Technical Description of the BASIC Air Handling System

General

Modular System

The BASIC is designed for comfort ventilation applications. Depending on the type of heat exchanger selected, the BASIC units can be utilised in buildings such as office buildings, schools, day nurseries, public buildings, shops, residential buildings, etc.

BASIC units with plate heat exchanger or coil heat exchanger can also be used for the ventilation of moderately humid buildings; however not where the humidity is continuously high, such as in indoor swimming baths. The air handling unit can be installed indoors and outdoors.

The system makes it possible to customize an installation in terms of airflows and the functional sections included, as well as its controls.

Certification

Swegon has a certificated Quality Management System that conforms to ISO 9001 and an Environmental Management System that conforms to ISO 14001 Standards. The BASIC Air Handling System is also certificated by Eurovent, No. AHU-00-02-020.

Block units

The BASIC air handling system offers the greatest flexibility and freedom of choice as a block unit. This is, in practice, often the case when heat recovery by means of a rotary heat exchanger or plate heat exchanger is selected.

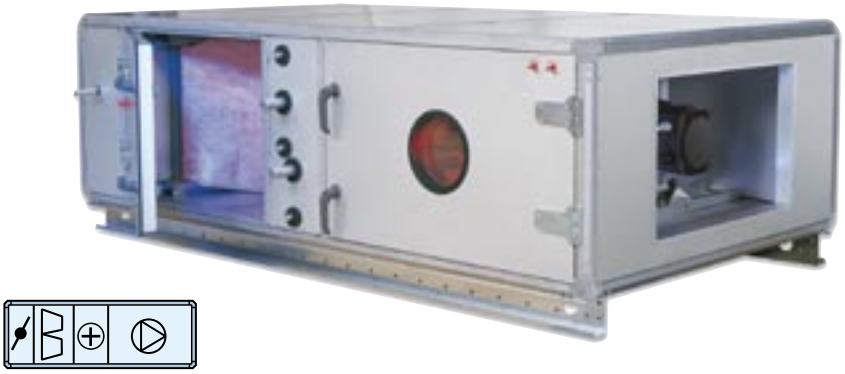
The principle involves incorporating the functional sections desired into blocks. The various blocks can then be jointed together at the building site to form a complete supply and extract air handling unit with heat recovery.

It is also possible to obtain delivery in the form of blocks that have been jointed together and mounted on common base beams or welded base frame.

Supply air or extract air handling units

The BASIC air handling system can also consist of supply air or extract air handling units.

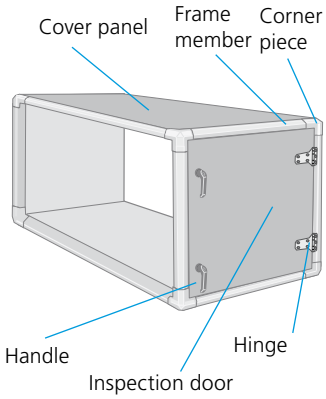
This is, in practice, often the case when heat recovery is not desirable or if coil heat exchangers are selected and separate supply air and extract air handling units are desired.



Technical Description of the Air Handling Unit

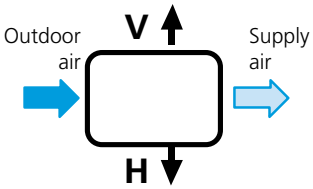
Functional Section	Description

Designations



Inspection side

The choice of inspection side is defined on the basis of the airflow direction of the supply air.



Viewed from above.
V = Left-hand
H = Right-hand

Block joints internally secured, 004-055.

Block joints internally secured, 004-055.

BCX Casing

The BCX(A,B) casing is composed of a self-supporting framework, consisting of profiled frame members, cover panels and inspection doors made of aluminium-zinc plated sheet steel (the size 080-120 casings have aluminium frame members). The profiled frame members have been form-rolled. The corner pieces are made of polyamide.

The cover panels and inspection doors are composed according to the sandwich principle with double sheet-steel skin and insulation sandwiched in between. The inspection doors have sturdy hinges and lockable handles. The inspection doors for access to the fans have a key lock.

The heat transfer coefficient of the unit casing conforms to Class T3 in accordance with EN 1886 Standard.

Sizes 004 – 055: The sheet metal thickness of the cover panels and inspection doors is 0.7 mm; that of the frame members is 1 mm.

Sizes 080 – 120: The sheet metal thickness of the cover panels and inspection doors is 1 mm; that of the frame members is 2 mm.

The Jointing of Blocks

An appropriate number of functional sections are installed in one and the same casing in appropriate blocks The various blocks can then be jointed together at the building site to become a complete air handling unit. The blocks are jointed together by means of bolts.

Some functional sections must always make up a block of their own. This will be specified when you use the PMWIN/ProUnit air handling selection program.

