

CasaFan

CEILING FANS SUMMER FANS

DSV44




 Many models now available with Smart Life control



TABLE OF CONTENTS

INTRO

Quality	4
AC or DC/EC	5
Installation	6
Comfort/Dimensioning	8
History of fans	12
Airflows, Noises, Dimensions	122

The following symbols depict specific features of your ceiling fan



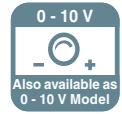
Operation with remote control + No. of speed levels



Operation with pull chain + No. of speed levels



Operation with wall control + No. of speed levels



For projects Optional with 0-10 V interface available



Forward / reverse switchable



All Functions can be operated by Smart Life App



Recommended for room size (m²)



Permanently installed LED + Wattage



Suitable lamp + Lamp Info + Wattage



Energy saving, commutated motor with latest DC/EC technology

CEILING FANS



ECO PLANO II	14	CLASSIC FLAT 132-III	86
ECO PLANO WOOD	16	BLACK MAGIC	87
ECO REGENTO	18	CENTURION	88
ECO PALLAS 116	20	TRISTAR-Z	89
ECO PALLAS 142	22	LIBECCIO 120/142	90
ECO CONCEPT	24	TITANIUM	92
ECO DYNAMIX II	26	NIGHT FLIGHT	94
ECO GENUINO 122	28	MERCURY	95
ECO GENUINO 152	30	MIRAGE	96
ECO GENUINO 180	34	ROTARY	98
ECO GENUINO-L	36	ALU	99
ECO INTERIOR	38	ELICA	100
AERODYNAMIX ECO	40	HELICO PADDEL	102
ECO AIRSCREW 152	42	MACAU	103
AEROPLAN ECO	46	FALCETTO	104
ECO ELEMENTS 103	49	LIBELLE	105
ECO ELEMENTS 132	50	OUTDOOR CLASSIC	106
ECO ELEMENTS 180	52	TRISTAR II	108
CARIBBEAN DREAM ECO II	53	THE SENSU PUNKAH	110
ECO TALOS	54	TDA-SYSTEM	180
ECO VOLARE 116	56		
ECO VOLARE 142	58		
ECO REVOLUTION	60		
ECO AVIATOS	62		
ECO GAMMA	64		
ECO NEO III 92	66		
ECO NEO III 103	68		
ECO NEO III 132	70		
ECO NEO III 152	72		
ECO NEO III 180	74		
ECO FIORE	76		
ECO HELIX	77		
BIG SMOOTH ECO	78		
CLASSIC ROYAL 75	80		
CLASSIC ROYAL 103	81		
CLASSIC ROYAL 132	82		
CLASSIC ROYAL 180	83		
CLASSIC FLAT 75-III	84		
CLASSIC FLAT 103-III	85		

ACCESSORIES

BLADES CASAFAN	128
REMOTE CONTROLS	132
WALL CONTROLS & TRANSFORMERS	134
LIGHT KITS CASAFAN	136
DOWNRODS CASAFAN	142
DOWNRODS VORTICE	144
MISCELLANEOUS	145



SUMMER FANS

TRADITION TV 30 II DESK	148
AIROS CIRCUBOX FLOOR / DESK	149
RETROJET DESK	150
VORT HYDRO CUBE DESK	152
NORDIK MIO DESK	153
GORDON DESK	154
GREYHOUND TV SL DESKH	155
AIROS PIN II TOWER	156
AIROS BIG PIN II TOWER	157
ARIANTE TOWER SUPER TOWER	158
ARIANTE 30 FLOOR	159
AIROS ECO SILENT STAND	160
SPEED2STAND	162
GREYHOUND SV SL STAND	163
GORDON C STAND	164
SATIN METAL BREEZE II STAND	165
RETRO-AIRSTYLE STAND	166
AIROS ECO SV35 STAND	167
GORDON W WAND	168
GREYHOUND WV WALL	169
DESK2PROTECT SL DESK	170
SPEED-G FLOOR	171
WM2 ECO WIND MACHINE	172
FLOOR2PROTECT SL FLOOR	174
SPEED2PROTECT SL WIND MACHINE	175
WM3 ECO IP44 SL WIND MACHINE	176
DF600/800 ECO IP54 SL DRUM	178

CASAFAN CEILING FANS - INDEX

LARGE	SMALL	MEDIUM	INCLUDING	OPTIONAL		INCLUDING	OPTIONAL	Determine the ceiling fan that suits your individual project	Page
				OPTIONAL	OPTIONAL				
Room size			Control				Light		
*			☺		⏪ F			BIG SMOOTH ECO	78
*	*	*	☺		⏪ F	💡		ECO AVIATOS	62
*	*	*	☺		⏪ F			ECO GENUINO	28 - 35
*	*	*	☺	🏠	⏪ F	💡		ECO NEO III	66 - 75
*	*	*	☺		⏪ F	💡		ECO ELEMENTS	49 - 52
*	*	*	☺	📶	⏪ K	💡		CLASSIC ROYAL	80 - 83
	*	*	☺		⏪ F	💡		AERODYNAMIX ECO	40
	*	*	☺		⏪ F	💡		ECO GAMMA	64
	*	*	☺	📶	⏪ K			TRISTAR II	108
	*	*	☺		⏪ F	💡		ECO PALLAS	20 - 23
	*	*	☺			💡		ECO VOLARE	56 - 59
	*	*	☺	☺	⏪ K	💡		TITANIUM	92
	*	*	☺	☺	⏪ K	💡		CLASSIC FLAT III	84 - 86
	*	*	☺	🏠	⏪ F	💡		ECO PLANO II	14
	*	*	☺	🏠	⏪ F			ECO PLANO WOOD	16
	*	*	☺	🏠	⏪ F	💡		ECO REVOLUTION	60
	*	*	☺		⏪ F	💡		ECO REGENTO	18
	*	*	☺	🏠	⏪ F	💡		ECO CONCEPT	24
	*	*	☺	🏠	⏪ F	💡		ECO DYNAMIX II	26
	*	*	☺		⏪ F	💡		ECO GENUINO-L	36
	*	*	☺			💡		ECO INTERIOR	38
	*	*	☺		⏪ F			ECO AIRSCREW	42
	*	*	☺		⏪ F			AEROPLAN ECO	46
	*	*	☺		⏪ F	💡		CARIBBEAN DREAM ECO II	53
	*	*	☺			💡		ECO TALOS	54
	*	*	☺		⏪ F	💡		ECO FIORE	76
	*	*	☺	☺	⏪ F	💡		ECO HELIX	77
	*	*	☺	☺	⏪ K			TRISTAR-Z	89
	*	*	☺	☺	⏪ K	💡		BLACK MAGIC	87
	*	*	☺	☺	⏪ K	💡		CENTURION	88
	*	*	☺		⏪ K	💡		LIBECCIO	90
	*	*	☺		⏪ K	💡		NIGHT FLIGHT	94
	*	*	☺		⏪ K	💡		MERCURY	95
	*	*	☺		⏪ K	💡		MIRAGE	96
	*	*	☺		⏪ K	💡		ROTARY	98
	*	*	☺	☺	⏪ K	💡		ALU	99
	*	*	☺	☺	⏪ K			ELICA	100
	*	*	☺	☺	⏪ K			HELICO PADDEL	102
	*	*	☺		⏪ K			MACAU	103
	*	*	☺		⏪ K			FALCETTO	104
	*	*	☺		⏪ K			LIBELLE	105
	*	*	☺	☺	⏪ K			OUTDOOR CLASSIC	106


KEY TO SYMBOLS:

☺ Ceiling fan | ☺ Remote control | ☺ Pull chain | 🏠 Smart Life App
⏪ F Wall switch/RF | ⏪ K Wall switch/wired | 💡 Light kit

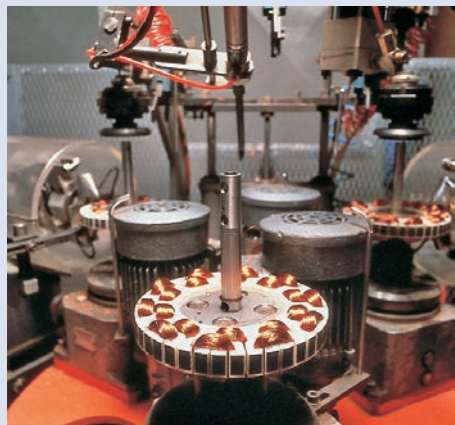
Over the past years ceiling fans have become increasingly popular - even in countries with a moderate climate. Ceiling fans not only create a pleasant living and working environment. They also prevent „stale air“, provide a fresh breeze and - the most important argument in times of high energy costs - they save heating costs. By means of this catalogue we try to pass on the entire experience we have gained over the past 38 years in an easy-to-understand form. Take some time to choose your fan, because besides shape and colour, there are other important factors that will soon make a ceiling fan indispensable in your

home or office. Here you can find the suitable model for every taste and every application. If you have any questions, your specialist dealer will be happy to help you. When choosing a product, be sure to look for quality. Starting with the balancing and synchronisation of a fan, through the design to the workmanship - all factors that are a guarantee for your satisfaction. When we include a fan in our catalogue, you can be sure that it meets the highest quality standards. Unlike many other manufacturers, who produce cheap goods for hardware stores and discounters, all CasaFan products are designed for long-term operation and are

very efficient terms of total cost of ownership. In times of growing responsibility for the environment, we, as the market leader in the specialised trade, consider it important to use pioneering energy-saving technologies. The new ECO models of the ECO GENUINO and ECO PALLAS series are extremely economical with 20 watts and consume only one third of the electrical power compared to most available AC fans! Still, with the same air delivery capacity and effective range!

Have lots of fun selecting your fan! Best wishes from all of us at 

Quality and Safety – Identical Appearance = Identical Quality?



Many ceiling fans may look very similar to the CasaFan models. Even so, identical appearance does not mean identical performance. In fact, the major aspects that account for the quality of a fan are invisible at the first glare. The heart of a fan is its motor. The materials used in the core and the windings affect performance and thus the motor's energy consumption. The windings must be tight and as even as possible. Important factors

in achieving smooth running are balanced stators and accessories such as the blades and the blade mountings. High quality switches and capacitors ensure long life and trouble-free operation. And if something goes wrong during delivery or installation the fan comes with a balancing kit. All these aspects are invisible for the client's eye. Separating "the wheat from the chaff" is therefore only possible during daily operation. Nothing is more unpleasant than a ceiling fan that is unbalanced, makes a lot of noise or stops working entirely when in continuous operation. CasaFan devices are comprised of high-quality, tested components entirely. The motors are designed for continuous operation and have sufficient extra capacity.

Only after many years, when a blade gets bent while moving house or the motor housing gets dented, it becomes apparent whether the manufacturer has a systematic replacement parts service. And whoever has tried to purchase a 3-speed pull-cord switch on its own, appreciates that we keep every

spare part in stock - from the switch to the motor - even for devices that we delivered 20 years ago.



Your safety is our priority. Even when we are developing new models, we feed in our 38 years experience with ceiling fan products. Many small details that enhance the quality, durability and safety of the product are standard for us. That is why many of our CasaFan products carry the GS-tested safety mark (Geprüfte Sicherheit).

The alternating current or AC motor - standard since more than 130 years

For over 130 years, ceiling fans with AC motors (Alternating Current) functioned more or less according to the same principle. A voltage-controllable, multi-pole single-phase asynchronous motor with squirrel-cage rotor, which is equipped with an auxiliary winding for start-up, provides the required torque and speed.

The external rotor motor is equipped with a stationary stator inside and a moving, rotating, outer part, the rotor. Although these types of motors are relatively inexpensive to produce, they do have some disadvantages. They are prone to electromagnetic resonance, which can be noticeable in the form of humming noises. This can be reduced by an optimal design of the motor and the use of high-quality raw materials.

In addition, they cannot be controlled steplessly with the usual control methods, e.g. phase control or section control (comparable to electronic dimmers), without emitting loud buzzing noises; in living areas, possibly in the bedroom, this is an intolerable condition.

However, in times of expensive energy, the biggest disadvantage of the AC motor is its low efficiency. Compared to an optimally designed EC/DC motor, it requires up to 3 times more electrical energy for the same air performance.

Direct current or DC does not automatically mean energy-saving

More than 25 years ago, CasaFan supplied ceiling fans for a project that were pure DC fans. The aim was to operate a fan directly on 12 V DC generated by a solar panel. In the project, which was funded by the World Bank, simple huts in Central Africa were equipped with a solar panel together with a battery and control electronics.

The aim was to improve the quality of life for the local population, that was cut off from the power supply infrastructure. Two energy-saving lights, a refrigerator, a television and a ceiling fan were part of the scope.

Compared to the latest CasaFan products the ceiling fan from back then our first direct current (DC) ceiling fan was not particularly efficient



Our smallest and most economical DC/EC motor. On the left the stator with the windings, in the middle the rotor as a permanent magnet. On the right, the ready-to-operate state.

when comparing the electrical power in relation to the volume flow (SV = service value of 1.9 to our modern ECO ceiling fans (EC/DC) of today. Today, a SV of 6-10 is standard for EC/DC fans.

Commutation is crucial

14 years ago, CasaFan was the first ceiling fan manufacturer in Europe to launch an EC/DC ceiling fan. With the same airflow compared to the AC model ROYAL 132 with 69 watts, the electrical power of our first ECO model was 23.5 watts at that time and enabled a previously unimagined energy saving of over 60%. The success of this model confirmed our decision to focus more on the energy-saving EC/DC technology (EC: electronically commutated). In addition, the much smaller design of the EC/DC motors enables completely new designs. Models like the Eco Genuino, without any visible motor fully integrated into the blade design, would be impossible with conventional AC motors. Our ECO fans work exclusively with

EC/DC motors, the most energy-saving type of a ceiling fan motor. These are also known as BLDC (brushless DC motors). As before, the ceiling fan is connected to 230 V~50 Hz alternating current.

A voltage transformer built into the control unit generates the required DC voltage. The electronic commutation (EC) of the BLDC external

rotor motor is decisive for the high efficiency. Here, the rotor is equipped with a permanent magnet; the stator is fixed and is equipped with the windings. The windings are three-phase. CasaFan uses sensor-controlled or sensorless motors, depending on the model.

In the first case, with our sensor-controlled motors, a hall sensor

permanently reports the position of the rotor to the electronics. The electronics thus know the current position and which windings are how strongly to be powered, so that the desired direction of rotation and speed can be achieved.

Our sensorless motors work purely according to electrical parameters. The electronics evaluate the inductance generated in the windings and control the voltage in the different windings depending on the value.

CasaFan Quality Warranty

In addition to the statutory warranty, we provide a quality guarantee for up to 25 years on the motors of our ceiling fans! But even after that, we keep all spare parts for your fan in stock. The motors of our units are designed for continuous operation and offer sufficient power reserves. A „cheap“ unit is often more expensive to repair or exchange than a high-quality brand product.

25 YEARS LIMITED MOTOR WARRANTY

Endless Selection

Through the CasaFan combination system, you can individually put together the unit that suits you best. The wood colour of the blades, the light, the housing - everything according to your personal taste and matching your furnishings. And if required, we have the perfect control unit for you - whether wireless remote control or wall switch. The extensive range of accessories enables installation in almost any situation.

Price-performance ratio

Your decision for a CasaFan product allows you to have access to the best quality with the longest service life at reasonable prices. Compare for yourself!

DC/EC Motors - the Advantages:

- state-of-the-art technology
- energy-saving
- almost noiseless
- long-lasting
- maintenance-free
- 6 speed levels, subtly divided
- compact design



Smart Life App

Many of our ceiling fans are now available with WiFi control via app for smartphones and tablets. They are recognisable by the blue symbol and the addition „W“ at the end of the item number.



All functions of the remote control can also be controlled via the Smart Life app. Complex scenes and connections to sensors are possible with the app.



Electrics - Which connection do you have?

Your new ceiling fan needs a power supply on the ceiling where it is to be mounted.

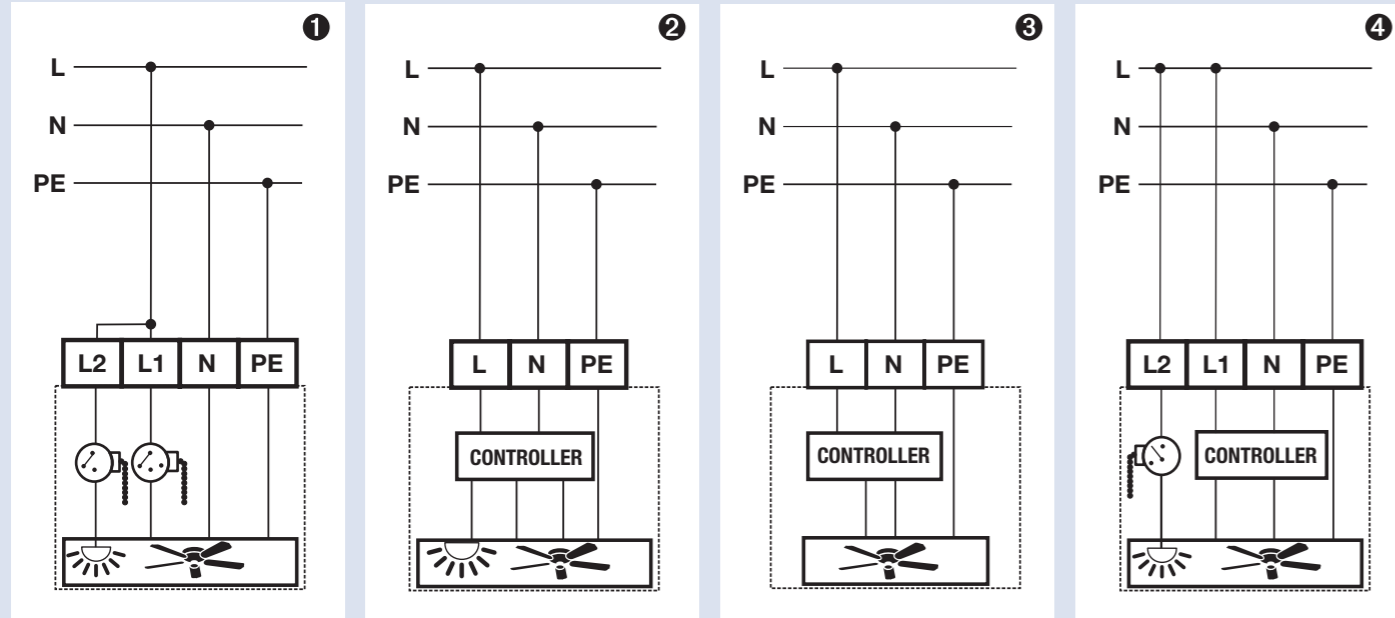
Since installing additional cables at a later date is often very costly or simply not possible, we

have designed all our fans so that they can be exchanged with an existing ceiling light.

On pages 126 to 127 you will find the assignment of the connection diagrams to the respec-

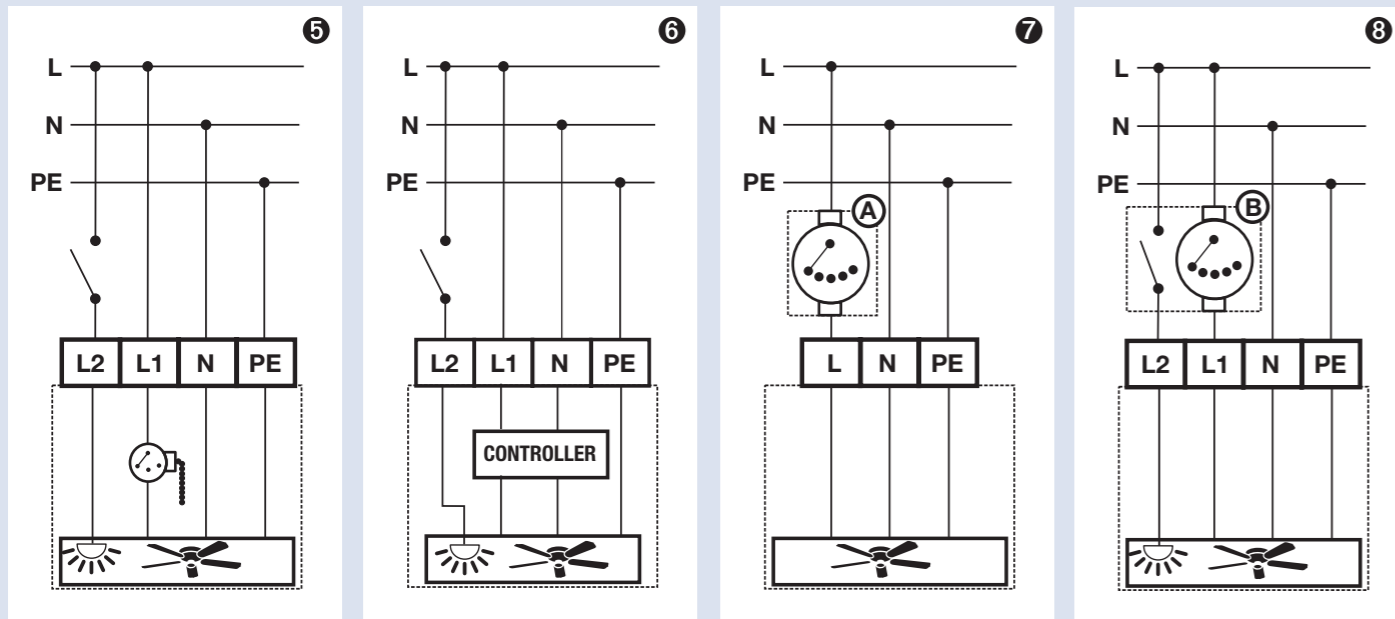
tive models. Standard is a switched phase or continuous voltage.

If you have a second phase on the ceiling that is switched via a (light) switch, you can use this



to switch the lighting on and off separately and independently of the motor of your ceiling fan on many of our models. If you replace your exi-

sting switch with a tap changer or transformer, you can use this to control the motor speed additionally (wiring diagrams 7 and 8).



Memory

Almost all CasaFan ceiling fans are equipped with a memory function. A memory module is located in the receiver of the remote control. Do you exchange your current ceiling lamp for a fan with lighting? This is easily possible with the memory module.

If a simple light switch was previously available for this purpose, you can continue to use it. The

motor of the fan is switched to OFF, the light to ON by remote control. Now you can turn the lamp on or off as before when entering the room with your light switch.

The memory module of the control unit „remembers“ the state before the voltage dropped (before the light switch was switched off) and restores it within 1.5 seconds. If necessary, the

fan is turned on by the pull switch. The table on pages 126 and 127 shows you which models have this memory function.

If you are unsure which control is compatible with your application, please contact your electrician. He will give you expert advice.

Mounting of ceiling fans

When installing ceiling fans, a few points have to be considered especially for safety reasons.

First check the load-bearing capacity of the ceiling. The mounting must be able to support at least 4 times the weight of the fan. In rooms equipped with suspended wooden or plasterboard ceilings, a ceiling fan must never be screwed only to the plasterboard or wooden

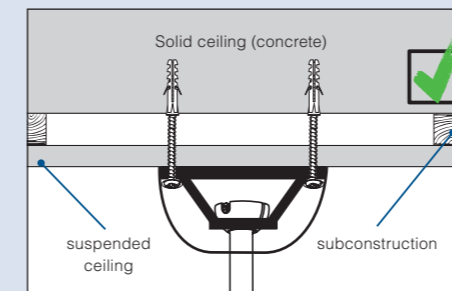


Fig. 1: Tensioning of a false ceiling

ceiling for reasons of fall protection, but also to avoid resonance noise (Fig. 3). Screwing into the load-bearing substructure of the ceiling is preferable (Fig. 2).

The ceiling mount of the fan with the suspended ceiling is braced against the fixed ceiling, usually made of concrete, with long screws and dowels (Fig. 1). For grid ceilings, which are

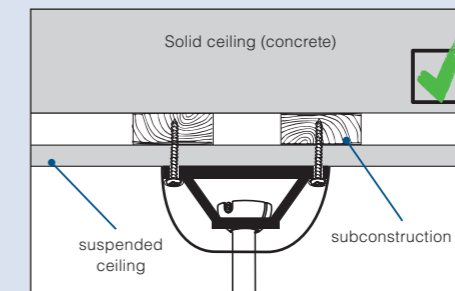


Fig. 2: Screw connection with substructure

common in offices, we recommend the length-adjustable suspension bracket type SST (Fig. 4 and Fig. 5), which is available in many lengths.

This ensures a safe and vibration-free suspension of all our ceiling fans.

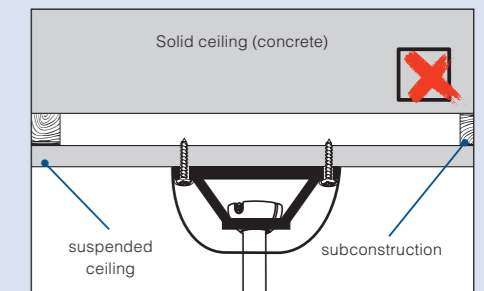


Fig. 3: Non-permitted fastening

When installing a ceiling fan, some minimum distances must be observed for safety reasons, but also to optimize the airflow.

Figure 6 shows these distances:

- A:** Distance to walls: should be at least 40 cm.
- B:** Distance to slopes: at least 15 cm horizontally.
- C:** Distance between blades and ceiling: at least $0.2 \times \text{fan } \varnothing$, except for extra-flat models. From a ceiling height of 3 m, „C“ should be at least 0.3 times, from 5 m 0.6 times and above 0.8 times the ceiling fan \varnothing . For rooms with low ceilings, always use our extra-flat models!
- D:** Distance between lower edge of blade and floor: at least 2.3 m (mandatory in commercial and public areas according to EN 60335-2-80, recommended in private areas).

Distances:

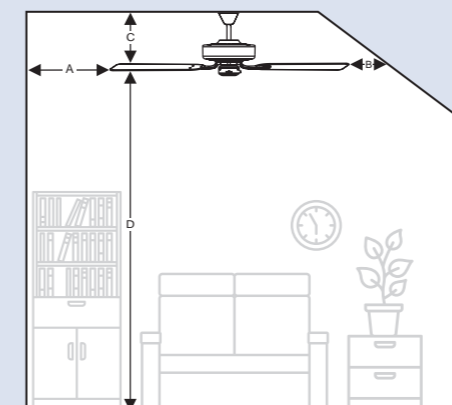


Fig. 6: Minimum distances when installing ceiling fans in rooms



Fig. 4: Trimming support SST

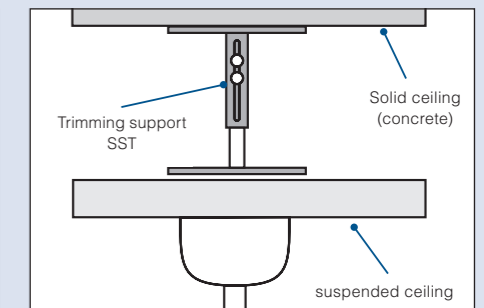


Fig. 5: Installation with trimming support SST

Mounting on roof and ceiling slopes

From a room height of approx. 2.7 m or when mounting on roofs or sloping ceilings, we recommend using a longer ceiling rod.

A ceiling fan always hangs vertically. Depending on the model, the suspension of our ceiling fans compensates for a tilt angle of the ceiling (Fig. 7, A).

The maximum possible pitch per model can be found on pages 126 - 127. For higher roof pitches, an on-site auxiliary construction in the form of a wedge made of wood or metal (B) is used, which ultimately enables the fan to be mounted on a horizontal surface.

To prevent the blade of the ceiling fan from hitting the pitch of the roof, a longer ceiling rod

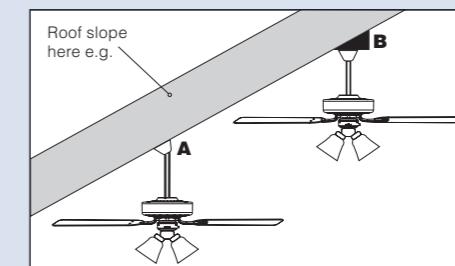


Fig. 7: Mounting ceiling fans on sloping roofs or ceilings

(accessories, see page 145) is required, which can easily be shortened by sawing it off to any intermediate size.

The minimum distance (Fig. 6, dimension C) depending on the angle of the roof or ceiling slope is shown in the following table:

Roof slope	Ceiling fan \varnothing					
	75	103	132	152	180	221
10°	9	11	14	15	18	22
15°	13	17	20	23	27	33
20°	18	23	28	31	36	44
25°	23	29	35	40	46	57
30°	28	36	44	49	58	70
35°	34	44	53	60	70	85
40°	41	52	64	72	83	101
45°	49	63	76	86	100	121

On pages 126 - 127 you will find all total distances per model as supplied, as well as with the longer ceiling rods available as accessories. The rods also include a cable extension with patent plugs for easy electrical connection.

Addition/amendment to the installation

In addition to avoiding mounting on vibrating surfaces, it is essential to ensure that no objects reach into the radius of the ceiling fan's blades (cables, lights, cabinet doors, etc.). Always use the screws and dowels suitable for your ceiling type for mounting.

The avoidance of light effects is shown in fig. 8 and 9.

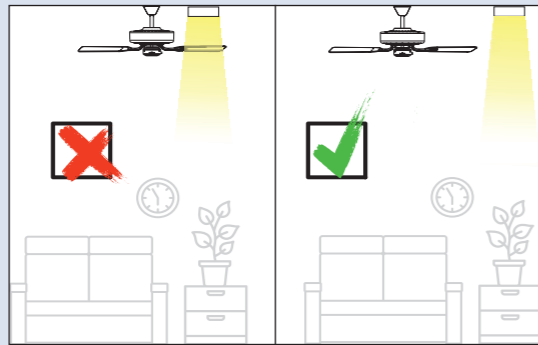


Fig. 8: When positioning ceiling fans, it should be ensured that the fan blades do not pass through a downward-facing luminaire. This leads to unpleasantly irritating stroboscopic effects.



Fig. 9: Especially at workplaces, the flickering of ceiling fan blades running through the lighting is disturbing. This should be taken into account during planning.

Fundamentals of thermal comfort

To determine the optimal ceiling fan for a room, you need to know the physical background and relationships.

First, the goal for which ceiling fans are to be used is determined:

If the aim is to improve comfort at high temperatures in summer, the purpose is **summer ventilation** with ceiling fans.

Also during winter times you can benefit from our ceiling fans. Warm air rises and accumulates under the ceiling. That effect leads to major temperature differences between the ceiling and the effective living space. Hence, by means of **winter ventilation** warm air is brought down slowly to the occupied living area.

In principle, there is nothing to be said against combining both objectives when using ceiling fans. The main difference is the respective air speed of both applications.

People perceive air currents completely different depending on the ambient temperature, humidity and air speed. If the environment is cooler, the same air flow in winter is perceived as unpleasant, draughty and may even promote illness. In summer, when temperatures are high, it is refreshing and beneficial.

What people perceive as pleasant is what experts call **comfort** or **thermal comfort**.

The American standard ASHRAE-55 describes 6 criteria that have an impact on a person's personal comfort range of temperature:

- **Physical activity:** Heavy physical work requires more cooling of the person than sitting or lying down quietly in order to keep the temperature balance in equilibrium.

- **Clothing:** In thin and short-sleeved clothing, the body's heat loss is disproportionately higher than in thick clothing that covers the entire body.

- **Heat radiation from objects in the environment:** A person standing next to a hot injection moulding machine needs much more cooling in the same environment than without this machine.

- **The ambient temperature:** At high ambient temperatures, the cooling requirement of humans is higher than at low temperatures in order to remain in thermal equilibrium.

- **The air velocity in the occupied zone:** In draughty rooms, the human body loses temperature very quickly.

- **The relative humidity:** The evaporative cooling of the body works much faster at low room humidity than at high room humidity, because dry air can absorb more water vapour than humid air.

Why does moving air cool the human body even though it hardly lowers the room temperature?

The movement of air extracts heat energy from the body by evaporating moisture on the skin, similar to driving fast in a car with the windows open. Even if the skin appears dry, there is a micro-fine film of moisture in the pores. At higher temperatures, the human organism promotes this natural cooling by releasing fluid on the surface of the skin through the sweat glands. This effect is easy to understand when you blow on your wet hand. The energy required for evapo-

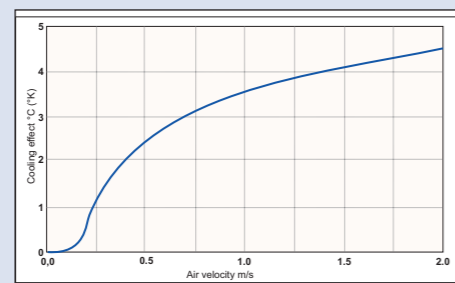
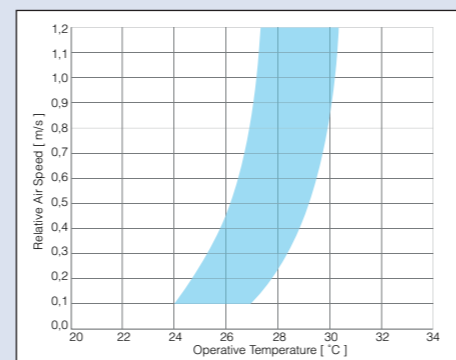
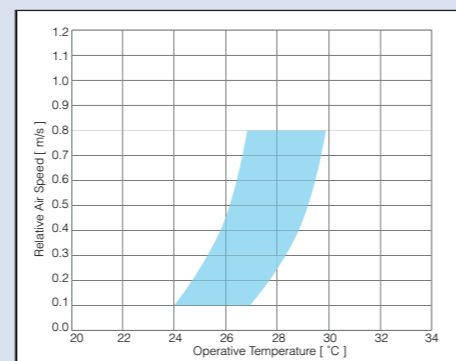


Diagram 1: Air flow velocity and cooling on the human body.

ration is thereby drawn from the body surface by heat conduction and cools it down.

This cooling of the body is shown in diagram 1 (bottom left).

Using the software tool „CBE Thermal Comfort Tool“ from Berkeley University of California, the following diagrams were created to show the comfort range. With a ceiling fan in forward rotation, a distinction is made between the main air flow and the secondary air flow. The vertical main air stream forms a circle with approx. 1.3 times the diameter of the ceiling fan (B). The maximum air velocity in the main air stream at head/shoulder height in a room with 3 m ceiling height is listed in the tables on pages 122 to 125.



Diagrams 2 and 3: Thermal comfort in relation to air velocity

The comfort range shows which air speeds are perceived as comfortable at which room temperatures. Diagram 2 (page 8) shows a central control of the speed where the users of the room have no influence on the control. This applies, for example, in schools or in open-plan offices where several ceiling fans are controlled centrally in the same way.

Diagram 3 (page 8) is valid for applications

where the users can individually control the fans themselves by using the remote control or wall control. The air speed is unlimited here, as the users can adjust the air speed to their needs at any time with their „personal control“.

Air flows with ceiling fans in summer operation

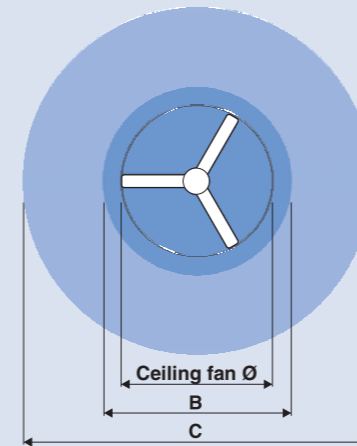


Fig. 10: Main and auxiliary airflow

The secondary airflow (C) is an area where the air velocity decreases outwards due to directional deflection and turbulence. The flow is diagonal to horizontal. The area of the secondary air flow is a circular area with approx. 2.4 times the diameter of the fan. These areas are the basis for the design of ceiling fans for summer ventilation in any room.

Under certain circumstances it may make sense to choose the next larger model when selecting the size, if the structural conditions permit. This is because a slightly larger dimensioned ceiling fan can run more slowly than a smaller model to deliver the same amount of

Design example summer ventilation

In a living/dining room of approx. 28 m², the thermal comfort is to be improved in summer by means of ceiling fans.

This can be achieved with a 132 cm diameter ceiling fan in the seating area of the living corner. The area of the main and secondary air flow effectively covers an area of approx. 8 m². But even beyond this, there is still an air movement that can be perceived as pleasant, but according to Diagram 1 on page 8 can no longer be used for summer cooling.

If both the seating area and the dining area are to be provided with generous cooling at higher temperatures, two units of size 103 cm can be used instead of one ceiling fan of size 132 cm (Fig. 10) (Fig. 11).

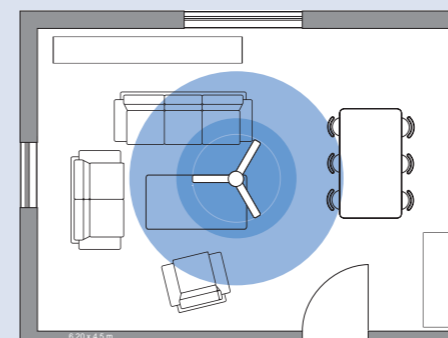


Fig. 10: Summer ventilation in the living/dining room with a ceiling fan Ø 132 cm

The respective arrangement ensures good cooling through sufficient air movement in both areas.

Ceiling fans in bedrooms

Special attention should be paid to ceiling fans in the bedroom (Fig. 12). Especially during summer times, people tend to choose a higher air speed when going to bed. The body is sweaty, one is lightly clothed and is quickly cooled down pleasantly by the strong evaporation of sweat.

If you fall asleep during this phase and the ceiling fan runs at high speed all night, there is a risk of damage to your health. A stiff neck or even a cold can be the result!

Therefore, it is important to choose the speed

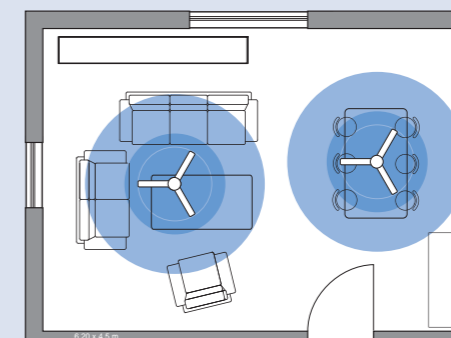


Fig. 11: Separate living/dining area with two ceiling fans, each Ø 103 cm

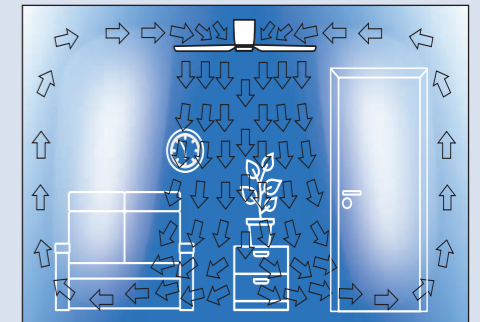


Fig. 13: Summer ventilation in a room with 2.5 m ceiling height with the low profile model Eco Plano II 132

air. This provides reserves that can be helpful in the case of very high temperatures.

of the fan so that the draught is only a faint breeze, depending on personal feeling ≤ 0.1 m/s). All our CasaFan ECO fans offer very low speeds for such cases, which do not cause any health consequences even for sensitive people.

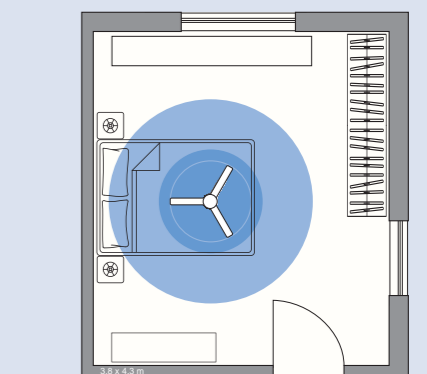


Fig. 12: Summer ventilation in the bedroom

A sleep timer that switches off the ceiling fan after a preset time is useful in the bedroom. This way, you can use pleasant cooling to fall asleep and do not expose yourself to the risk of health consequences from a strong draught that lasts all night.

A sleep timer is included as standard in many of our ECO fans and is operated via the fan's remote control.

Ceiling fans for heat recirculation in winter

Heated air has a lower specific weight than cold air. Following the laws of physics, it rises and accumulates under the ceiling of the room.

This phenomenon is familiar to anyone who has ever stood on a ladder in a heated room in winter and carried out work on the ceiling. This causes a considerable temperature difference between the ceiling and the floor. The higher the room, the greater the difference.

This enormous „heat reserve“ is conducted back into the occupied area without draughts by a ceiling fan with appropriate blade profiling. Without additional heating, the temperature at floor level is increased significantly. Thus the device pays for itself within 2 to 3 heating periods! The savings are fully

automatic. This is because the thermostats of the radiators recognise the higher temperature and switch to heating mode later.

If you consider that, according to a rule of thumb, a 1 °C higher room temperature corresponds to about 6% more heating costs, a lot of money can be saved with little effort. The temperature difference between ceiling and floor can be calculated using the following simplified formula*:

$$t_{\text{Ceiling}} = t_{\text{Floor}} \times (1 + (0,115 \times h))$$

t_{Ceiling} = Temperature at the ceiling

t_{Floor} = Temperature at the floor

h = Ceiling height

This is without taking into account extraneous factors such as thermal insulation, solar radia-

tion, etc. A lot of heating energy is wasted here. The heat „stands“ under the ceiling.

Fig. 13: Thermal layers in a heated, high ceilinged room*.



Example:

In a room 3 metres high, the temperature at floor level is 18°C. The temperature at the ceiling is calculated as follows:

$$18 \times (1 + (0,115 \times 3)) = 24,21 \text{ °C}$$

In our example, the temperature difference is more than 6 °C*.

A lot of wasted heating costs.

Air flows with ceiling fans in winter

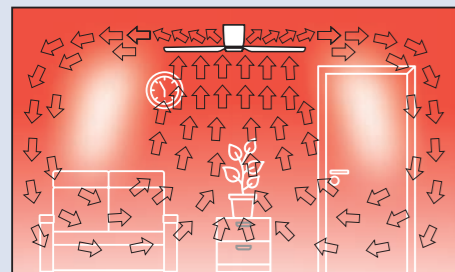


Fig. 14: Reverse running in low spaces

In contrast to summer ventilation, a much lower air velocity of max. 0.1 m/s. at the body is pursued in winter ventilation, in order to avoid a cooling effect.

