If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIA	B	H	L	kg	End connection panel, if required kg
-020	1400	775,5	565	61	19
-020	1400	775,5	850	86	19
-030	1600	905,5	565	69	23
-030	1600	905,5	850	96	23
-040	1990	1079,5	565	81	34
-040	1990	1079,5	850	117	34
-060	2318	1144	565	103	34
-060	2318	1144	850	143	34

Complements and accessories

Duct accessories, in insulated casing

The TCIA inspection section, inspection door in the entire length of the section

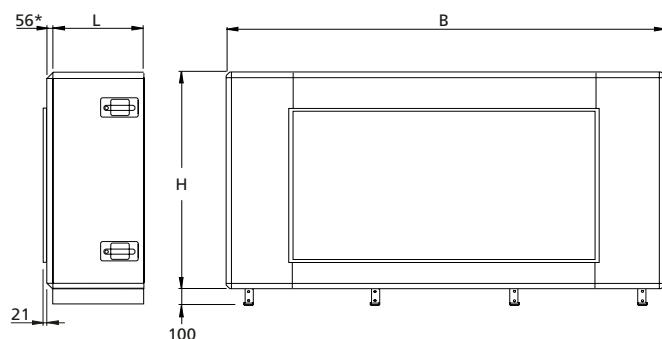


Connection dimensions to duct:
TCIA 080 1800 x 1000 mm

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCIA	B	H	L	kg	End connection panel, if required kg
-080	2637	1320	565	129	40
-080	2637	1320	850	174	40



Connection dimensions to duct:
TCIA 120 2400 x 1200 mm

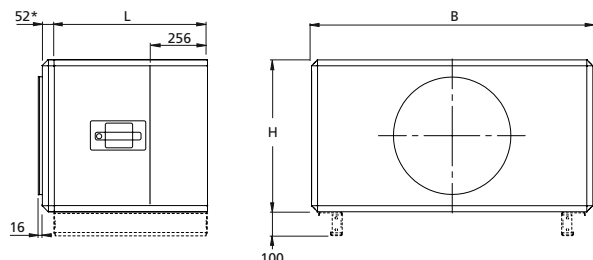
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCIA	B	H	L	kg	End connection panel, if required kg
-120	3340	1620	500	200	59
-120	3340	1620	720	247	59

Complements and accessories

Duct accessories, in insulated casing

TCIA inspection section, split cover panel/inspection door



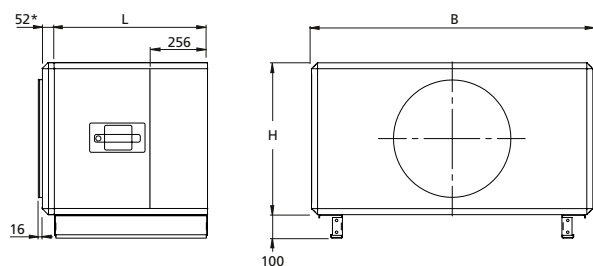
Connection dimensions to duct:

TCIA 005 \varnothing 315
TCIA 008 \varnothing 400

Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.

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

TCIA	B	H	L	kg	End connection panel, if required kg
-005	825	460	565	37	7
-005	825	460	850	54	7
-008	995	542,5	565	43	10
-008	995	542,5	850	63	10



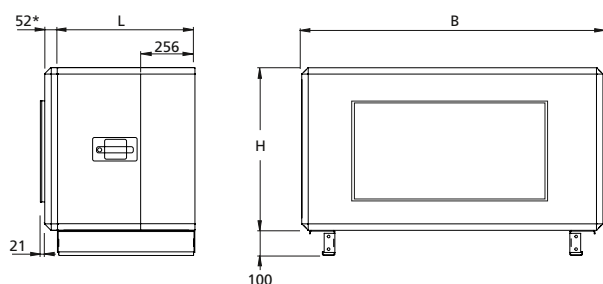
Connection dimensions to duct:

TCIA 012 \varnothing 500

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCIA	B	H	L	kg	End connection panel, if required kg
-012	1199	647,5	565	52	13
-012	1199	647,5	850	74	13



Connection dimensions to duct:

TCIA 020 1000 x 400 mm
TCIA 030 1200 x 500 mm
TCIA 040 1400 x 600 mm

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCIA	B	H	L	kg	End connection panel, if required kg
-020	1400	775,5	565	61	19
-020	1400	775,5	850	86	19
-030	1600	905,5	565	69	23
-030	1600	905,5	850	96	23
-040	1990	1079,5	565	81	34
-040	1990	1079,5	850	117	34

Complements and accessories

Duct accessories, in insulated casing

Unit sound attenuator, TCDA

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

To be installed for horizontal airflow.

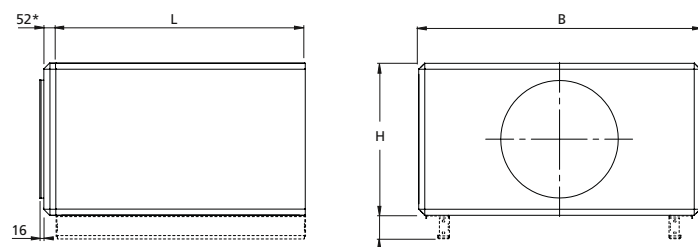
Technical data

Insulated casing. The outer skin is made of galvanized sheet steel, re-painted in Swegon's own grey metallic paint (closest comparable RAL colour: 9007). The inner skin is made of 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. The cover panel is easy to remove.



Connection dimensions to duct:

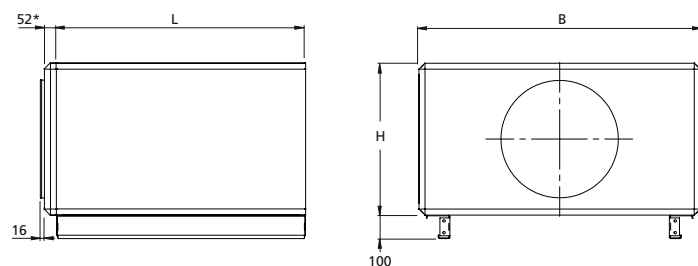
TCDA 005 \varnothing 315

TCDA 008 \varnothing 400

Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.

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

TCDA	B	H	L	kg	End connection panel, if required kg
-005	825	460	975	75	7
-008	995	542,5	975	89	10



Connection dimensions to duct:

TCDA 012 \varnothing 500

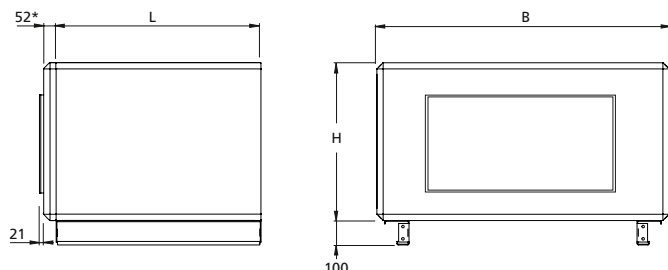
Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCDA	B	H	L	kg	End connection panel, if required kg
-012	1199	647,5	975	106	13

Complements and accessories

Duct accessories, in insulated casing



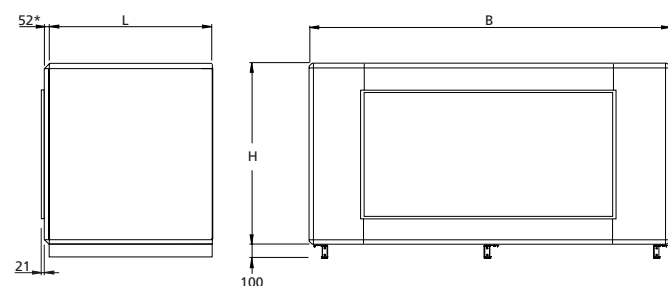
Connection dimensions to duct:

TCDA 020	1000 x 400 mm
TCDA 030	1200 x 500 mm
TCDA 040	1400 x 600 mm
TCDA 060	1600 x 800 mm

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCDA	B	H	L	kg	End connection panel, if required kg
-020	1400	775,5	975	130	19
-030	1600	905,5	975	154	23
-040	1990	1079,5	975	199	34
-060	2318	1144	975	234	34



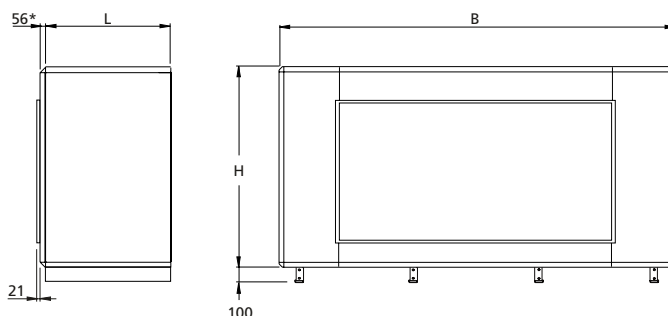
Connection dimensions to duct:

TCDA 080	1800 x 1000 mm
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Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCDA	B	H	L	kg	End connection panel, if required kg
-080	2637	1320	975	295	40



Connection dimensions to duct:

TCDA 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.

TCDA	B	H	L	kg	End connection panel, if required kg
-120	3340	1620	1070	452	59

Complements and accessories

Duct accessories, in insulated casing

Air heater, TCLA, hot water

The TCLA 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. The outer skin is made of galvanized sheet steel, re-painted in Swegon's own grey metallic paint (closest comparable RAL colour: 9007). The inner skin is made of 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 TCLA 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.

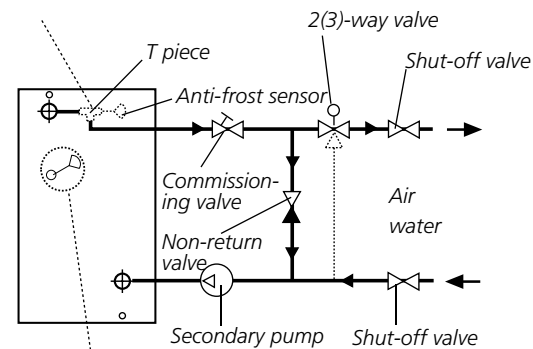
Installation

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
TCLA 005-012

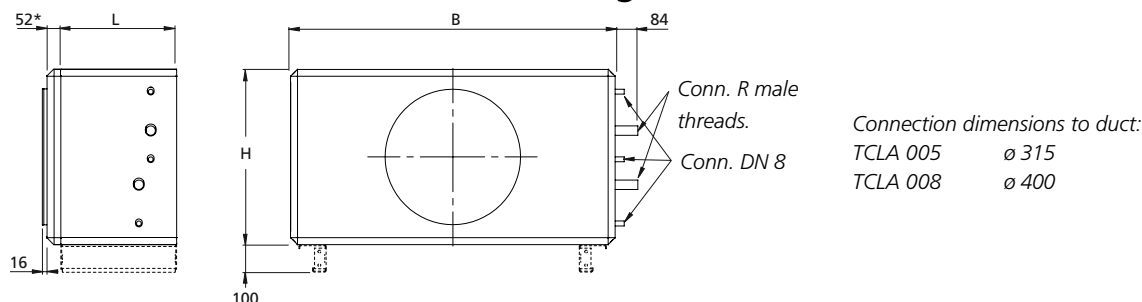


Anti-freeze monitor sensor. Applicable to TCLA 014-120

1) The anti-frost protection sensor for the size 005-012 TCLA should be installed in the T-piece on the return pipework and for the size 014-120 TCLA in the connection on the air heater.

Complements and accessories

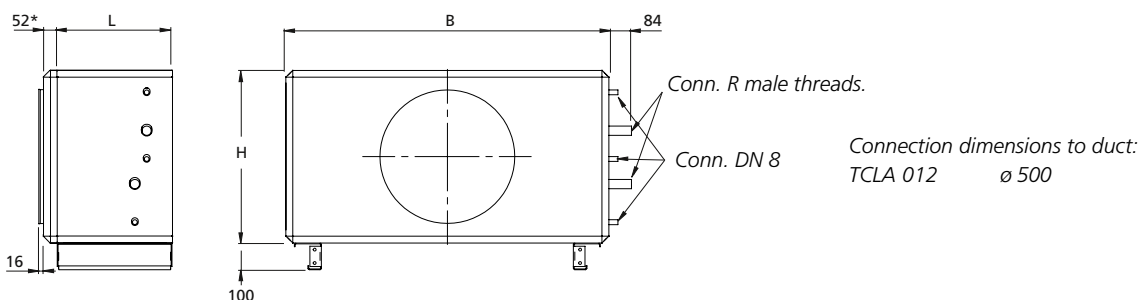
Duct accessories, in insulated casing



Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCLA	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⁾	
-005	825	460	400	DN15	33	DN15	34	DN20	36	7
-008	995	542,5	400	DN15	41	DN20	43	DN20	45	10

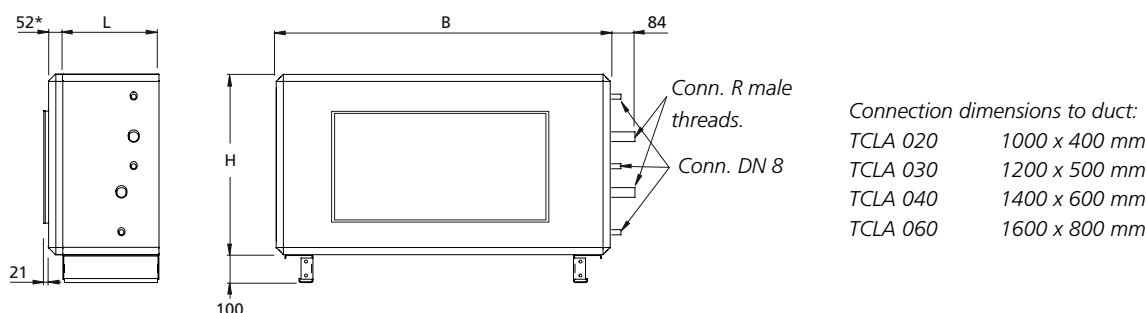
¹⁾ Not filled with water.



Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCLA	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⁾	
-012	1199	647,5	400	DN20	50	DN20	53	DN25	56	13

¹⁾ Not filled with water.



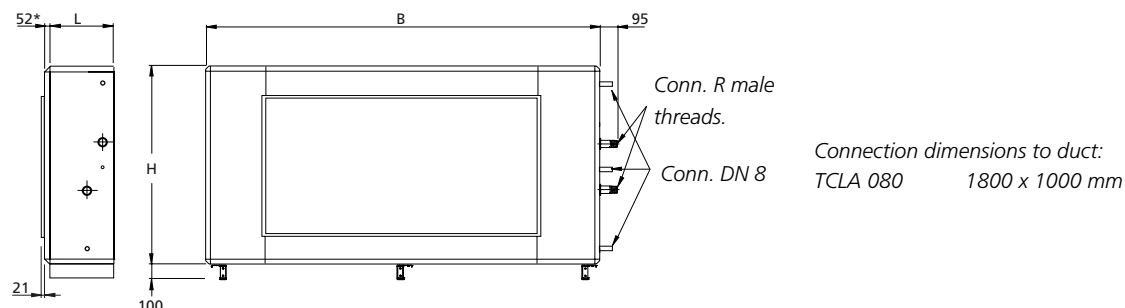
Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCLA	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⁾	
-020	1400	775,5	400	DN20	60	-	DN25	65	-	DN25	70	-	19
-030	1600	905,5	400	DN25	70	-	DN32	78	-	DN32	86	-	23
-040	1990	1079,5	400	DN32	89	-	DN40	100	-	DN40	114	-	34
-060	2318	1144	565	DN32	150	112	DN50	161	112	DN50	175	112	34

¹⁾ Not filled with water.