Design Options

Inspection side

– Right-hand inspection side

– Left-hand inspection side

Defined on the basis of the airflow direction of the supply air.

Environmental Class

– Environmental Class C4 (standard).

– Alternative environmental classes must be agreed upon.

Insulation

– 50 mm thick fire-resistant thermal and condensation insulation (standard)

– Or insulation equivalent to Fire-resistance Class EI30.

Tightness with respect to leakage to the atmosphere

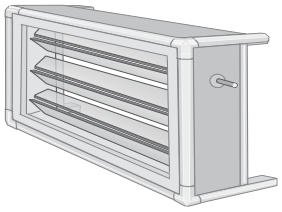
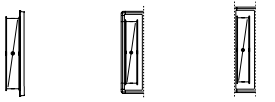
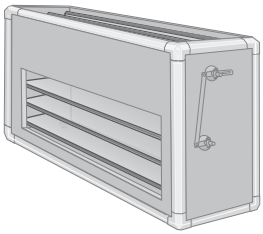
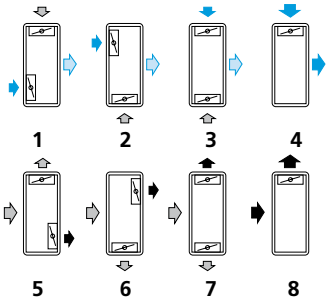
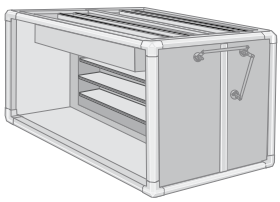
– Class A in accordance with EN 1886 (standard).

– Or Class B as a special variant.

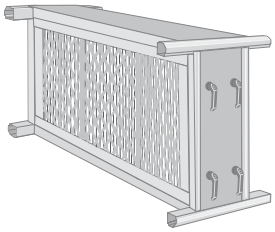
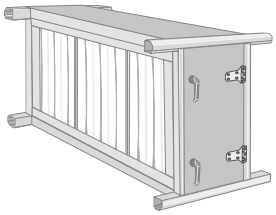
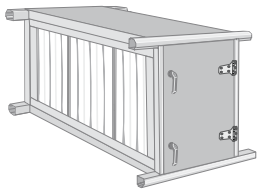
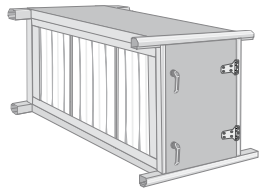
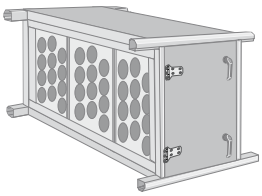
Optional Extras

Finishing coat (paint), inspection windows, interior lighting, end connection frame, connection frame on end connection, connection frame on casing, base beams, version for outdoor installation, support foot, rubber disc for support foot, extension for support foot, flexible connection (large) and set of clamping strips (large).

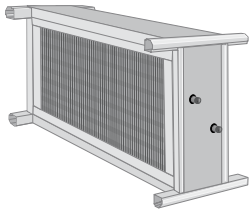
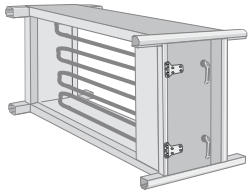
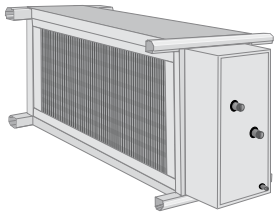
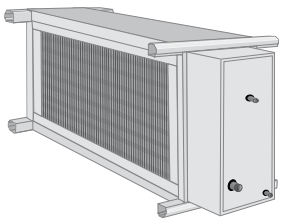
Technical Description of the Functional Sections