In rooms with a ceiling height of up to 2.6 m, the ceiling fan runs optimally backwards for this purpose, i.e. it pushes the air towards the ceiling (Fig. 14). This flows down the ceiling along the walls to the floor and is sucked in again by the negative pressure under the fan and conveyed upwards. Since the air velocity

at the fan on the suction side is much lower than on the pressure side, the air movement in the occupied zone is hardly perceptible.

If the room is higher than 2.6 m, a ceiling fan should be operated forward, i.e. conveying the air downwards, even in winter. Otherwise, due to the natural buoyancy of the warm air, there is a danger in reverse operation, so it will not reach the floor and will flow back upwards towards the ceiling (Fig. 15).

The room then remains cold underfoot and the desired effect is not achieved. Decisive for the heat recirculation in the forward direction (Fig. 16) in high rooms is the fine adjustment of the speed and thus of the air velocity. Our ECO ceiling fans have also been specially designed for this pur-

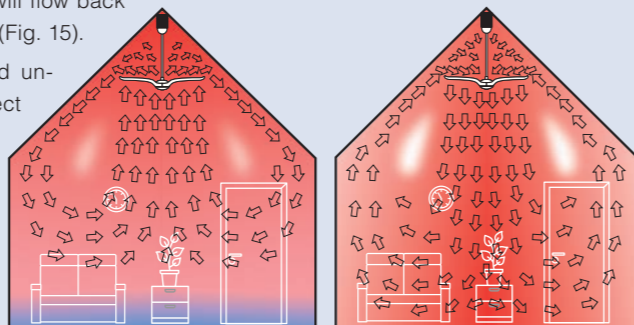


Fig. 15: Running backwards in high rooms, it remains cold underfoot Fig. 16: Forward running, the warm air reaches the ground

pose. All these models have 6 speed levels, a very low lowest level and are subtly graduated.

This means that even in winter, when people are very sensitive to draughts, the best air speed can always be selected.

Design of ceiling fans for heat recirculation in winter

Every ceiling fan that is designed for cooling in summer, in principle, can also be used for heat recirculation in winter. However, it is important to be able to generate an air flow that is as slow as possible.

Due to the slower and draught-free flow, it can take up to 15 minutes to equalise the temperatures, depending on the area.

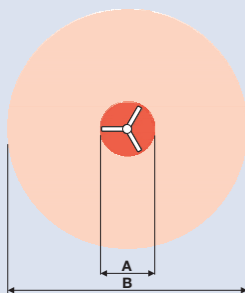


Fig. 17: Area of effect of a ceiling fan in heat recirculation in winter

The highest air velocity (Fig. 17) also prevails during heat recirculation with ceiling fans in winter directly under the fan's blade radius (A).

The effective area, i.e. the surface area for heat recirculation in winter, is 4.5 times the diameter of the fan (B), which is considerably larger than the effective area for summer ventilation.

Especially in high rooms, such as an attic studio, with e.g. a stove, the warm air from the heat source rises directly upwards under the ceiling and gathers there.

For the users of the room, only the radiant heat of the stove arrives in its direct vicinity. Most of the heat emitted by the stove rises upwards to the ceiling as warm air and remains unused.

The correct use of a ceiling fan can save enormous heating costs.

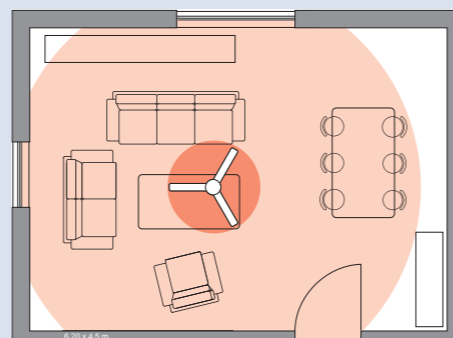


Fig. 18: The room in Figs. 10 and 11 when used purely for heat recirculation

*without air movement, air exchange and corresponding time period

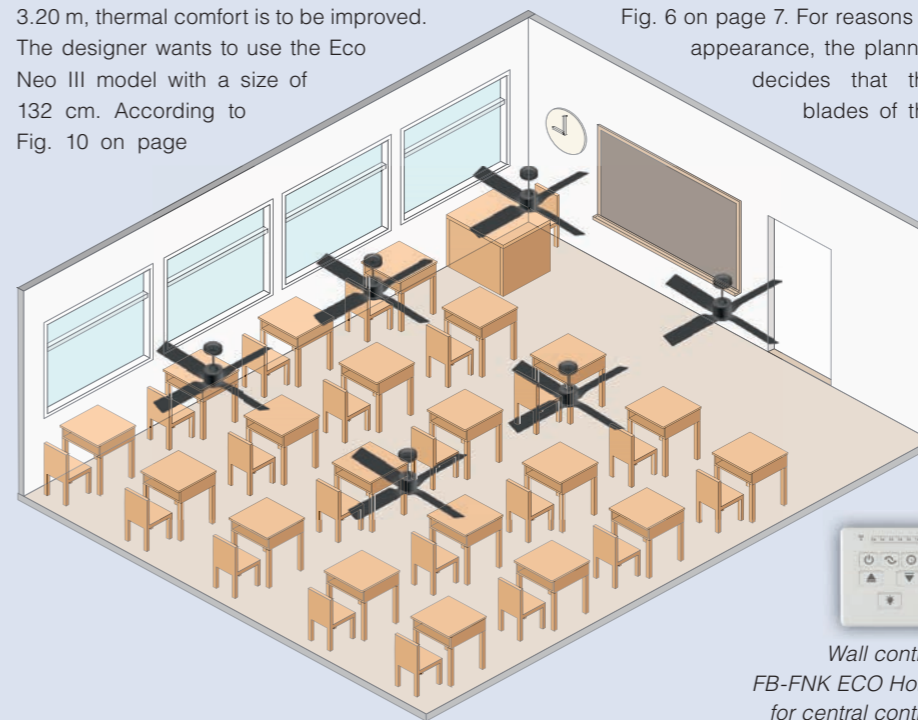
Design example ceiling fans in schools

In Switzerland and France, ceiling fans have long been standard in schools. Relatively low investments are offset by high benefits in terms of improved thermal comfort for teaching staff and students. In a 9 x 7 m classroom with a ceiling height of 3.20 m, thermal comfort is to be improved.

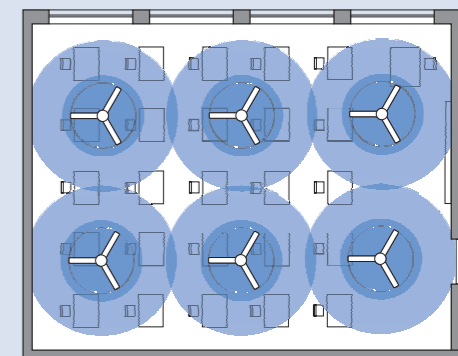
The designer wants to use the Eco Neo III model with a size of 132 cm. According to Fig. 10 on page

9, this results in an effective area in the secondary air flow of 2.4 x 1.32 m, i.e. a circular area with 3.168 m Ø. These circular areas are distributed accordingly on the adjacent floor plan. The distance ceiling - sash should be at least 0.3 x fan Ø, i.e. 0.396 m, according to

Fig. 6 on page 7. For reasons of appearance, the planner decides that the blades of the



Wall control FB-FNK ECO Hotel for central control



ceiling fans should be arranged at 2.7 m. The distance between the ceiling and the fan is then calculated from the dimensions table on page 126. From the dimension table on page 126, this results in the use of a 60 cm ceiling rod that is shortened by (810 mm - 500 mm) 310 mm.

A central wall control **FB-FNK ECO Hotel A #86200** (page 133), which is mounted on the wall near the teacher's desk, is used to control the fans together.

Alternatively, a version of the fans with 0-10 VDC interface is used, which can be controlled in speed and running direction via the building management system or the wired wall potentiometer **POT-R 0-10V #85251** from page 133.

Design example of ceiling fans in offices

Ceiling fans also create more comfort for employees in offices and meeting rooms in summer, when temperatures are higher. In Central Europe, temperate climate zones, ceiling fans are the cost-effective choice both in terms of purchase, but much more importantly in terms of follow-up energy costs. The design is based on the effective area with 2.4 times the diameter of the fan (Fig. 10, page 9).

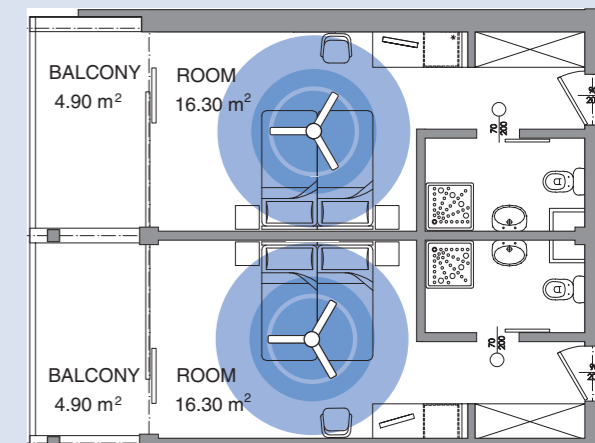
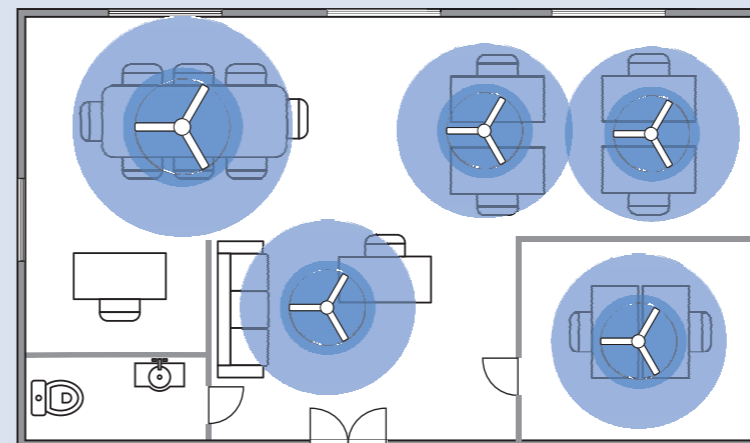
What is important here is the individual control of the ceiling fans by remote control or wall remote control or wall control, as every person perceives moving air differently.



Design example hotel room

In many hotel rooms, they are now a well-established team: the ventilation system and the ceiling fan. The ventilation system ensures that stale air is exchanged for fresh air and transports any moisture to the outside to prevent damage to the building fabric. A ceiling fan improves the thermal comfort of the guest at higher temperatures. And quite incidentally, a ceiling fan with or without a light can be a very decorative furnishing item in a hotel room. Here, too, the low consumption and the relatively low acquisition costs favour the use of ceiling fans.

FB-FNK ECO Hotel wall control - the hotel guests won't take it with them



FANS THROUGH HISTORY

1896: Edison Orange, NY, USA, battery powered table fan with a 230 mm blade diameter

2. April 1898: Schematic representation of an electric ceiling fan in "The Electric World"

Late C19th: Junior C.T. Fardwell table fan operated by water pressure

1908: AEG, Germany, Peter Behrens, cast iron and steel, 300 mm blade diameter

Late C19th: Le Zephyr, Paris – clock-work, spring-driven, fan

Circa 1910: Emerson, St. Louis, Table fan, 320 mm blade diameter

1919: WJH Strong's Lake Breeze Motor, which was driven by the combustion of kerosene, using the principle of the Stirling engine. At that time it cost \$22.50, representing about one fifth of the average monthly income. The blade diameter was 410 mm.

Ca. 1940: Aeros, Germany, aluminium and sheet steel, blade diameter 300 mm

1920: Extract from The Safety Car Heating and Light Company

1945: Aeros, Germany, cast iron and sheet steel, blade diameter 250 mm

Ca. 1955: Hurricane Aghetto, Turin, Italy, synthetic resin, aluminium and vinyl, blade diameter 200 mm

1948: Marelli, Italy, cast iron and sheet steel, blade diameter 200 mm

Ca. 1950: Fabbriche Elettrotecniche Riunite, Italy, Rubber and Steel, blade diameter 250 mm

1954: Vortice, Italy, VQ3, plastic and chromium plated steel, blade diameter 200 mm

1955: Vortice, Italy, Atomium, Attilio Pagani, plastic and brass, blade diameter 200 mm

1971: Braun, Germany, HL70, designed by R. Weiss/J. Geubel, plastic, tangential impeller, blade diameter 60 mm

1975: Vortice, Italy, Ariante, designed by M. Zanusoi, ABS plastic, blade diameter 150 mm

1880 **1910** **1920** **1950** **1955** **1975**

The primary use of fans is to cool people during the summer heat. Even in ancient Egypt, fan bearers were a sign of a pleasant and active life.

Small fans that were operated by a wind-up spring mechanism could already be found in the 18th century. Thanks to an invention by the English naturalist Stephen Hales, fans moved large quantities of air. On ships or in industrial production, among other places, they sucked in the air from outside and conveyed fresh air into the interior. For a long time, fans were driven by muscle power, later by fuels such as kerosene or steam engines with idler pulleys and drive belts.

The first ceiling fans appeared in the United States in 1860. At the beginning of the Industrial Revolution, workers sweated in steam-powered factories and were grateful for cooling provided by these early, two-bladed ceiling fans: The air flow reduces heat build-up on the human skin surface, which creates a cooling effect.

In 1882, the German-American Philip Diehl, who worked as a technician for the Singer Company, fitted an electric motor with an impeller and mounted the construction on the ceiling, which was much more space-saving. Already by the turn of the century, many

factories in the USA, as well as upper class households, were already equipped with this novel, cooling marvel.

For the first electrical table fan, the American electrical engineer Schyler Skaats Wheeler received the prestigious John Scott Award in 1904 for outstanding achievements in increasing living comfort and quality of life. The demand for small fans increased, so that European companies such as AEG also brought the first of their own devices onto the market.

Later, the developed ceiling fans were fitted with four rather than two blades, which im-

proved their smoothness and energy efficiency. In the "Golden Twenties" there was hardly a bar, a restaurant, a drugstore, grocery store or a factory that did not use this new miracle of technology for cooling.

With the Great Depression and its consequences for the population, ceiling fans went completely out of fashion. Within a short time air conditioning units came to dominate the American market in spite of their enormous power requirements; electricity from fossil fuels like oil and coal was cheap and ceiling fans were only for those with nostalgia. Only a few US manufacturers still produced ceiling fans.

This was the opportunity that some Far Eastern manufacturers grasped.

They were low priced and had sufficient experience in the field, because in many countries with tropical climates ceiling fans continued to be a product that was well-liked and in frequent use – especially where air conditioners did not succeed among the general population because of their price. Ceiling fans experienced a renaissance at the end of the 70s as a result of the oil crisis and rising electricity costs. Suddenly in the USA, the low priced and, compared to air conditioning units, power-saving ceiling fans became attractive again.

A real run on the traditional product set in and helped many newly founded US manufacturers to flourish. Unlike in the first decade of the century, when every part was "Made in the USA", many components of this new generation of devices came from Asia, making the price of even high-quality products affordable for mass market consumers.

In Central European countries with a temperate climate, the ceiling fan remained a luxury product for the few hot summer months. In warmer countries such as Spain, Greece, the south of France and especially in Italy, it quickly found new friends as a cooling lifestyle product and conquered the mass market.

Eco PLANO II



**25 YEARS
LIMITED MOTOR
WARRANTY**

**2, 3 or 4
blades installation
as you prefer!**

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"



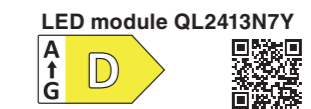
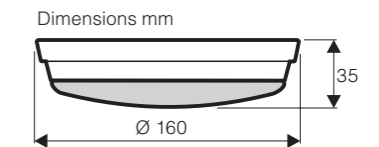
**in 2 sizes with
Ø 112 and 132 cm
available!**

LOW PROFILE!
especially made for
low-ceilinged rooms

LED-Light kit Eco PLANO II

Ultra-flat yet bright as day: the ready-to-install luminair complements the ECO PLANO II and immerses your room in a cosy, warm white light.

- Opal glass lamp with LED panel, 12 Watt.
- Dimmable via the remote control of ECO PLANO II.
- Quick and easy installation, subsequent connection possible.
- Overall height only 35 mm.
- Available in all housing finishes.



Lamp	LED
Power max. (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

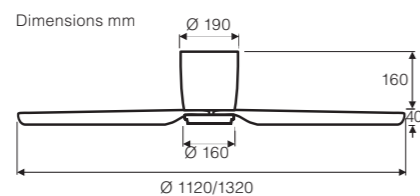
The luminair contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminair. Replacement LED modules available.

Product	Code No.	Housing Finish
Light kit EP-LED BN	2761	Brushed chrome
Light kit EP-LED WE	2762	White
Light kit EP-LED BG	2763	Basalt grey
Light kit EP-LED BZ	2764	Antique bronze
Light kit EP-LED LG	2765	Light grey

- Very low profile for installation in low-ceilinged rooms.
- Available in two sizes: for small rooms up to 15 m² and for medium rooms up to 22 m².
- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Balanced motor and blades.
- 4 blades included: 2, 3 or 4 installable.

Options:

- Dimmable light kits type EP-LED adaptable
- Hotel wall control **FB-FNK ECO A #86200** (p. 133).



Model	112	132
No. of blades		4
Power motor (W)	1.0 - 13	1.1 - 28
Voltage (V/Hz)	100-240/50-60	
Size Ø (cm/°)	112/44	132/52
No. of speeds (with R/C)	6	
Rev. (RPM)	30 - 208	30 - 207
Weight (kg)	5.9	6.4

Installation: 2 screws Ø min. 4.5 mm
separation 68 - 94 mm

Further technical data on pages 122 and 126

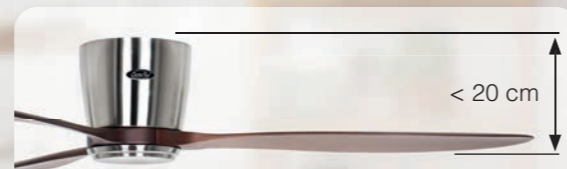
Eco PLANO II 112

Product	Code No.	Code No.	Ø cm	Housing Finish	Blade Finish
112 BN-SI	311280	311280W	112	Brushed chrome	Silver
112 WE-WE	311283	311283W	112	White	White
112 BG-BG	311284	311284W	112	Basalt grey	Basalt grey
112 BZ-NB	311282	311282W	112	Antique bronze	Walnut
112 LG-LG	311285	311285W	112	Light grey	Light grey

Eco PLANO II 132

Product	Code No.	Code No.	Ø cm	Housing Finish	Blade Finish
132 BN-SI	313280	313280W	132	Brushed chrome	Silver
132 WE-WE	313283	313283W	132	White	White
132 BG-BG	313284	313284W	132	Basalt grey	Basalt grey
132 BZ-NB	313282	313282W	132	Antique bronze	Walnut
132 LG-LG	313285	313285W	132	Light grey	Light grey

ECO PLANO WOOD BN-NT
#313287



Solid wood blades – less than 20 cm height!
This ceiling fan fits perfectly in rooms with a ceiling height of 2.5 m – and still keeps the distance of 2.3 m from the floor to the lower edge of the blades prescribed in EN 60335-2-80.



Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries

**25 YEARS
LIMITED MOTOR
WARRANTY**



LOW PROFILE!
especially made for
low-ceilinged rooms

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"



BG-SW
#313296



WE-WE
#313291



BN-NB
#313288



BZ-NB
#313294

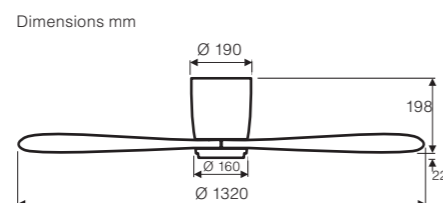


LG-LG
#313286



WE-NT
#313292

- Very low profile.
 - 3 blades, handmade from solid wood.
 - Many different housing and blade colours available.
 - Forward/reverse (summer/winter) by remote control.
 - 6 speeds by remote control, including sleep timer.
 - Balanced motor and blades.
 - Installation only on straight ceilings.
- Options:**
- Light kit not adaptable.
 - Hotel wall control **FB-FNK ECO A #86200** (p. 133)



No. of blades	3
Power motor (W)	1.0 - 21.3
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	132/52
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 210
Weight (kg)	6.0
Installation: 2 screws Ø min. 4.5 mm separation 68 - 94 mm	

ECO PLANO WOOD

Product	Code No.	Code No.	Housing Finish	Blade Finish
BN-NB	313288	313288W	Brushed chrome	Solid wood walnut stained
BN-NT	313287	313287W	Brushed chrome	Solid wood natural
BN-WE	313289	313289W	Brushed chrome	Solid wood white
BN-SW	313290	313290W	Brushed chrome	Solid wood black
WE-WE	313291	313291W	White	Solid wood white
WE-NT	313292	313292W	White	Solid wood natural
WE-LG	313293	313293W	White	Solid wood light grey

Product	Code No.	Code No.	Housing Finish	Blade Finish
BZ-NB	313294	313294W	Bronze	Solid wood walnut stained
BZ-NT	313295	313295W	Bronze	Solid wood natural
BG-SW	313296	313296W	Basalt grey	Solid wood black
BG-LG	313297	313297W	Basalt grey	Solid wood light grey
LG-LG	313286	313286W	Light grey	Solid wood light grey
LG-SW	313299	313299W	Light grey	Solid wood black
LG-WE	313277	313277W	Light grey	Solid wood white

ECO REGENTO

LED-Light kit ECO REGENTO

ECO REGENTO 140 BN-NT
#314051 and
Light kit PR-LED BN #3161

140 BN-NB
#314050 and
Light kit
PR-LED BN #3161

**25 YEARS
LIMITED MOTOR
WARRANTY**

LOW PROFILE!
especially made for
low-ceilinged rooms

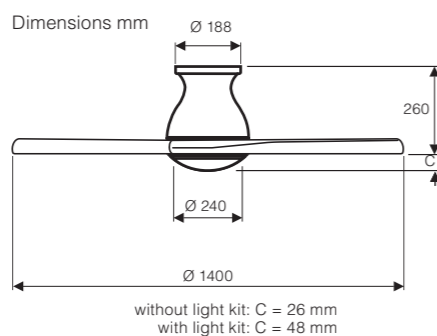
(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"



- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Balanced motor and blades.
- 3 blades, handmade from layered glued solid wood.
- Installation only on straight ceilings.
- Prepared for light kit installation.

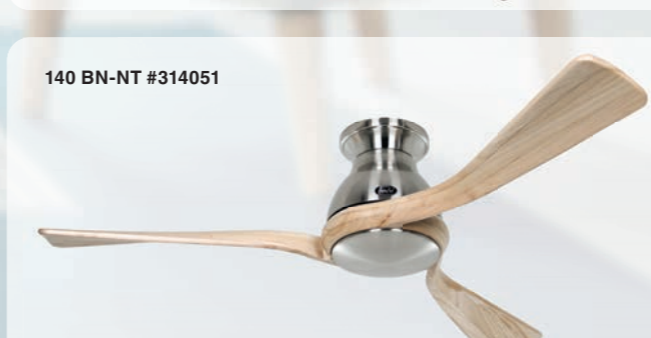
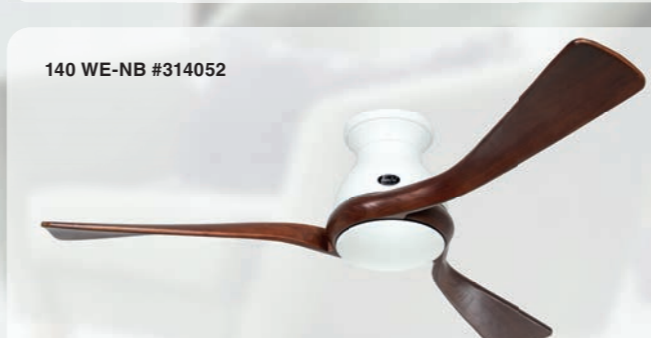
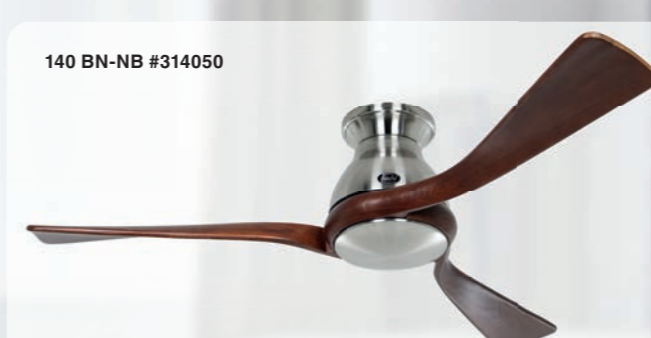
Options:

- Optional light kit PR-LED combinable.
- Hotel wall control **FB-FNK ECO A #86200** (p. 133)



No. of blades	3
Power motor (W)	1.2 - 27
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	140/55
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 132
Weight (kg)	6.4
Installation: 2 screws Ø min. 4.5 mm separation 66 - 90 mm	

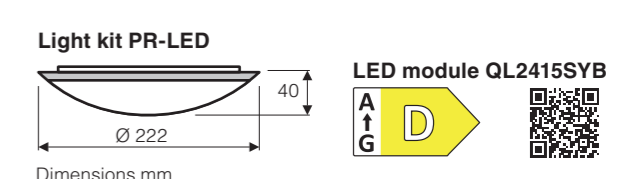
Further technical data on pages 122 and 126



Product	Code No.	Size Ø	Housing Finish	Blade Finish
140 BN-NB	314050	140 cm	Brushed chrome	Walnut finish
140 BN-NT	314051	140 cm	Brushed chrome	Natural wood
140 WE-NB	314052	140 cm	White	Walnut finish
140 WE-NT	314053	140 cm	White	Natural wood

The light kit made of frosted, white glass is a special addition to the ECO REGENTO. Its shape fits seamlessly into the design of the fan.

- Opal glass lamp with LED panel, 12 Watt.
- Dimmable by remote control of ECO REGENTO.
- Light colour adjustable: 3,000, 4,000 or 5,000 K.
- Quick and easy installation, subsequent connection possible.
- Low overall height.



Product	Code No.	Housing Finish
Light kit PR-LED BN	3161	Brushed chrome
Light kit PR-LED WE	3160	White

Product	Code No.	Housing Finish
Light kit PR-LED BN	3161	Brushed chrome
Light kit PR-LED WE	3160	White

Energy saving
DC/EC motor

**Voltage/
Frequency**
100-240 V/
50-60 Hz
suitable
for many
countries

ECO PALLAS 116

NEW



ECO PALLAS 116 BN-AH/BU #311670



116 BN-EA/NB #311671 and Light kit PR-LED BN #3161



116 BN-EA/NB #311671



116 WE-WE/LG #311676 and Light kit PR-LED WE #3160



116 WE-EA/NB #311675



116 WE-AH/BU #311674



116 BN-SI/KB #311673

LED-Light kit ECO PALLAS

The light kit made of frosted, white glass is a special addition to the ECO VOLARE. Its shape fits seamlessly into the design of the fan.

- Opal glass lamp with LED panel, 12 Watt.
- Dimmable by remote control of ECO PALLAS.
- Light colour adjustable: 3,000, 4,000 or 5,000 K.
- Quick and easy installation, subsequent connection possible.
- Low overall height.

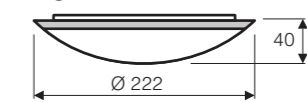


Light kit PR-LED WE #3160



Light kit PR-LED BN #3161

Light kit PR-LED



Dimensions mm

LED module QL2415SYB



Lamp	LED
Power (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

Product	Code No.	Housing Finish
Light kit PR-LED BN	3161	Brushed chrome
Light kit PR-LED WE	3160	White

25 YEARS LIMITED MOTOR WARRANTY



6 SPEEDS



WINTER/SUMMER



MAX. 14 m²

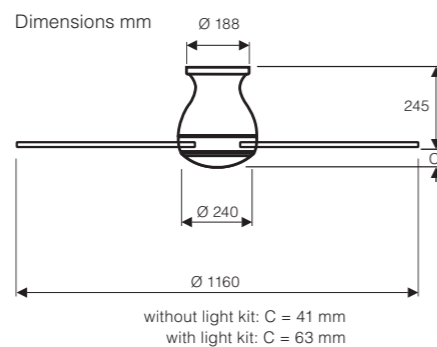
LOW PROFILE! especially made for low-ceilinged rooms

(((SLOW MOTION))) Speed 1 is guaranteed to work "draught-free"

- Extra flat design for low-ceilinged rooms.
- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Balanced motor and blades.
- 3 reversible wooden blades with 2 different finishes.
- Prepared for light kit installation.

Options:

- Optional light kit PR-LED combinable.
- Hotel wall control **FB-FNK ECO A #86200** (p. 133)



No. of blades	3
Power motor (W)	1.2 - 20
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/°)	116/45
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 209
Weight (kg)	6.0

Installation: 2 Screws Ø min. 4.5 mm separation 66 - 90 mm

ECO PALLAS 116

Product	Code No.	Size Ø	Housing Finish	Blade Finish
116 BN-AH/BU	311670	116 cm	Brushed chrome	Maple/Beech
116 BN-EA/NB	311671	116 cm	Brushed chrome	Antique Oak/Walnut
116 BN-WE/LG	311672	116 cm	Brushed chrome	White/Light grey
116 BN-SI/KI	311673	116 cm	Brushed chrome	Silber/Kirschbaum
116 WE-AH/BU	311674	116 cm	White	Maple/Beech
116 WE-EA/NB	311675	116 cm	White	Antique Oak/Walnut
116 WE-WE/LG	311676	116 cm	White	White/Light grey
116 WE-SI/KI	311677	116 cm	White	Silver/Cherry



Voltage/Frequency
100-240 V/50-60 Hz
suitable for many countries

ECO PALLAS 142

NEW

LED-Light kit ECO PALLAS

The light kit made of frosted, white glass is a special addition to the ECO PALLAS. Its shape fits seamlessly into the design of the fan.

- Opal glass lamp with LED panel, 12 Watt.
- Dimmable by remote control of ECO PALLAS.
- Light colour adjustable: 3,000, 4,000 or 5,000 K.
- Quick and easy installation, subsequent connection possible.
- Low overall height.



ECO PALLAS 142 BN-SI/KI #314273 and Light kit PR-LED BN #3161

142 WE-WE/LG #314276 and Light kit PR-LED WE #3160

142 WE-EA/NB #314275

142 WE-AH/BU #314274

142 BN-AH/BU #314270

142 BN-WE/LG #314272

142 BN-EA/NB #314271

25 YEARS LIMITED MOTOR WARRANTY



LOW PROFILE! especially made for low-ceilinged rooms

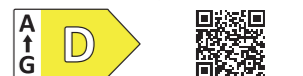
(((SLOW MOTION))) Speed 1 is guaranteed to work "draught-free"

Light kit PR-LED



Dimensions mm

LED module QL2415SYB



The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

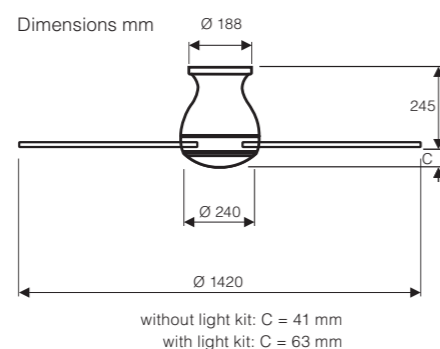
Lamp	LED
Power (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

Product	Code No.	Housing Finish
Light kit PR-LED BN	3161	Brushed chrome
Light kit PR-LED WE	3160	White

- Extra flat design for low-ceilinged rooms.
- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Balanced motor and blades.
- 3 reversible wooden blades, with 2 different finishes.
- Installation only on straight ceilings.
- Prepared for light kit installation.

Options:

- Optional light kit PR-LED combinable.
- Hotel wall control **FB-FNK ECO A #86200** (p. 133)



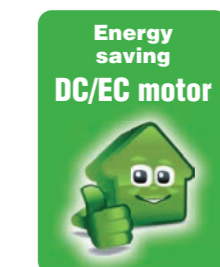
without light kit: C = 41 mm
with light kit: C = 63 mm

No. of blades	3
Power motor (W)	1.2 - 27
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/°)	142/56
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 182
Weight (kg)	6.2

Installation: 2 screws Ø min. 4.5 mm separation 66 - 90 mm

ECO PALLAS 142

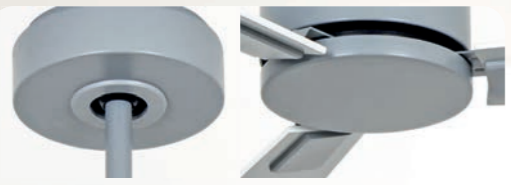
Product	Code No.	Size Ø	Housing Finish	Blade Finish
142 BN-AH/BU	314270	142 cm	Brushed chrome	Maple/Beech
142 BN-EA/NB	314271	142 cm	Brushed chrome	Antique Oak/Walnut
142 BN-WE/LG	314272	142 cm	Brushed chrome	White/Light grey
142 BN-SI/KI	314273	142 cm	Brushed chrome	Silver/Cherry
142 WE-AH/BU	314274	142 cm	White	Maple/Beech
142 WE-EA/NB	314275	142 cm	White	Antique Oak/Walnut
142 WE-WE/LG	314276	142 cm	White	White/Light grey
142 WE-SI/KI	314277	142 cm	White	Silver/Cherry



Voltage/Frequency
100-240 V/50-60 Hz
suitable for many countries

ECO CONCEPT

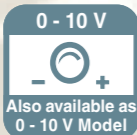
ECO CONCEPT 152
LG-WE/LG #921560



The cylindrical shape of the motor housing continues in the canopy and in the motor cover.



Voltage/Frequency
100-240 V/
50-60 Hz
suitable for many countries



2, 3 or 4
blades installation
as you prefer!

25 YEARS
LIMITED MOTOR
WARRANTY

in 2 sizes with
Ø 132 and 152 cm
available!

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"

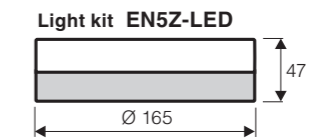
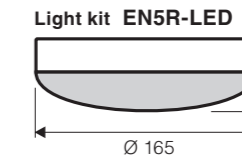
LED-Light kit ECO CONCEPT

The light kit made of frosted, white glass is a special addition to the ECO CONCEPT. Profile and underside also appear straight and consistent.

- Opal glass lamp with LED panel, 12 Watt.
- Quick and easy installation, subsequent connection possible.
- Dimmable by remote control of ECO CONCEPT.
- Low overall height – two discreet forms:



Dimensions mm



Lamp	LED
Power max. (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

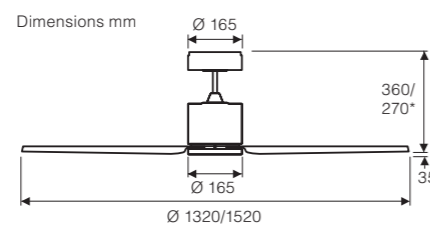
The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

Product	Code No.	Code No.	Housing Finish
Light kit	EN5R-LED	EN5Z-LED	
EN5x-LED BN	2685	2785	Brushed chrome
EN5x-LED WE	2686	2786	White
EN5x-LED LG	2687	2787	Light grey

- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 23°.
- 4 blades included.
- Prepared for light kit installation.

Options:

- Optional light kits type EN5x-LED combinable.
- Longer downrods for high ceilings (page 142).
- Hotel wall control **FB-FNK ECO A #86200** (p. 133).



*shows installation with shortened downrod

Model	132	152
No. of blades	4	
Power motor (W)	2.3 - 27	2.5 - 27
Voltage (V/Hz)	100-240/50-60	
Size Ø (cm/°)	132/52	152/60
No. of speeds (with R/C)	6	
Rev. (RPM)	30 - 185	30 - 146
Weight (kg)	5.9	6.1

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

ECO CONCEPT 132

Product	Code No.	Code No.	Ø cm	Housing Finish	Reversible Blade Finish
132 LG-WE/LG	921360	921360W	132	Light grey	White/Light grey
132 BN-NB/KI	921361	921361W	132	Brushed chrome	Walnut/Cherry
132 WE-WE/LG	921362	921362W	132	White	White/Light grey

ECO CONCEPT 152

Product	Code No.	Code No.	Ø cm	Housing Finish	Reversible Blade Finish
152 LG-WE/LG	921560	921560W	152	Light grey	White/Light grey
152 BN-NB/KI	921561	921561W	152	Brushed chrome	Walnut/Cherry
152 WE-WE/LG	921562	921562W	152	White	White/Light grey

ECO DYNAMIX II

ECO DYNAMIX II
BG-BG #313275



BG-BG
#313275



BN-SI
#313273



WE-WE
#313274

**25 YEARS
LIMITED MOTOR
WARRANTY**



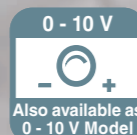
6 SPEEDS



WINTER/
SUMMER



MAX. 25 m²



0 - 10 V
Also available as
0 - 10 V Model



WiFi

**2, 3 or 4
blades installation
as you prefer!**

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"

LED-Light kit ECO DYNAMIX

The light kit made of frosted, white glass is a special addition to the ECO DYNAMIX II.

- Luminaire with LED panel, 12 Watt.
- Quick and easy installation, subsequent connection possible.
- Dimmable by remote control of ECO DYNAMIX II.
- Low overall height.
- Available as glass bowl or glass cylinder.



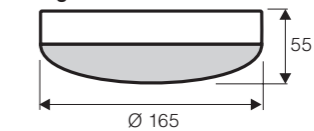
Light kit EN5Z-LED
Glass cylinder



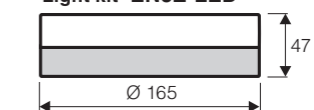
Light kit EN5R-LED
Glass bowl

Dimensions mm

Light kit EN5R-LED



Light kit EN5Z-LED



LED module QL2413N7Y



Lamp	LED
Power max. (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

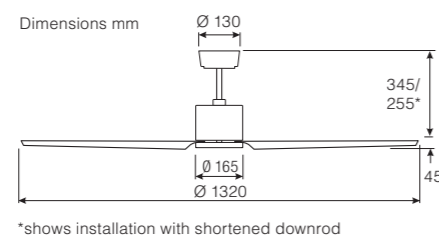
The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

Product	Code No.	Code No.	Housing Finish
Light kit	EN5R-LED	EN5Z-LED	
EN5x-LED BN	2685	2785	Brushed chrome
EN5x-LED WE	2686	2786	White
EN5x-LED BG	2688	2788	Basalt grey

- Modern, dynamic blade design.
- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- 4 high-quality plastic blades included.
- Installation on sloped ceilings up to 22°.
- Balanced motor and blades.

Options:

- Optional light kits type EN5x-LED combinable.
- Longer downrods for high ceilings (page 142).
- Hotel wall control **FB-FNK ECO A #86200** (p. 133).



*shows installation with shortened downrod

No. of blades	4
Power motor (W)	2.3 - 28
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	132/52
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 177
Weight (kg)	7.2

Installation: 2 screws Ø min. 4.5 mm
separation 70 - 110 mm

ECO DYNAMIX II

Product	Code No.	Code No.	Housing Finish	Blade Finish
132 BN-SI	313273	313273W	Brushed chrome	Composite silver
132 WE-WE	313274	313274W	White	Composite white
132 BG-BG	313275	313275W	Basalt grey	Composite basalt grey



Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries

ECO GENUINO 122



ECO GENUINO 122 BN-NB
#312215



Shapely. Precious. Powerfull.
Handicraft perfection and fine materials distinguish the ECO GENUINO.



Low level even in winter guarantees "draught-free"

25 YEARS LIMITED MOTOR WARRANTY



122 BN-NT
#312216



122 MG-NB
#312221



122 MS-NB
#312217



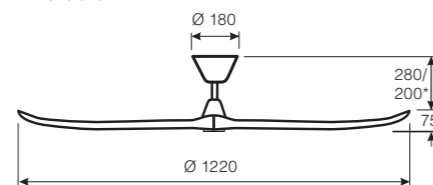
122 MW-NT
#312219

- Model ECO GENUINO 122 for offices and living areas up to 16 m².
- Housing finish in brushed chrome or brushed brass, matt black or matt white.
- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. sleep timer.
- Blades, milled from layer-glued solid wood.
- Balanced motor and blades.
- Installation on sloped ceilings up to 12°.

Options:

- Longer downrods for high ceilings (page 143).
- Hotel wall control **FB-FNK ECO B #86201** (p. 133).

Dimensions mm



*shows installation with shortened downrod

No. of blades	3
Power motor (W)	3.2 - 11.3
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	122/48
No. of speeds (with R/C)	6
Rev. (RPM)	50 - 144
Weight (kg)	6.8

Installation: 2 screws Ø min. 4.5 mm separation 75 - 145 mm

ECO GENUINO 122

Product	Code No.	Housing Finish	Blade Finish
122 BN-NB	312215	Brushed chrome	Walnut finished
122 BN-NT	312216	Brushed chrome	Natural wood, clear varnished
122 MG-NB	312221	Brushed brass	Walnut finished
122 MG-NT	312222	Brushed brass	Natural wood, clear varnished

Product	Code No.	Housing Finish	Blade Finish
122 MS-NB	312217	Matt black	Walnut finished
122 MS-NT	312218	Matt black	Natural wood, clear varnished
122 MW-NB	312220	Matt white	Walnut finished
122 MW-NT	312219	Matt white	Natural wood, clear varnished

ECO GENUINO 152

ECO GENUINO 152 BN-NB
#315215



ECO GENUINO BN-NB
3 blades milled from layer-glued, solid wood, walnut finished



Low level even in winter guarantees "draught-free"

25 YEARS LIMITED MOTOR WARRANTY

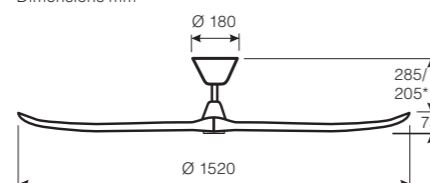


- Model ECO GENUINO 152 for offices and living areas up to 35 m².
- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. sleep timer.
- Blades milled from layer-glued solid wood.
- Balanced motor and blades.
- Installation on sloped ceilings up to 12°.