Complements and accessories

Duct accessories, in insulated casing



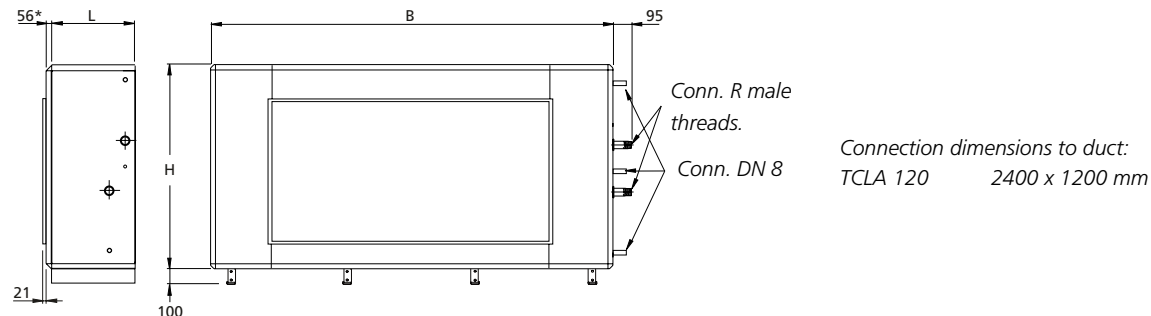
Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCLA	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⁾	
-080	2637	1320	565	DN50	181	132	DN65	197	132	DN65	217	132	40

¹⁾ Including casing, not filled with water.

²⁾ Casing only.



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

TCLA	B	H	L	Capacity variant 1			Capacity variant 2			Capacity variant 3			End connection panel, if required kg
				R	kg ¹⁾	kg ²⁾	R	kg ¹⁾	kg ²⁾	R	kg ¹⁾	kg ²⁾	
-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

TCLE-02 Electric air heater

Air heater TCLE is used for reheating of the supply air or for certain preheating needs of outdoor air.

To be installed for horizontal airflow.

The integrated thyristor is controlled via signals 0 - 10V. The air heater is equipped with four, five or six series-coupled overheating protections.

Technical data

Insulated casing. The outer skin is made of galvanized sheet steel, re-painted in Swegon's own grey metallic paint (closest comparable RAL colour: 9007). The inner skin is made of aluminium-zinc plated sheet steel. Environmental class C4.

The TCLE air heater is available in several capacity variants.

The electrical equipment conforms to the provisions of Degree of Protection IP44.

The air heater is approved for operating temperatures, in the surroundings and the air stream, from -25°C to +40°C.

Installation

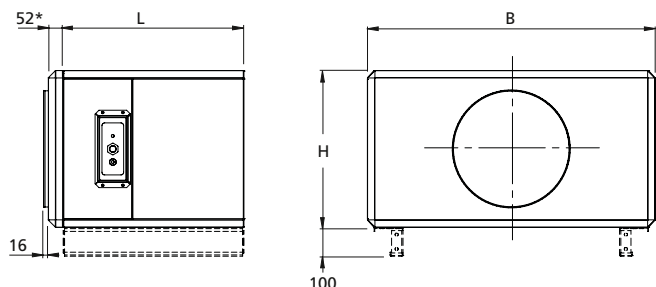
The air heater should be mounted directly against the air handling unit or insulated duct accessory. The space necessary for obtaining a uniform air stream is provided inside the TCLE. Therefore other duct accessories can be fitted downstream of the TCLE without risk of overheating.

Electrical connection. **Power must be supplied directly from the electrical distribution box.**



Complements and accessories

Duct accessories, in insulated casing



Connection dimensions to duct:

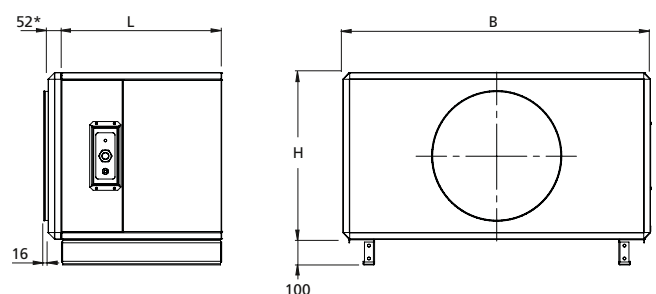
TCLE 005 \varnothing 315

TCLE 008 \varnothing 400

Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.

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

TCLE	B	H	L	kg	End connection panel, if required kg
-005	825	460	625	55-58	7
-008	995	542.5	625	66-72	10



Connection dimensions to duct:

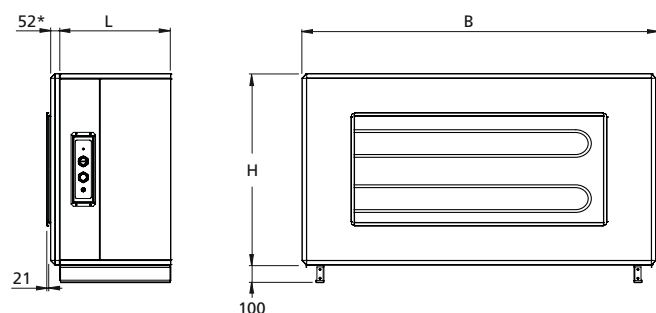
TCLE 012 \varnothing 500

Duct accessories in the lower duct are always delivered with mounted base beam.

Duct accessories in the upper duct are always delivered without base beam.

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

TCLE	B	H	L	kg	End connection panel, if required kg
-012	1199	647.5	625	80-95	13



Connection dimensions to duct:

TCLE 020 1000 x 400 mm

TCLE 030 1200 x 500 mm

TCLE 040 1400 x 600 mm

TCLE 060 1600 x 800 mm

Duct accessories in the lower duct are always delivered with mounted base beam.

Duct accessories in the upper duct are always delivered without base beam.

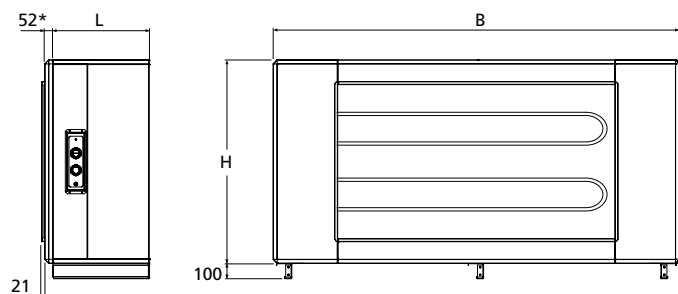
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCLE	B	H	L	kg	kg ¹⁾	End connection panel, if required kg
-020	1400	775,5	625	93-110	-	19
-030	1600	905.5	625	108-128	-	23
-040	1990	1079.5	625	130-156	-	34
-060	2318	1144	625	169-197	121	34

¹⁾ Casing only.