Functional Section	Description
 **Alternatives** Externally on the end wall panel / In the casing / Between functional sections 	**BCSA Damper** The size 004-055 BCSA units have counter-rotating, torsionally rigid damper blades made of aluminium-zinc plated, double-skin sheet steel, Environmental Class C4. The size 080-120 BCSA units have counter-rotating, torsionally rigid damper blades made of extruded aluminium, Environmental Class C4. The damper blades are journalled in nylon bushings and are uninsulated. The damper conforms to the provisions of Tightness Class 3 to EN 1751. Sizes 035 – 120 have two dampers in the opening. Connection of the damper actuators in the size 004 – 027 units is carried out on the right-hand or left-hand side; and in the size 035 – 120 units between the dampers in the centre of the mixing section. **Design Options** Externally mounted on the end wall panel (sizes 004 – 027), mounted in the casing and mounted in the casing between the functional sections. **Optional Extra** Insulated damper blade, supplied in unmounted condition for sizes 004 – 027.
 **Alternatives**  1 2 3 4 5 6 7 8	**BCBA Mixing and Intake Air Section** **Design** The BCBA has ***two dampers in one level*** for mixing recirculated air and outdoor air. The size 004-055 BCBA units have counter-rotating, torsionally rigid damper blades made of aluminium-zinc plated, double-skin sheet steel, Environmental Class C4. The size 080-120 BCBA units have counter-rotating, torsionally rigid damper blades made of extruded aluminium, Environmental Class C4. The damper blades are journalled in nylon bushings and are uninsulated. The damper assemblies are individually adjustable for obtaining the appropriate mixing ratio. This provides excellent air mixture with linear characteristics. The damper conforms to the provisions of Tightness Class 3 to EN 1751. Sizes 035 – 120 have two dampers per opening. Connection of the damper actuators in the size 004 – 027 units is carried out on the right-hand or left-hand side; and in the size 035 – 120 units between the dampers in the centre of the mixing section. **Design Options** Several variants for various air directions and for installation on both the inlet and the outlet. **Optional Extras** Insulated damper blades.
	**BCBB Mixing Section** The BCBB has ***three dampers in one level*** for mixing outdoor air, recirculated air and extract air. Its design is otherwise like that of the BCBA. **Optional Extras** Insulated damper blades.
	**BCBC Mixing Section** **Sizes 004 – 055** The BCBC has ***three dampers in two levels*** for mixing outdoor air, recirculated air and extract air. Its design is otherwise like that of the BCBA. **Optional Extras** Insulated damper blades.

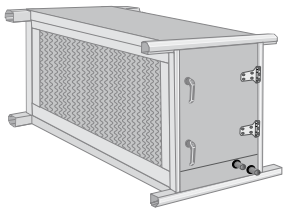
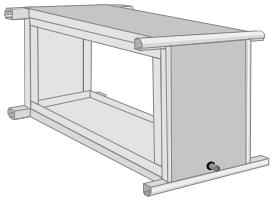
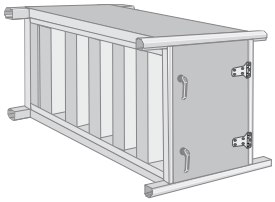
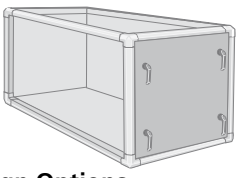
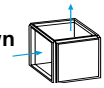
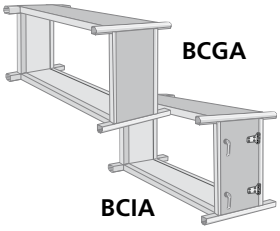
Technical Description of the Functional Sections

Functional Section	Description
	**BCFA Filter section** **Design** The filter surface is divided into a number of filter cassettes (see the Dimensions Section). The cassettes are arranged and slide in guide rails and are easy to withdraw. Measurement tappings are provided on the casing of the filter section for connection to a U-tube manometer. **Optional Extras** Extra tight bottom, spare filters, U-tube manometer, differential pressure manometer. **Filters** Compact filters of Filter Class G4, glass fibre filter material. The filter cassette has a cardboard casing with substantial moisture resistance Also available with woven aluminium filter or without filter media.
	**BCFB Filter Section** **Design and Design Options** As specified for the BCFA. In addition, the filter holder has sealing strips and an expansion-type locking system for effective tightness. **Filters** Short bag filters of Filter Class G3, glass fibre filter material. Cassette frame made of galvanized sheet steel. Is also available without filter media.
	**BCFC Filter Section** **Design and Design Options** As specified for the BCFB. **Filters** Long bag filters of Filter Class F5, glass fibre filter material. Cassette frame made of galvanized sheet steel. Also available to Filter Class F7, F8 and without filter media.
	**BCFD Filter section** **Design and Design Options** As specified for the BCFB. In addition, the BCFD also has a prefilter. **Filters** Fine filters according to the filters for the BCFA. Fine filters according to the filters for the BCFC.
  *Carbon cartridges*	**BCFK Carbon Filter Section** **Sizes 004 – 027** **Design and Design Options** The BCFK has activated carbon filter medium designed for improving the air quality indoors by adsorbing gaseous, harmful or foul-smelling substances from the air Keep in mind that 100% elimination of odours cannot be guaranteed, due to variations in compounds and mixtures in various chemical substances. The carbon filter cartridges are disposable. They are seated in mounting frames and are locked in their bayonet socket by a simple grip of the hand. Optional extras according to the BCFA. **Filters** Cartridges with filter mat made of polyester, that encloses the activated carbon. Is also available without filter media.