Options:

- Longer downrods for high or sloped ceilings available (page 143).
- Hotel wall control **FB-FNK ECO B #86201** (p. 133).

Dimensions mm



*shows installation with shortened downrod

No. of blades	3
Power motor (W)	3.3 - 16.6
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	152/60
No. of speeds (with R/C)	6
Rev. (RPM)	50 - 143
Weight (kg)	7.0

Installation: 2 screws Ø min. 4.5 mm separation 75 - 145 mm

ECO GENUINO 152

Product	Code No.	Housing Finish	Blade Finish
152 BN-MS	315225	Brushed chrome	Matt black
152 BN-MW	315224	Brushed chrome	Matt white
152 BN-NB	315215	Brushed chrome	Walnut finished
152 BN-NT	315216	Brushed chrome	Natural wood, clear varnished

ECO GENUINO 152



ECO GENUINO 152

Product	Code No.	Housing Finish	Blade Finish
152 MG-MS	315233	Brushed brass	Matt black
152 MG-MW	315232	Brushed brass	Matt white

Product	Code No.	Housing Finish	Blade Finish
152 MG-NB	315230	Brushed brass	Walnut finished
152 MG-NT	315231	Brushed brass	Natural wood, clear varnished

ECO GENUINO 152

Product	Code No.	Housing Finish	Blade Finish
152 MS-MS	315227	Matt black	Matt black
152 MS-MW	315226	Matt black	Matt white
152 MS-NB	315217	Matt black	Walnut finished
152 MS-NT	315218	Matt black	Natural wood, clear varnished

Product	Code No.	Housing Finish	Blade Finish
152 MW-MS	315229	Matt white	Matt black
152 MW-MW	315228	Matt white	Matt white
152 MW-NB	315213	Matt white	Walnut finished
152 MW-NT	315214	Matt white	Natural wood, clear varnished

ECO GENUINO 180

ECO GENUINO 180 BN-NB
#318015



ECO GENUINO BN-NB
3 blades milled from layer-glued, solid wood, walnut finished



180 MG-NB
#318021



180 MS-NB
#318017



180 MS-NT
#318018



180 MW-NB
#318019



Low level even in winter guarantees "draught-free"

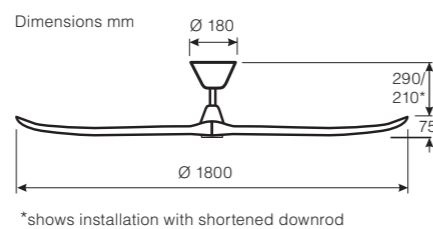
25 YEARS LIMITED MOTOR WARRANTY



- Model ECO GENUINO 180 for offices and living areas up to 45 m².
- Housing finish in brushed chrome or brushed brass, matt black or matt white.
- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. sleep timer.
- Balanced motor and blades.
- Installation on sloped ceilings up to 12°.

Options:

- Longer downrods for high or sloped ceilings available (page 143).
- Hotel wall control **FB-FNK ECO B #86201** (p. 133).



No. of blades	3
Power motor (W)	4.1 - 30
Voltage (V/Hz)	220-240/50
Size Ø (cm/°)	180/71
No. of speeds (with R/C)	6
Rev. (RPM)	50 - 132
Weight (kg)	7.6

Installation: 2 screws Ø min. 4.5 mm separation 75 - 145 mm

ECO GENUINO 180

Product	Code No.	Housing Finish	Blade Finish
180 BN-NB	318015	Brushed chrome	Walnut finished
180 BN-NT	318016	Brushed chrome	Natural wood, clear varnished
180 MG-NB	318021	Brushed brass	Walnut finished
180 MG-NT	318022	Brushed brass	Natural wood, clear varnished

Product	Code No.	Housing Finish	Blade Finish
180 MS-NB	318017	Matt black	Walnut finished
180 MS-NT	318018	Matt black	Natural wood, clear varnished
180 MW-NB	318019	Matt white	Walnut finished
180 MW-NT	318020	Matt white	Natural wood, clear varnished

ECO GENUINO-L 152



ECO GENUINO-L 152
BN-NT #315260



Low level even in winter guarantees "draught-free"

25 YEARS LIMITED MOTOR WARRANTY



152 BN-NB
#315261



152 MS-NT
#315265



152 MG-NT
#315275



152 MW-NT
#315270



152 MS-NB
#315266

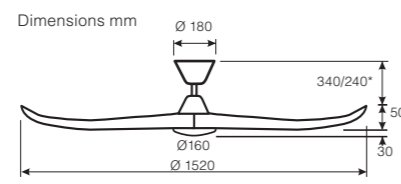
- Model ECO GENUINO-L with LED-light kit, 17 W.
- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. light on/off/dimming.
- 3 blades milled from layerglued, solid wood.
- Balanced motor and blades.
- Installation on sloped ceilings up to 18°.

Integrated light kit LED module ML095A-1:

- Light warm white (3,000 K, 1,800 lm).
- Beam angle 120°, Life span 20,000 h.
- CRI 80, lamps dimmable, 17 W.
- Energy class F (Spectrum A to G).

Options:

- Longer downrods for high ceilings available (p. 143).
- Hotel wall control **FB-FNK ECO B #86201** (p. 133).



*shows installation with shortened downrod



LED module ML095A-1

The luminaire contains built-in LED lamps. Energy class F (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

No. of blades	3
Power motor (W)	3.3 - 16.5
Power Lamp max. (W)	17
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	152/60
No. of speeds (with R/C)	6
Rev. (RPM)	50 - 144
Weight (kg)	8.9

Installation: 2 screws Ø min. 4.5 mm separation 75 - 145 mm

ECO GENUINO-L

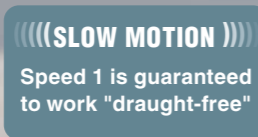
Product	Code No.	Housing Finish	Blade Finish
152 BN-NB	315261	Brushed chrome	Walnut finished
152 BN-NT	315260	Brushed chrome	Natural wood, clear varnished
152 MS-NB	315266	Matt black	Walnut finished
152 MS-NT	315265	Matt black	Natural wood, clear varnished
152 MW-NB	315271	Matt white	Walnut finished
152 MW-NT	315270	Matt white	Natural wood, clear varnished
152 MG-NB	315276	Brushed brass	Walnut finished
152 MG-NT	315275	Brushed brass	Natural wood, clear varnished

Downrods

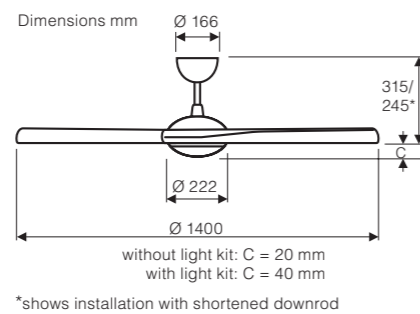
Product	Code No.	Housing Finish	Length (cm)
ST 60 BN-EG-L	991079	Brushed chrome	60
ST 100 BN-EG-L	991080	Brushed chrome	100
ST 60 MW-EG-L	991084	Matt white	60
ST 100 MW-EG-L	991086	Matt white	100
ST 60 MS-EG-L	991081	Matt black	60
ST 100 MS-EG-L	991085	Matt black	100
ST 60 MG-EG-L	991087	Brushed brass	60
ST 100 MG-EG-L	991088	Brushed brass	100

ECO INTERIOR

ECO INTERIOR 140 BN-NT
#314230



- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
 - Forward/reverse (summer/winter) by remote control.
 - Balanced motor and blades.
 - 3 blades, handmade from layered glued solid wood.
 - Installation on sloped ceilings up to 18°.
- Options:**
- Light kit VIT-LED optional combinable.
 - Longer downrods for high ceilings (page 143).



No. of blades	3
Power motor (W)	8.6 - 28.5
Voltage (V/Hz)	220-240/50
Size Ø (cm/°)	140/55
No. of speeds (with R/C)	6
Rev. (RPM)	38 - 143
Weight (kg)	6.5

Installation: 2 screws Ø min. 4.5 mm separation 73 - 127 mm

Further technical data on pages 122 and 126

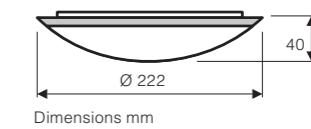
LED-Light kit ECO INTERIOR

The light kit made of frosted, white glass is a special addition to the ECO INTERIOR. Their shape fits seamlessly into the design of the fan.

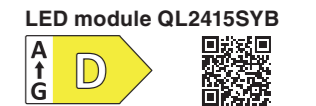
- Opal glass lamp with LED panel, 12 Watt.
- Dimmable by remote control of ECO INTERIOR.
- Light colour adjustable: 3,000, 4,000 or 5,000 K.
- Quick and easy installation, subsequent connection possible.
- Low overall height.



Light kit VIT-LED



The luminaire contains built-in LED lamps. Energy class D (Spectrum A to E). The lamps cannot be changed in the luminaire. Replacement LED modules available.



Lamp	LED
Power (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

Product	Code No.	Housing Finish
Light kit VIT-LED BN	3140	Brushed chrome
Light kit VIT-LED WE	3143	White

Downrods

for suspension of the ECO INTERIOR series ceiling fans in rooms with high ceilings. Available in 60 cm and 120 cm length. Can be shortened to any intermediate size.

Product	Code No.	Finish	Length
ST 60 BN-VIT	971048	Brushed chrome	60 cm
ST 60 WE-VIT	971039	White	60 cm
ST 120 BN-VIT	971049	Brushed chrome	120 cm
ST 120 WE-VIT	971059	White	120 cm



140 BN-NB
#314231



140 BN-NB #314231
and Light kit
VIT-LED BN #3140



140 BN-NT # 314230
and Light kit
VIT-LED BN #3140

ECO INTERIOR

Product	Code No.	Ø cm	Housing Finish	Blade Finish
140 BN-NT	314230	140	Brushed chrome	Natural wood
140 BN-NB	314231	140	Brushed chrome	Walnut
140 WE-NT	314232	140	White	Natural wood
140 WE-NB	314233	140	White	Walnut

AERODYNAMIX ECO
CH #313231 and
NB #19608

COMBINE YOUR DESIGN!

Always choose the appropriate motor finish and the desired blade decor. Popular combinations see price list.



in 2 sizes with
Ø 112 and 132 cm
available!

25 YEARS
LIMITED MOTOR
WARRANTY



Low level even in winter guarantees "draught-free"



BN #313233
and **SI #19611**



WE #313232
and **NB #19608**



BG #313234
and **NT #19610**

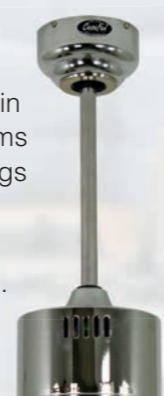


WE #313232
and **WE #19609**

Downrods

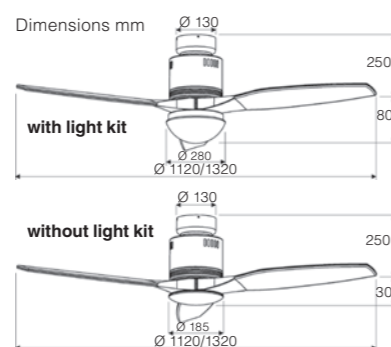
for use of Aerodynamix ceiling fans in high ceilinged rooms or on sloped ceilings up to 28°.

Available in 60 cm and 120 cm length. (can be shortened to any length).



CH #313231
and **NB #19608**

- 3 handmade solid wood blades.
- 6 speeds, light on/off by remote control.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installing only on straight ceilings – for installing on slopes (up to 28°) additional downrod required.
- Light kit (max. 2 x 40 W, E14, suitable for ESL) and metal light cover always included. Installation with or without light possible.
- Combination system: motor units and blade sets can be combined in any way. Please order motor and blades separately!
- Hotel wall control **FB-FNK ECO B #86201** (p. 133) can be used optionally.



No. of blades	3
Power motor (W)	3.8-11.3 3.6-20.4
Power light kit max. (W)	2 x 40
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	112/44 132/52
No. of speeds (w. R/C)	6
Rev. (RPM)	74-190 72-188
Weight (kg)	9.7 10.0

Installation: 2 screws Ø min. 4.5 mm separation 75 - 110 mm

Further technical data on pages 122 and 126

AERODYNAMIX ECO

Blades 112 and 132 cm

Product	Code No.	Blade Finish
132 NB	19608	Walnut
132 WE	19609	White
132 SI	19611	Silver
132 NT	19610	Natural wood
112 NB	19612	Walnut
112 WE	19613	White
112 SI	19617	Silver
112 NT	19614	Natural wood

Motor

Product	Code No.	Housing Finish
CH	313231	Polished chrome
WE	313232	White
BN	313233	Brushed chrome
BG	313234	Basalt grey

Light bulbs are not included.

Downrods

Product	Code No.	Finish	Length
ST 60 CH-AD	981037	Polished chrome	60 cm
ST 60 BN-AD	981048	Brushed chrome	60 cm
ST 60 BG-AD	981046	Basalt grey	60 cm
ST 60 WE-AD	981039	White	60 cm
ST 120 CH-AD	981057	Polished chrome	120 cm
ST 120 BN-AD	981049	Brushed chrome	120 cm
ST 120 BG-AD	981002	Basalt grey	120 cm
ST 120 WE-AD	981059	White	120 cm

Popular combinations of motor and blades can be found in our enclosed price list!

ECO AIRSCREW 152

ECO AIRSCREW 152
MS-GW #315221



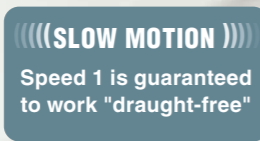
6 SPEEDS



WINTER/
SUMMER



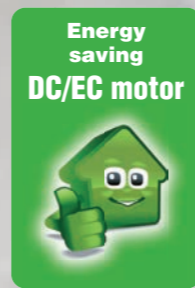
MAX. 40 m²



(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"



25 YEARS
LIMITED MOTOR
WARRANTY



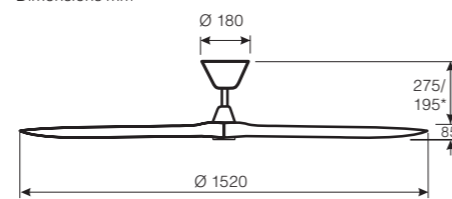
Energy
saving
DC/EC motor

- ECO AIRSCREW 152 in authentic propeller shape.
- 6 speeds by remote control, incl. sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Housing in brushed chrome or brushed brass, in matt black or matt white.
- 3 blades milled from layer-glued wood.
- Balanced motor and blades.
- Installation on sloped ceilings up to 12°.
- Not suitable for light kits.

Options:

- Longer downrods for installation on high or sloped ceilings available (page 142).
- Hotel wall control **FB-FNK ECO B #86201** (page 133).

Dimensions mm



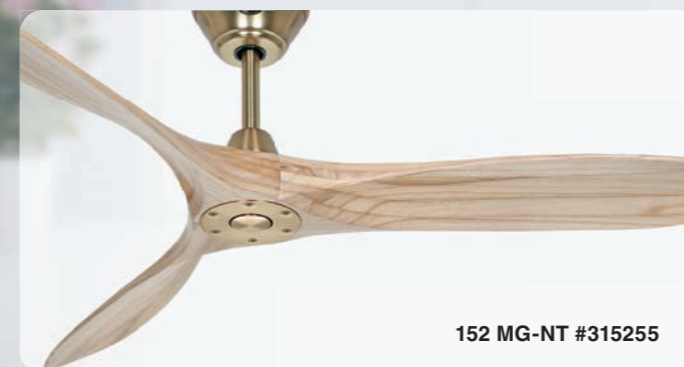
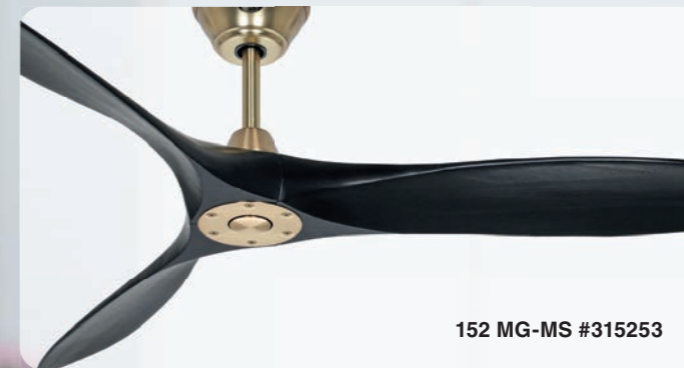
*shows installation with shortened downrod

No. of blades	3
Power motor (W)	4.4 - 28
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	152/60
No. of speeds (with R/C)	6
Rev. (RPM)	50 - 125
Weight (kg)	7.0

Installation: 2 screws Ø min. 4.5 mm
separation 75 - 145 mm



ECO AIRSCREW 152



ECO AIRSCREW 152

Product	Code No.	Housing Finish	Blade Finish
152 MS-GW	315221	Matt black	Grey washed aged wood
152 MS-BW	315244	Matt black	Brushed white
152 MS-MS	315245	Matt black	Matt black
152 MS-MW	315246	Matt black	Matt white
152 MS-NT	315247	Matt black	Natural wood

Product	Code No.	Housing Finish	Blade Finish
152 BN-GW	315220	Brushed chrome	Grey washed aged wood
152 BN-BW	315240	Brushed chrome	Brushed white
152 BN-MS	315241	Brushed chrome	Matt black
152 BN-MW	315242	Brushed chrome	Matt white
152 BN-NT	315243	Brushed chrome	Natural wood

ECO AIRSCREW 152

Product	Code No.	Housing Finish	Blade Finish
152 MG-GW	315223	Brushed brass	Grey washed aged wood
152 MG-BW	315252	Brushed brass	Brushed white
152 MG-MS	315253	Brushed brass	Matt black
152 MG-MW	315254	Brushed brass	Matt white
152 MG-NT	315255	Brushed brass	Natural wood

Product	Code No.	Housing Finish	Blade Finish
152 MW-GW	315222	Matt white	Grey washed aged wood
152 MW-BW	315248	Matt white	Brushed white
152 MW-MS	315249	Matt white	Matt black
152 MW-MW	315250	Matt white	Matt white
152 MW-NT	315251	Matt white	Natural wood

AEROPLAN ECO

NEW



AEROPLAN ECO BN-WE
#313248



LG-LG #313253



WE-WE #313252



BZ-NB #313243



BN-NB #313246



BN-NT #313247



BN-SW #313245



BG-SW #313242



BN-LG #313244

25 YEARS
LIMITED MOTOR
WARRANTY

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"



Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries



- 3 blades milled solid wood.
- 6 speeds by remote control, incl. sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 30°.
- Light kit not adaptable.

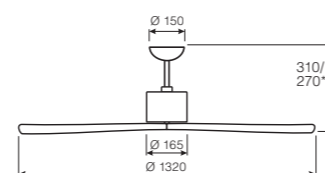
Optionen:

- Longer downrods for installation on high or sloped ceilings available (page 142).
- Hotel wall control **FB-FNK ECO A #86200** (page 133).

No. of blades	3
Power motor (W)	2.7 - 26.5
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	132/52
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 226
Weight (kg)	5.7

Installation: 2 screws Ø min. 4,5 mm
separation 70 - 110 mm

Dimensions mm



*shows installation with shortened downrod

AEROPLAN ECO

Product	Code No.	Housing Finish	Blade Finish	Product	Code No.	Housing Finish	Blade Finish
BN-NB	313246	Brushed chrome	Walnut finished wood	WE-NB	313249	White	Walnut finished wood
BN-NT	313247	Brushed chrome	Natural solid wood	WE-NT	313251	White	Natural solid wood
BN-WE	313248	Brushed chrome	White solid wood	WE-LG	313250	White	Light grey solid wood
BN-LG	313244	Brushed chrome	Light grey solid wood	BZ-NB	313243	Bronze	Walnut finished wood
BN-SW	313245	Brushed chrome	Black solid wood	LG-LG	313253	Light grey	Light grey solid wood
WE-WE	313252	White	White solid wood	BG-SW	313242	Basalt grey	Black solid wood



ECO GENUINO-L 152 BN-NB
see page 36

ECO ELEMENTS 103

ECO ELEMENTS 103 BN-WN/AH
#510382



103 MA-EA/BU
#510380



103 WE-WE/LG
#510381



103 BA-NB/BU
#510383



103 GR-GR/SW
#510384

25 YEARS
LIMITED MOTOR
WARRANTY

Energy saving
DC/EC motor

Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries



(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"

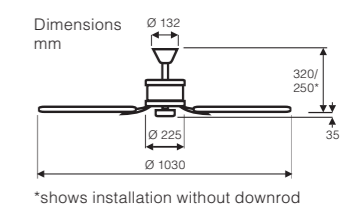
- 6 speeds by remote control, incl. light on/off, sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 28°, higher pitch with on-site construction.
- Low profile by installation without downrod.

- Options:**
- Longer downrods available for high ceilings (page 142).
 - Light kits only pre-installed (pages 136/137).
 - Hotel wall control **FB-FNK ECO A #86200** (page 133).

ECO ELEMENTS 103

Product	Code No.	Housing Finish	Reversible Blade Finish
103 MA-EA/BU	510380	Antique brass	Antique oak/Beech
103 BN-WN/AH	510382	Brushed chrome	Wengé/Maple
103 WE-WE/LG	510381	White	White/Light grey
103 GR-GR/SW	510384	Graphite	Graphite/Black
103 BA-NB/BU	510383	Antique brown	Walnut/Beech

No. of blades	5
Power motor (W)	1.0 - 14.7
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	103/42
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 209
Weight (kg)	6.5
Installation:	2 screws Ø min. 4.5 mm separation 70 - 110 mm



Further technical data on pages 122 and 126

ECO ELEMENTS 132



ECO ELEMENTS
132 BA-NB-BU
#513283



Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries

**25 YEARS
LIMITED MOTOR
WARRANTY**

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"



132 BN
#513282

with light kit 15 BN #11001,
blade holders FHN BN #19303,
blades rattan antique #19902



132 WE-WE/LG
#513281



132 MA-EA/BU
#513280



132 BN-WN/AH
#513282

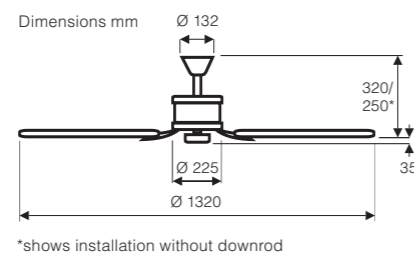


132 GR-GR/SW
#513284



132 MA-EA/BU
#513280

- 6 speeds by remote control, incl. light on/off and sleep timer.
 - Forward/reverse (summer/winter) by remote control.
 - Installation on sloped ceilings up to 28°.
 - Balanced motor and blades.
 - Low profile by installation without downrod (only 25 cm ceiling - blades).
- Options:**
- Longer downrods for high ceilings available (p. 142).
 - Light kits only pre-installed! (pages 136/137).
 - All blades for dia Ø 132 cm can be used (p. 129 - 131).
 - Hotel wall control **FB-FNK ECO A #86200** (page 133).



*shows installation without downrod

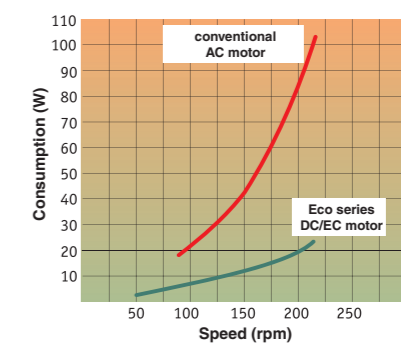
No. of blades	5
Power motor (W)	1.0 - 26
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	132/52
No. of speeds (with RC)	6
Rev. (RPM)	30 - 204
Weight (kg)	6.8

Installation: 2 screws Ø min. 4.5 mm
separation 70 - 110 mm

Further technical data on pages 122 and 126

ECO ELEMENTS 132

Product	Code No.	Housing Finish	Reversible Blade Finish
132 MA-EA/BU	513280	Antique brass	Antique oak/Beech
132 BN-WN/AH	513282	Brushed chrome	Wengé/Maple
132 WE-WE/LG	513281	White	White/Light grey
132 GR-GR/SW	513284	Graphite	Graphite/Matt black
132 BA-NB/BU	513283	Antique brown	Walnut/Beech



Energy consumption of ceiling fans, comparing between conventional AC motors and the patented DC/EC commutated motors, depending on total surface, profile and pitch of blades

ECO ELEMENTS 180



ECO ELEMENTS 180
BN-WE/LG #518082



Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries

**25 YEARS
LIMITED MOTOR
WARRANTY**



180 MA-EA/NB
#518080



180 WE-WE/LG
#518081



180 BA-EA/NB
#518083

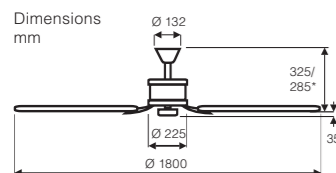


(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"

- 6 speeds by remote control, incl. light on/off, sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 20°, higher pitch with on-site construction.
- Low profile by installation with short downrod.

Options:

- Longer downrods for high ceilings available (page 142).
- Light kits only pre-installed! (page 136/137).
- Hotel wall control **FB-FNK ECO A #86200** (page 133).



*shows installation with shortened downrod

No. of blades	5
Power motor (W)	1.3 - 27
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	180/71
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 138
Weight (kg)	7.2
Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm	

ECO ELEMENTS 180

Product	Code No.	Housing Finish	Reversible Blade Finish
180 MA-EA/NB	518080	Antique brass	Antique oak/Walnut
180 BN-WE/LG	518082	Brushed chrome	White/Light grey
180 WE-WE/LG	518081	White	White/Light grey
180 BA-EA/NB	518083	Antique brown	Antique oak/Walnut

Further technical data on pages 122 and 126

CARIBBEAN DREAM ECO II



CARIBBEAN DREAM ECO II
MA-RTN #513721
Blades antique wicker

Note: due to the irregular surface of palm leaves, the air performance is reduced by about 40% compared to wooden blades of the same size!

**25 YEARS
LIMITED MOTOR
WARRANTY**



Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries



CARIBBEAN DREAM ECO II BN-PLM #513722
Blades natural palm leaf



CARIBBEAN DREAM ECO II BA-RTN #513725
Blades antique wicker

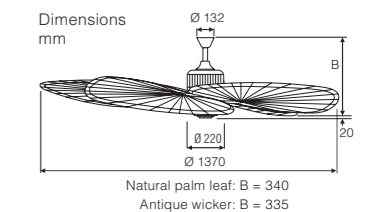


(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"

- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 20°, higher pitch with on-site construction.
- Natural blades antique wicker, woven, or real palm leaf, each on metal frame.

Options:

- Light kits only pre-installed! (page 136/137).
- Longer downrods available for high ceilings (page 142).
- Hotel wall control **FB-FNK ECO A #86200** (page 133).



Natural palm leaf: B = 340
Antique wicker: B = 335

CARIBBEAN DREAM ECO II

Product	Code No.	Housing Finish	Blade Finish
MA-PLM	513720	Antique brass	Natural palm leaf
MA-RTN	513721	Antique brass	Antique wicker
BN-PLM	513722	Brushed chrome	Natural palm leaf
BN-RTN	513723	Brushed chrome	Antique wicker
BA-PLM	513724	Antique brown	Natural palm leaf
BA-RTN	513725	Antique brown	Antique wicker

No. of blades	5
Power motor (W)	1.1 - 25.6
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	137/54
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 161
Weight (kg)	6.8
Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm	

Further technical data on pages 122 and 126

ECO TALOS



ECO TALOS 135 BN-EN
#313590



2 or 3 blades installation as you prefer!

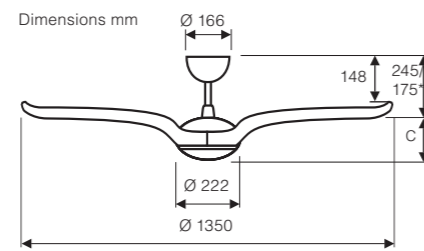
(((SLOW MOTION)))
Speed 1 is guaranteed to work "draught-free"

25 YEARS LIMITED MOTOR WARRANTY

- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. light on/off/dimminn und sleep timer.
- Balanced motor and blades.
- 3 blades included, 2 or 3 installable.
- Installation on sloped ceilings up to 18°, higher pitch with on-site construction.

Optionen:

- Light kit VIT-LED optional combinable.
- Longer downrods for high ceilings (p. 143).



*shows installation with short downrod

No. of blades	3
Power motor (W)	9.1 - 30.5
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	135/53
No. of speeds (with R/C)	6
Rev. (RPM)	38 - 185
Weight (kg)	7.1
Installation: 2 screws Ø min. 4.5 mm separation 73 - 127 mm	

Further technical data on pages 122 and 126

LED-Light kit ECO TALOS

The light kit made of frosted, white glass is a special addition to the ECO TALOS. Its shape fits seamlessly into the design of the fan.

- Opal glass lamp with LED panel, 12 Watt.
- Dimmable by remote control of ECO TALOS.
- Light colour adjustable: 3,000, 4,000 or 5,000 K.
- Quick and easy installation, subsequent connection possible.
- Low overall height.

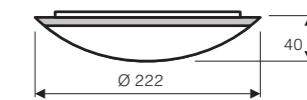


Light kit VIT-LED BN #3140



Light kit VIT-LED BN #3140

Light kit VIT-LED



Dimensions mm

The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

LED module QL2415SYB



Lamp	LED
Power (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

Product	Code No.	Housing Finish
Light kit VIT-LED BN	3140	Brushed chrome

Downrods

for suspension of the ECO TALOS series ceiling fans in rooms with high ceilings.

Available in 60 cm and 120 cm length. Can be shortened to any intermediate size.

Product	Code No.	Finish	Length
ST 60 BN-VIT	971048	Brushed chrome	60 cm
ST 120 BN-VIT	971049	Brushed chrome	120 cm

ECO TALOS

Product	Code No.	Ø cm	Housing Finish	Blade Finish
135 BN-EN	313590	135	Brushed chrome	Natural oak
135 BN-NB	313591	135	Brushed chrome	Walnut

ECO VOLARE 116



ECO VOLARE 116 BN-NB
#511685



**25 YEARS
LIMITED MOTOR
WARRANTY**



(((SLOW MOTION)))
Speed 1 is guaranteed to work "draught-free"



116 BN-LG
#511683



116 BN-WE
#511680



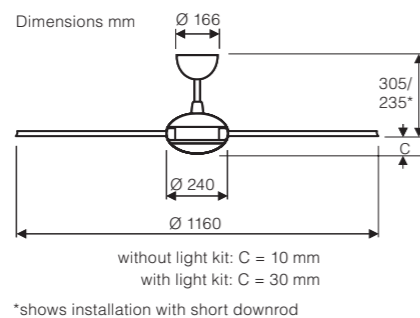
116 BG-BG
#511682



116 WE-WE
#511681



116 WE-BG
#511687



*shows installation with short downrod

No. of blades	5
Power motor (W)	6.8 - 26.7
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	116/45
No. of speeds (with R/C)	6
Rev. (RPM)	37 - 157
Weight (kg)	7.1

Installation: 2 screws Ø min. 4.5 mm separation 73 - 127 mm

Further technical data on pages 122 and 126

ECO VOLARE 116

Product	Code No.	Ø cm	Housing Finish	Blade Finish
116 BN-WE	511680	116 cm	Brushed chrome	White
116 BN-LG	511683	116 cm	Brushed chrome	Light grey
116 BN-EN	511684	116 cm	Brushed chrome	Natural oak
116 BN-NB	511685	116 cm	Brushed chrome	Walnut
116 WE-WE	511681	116 cm	White	White
116 WE-LG	511686	116 cm	White	Light grey
116 WE-BG	511687	116 cm	White	Basalt grey
116 BG-BG	511682	116 cm	Basalt grey	Basalt grey

LED-Light kit ECO VOLARE

The light kit made of frosted, white glass is a special addition to the ECO VOLARE. Its shape fits seamlessly into the design of the fan.

- Opal glass lamp with LED panel, 12 Watt.
- Dimmable by remote control of ECO VOLARE.
- Light colour adjustable: 3,000, 4,000 or 5,000 K.
- Quick and easy installation, subsequent connection possible.
- Low overall height.

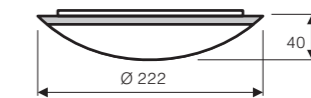


Light kit
VIT-LED BG #3144



Light kit
VIT-LED BN #3140

Light kit VIT-LED



Dimensions mm

LED module QL2415SYB



The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

Lamp	LED
Power (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

Product	Code No.	Housing Finish
Light kit VIT-LED BN	3140	Brushed chrome
Light kit VIT-LED WE	3143	White
Light kit VIT-LED BG	3144	Basalt grey

Downrods

for suspension of the ECO VOLARE series ceiling fans in rooms with high ceilings.

Available in 60 cm and 120 cm length. Can be shortened to any intermediate size.

Product	Code No.	Finish	Length
ST 60 BN-VIT	971048	Brushed chrome	60 cm
ST 60 WE-VIT	971039	White	60 cm
ST 60 BG-VIT	971046	Basalt grey	60 cm
ST 120 BN-VIT	971049	Brushed chrome	120 cm
ST 120 WE-VIT	971059	White	120 cm
ST 120 BG-VIT	971002	Basalt grey	120 cm

ECO VOLARE 142



ECO VOLARE 142 BN-EN
#514284



25 YEARS LIMITED MOTOR WARRANTY



(((SLOW MOTION)))
Speed 1 is guaranteed to work "draught-free"



142 BN-LG
#514283



142 BN-WE #514280 and
Light kit VIT-LED BN #3140



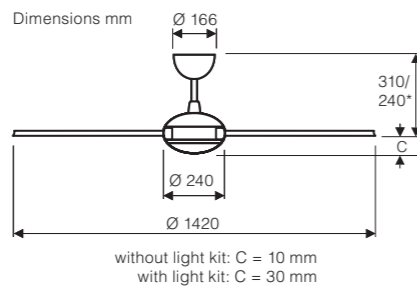
142 WE-WE
#514281



142 WE-LG #514286 and
Light kit VIT-LED WE #3143



142 BG-BG
#514282



*shows installation with short downrod

No. of blades	5
Power motor (W)	7.2 - 26.8
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	142/56
No. of speeds (with R/C)	6
Rev. (RPM)	37 - 122
Weight (kg)	7.5

Installation: 2 screws Ø min. 4.5 mm separation 73 - 127 mm

ECO VOLARE 142

Product	Code No.	Ø cm	Housing Finish	Blade Finish
142 BN-WE	514280	142 cm	Brushed chrome	White
142 BN-LG	514283	142 cm	Brushed chrome	Lack lichtgrau
142 BN-EN	514284	142 cm	Brushed chrome	Eiche natur
142 BN-NB	514285	142 cm	Brushed chrome	Nussbaum
142 WE-WE	514281	142 cm	White	White
142 WE-LG	514286	142 cm	White	Light grey
142 WE-BG	514287	142 cm	White	Basalt grey
142 BG-BG	514282	142 cm	Basalt grey	Basalt grey

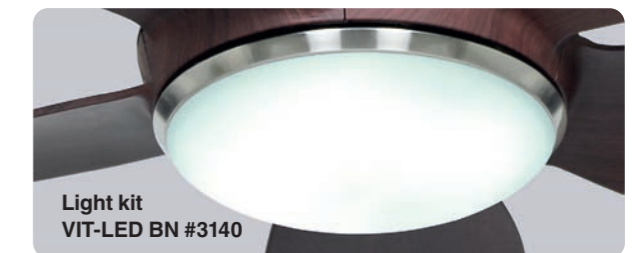
LED-Light kit ECO VOLARE

The light kit made of frosted, white glass is a special addition to the ECO VOLARE. Its shape fits seamlessly into the design of the fan.

- Opal glass lamp with LED panel, 12 Watt.
- Dimmable by remote control of ECO VOLARE.
- Light colour adjustable: 3,000, 4,000 or 5,000 K.
- Quick and easy installation, subsequent connection possible.
- Low overall height.

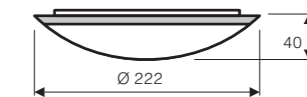


Light kit
VIT-LED BN #3140



Light kit
VIT-LED BN #3140

Light kit VIT-LED



Dimensions mm

The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

LED module QL2415SYB



Lamp	LED
Power (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

Product	Code No.	Housing Finish
Light kit VIT-LED BN	3140	Brushed chrome
Light kit VIT-LED WE	3143	White
Light kit VIT-LED BG	3144	Basalt grey

Downrods

for suspension of the ECO VOLARE series ceiling fans in rooms with high ceilings.

Available in 60 cm and 120 cm length. Can be shortened to any intermediate size.

Product	Code No.	Finish	Length
ST 60 BN-VIT	971048	Brushed chrome	60 cm
ST 60 WE-VIT	971039	White	60 cm
ST 60 BG-VIT	971046	Basalt grey	60 cm
ST 120 BN-VIT	971049	Brushed chrome	120 cm
ST 120 WE-VIT	971059	White	120 cm
ST 120 BG-VIT	971002	Basalt grey	120 cm



ECO REVOLUTION
136 BN-MMG
#313620



136 BN-MMG
#313620 and
Light kit ER-LED #3150



136 BN-MWE
#313621



136 WE-WE
#313623



136 MWE-MWE
#313623 and
Light kit ER-LED #3150



136 MNS-MNS
#313626



136 BN-MWE
#313621 and
Light kit ER-LED #3150

LED-Light kit Eco REVOLUTION

The light kit made of frosted, white glass is a special addition to the ECO REVOLUTION. Its shape fits seamlessly into the design of the fan.

- Opal glass lamp with LED panel, 12 Watt.
- On/Off/Dimmable by remote control of ECO REVOLUTION.
- Light colour adjustable: 3,000, 4,000 or 5,000 K.
- Quick and easy installation, subsequent connection possible.
- Very low overall height, unchanged fan overall height.

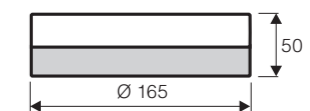


Light kit ER-LED #3150



Light kit ER-LED #3150

Light kit ER-LED



Dimensions mm

LED module QL2415SYB



The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

Lamp	LED
Power (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

Product	Code No.	Housing Finish
Light kit ER-LED	3150	universal for all housing colours



25 YEARS LIMITED MOTOR WARRANTY

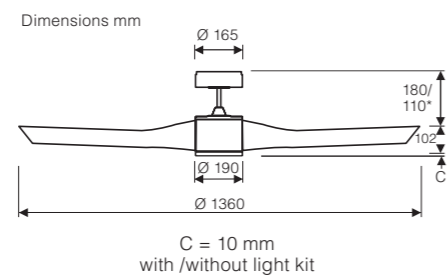


(((SLOW MOTION)))
Speed 1 is guaranteed to work "draught-free"

- 3 dynamically curved plastic blades for maximum air performance at low noise.
- Forward/reverse (summer/winter) by remote control.
- 6 speeds by remote control, incl. light on/off and motor sleep timer.
- Balanced motor and blades.
- Installation on sloped ceilings up to 10°, higher pitch with on-site construction.

Optionen:

- Prepared for installation of light kit ER-LED.
- Longer downrods for high ceilings (page 143).
- Hotel wall control **FB-FNK ECO A #86200** (p. 133).



*shows installation with enclosed short downrod

No. of blades	3
Power motor (W)	2.4 - 23.5
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	136/53.5
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 144
Weight (kg)	6.7

Installation: 2 screws Ø min. 4.5 mm separation 73 - 127 mm

ECO REVOLUTION

Product	Code No.	Size Ø	Housing Finish	Blade Finish
136 BN-MMG	313620	136 cm	Brushed chrome	Matt metal grey
136 BN-MWE	313621	136 cm	Brushed chrome	Matt white
136 BN-MNS	313622	136 cm	Brushed chrome	Matt night black
136 MWE-MWE	313623	136 cm	Matt white	Matt white
136 MWE-MMG	313624	136 cm	Matt white	Matt metal grey
136 MWE-MNS	313625	136 cm	Matt white	Matt night black
136 MNS-MNS	313626	136 cm	Matt night black	Matt night black
136 MNS-MWE	313627	136 cm	Matt night black	Matt white
136 MNS-MMG	313628	136 cm	Matt night black	Matt metal grey

ECO AVIATOS

ECO AVIATOS 132 BN-SI
#513285



Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries

**25 YEARS
LIMITED MOTOR
WARRANTY**



Interchangeable blades ECO AVIATOS: maple, cherry and walnut (from left) in dia Ø 132 and 162 cm.



**2 sizes
available: Ø 132 cm
and 162 cm !**

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"



132 WE-WE
#513286



132 BG-BG
#313298



162 BN-KI
#516088



162 BN-AH
#516087



162 BG-KI
#516096



162 BG-NB
#516095

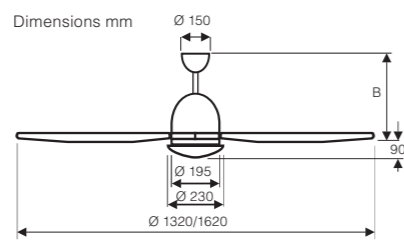


162 BN-NB
#516089

- 6 speeds, light on/off and sleep timer by remote control.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 30°.
- Integrated frosted glass light kit, max. 2 x 40 W (E27), suitable for ESI.

Options:

- Longer downrods for high ceilings available (page 142).
- Interchangeable blades in different sizes (p. 129).
- Hotel wall control **FB-FNK ECO A #86200** (p. 133).