Complements and accessories

Duct accessories, in insulated casing



Connection dimensions to duct:
TCLE 080 1800 x 1000 mm

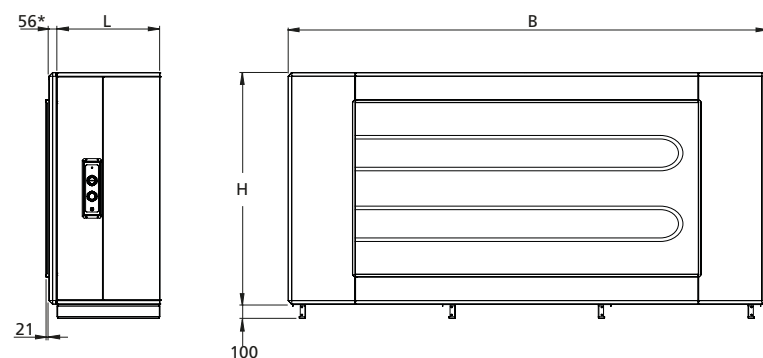
Duct accessories in the lower duct are always delivered with mounted base beam.

Duct accessories in the upper duct are always delivered without base beam.

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

TCLE	B	H	L	kg	kg ¹⁾	End connection panel, if required kg
-080	2637	1320	625	204-232	156	40

¹⁾ Casing only.



Connection dimensions to duct:
TCLE 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.

TCLE	B	H	L	kg	kg ¹⁾	End connection panel, if required kg
-120	3340	1620	720	326-363	267	59

¹⁾ Casing only.

Complements and accessories

Duct accessories, in insulated casing

Air cooler, TCKA (water), TCKC (direct expansion)

The TCKA/TCKC 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 TCKA 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. The outer skin is made of galvanized sheet steel, re-painted in Swegon's own grey metallic paint (closest comparable RAL colour: 9007). The inner skin is made of aluminium-zinc plated sheet steel. Environmental Class C4.

The TCKA/TCKC air coolers are composed of copper tubes and profiled aluminium fins. The TCKA have headers and water connections made of copper/brass, with male connection threads. The TCKC 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.

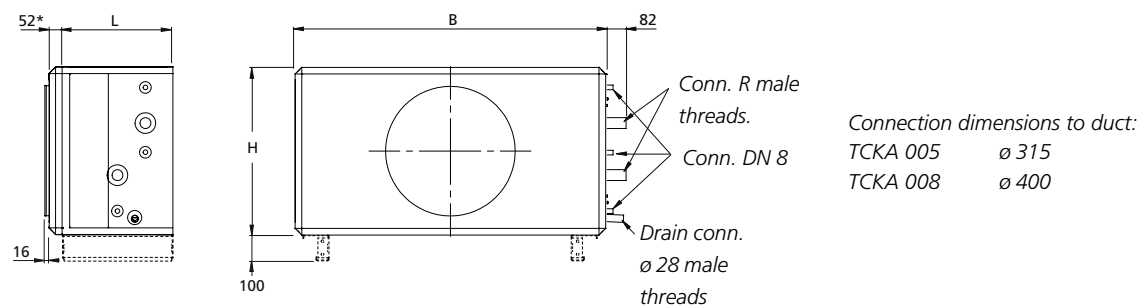
Installation

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

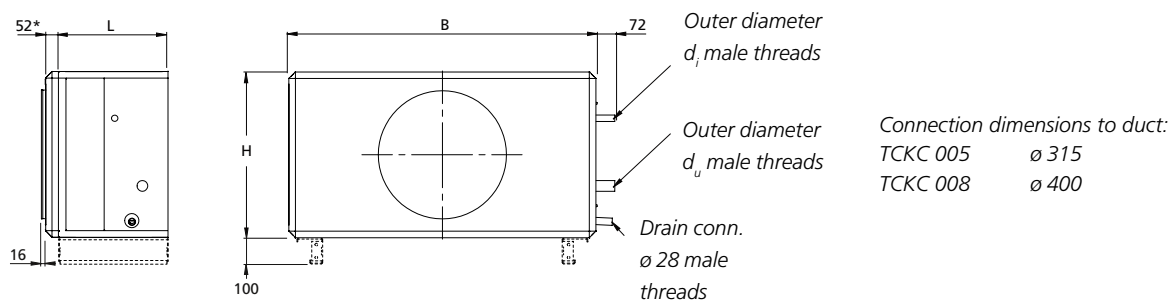


Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.

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

TCKA	B	H	Cap. variant 1			Cap. variant 2			Cap. variant 4			End connection panel, if required kg
			L	R	kg ¹⁾	L	R	kg ¹⁾	L	R	kg ¹⁾	
-005	825	460	475	DN20	49	475	DN25	51	625	DN25	66	7
-008	995	542,5	475	DN25	60	475	DN25	64	625	DN32	83	10

¹⁾ Excl. cooling agent



Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.

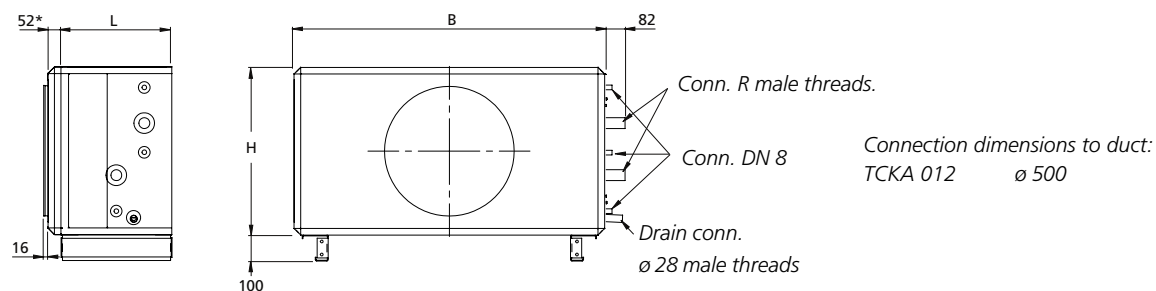
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCKC	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⁾	
-005	825	460	475	1/2"	22	49	5/8"	28	51	7
-008	995	542,5	475	5/8"	28	60	5/8"	35	64	10

¹⁾ Excl. cooling agent

Complements and accessories

Duct accessories, in insulated casing

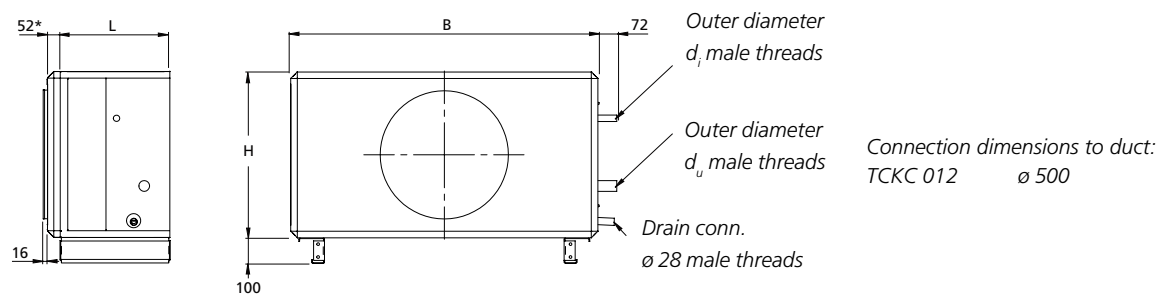


Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCKA	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⁾	
-012	1199	647,5	475	DN25	73	475	DN32	79	625	DN40	106	13

¹⁾ Excl. cooling agent



Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

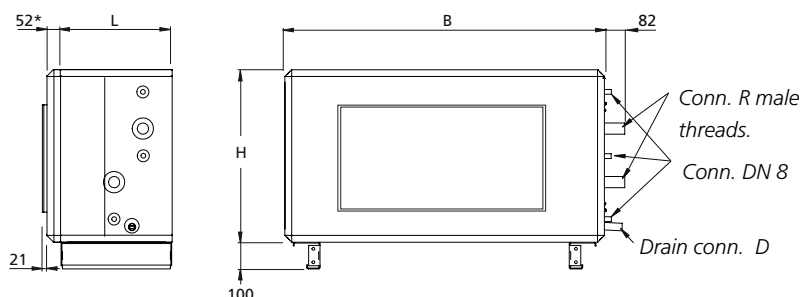
TCKC	B	H	L	Capacity variant 1			Capacity variant 2			End connection panel, if required kg
				d _i	d _u	kg ²⁾	d _i	d _u	kg ²⁾	
-012	1199	647,5	475	5/8" ¹⁾	35 ¹⁾	73 ¹⁾	19 ¹⁾	42 ¹⁾	80 ¹⁾	13