Technical Description of the Functional Sections

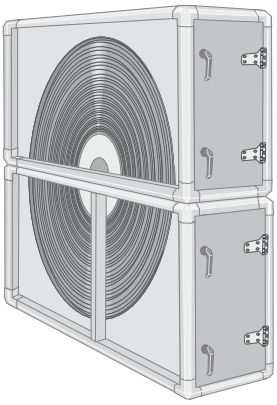
Functional Section	Description
	**BCLA Air Heater, for hot water** The BCLA consists of a system of tubes and profiled fins. The pipe connections have male threads. All the coils are equipped with individual plugs for venting and drainage. A separate connection is provided for an anti-frost monitor sensor. The BCLA is designed for a max. permissible working pressure of 1 Mpa. **Design Options** Available in several capacity variants. Use our calculation software for selection. **Optional Extra** Automatic air purging valve
	**BCLD Electric Air Heater** **Sizes 004 – 055** The BCLD is of flat tube design with stainless steel heating elements. The heater has degree of protection IP 22 and conforms to the provisions of Standard EMKO-TUB (321-SEC)N 113/81. The heating output of the air heater is controlled by means of a stepping switch or steplessly by means of a thyristor. The min. permissible air velocity through the air heater is 1.0 m/s. The BCLD has double thermal overload protections. **Design Options** Several different variants with regard to voltage, output and division into switching steps. Use our calculation software for selection.
	**BCKA Air Cooler, for chilled water** The BCKA consists of a system of tubes and profiled fins. The pipe connections of the size 004-055 units have male threads; those of the size 080-120 units are flanged. The BCKA is equipped with individual plugs for venting and drainage. The BCKA has a sloping, stainless drip tray for collecting condensate with drainage to a connection on the inspection side. The BCKA is designed for a max. permissible working pressure of 1 MPa. **Design Options** Available in several capacity variants. Use our calculation software for selection. **Optional Extras** Automatic air purging valve Droplet eliminator (for preventing water entrainment at air velocities exceeding 2.8 m/s). Droplet eliminator for replacement. Water trap for the drain connection.
	**BCKC Air Cooler, for evaporative refrigerant** The BCKC consists of a system of tubes and profiled fins. The pipe connections are designed for brazed joints. The BCKC has a sloping, stainless drip tray for collecting condensate with drainage to a connection on the inspection side. The BCKC is designed for a max. permissible working pressure of 1 MPa. **Design Options** Available in several capacity variants. Use our calculation software for selection. **Optional Extras** Droplet eliminator (for preventing water entrainment at air velocities exceeding 2.8 m/s). Droplet eliminator for replacement. Water trap for the drain connection.

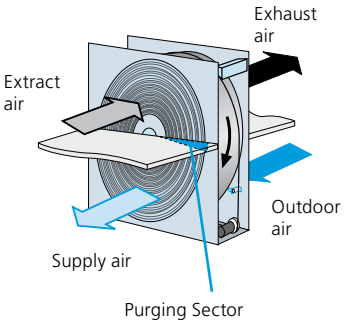
Technical Description of the Functional Sections

Functional Section	Description
	**BCHA Humidifier** The BCHA has an evaporative humidifier designed for once-through or circulating water. The water evaporates from an unheated wet contact fill consisting of a inorganically impregnated woven glass fibre material of cross-block design. The BCHA has a stainless water tray with drainage to a connection on the inspection side. The spray system for circulated water consists of water spray tubes, pump, drain valve, float valve and the internal piping. **Design Options** Several variants are available for selecting the humidification rate, once-through or circulating water and whether to fit a droplet eliminator. Use our calculation software for selection. **Optional Extras** Droplet eliminator (also for replacement), water trap, humidifier fills for replacement, solenoid valve.
	**BCHB Empty Section** **Sizes 004 – 055** The BCHB is an empty section designed for the installation of a steam pipe. The steam pipe is not included. The BCHB has a stainless water tray with drainage to a connection on the inspection side. **Optional Extras** Water trap
	**BCDA Silencer** The BCDA silencer is an absorptive sound attenuator composed of baffle elements between which the air passes. The baffle elements are fabricated of incombustible absorptive material with a surface treated outer layer that prevents mineral wool fibre migration to the air. The baffle elements are withdrawable. **Design Options** The BCDA can be selected in three lengths (short, medium, long). The longer the length; the better the sound attenuation.
 **Design Options** **Up/ down**  **Side-ways** 	**BCCA Angle Section** **Sizes 004 – 020** The BCCA is an empty modular section designed to enable a number of functional sections to be assembled into an angle unit, 90° to the side or 90° upwards or downwards. **Design Options** Air deflection upwards/downwards or sideways.
 **BCGA** **BCIA**	**BCIA Inspection Section/BCGA Spacer Section** The BCIA is an empty section ***with*** inspection door; the BCGA is an empty section. ***Without*** Inspection door. The BCIA/BCGA is used if provision for inspection or distance must be arranged between functional sections. **Design Options** Various installation lengths.