Model	132	162
No. of blades	3	
Power motor (W)	2.4 - 25	2.8 - 36
Power light kit max. (W)	2 x 40	
Voltage (V/Hz)	100-240/50-60	
Size Ø (cm/")	132/52	162/64
No. of speeds (with R/C)	6	
Rev. (RPM)	36 - 188	36 - 150
Weight (kg)	5.9	6.4

Installation: 2 screws Ø min. 4.5 mm
separation 70 - 110 mm

Further technical data on pages 122 and 126

ECO AVIATOS

Product	Code No.	Size Ø	Product	Code No.	Size Ø	Housing Finish	Blade Finish
132 BN-SI	513285	132 cm	162 BN-SI	516085	162 cm	Brushed chrome	Silver
132 BN-KI	513251	132 cm	162 BN-KI	516088	162 cm	Brushed chrome	Cherry
132 BN-NB	513252	132 cm	162 BN-NB	516089	162 cm	Brushed chrome	Walnut
132 BN-AH	513250	132 cm	162 BN-AH	516087	162 cm	Brushed chrome	Maple
132 WE-WE	513286	132 cm	162 WE-WE	516086	162 cm	White	White
132 BG-BG	313298	132 cm	162 BG-BG	516098	162 cm	Basalt grey	Basalt grey
132 BG-NB	513254	132 cm	162 BG-NB	516095	162 cm	Basalt grey	Walnut
132 BG-KI	513255	132 cm	162 BG-KI	516096	162 cm	Basalt grey	Cherry

Interchangeable blades

Blade Colour	Code No. Ø 132	Code No. Ø 162
Maple	19149	19146
Cherry	19148	19145
Walnut	19147	19144

Light bulbs are not included.

ECO GAMMA



**ECO GAMMA 137 BN-WE/LG
#9517250**



Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries

**25 YEARS
LIMITED MOTOR
WARRANTY**



**in 2 sizes with
Ø 103 and 137 cm
available!**

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"



**137 BN-BU/AH
#9517249**



**103 BN-WE/LG
#9510350**



**137 BN-BU/AH
#9517249 with light kit
LA GAMMA, #9511001**

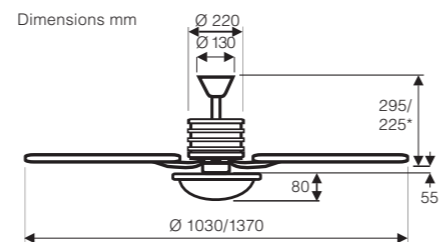


**137 BN-NB/SW
#9513745**

- Modern Design in the flair of the Roaring Twenties.
- Housing brushed chrome with black rings.
- 6 speeds by remote control, incl. light on/off and sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Installation on sloped ceilings up to 28°.
- Balanced motor and blades.
- Low profile by installation without downrod (only 22 cm ceiling - blades).

Options:

- Light kit **LA GAMMA, #9511001** (E27, max. 2 x 40 W) optional
- Longer downrods for high ceilings available (page 142).
- Hotel wall control **FB-FNK ECO A #86200** (page 133).



*shows installation without downrod

Model	103	137
No. of blades	5	
Power motor (W)	1.0 - 14.6	1.1 - 26.4
Voltage (V/Hz)	100-240/50-60	
Size Ø (cm/")	103/42	137/54
No. of speeds (with R/C)	6	
Rev. (RPM)	30 - 193	30 - 183
Weight (kg)	8.1	8.4

Installation: 2 screws Ø min. 4.5 mm
separation 70 - 110 mm

ECO GAMMA

Product	Code No. Ø 103 cm	Code No. Ø 137 cm	Reversible Blade Finish
BN-NB/SW	9510345	9513745	Walnut/Black
BN-BU/AH	9510349	9517249	Beech/Maple
BN-WE/LG	9510350	9517250	White/Light grey

Eco Neo III 92

NEW



ECO NEO III WE
#413243 and
92 WE/LG #19494

25 YEARS
LIMITED MOTOR
WARRANTY

COMBINE YOUR DESIGN!

Always choose the appropriate motor finish and the desired blade decor. Popular combinations see price list.



- 6 SPEEDS
- WINTER/SUMMER
- MAX. 9 m²
- 0 - 10 V
Also available as 0 - 10 V Model
- WiFi



CH #413248 and
92 SW/TK #19493

2, 3 or 4
blades installation
as you prefer!

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"



BN #413242 and
92 WE/LG #19494



BG #413252 and
92 SW/TK #19493



BZ #413249 and
92 NB/KI #19492



MA #413244 and
92 NB/KI #19492

LED-Light kit Eco Neo III

- LED-Light kit for combination with ECO NEO III.
- Quick and easy installation, subsequent connection possible.
- Dimmable by remote control of ECO NEO III.
- Low overall height.
- Available as glass bowl or glass cylinder.

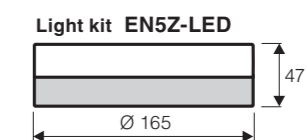
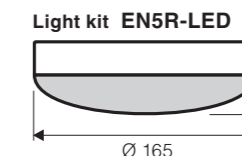


Light kit EN5Z-LED
Glass cylinder



Light kit EN5R-LED
Glass bowl

Dimensions mm



LED module QL2413N7Y



Lamp	LED
Power max. (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

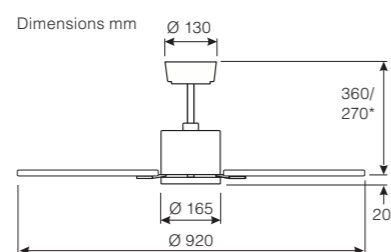
The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

Product	Code No.	Code No.	Housing Finish
LED-Light kit	EN5R-LED	EN5Z-LED	
EN5x-LED BN	2685	2785	Brushed chrome
EN5x-LED WE	2686	2786	White
EN5x-LED LG	2687	2787	Light grey
EN5x-LED BG	2688	2788	Basalt grey
EN5x-LED BZ	2689	2789	Antique bronze
EN5x-LED CH	2690	2790	Polished chrome
EN5x-LED MA	2691	2791	Antique brass

- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 23°.
- Motor units in 6 different colors and the reversible blades in different finishes can be combined in any combination.

Optionen:

- Longer downrods for high ceilings available (page 143).
- Prepared for installation of light kit EN5x-LED.
- Hotel wall control **FB-FNK ECO A #86200** (page 133).



*shows installation with shortened downrod

No. of blades	4
Power motor (W)	1.1 - 12.2
Voltage (V/Hz)	100-240/50-60
Size Ø (cm)	92
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 209
Weight (kg)	5.8

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

Eco Neo III 92

Product (Motor)	Code No.	Code No.	Housing Finish
BN	413242	413242W	Brushed chrome
WE	413243	413243W	White
MA	413244	413244W	Antique brass
CH	413248	413248W	Polished chrome
BG	413252	413252W	Basalt grey
BZ	413249	413249W	Antique bronze

Product (4 blades Ø 92 cm)	Code No.	Reversible Blade Finish
92 AH/BU	19491	Maple/Beech
92 NB/KI	19492	Walnut/Cherry
92 SW/TK	19493	Black/Teak
92 WE/LG	19494	White/Light grey
92 WN/SI	19495	Wengé/Silver

Popular combinations of motor and blades can be found in our enclosed price list!

Energy saving
DC/EC motor

Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries

ECO NEO III 103

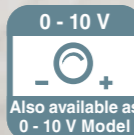
ECO NEOIII BG
#413252 and
103 NB/KI #19511



**25 YEARS
LIMITED MOTOR
WARRANTY**

COMBINE YOUR DESIGN!

Always choose the appropriate motor finish and the desired blade decor. Popular combinations see price list.



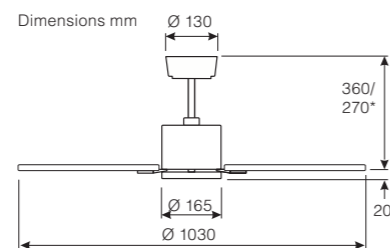
**2, 3 or 4
blades installation
as you prefer!**

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"

- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 23°, higher pitch with on-site construction.
- Motor units in 6 different colors and the reversible blades in different finishes can be combined in any combination.

Options:

- Longer downrods for high ceilings available (page 143).
- Prepared for installation of light kit EN5x-LED.
- Hotel wall control **FB-FNK ECO A #86200** (page 133).



*shows installation with shortened downrod

No. of blades	4
Power motor (W)	2.5 - 15.8
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	103/42
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 208
Weight (kg)	5.8

Installation: 2 screws Ø min. 4.5 mm
separation 70 - 110 mm

Further technical data on pages 122 and 126



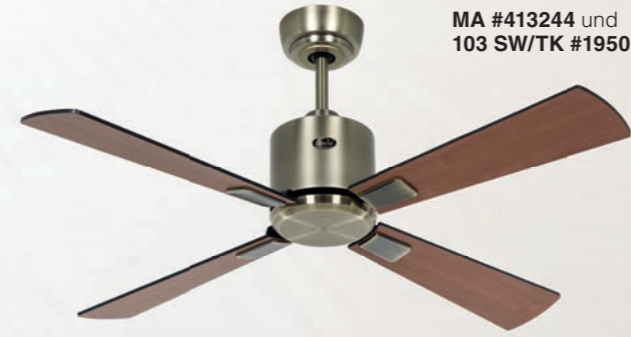
CH #413248 und
103 WN/SI #19541



BZ #413249 und
103 NB/KI #19511



WE #413243 und
103 WE/LG #19531



MA #413244 und
103 SW/TK #19501

LED-Light kit Eco NEO III

- LED-Light kit for combination with ECO NEO III.
- Quick and easy installation, subsequent connection possible.
- Dimmable by remote control of ECO NEO III.
- Low overall height.
- Available as glass bowl or glass cylinder.



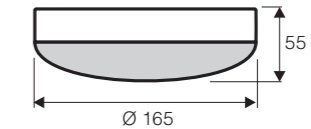
Light kit EN5Z-LED
Glass cylinder



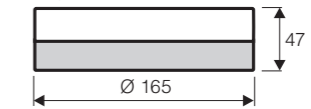
Light kit EN5R-LED
Glass bowl

Dimensions mm

Light kit EN5R-LED



Light kit EN5Z-LED



LED module QL2413N7Y



Lamp	LED
Power max. (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

Product	Code No.	Code No.	Housing Finish
LED-Light kit	EN5R-LED	EN5Z-LED	
EN5x-LED BN	2685	2785	Brushed chrome
EN5x-LED WE	2686	2786	White
EN5x-LED BG	2688	2788	Basalt grey
EN5x-LED BZ	2689	2789	Antique bronze
EN5x-LED CH	2690	2790	Polished chrome
EN5x-LED MA	2691	2791	Antique brass

ECO NEO III 103

Product (Motor)	Code No.	Code No.	Housing Finish	Product (4 blades Ø103 cm)	Code No.	Reversible Blade Finish
BN	413242	413242W	Brushed chrome	103 AH/BU	19521	Maple/Beech
WE	413243	413243W	White	103 NB/KI	19511	Walnut/Cherry
MA	413244	413244W	Antique brass	103 SW/TK	19501	Black/Teak
CH	413248	413248W	Polished chrome	103 WE/LG	19531	White/Light grey
BG	413252	413252W	Basalt grey	103 WN/SI	19541	Wengé/Silver
BZ	413249	413249W	Antique bronze			

Popular combinations of motor and blades can be found in our enclosed price list!

**Energy saving
DC/EC motor**

**Voltage/
Frequency**

**100-240 V/
50-60 Hz**

**suitable
for many
countries**

ECO NEO III 132

ECO NEO III WE
#413243 and
132 WE/LG #19532

MA #413244 and
132 AH/BU #19522



CH #413248 and
132 AH/BU #19522



BN #413242 and
132 AH/BU #19522



BZ #413249 and
132 NB/KI #19512



BG #413252 and
132 WE/LG #19532

LED-Light kit Eco NEO III

- LED-Light kit for combination with ECO NEO III.
- Quick and easy installation, subsequent connection possible.
- Dimmable by remote control of ECO NEO III.
- Low overall height.
- Available as glass bowl or glass cylinder.



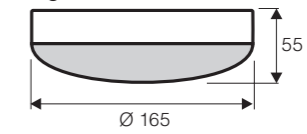
Light kit EN5Z-LED
Glass cylinder



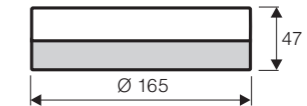
Light kit EN5R-LED
Glass bowl

Dimensions mm

Light kit EN5R-LED



Light kit EN5Z-LED



LED module QL2413N7Y



Lamp	LED
Power max. (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

Product	Code No.	Code No.	Housing Finish
LED-Light kit	EN5R-LED	EN5Z-LED	
EN5x-LED BN	2685	2785	Brushed chrome
EN5x-LED WE	2686	2786	White
EN5x-LED BG	2688	2788	Basalt grey
EN5x-LED BZ	2689	2789	Antique bronze
EN5x-LED CH	2690	2790	Polished chrome
EN5x-LED MA	2691	2791	Antique brass

25 YEARS LIMITED MOTOR WARRANTY

COMBINE YOUR DESIGN!

Always choose the appropriate motor finish and the desired blade decor. Popular combinations see price list.



- 6 SPEEDS
- WINTER/SUMMER
- MAX. 25 m²
- 0 - 10 V
- WiFi

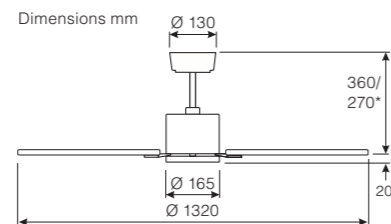
2, 3 or 4 blades installation as you prefer!

(((SLOW MOTION)))
Speed 1 is guaranteed to work "draught-free"

- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 23°.
- Motor units in 6 different colors and the reversible blades in different finishes can be combined in any combination.

Options:

- Longer downrods for high ceilings available (p. 143).
- Prepared for installation of light kit EN5x-LED.
- Hotel wall control **FB-FNK EC #86200** (page 133).



*shows installation with shortened downrod

No. of blades	4
Power motor (W)	2.3 - 27
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	132/52
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 185
Weight (kg)	5.9

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

ECO NEO III 132

Product (Motor)	Code No.	Code No.	Housing Finish	Product (4 blades Ø132 cm)	Code No.	Reversible Blade Finish
BN	413242	413242W	Brushed chrome	132 AH/BU	19522	Maple/Beech
WE	413243	413243W	White	132 NB/KI	19512	Walnut/Cherry
MA	413244	413244W	Antique brass	132 SW/TK	19502	Black/Teak
CH	413248	413248W	Polished chrome	132 WE/LG	19532	White/Light grey
BG	413252	413252W	Basalt grey	132 WN/SI	19542	Wengé/Silver
BZ	413249	413249W	Antique bronze			

Popular combinations of motor and blades can be found in our enclosed price list!

Energy saving DC/EC motor

Voltage/Frequency 100-240 V/ 50-60 Hz suitable for many countries

ECO NEO III 152



ECO NEO III CH
#413248 and
152 SW/TK #19503



BN #413242 and
152 SW/TK #19503



BG #413252 and
152 AH/BU #19523



MA #413244 and
152 NB/KI #19513



BZ #413249 and
152 NB/KI #19513



WE #413243 und
152 WN/SI #19137

25 YEARS
LIMITED MOTOR
WARRANTY

COMBINE YOUR DESIGN!

Always choose the appropriate motor finish and the desired blade decor. Popular combinations see price list.



- 6 SPEEDS**
- WINTER/SUMMER**
- MAX. 35 m²**
- 0 - 10 V**
Also available as 0 - 10 V Model
- WiFi**

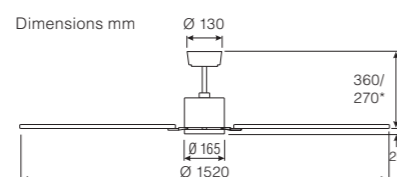
2, 3 or 4 blades installation as you prefer!

(((SLOW MOTION)))
Speed 1 is guaranteed to work "draught-free"

- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 23°.
- Motor units in 6 different colors and the reversible blades in different finishes can be combined in any combination.

Options:

- Longer downrods for high ceilings available (p. 143).
- Prepared for installation of light kit EN5x-LED.
- Hotel wall control **FB-FNK ECO A #86200** (page 133).



*shows installation with shortened downrod

No. of blades	4
Power motor (W)	2.5 - 27
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/°)	152/60
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 150
Weight (kg)	6.1

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

Further technical data on pages 122 and 126

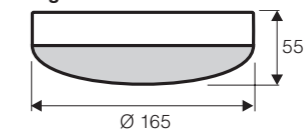
LED-Light kit Eco NEO III

- LED-Light kit for combination with ECO NEO III.
- Quick and easy installation, subsequent connection possible.
- Dimmable by remote control of ECO NEO III.
- Low overall height.
- Available as glass bowl or glass cylinder.

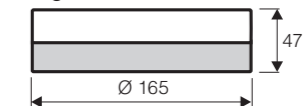


Dimensions mm

Light kit EN5R-LED



Light kit EN5Z-LED



LED module QL2413N7Y



Lamp	LED
Power max. (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

Product	Code No.	Code No.	Housing Finish
LED-Light kit	EN5R-LED	EN5Z-LED	
EN5x-LED BN	2685	2785	Brushed chrome
EN5x-LED WE	2686	2786	White
EN5x-LED BG	2688	2788	Basalt grey
EN5x-LED BZ	2689	2789	Antique bronze
EN5x-LED CH	2690	2790	Polished chrome
EN5x-LED MA	2691	2791	Antique brass

ECO NEO III 152

Product (Motor)	Code No.	Code No.	Housing Finish	Product (4 blades Ø152 cm)	Code No.	Reversible Blade Finish
BN	413242	413242W	Brushed chrome	152 AH/BU	19523	Maple/Beech
WE	413243	413243W	White	152 NB/KI	19513	Walnut/Cherry
MA	413244	413244W	Antique brass	152 SW/TK	19503	Black/Teak
CH	413248	413248W	Polished chrome	152 WE/LG	19533	White/Light grey
BG	413252	413252W	Basalt grey	152 WN/SI	19137	Wengé/Silver
BZ	413249	413249W	Antique bronze			

Popular combinations of motor and blades can be found in our enclosed price list!

Energy saving DC/EC motor

Voltage/Frequency 100-240 V/ 50-60 Hz suitable for many countries

Eco NEO III 180

ECO NEOIII CH
#413248 and
AH/BU #19525

25 YEARS
LIMITED MOTOR
WARRANTY

COMBINE YOUR DESIGN!

Always choose the appropriate motor finish and the desired blade decor. Popular combinations see price list.



6 SPEEDS



WINTER/
SUMMER



MAX. 45 m²



0 - 10 V
Also available as
0 - 10 V Model

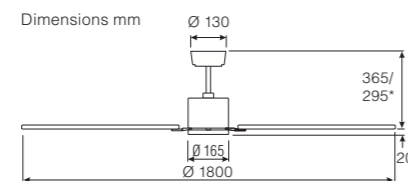


WiFi

2, 3 or 4
blades installation
as you prefer!

(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"

Dimensions mm



*shows installation with short downrod

No. of blades	4
Power motor (W)	1.5 - 28
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	180/71
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 110
Weight (kg)	5.8

Installation: 2 screws Ø min. 4.5 mm
separation 70 - 110 mm

- 6 speeds by remote control, incl. light on/off/dimming and sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- Installation on sloped ceilings up to 23°.
- Motor units in 6 different colors and the reversible blades in different finishes can be combined in any combination.
- Longer downrods for high ceilings available (p. 143).
- Prepared for installation of light kit EN5x-LED.
- Hotel wall control **FB-FNK ECO A #86200** (page 133).

Further technical data on pages 122 and 126

LED-Light kit Eco NEO III

- LED-Light kit for combination with ECO NEO III.
- Quick and easy installation, subsequent connection possible.
- Dimmable by remote control of ECO NEO III.
- Low overall height.
- Available as glass bowl or glass cylinder.



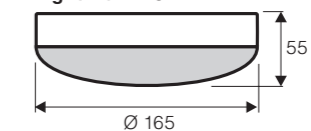
Light kit EN5Z-LED
Glass cylinder



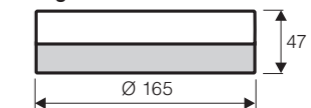
Light kit EN5R-LED
Glass bowl

Dimensions mm

Light kit EN5R-LED



Light kit EN5Z-LED



LED module QL2413N7Y



Lamp	LED
Power max. (W)	12
CRI	80
Luminous flux (lm)	1,800
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000

The luminaire contains built-in LED lamps. Energy class D (Spectrum A to G). The lamps cannot be changed in the luminaire. Replacement LED modules available.

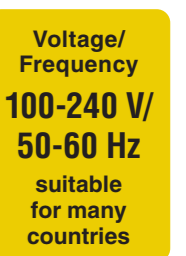
Product	Code No.	Code No.	Housing Finish
LED-Light kit	EN5R-LED	EN5Z-LED	
EN5x-LED BN	2685	2785	Brushed chrome
EN5x-LED WE	2686	2786	White
EN5x-LED BG	2688	2788	Basalt grey
EN5x-LED BZ	2689	2789	Antique bronze
EN5x-LED CH	2690	2790	Polished chrome
EN5x-LED MA	2691	2791	Antique brass

ECO NEO III 180

Product (Motor)	Code No.	Code No.	Housing Finish
BN	413242	413242W	Brushed chrome
WE	413243	413243W	White
MA	413244	413244W	Antique brass
CH	413248	413248W	Polished chrome
BG	413252	413252W	Basalt grey
BZ	413249	413249W	Antique bronze

Product (4 blades Ø180 cm)	Code No.	Reversible Blade Finish
180 AH/BU	19525	Maple/Beech
180 NB/KI	19515	Walnut/Cherry
180 SW/TK	19510	Black/Teak
180 WE/LG	19209	White/Light grey
180 WN/SI	19210	Wengé/Silver

Popular combinations of motor and blades can be found in our enclosed price list!



ECO FIORE 142 WE
#314226

ECO HELIX WE
#313254



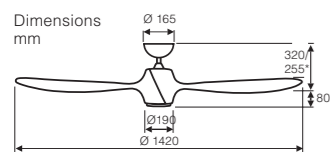
- LED-Light kit, 17 Watt.
- Forward/reverse (summer/winter) by remote control.
- 6 speeds, light on/off by remote control.
- Housing and blades made of polished ABS plastic with water transfer printing.
- Balanced motor and blades.
- Installation on sloped ceilings up to 30°, higher pitch with on-site construction.

Options:

- Longer downrods available for high ceilings (page 142).

Integrated LED module ML111B:

- 17 W, warm white (3,000 K, 1,800 lm, CRI 80).
- Beam angle 120°, life span 30,000 h.
- Not dimmable.
- Energy class F (Spectrum A to G).



*shows installation with short downrod

25 YEARS LIMITED MOTOR WARRANTY

(((SLOW MOTION)))
Speed 1 is guaranteed to work "draught-free"

LED module ML111B
A F G

Energy saving DC/EC motor

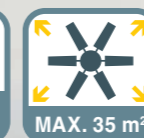
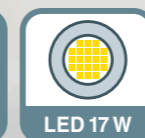


25 YEARS LIMITED MOTOR WARRANTY

(((SLOW MOTION)))
Speed 1 is guaranteed to work "draught-free"

LED module ML111B
A F G

Energy saving DC/EC motor



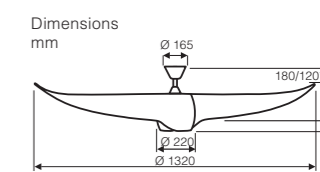
- Fresh, floral design with aerodynamically shaped bladetips.
- LED-Light kit, 17 Watt.
- 6 speeds, light on/off by remote control.
- Forward/reverse (summer/winter) by remote control.
- Installation on sloped ceilings up to 30°.
- Balanced motor and blades.

Options:

- Longer downrods available (page 143).

Integrated LED module ML111B:

- 17 W, warm white (3,000 K, 1,800 lm, CRI 80).
- Beam angle 120°, life span 30,000 h.
- Not dimmable.
- Energy class F (Spectrum A to G).



*shows installation with short downrod

No. of blades	3
Power motor (W)	2.3 - 47
Power light kit (W)	17
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	142/56
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 183
Weight (kg)	9.3
Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm	

ECO FIORE

Product	Code No.	Blades/Housing Finish
142 WE	314226	ABS polished, white
142 RP	314228	ABS, redpine water transfer printing/brushed chrome

The luminaire contains built-in LED lamps. The lamps cannot be changed in the luminaire. Replacement LED panels available.

Further technical data on pages 122 and 126

ECO HELIX

Product	Code No.	Housing Finish	Blade Finish
WE	313254	ABS polished, white	ABS polished, white

The luminaire contains built-in LED lamps. The lamps cannot be changed in the luminaire. Replacement LED panels available.

Further technical data on pages 122 and 126

No. of blades	3
Power motor (W)	2.0 - 30.5
Power light kit max. (W)	17
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 163
Weight (kg)	7.9
Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm	

BIG SMOOTH ECO

BIG SMOOTH ECO
TS-TS #922012



Voltage/
Frequency
**100-240 V/
50-60 Hz**
suitable
for many
countries



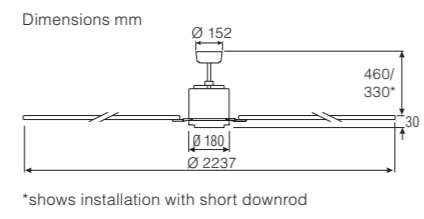
(((SLOW MOTION)))
Speed 1 is guaranteed
to work "draught-free"

**25 YEARS
LIMITED MOTOR
WARRANTY**



- Massive air power at low Rev.
- 6 speeds by remote control, incl. sleep timer.
- Forward/reverse (summer/winter) by remote control.
- Balanced motor and blades.
- 9 ventilation-optimized profiled aluminium blades.
- Installation on sloped ceilings up to 24°, higher pitch with on-site construction.

- Options:**
- Longer downrods for high ceilings available (page 142).
 - Hotel wall control **FB-FNK ECO A #86200** (page 133).



No. of blades	9
Power motor (W)	1.8 - 35
Voltage (V/Hz)	100-240/50-60
Size Ø (cm/")	223/88
No. of speeds (with R/C)	6
Rev. (RPM)	30 - 100
Weight (kg)	8.9

Installation: 2 screws Ø min. 4.5 mm
separation 83 - 110 mm

BIG SMOOTH ECO

Product	Code No.	Housing Finish	Blade Finish
TS-TS	922012	Titan silver	Aluminum profile, titan silver
WE-WE	922013	White	Aluminum profile, white
BZ-BZ	922014	Antique bronze	Aluminum profile, antique bronze

CLASSIC ROYAL 75



ROYAL 75 BN-BU/KB
#507515



75 MP-EA/WI
#507509



75 CH-WE/LG
#507502



75 MA-EA/WI
#507501



75 WE-WE/LG
#507503



75 BA-NB/ND
#507513

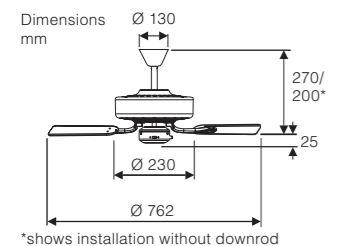
15 YEARS LIMITED MOTOR WARRANTY



- 3-speeds pull chain switch.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Installation on sloped ceilings up to 28°, higher pitch with on-site construction.
- Low profile by installation without downrod (only 20 cm ceiling - blades).

Options:

- Light kits adaptable (page 136/137).
- Optional remote and wall controls available (page 132 - 134).
- Longer downrods available for high ceilings (page 142).
- All blades for dia Ø 75 cm can be used (p. 129 - 131).



No. of blades	5
Power motor (W)	48.3
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	76.2/30
No. of speeds (w. P/C)	3
Rev. max. (RPM)	287
Weight (kg)	5.2
Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm	

CLASSIC ROYAL 75

Product	Code No.	Housing Finish	Reversible Blade Finish
75 MA-EA/WI	507501	Antique brass	Antique oak/Wild oak
75 CH-WE/LG	507502	Polished chrome	White/Light grey
75 WE-WE/LG	507503	White	White/Light grey
75 MP-EA/WI	507509	Polished brass	Antique oak/Wild oak
75 BA-NB/ND	507513	Ant. Brown/bronze	Walnut/Dark walnut
75 BN-BU/KB	507515	Brushed chrome	Beech/Heartwood beech

Further technical data on pages 124 and 127

CLASSIC ROYAL 103



ROYAL 103 BA-NB/ND
#510313



103 CH-WE/LG
#510302



103 MP-EA/WI
#510309



103 MA-EA/WI
#510301



103 WE-WE/LG
#510303



103 BN-BU/KB
#510315

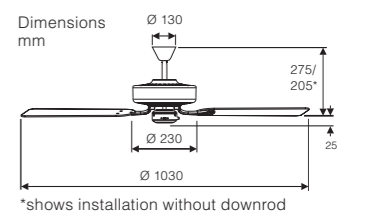
15 YEARS LIMITED MOTOR WARRANTY



- 3-speeds pull chain switch.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Installation on sloped ceilings up to 28°, higher pitch with on-site construction.
- Low profile by installation without downrod (only 21 cm ceiling - blades).

Options:

- Light kits adaptable (page 136/137).
- Optional remote and wall controls available (page 132 - 134).
- Longer downrods available for high ceilings (page 142).
- All blades for dia Ø 103 cm can be used (p. 129 - 131).



No. of blades	5
Power motor (W)	52.5
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	103/42
No. of speeds (w. P/C)	3
Rev. max. (RPM)	204
Weight (kg)	5.9
Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm	

CLASSIC ROYAL 103

Product	Code No.	Housing Finish	Reversible Blade Finish
103 MA-EA/WI	510301	Antique brass	Antique oak/Wild oak
103 CH-WE/LG	510302	Polished chrome	White/Light grey
103 WE-WE/LG	510303	White	White/Light grey
103 MP-EA/WI	510309	Polished brass	Antique oak/Wild oak
103 BA-NB/ND	510313	Ant. Brown/bronze	Walnut/Dark walnut
103 BN-BU/KB	510315	Brushed chrome	Beech/Heartwood beech

Further technical data on pages 124 and 127

CLASSIC ROYAL 132



ROYAL 132 BN-BU/KB
#513214



132 WE-WE/LG
#513203



132 GR-GR/MS
#513248



132 CH-WE/LG
#513202



132 MA-EA/WI
#513201



132 BA-NB/ND
#513213

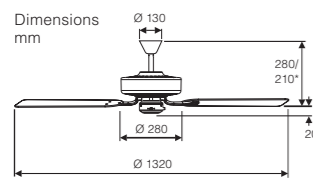
15 YEARS LIMITED MOTOR WARRANTY



- 3-speeds pull chain switch.
- Forward/reverse (summer/winter) slide switch.
- Reversible wooden blades with 2 different decors.
- Balanced motor and blades.
- Installation on sloped ceilings up to 28°, higher pitch with on-site construction.

Options:

- Light kits adaptable (page 136/137).
- Optional controls available (page 132 - 134).
- Longer downrods available for high ceilings (page 142).
- All blades for dia Ø 132 cm can be used (p. 129 - 131).



*shows installation without downrod

CLASSIC ROYAL 132

No. of blades	5
Power motor (W)	64
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (w. P/C)	3
Rev. max. (RPM)	180
Weight (kg)	6.9

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

Product	Code No.	Housing Finish	Reversible Blade Finish
132 MA-EA/WI	513201	Antique brass	Antique oak/Wild oak
132 CH-WE/LG	513202	Polished chrome	White/Light grey
132 WE-WE/LG	513203	White	White/Light grey
132 MP-EA/WI	513209	Polished brass	Antique oak/Wild oak
132 BA-NB/ND	513213	Ant. Brown/bronze	Walnut/Dark walnut
132 GR-GR/MS	513248	Graphite	Graphite/Matt black
132 BN-BU/KB	513214	Brushed chrome	Beech/Heartwood beech

Further technical data on pages 124 and 127

CLASSIC ROYAL 180



ROYAL 180 BN-EA/NB
#518015



180 WE-WE/LG
#518003



180 BA-EA/NB
#518013



180 MA-EA/NB
#518001



180 WE-EA/NB
#518019

15 YEARS LIMITED MOTOR WARRANTY



- 3-speeds pull chain switch.
- Forward/reverse (summer/winter) slide switch.
- Reversible wooden blades with 2 different decors.
- Balanced motor and blades.
- Installation on sloped ceilings up to 28°, higher pitch with on-site construction.

Options:

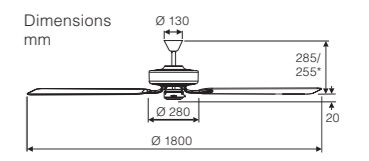
- Light kits adaptable (page 136/137).
- Optional controls available (page 132 - 134).
- Longer downrods available for high ceilings (page 142).
- 'Slow motion' (approx. 35 RPM) in combination with remote control **FB-FNK Advanced #85229** (page 132).

CLASSIC ROYAL 180

Product	Code No.	Housing Finish	Reversible Blade Finish
180 MA-AH/BU	518017	Antique brass	Maple/Beech
180 MA-EA/NB	518001	Antique brass	Antique oak/Walnut
180 MA-WE/LG	518018	Antique brass	White/Light grey
180 BN-AH/BU	518014	Brushed chrome	Maple/Beech
180 BN-EA/NB	518015	Brushed chrome	Antique oak/Walnut
180 BN-WE/LG	518016	Brushed chrome	White/Light grey
180 WE-AH/BU	518020	White	Maple/Beech
180 WE-EA/NB	518019	White	Antique oak/Walnut
180 WE-WE/LG	518003	White	White/Light grey
180 BA-AH/BU	518022	Antique brown/bron.	Maple/Beech
180 BA-EA/NB	518013	Antique brown/bron.	Antique oak/Walnut
180 BA-WE/LG	518021	Antique brown/bron.	White/Light grey

No. of blades	5
Power motor (W)	65.7
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	180/71
No. of speeds (w. P/C)	3
Rev. max. (RPM)	112
Weight (kg)	6.9

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm



*shows installation with short downrod

Further technical data on pages 124 and 127

CLASSIC FLAT 75-III

CLASSIC FLAT 103-III



FLAT 75-III BN-NB/BU
#5075051



FLAT 103-III BN-NB/BU
#5103051



75-III BZ-AE/EK
#5075371



75-III MP-AE/EK
#5075001



75-III WE-WE/LG
#5075061



75-III MA-AE/EK
#5075041



103-III BZ-AE/EK
#5103371



103-III WE-WE/LG
#5103061



103-III MA-EA/BU
#5103041



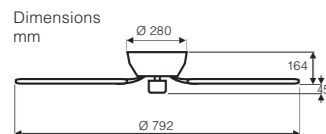
103-III MP-AE/AH
#5103001

LOW PROFILE!
especially made for
low-ceilinged rooms

- 3-speeds pull chain switch.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Reversible wooden blades with 2 different decors.

Options:

- Optional remote and wall controls available (page 132 - 134).
- Light kits adaptable (page 136/137).
- All blades for dia Ø 79 cm can be used (p. 129 - 131).



15 YEARS LIMITED MOTOR WARRANTY



CLASSIC FLAT 75-III

Product	Code No.	Housing Finish	Reversible Blade Finish
75-III BZ-AE/EK	5075371	Antique bronze	Used wood oak/Colonial oak
75-III MA-AE/EK	5075041	Antique brass	Used wood oak/Colonial oak
75-III BN-NB/BU	5075051	Brushed chrome	Walnut/Beech
75-III WE-WE/LG	5075061	White	White/Light grey
75-III MP-AE/AH	5075001	Polished brass	Used wood oak/Maple

No. of blades	5
Power motor (W)	63
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	79/32
No. of speeds (w. P/C)	3
Rev. max. (RPM)	315
Weight (kg)	4.5
Installation: 2 screws Ø min. 4.5 mm separation 70 - 90 mm	

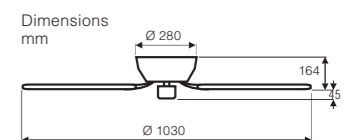
Further technical data on pages 124 and 127

LOW PROFILE!
especially made for
low-ceilinged rooms

- 3-speeds pull chain switch.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Reversible wooden blades with 2 different decors.

Options:

- Optional remote and wall controls available (page 132 - 134).
- Light kits adaptable (page 136/137).
- All blades for dia Ø 103 cm can be used (p. 129 - 131).



15 YEARS LIMITED MOTOR WARRANTY



CLASSIC FLAT 103-III

Product	Code No.	Housing Finish	Reversible Blade Finish
103-III BZ-AE/EK	5103371	Antique bronze	Used wood oak/Colonial oak
103-III MA-EA/BU	5103041	Antique brass	Antique Oak/Beech
103-III BN-NB/BU	5103051	Brushed chrome	Walnut/Beech
103-III WE-WE/LG	5103061	White	White/Light grey
103-III MP-AE/AH	5103001	Polished brass	Used wood oak/Maple

No. of blades	5
Power motor (W)	63
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	103/42
No. of speeds (w. P/C)	3
Rev. max. (RPM)	225
Weight (kg)	4.7
Installation: 2 screws Ø min. 4.5 mm separation 70 - 90 mm	

Further technical data on pages 124 and 127

CLASSIC FLAT 132-III

BLACK MAGIC



FLAT 132-III BZ-AE/EK
#5132371



BLACK MAGIC SW-SW
#513207



132-III MA-EA/BU
#5132041



132-III BN-NB/BU
#5132051



132-III WE-WE/LG
#5132061



132-III MP-AE/AH
#5132001



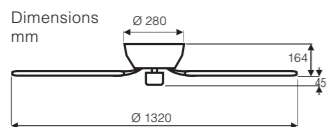
BLACK MAGIC w/o L. SW-SW
#513297

LOW PROFILE!
especially made for
low-ceilinged rooms

- 3-speeds pull chain switch.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Reversible wooden blades with 2 different decors.

Options:

- Optional remote and wall controls available (page 132 - 134).
- All blades for dia Ø 132 cm can be used (page 129 - 131).



No. of blades	5
Power motor (W)	68
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (w. P/C)	3
Rev. max. (RPM)	172
Weight (kg)	6.2
Installation: 2 screws Ø min. 4.5 mm separation 70 - 90 mm	

15 YEARS LIMITED MOTOR WARRANTY



CLASSIC FLAT 132-III

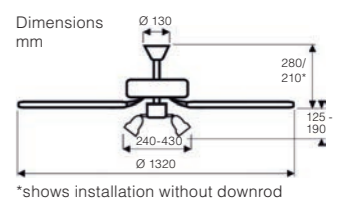
Product	Code No.	Housing Finish	Reversible Blade Finish
132-III BZ-AE/EK	5132371	Antique bronze	Used wood oak/Colonial oak
132-III MA-EA/BU	5132041	Antique brass	Antique oak/Beech
132-III BN-NB/BU	5132051	Brushed chrome	Walnut/Beech
132-III WE-WE/LG	5132061	White	White/Light grey
132-III MP-AE/AH	5132001	Polished brass	Used wood oak/Maple

Further technical data on pages 124 and 127

- Black lacquer housing with polished brass.
- 3-speeds pull chain switch.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- With or without 4 spotlights (E27), individually adjustable, pull switch luminaire 0-2-2-4, ESL possible.
- Installation on sloped ceilings up to 28°, higher pitch with on-site construction.

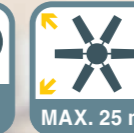
Options:

- Optional remote and wall controls available (p. 132 - 134).
- Longer downrods for high ceilings available (page 142).
- All blades for dia Ø 132 cm can be used (p. 129 - 131).
- Other light kits adaptable (page 136/137).



*shows installation without downrod

15 YEARS LIMITED MOTOR WARRANTY



BLACK MAGIC

Product	Code No.	Housing Finish	Reversible blades
BLACK MAGIC SW-SW	513207	Black/ Polished brass	Black
BLACK MAGIC w/o L. SW-SW	513297	Black/ Polished brass	Black

Light bulbs are not included.

No. of blades	5
Power motor (W)	64.5
Power light kit max. (W)	4 x 14
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (w. P/C)	3
Rev. max. (RPM)	180
Weight/with light kit (kg)	6.5/7.7
Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm	

Further technical data on pages 124 and 127

CENTURION

**CENTURION 132 MA-EA/NB
#513243**



**132 MA-EA/NB
#513243**

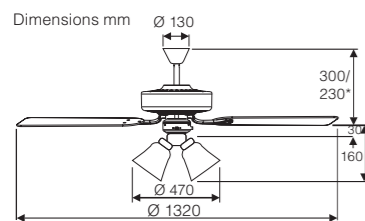


**15 YEARS
LIMITED MOTOR
WARRANTY**

- Housing with ornaments.
- 3-speeds pull chain switch.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- 5-tulp light kit, max. 5 x 60 W (E27) included. Mounting with or without light kit possible.
- Installation on sloped ceilings up to 28°, higher pitch with on-site construction.
- Low profile installation without downrod (only 23 cm ceiling - blades).

Options:

- Optional remote and wall controls available (p. 132 - 134).
- Longer downrods for high ceilings available (page 142).



* shows installation without downrod

No. of blades	5
Power motor (W)	79
Power light kit max. (W)	5 x 14
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (w. P/C)	3
Rev. max. (RPM)	216
Weight (kg)	9.7

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

CENTURION

Product	Code No.	Housing Finish	Rev.Blade Finish
132 MA-EA/NB	513243	Antique brass	Antique oak/Walnut

Light bulbs are not included.

Further technical data on pages 124 and 127

NEW

TRISTAR-Z

**TRISTAR-Z 120 SW
#312012**



**120 CH
#312011**



**120 WE
#312010**



- Forward/reverse (summer/winter) slide switch.
- 3-speeds pull chain switch.
- Balanced motor and blades.
- When installing with enclosed short downrod only 20 cm distance ceiling - blades.
- Installation on sloped ceilings up to 16°, higher pitch with on-site construction.

Options:

- Optional remote and wall controls available (p. 132 - 134).
- Longer downrods for high ceilings available (page 143).

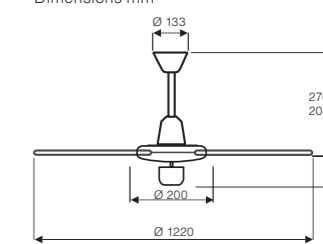
TRISTAR-Z 120

Product	Code No.	Housing Finish	Blade Finish
120 SW	312012	Black	Black
120 CH	312011	Polished chrome	Polished chrome
120 WE	312010	White	White

No. of blades	3
Power motor (W)	59
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	122/48
No. of speeds (m.Zugsch.)	3
Rev. max. (RPM)	286
Weight (kg)	4.5

Installation: 2 screws Ø min. 4.5 mm separation 75 - 95 mm

Dimensions mm



* shows installation with short downrod

Further technical data on pages 124 and 127

LIBECCIO 120/142

LIBECCIO BN-WN/KF
#9314253



15 YEARS
LIMITED MOTOR
WARRANTY

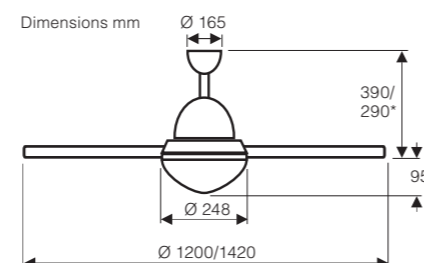


2, 3 or 4
blades installation
as you prefer!