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

²⁾ Excl. refrigerant

Complements and accessories

Duct accessories, in insulated casing



Connection dimensions to duct:
 TCKA 020 1000 x 400 mm
 TCKA 030 1200 x 500 mm
 TCKA 040 1400 x 600 mm
 TCKA 060 1600 x 800 mm

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

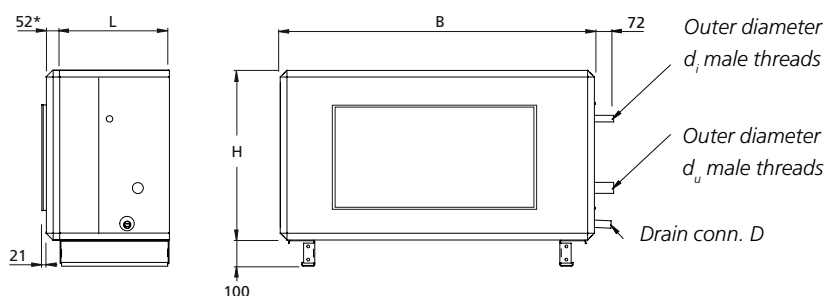
* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCKA	B	H	D	Cap.variant 1				Cap.variant 2				Cap.variant 3				Cap.variant 4				End connection panel, if required kg
				L	R	kg ¹⁾	kg ²⁾	L	R	kg ¹⁾	kg ²⁾	L	R	kg ¹⁾	kg ²⁾	L	R	kg ¹⁾	kg ²⁾	
-020	1400	775,5	28 utv.	475	DN32	91	-	475	DN32	100	-	625	DN40	123	-	625	DN50	132	-	19
-030	1600	905,5	28 utv.	475	DN32	110	-	475	DN40	126	-	625	DN50	156	-	625	DN60	173	-	23
-040	1990	1079,5	28 utv.	475	DN40	138	-	475	DN50	160	-	625	DN65	199	-	625	DN60	223	-	34
-060	2318	1144	DN25	565	DN65	199	108	565	DN65	211	108	565	DN65	225	108	565	DN65	242	108	34

TCKA	B	H	D	Cap.variant 5				Effektvariant 6				End connection panel, if required kg
				L	R	kg ¹⁾	kg ²⁾	L	R	kg ¹⁾	kg ²⁾	
-060	2318	1144	DN25	565	DN65	210	108	565	DN65	230	108	34

¹⁾ Excl. cooling agent

²⁾ Casing only.



Connection dimensions to duct:
 TCKC 020 1000 x 400 mm
 TCKC 030 1200 x 500 mm
 TCKC 040 1400 x 600 mm
 TCKC 060 1600 x 800 mm

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCKC	B	H	L	D	Cap. variant 1				Cap. variant 2				Cap. variant 3		End connection panel, if required kg
					d _i	d _u	kg ²⁾	kg ³⁾	d _i	d _u	kg ²⁾	kg ³⁾	kg ²⁾	kg ³⁾	
-020	1400	775,5	475	28 utv.	22 ¹⁾	42 ¹⁾	94 ¹⁾	-	28 ¹⁾	54 ¹⁾	104 ¹⁾	-	-	-	19
-030	1600	905,5	475	28 utv.	28 ¹⁾	54 ¹⁾	115 ¹⁾	-	28 ¹⁾	54 ¹⁾	128 ¹⁾	-	-	-	23
-040	1990	1079,5	475	28 utv.	28 ¹⁾	54 ¹⁾	147 ¹⁾	-	28 ¹⁾	54 ¹⁾	167 ¹⁾	-	-	-	34
-060	2318	1144	565	DN25	-	-	210	108	-	-	230	108	248	108	34

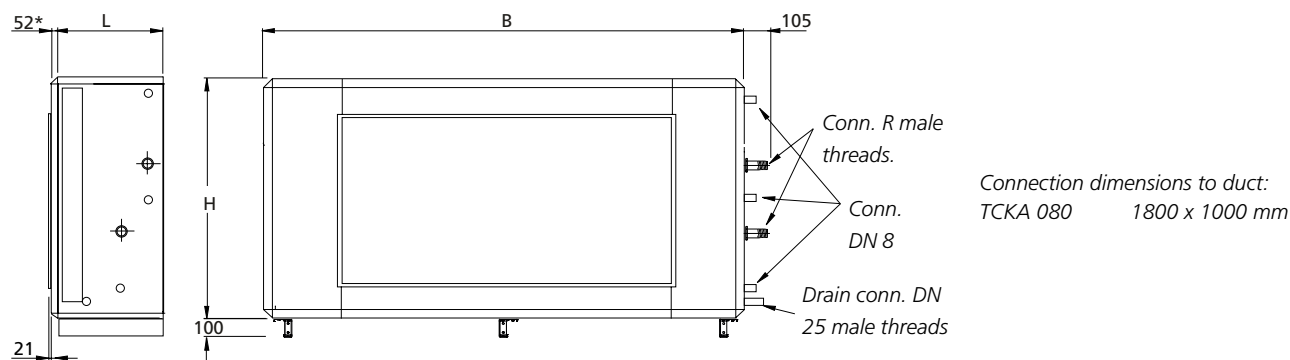
¹⁾ If there are two sections: depending on the division of sections

²⁾ Excl. refrigerant

³⁾ Casing only.

Complements and accessories

Duct accessories, in insulated casing



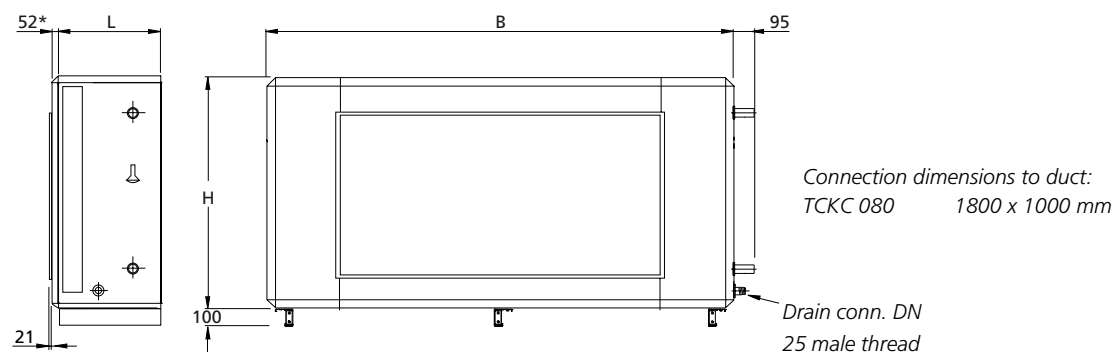
Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCKA	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	kg ¹⁾	kg ²⁾	
-080	2637	1320	565	DN65	263	135	DN65	282	135	DN65	302	135	DN65	324	135	40

¹⁾ Including casing, not charged with refrigerant.

²⁾ Casing only.



Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

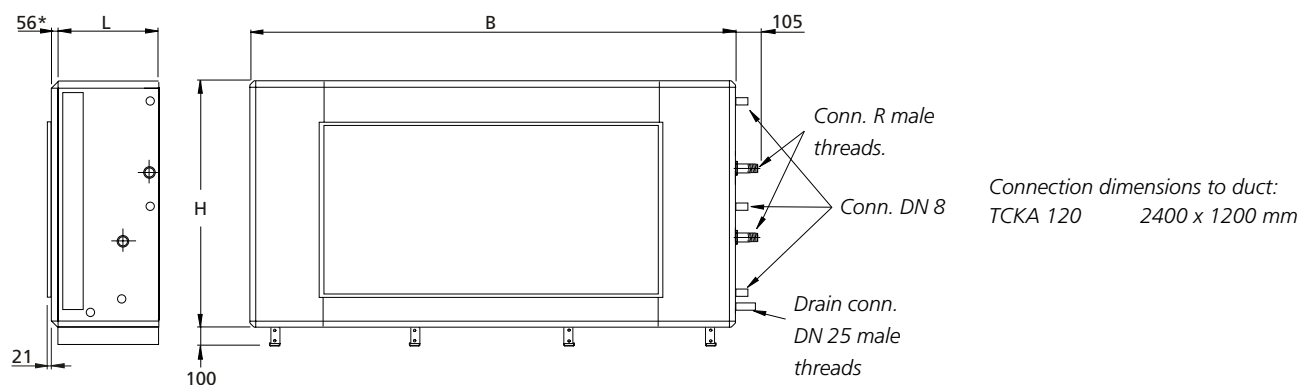
TCKC	B	H	L	Cap. variant 1		Cap. variant 2		Cap. variant 3		End connection panel, if required kg
				kg ¹⁾	kg ²⁾	kg ¹⁾	kg ²⁾	kg ¹⁾	kg ²⁾	
-080	2637	1320	565	280	135	316	135	332	135	40

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.

TCKA	B	H	L	Capacity variant 1			Capacity variant 2			Capacity variant 3			Capacity 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⁾	
-120	3340	1620	720	DN65	414	260	DN80	461	260	DN80	513	260	DN100	568	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, TCFB

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.

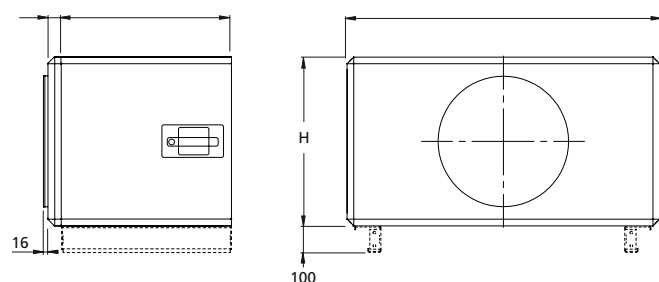
Technical data

Insulated casing. The outer skin is made of galvanized sheet steel, re-painted in Swegon's own grey metallic paint (closest comparable RAL colour: 9007). The inner skin is made of aluminium-zinc plated sheet steel. Environmental Class C4. Bag filters to filter class ePM1 50% (F7) or ePM1 85% (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:

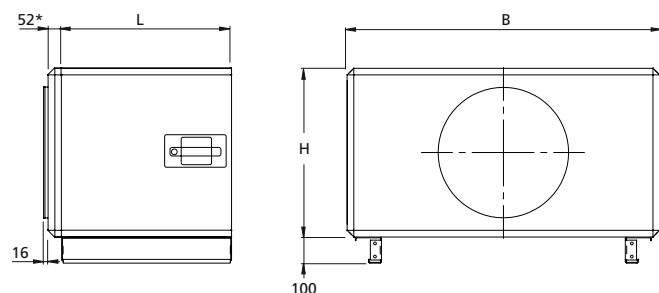
TCFB 005 \varnothing 315

TCFB 008 \varnothing 400

Base beam is optional on duct accessories in the lower duct. Duct accessories in the upper duct are always delivered without base beam.

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

TCFB	B	H	L	kg	End connection panel, if required kg
-005	825	460	720	52	7
-008	995	542,5	720	58	10



Connection dimensions to duct:

TCFB 012 \varnothing 500

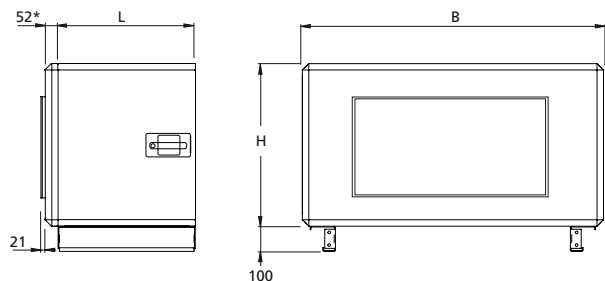
Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCFB	B	H	L	kg	End connection panel, if required kg
-012	1199	647,5	720	72	13

Complements and accessories

Duct accessories, in insulated casing



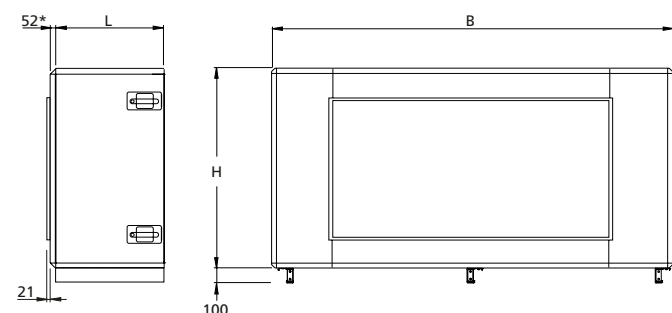
Connection dimensions to duct:

TCFB 020	1000 x 400 mm
TCFB 030	1200 x 500 mm
TCFB 040	1400 x 600 mm
TCFB 060	1600 x 800 mm

Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCFB	B	H	L	kg	End connection panel, if required kg
-020	1400	775,5	720	88	19
-030	1600	905,5	720	103	23
-040	1990	1079,5	720	119	34
-060	2318	1144	720	150	34



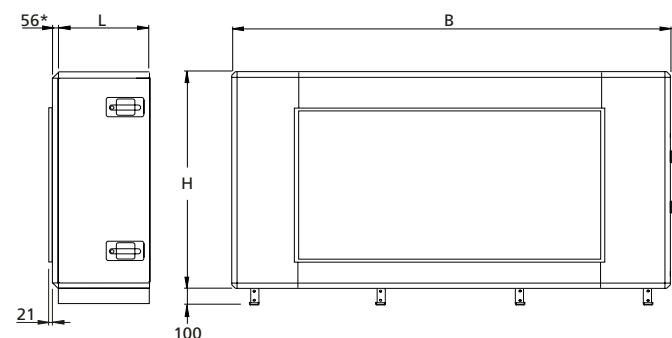
Connection dimensions to duct:

TCFB 080	1800 x 1000 mm
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Duct accessories in the lower duct are always delivered with mounted base beam. Duct accessories in the upper duct are always delivered without base beam.

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

TCFB	B	H	L	kg	End connection panel, if required kg
-080	2637	1320	720	198	40



Connection dimensions to duct:

TCFB 120	2400 x 1200 mm
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* If several duct accessories are arranged in succession, the end connection panel is supplied only on the duct accessory farthest out facing the ductwork.

TCFB	B	H	L	kg	End connection panel, if required kg
-120	3340	1620	720	297	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.

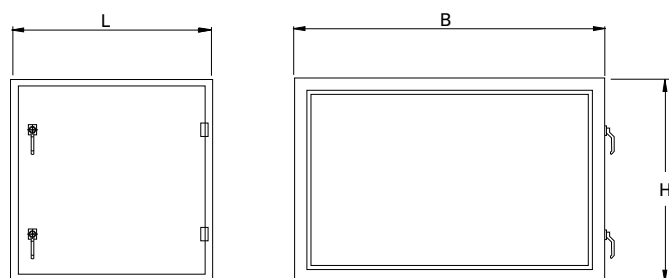
Inspection doors have hinges and handle.