Technical Description of the Heat Exchanger

Functional Section	Description





BCVA Rotary Heat Exchanger – Reconomic

The BCVA can be used in most comfort ventilation applications such as office buildings, schools, public buildings and industrial buildings.

The BCVA is not suitable for use in applications that require completely separate extract air and supply air passages, such as in the chemical industry and laboratories. The BCVA is not suitable for use in damp environments either.

Design

The Reconomic BCVA is fabricated according to a patented jointing method, without glue or any system of spokes. This jointing method gives the rotor long durability and dimensional stability; at the same time as it makes the air flowing through the rotor passages become turbulent.

The turbulent airflow enables a temperature efficiency of as high as 85% when the supply air and extract air flows are the same. The heat exchanger can also be utilized for cooling energy recovery.

The max permissible temperature of the ventilation air is 40°C.

Design Options

Supply air path

– In the lower part
– In the upper part

Always specify the supply air path as lower or upper. This is important so that the factory-fitted purging sector will be fitted at the right spot.

Rotor surface finish:

– Non-hygroscopic rotor Used for comfort ventilation.
– Hygroscopic rotor. Used to meet high demands on moisture recovery.
– Corrosion-protected rotor. Used in environments with aggressive atmosphere.

Temperature efficiency

– High efficiency.
– High efficiency.

If high efficiency is not given priority, heat exchangers with normal efficiency can be selected. This exchanger has a 200 mm wide rotor. The high-efficiency rotor has a width of 250 mm.

Size

– Standard
– Large.

A large heat exchanger can also be selected for the size 004 – 035 units, which means the nearest larger size of heat exchanger. For example: BCVA size 006 can be selected for a size 004 air handling unit.

Speed Control

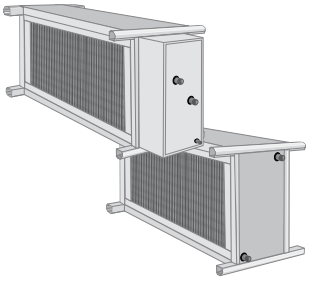
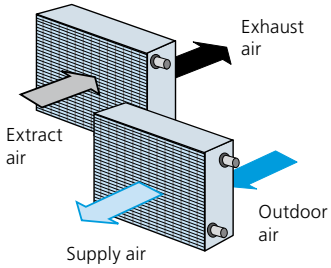
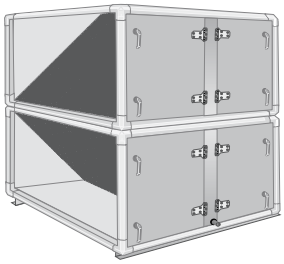
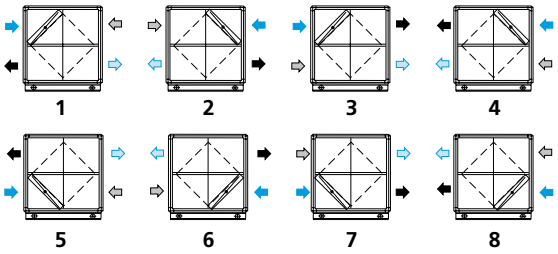
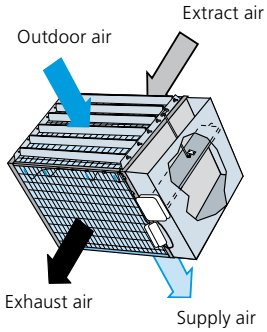
– Speed Control.
– Constant speed.

The rotor speed controls the efficiency. If the rotor speed is constant, the supply air temperature cannot be kept constant. The heat exchanger should be equipped with speed control in order to prevent undesirable temperature rises.

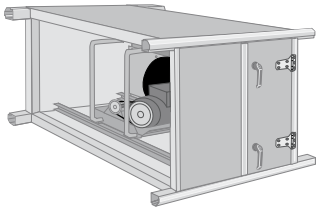
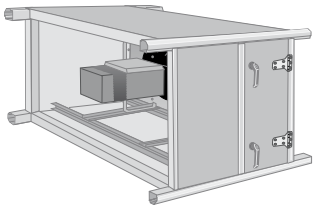
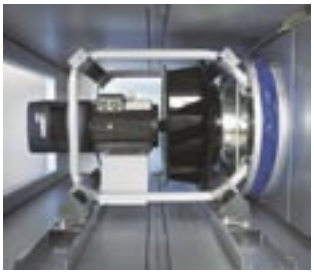
The speed controller steplessly varies the rotor speed from 0 – 12 r/min.