- Forward/reverse (summer/winter) slide switch.
- 3 speeds, light on/off and dimming by remote control, wall bracket included.
- Integrated frosted glass light kit, max. 2 x 10 W (E27), suitable for ESL.
- Balanced motor and blades.
- 2 blade sets Ø 120 and Ø 142 with 4 blades each included.
- Installation on sloped ceilings up to 17°, higher pitch with on-site construction.

Options:

- Optional wall controls available (pages 133/134).
- Longer downrods for high ceilings available (page 142).
- Hotel wall control **FB-FNK-D AC Hotel #86210** (page 133).



* shows installation with short downrod

Further technical data on pages 124 and 127

No. of blades	4 + 4
Power motor (W)	13 - 81 / 14 - 83
Power light kit max. (W)	2 x 10
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	120/47 / 142/56
No. of speeds (with R/C)	3
Rev. max. (RPM)	170 / 113
Weight (kg)	8.8

Installation: 2 screws Ø min. 4.5 mm
separation 70 - 110 mm

Further technical data on pages 124 and 127

LIBECCIO 120/142

Product	Code No.	Housing Finish	Reversible Blade Finish
BN	9314253	Brushed chrome	KI/AH Ø 120 cm: Cherry/Maple WN/KF Ø 142 cm: Wengé/Pine
WE	9314254	White	KI/AH Ø 120 cm: Cherry/Maple WE/LG Ø 142 cm: White/Light grey

Light bulbs are not included.

TITANIUM



TITANIUM 132 BN-KF/BU
#9513260



LOW PROFILE POSSIBLE!
With direct mounting also suitable for low ceilings

25 YEARS LIMITED MOTOR WARRANTY



3 sizes from Ø 105 to 162 cm available!



132 BN-NB/KI
#9513262



TITANIUM 105: for room size up to 15 m²

105 WE-WE
#9510561



132 BN-NB/KI
#9513262



TITANIUM 132: for room size up to 27 m²

132 WE-WE
#9513261



132 BN-KF/BU
#9513260



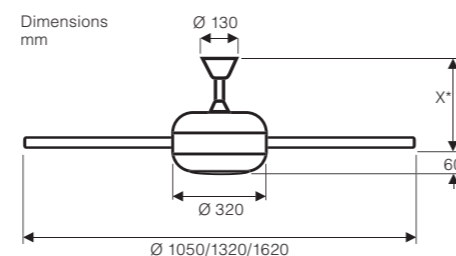
TITANIUM 162: for room size up to 38 m²

162 WE-WE
#9516261

- Forward/reverse (summer/winter) slide switch.
- 3 speeds, light on/off and dimming by remote control, wall bracket included.
- Integrated frosted glass light kit, max. 2 x 10 W (E27), suitable for ESL.
- Balanced motor and blades.
- Installation on sloped ceilings up to 14°, higher pitch with on-site construction.
- Low profile by installation without downrod (only valid for size 132 cm/52").

Options:

- Optional wall controls available (pages 133/134).
- Longer downrods for high ceilings available (page 143).
- Interchangeable blade sets available (page 129 - 131).
- Hotel wall control **FB-FNK-D AC Hotel #86210** (page 133).



* X = Ø 1050/1320: 260 mm, 190 mm for installation without downrod;
X = Ø 1620: 260 mm, 235 mm for installation with shortened downrod

Model	105	132	162
No. of blades	5	5	5
Power motor (W)	15-66	15-73	14-79
Power light kit max. (W)	2 x 40		
Voltage (V/Hz)	220-240/50		
Size Ø (cm)	105	132	162
No. of speeds (with R/C)	3	3	3
Rev. max. (RPM)	279	187	140
Weight (kg)	8.5	8.7	9.0

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

TITANIUM

	room size up to 15 m² Size Ø 105			room size up to 27 m² Size Ø 132			room size up to 38 m² Size Ø 162		
	BN-KF/BU	BN-NB/KI	WE-WE	BN-KF/BU	BN-NB/KI	WE-WE	BN-KF/BU	BN-NB/KI	WE-WE
Code No.	9510560	9510562	9510561	9513260	9513262	9513261	9516260	9516262	9516261
Housing Finish	Brushed chrome	Brushed chrome	White	Brushed chrome	Brushed chrome	White	Brushed chrome	Brushed chrome	White
Reversible Blade Finish	Pine/ Beech	Walnut/ Cherry	Glossy white	Pine/ Beech	Walnut/ Cherry	Glossy white	Pine/ Beech	Walnut/ Cherry	Glossy white

Light bulbs are not included.

Further technical data on pages 124 and 127



NIGHT FLIGHT BN-BU
#9313224



MERCURY BN-SI/NB
#9513270



WE-WE
#9313216



BN-WN
#9313215



BN-TR
#9313217

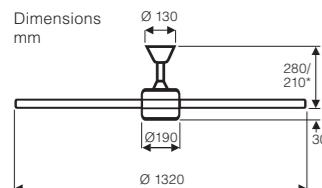


BN-SI/NB
#9513270

- 3 speeds by remote control, incl. light on/off/dimming.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Installation on slopes up to 14°.
- Low profile by installation without downrod (only 21 cm ceiling - blades).

Options:

- Optional wall controls available (page 133/134).
- Interchangeable blade sets available (page 129 - 131).
- Longer downrods for high ceilings available (page 143).
- Light kits only pre-installed! (page 136/137).



*shows installation without downrod, not possible with acrylic blades.

15 YEARS LIMITED MOTOR WARRANTY



No. of blades	3
Power motor (W)	14 - 70
Voltage (V/Hz)	220-240/50
Size Ø (cm/')	132/52
No. of speeds (with R/C)	3
Rev. max. (RPM)	278
Weight (kg)	6.9

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

NIGHT FLIGHT

Product	Code No.	Housing Finish	Blade Finish
BN-WN	9313215	Brushed chrome	Wengé
WE-WE	9313216	White	White
BN-BU	9313224	Brushed chrome	Beech
BN-TR	9313217	Brushed chrome	Acrylic transparent

Further technical data on pages 124 and 127

25 YEARS LIMITED MOTOR WARRANTY



MERCURY

Product	Code No.	Housing Finish	Reversible Blade Finish
BN-SI/NB	9513270	Brushed chrome	Silver/Walnut

Light bulbs are not included.

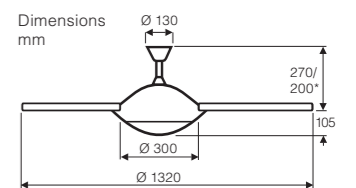
No. of blades	5
Power motor (W)	14 - 70
Power light kit max. (W)	2 x 10
Voltage (V/Hz)	220-240/50
Size Ø (cm/')	132/52
No. of speeds (with R/C)	3
Rev. max. (RPM)	162
Weight (kg)	9.2

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

- Radio remote control (motor 3 speeds, light on/off or dimming), wall bracket included.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Installation on sloped ceilings up to 14°, higher pitch with on-site construction.
- Integrated frosted glass light kit, max. 2 x 10 W (E27), suitable for ESL.

Options:

- Optional wall controls available (page 133/134).
- Longer downrods for high ceilings available (page 143).



*shows installation without downrod

Further technical data on pages 124 and 127

MIRAGE

MIRAGE BN-SW
#9313211



BN-SW
#9313211



WE-WE
#9313220



BN-SI
#9313210



BN-TR
#9313209

25 YEARS
LIMITED MOTOR
WARRANTY

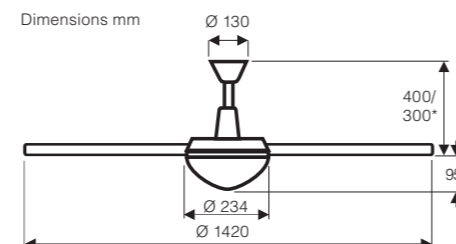


2, 3 or 4
blades installation
as you prefer!

- 4 injection molded composite blades for best air delivery.
- 3 speeds, light on/off and dimming by remote control, wall bracket included.
- Forward/reverse (summer/winter) slide switch.
- Integrated frosted glass light kit, max. 2 x 10 W (E27), suitable for ESL.
- Balanced motor and blades.
- Installation on sloped ceilings (up to 14°), higher pitch with on-site construction.

Options:

- Optional wall controls available (page 133/134).
- Longer downrods available (page 143).
- Interchangeable blade sets available (page 129 - 131).
- Hotel wall control **FB-FNK-D AC Hotel #86210** (page 133).



* shows installation with short downrod

No. of blades	4
Power motor (W)	18 - 62
Power light kit max. (W)	2 x 10
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	142/56
No. of speeds (with R/C)	3
Rev. max. (RPM)	230
Weight (kg)	8.1

Installation: 2 screws Ø min. 4.5 mm
separation 70 - 110 mm

Further technical data on pages 124 and 127

MIRAGE

Product	Code No.	Housing Finish	Blade Finish
BN-SW	9313211	Brushed chrome	Composite, black
BN-SI	9313210	Brushed chrome	Composite, silver
WE-WE	9313220	White	Composite, white
BN-TR	9313209	Brushed chrome	Composite, semitransparent

Light bulbs are not included.

ROTARY

ALU



ROTARY BN-WN
#9513265



ALU AL-AL/KI
#513218



Interchangeable blades beech #19103 / pine #19102 (accessory)



Interchangeable blades Maple/Chalked oak #19018 (accessory)



WE-BU
#9513277



WE-WE
#9513269



WE-WE
#513219



AL-AL/KI
#513218

- Forward/reverse (summer/winter) slide switch.
- 3 speeds by remote controle, incl. light on/off/dimming.
- Balanced motor and blades.
- Installation on sloped ceilings up to 14°.
- Low profile by installation without downrod (only 16 cm ceiling - blades).

Options:

- Optional wall controls available (page 133/134).
- Light kits only pre-installed! (page 136/137).
- Longer downrods available for high ceilings (page 143).
- Interchangeable blades available (page 129 - 131).

25 YEARS LIMITED MOTOR WARRANTY



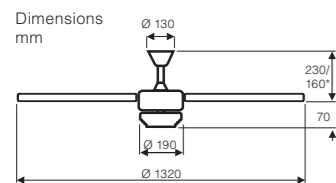
20 YEARS LIMITED MOTOR WARRANTY



- 3 speeds pull chain switch.
- Forward/reverse (summer/winter) pull chain switch.
- Integrated light kit, max. 1 x 20 W (E27), suitable for ESL.
- Light pull chain switch.
- Storage compartment for unused pull chain switches.
- Balanced motor and blades.
- Installation on sloped ceilings up to 30°, higher pitch with on-site construction.

Options:

- Optional controls available (page 132 - 134).
- Longer downrods available for high ceilings (page 142).
- Interchangeable blade set available (page 129 - 131).



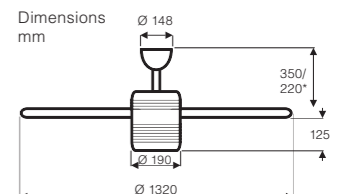
*shows installation without downrod

No. of blades	5
Power motor (W)	14 - 72
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (with R/C)	3
Rev. max. (RPM)	239
Weight (kg)	7.4
Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm	

ROTARY

Product	Code No.	Housing Finish	Blade Finish
BN-WN	9513265	Brushed chrome	Wengé
WE-WE	9513269	White	White
WE-BU	9513277	White	Beech

Further technical data on pages 124 and 127



* shows installation with short downrod

ALU

Product	Code No.	Housing Finish	Reversible Blade Finish
AL-AL/KI	513218	Brushed Aluminum	Aluminium silver/Cherry
WE-WE	513219	White	White

Light bulbs are not included.

No. of blades	5
Power motor (W)	60
Power light kit max. (W)	1 x 20
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (w. P/C)	3
Rev. max. (RPM)	180
Weight (kg)	7.7
Installation: 2 screws Ø min. 4.5 mm separation 70 - 125 mm	

Further technical data on pages 124 and 127



ELICA BN-WN
#9513278



WE-AH
#9513296



WE-WE
#9513279

25 YEARS
LIMITED MOTOR
WARRANTY



3 SPEEDS



2 x 10 W
E27

2 x 7 W



WINTER/
SUMMER



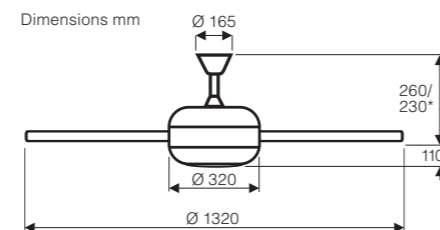
MAX. 25 m²

- 3 speeds, light on/off and dimming by remote control, wall bracket included.
- Forward/reverse (summer/winter) slide switch.
- Integrated frosted glass light kit, max. 2 x 10 W (E27), suitable for ESL.
- Balanced motor and blades.
- Installation on sloped ceilings up to 17°, higher pitch with on-site construction.
- Low profile by installation with short downrod.

Options:

- Optional wall controls available (page 133/134).
- Longer downrods for high ceilings available (page 143).
- Interchangeable blade sets available (page 129 - 131).

Dimensions mm



* shows installation with short downrod

No. of blades	5
Power motor (W)	15 - 72
Power light kit max. (W)	2 x 10
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (with R/C)	3
Rev. max. (RPM)	188
Weight (kg)	8.7

Installation: 2 screws Ø min. 4.5 mm
separation 70 - 110 mm

Further technical data on pages 124 and 127

ELICA

Product	Code No.	Housing Finish	Blade Finish
BN-WN	9513278	Brushed chrome	Wengé
WE-WE	9513279	White	White
WE-AH	9513296	White	Maple

Light bulbs are not included.

HELICO PADDEL



HELICO PADDEL BN-NB
#9313237

MACAU



MACAU BN-NT
#313266



BN-NB
#313265



ORB-NT
#313268



ORB-NB
#313267



BN-BU
#9313236

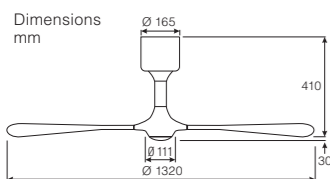
- Blades, milled from solid wood, stained beech or walnut finished.
- 3 speeds, light on/off by remote control.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Integrated light kit, max. 20 W, E27 (Ø 97 mm, L 91 mm).
- Including 1 x MEGAMAN MM17242, 10,5 W (PAR30S), light warm white (2,800 K, 700 lm), Energy class G (Spectrum A to G).
- Installation only on straight ceilings.

20 YEARS LIMITED MOTOR WARRANTY



Options:

- Optional wall controls available (page 133/134).



No. of blades	3
Power motor (W)	16 - 61
Power light kit max. (W)	1 x 20
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (with R/C)	3
Rev. max. (RPM)	170
Weight (kg)	7.9

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm

HELICO PADDEL

Product	Code No.	Housing Finish	Blade Finish
BN-BU	9313236	Brushed chrome	Solid wood, stained beech
BN-NB	9313237	Brushed chrome	Solid wood, walnut

15 YEARS LIMITED MOTOR WARRANTY



MACAU

Product	Code No.	Housing Finish	Blade Finish
BN-NB	313265	Brushed chrome	Solid wood, Walnut
BN-NT	313266	Brushed chrome	Solid wood, Natural
ORB-NB	313267	Oil Rubbed Bronze	Solid wood, Walnut
ORB-NT	313268	Oil Rubbed Bronze	Solid wood, Natural

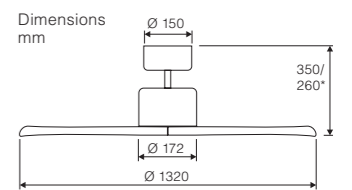
No. of blades	3
Power motor (W)	21 - 39
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (with R/C)	3
Rev. max. (RPM)	152
Weight (kg)	7.5

Installation: 2 screws Ø min. 4.5 mm separation 73 - 127 mm

- 3 blades milled from solid wood.
- Modern shaped housing, made of steel.
- 3 speeds by remote control.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Installation on sloped ceilings up to 18°, higher pitch with on-site construction.
- Additional short ceiling bar included in delivery.

Options:

- Optional wall controls available (page 133/134).
- Longer downrods available for high ceilings (page 143).



* shows installation with short downrod



FALCETTO AP-AL
#9513271



LIBELLE BN-TR
#9413250



BA-NB #9513273



WE-WE #9513272



WE-TR #9413251



BN-TR #9413250

- 3 speeds by remote control.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Aluminum die cast housing.
- Installation on sloped ceilings up to 17°, higher pitch with on-site construction.

Options:

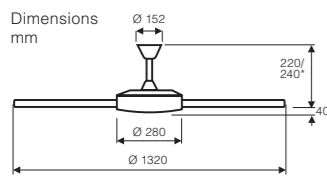
- Optional wall controls available (page 133/134).
- Longer downrods available for high ceilings (page 143).
- Interchangeable blade sets available (page 129 - 131).

25 YEARS LIMITED MOTOR WARRANTY



No. of blades	5
Power motor (W)	13 - 83
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (with R/C)	3
Rev. max. (RPM)	189
Weight (kg)	8.6

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm



* shows installation with short downrod

FALCETTO

Product	Code No.	Housing Finish	Blade Finish
AP-AL	9513271	Aluminum handpolished	Alu silver
WE-WE	9513272	White	White
BA-NB	9513273	Antique brown/bronze	Walnut

Further technical data on pages 124 and 127

15 YEARS LIMITED MOTOR WARRANTY



2, 3 or 4 blades installation as you prefer!

- 3 speeds by remote control.
- Forward/reverse (summer/winter) slide switch.
- Balanced motor and blades.
- Installation on sloped ceilings up to 17°, higher pitch with on-site construction.

Options:

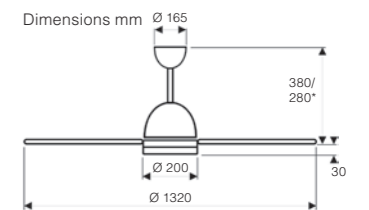
- Optional wall controls available (page 133/134).
- Longer downrods for high ceilings available (page 143).

LIBELLE

Product	Code No.	Housing Finish	Blade Finish
BN-TR	9413250	Brushed chrome	Acrylic glass
WE-TR	9413251	White	Acrylic glass

No. of blades	4
Power motor (W)	15 - 75
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (with R/C)	3
Rev. max. (RPM)	147
Weight (kg)	7.5

Installation: 2 screws Ø min. 4.5 mm separation 70 - 110 mm



*shows installation with short downrod

Further technical data on pages 124 and 127

OUTDOOR CLASSIC



**OUTDOOR CLASSIC BZ-PR
PALM/WICKER
#513294**



WE-PR #513295



WE-EW #513293

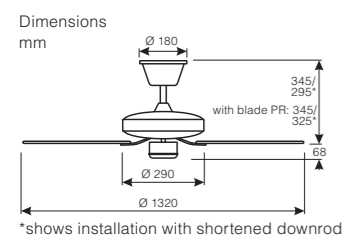
- Motor protection class IP44. Suitable for protected outdoor areas.
- 3 speeds pull chain switch.
- Forward/reverse (summer/winter) pull chain switch.
- Balanced motor and blades.
- Installation on sloped ceilings with on-site construction.
- Not suitable for light kits.

Options:

- Optional wall and remote controls available (p. 132 - 134).
- Longer downrods available for high ceilings (page 143).

IP44
splash-proof
ideal for the
covered terrace

15 YEARS
LIMITED MOTOR
WARRANTY



No. of blades	5
Power motor (W)	27 - 61
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	132/52
No. of speeds (w. P/C)	3
Rev. max. (RPM)	190
Weight (kg)	8.6
Installation:	2 screws Ø min. 4.5 mm separation 70 - 110 mm

OUTDOOR CLASSIC

Product	Code No.	Housing Finish	Blade Finish
BZ-EB	513292	Bronze	Brown oak decor composite
WE-EW	513293	White	White oak decor composite
BZ-PR	513294	Bronze	Palm/wicker composite
WE-PR	513295	White	Palm/wicker composite



**OUTDOOR CLASSIC BZ-EB
#513292**

TRISTAR II

TRISTAR II 140 WE
#314004



120 WE #312005



90 WE #309004

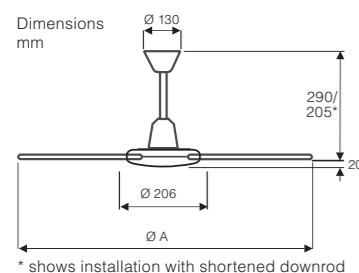


in 3 sizes from
Ø 90 to 140 cm
available!

- Forward function, non-reverse.
- Balanced motor and blades.
- No control unit. Choose a fan control that meets your needs.
- Installation on sloped ceilings up to 18°, higher pitch with on-site construction.

Options:

- Optional wall and remote controls available (page 132 - 134).
- Longer downloads for high ceilings available (page 143).



Model	90	120	140
No. of blades	3	3	3
Power motor (W)	52	58	70
Voltage (V/Hz)	220-240/50		
Size A Ø (cm/")	92/36	122/48	142/56
No. of speeds	1 (3 - 5) ¹		
Rev. max. (RPM)	362	300	280
Weight (kg)	4.1	4.5	5.6

Installation: 2 screws Ø min. 4.5 mm separation 75 - 95 mm

TRISTAR II

Product	Code No.	Housing Finish	Blade Finish	Dim. A (mm)
II 90 WE	309004	White	White	920
II 120 WE	312005	White	White	1220
II 140 WE	314004	White	White	1420

¹ Always order control unit separately!



ECO CONCEPT 152 LG-WE/LG
see page 24



ECO GENUINO 180 MS-NB
see page 34

THE SENSU PUNKAH



THE SENSU PUNKAH Off White #941805



Red #941802



Black #941803



Blue #941804



White #941805

- A large fabric fan glides gently back and forth.
- Incomparably natural and refreshing airflow.
- Perfect for selective ventilation in large rooms.
- Absolutely quiet and smooth running.
- 3 speeds selectable by remote control.
- Moves to a rest position on the ceiling by the touch of a button when not in use.

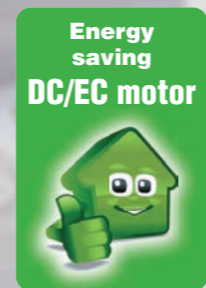
Options

- Several devices run synchronously via sync cable (accessory).

Remote control included.



15 YEARS LIMITED MOTOR WARRANTY

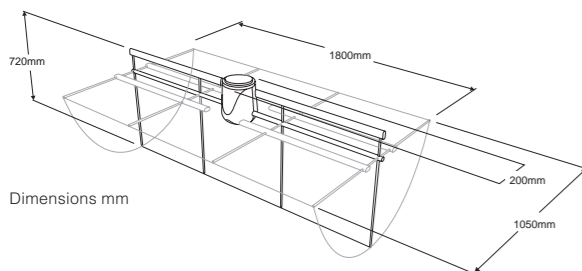


No. of blades	1
Power motor max. (W)	20
Power opt. light kit max. (W)	9
Voltage (V/Hz)	100-240/50-60
Size (cm)	180 x 72
No. of speeds (with R/C)	3
Rev. max. (RPM)	30,8
Weight (kg)	7,5

Installation: 4 screws Ø min. 6 mm on a bolt circle of 96 mm

THE SENSU PUNKAH

Code No.	Blade Finish	Material
941802	Red	Aluminum, Steel
941803	Black	
941804	Blue	
941805	White	



Dimensions mm



Nordik EVOLUTION

Nordik EVOLUTION 120 SI
#61754



140 WG
#61758



140 WE
#61752



140 SW
#61759



EVOLUTION light kit* #22413 (L) with opal glass shade, max. 150 W (E27) and #22414 (r.) made of polished methacrylate for ESL max. 15 W (E27).

COMMERCIAL USE
Approved according Machinery Directive 2006/42/EC Part 1 for commercial use

15 YEARS LIMITED MOTOR WARRANTY



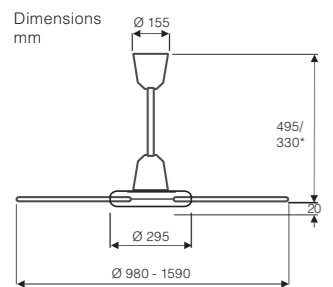
in 4 sizes from Ø 92 to 159 cm available!



- Motor housing made of shockproof, thermoplastic resin, blades made of metal.
- Motor and blades finished with a scratchproof polyester paint.
- Balanced motor and blades.
- Forward/reverse selectable.
- Installation on sloped ceilings with on-site construction.

Options:

- Optional wall and remote control available (page 132-134). *Always order control unit separately.*
- Longer downrods for high ceilings available (page 144).



*shows installation with shortened downrod

No. of blades	3
Power motor (W)	24 - 78
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	98-159/36-62
No. of speeds	1 (3 - 5) ¹
Rev. max. (RPM)	200
Weight (kg)	6.1 - 7.6



¹ Always order control unit separately!
* Light bulbs are not included.

NORDIK EVOLUTION

Product	Code No.	Housing Finish	Blade Finish	Ø cm
90 WE	61750	White	White	98
120 WE	61751	White	White	128
140 WE	61752	White	White	149
160 WE	61753	White	White	159
120 SI	61754	Metallic silver	Metallic silver	128
140 SI	61757	Metallic silver	Metallic silver	149
120 SW	61756	Black	Black	128
140 SW	61759	Black	Black	149
120 WG	61755	Wood grain	Wood grain	128
140 WG	61758	Wood grain	Wood grain	149

Nordik DESIGN 1S

Nordik DESIGN 1S 120 WE
#61260



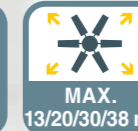
Nordik DESIGN 1S/L* 120 WE #61101

COMMERCIAL USE
Approved according Machinery Directive 2006/42/EC Part 1 for commercial use

15 YEARS LIMITED MOTOR WARRANTY



in 4 sizes from Ø 92 to 152 cm available!



awarded design by IF84 Design Award Die gute Industrieform

- Balanced motor and blades.
- Motor housing made of UV-resistant and shockproof thermoplastic resin, blades made of metal, pure white.
- Surface stove enamelled.
- Forward/reverse selectable.
- Installation on sloped ceilings up to 22°, higher pitch with on-site construction.
- Without (1S) and with opal glass lamp (1S/L), max. 150 W, E27) available.

Options:

- Optional wall or remote control available (page 133/134). *Always order control unit separately.*
- Longer downrods for high ceilings available (page 144).

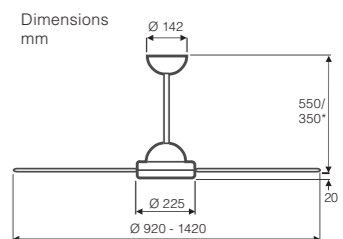
NORDIK DESIGN 1S

Product	Code No.	Housing/ Blade Finish	Light kit	Ø cm
1S 90 WE	61160	White	no	92
1S 120 WE	61260	White	no	122
1S 140 WE	61360	White	no	142
1S 160 WE	61460	White	no	152
1S/L 90 WE	61001	White	max. 150 W (E27)	92
1S/L 120 WE	61101	White	max. 150 W (E27)	122
1S/L 140 WE	61301	White	max. 150 W (E27)	142
1S/L 160 WE	61401	White	max. 150 W (E27)	152

No. of blades	3
Power motor (W)	24 - 70
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	92-152/36-60
No. of speeds	1 (3 - 5) ¹
Rev. max. (RPM)	231
Weight (kg)	5.6 - 7.8



¹ Always order control unit separately!
* bulbs are not included.



*shows installation with shortened downrod

Hanger

A special plate with 4 holes for tight and durable fastening, which can also be used to suspend the appliance from sloping ceilings.



Blades

For additional mechanical strength and durability over time, the blades with 180 cm (70") and 200 cm (80") are reinforced at the point of attachment to the motor.



Nordik ECO 120
#61060

Telenordik Eco
#21200



IR remote control, forward/reverse, 5 speeds, with wall bracket

Continuously variable wall regulator
POT-R #12829



Forward/reverse operation for surface-mounting and flush mounting

Differential temperature controller Vort Delta T WIFI
#21175

for fully automatic heat recirculation in winter



Receiver MD-WIFI
#21399

(1 is required for each fan)



25 YEARS
LIMITED MOTOR
WARRANTY



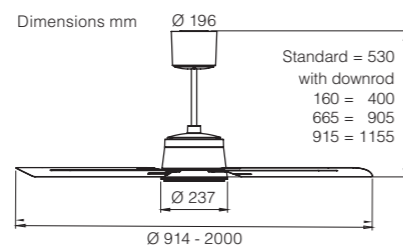
in 6 sizes with
Ø 92 to 200 cm
available!



- State-of-the-art, economical EC motor technology.
- Forward/reverse (summer/winter) function.
- Balanced motor and blades.
- Controlled¹ by optional IR-remote control **Telenordik Eco** or optional wall controller **POT-R**.
- Housing ABS white, RAL 9016 satin finished, blades steel, RAL 9016 satin-finished, powdercoated.
- Installation on sloped ceilings only with on-site construction.

Options:

- Longer downrods for high ceilings available (p. 144).



¹ Always order control unit separately
Cannot be operated without control unit!

No. of blades	3
Power motor (W)	2.7 - 40
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	92-202/36-80
No. of speeds	stepless/5 ¹
Rev. max. (RPM)	200 - 250
Weight (kg)	5.5 - 10.0

Installation: 4 screws min. Ø 4.5 mm
separation □ 80 mm

Nordik Eco

Product	Code No.	W	U/min	m ² max.	Ø (mm)	Housing finish	Blade finish
ECO 90	61060	27	250	15	914	ABS White	White
ECO 120	61061	30	235	22	1218	ABS White	White
ECO 140	61062	30	235	32	1422	ABS White	White
ECO 160	61063	30	210	40	1524	ABS White	White
ECO 180	61064	40	205	46	1800	ABS White	White
ECO 200	61065	40	200	54	2000	ABS White	White

Downrods

in 3 different lengths:

Finish	Code No. 160 mm	Code No. 665 mm	Code No. 915 mm
White	21150	21154	21155

Nordik AIRDESIGN



Three lighting scenarios can be selected by remote control:

Home: 60 internal LEDs with 120° beam angle. | **Work:** 50 outer LEDs with 60° beam angle. | **Mixed:** All 110 LEDs combined (light colour 3,000 K).

Each scenario can be dimmed by remote control.

The luminaire contains built-in LED lamps.

Energy class E (Spektrum A to G). The lamps cannot be changed in the luminaire.



Nordik AirDesign
MOTOR WE #21021

LED module 3-601014



Lamp	LED
Power max. (W)	37
CRI	80
Luminous flux (lm)	3,683
Luminous colour (K)	3,000
Beam angle (°)	120
Service life (h)	30,000



Downrod
Titan 290 #21047
MOTOR TI #21022
Blades
Carbon rose
160 cm #21069



Downrod
White 290 #21046
MOTOR WE #21021
Blades
Carbon oak
160 cm #21070

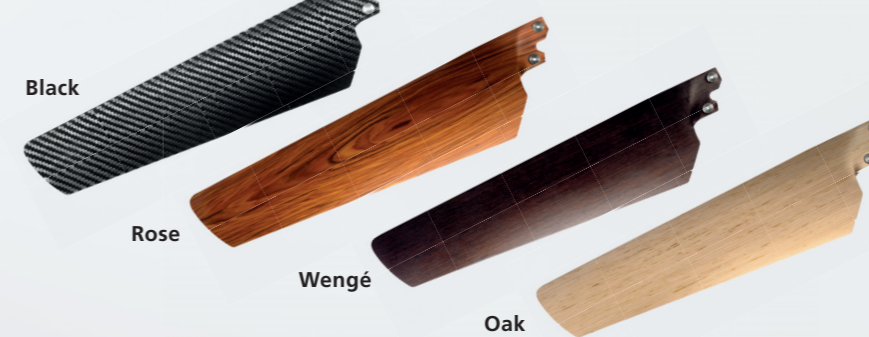


Downrods



Downrod
White 290 #21046
MOTOR RO #21023
Blades
Carbon black
160 cm #21068

Blades



Motor units



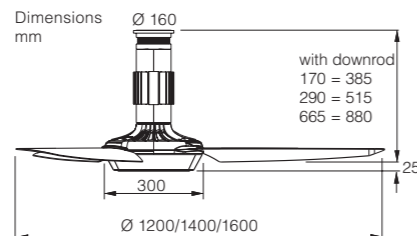
25 YEARS
LIMITED MOTOR
WARRANTY



in 3 sizes from
Ø 120 to 160 cm
available!



- Motor housing and downrods made of polycarbonate.
- 3 blades made of baked carbon, available in 3 different sizes.
- State-of-the-art LED technology for the integrated, dimmable luminaire.
- Balanced motor and blades.
- Forward/reverse (summer/winter) function.
- Radio remote controle (5 speeds, light on/off or dimming, sleep timer) included.



No. of blades	3
Power motor + light (W)	120
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	120-160/48-63
No. of speeds (with R/C)	5
Rev. max. (RPM)	45 - 146
Weight (kg)	9.7 - 10.0

Installation: 4 - 6 screws Ø min. 4.5 mm on a bolt circle of 140 mm

Nordik AIRDESIGN

Downrods in 3 different lengths:

Finish	Code No. L = 170	Code No. L = 290	Code No. L = 665
White	21041	21046	21051
Red	21043	21048	21053
Clear	21040	21045	21050
Titan	21042	21047	21052

Set of 3 blades selectable in 3 dimensions and 4 finishes:

Finish	Code No. Ø 120 cm	Code No. Ø 140 cm	Code No. Ø 160 cm
Carbon black	21060	21064	21068
Carbon rose	21061	21065	21069
Carbon wengé	21063	21067	21071
Carbon oak	21062	21066	21070

Motor units in 4 finishes:

Finish	Code No.	Colour
MOTOR WE	21021	White
MOTOR RO	21023	Red
MOTOR TR	21020	Clear
MOTOR TI	21022	Titan

Nordik INTERNATIONAL PLUS

COMMERCIAL USE

Approved according Machinery Directive 2006/42/EC Part 1 for commercial use

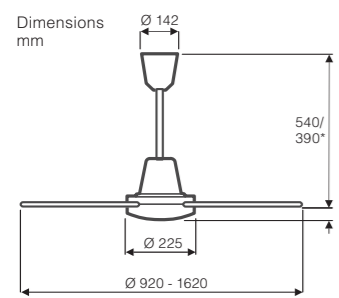


I-plus light kit #22415
Opal glass
(max. 150 W, E27)

- Balanced motor and blades.
- Motor housing made of shock-proof, thermoplastic resin, colour light grey.
- Surface stove enamelled.
- Forward/reverse selectable.
- Installation on sloped ceilings up to 22°.

Options:

- Optional wall and remote control available (page 132-134). *Always order control unit separately.*
- Longer downrods for high ceilings available (page 144).
- Light kit **I-plus #22415** available.



* shows installation with shortened downrod

No. of blades	3
Power motor (W)	24 - 76
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	90-152/35-60
No. of speeds	1 (3 - 5) ¹
Rev. max. (RPM)	207 - 238
Weight (kg)	5.5 - 6.8



Nordik INTERNATIONAL PLUS

Product	Code No.	Housing Finish	Blade finish	Ø cm
I 90 plus	61701	Light grey	Light grey	92
I 120 plus	61711	Light grey	Light grey	122
I 140 plus	61721	Light grey	Light grey	142
I 160 plus	61731	Light grey	Light grey	152

¹ Always order control unit separately!

15 YEARS LIMITED MOTOR WARRANTY



in 4 sizes from Ø 92 to 152 cm available!



15 YEARS LIMITED MOTOR WARRANTY



COMMERCIAL USE

Approved according Machinery Directive 2006/42/EC Part 1 for commercial use

Nordik TROPICAL IPX5

IPX5

Splash proof protection
insensitive to water, humidity, dust and dirt

Nordik TROPICAL 140 IPX5 #61742

- IPX5 splash protection according EN 60529:1997 + A1:2000.
- Balanced motor and blades.
- Motor and blades finished with a scratchproof polyester paint.
- Blades, downrod and motor shaft made entirely from galvanised, rust-proof steel.
- Casing in impact-resistant, PP plastic resin with anti-UV, anti-yellowing treatment.
- Forward/reverse selectable.
- Installation only on straight ceilings.

Options:

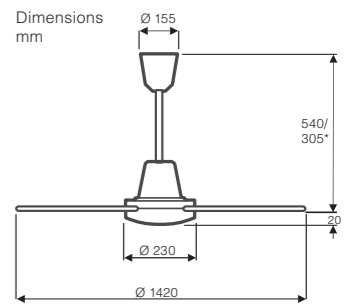
- Optional wall control available (page 132-134). *Always order control unit separately.*
- Longer downrods for high ceilings available (page 144).

Nordik TROPICAL IPX5

Product	Code No.	Housing Finish	Blade finish
140 IPX5	61742	Light grey	Light grey

¹ Always order control unit separately!

No. of blades	3
Power motor (W)	24 - 74
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	142/56
No. of speeds	1 (4 - 5) ¹
Rev. max. (RPM)	231
Weight (kg)	6.1



* shows installation with shortened downrod

Nordik HEAVY DUTY BASE

IP55
 Splash proof protection
 insensitive to water,
 humidity, dust and dirt

Nordik HD 160 BASE
 #61022

COMMERCIAL USE
 Approved according Machinery
 Directive 2006/42/EC Part 1
 for commercial use

The hanger consists of a special plate with 4 holes for tight and durable fastening, which can also be used to suspend the appliance from sloping ceilings.



Nordik HEAVY DUTY ideal for use in agriculture, production and wherever dirt, dust and wetness are part of everyday life – the special encapsulation of the motor and the anti-corrosive treatment of the components guarantee the highest quality.

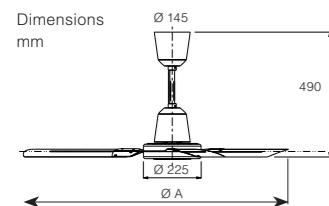


- Available in 4 sizes.
- Blades made of electrolytic zinc-coated steel, treated with an epoxy base coat.
- Balanced motor, insulation class H.
- Motor housing made of die-cast aluminium, treated with an anthracite epoxy base topcoat with hammered finish.
- Forward/reverse selectable.
- Protection class I.

Optionen:

Optional wall controls available (page 132-134). Suitable for control with TDA-Control!
 Always order control unit separately.

Longer downrods for high ceilings (page 144).
 For example: Brushed chrome



Downrod cannot be shortened due to design

15 YEARS
 LIMITED MOTOR
 WARRANTY



in 4 sizes from
 Ø 120 to 200 cm
 available!



Nordik HEAVY DUTY BASE

Product	Code No.	Housing finish	Blade finish	Air delivery ² m ³ /min	Power (W)	Dim. A (mm)
120 Base	61020	anthracite powder coating hammered finish	anthracite powder coating hammered finish	234	80	1,218
140 Base	61021			266.6	80	1,422
160 Base	61022			321.6	85	1,524
200 Base	61023			367.5	85	2,000

¹ Always order control unit separately!

² according IEC 60879

Nordik HEAVY DUTY INOX

IP55
 Splash proof protection
 insensitive to water,
 humidity, dust and dirt

Nordik HD 160 INOX
 #61026

COMMERCIAL USE
 Approved according Machinery
 Directive 2006/42/EC Part 1
 for commercial use

The hanger consists of a special plate with 4 holes for tight and durable fastening, which can also be used to suspend the appliance from sloping ceilings.

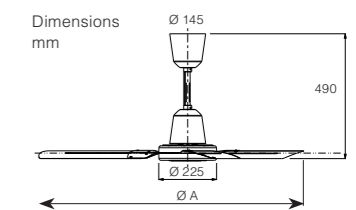


- Available in 4 sizes.
- Balanced motor, insulation class H.
- Blades, Downrod and canopy made of stainless steel 304.
- Motor housing made of die-cast aluminium, treated with an anthracite epoxy base topcoat with hammered finish.
- Forward/reverse selectable.
- Protection class I.

Options:

Optional wall controls available (pages 132-134). Suitable for control with TDA-Control!
 Always order control unit separately.

Longer downrods for high ceilings (page 144).
 For example: Stainless steel



Downrod cannot be shortened due to design

15 YEARS
 LIMITED MOTOR
 WARRANTY



in 4 sizes from
 Ø 120 to 200 cm
 available!



Nordik HEAVY DUTY INOX

Product	Code No.	Housing finish	Blade finish	Air delivery ² m ³ /min	Power (W)	Dim. A (mm)
120 Inox	61024	anthracite powder coating hammered finish	Stainless steel 304	234.0	80	1,218
140 Inox	61025			266.6	80	1,422
160 Inox	61026			321.6	85	1,524
200 Inox	61027			367.5	85	2,000

¹ Always order control unit separately!

² according IEC 60879

No. of blades	3
Power motor (W)	24 - 85
Voltage (V/Hz)	220-240/50
Size Ø (cm/")	120-200/47-80
No. of speeds	1 (3 - 5) ¹
Rev. max. (RPM)	186 - 239
Weight (kg)	7.3 - 9.1
Installation:	4 screws min Ø 5.5 mm

TECHNICAL DATA AC MODELS

¹ The table shows the maximum speed at the highest setting at 1.5 m above the floor in a 3 m high room. This is to help you estimate draughts at head height, sitting under the ceiling fan. This specification refers to the highest speed. A fine gradation of the speed with as many steps as possible enables you to have draught-free operation even in winter when returning the warm air that is under the ceiling.

² Noise measurements were carried out at the VDE Testing and Certification Institute in Offenbach/Main. The lower limit for the laboratory measurement is 32 dB(A) for sound power L_W and 15 dB(A) for sound pressure L_P -3m.

³ Since many ceiling fans on the market are published with one or the other value, we provide the measured noise values both as sound power L_W and sound pressure L_P -3m.