Installation

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



Carbon cartridges



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 004-012 SILVER C units have circular duct connection fitted with type-approved rubber ring seal for jointing to spiral ductwork.

The hoods for the size 014-040 SILVER C units have rectangular duct connection for slip-clamp joint connection.

TBHA Outdoor Air Hood

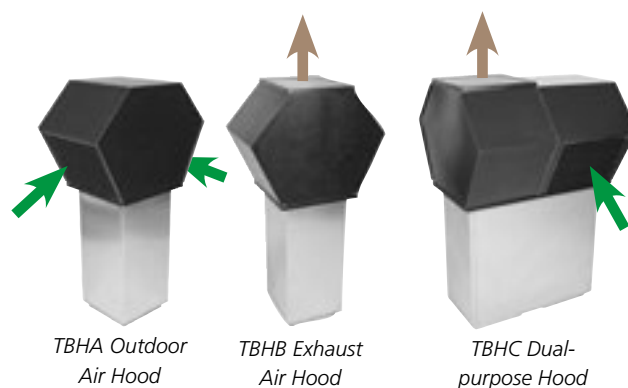
Designed for the intake of outdoor air. The design of the hood makes it difficult for snow and rain drops to enter the hood with the incoming air. The hood is hinged and has air intake louvres on both sides. For SILVER C, sizes 004-040.

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 004-040.

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 004-012 SILVER C units only.

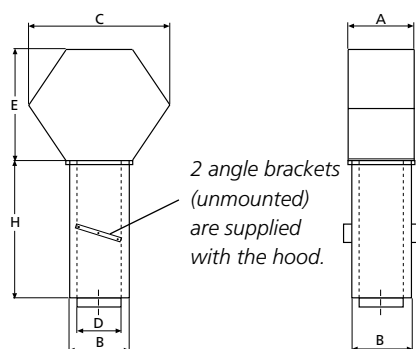


TBHA Outdoor Air Hood

TBHB Exhaust Air Hood

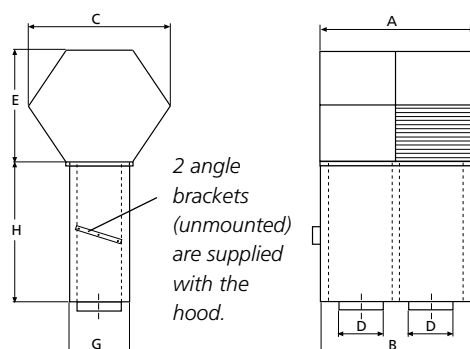
TBHC Dual-purpose Hood

TBHA Outdoor air hood and TBHB Exhaust air hood



For SILVER C	A	B	C	D	E	H	kg
004/005	500	400	850	Ø315	620	800	31
007/008	600	500	950	Ø400	620	800	44
011/012	820	700	1300	Ø500	850	1200	129
014/020	820	700	1300	600	850	1200	129
025 - 040	1120	1000	1700	900	1150	1200	148

TBHC Dual-purpose Hood



For SILVER C	A	B	C	D	E	H	G	kg
004/005	1000	900	850	Ø315	620	800	400	70
007/008	1200	1100	950	Ø400	620	800	500	100
011/012	1600	1500	1300	Ø500	850	1200	700	290

Complements and accessories

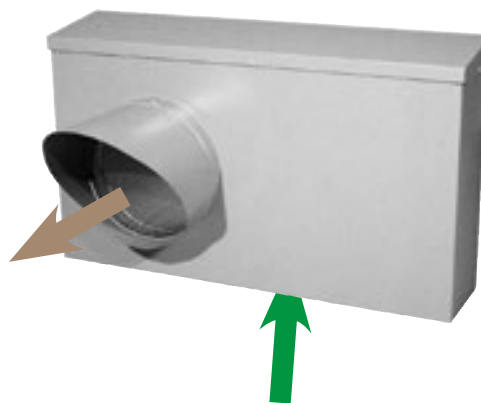
Roof hoods and exterior wall hoods

TBHE Exterior wall hood

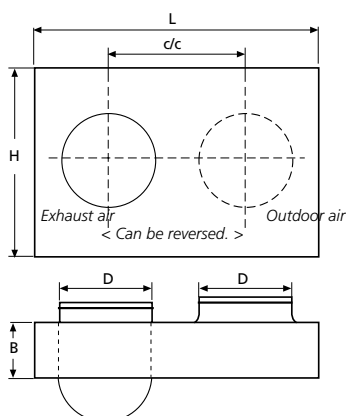
Designed for the admission of outdoor air and the discharge of exhaust air. The exhaust air is horizontally discharged through a circular wire mesh grille at the front of the hood. Outdoor air is admitted through a wire mesh grille at the bottom of the hood.

This design effectively prevents short-circuit flow between the outdoor air/exhaust air. For SILVER C, sizes 004-012.

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
004/005	200	420	Ø315	520	950	11
0007/008	250	500	Ø400	580	1150	15
011/012	300	600	Ø500	750	1350	20

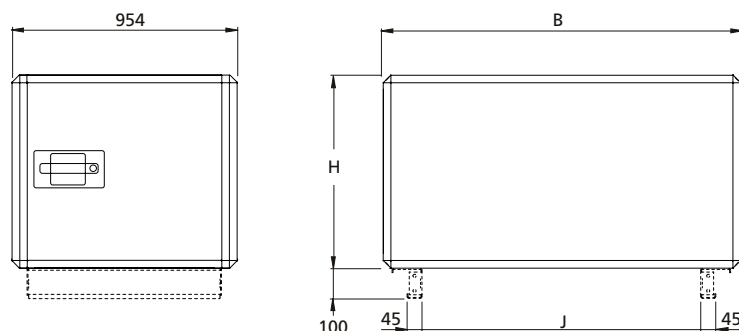
TCWP Component box

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
005	825	460	579	69
012	1199	648	953	102
030	1600	906	1354	143
040	1990	1080	1726	160

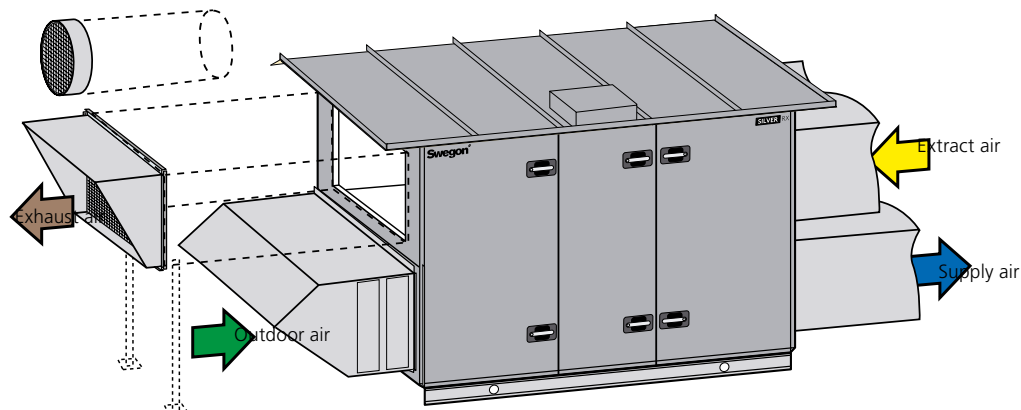
The base beams are optional extras for the size 005 (Standard on the other sizes).