The control cubicle for the size 004-027 units is mounted on the drive motor; for the size 035-055 units it is supplied in unmounted condition.

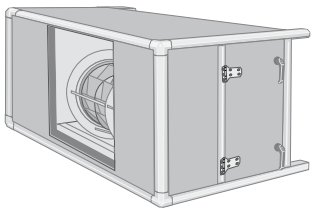
Technical Description of the Heat Exchanger

Functional Section	Description
	**BCVD Coil heat exchanger** The BCVD consists of two coils. The coils consist of a system of tubes and profiled fins. The pipe connections have male threads. The coils are equipped with the necessary plugs for venting and drainage and a drain connection. The one coil is located in the extract air and absorbs the heat content of the extract air. The other coil is located in the supply air and emits heat to the supply air. Water mixed with anti-freeze agent is used as the energy carrier. The temperature efficiency is approx. 50% when the supply and exhaust air flows are the same. **Range of Application** Coil heat exchangers are appropriate for use in separate supply air and exhaust air handling units and for larger sizes of air handling units in which completely separate air passages are required **Design Options** Available in several capacity variants. Use our calculation software for selection. **Optional Extras** Droplet eliminator (also for replacement), pipework package, automatic purging valve, water trap. **Pipework Package** The pipework package can be used for interconnecting extract air and supply air sections of the BCVD. The pipework package consists of a circulation pump, control valve, expansion vessel, safety valve, manometer, venting valve, filling valve, throttling valve, pipe socket for an insertion sensor and two or more thermometers.
	
	**BCVF Heat Exchanger** **Sizes 004 – 020** The BCVF is a recuperative heat exchanger of cross-flow type. The BCVF consists of sheet metal channels arranged at right angles to one another The supply air channels are completely separated from the extract air channels and heat recovery takes place as the "walls" of the channels transfer heat from the extract air to the supply air. The BCVF is equipped with a drain connection. The temperature efficiency is as high as 60 % when the supply and extract air flows are the same. **Range of Application** The BCVF is appropriate for use in applications that require completely separate supply air and extract air flows. **Anti-frost protection** The anti-frost protection consists of a measuring sensor, control unit and damper actuator for the bypass function. **Design Options** Several different airflow directions can be selected. See below! **Optional Extras** By-pass damper, anti-frost protection, water trap, heating cable for the drainage pipework. **Airflow Direction Alternatives**  Outdoor air Supply air Extract air Exhaust air
	

Technical Description of the Fan

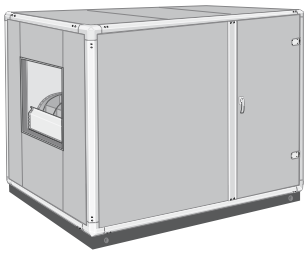
Functional Section	Description
BCRWR BASIC Wing fan, belt-driven   **BCRWD BASIC Wing fan, direct-driven**   **BCRWD, Duo Fan** 	**BCRWR BASIC Wing fan, belt-driven and BCRWD BASIC Wing fan, direct-driven** The BASIC Wing is a fan of axi-centrifugal design with focus on excellent power efficiency, low discharge velocity, uniform airflow, low noise generation and short installation length. Sharp duct bends and functional sections can installed directly at the fan outlet without additional pressure losses. The max permissible temperature of the ventilation air is 40°C. The fans have as standard built-in airflow measurement with measurement inaccuracy of ± 5%. The BASIC Wing is patented. ***Alternatives for both the BCRWR and BCRWD*** **Discharge direction** – Forward. Upward. Both forward and upward. **Flexible Connection** – Woven plastic (standard). Aluminium-coated glass fibre. ***Alternatives for the BCRWR, belt-driven*** **Available in sizes 004 – 027** Fans as well as motors have bushing type belt pulleys that enable quick belt replacement for adjusting the speed, for instance. The speed of the fans can also be controlled by separate frequency inverters. **Motors** – Single-speed and two-speed motors with various outputs. – Double motors. – Frequency inverters. **Belt drive** – V-belt (standard). Poly-V. ***Alternatives for the BCRWR, direct-driven*** **Available in sizes 004 – 055** **Motors** – Motors with various outputs. – With built-in frequency inverters. – Without built-in frequency inverter. Designed for speed control from a external frequency inverter. **Duo and Triple Fans** – Duo, sizes 027 and 035, triple size 055. Several smaller fans in one and the same fan casing generate higher capacity without taking up more space. **Controlling Fan Motors by Means of Built-in Frequency Inverters.** – Fan speed selector switch Unit for fan motors with built-in frequency inverters. has two potentiometers for adjusting the fan speed manually. Can be used for two-speed control of one fan or for single-speed control of two fans. No separate power supply to the unit is required. Has mounting brackets for installation on 35 mm DIN rail. Designed to be installed in a cubicle or the like. Degree of protection IP20. – Fan control equipment cubicle. Fan motor control equipment cubicle with built-in frequency inverter. Designed for controlling the fan motor. Has a switch for controlling two preset fan speeds and stop as well as LEDs for in-operation and alarm indication. No separate power supply to the equipment cubicle is required. Made of painted sheet steel. Designed for wall-mounting. Degree of protection IP54.