Model Size cm	Motor Type	Catalogue Page	Air flow at highest level (m³/h)	Maximum Fan Flow Rate F (m³/min)	Service Value SV ((m³/min)/W)	Air Velocity 1.5 m above floor (m/s) ¹	RPM (min-1)			Fan Power Input P (W)			Fan Sound Power Level LW (dB(A)) ^{2,3}			Fan Sound Pressure Level LP -3m (dB(A)) ^{2,3}		
							Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Classic Royal 75	AC	80	3,877	64.6	1.3	1.70	183	254	287	25.6	37.7	48.3	32.5	41.1	51.7	<15	23.6	34.2
Classic Royal 103	AC	81	6,082	101.4	1.9	1.82	108	171	204	27.0	40.7	52.5	<32	34.0	44.9	<15	16.5	27.4
Classic Royal 132	AC	82	8,919	148.7	2.3	1.90	99	164	180	27.2	46.1	64.0	<32	<32	47.7	<15	<15	30.9
Classic Royal 180	AC	83	9,371	156.2	2.4	1.41	59	90	112	28.5	48.9	65.7	<32	38.4	45.2	<15	17.9	24.7
Classic Royal 132 palm blades	AC	-	1,592	26.5	0.4	0.25	56	92	119	28.3	48.8	65.5	32.7	41.5	44.8	<15	21.0	24.3
Classic Royal 132 wicker blades	AC	-	7,684	128.1	2.0	1.33	75	112	133	28.2	47.9	64.5	32.1	42.7	50.4	<15	22.2	29.9
FLAT III 75	AC	84	3,431	57.2	0.9	2.07	189	217	315	23.3	35.9	63.0	39.2	47.8	48.3	18.7	27.3	27.8
FLAT III 103	AC	85	7,492	124.9	2.0	2.31	123	185	225	25.1	40.2	63.0	32.2	46.6	52.2	<15	26.1	31.7
FLAT III 132	AC	86	9,382	156.4	2.3	2.08	70	129	172	25.8	42.0	68.0	<32	43.8	50.0	<15	23.3	29.5
Black Magic 132/BM 132 w/o L.	AC	87	8,919	148.7	2.3	1.90	99	164	180	27.2	46.1	64.5	<32	<32	47.7	<15	<15	30.9
Centurion 132	AC	88	11,614	193.6	2.5	2.40	91	165	216	34.4	58.6	79.0	35.9	53.7	60.2	15.4	33.2	39.7
Tristar-Z 120	AC	89	7,856	130.9	2.2	2.00	130	242	286	55.0	56.0	59.0	36.9	56.0	57.0	16.4	35.5	36.5
Libeccio 120*	AC	90	10,034	167.2	2.1	2.64	54	100	170	13.4	43.1	81.1	<32	<32	46.0	<15	<15	28.5
Libeccio 142*	AC	90	10,714	178.6	2.2	2.02	44	83	116	13.9	44.7	83.0	<32	<32	38.8	<15	<15	21.9
Titanium 105	AC	92	9,286	154.8	2.3	2.51	141	237	279	14.6	38.6	66.0	39.6	49.4	55.8	19.1	28.9	35.3
Titanium 132	AC	92	9,096	151.6	2.1	2.18	81	147	187	14.5	40.0	73.0	37.6	41.6	51.1	17.1	21.1	30.6
Titanium 160	AC	92	12,361	206.0	2.6	1.98	54	98	140	14.0	41.2	79.6	<32	36.8	48.0	<15	16.3	27.5
Night Flight 132	AC	94	10,729	178.8	2.6	2.82	97	159	278	14.2	42.0	70.0	36.9	50.4	57.0	16.4	29.9	36.5
Mercury 132	AC	95	9,075	151.3	2.2	1.96	68	115	162	13.5	37.1	69.8	<32	<32	48.4	<15	<15	30.9
Mirage 142*	AC	96	11,112	185.2	3.0	2.70	86	165	230	17.8	49.5	61.7	<32	45.1	58.3	<15	27.6	40.8
Rotary 132	AC	98	10,630	177.2	2.4	2.30	97	183	239	13.9	41.8	72.4	32.1	51.4	61.6	<15	30.9	41.1
ALU 132	AC	99	9,320	155.3	2.6	1.80	94	148	180	15.0	34.3	59.3	<32	42.7	50.4	<15	22.2	29.9
Elica 132	AC	100	9,749	162.5	2.3	2.10	85	150	188	14.9	40.9	71.5	<32	44.5	53.8	<15	24.0	33.3
Helico Paddel 132	AC	102	8,504	141.7	2.3	2.58	83	140	170	15.5	39.9	61.1	32.1	42.2	48.2	<15	21.7	27.7
Macau 132	AC	103	8,108	135.1	3.5	1.76	107	137	152	21.1	33.8	39.0	<32	37.4	44.8	<15	17.9	24.3
Falchetto 132	AC	104	11,927	198.8	2.4	2.51	74	129	189	13.1	41.0	83.0	<32	39.3	53.0	<15	18.8	32.5
Libelle 132*	AC	105	7,575	126.3	1.7	2.38	95	109	147	14.5	43.1	74.9	<32	<32	42.5	<15	15.7	25.0
Outdoor Classic 132	AC	106	8,317	138.6	2.3	1.91	90	151	190	26.6	44.7	60.0	<32	40.8	48.3	<15	20.3	27.8
Outdoor Classic 132 palm/wicker	AC	106	7,852	130.9	2.1	1.41	90	143	176	26.9	45.5	61.0	<32	39.2	48.1	<15	18.7	27.6
Tristar II 90	AC	108	6,001	100.0	2.0	2.74	233	352	362	16.8	40.3	51.1	39.4	51.5	52.5	18.9	31.0	32.0
Tristar II 120	AC	108	8,094	134.9	2.3	2.75	130	266	300	14.5	37.0	58.0	36.9	56.0	57.0	16.4	35.5	36.5
Tristar II 140	AC	108	10,976	182.9	2.6	2.83	69	128	280	14.6	39.3	70.0	33.7	53.4	60.3	<15	32.9	39.8

* For ceiling fan models that offer the option of mounting with 2, 3 or 4 blades, all measurements were taken with 4 blades.

ADDITIONAL BLADES

To allow an optimal adaption of the ceiling fans to your interior, for selected models we offer a variety of additional and interchangeable blades for the ceiling fans. These will be shipped instead of the original blades.

Prices are extra charges to the ceiling fan. Depending on the model, the blade set consists of 3, 4 or 5 balanced blades, made of multi-layer glued hardwood, lacquered and impregnated, or of plastic with and without wood decor.

Beech	Heartwood beech	Pine	Maple	Antique oak	Wild oak
Used Wood oak	Colonial oak	Walnut	Wengé	Cherry	Teak
Silver grey finished	Light grey finished	Graphite/Basalt grey	Black finished	White finished	Acrylic

Decorative Natural Blades

Handmade blades of natural materials. Suitable for medium-sized ceiling fans (Ø = 132 cm) of series CLASSIC ROYAL, CLASSIC FLAT III, CENTURION and ECO ELEMENTS.

The natural blade sets **palme leaf, code.-nr. 19901**, and **antique wicker, code.-nr. 19902**, consist of 5 handmade blades. Irregularities arise from manual work and the natural materials, and are not regarded as a defect. Depending on the fan and blade set, the air volume delivered naturally reduced by about 35 to 50 percent.

ECO ELEMENTS 132 BA #513283 housing antique brown, shown with blades natural palm #19901 and blade holders FHN BA #19302



Blade set natural palm leaf #19901

hand-woven stretched on steel wire frame, clear coated



Blade set antique wicker #19902, hand-woven, on steel wire frame, antique stained



Blade holder set for natural blades, Antique brass = #19301, Antique brown = #19302, Brushed chrome = #19303, White coated = #19304 (from left)



Product	Code No.	Blade Finish
FHN MA	19301	Antique brass
FHN BA	19302	Antique brown
FHN BN	19303	Brushed chrome
FHN WE	19304	White coated
FHN CH	19313	Polished chrome

INTERCHANGEABLE BLADES

Product	Ø	Blade set	Acrylic	Black finished	Maple	Beech	White finished	Wengé	Antique oak	Pine	Silver grey finished	Walnut	Cherry	Basalt grey	Light grey finished	Oak
CLASSIC ROYAL	132		19012							19792						
CLASSIC ROYAL	103									19791						
CLASSIC ROYAL	75															
CLASSIC ROYAL	180															
CLASSIC FLAT III	132		19012							19792						
CLASSIC FLAT III	103															
CLASSIC FLAT III	75															
CENTURION	132															
BLACK MAGIC	132		19012							19792						
TITANIUM	105															
TITANIUM	132															
TITANIUM	162							19362								
LIBECCIO	120															
LIBECCIO	142															
NIGHT FLIGHT	132		19179			19101	19318	19173								
MERCURY	132															
MIRAGE	142		19114	19106			19115				19113					
ROTARY	132					19103	19165	19164		19102						
ALU	132						19016									
FALCETTO	132						19150				19154	19155				
ELICA	132				19176		19177	19178			19189					
ECO PLANO II	112						19436				19435	19438		19439	19434	19440
ECO PLANO II	132						19446				19445	19448		19449	19444	19450
ECO CONCEPT	132															
ECO CONCEPT	152															
ECO ELEMENTS	132		19012							19792						
ECO ELEMENTS	180															
ECO AVIATOS	132				19149		19134				19133	19147	19148	19196		
ECO AVIATOS	162				19146		19110				19109	19144	19145	19194		
ECO NEO III	92															
ECO NEO III	103															
ECO NEO III	132															
ECO NEO III	152															
ECO NEO III	180															
ECO GAMMA	103															
ECO GAMMA	137															
ECO DYNAMIX II	132						19421				19422			19423		
ECO VOLARE	116						19460				19462		19464	19463	19461	
ECO VOLARE	142						19470				19472		19474	19473	19471	

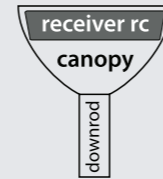
REMOTE CONTROLS

A ceiling fan can be easily controlled from any point of the room using a universal remote control. The motor speed can be switched to any one of three or four settings, the light can be dimmed or, with energy-saving bulbs, switched on and off. Depending on the model the information is transmitted by wireless or infrared light.

FB-FNK Powerboat
Designer universal remote control for all NON-Eco ceiling fans. Functions: 3 motor speeds, light dimmer or ON/OFF. Motor max. 100 W, light max. 300 W.



FB-FNK Powerboat: Universal remote control for ceiling fans with designer handset. Wireless operation in the 434 MHz band, encodable for 16 separate models, effective range about 10 meters. The receiver is located in the ceiling fan's canopy or on its cover plate (for ultraslim models). The handheld transmitter has a wall bracket, a power LED indicator and is powered by a type 23A 12 V battery (included).



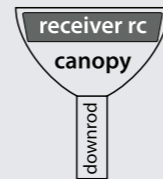
Product	Code No.	Colour Handpiece	Function Motor	Function Light
FB-FNK Powerboat	85220	Silver/black	3 speeds, OFF	Dimming, ON/OFF

FB-FNK Advanced
Designer-styled universal remote control for all NON-Eco ceiling fans. Functions: 4 motor speeds, light dimmer, temperature controller, sleep timer, etc.



4 SPEEDS
Speed 1 very slow + temperature control

FB-FNK Advanced: Universal remote control for ceiling fans with designer handset. Wireless operation in the 434 MHz band, encodable for 16 separate models, effective range about 10 meters. The receiver is located in the ceiling fan's canopy or on its cover plate (for ultraslim models). In addition to a 4-speed motor control, the remote control offers a number of additional Functions such as temperature control (temperature-dependent ON/OFF and speed control operation), 24-hour light and motor sleep timer, auto-off after 99 seconds, etc. The handheld transmitter has a wall bracket, an LCD display and is powered by a 9 V E-Block battery (included). Motor max. 100 W, light max. 300 W.

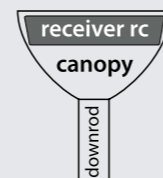


Product	Code No.	Colour Handpiece	Function Motor	Function Light
FB-FNK Advanced	85229	Dark grey/silver	4 speeds, OFF	Dimming, ON/OFF

FB-FNK Multicode
Designer Universal remote control for all NON-Eco ceiling fans. Functions: 3 motor speeds, light dimmer or ON/OFF. Motor max. 100 W, light max. 240 W. Up to 65,000 different codes.



FB-FNK Multicode: Universal remote control for ceiling fans with handset. Wireless operation in the 434 MHz band. The receiver is located in the ceiling fan's canopy or on its cover plate (for ultraslim models). The handheld transmitter has a wall bracket. It's powered by a battery type 23A, 12 V (included). Functions: motor 3 speeds/ON/OFF. Light ON/OFF, dimming, motor max. 100 W, light max. 240 W. Multicode model with up to 65,000 different codes.



Product	Code No.	Colour Handpiece	Function Motor	Function Light
FB-FNK Multicode	85238	White / grey	3 speeds, OFF	Dimming, ON/OFF

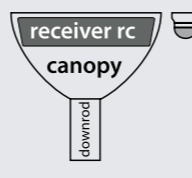
FB-IR Basic
Universal remote control unit for all NON-Eco ceiling fans. Functions: 3 motor speeds, light ON/OFF. Motor max. 100 W, light max. 240 W. Line of sight between transmitter and receiver required!



FB-IR Basic: Economic universal remote control for NON-ECO-ceiling fans. Infrared operation. The receiver is located in the ceiling fan's canopy or on its cover plate (for ultraslim models).

A small 2 cm, self-adhesive IR sensor is fixed next to the canopy. The handheld transmitter includes a wall bracket and is powered by two 1.5 V AA batteries (included). Motor max. 100 W, light max. 240 W.

Function only with direct line of sight between hand-held transmitter/IR sensor.



Product	Code No.	Colour Handpiece	Function Motor	Function Light
FB-IR Basic	85213	Black	3 speeds, OFF	ON/OFF

The set consists of a receiver and a transmitter. With additional receivers, which are available as accessories, several ceiling fans can be controlled at the same time.

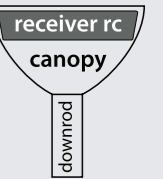
NEW

FB-FNK LCD Touch
Touch remote control for all NON-Eco ceiling fans. Functions: 4 motor speeds, light ON/OFF, sleep timer, motor max. 100 W, light max. 300 W (LED 24 W).



FB-FNK LCD Touch: Operation via touch screen on the handheld transmitter of the remote control. Sleep timer (up to 12 hours) and a 3-minute automatic switch off for the light when leaving the room.

Universal remote control for NON-Eco ceiling fans with flat handheld transmitter and wall bracket. Wireless operation in the 434 MHz band, encodable for 16 separate models, effective range about 10 meters. The receiver is located in the ceiling fan's canopy or on its cover plate (for ultraslim models). The handheld transmitter is powered by 4 batteries 1.5 V (AAA). Delivery includes wall bracket.



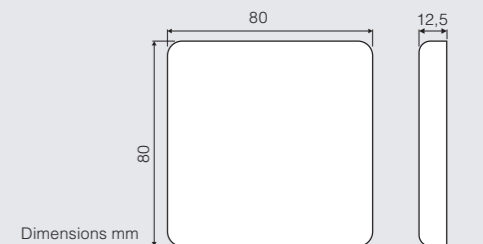
Product	Code No.	Colour Handpiece	Function Motor	Function Light
FB-FNK LCD Touch	85236	Dark grey	4 speeds, OFF	Dimming, ON/OFF

NEW



FB-FNK ECO Hotel
Remote control for ECO ceiling fans. Wall mounting. Plastic white, RAL 9010. Functions: 6 motor speeds, reversible, light ON/OFF, dimming*, sleep timer.

FB-FNK ECO Hotel: Remote control for ECO ceiling fans, with LED indicator, wall mounting. Motor: 6 speeds with extra-slow speed (see details fan model), forward/reverse, light ON/OFF, dimming*. Sleep timer up to 6 hours, wireless operation in the 434 MHz band, can be coded 65,000 times, range approx. 10 metres. Battery powered (2 x AAA).



FB-FNK ECO Hotel A. Suitable for all models of the series: ECO NEO III, ECO PLANO II, ECO PALLAS, ECO REGENTO, ECO CONCEPT, CARIBBEAN DREAM ECO, ECO ELEMENTS, ECO AVIATOS, ECO DYNAMIX II, ECO FIORE, ECO HELIX, ECO GAMMA, AEROPLAN ECO, ECO REVOLUTION, BIG SMOOTH ECO, ECO PLANO WOOD.

FB-FNK ECO Hotel A. Suitable for all models of the series: ECO GENUINO, ECO GENUINO-L, ECO AIRSCREW, AERODYNAMIX ECO.

Product	Code No.	Colour Wall switch	Function Motor	Function Light
FB-FNK ECO Hotel A	86200	White, RAL 9010	6 speeds, OFF, Sleep timer	Dimming*, ON/OFF
FB-FNK ECO Hotel B	86201	White, RAL 9010	6 speeds, OFF, Sleep timer	Dimming*, ON/OFF

* Dimming depending on fan/luminaire model

NEW



FB-FNK-D AC Hotel
Remote control for AC ceiling fans for wall mounting. Colour white, RAL 9010.

FB-FNK-D AC Hotel: Remote control for AC ceiling fans. Individual or group mode. With LED indicator, for wall mounting. The transmitter is powered by 2 AAA batteries. Consisting of wall transmitter and receiver. Suitable for all AC ceiling fans.

Motor: 3 speeds, light ON/OFF, dim (with dimmable lamps). Sleep timer up to 6 hours, wireless operation in the 434 MHz band, can be coded 65,000 times, range approx. 10 metres.

Dimensions see FB-FNK ECO Hotel

Product	Code No.	Colour Wall switch	Function Motor	Function Light
FB-FNK-D AC Hotel	86210	White, RAL 9010	3 speeds, OFF	Dimming, ON/OFF

Telenordik 5TR
Remote control for NORDIK EVOLUTION ceiling fan.

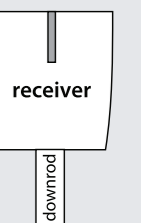
Functions: 5 speeds motor, light ON/OFF, sleep timer, fan reverse.



REVERSIBLE

TELENORDIK 5TR: Remote control **ONLY** for NORDIK EVOLUTION series. Data transmission via infrared light. Effective range about 13 meters. The receiving unit is placed inside the canopy of the ceiling fan. Installation at sloped ceilings not possible.

Besides the 5 speed motor control and the reverse Function Telenordik 5TR has a sleep timer, which allows the fan working for one hour at selected speed and direction. The remote control switches the optional Light kit ON/OFF. The handpiece comes with a wall bracket. Motor max. 100 W, light max. 300 W.



Product	Code No.	Colour Handpiece	Colour Canopy	Function Motor	Function Light
Telenordik 5TR	22386	Black	White/Black	5 speeds, OFF	ON/OFF

ST4-150 II

4-speed switch for ceiling fans, surface housing, flush housing fitting option.



Installation in bespoke housing with knob, frame and cover plate of external system with 6 mm shaft.

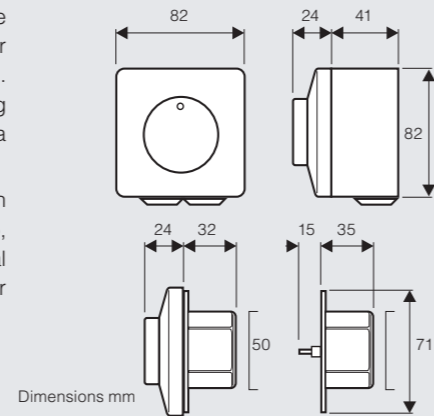


(Example with external system)

ST4-150 II: 4-speed rotary switch for hum free control of NON-ECO ceiling fans. The controller works using micro-capacitors. Protection to IP44. The supplied unit is suitable for surface mounting on standard wall outlets, with an option to fit in a standard flush housing.

The ST4-150 II can be integrated into any switch system with a 6 mm shaft, by using the rotary knob, the frame and the central cover plate of the external system. A separate dimmer switch is needed for ceiling fans with a light.

Maximum motor power: 100 watts.



Dimensions mm

Product	Code No.	Function	Usage
ST4-150 II	85215	4 speeds, OFF	for all NON-ECO ceiling fans

ST4-150/400

4-speed switch with light switch for ceiling fans, surface housing, flush housing fitting option. Installation in standard flush housing possible.



ST4-150/400: 4-speed rotary switch for hum free control of NON-ECO ceiling fans and an on/off switch for a light. The controller works using micro-capacitors. The supplied unit is suitable for surface mounting on standard wall outlets, with an option to fit in a standard flush housing.

Two separate wires (L-motor and L-light) are required between the switch and the fan for switching the motor and light. Maximum motor power: 100 watts. Maximum light power: 300 watts.

Dimensions see above (ST4-150 II)

Product	Code No.	Function	Usage
ST4-150/400	85205	4 speeds, OFF, light ON/OFF	for all NON-ECO ceiling fans

SCRR5

5-speed transformer for reversible ceiling fans of NORDIK series. Surface housing, illuminated ON/OFF switch, reverse switch.

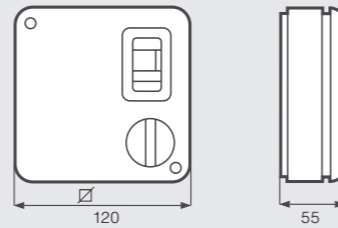


Type SCRR5L with additional light switch.

SCRR5L: 5-step transformer for hum free control of NON-ECO ceiling fans. With illuminated on/off switch, additional light and reversing switch.

All products use a copper-wound transformer. Supplied suitable for a surface mounting, flush installation requires a special flush housing kit (SCB5, Code. No. 22483).

Maximum motor power: 100 watts.



Dimensions mm

Product	Code.No.	Function	Usage
SCNR5	12955	5 speeds, ON/OFF	for all NON-ECO ceiling fans
SCNRL5	12957	5 speeds, ON/OFF, light ON/OFF	for all NON-ECO ceiling fans with integrated or additional light kit
SCRR5	12963	5 speeds, ON/OFF, motor reverse	for all reversible ceiling fans of NORDIK EVOLUTION series and TROPICAL IPX5
SCRR5L	12964	5 speeds, ON/OFF, motor reverse, light ON/OFF	for all reversible ceiling fans of NORDIK EVOLUTION series with light kit

REVERSIBLE

Caution: for each function (reverse, light) one additional wire between transformer and fan is needed.

FANINBOX

Smart Home KNX control for AC ceiling fans with up to 3 speeds as well as manual control of the outputs.



KNX control

FANINBOX: Ceiling fan control for controlling NON-ECO ceiling fans by means of KNX for top-hat rail mounting.

Up to 3 speed levels, manual control of outputs and status LED logic module with 10 functions included. Error indication in case of power failure.

Operating voltage 29VDC SELV, protection type IP20. Min. power 30 W, max. power 100 W. Electrical control unit, suitable for top-hat rail mounting. Installation in control cabinets on top-hat rail (EN 50022).

Application programme ETS5/ETS6 available.

Product	Code No.	Function	Usage
FANINBOX	85350	up to 3 speeds, OFF	for all NON-ECO ceiling fans

1-10V Potentiometer

NEW



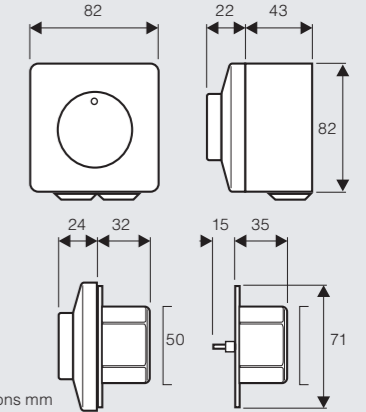
POT-R 0-10V

Wall potentiometer for speed control of motors and dimming of lights, each with 0-10V interface.

POT-R 0-10V: 10kΩ potentiometer for flush or surface mounting. Switching forward/reverse by pressing the rotary knob. Installation in standard flush housing possible. Housing colour white, similar to RAL 9003.

Suitable for controlling CasaFan ECO ceiling fans with 0-10V interface. For speed control of the motor 3 wires are needed, when using forward/reverse 4 wires are needed between fan and potentiometer.

The POT-R 0-10V can be integrated into any switch system with a 6 mm shaft, by using the rotary knob, the frame and the central cover plate of the external system.



Dimensions mm

Product	Code No.	Function	Usage
POT-R 0-10V	86111	Continuous motor speed control	CasaFan ECO ceiling fans with 0-10V interface

5-Speed-Transformers

ETW

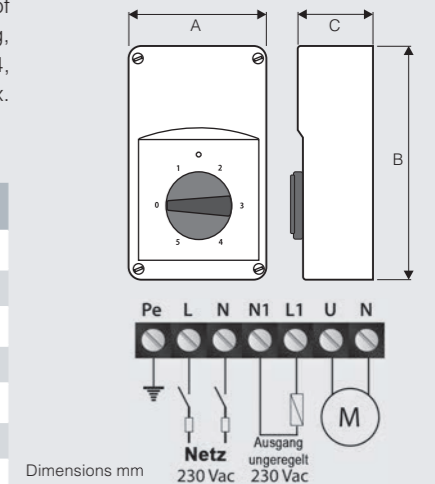
5-speed transformers for control of one or several ceiling fans (up to 30 units with ETW 10.0).



IP54
Dust protection
insensitive to dust,
dirt and splash water

ETW: 5-speed transformers for hum free control of several NON-ECO ceiling fans. Industrial housing, colour light grey RAL 7035, protection class IP54, (0-80-110-140-170/190-230 V), control lamp, max. ambient temperature 35 °C.

Product	Code No.	Amp. (max.)	A	B	C
ETW 1.0	892032	1.0	84	160	88
ETW 1.5	892021	1.5	115	205	100
ETW 2.2	892022	2.2	115	205	100
ETW 3.5	892033	3.5	170	255	140
ETW 5.0	892018	5.0	170	255	140
ETW 7.5	892019	7.5	100	305	140
ETW 10.0	892038	10.0	300	325	185



Dimensions mm

7-Speed-Transformers for Cabinet Installation

ETISW

7-speed transformers for cabinet installation, operable by rotary switch.

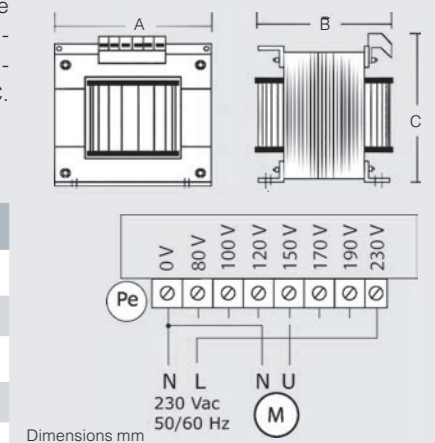


Rotary switch for transformers,
Code No. 892128



ETISW 5.0: 7-speed transformers for hum free control of several ceiling fans for cabinet installation, protection class IP20, (0-80-100-120-150-170-190-230 V), max. ambient temperature 35 °C. Suitable rotary switch, Code No. 892128.

Product	Code No.	Amp. (max.)	A	B	C
ETISW 1.5	892129	1.5	84	70	90
ETISW 2.5	892130	2.5	84	87	90
ETISW 3.5	892127	3.5	108	90	112
ETISW 5.0	892131	5.0	108	100	112
Rotary switch	892128	13	-	-	-



Dimensions mm

LIGHT KITS

The following Light kits can be retrofitted to the fans of the series CLASSIC ROYAL, CLASSIC FLAT 103-III, CLASSIC FLAT 75-III, CENTURION and BLACK MAGIC.

The CasaFan combination system allows quick and easy replacements. Regardless of the fan, lights can be controlled with pull chain switch (standard equipment), by remote control or also with a wall-mounted switch.

ECO ELEMENTS, CARIBBEAN DREAM ECO II, NIGHT FLIGHT and ROTARY: When ordering, be sure to specify the ceiling fan model in question! All luminaires are suitable for use with energy-saving light sources such as LED lamps.

Product	Image	Dimensions (mm)	Lamps (not included)	Brushed chrome	Polished chrome	Antique brown	Graphite	White	Antique brass	Polished brass	Shabby white
Light kit 1 Opal glass light sphere in flat schoolhouse shape, glossy			1 x 60 W E27	10561	10281	10201	10211	10261	10271	10251	10231
Light kit 1 s Opal glass light in the shape of a small hemisphere, glossy			1 x 40 W E27	10569	10289	10209	10219	10269	10279	10259	10239
Light kit 1 k Opal glass light in the shape of a sphere, glossy			1 x 60 W E27	10563	10283	10203	10243	10263	10273	10253	10233
Light kit 1 z Opal glass light in the shape of a cylinder, open at bottom, frosted			1 x 60 W E27	10566	10286	10206	10246	10266	10276	10256	10236
Light kit 1 t Opal glass light, funnel shaped, open at bottom, frosted			1 x 60 W E27	10567	10287	10207	10247	10267	10277	10257	10237
Light kit 1 b Opal glass light, cylinder shaped, closed at bottom, glossy			1 x 60 W E27	10568	10288	10208	10248	10268	10278	10258	10238
Light kit 3 3 fixed tulip glasses with ornaments, frosted			3 x 60 W E27	-	-	1095	-	1021	1033	1036	-

Product	Image	Dimensions (mm)	Lamps (not included)	Brushed chrome	Polished chrome	Antique brown	Graphite	White	Antique brass	Polished brass	Shabby white
Light kit 4 4 individual adjustable metal spot lights			4 x 60 W E27	1045	1032	-	1096	1031	1034	1024	-
Light kit 5-II 3 individual adjustable metal halogen spot lights			3 x 50 W GU10	1116	1114	-	1117	1113	1115	-	-
Light kit 6 3 acrylic disks + frosted cylindric glass			1 x 60 W E27	1093	1109	-	-	1094	-	-	-
Light kit 8-II Open hemispherical shape, frosted			1 x 60 W E27	10564	10284	102049	10244	10264	10274	10254	10234
Light kit 14 Heavy textured glass bowl, frosted Metal parts included			2 x 60 W E14	1043	1043	1043	-	1043	1043	1043	1043
Light kit 14 Heavy textured glass bowl, amber frosted Metal parts included			2 x 60 W E14	1044	1044	1044	-	1044	1044	1044	1044
Light kit 15 r Flat opal glass shade, frosted			2 x 40 W E27	11001	11031	11051	11041	11021	11011	-	-
Light kit 15 z Flat cylindrical opal glass shade, frosted			2 x 40 W E27	11006	11036	11056	11046	11026	11016	-	-

COMBINATION EXAMPLES LIGHT KITS



LIGHT KIT 1 MP #10251
on CasaFan CLASSIC ROYAL
103 MP-EA/WI #510309



LIGHT KIT 1t BA #10207
on CasaFan CLASSIC FLAT
103-III BZ-AE/EK #5103371



LIGHT KIT 1 MA #10721
on CasaFan CLASSIC FLAT
103-III MA-EA/BU #5103041



LIGHT KIT 3 WE #1021
on CasaFan CLASSIC FLAT
75-III WE-WE/LG #5075061



LIGHT KIT 1s GR #10219
on CasaFan ECO ELEMENTS
103 GR-GR/SW #510384*



LIGHT KIT 1s WE #10269
on CasaFan CLASSIC
ROYAL 103 WE-WE/LG
#510303



LIGHT KIT 3 MA #1033
on CasaFan ECO ELEMENTS
132 MA-EA/BU #513280*



LIGHT KIT 4 WE #1031
on CasaFan CLASSIC
ROYAL 103 WE #510303



LIGHT KIT 1k GR #10243
on CasaFan ECO ELEMENTS
132 GR-GR/SW #513284*



LIGHT KIT 5-II BN #1116
on CasaFan ECO ELEMENTS
132 BN-WN/AH #513282*

COMBINATION EXAMPLES LIGHT KITS



LIGHT KIT 5-II BN #1116
on CasaFan NIGHT FLIGHT
132 BN-WN #9313215*



LIGHT KIT 5-II BN #1116
on CasaFan CLASSIC
ROYAL 75 CH-WE/LG
#507502



LIGHT KIT 6 CH #1109
on CasaFan CLASSIC
ROYAL 132 CH-WE/LG
#513202



LIGHT KIT 15r WE #11021
on CasaFan NIGHT FLIGHT
132 WE-WE #9313216*



LIGHT KIT 8-II WE #10264
on CasaFan ROTARY 132 WE-WE
#9513269*



LIGHT KIT 15z BN #11006
on CasaFan ECO ELEMENTS
180 BN-WE/LG #518082*



LIGHT KIT 15r WE #11021
on CasaFan ROTARY 132 WE-WE
#9513269*



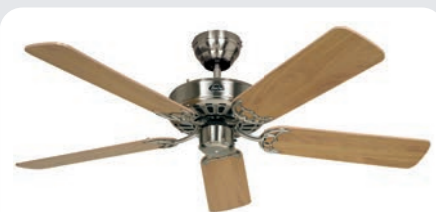
LIGHT KIT 14 #1043
on CasaFan CLASSIC
ROYAL 180 BN-EA/NB
#518015

LIGHT KIT 15r BA #11051
on CasaFan CARIBBEAN
DREAM ECO II BA-PLM
#513724



DOWNRODS

A downrod sets the fan at the proper height for optimum performance. All CasaFan downrods match the CasaFan fans in terms of fit and finish, and are supplied with suitable cable extensions.



Assembly with short downrod
(included in delivery of the ceiling fan)



Assembly with 60 cm downrod in high ceilings (up to approx. 3.00 m ceiling height)



Assembly with 60 cm downrod on a sloping ceiling (max. roof slope see fan Product page)

Longer downrods (can be shortened to any length) in exchange against the original rods.

Model	cm	Brushed chrome	Polished chrome	Basalt grey	Antique brown	Bronze	Graphite	Light grey	Matt black	Matt white	Titan silver	White	Antique brass	Brushed brass	Polished brass
AERODYNAMIX ECO	60	981048*	981037*	981046*								981039*			
AERODYNAMIX ECO	120	981049*	981057*	981002*								981059*			
AEROPLAN ECO	60	1048		1046		81044		1118				1039			
AEROPLAN ECO	120	1049		1002		81045		1138				1059			
ALU	60	1061**										1060**			
ALU	120	1065**										1068**			
BIG SMOOTH ECO	60					81044					91047	1039			
BIG SMOOTH ECO	120					81045					91051	1059			
BLACK MAGIC	60			(1046)											1040
BLACK MAGIC	120			(1002)											1050
CARIBBEAN DREAM ECO	60				1106										
CARIBBEAN DREAM ECO	120				1108										
CENTURION	60											1038			
CENTURION	120											1058			
CLASSIC ROYAL	60	1048	1037		1106		1098					1039	1038		1040
CLASSIC ROYAL	120	1049	1057		1108		1107					1059	1058		1050
ECO AIRSCREW	60	991076							991983	991256					991082
ECO AIRSCREW	100	991077							991984	991257					991083
ECO AVIATOS	60	1048		1046								1039			
ECO AVIATOS	120	1049		1002								1059			
ECO CONCEPT	60	1048						1118				1039			
ECO CONCEPT	120	1049						1138				1059			
ECO DYNAMIX II	60	1048		1046								1039			
ECO DYNAMIX II	120	1049		1002								1059			
ECO ELEMENTS	60	1048			1106		1098					1039	1038		
ECO ELEMENTS	120	1049			1108		1107					1059	1058		
ECO FIORE	60	1048				81044						1039			
ECO FIORE	120	1049				81045						1059			
ECO GAMMA	60	1048													
ECO GAMMA	120	1049													

Model	cm	Brushed chrome	Polished chrome	Basalt grey	Antique brown	Bronze	Graphite	Light grey	Matt black	Matt white	Titan silver	White	Antique brass	Brushed brass	Polished brass
Eco GENUINO	60	991076								991983	991256				991082
Eco GENUINO	100	991077								991984	991257				991083
Eco GENUINO-L	60	991079								991081	991084				991087
Eco GENUINO-L	100	991080								991085	991086				991088
Eco HELIX	60														1039
Eco HELIX	120														1059
Eco INTERIOR	60	971048										971039			
Eco INTERIOR	120	971049										971059			
Eco NEO III	60	1048	1037	1046			81044					1039	1038		
Eco NEO III	120	1049	1057	1002			81045					1059	1058		
Eco REVOLUTION	60	1048		(1046)								1039			
Eco REVOLUTION	120	1049		(1002)								1059			
Eco TALOS	60	971048													
Eco TALOS	120	971049													
Eco VOLARE	60	971048		971046								971039			
Eco VOLARE	120	971049		971002								971059			
ELICA	60	1048										1039			
ELICA	120	1049										1059			
FALCETTO	60		1037		1106							1039			
FALCETTO	120		1057		1108							1059			
LIBECCIO	60	1048										1039			
LIBECCIO	120	1049										1059			
LIBELLE	60	1048										1039			
LIBELLE	120	1049										1059			
MACAU	60	1048					81044								
MACAU	120	1049					81045								
MERCURY	60	1048													
MERCURY	120	1049													
MIRAGE	60	1048										1039			
MIRAGE	120	1049										1059			
NIGHT FLIGHT	60	1048										1039			
NIGHT FLIGHT	120	1049										1059			
OUTDOOR CLASSIC	60						81044					1039			
OUTDOOR CLASSIC	120						81045					1059			
ROTARY	60	1048										1039			
ROTARY	120	1049										1059			
TITANIUM	60	1048										1039			
TITANIUM	120	1049										1059			
TRISTAR II	60		1037									1039			
TRISTAR II	120		1057									1059			
TRISTAR-Z	60		1037	(1046)								1039			
TRISTAR-Z	120		1057	(1002)								1059			

* Including hanger ball and cover ring

** Consisting of an inner rod and a decorative sleeve

(...) = Product colour different from housing colour



Longer downrods (can be shortened to any length) in exchange against the original Vortice downrods of the NORDIK series DESIGN S, EVOLUTION, INTERNATIONAL PLUS and TROPICAL.

Product	Code No. L = 50 cm	Code No. L = 75 cm	Code No. L = 100 cm	Housing Finish
Metallic silver	-	22028	22029	Metallic silver
Black	-	-	22043	Black
White	22052	22072	22075	White
Light grey	-	22074	22077	Light grey
Woodgrain	-	-	22071	Woodgrain

NORDIK ECO: Longer downrods (arbitrarily shortenable) in exchange against the original downrods.

Product	Code No. L = 16 cm	Code No. L = 66,5 cm	Code No. L = 91,5 cm	Housing Finish
White	21150	21154	21155	White

NORDIK HEAVY DUTY BASE and HEAVY DUTY INOX: Longer downrods (arbitrarily shortenable).

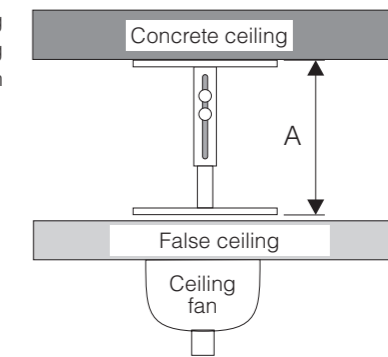
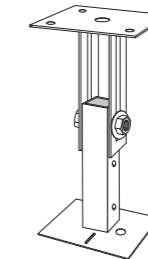
Product	Code No. L = 67 cm	Code No. L = 92 cm	Housing Finish
Polished chrome	22718	22719	Hammered anthracite
304 stainless	22722	22723	Hammered anthracite



Mounting support for ceiling fans

Continuously adjustable support for safe and vibration free installation of ceiling fans at suspended and false ceilings (wood, gypsum, plasterboard, ceiling grid). Ceiling plate with 4 holes for mounting to hard ceiling, lower plate with universal holes for installation of any ceiling fan.

Product	Code No.	A (mm)	Weight (kg)
SST20-35	93221	200 - 350	3.7
SST35-65	93222	350 - 650	5.6
SST65-120	93223	650 - 1,200	10.2
SST120-170	93225	1,200 - 1,700	13.6



SST support for false ceilings:
The support has no contact to the false ceiling. This prevents resonances and vibration noise.

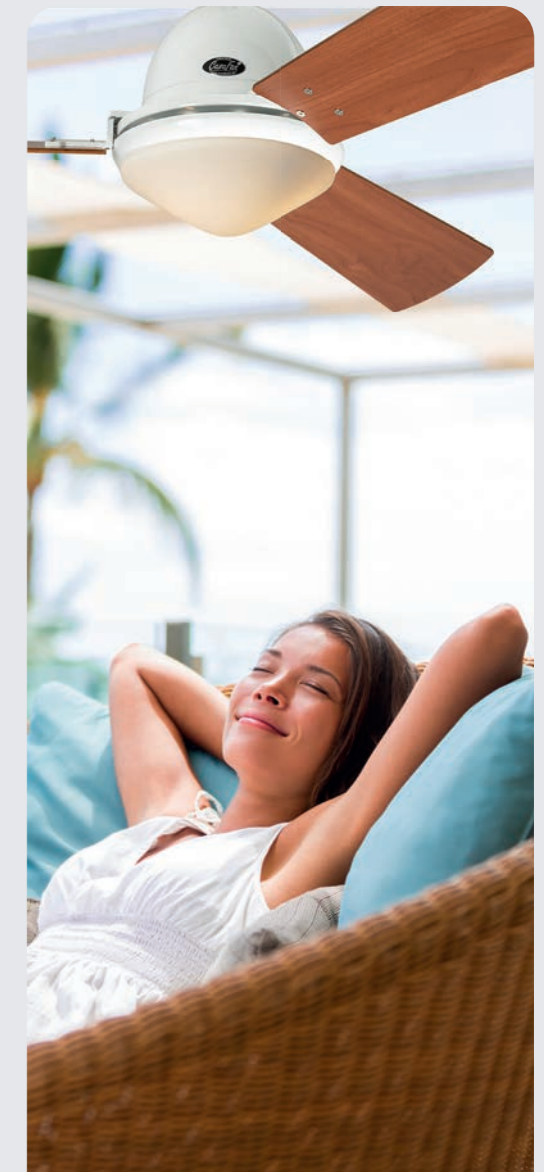
Long Pull chains

Longer pull chains for operating ceiling fans and light kits with pull chain switches at high ceilings. Pull chain length 100 cm can be cut to any length.