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

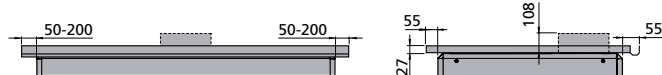
The TCKC air handling units, including optional unit sections and the COOL DX/DXS chiller can be installed outdoors. This presupposes that the roof, air intake section and exhaust air hood accessories are used. SILVER C air handling units cannot be installed outdoors in applications that call for the 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 galvanized sheet steel, painted in Swegon's grey metallic paint (nearest comparable RAL colour: 9007).

Dimensions



TBTF Intake air section with pre-filter (sizes 004-040)

The TBTF intake air section is made of galvanized sheet steel with visible parts painted in Swegon's grey metallic paint (nearest comparable RAL colour: 9007). The intake air section has a fixed grille and has a hole for drainage. The intake air section has rectangular connection dimensions and the air handling unit is supplied with full face end connection panel. The intake air section is equipped with slip-clamp connection (slip clamps are included). It is possible to order a filter and damper installed in the air intake section. The filter is an aluminium-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 050-120)

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 004-012 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 050-120 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 004-012 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 004/005 and 007/008

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.

Set of support legs

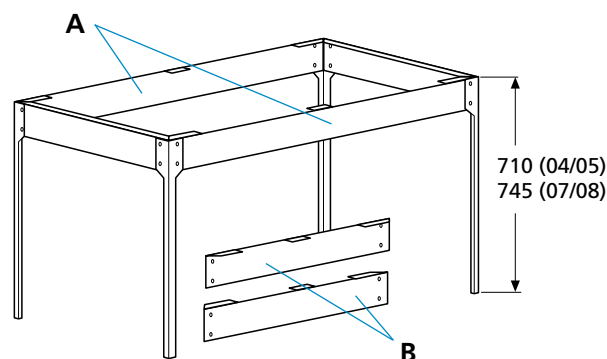
SILVER C PX, counterflow heat exchanger

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 in the base beams under 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.



Stand for the SILVER C RX/SD, sizes 004/005 and 007/008.

Complements and accessories

Mechanical Equipment

SILVER C, all sizes

Water trap

Water trap for the drain branch of counterflow 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 gulley.

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 004/005, 007/008, 011/012, 014/020, 025/030 and 035/040, *at least* 6 support feet are recommended.

For the SILVER C in sizes 050/060 and 070/080, *at least* 12 support feet are recommended.

Rubber disc

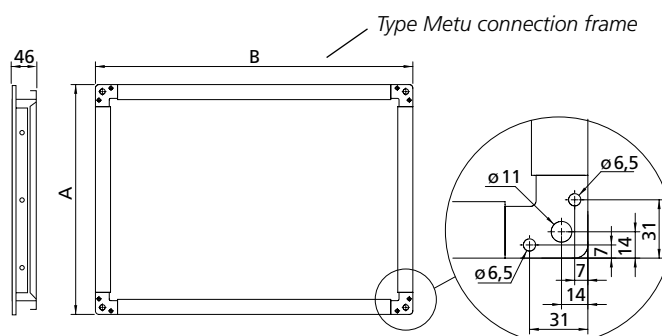
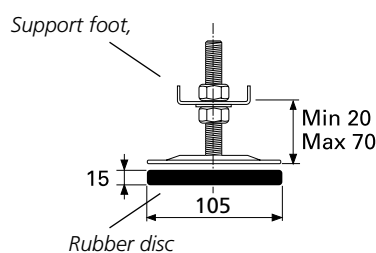
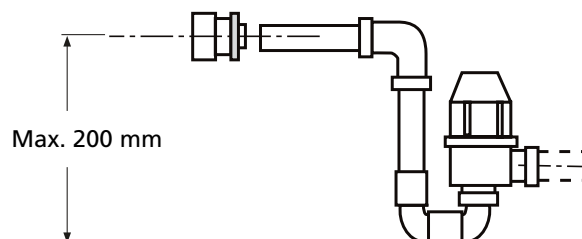
Designed to be glued under the support foot.

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
014/020	458	1058	5
025/030	558	1258	5.5
035/040	658	1458	6,5
050/060	858	1658	8
070/080	1058	1858	9
100/120	1258	2458	12

Complements and accessories

Mechanical equipment

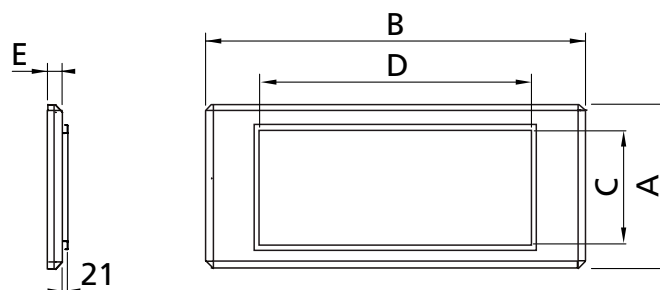
SILVER C, all sizes

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, insulated and pre-painted in Swegon's grey metallic paint (nearest comparable RAL colour: 9007).

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.



For SILVER C/ COOL DX	A	B	C	D	E	kg
004/005	460	825	300	600	52	7
007/008	542,5	995	400	800	52	10
011/012	647,5	1199	400	1000	52	13
014/020	775,5	1400	500	1200	52	19
025/030	905,5	1600	600	1400	52	23
035/040	1079,5	1990	800	1600	52	34
050/060	1144	2318	1000	1800	52	34
070/080	1320	2637	1200	2400	52	40
100/120	1620	3340	1500	3100	56	59

Complements and accessories

TBXZ Pipework package

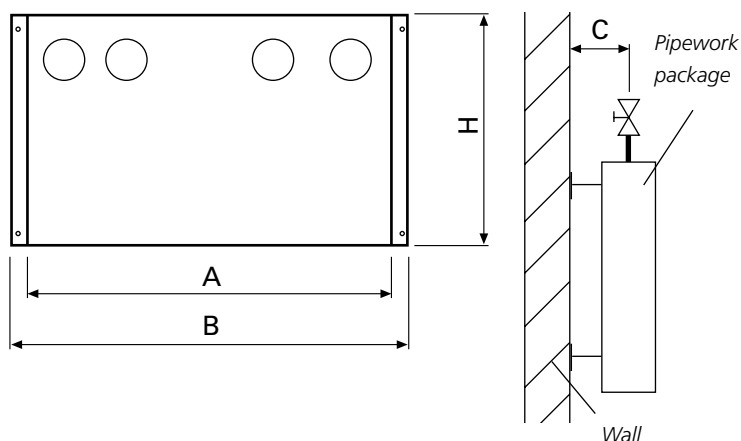
The pipework package is used for the SILVER C SD with coil heat exchanger and the SILVER C CX. The floor stand for the pipework package is available as an accessory. With the floor stand, the height from floor level to the thermometers on the installed pipework package is approx. 1480 mm.

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.



SILVER C/ SILVER C Sizes	TBXZ-42 Size	A	B	H	C
011/012	12	601	669	415	130
014/020	20	601	669	415	130
025/030	30	772	839	530	128
035/040	40	772	839	530	128
050/060	60	772	839	530	128
070/080	80	772	839	530	128
100/120	120	937	1003	640	141

Hand-held micro terminal, fan motor control system

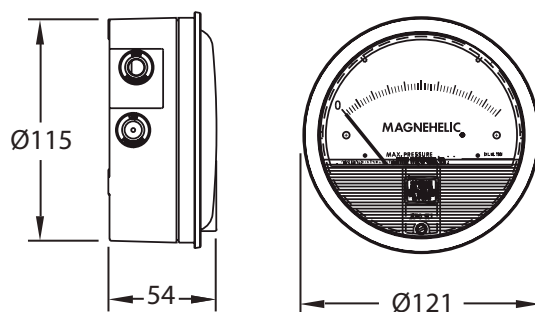
The hand-held micro terminal is used for setting the motor parameters of the SILVER C.



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.