Technical Description of the Fan

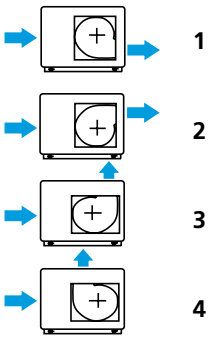
Functional Section	Description
 	**BCRT BASIC Twinner Fan** **Sizes 020 – 055** The BASIC Twinner BCRT is a belt-driven, double-inlet centrifugal fan with backward-curved blades. The pressure chamber is permanently mounted in the casing of the air handling unit and partially consists of the casing. Fans as well as motors have bushing type belt pulleys that enable quick belt replacement for adjusting the speed, for instance. The speed of the fans can also be controlled by separate frequency inverters. The max permissible temperature of the ventilation air is 40°C. The fans have as standard built-in airflow measurement with measurement inaccuracy of ± 5%. **Design Options** **Fan size** – Standard – Small. Alternative for sizes 035 and 055. Means that the unit size 035 has fan insert size 027 and that unit size 055 has fan insert size 035. **Motors** – Single-speed and two-speed motors with various outputs. – Double motors. – Frequency inverters. **Belt drive** – V-belt (standard). Poly-V. **Discharge direction** – Forward. Upward. Both forward and upward. **Flexible Connection** – Woven plastic (standard). Aluminium-coated glass fibre. **Vibration Isolation** – Rubber anti-vibration mountings Standard sizes 020 – 055. - Steel spring anti-vibration mountings. Standard for size 055. Optional extra for sizes 020-055. **Functional Sections Downstream of the Fan** If a functional section, such as a silencer or coil, must be positioned downstream of the fan, a BCGA spacer section or BCIA inspection section must be installed between the fan and the relevant functional section. The purpose is to obtain good air distribution and uniform air velocity in the downstream section. Minimum length for spacer section or inspection section: Sizes 020 – 353 mm Sizes 027 – 353 mm Sizes 035 – 453 mm Sizes 055 – 553 mm

Technical Description of the Fan

Functional Section	Description



Air discharge direction variants



BCRB Fan

Sizes 080 – 120

The BCRB fan is a belt-driven, double-inlet centrifugal fan with flat, backward-curved blades for pressures up to 2,500 Pa.

The fan has a conventional design and is designed for use in larger ventilation systems that normally provide sufficient space for a correct system of ducts. The fan achieves an efficiency of as high as 83%.

The fan base is fabricated of a stable system of beams, effectively vibration-isolated from the casing. The anti-vibration mountings consist of spiral springs made of steel.

Fans as well as motors have bushing type belt pulleys that enable quick belt replacement for adjusting the speed, for instance. The speed of the fans can also be controlled by separate frequency inverters.

The max permissible temperature of the ventilation air is 40°C. The fan has as standard built-in airflow measurement facilities.

Design Options

Motors

– Single-speed and two-speed motors with various outputs.
– Double motors.
– Frequency inverters.

Belt drive

– V-belt (standard). Poly-V.

Discharge direction

– Four variants are available. See the left-hand column!

Flexible Connection

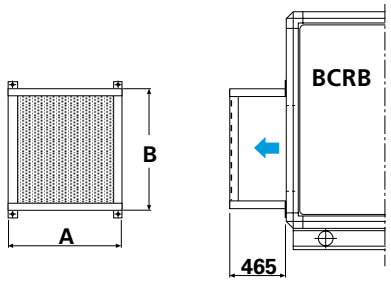
– Woven plastic.

Functional Sections Downstream of the Fan

If a functional section, such as a silencer or coil, must be positioned downstream of the fan, an air distributor (see below) must be fitted to the fan outlet. The purpose is to obtain good air distribution and uniform air velocity in the downstream section.

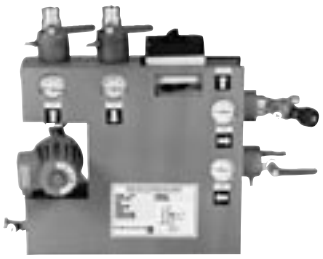
The air distributor should preferably be installed in a BCGA spacer section having a minimum installation length of 780 mm.