Product	Code No.	Metal finish	Knob
ZK100MA	81003	Antique brass	Wood
ZK100CH	81002	Polished chrome	Wood
ZK100MP	81001	Polished brass	Wood
ZK100CH/A	81005	Polished chrome	Acrylic



ZK 100: Long pull chains allow the access to pull chain switches of ceiling fans and light kits installed at high ceilings.



SlowMotion

The electronic part "SLOWMOTION" works as a pre-resistance, for reducing one of the 3 available speeds of a CasaFan NON-Eco ceiling fan. The Product has been designed to prevent heat development that could damage other parts.

(((SLOW MOTION)))
Speed 1 is guaranteed to work „draught-free“

In connection with a CasaFan remote control, ALL speed levels will be reduced in speed by about half.

Product	Code No.	Function
SLOWMOTION 1,5	99669	Speed reduction for AC ceiling fans

THE BEST FANS YOU CAN GET.

CasaFan
VENTILATORS

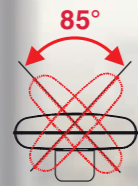


COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



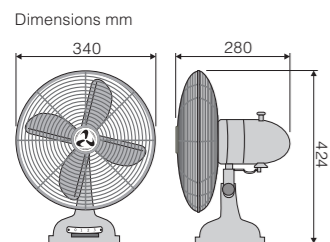
TRADITION TV 30 II MS #303053



TRADITION TV 30 II CH #303052



- Traditional design with state-of-the-art technology.
- Housing, fan base and protective grille polished chrome finish.
- 3-speed level switch at front of fan base.
- Vertical grade adjustable.
- Mechanical 85°-oscillation, can be switched off.
- Stable, tilt-free fan base with rubber feet.
- Useful handle at the back of the protective grille.
- Removable protective grille for easy cleaning.
- Powerful blade made of Aluminum.
- 1.8 meters power cord with protective contact plug.



Blade Ø	300
Power motor (W)	37
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,321
Oscillation (°)	85
Weight (kg)	3.5

TRADITION TV 30 II

Product	Code No.	Housing Finish
TRADITION TV 30 II CH	303052	Polished chrome
TRADITION TV 30 II MS	303053	Matt black



AIROS CIRCUBOX WE #67856



AIROS CIRCUBOX SW #67855

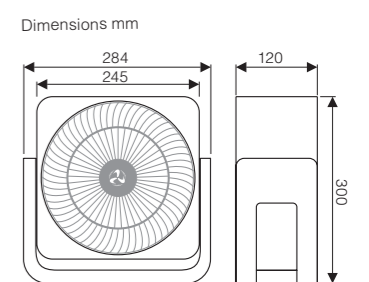


- Housing, protective grille and blade made of shockproof thermo-plastic resin, frosted.
- 3 speeds selectable with rotary switch.
- 3-blade wheel, for powerful air delivery.
- High airstream range of up to 10 m.
- Vertical grade adjustable in 5 steps up to 120°.
- Stable stand with rubber feet integrated in the housing.
- 1.8 meters power cord with Euro plug.
- Rear grid can be opened for cleaning the filter net.

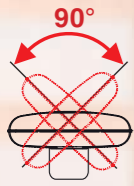
AIROS CIRCUBOX

Product	Code No.	Housing Finish	Grille
AIROS CIRCUBOX WE	67856	Matt white	Black
AIROS CIRCUBOX SW	67855	Matt black	Light grey

Blade Ø	200
Power motor (W)	35
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,310
Weight (kg)	2.0



RETROJET



RETROJET RO
#301501



RETROJET GN
#301505



RETROJET WE
#301504



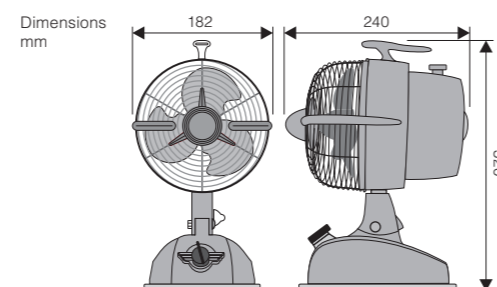
RETROJET SW
#301502



RETROJET SIL
#301503



- Housing made of shockproof thermo-plastic ABS resin and steel.
- Protective grille and applications chrome finished.
- 3-speed rotary switch at the front of the fan base.
- Powerful motor and optimized blade, black finished.
- Vertical grade adjustable.
- Mechanical 90°-oscillation, switchable.
- Stable, tilt-free fan base with rubber feet.
- Useful handle at the fan head.
- 1.8 meters power cord with protective contact plug.



Blade Ø	150
Power motor (W)	15
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	2,620
Oscillation (°)	90
Weight (kg)	2.4

RETROJET

Product	Code No.	Housing Finish
RETROJET RO	301501	Glossy ruby finish
RETROJET SW	301502	Glossy black finish
RETROJET SIL	301503	Glossy silver finish
RETROJET WE	301504	Glossy white finish
RETROJET GN	301505	Glossy british green finish

VORT HYDRO CUBE

VORT HYDRO CUBE #60405



- Design humidifier in modern cube shape.
- Housing made of ABS, hygienic and easy to clean.
- 2-stage ultrasonic vaporisation (210 and 350 ml/h).
- Closed, removable water tank with 4 liter capacity.
- Selectable between cold and hot steam function.
- 360° adjustable mist nozzle.
- Water level indicator and automatic switch-off at empty tank.
- Desired room air humidity can be selected on the adjustable hygostat (40%, 50%, 60% and 70%).
- Sleep timer up to 12 hours.
- Removable container for essential oils to enrich the humidifier mist.
- Operation via soft-touch buttons. LED display of selected functions.
- 1.8 meters power cord with Euro plug.

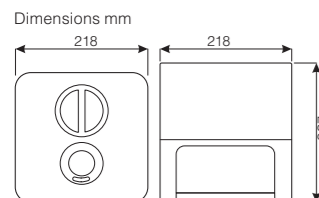
Large filling opening and adjustable mist nozzle.



Removable water tank.



Easy filling of the 4 liter water tank.



Water tank capacity (l)	4.0
Power motor (W)	95
Voltage (V/Hz)	220-240/50
Humidification (ml/h)	210/350
Autom. Hygostat	40% - 70% r.F.
Sleep timer (h.)	12
Weight (kg)	1.8

VORT HYDRO CUBE

Product	Code No.	Housing Finish
VORT HYDRO CUBE	60405	White

NORDIK MIO

NORDIK MIO #61046



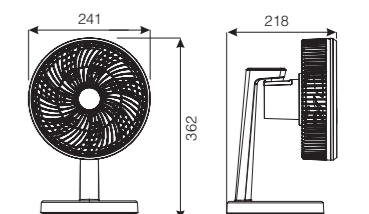
- Housing and protective grille made of ABS white colour.
- 4 speeds selectable with soft touch switch with LED indication.
- Sleep timer up to 4 hours.
- 7-blade wheel, optimized for best air delivery with lowest noise.
- Vertical grade adjustable.
- High-quality, reliable motor with long service life.
- Electronic 2-step oscillation (45° and 70°) switchable.
- 12V power supply with 1.2 meters power cord with Euro plug.
- Stable, tilt-free base with rubber feet.

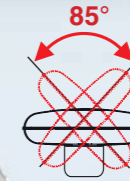
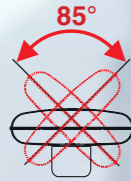
NORDIK MIO

Product	Code No.	Housing/Grille Finish	Blade
NORDIK MIO	61046	White	Grey

Blade Ø	200
Power motor (W)	14
Voltage (V/Hz)	220-240/50-60
No. of speeds	4
Rev. max. (RPM)	1,210
Sleep timer (h.)	4
Weight (kg)	1.3

Dimensions mm





GORDON 30 LG
#60610



GORDON 40 LG
#60615



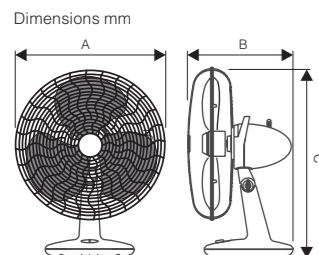
TV 36-SL WE
#30365

TV 36-SL AZ
#30366



Actual Italian design (F. Trabucchi/ M. Vecchi) selected for **ADI DESIGN INDEX 2004**

- Housing, protective grille and blade made of shockproof thermo-plastic resin, colour light grey.
- Awarded Italian design.
- 3 speeds selectable with rotary switch at the fan base.
- Mechanical 85°-oscillation, switchable.
- 3-blade wheel, optimized for best air delivery with lowest noise.
- Vertical grade adjustable.
- Stable, tilt-free base with rubber feet.
- 1.8 meters power cord with Euro plug.
- Removable protective grille for easy cleaning.



Blade Ø	300/400
Power motor (W)	35/40
Voltage (V/Hz)	220-240/50
Dim. A (mm)	364/458
Dim. B (mm)	303/303
Dim. C (mm)	524/571
No. of speeds	3
Rev. max. (RPM)	1,300/1,145
Oscillation (°)	85
Weight (kg)	2.3/2.5

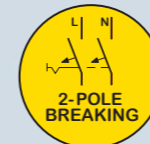
GORDON

Product	Code No.	Housing Finish	Blade Ø	Grille Ø
30 LG	60610	Light grey	300 mm	364 mm
40 LG	60615	Light grey	400 mm	458 mm



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

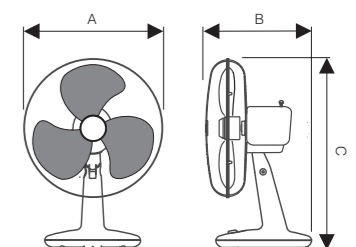


COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

- Housing made of shockproof thermoplastic resin, housing colour white/anthracite, blades transparent. Protective grille steel wire, white/ anthracite.
- 3 speeds can be chosen by piano switch at the fan base.
- Mechanical 85°-oscillation movement, switchable.
- 3-blade wheel, for powerful air delivery.
- Vertical grade adjustable.
- Stable, tilt-free fan base with rubber feet.
- 1.8 meters power cord with Euro plug.
- Removable protective grille for easy cleaning.

Dimensions mm



Blade Ø	300
Power motor (W)	35
Voltage (V/Hz)	220-240/50
Dim. A (mm)	345
Dim. B (mm)	275
Dim. C (mm)	460
No. of speeds	3
Rev. max. (RPM)	1,310
Oscillation (°)	85
Weight (kg)	2.4

GREYHOUND TV-SL

Product	Code No.	Housing Finish	Grille
TV 36-SL WE	30365	White, matt surface	White
TV 36-SL AZ	30366	Anthracite, matt surface	Anthracite



AIROS PIN II

AIROS PIN II
#67522

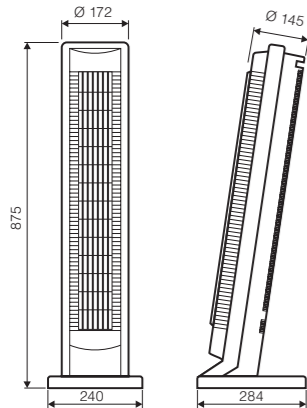


All functions can be controlled by the hand held remote control



- Elegant, compact housing made of shockproof, thermoplastic ABS resin, anthracite/black.
- 3 speeds selectable.
- Timer up to 7.5 hours switch off delay.
- Natural modes for constantly changing airflow.
- Storage for remote control at fan head.
- All functions selectable at the fan panel and by IR remote control.
- Stable, tilt-free stand.
- LED shows selected functions.
- Internal 65°-oscillation for even airflow in the room.
- Specially developed impeller for low noise at maximum air performance, range up to 6 m.
- 1.8 meters power cord with Euro plug.
- Useful transport handle integrated in the back of the housing.

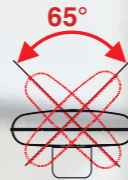
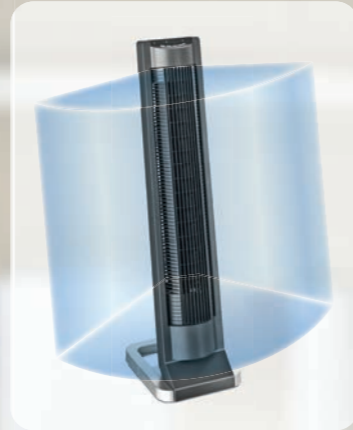
Dimensions mm



Exhaust grille (H x W)	540 x 78
Power motor (W)	40
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,250
Oszillation internal (°)	65
Weight (kg)	3.9

AIROS PIN II

Product	Code No.	Housing Finish
PIN II	67522	Anthracite/black



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

AIROS BIG PIN II
SW #67540



AIROS BIG PIN II
WE #67541



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

AIROS BIG PIN II

Product	Code No.	Housing Finish
BIG PIN II SW	67540	Anthracite/black
BIG PIN II WE	67541	White



Exhaust grille (H x W)	550 x 68
Power motor (W)	40
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,270
Oszillation internal (°)	65
Weight (kg)	5.2

AIROS BIG PIN II

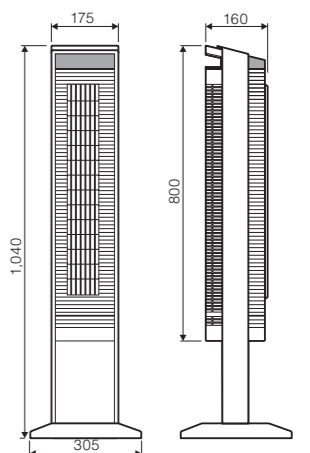


All functions can be controlled by the hand held remote control



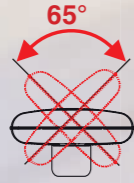
- Stylish, slim housing made of shockproof, thermoplastic ABS, anthracite/black or white.
- 3 speeds selectable.
- Timer up to 7.5 hours switch off delay.
- Natural mode for permanent varyingly airstreams.
- Storage for remote control at fan head.
- Temperature function controls fan speed.
- Discreetly illuminated display shows the selected functions.
- Specially developed impeller for low noise at maximum air performance, range up to 8 m.
- Stable, tilt-free stand.
- Internal 65°-oscillation for even airflow in the room.
- 1.8 meters power cord with Euro plug.
- Useful transport handle integrated in the back of the housing.

Dimensions mm



ARIANTE TOWER SUPER

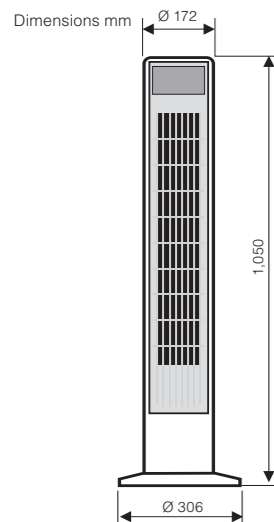
ARIANTE TOWER SUPER
#63016



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

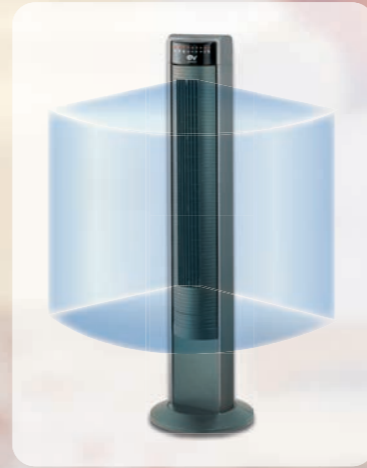
- Elegant, slim housing made of shockproof, thermoplastic ABS, grey/anthracite finished.
- 3 speeds selectable.
- Timer up to 7.5 hours switch off delay.
- 2 natural modes for permanent varying airstreams.
- Storage for remote control at fan head.
- All functions selectable at fan panel and by remote control.
- Stable, tilt-free stand.
- Specially new developed, longer tangential wheel for lower noise with stronger airstream, range up to 7 meters.
- LED display shows selected functions.
- Internal 65°-oscillation distributes the air all over the room.
- 1.8 meters power cord with Euro plug.
- Useful transport handle integrated in the back of the housing.



Exhaust grille (H x W)	680 x 90
Power motor (W)	40
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,200
Oscillation intern (°)	65
Weight (kg)	5.2

ARIANTE TOWER SUPER

Product	Code No.	Housing Finish
ARIANTE TOWER SUPER	63016	Grey/Anthracite



Storage for remote control at the back of fan head.



Control buttons covered by a flap. All selected functions are indicated by LEDs.



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

ARIANTE 30 multicolor
#60795



ARIANTE 30

Product	Code No.	Housing Finish	Oscillation
ARIANTE 30	60790	Light grey	360°
ARIANTE 30 multicolor	60795	Multicolour pastel	360°

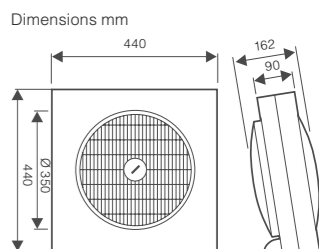
Blade Ø	330
Power motor (W)	35
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,075
Oscillation (°)	360
Weight (kg)	3.5

ARIANTE 30

ARIANTE 30 LG
#60790



- Floor fan with elegant, italian design. Strong: the components are made of shockproof, thermoplastic resin.
- ARIANTE 30 light grey colour.
- ARIANTE 30 multicolor: parts in 5 pastel shades: light yellow, grey, pink, light blue and light green at random combination.
- 3 speeds selectable by rotary switch.
- Slowly rotating front grille with angular fins distributes the air in a 360° radius. Rev. can be switched off.
- Special 6-blade fan gives guaranteed maximum performance and low noise level making it suitable for use overnight.
- Stable, vibration-free stand.
- Powerful motor.
- 1.5 meters power cord with Euro plug stores in cable tidy.
- Front and rear grilles easily removable for cleaning and maintenance.



AIROS ECO SILENT

NEW

AIROS ECO SILENT SW
#64501

Magnetic holder of the remote control in the centre of the protective grille.



COMMERCIAL USE

Approved according Machinery Directive 2006/42/EC Part 1 for commercial use

- High-performance stand fan with high-efficiency, brushless EC motor.
- Ideal for use in private and commercial areas.
- 6 finely graduated speed levels adjustable by means of push-button or remote control. Indicator display on the motor.
- Additional, extra-quiet sleep level with only 13.2 dB(A)* with super-soft airflow.
- Vertical tilt adjustable in the range of 35° adjustable, switchable 90° oscillation.
- Protective grille, housing and stand black, impeller transparent.
- Stable stand, height adjustable from 1,100 to 1,350 mm.
- Switch-off timer 1 to 9 hours.
- Innovative, patented impeller with 18 blades and 2 blade circles.
- Rubber hose cable H05RN-F G 3 0.75 mm², length 2.5 m with protective contact plug.

Selection and display of functions in the control panel on top of the motor.



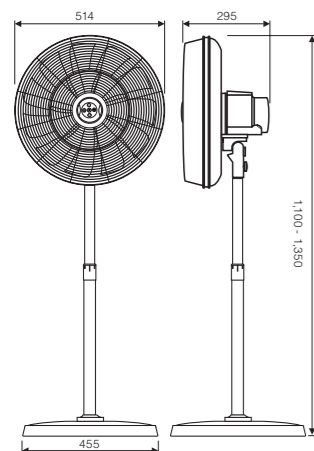
All functions can also be operated by remote control.



Energy saving DC/EC motor



Dimensions mm



Grille Ø (mm)	514
Blade Ø (mm)	442
Power motor (W)	4.2 - 90
Voltage (V/Hz)	220-240/50-60
No. of speeds	6 + 1
Rev. max. (RPM)	850
Weight (kg)	10.0

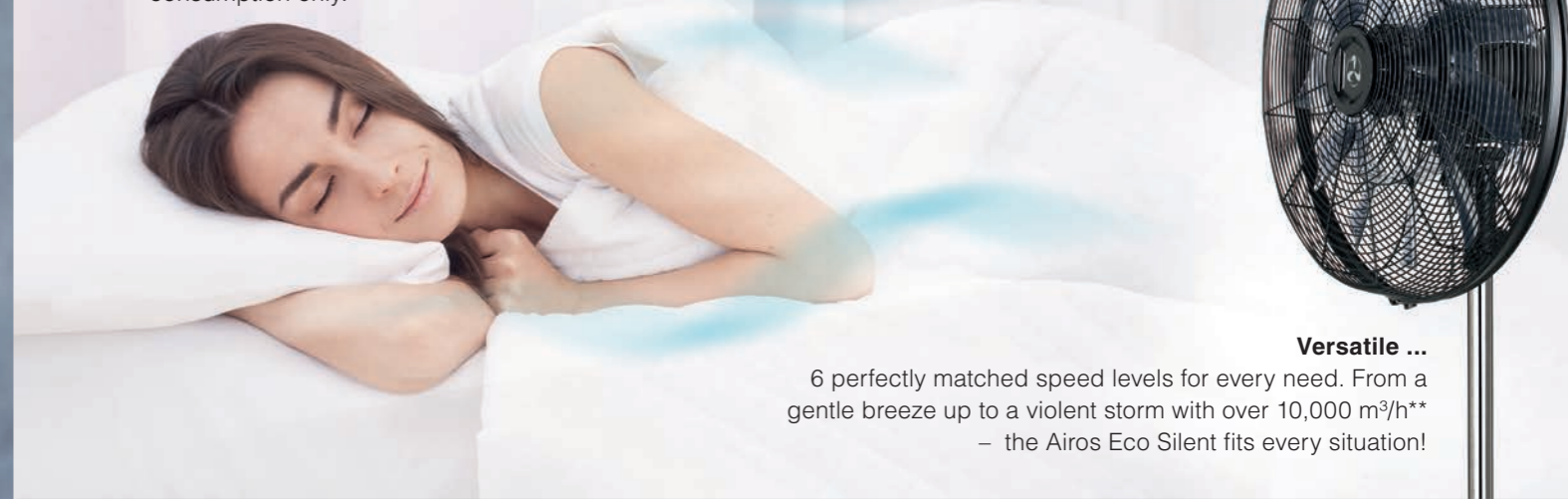
AIROS ECO SILENT

Product	Code No.	Housing/Grille Finish	Blade Finish
AIROS ECO SILENT SW	64501	Black	Transparent

* Sound pressure LP -3 m
** Fan flow rate acc. IEC 60879

Quieter than a whisper ...

An additional "Sleep" level creates a gentle breeze and a barely perceptible noise – with 4.2 watts consumption only.



Versatile ...

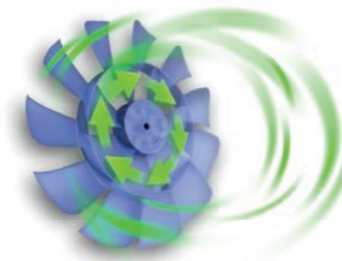
6 perfectly matched speed levels for every need. From a gentle breeze up to a violent storm with over 10,000 m³/h** – the Airos Eco Silent fits every situation!

HighTech ...

Encapsulated, highly efficient EC precision motor with permanent magnet and integrated control electronics. The 3rd generation of brushless EC motor technology. Saves up to 50% energy compared to conventional AC motors.

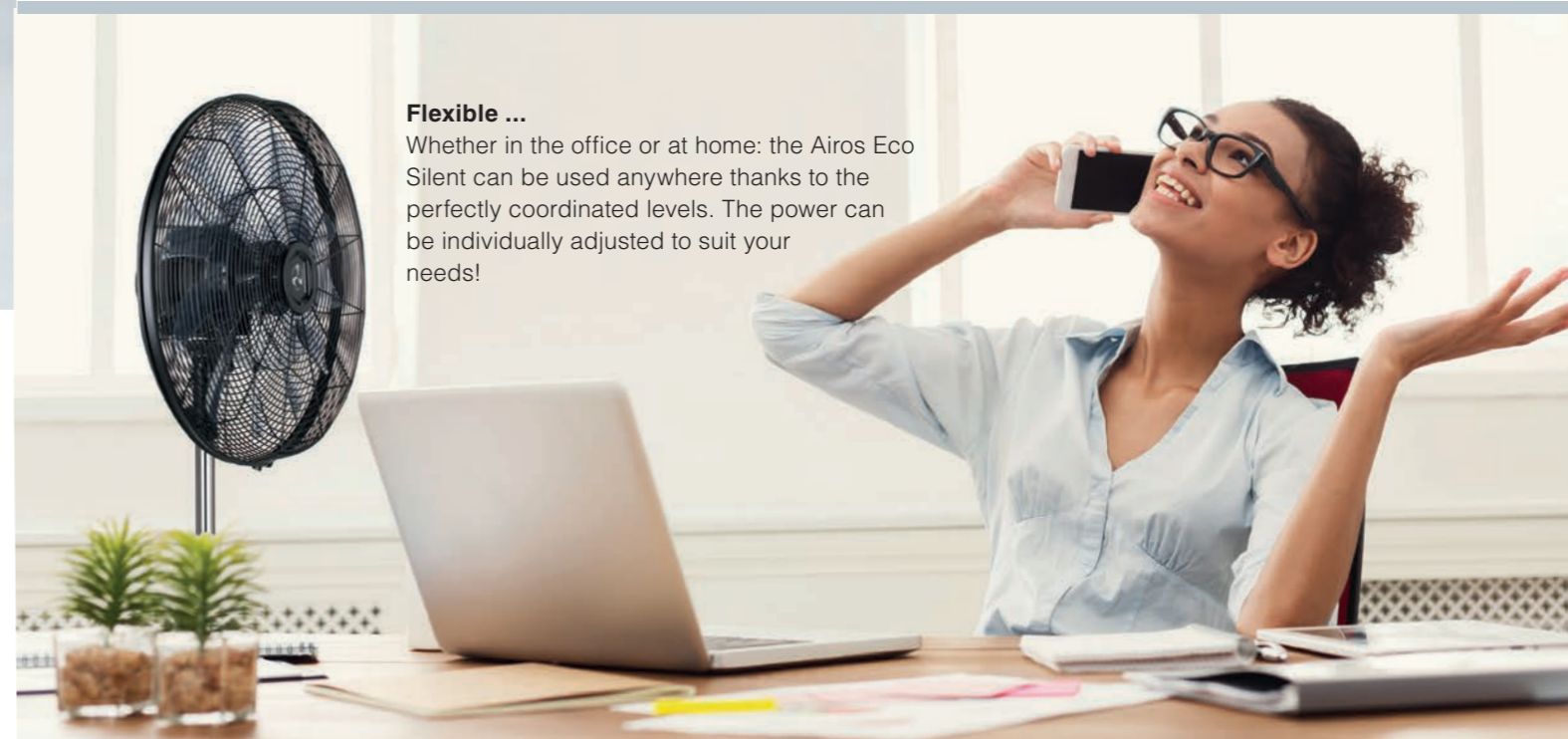
Powerful ...

Newly developed, patented impeller for a wider airflow with a higher range. The slower airflow of the inner 7-blade impeller is merged with the faster airflow of the outer 11-blade impeller in front of the fan, achieving a longer reach (up to 25 m) with a uniform flow.



Flexible ...

Whether in the office or at home: the Airos Eco Silent can be used anywhere thanks to the perfectly coordinated levels. The power can be individually adjusted to suit your needs!



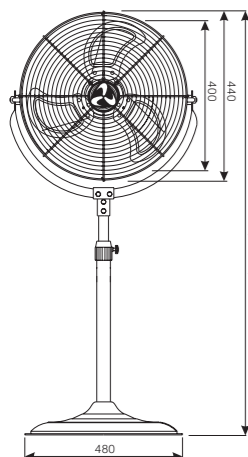
SPEED2STAND

Speed transformer **ETWZ 1,0 # 891020** for regulation in 5 steps from whisper-quiet to high performance.



- High-performance pedestal fan.
- Ideal for use in private and commercial sector.
- 3 speeds selectable with rotary switch.
- Vertical grade of 100° adjustable.
- Chromed protective grille, housing, frame and base silvergrey coated.
- Stable, tilt-free steel base, height adjustable.
- Comfortable handle and cable winder on the backside of the protective grille.
- Powerful Aluminum impeller, black.
- Rubber sheathed cable H05RN-F G 3 1.0 mm², length 2.5 m with protective contact plug.

Dimensions mm



Grille Ø (mm)	440
Blades Ø (mm)	400
Power motor (W)	110
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. (RPM)	1,305
Weight (kg)	12.8

SPEED2STAND

Product	Code No.	Housing/Grille Finish	Blade Finish
SPEED2STAND	304010	Silver grey/chrome	Aluminum, black

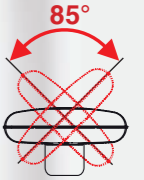
COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

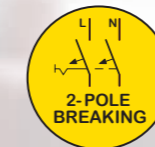


CasaFan ⚡
SafeLine

GREYHOUND SV SL



GREYHOUND SV45-10 SL WE #306135



COMMERCIAL USE

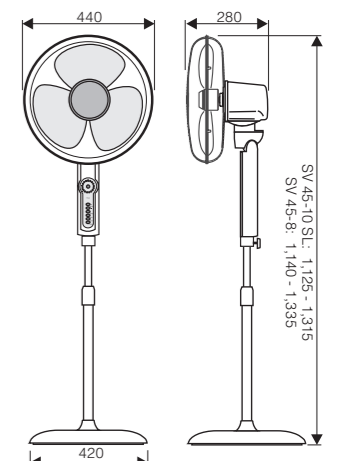
Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

GREYHOUND SV45-8 FB AZ #307121

All functions can be controlled by the hand held remote control.

- Housing and blade made of shockproof, thermoplastic resin, matt.
- 85°-oscillation (can be turned off).
- 3 speeds selectable with pressure switch.
- 3-blade wheel, optimized for best air delivery with lowest noise.
- Vertical grade adjustable.
- LEDs show selected functions (only SV45-8 FB AZ).
- Greyhound SV 45-8 FB AZ with remote control
- Height adjustable from 1,125 to 1,335 mm.
- Stable base without risk of tilting.
- 2.5 meters power cord with Euro plug.
- Removable protective grille for easy cleaning.

Dimensions mm



Blade Ø	400
Power motor (W)	50
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,145
Oscillation (°)	85
Weight (kg)	5.7

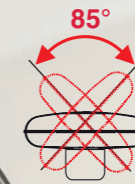
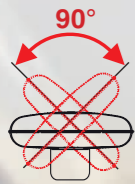
GREYHOUND SV

Product	Code No.	Housing Finish	Blade Finish
SV 45-10 SL WE	306135	White, matt surface	Plastic, semi-transpar.
SV 45-8 FB AZ	307121	Anthracite, matt surface	Plastic, semi-transpar.



GORDON C

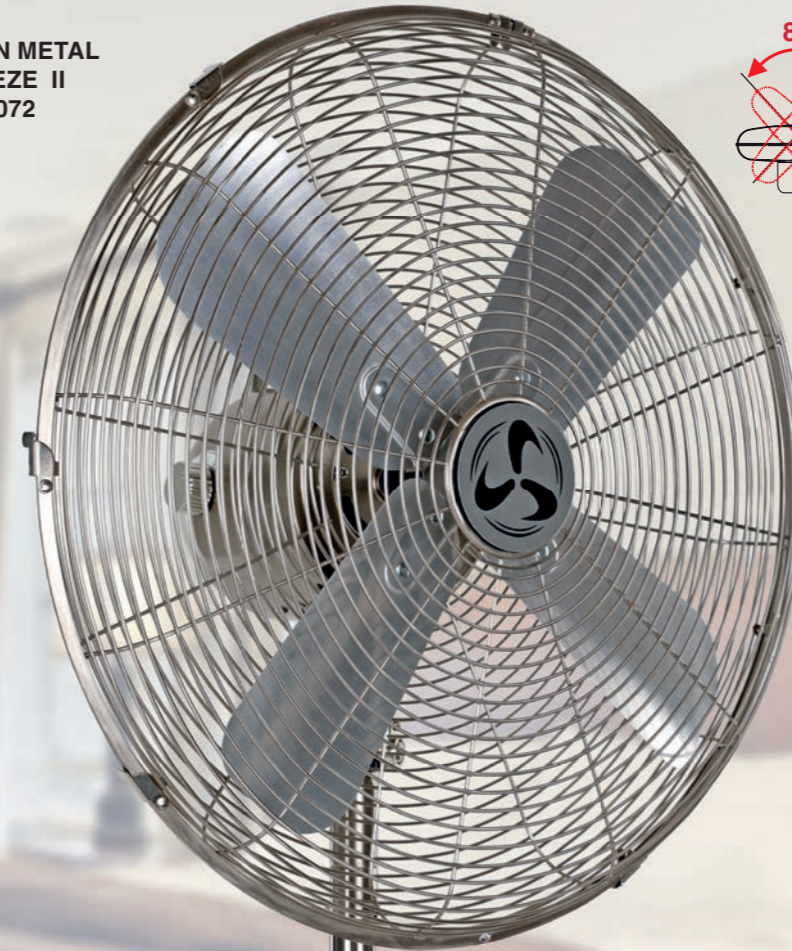
SATIN METAL BREEZE II



GORDON C 40 SW
#60621



GORDON C 40 LG
#60620



SATIN METAL BREEZE II
#304072



- Actual italian design (F. Trabucco/ M. Vecchi) selected for **ADI DESIGN INDEX 2004**
- Housing, protective grille and blade made of shockproof thermoplastic resin, colour light grey or black.
- Awarded italian design.
- 3 speeds selectable with rotary switch.
- Selectable mechanical 90°-oscillation
- 3-blade wheel, optimized for best air delivery with lowest noise.
- Vertical grade adjustable.
- Stable, tilt-free base.
- Height adjustable from 1,480 to 1,893 mm.
- 1.5 meters power cord with Euro plug.
- Insulation class II.
- Removable protective grille for easy cleaning.



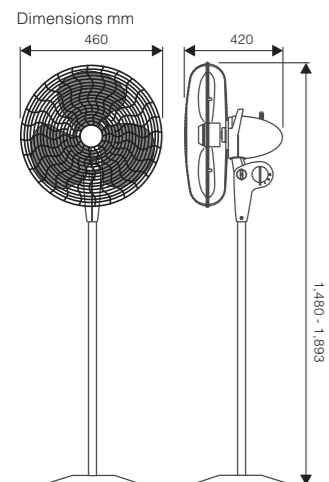
COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



Blade Ø	400
Power motor (W)	40
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,145
Oscillation (°)	90
Weight (kg)	5.4

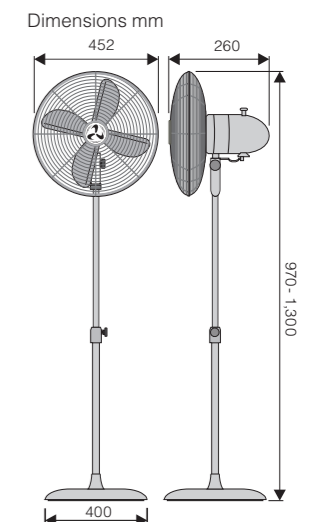
GORDON C

Product	Code No.	Housing Finish	Grille Ø (mm)
C 40 LG	60620	Light grey	460
C 40 SW	60621	Black	460

SATIN METAL BREEZE II

Product	Code No.	Housing Finish	Blade Finish
SATIN METAL BREEZE II	304072	Brushed chrome	Aluminum

Blade Ø	400
Power motor (W)	50
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,150
Oscillation (°)	85
Weight (kg)	7.3

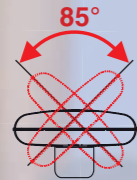


- All-metal housing brushed chrome finish.
- Selectable 85°-oscillation.
- 3 speeds selectable with rotary switch.
- Vertical grade adjustable.
- Height adjustable from 985 to 1,390 mm.
- Stable, tilt-free base with rubber feet.
- Powerful blade made of Aluminum.
- 2.5 meters power cord with protective contact plug.
- Removable protective grille for easy cleaning.



RETRO-AIRSTYLE

RETRO AIRSTYLE
BN-NB
#304085



- Retrodesign with the latest technology.
- Heavy all-metal version. Housing made of steel, surface chrome brushed.
- Adjustable stand with 3 wooden arms, natural colour or walnut stained.
- Lovingly crafted details such as a solid metal adjusting handle or solid crossbars in the protective grille.
- 3 speeds, switchable via rotary switch.
- 4-blade, aerodynamically optimised impeller in retro look.
- Switchable 85°-oscillation.
- Fan head inclination vertically adjustable.
- Removeable protective grille for easy cleaning.
- 1.8 meters power cord with protective contact plug.

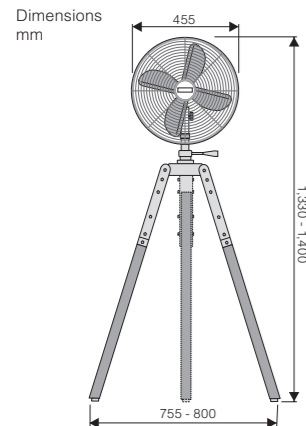


With many exclusive metal details.



Adjustment handle for the horizontal directional adjustment of the airstream.

RETRO AIRSTYLE
BN-NT #304086



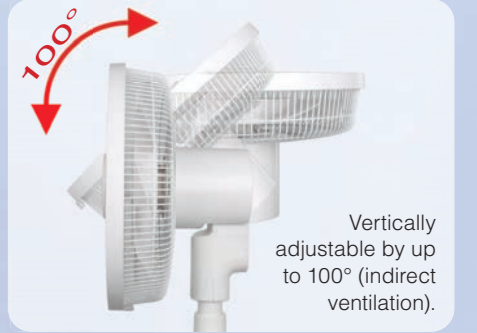
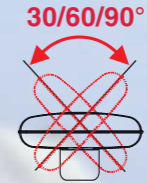
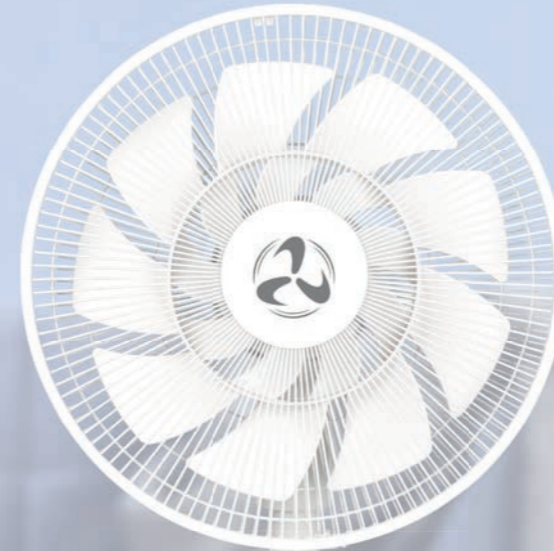
Blade Ø	400
Power motor (W)	40
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,165
Oscillation (°)	85
Weight (kg)	7.6

RETRO-AIRSTYLE

Product	Code No.	Housing Finish	Tripod colour
BN-NB	304085	Brushed chrome	Stained walnut
BN-NT	304086	Brushed chrome	Natural wood, clear coated

NEW

AIROS Eco SV35



LED display which shows the selected settings at the stand.

Vertically adjustable by up to 100° (indirect ventilation).

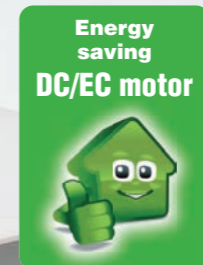
AIROS ECO SV35 WE
#64510



IR remote control included.

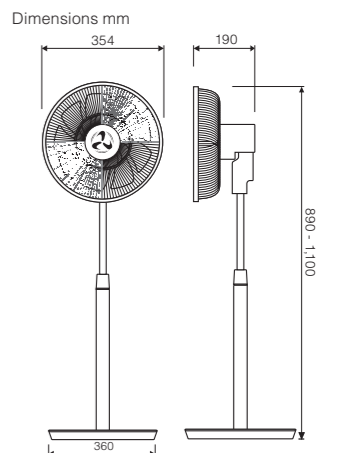


Easy-to-reach control buttons on top of the motor head to select all functions.



Voltage/
Frequency
100-240 V/
50-60 Hz
suitable
for many
countries

- Stand fan with high-efficiency, brushless EC motor.
- Housing and impeller made of white plastic, fine matted.
- 12 speeds, soft switch on the motor housing.
- Oscillation selectable in 3 steps (30° - 60° - 90°, also via IR remote control).
- Innovative, patented impeller with 18 blades and 2 blade circles.
- LED display of the selected settings on the stand.
- 13.6 dB(A)* on low speed setting, ideal for use in the bedroom.
- Vertically adjustable by up to 100° (indirect ventilation).
- Stable stand, height adjustable from 890 to 1,100 mm.
- 24V power supply with 2.0 m power cord with Euro plug.
- Removable protective grille for easy cleaning.



Blade Ø	325
Power motor (W)	25
Voltage (V/Hz)	100-240/50/60
No. of speeds	12
Rev. max. (RPM)	1,000
Oscillation (°)	30/60/90
Weight (kg)	5.6

AIROS Eco SV35

Product	Code No.	Housing/Grille Finish	Blade Finish
Airos Eco SV35 WE	64510	Fine matt white	Fine matt white



* Sound pressure LP -3 m

GORDON W

GORDON W 40 LG
#60641

GORDON WALL series:
vertical grade adjustable



Actual Italian design (F. Trabucco/ M. Vecchi) selected for **ADI DESIGN INDEX 2004**

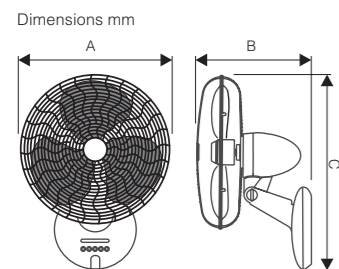
- Housing, protective grille and blade made of shockproof thermo-plastic resin, colour light grey.
- Awarded Italian design.
- 3 speeds, 6 hours timer, oscillation and breeze mode can be controlled by remote control or with buttons at the fan base.
- LED display shows selected functions.
- Electronic 90°-oscillation.
- 3-blade wheel, optimized for best air delivery with lowest noise.
- Vertical grade adjustable.
- Stable wall- and ceiling holder, including fastening fixtures.
- Without cable for fixed connection.
- Protection class IP20, insulated.
- Removable protective grille for easy cleaning.