Air Diffuser Accessories

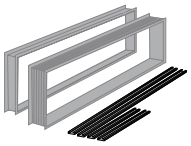
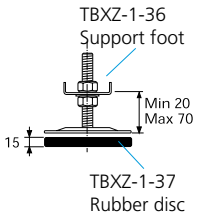
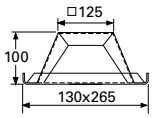
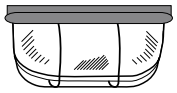
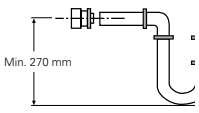
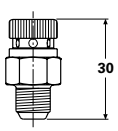
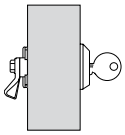


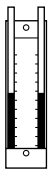
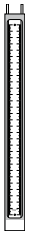
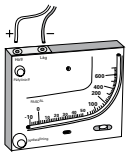
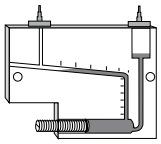
BC	A	B
080	1450	1459
100	1800	1800
120	2000	2000

Technical Description, Optional – Pipework Packages, Motors

Functional Section	Description
	**SEBM and SEBG Pipework Package** The SEBM pipework package is designed for use in systems with main pump and is matched to the ELQA control system. It is available in two sizes with 25 and 32 mm connections respectively. The SEBM is available in several variants when it comes to design of its primary circuit, control valve and pump. The SEBG pipework package is designed for use in systems with main pump in which the control valve puts a load on the main pump. It is available in nine sizes with 25 to 150 mm connections respectively. The SEBG is available in several variants when it comes to design of its primary circuit, control valve and pump.
	**Fan motor** Swegon offers a large selection of fan motors that make it possible to optimize the installation. The motors have, if not otherwise agreed, degree of protection IP54, i.e. of dust-proof, spray-proof design according to IEC publications. 34-5. The motors perform to Class EFF1, i.e. their performance measures up to the highest efficiency rating classified by the EU and CEMEP European Committee of Manufacturers of Electrical Machines and Power Electronics. All terminal boxes have dust-proof, hose-proof enclosures to degree of protection IP41, i.e. jacket cooling by means of an external fan according to IEC publ. 34-6 and SEN 26 01 06.

Technical Description, Optional – Mechanical Equipment

Part	Description
	**Connection side:** **Flexible Connection** **Slip-clamp jointing flanges** See the section: Dimensions, Connections and Connection Components.
	**TBXZ-1-36 Support foot** **TBXZ-1-37** **Rubber disc** The max. permissible load per foot is 400 kg. Supplied without rubber disc. The TBXY-1-37 can be used together with a support foot. Supplied in unmounted condition.
	**TBXZ-1-39 Extension for support foot** Used for obtaining correct height of units with water trap above the floor.
	**Inspection window** Double-glazed with 200 mm dia. Plexiglas. Cannot be used with an EI30-rated casing.
	**Interior light fitting** Degree of protection: IP44. Width: 110, depth: 115, length: 195 mm.
	**BCXZ-1-71-a Water trap with set of connection fittings** Supplied with a set of appropriate connection fittings for the relevant unit section The pipe from the water trap must be run without reduction in pipe dimension to a floor gulley.
	**BCXZ-1-68-a Automatic air purging valve** Designed for connection to the venting nipple on the coil.
	**Lock with key (set)** For lockable doors.

Part	Description
	**U-tube manometer, TBXZ-1-64** Measures pressure drop across the filter. Adjustable scale, length: 100 mm. Measurement range: up to 1000 Pa Connection tubing is included.
	**U-tube manometer, fan , TBXZ-1-63** Used for measuring the pressure in BCRWD, BCRWR and BCRT fans. The measurement curves for airflow measurement are affixed on the fan section. Measurement range: up to 3000 Pa Connection tubing is included.
	**FLMB-1-0 Manometer** Used for measuring differential pressure in conjunction with measuring the airflow in BCRB fans. Measurement range: up to 700 Pa
	**TBXZ-1-65 Differential pressure manometer** Used for extra accurate pressure drop readings. Measurement range: up to 300 Pa
	**TBDR/TBDV Unit Silencer** The external surface of the casing is made of galvanized sheet steel. Inside, the silencer has baffle elements built up on a frame made of galvanized sheet steel. The silencer is available in two variants: straight (TBDR) and right angle (TBDV). The absorption material used is of type Cleanolon, consisting of mineral wool with optimal sound absorbing capacity, covered with special glass fibre fabric. Cleanolon has been specially developed for the internal insulation of silencers and is type approved with regard to cleanability, emissions and preventing fibre migration. The material conforms to the provisions of Surface Layer Class 1 (the highest class). **Design Options** The BCDA can be selected in two lengths (650 or 1250 mm). The longer the length; the better the sound attenuation. The TBDV can be selected for horizontal or vertical airflow.