GORDON W 30 LG #60643



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



Blade Ø	300/400
Power motor (W)	35/40
Voltage (V/Hz)	220-240/50
Dim. A (mm)	365/460
Dim. B (mm)	335/355
Dim. C (mm)	550/600
No. of speeds	3
Rev. max. (RPM)	1,300/1,145
Oscillation (°)	90
Weight (kg)	2.7/3.0

GORDON W

Product	Code No.	Housing Finish	Grille Ø (mm)
W 30 LG	60643	Light grey	365 mm
W 40 LG	60641	Light grey	460 mm

GREYHOUND WV-II

WV 45-II FB AZ
#304525



All functions can be controlled by the hand held remote control.



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

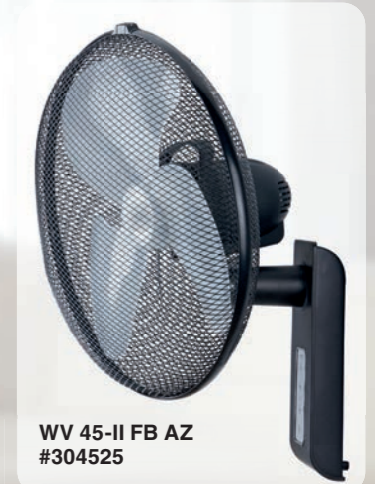
Blade Ø	400
Power motor (W)	50
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,145
Oscillation (°)	85
Weight (kg)	3.8

GREYHOUND WV

Product	Code No.	Housing Finish	Blade Finish	Grille Ø
WV 45-II FB AZ	304525	Anthracite matt	semi-transparent	440 mm
WV 45-II FB LG	304524	Light grey matt	semi-transparent	440 mm

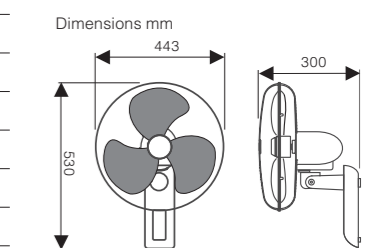


WV 45-II FB LG
#304524



WV 45-II FB AZ
#304525

- Housing made of shockproof thermo-plastic resin, protective grille steel wire.
- 3 speeds can be chosen by switch at the fanbase or by remote control.
- 85°-oscillation movement, switchable.
- LEDs showing selected functions.
- 3-blade wheel for powerful air delivery.
- Vertical grade adjustable.
- Stable fan base with rubber feet and wall fixture.
- 2.5 meters power cord with Euro plug.
- Removable protective grille for easy cleaning.



DESK2PROTECT SL

CasaFan ⚡
SafeLine

SPEED-G



The ON/OFF switch and pressure switch for speed are covered by a protective rubber.



Easy installation at traverses and superstructures.

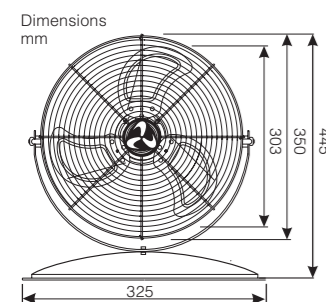
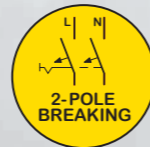
- High-performance desk/superstructure fan in industrial design.
- Perfect for personal use in production areas, warehouses and workshops.
- Easy installation at superstructures and frames.
- 3 speeds selectable by enclosed pressure switch.
- Vertical grade of 130° adjustable.
- Stable, tilt-free steel base.
- Protective grille, housing, frame and base with double corrosion protection coating, white.
- Useful transport handle and cable coil at the back side of protective grille.
- Rubber sheathed cable H07RN-F G 3 1.0 mm², length 2.5 m with protective contact plug.
- Powerful Aluminum impeller.
- Protection class IP44 splash proof.



DESK2PROTECT SL
#303512

COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



Grille Ø (mm)	400
Blade Ø (mm)	300
Power motor (W)	43
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. max. (RPM)	1,360
Weight (kg)	5.1

DESK2PROTECT SL

Product	Code No.	Housing/Grille Finish	Blade Finish
DESK2PROTECT SL	303512	Double corrosion protection coating, white	Aluminum

Often in hot weather and in rough, wet and dirty environmental conditions in production, workshop and workplace, simple fans from the hardware store are used to cool people and machines. These fans were developed for use in private households and provide insufficient protection against splashing water. The new DESK2PROTECT helps out in this situation!



SPEED 40-G CH
#304008



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



SPEED 40-G CH and SPEED 50-G CH:
The accessories for wall mounting are included in the scope of delivery.

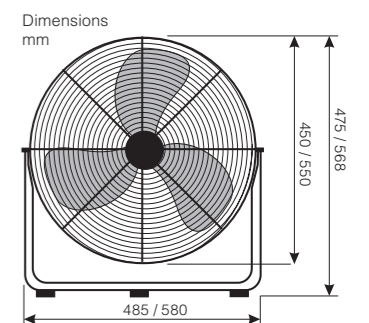
- Protective grille with chrome finish.
- 3-speed rotary switch at the back of the grille.
- Vertical grade adjustable.
- For wall mounting or usable with chain suspension (hooks included).
- Stable, tilt-free, chromed tubular frame with rubber feet.
- Useful transport handle and cable coil.
- Powerful Aluminum blade, matt black.
- Rubber sheathed cable H05RN-F G 3 1.0 mm², length 2.5 m with protective contact plug.
- Optional 5 speed transformer (ETWZ 1,0 #891020) for regulation between a whisper quiet breeze and high performance.

SPEED-G

Product	Code No.	Grille Finish	Blade Finish	Grille-Ø
40-G CH	304008	Chrome	Matt black	440 mm
50-G CH	305008	Chrome	Matt black	550 mm



Model SPEED G	40	50
Blade Ø (mm)	400	500
Power motor (W)	110	120
Voltage (V/Hz)	220-240/50	
No. of speeds	3	
Rev. max. (RPM)	1,305	1,310
Weight (kg)	4.6	5.5



WM2 WALL ECO

WM2 STAND ECO

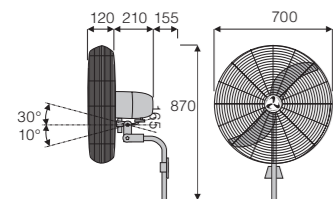
Optional 5- speed transformer **ETWZ 1,0 #891020** for regulation in between a whisper quiet breeze and high performance available.



Wind machine
WM2 WALL ECO
#207512

- Wall rod and grille guard chrome, housing, blade and wall mount silver grey finished.
- Heavy all-metal product.
- 3 speeds selectable by rotary control switch at the motor.
- Mechanical 80°-oscillation, disengageable.
- 2-blade, sickle shaped wheel, designed for best air delivery.
- Vertical adjustable grille pitch.
- Wall mount height adjustable.
- Rubber sheathed cable H05RN-F G 3 1.0 mm², length 2.5 m with protective contact plug.

Dimensions mm



Blade Ø	650
Power motor (W)	123
Voltage (V/Hz)	220-240/50
Height max. (mm)	810
No. of speeds	3
Rev. max. (RPM)	1,190
Oscillation (°)	80
Weight (kg)	13.3

WM2 WALL ECO

Product	Code No.	Housing/Blade Finish	Grille Finish
WM2 Wall ECO	207512	Silver grey/Chrome	Chrome



COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



COMMERCIAL USE

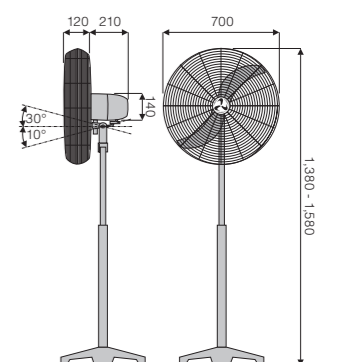
Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

WM2 STAND ECO

Product	Code No.	Housing/Blade Finish	Grille Finish
WM2 ECO	207503	Silver grey/Chrome	Chrome

Blade Ø	650
Power motor (W)	123
Voltage (V/Hz)	220-240/50
Height max. (mm)	1.580
No. of speeds	3
Rev. max. (RPM)	1,190
Oscillation (°)	80
Weight (kg)	16.4

Dimensions mm



- Stand rod and grille guard chrome, housing, blade and base silver grey finished.
- Heavy all-metal product.
- 3 speeds selectable by rotary control switch at the motor.
- Mechanical 80°-oscillation, disengageable.
- 2-blade, sickle shaped wheel, designed for best air delivery.
- Vertical adjustable grille pitch.
- Stable, tilt-free pedestal, adjustable up to 1,580 mm with die cast base.
- Rubber sheathed cable H05RN-F G 3 1.0 mm², length 2.5 m with protective contact plug.
- Optional 5 speed transformer (**ETWZ 1,0 #891020**) for regulation between a whisper quiet breeze and high performance available.

FLOOR2PROTECT SL

CasaFan ⚡
SafeLine

CasaFan ⚡
SafeLine

SPEED2PROTECT SL



The ON/OFF switch and pressure switch for speed are covered by a protective rubber.



The ON/OFF switch and pressure switch for speed are covered by a protective rubber.



Wall fixture included.

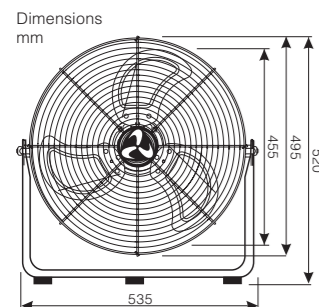
FLOOR2PROTECT SL
#304515



- High-performance floor fan in industrial design.
- Ideal for use in production, warehousing and shipping.
- 3 speeds by enclosed pressure switch.
- Vertical grade of 130° adjustable.
- Protective grille, housing, frame and base with double corrosion protection coating, colour white.
- Comfortable handle on the rear side of the protective grille.
- Rubber sheathed cable H07RN-F G 3 1.0 mm², length 2.5 m with protective contact plug IP54.
- Powerful Aluminum impeller.
- Protection class IP54 dust and splash-proof.

COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



Grille Ø (mm)	495
Blade Ø (mm)	455
Power motor (W)	120
Voltage (V/Hz)	220-240/50
No. of speeds	3
Rev. (RPM)	1,250
Weight (kg)	7.1

FLOOR2PROTECT SL

Product	Code No.	Housing/Grille Finish	Blade Finish
FLOOR2PROTECT SL	304515	Double corrosion protection coating, white	Aluminum

Often in hot weather and in rough, wet and dirty environmental conditions in production, workshop and workplace, simple fans from the hardware store are used to cool people and machines. These fans were developed for use in private households and provide insufficient protection against splashing water. The new FLOOR2PROTECT helps out in this situation!



SPEED2PROTECT SL
#304514

COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



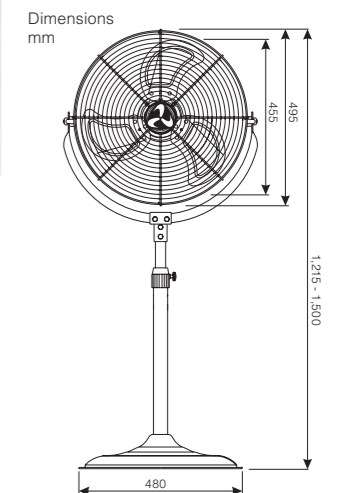
- High-performance pedestal fan in industrial design.
- Ideal for use in production, warehousing and shipping.
- Wall holder for fixed installation included.
- 3 speeds by enclosed pressure switch.
- Vertical grade of 130° adjustable.
- Protective grille, housing, frame and base with double corrosion protection coating, colour white.
- Stable, tilt-free steel base, height adjustable.
- Rubber sheathed cable H07RN-F G 3 1.0 mm², length 2.5 m with protective contact plug IP54.
- Powerful Aluminum impeller.
- Protection class IP54 dust and splash-proof.

SPEED2PROTECT SL

Product	Code No.	Housing/Grille Finish	Blade Finish
SPEED2PROTECT SL	304514	Double corrosion protection coating, white	Aluminum

Often in hot weather and in rough, wet and dirty environmental conditions in production, workshop and workplace, simple fans from the hardware store are used to cool people and machines. These fans were developed for use in private households and provide insufficient protection against splashing water. The new SPEED2PROTECT helps out in this situation!

Grille Ø (mm)	495
Blade Ø (mm)	455
Power motor (W)	120
Voltage (V/Hz)	220-240/50
No. of speeds	2
Rev. (RPM)	1,250
Weight (kg)	14.8



WM3 ECO WALL IP44 SL

CasaFan ⚡
SafeLine

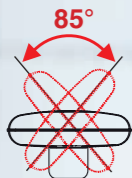
CasaFan ⚡
SafeLine

WM3 ECO STAND IP44 SL

Optional 5 speed transformer (ETWZ 1,0 891020) for regulation between a whisper quiet breeze and high performance.

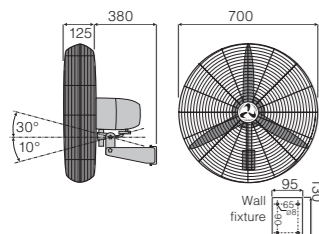


Operation with easily accessible pull switch.



- Housing, protective grille, blade and wall fixture anti-corrosion primed and matt black lacquered.
- Heavy all-metal version.
- 3 speed levels selectable via encapsulated pressure switch on the motor.
- Mechanical, 85°-oscillation, disengageable.
- 3-blade impeller for optimum air flow rate.
- Fan head inclination vertically adjustable.
- Swivelling wall mount.
- Rubber sheathed cable H07RN-F G 3 1.0 mm², length 2.5 m with protective contact plug IP44.

Dimensions mm



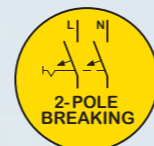
Blade Ø	650
Power motor (W)	123
Voltage (V/Hz)	220-240/50
Height max. (mm)	700
No. of speeds	3
Rev. max. (RPM)	1,190
Oscillation (°)	85
Weight (kg)	13.3

WM3 Eco WALL IP44 SL

Product	Code No.	Housing/Blade Finish	Grille Finish
WM3 ECO Wall IP44 SL	307502	Matt black finished	Matt black

COMMERCIAL USE

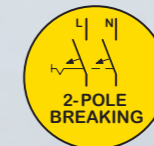
Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use



Windmaschine
WM3 ECO WALL
IP44 SL #307502

COMMERCIAL USE

Certified according to Machinery Directive 2006/42/EC Part 1 for commercial use

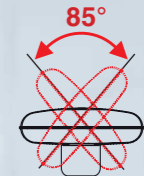


WM3 ECO STAND IP44 SL

Product	Code No.	Housing/Blade Finish	Grille/Stand Finish
WM3 ECO Stand IP44 SL	307511	Matt black	Matt black

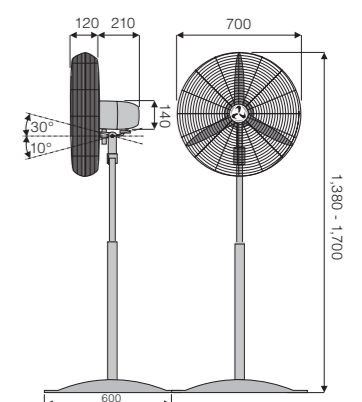
Blade Ø	650
Power motor (W)	123
Voltage (V/Hz)	220-240/50
Height max. (mm)	1,700
No. of speeds	3
Rev. max. (RPM)	1,190
Oscillation (°)	85
Weight (kg)	16.4

Wind machine
WM3 ECO STAND
IP44 SL #307511



- Housing, protective grille, blade and stand anti-corrosion primed and matt black lacquered, chrome-plated rod.
- Heavy all-metal version.
- 3 speed levels selectable via encapsulated pressure switch on the motor.
- Mechanical, 85°-oscillation, disengageable.
- 3-blade impeller for optimum air flow rate.
- Fan head inclination vertically adjustable.
- Height adjustable up to 1.7 m.
- Rubber sheathed cable H05RN-F G 3 1.0 mm², length 2.5 m with protective contact plug IP 44.
- Black lacquered base for a stable stand.
- Speed can be reduced to approx. 300 rpm by means of optional 5 speed transformer (ETWZ 1,0 #891020).

Dimensions mm



DF600/800 Eco IP54 SL

CasaFan ⚡
SafeLine

DF800 ECO IP54 SL
#308095



Optional 5- speed transformer
ETWZ 1,0 #891020 for regulation
in between a whisper quiet
breeze and high performance
available.



DF600 ECO IP54 SL
#306090

IP54
dust-proof
splash-proof

COMMERCIAL USE

Certified according to Machinery
Directive 2006/42/EC Part 1
for commercial use



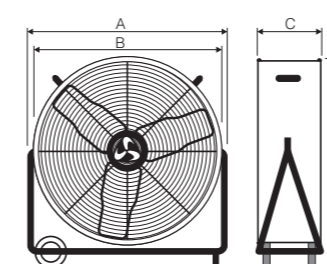
Wall mounting accessory
WHDF # 96080 please order separately



- Drum fan series with high air volume.
- Ideal for use in production, warehouse and logistic areas.
- 3 speeds selectable by push button switch.
- Two-pole on/off switch.
- Vertical grade in 360° range adjustable.
- Housing, blades, protective grille and tubular steel frame matt black finish.
- Wall mounting possible using accessory **WHDF #96080**.

- Stable, tilt-free tubular steel frame with transport wheels and rubber feet.
- Useful transport handles at the housing and cable coil at the back side of protective grille.
- High-performance Aluminum blade.
- Protection class IP54 dust and splash-proof.
- Rubber sheathed cable H07RN-F G 3 1.0 mm², length 2.5 m with protective contact plug IP54.

Dimensions mm



Model DF ECO	800	600
Grille Ø (mm)	800	650
Blade Ø (mm)	750	600
Dim. A/B	880/830	750/680
Dim. C/D	260/920	270/770
Power motor (W)	123	123
Voltage (V/Hz)	220-240/50	
No. of speeds	3	
Rev. (RPM)	870	870
Weight (kg)	19.3	16.3

DF600/800 Eco IP54 SL

Product	Code No.	Housing/Grille Finish	Blade Finish
DF800 ECO IP54 SL	308095	Matt black	Black
DF600 ECO IP54 SL	306090	Matt black	Black

Easily reduce heating costs by up to 30%



Temperature-Difference-Attenuation-System

Thermal stratification

It takes a tremendous amount of energy to heat large, high rooms.

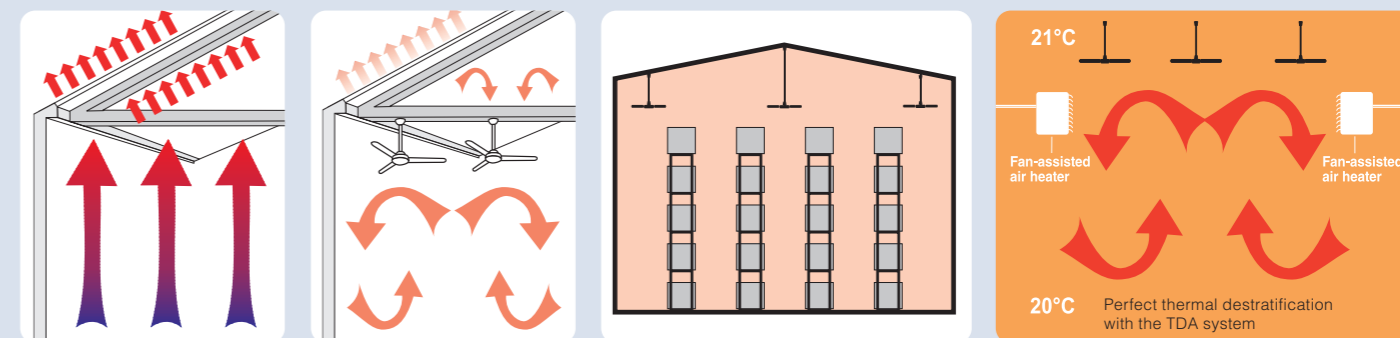
According to the laws of physics, hot air rises and forms a warm layer beneath the ceiling. Anyone who has ever stood on a ladder to work at ceiling level will know this effect. The higher a room is, the more heat gathers at the top.

Warm air has a lower specific gravity than cold air. As a result, cold air collects at floor level and warm air near the ceiling.

Any incoming cold air immediately "falls" to the floor and accumulates there. It is almost always the temperature around floor level that is relevant to the use of a room, because this is where people work and spend their time.

There are two ways of achieving an acceptable temperature at ground level; either wasting costly energy on extra heating, or inexpensively mixing the air inside the room so that the average temperature remains constant throughout.

The diagram below illustrates how thermal stratification (also known as horizontal layering) occurs and what effect it has. A tremendous amount of valuable and expensive heat "sits" unused below the ceiling, while the temperature in the occupied part of the room is too low. According to one rule of thumb, it takes around a 6 % increase in heating costs to raise the temperature by 1 °C in this situation.



Less heat loss

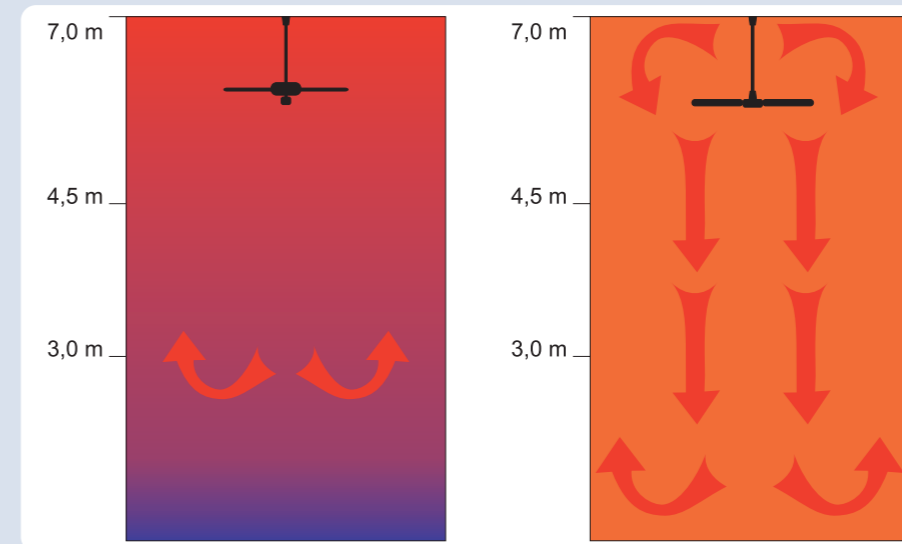
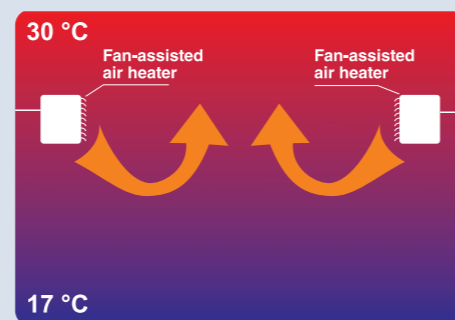
Roofs that remain free of snow in the winter are a sign of unnecessarily high heating costs. There are often thermal bridges in the roof due to poor or non-existent insulation, allowing most of the heat accumulated under the roof to escape. The TDA system recirculates this warm air back to where it is needed: the occupied part of the room where people work. This significantly lowers the temperature at roof level. And with the area below the roof considerably cooler, less heat can escape.

The right fans

Not every ceiling fan is suitable for use in high rooms. Traditional, decorative ceiling fans usually lack the necessary range. The air current "breaks off" far above the ground and flows back up to the ceiling. Although the thermal layers in the top half of the room are mixed, it fails to reach the occupied part of the room at floor level, which is where the heat is needed. The same thing happens with reverse operation, which is useful in low rooms but no longer effective for heat recirculation in rooms more than 2.6 m high. The specially shaped metal blades on TDA fans overcome natural buoyancy even in rooms with high ceilings, allowing the warm air to reach far down the room. With fine-tuning on the TDA-Control, the air speed can be adjusted to suit almost any room conditions and hall construction characteristic.

Universal application

The TDA system can be configured for many different purposes and situations. There are four sizes that can be combined as required, customisable drop rods in various lengths, and optional IPX5 fans with protection against water jets. Intermediate transformers can reduce air speed in different sections of the room, making it possible for the system to be used in almost any building environment.



Cooling in the summer

A manual setting on the TDA-Control allows the system to be operated by hand as a speed controller outside the heating season (summer mode), introducing a refreshing air flow into otherwise stuffy, overheated rooms.

This improves concentration and physical comfort, which also increases productivity.

A simple switch allows the control system to be changed back to winter mode.

The potential energy savings

To determine the potential energy savings, the average temperature difference between the ceiling and floor must first be calculated using the following (extremely simplified) formula for industrial buildings higher than 5 m:

The following variables must be inserted:

t_b = temperature at floor level

h = room height in metres

$$\Delta T = t_b \times (1 + 0,1 h) - t_b$$

The ceiling temperature can be calculated as follows:

$$t_{\text{ceiling}} = t_b \times (1 + 0,1 h)$$

The formula is based on ideal conditions and varies according to the level of wall and ceiling insulation, the size and position of windows, exposure to sunlight, and the size of doors and gates as well as how often and how long they are open. It is valid for ceiling heights up to approx. 9 m.

Example: A TDA hot air recirculation system is to be installed in a showroom with forced air heating, a ceiling height of 6 m and an average floor temperature of 17.5 °C. Using the formula above gives the following calculation: ceiling temperature = $17.5 \times (1 + (0.1 \times 6))$. This equates to a ceiling temperature of around 28 °C, which means a temperature difference of 10.5 °C. By recirculating this heat reserve, a temperature increase of around 4 °C can be expected in the occupied part of the room!

The intelligent control system

The new intelligent control units in the TDA-Control series are equipped with two semiconductor temperature sensors. One of these is installed at ceiling level and one at floor level. Ordinary twisted pair cables up to 50 metres long are used for the wiring.

The unit measures the temperatures at ceiling and floor level up to 60 times per minute, calculates the temperature difference, and uses the extent of this difference to control the speed of the fans completely automatically. Once the thermal stratification is reduced and the temperature difference drops below a configurable threshold, the TDA-Control 6 automatically switches off the units.

It is possible to select the minimum temperature differences at which the fans should switch on (threshold), the minimum and maximum fan speed to prevent drafts, and continuous operation (e.g. for convection cooling in summer). These fully automatic controls perfectly regulate the system without the need for user intervention, which prevents unauthorised manipulating the control unit.

TDA-Control 6 D #983019



TDA-SYSTEM

Number of fans

First, the selection diagram is used to determine the number of units per 1,000 m² and the size of the TDA units based on the room height. Starting on the vertical axis, find the relevant room height and move right until it intersects with the characteristic. From there, move vertically down to find the number of units required. In the colour transitions between two sizes, planners can choose between either size.

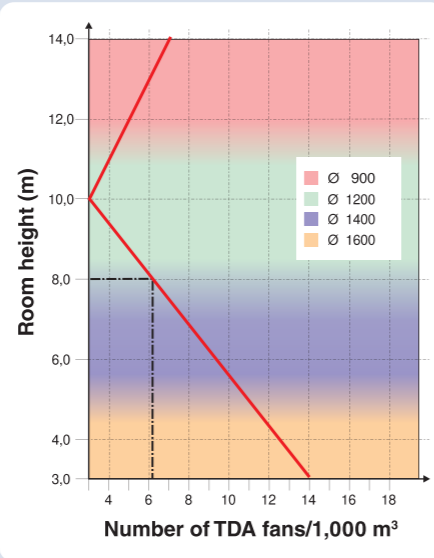
Fan spacing

For planning, it is necessary to find dimension D, the average distance between TDA units.

This is calculated using the following formula:

$$A (m) = \sqrt{\frac{\text{Area in } m^2}{\text{Number of units required per } 1,000 m^2}}$$

The distance between the fans and a cold outside wall is 1/2 A to compensate for the cooling off hot air in this area and the resulting reduction in buoyancy.



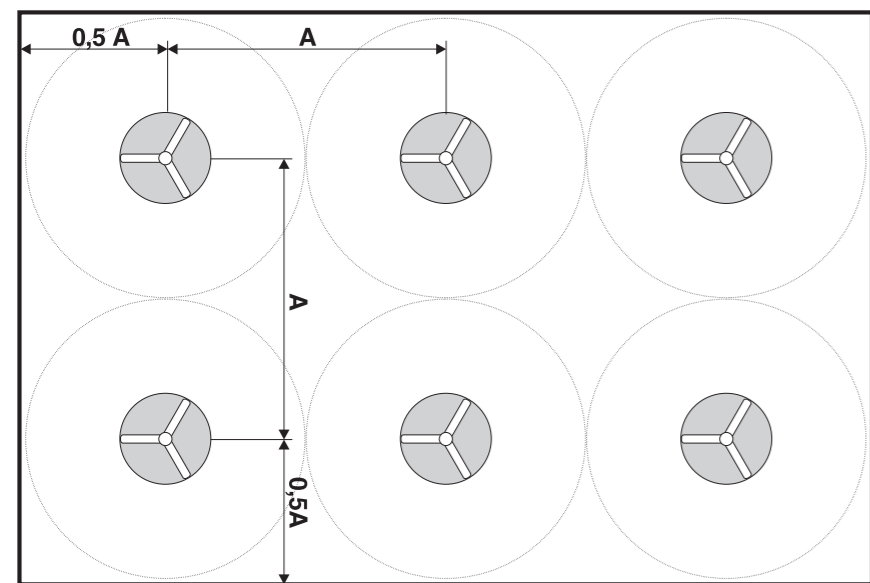
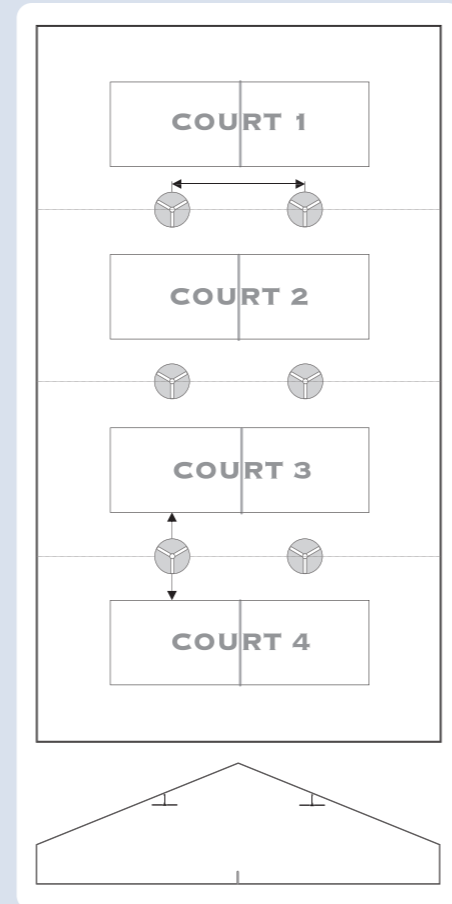
Selection diagram for number of units/1,000 m²: Depending on the room height (vertical axis), move horizontally right until the point of intersection with the red characteristic, then vertically down. The horizontal axis shows the number of TDA fans required per 1,000m².

The fan size is indicated by the background colour at the point of intersection with the red line.

Indoor tennis courts

Particular layout rules apply here. In halls used for tennis and badminton, fans should ideally be installed between the courts to avoid visually distracting the players. Two units should be installed 5 to 8 m away from each side of the net. The average air speed at approx. 1 m high should be set to between 0.15 and 0.40 m/s, depending on the players' sensitivity (maximum speed limited on TDA-Control).

Two TDA 1200 I units should be included for a hall with two courts, four units for a three-court hall, six for a four-court hall, etc.



Example

A storage hall with a length of 41 m and a width of 24 m is to be fitted with a TDA system. The hall is 8 m high.

The table is used to determine that approx. six units per 1,000 m² are needed (dotted line). The selection point lies between the blue and the green ranges; in this case the planner can choose between the TDA 1200 I and TDA 1400 I models.

The actual size of the hall is 984 m²; i.e.:

$$\frac{984}{1.000} \times 6 \approx 6 \text{ fans}$$

In our example, the average distance A is calculated as follows:

$$\sqrt{\frac{984}{6}} = 12,8 \text{ m}$$

This means that, in our example, six TDA 1400 I or TDA 1200 I units are needed for optimum warm air recirculation and to ensure sufficient ventilation.

The average distance A is 12.8 m.

This means that three fans are needed along the length of the hall (41 m) and two across its width (24 m).

The distance to each external (cold) wall is 1/2 A = 6.4 m.

TDA-Highstream

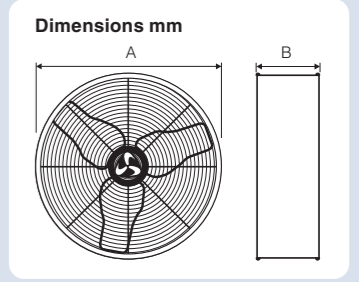
The TDA-Highstream 600 and 800 models were especially developed for areas that require protection against contact. These units feature lower energy consumption with top air flow and maximum range.

Suspended on chains (supplied), they can reach floor level even at great heights with a high ΔT. The maximum speed limit on the TDA-Control unit prevents drafts.

And neither damp nor dirt are a problem: models in the TDA-Highstream range are resistant to both, with protection class IP44.



TDA Highstream 800

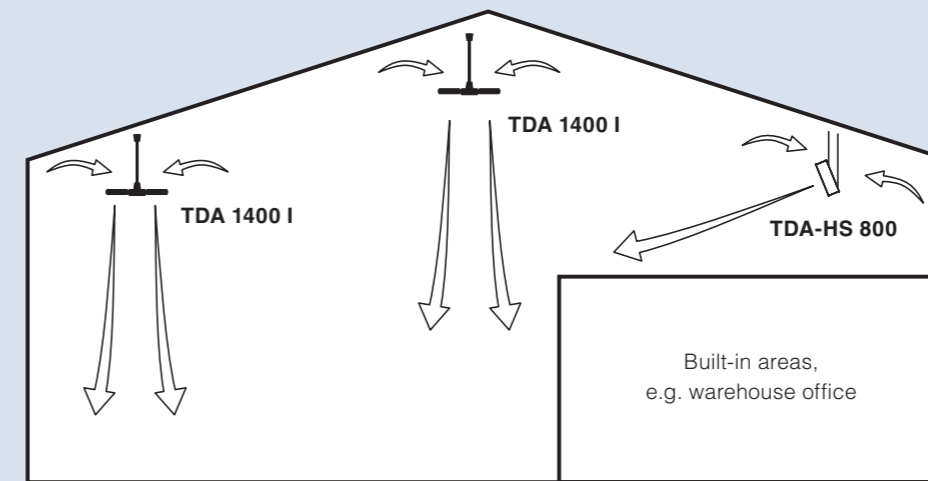


Product	Code No.	Power (W)	Air delivery* (m³/h)	Dim. A (mm)	Dim. B (mm)	Weight (kg)	Vertical Range (m)
TDA-HS 600	9306080	123	13.000	680	270	10,9	11
TDA-HS 800	9307580	123	15.650	830	270	13,8	16

* measured according to IEC 60879-1986-10

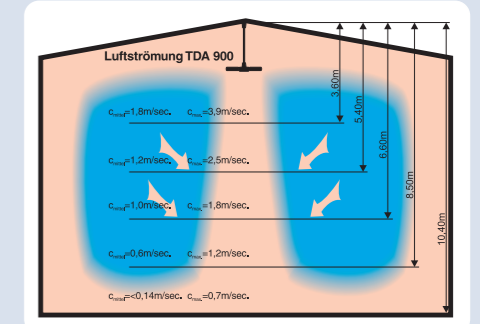
Unlike TDA fans, units in the TDA-Highstream series also allow for installation with targeted, e.g. diagonal airflow. In this case, mounting on chains is done at an angle and the air is guided diagonally or horizontally. This allows heat layers to be used that normal TDA fans cannot recirculate to the occupied areas of the room. To prevent drafts, an intermediate transformer

type ETW 1.0 #892032 should be planned between the TDA-Control and TDA-Highstream. The appropriate operating level is chosen by the fitter. Since drum fans are always louder than ceiling fans due to their higher speeds, the intermediate transformer also serves to adjust the volume of the overall TDA system.



Air flow shown for TDA 900

C_{average} = average air speed
C_{max.} = maximum air speed



Regardless of the heating method, the TDA system is fully compatible with existing thermostat-controlled heating systems and a useful addition to these without the need for extra wiring or complicated modifications.

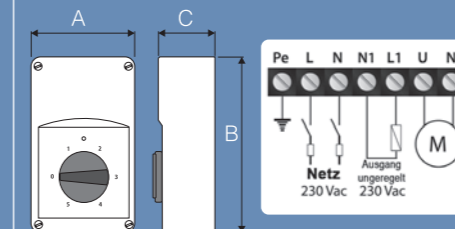
The heating system thermostat "feels" the temperature rise in the occupied part of the room and automatically reduces the heat output. This ensures that the desired savings are achieved instantly. The TDA system also ensures that adequate ventilation is provided.

Reversing?

Unlike with lower ceilings, reversing, i.e. running in reverse for heat recirculation, makes little sense in high halls. From a room height of approx. 5 m, the warm air in reverse operation no longer reaches the floor due to its lower specific weight.

Depending on the hall height, select the appropriate fan series TDA-I (without reversing) or the series TDA-E (with reversing).

5-speed transformers for hum free control of several ceiling fans. Industrial housing, colour light grey RAL 7035, protection class IP54, (0-80-110-140-170/190-230 V), control lamp, max. ambient temperature 35° C.



ETW: 5-speed transformers for hum free control of one or several ceiling fans.



Product	Code No.	Amp. (max.)	A	B	C
ETW 1.0	892032	1.0	84	160	88
ETW 1.5	892021	1.5	115	205	100
ETW 2.2	892022	2.2	115	205	100
ETW 3.5	892033	3.5	170	255	140
ETW 5.0	892018	5.0	170	255	140
ETW 7.5	892019	7.5	100	305	140
ETW 10.0	892038	10.0	300	325	185

TDA-SYSTEM

TDA control units

TDA-Control 6:

Basic unit with analogue setting, reverse phase control.

TDA-Control 6 D:

Digital programmable version of TDA-Control 6, with display screen.

TDA-Control x T:

Version of TDA-Control 6 with a 7-step transformer. For noise-sensitive areas.

TDA-Control	Code No.	A (mm)	Anz. Vent. (max.)
6	983009	6,0	15
1,5 T	983909	1,5	4
2,5 T	983910	2,5	7
5,0 T	983911	5,0	13
6 D	983019	6,0	15



Dimensions mm

Product	A	B	C
TDA-Control 6/6D	165	159	93
TDA-Control x,x T	255	210	135

Functions: The unit determines the temperature difference (ΔT) between floor level and ceiling level using two separate semiconductor sensors (connected via ordinary twisted-pair cables).

Using the configured ΔT set point (1-10 °K) the fans are regulated smoothly/at seven levels between the preset minimum and maximum speed. If the configured ΔT is exceeded by 3 °K, the unit switches on the fans. The higher the ΔT , the higher the fan speed. When the ΔT is smaller than the configured set point, the fans will switch off. Thermal stratification is prevented, and the fans are only operated when are really needed.

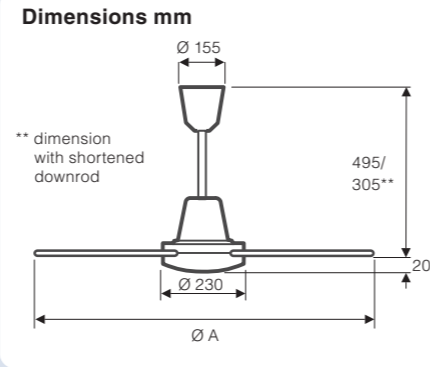
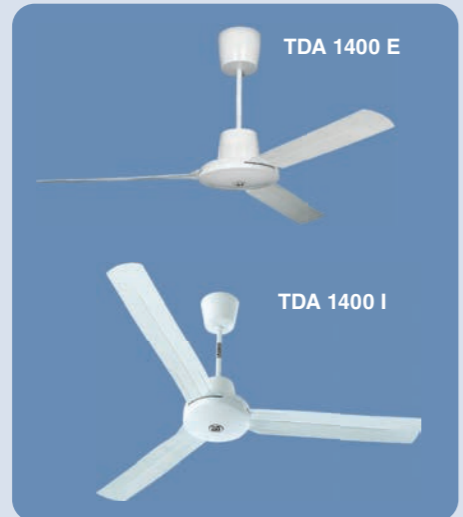
Universal application

Ceiling sensor installation: at the highest point of the hall, in the air current.

Floor sensor installation: sideways, approx. 10 cm above the floor, in the air current. Do not install behind curtains or shelves. Do not mount on metal beams (thermal bridge).

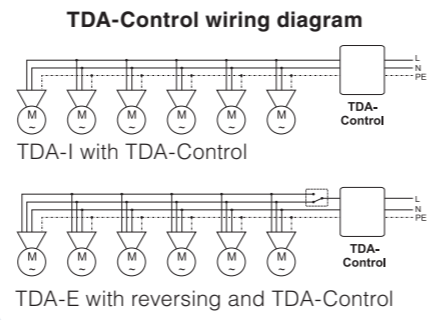
Sensor cables: up to 50 m long $2 \times 1.5 \text{ mm}^2$, up to 150 m long $2 \times 2.5 \text{ mm}^2$.

Do not use any free wires from voltage-carrying cables – always run separately.



Product	Code No.	W	A (mm)	B (mm)
TDA 900 I	961701	70	0,33	920
TDA 1200 I	961711	70	0,33	1220
TDA 1400 I	961721	72	0,33	1420
TDA 1600 I	961731	74	0,33	1520
TDAX 1400 I	617429	72	0,33	1420

Product	Code No.	W	A (mm)	B (mm)
TDA 900 E	961750	70	0,33	920
TDA 1200 E	961751	72	0,33	1220
TDA 1400 E	961752	74	0,33	1420
TDA 1600 E	961753	78	0,33	1620



Berechnung der Heizlast einer Beispielhalle (Produktionshalle 50m x 100m) für zwei verschiedene Heizsysteme:

1. Luftheizung mit Temperaturschichtung
2. Heizung mit Deckenventilator und PWW-Lufterhitzer ohne Temperaturschichtung

Forschungsgesellschaft Heizung Lüftung Klima (HLK) Stuttgart mbH
 Pfaffenwaldring 6 a
 D - 70569 Stuttgart-Waldingen
 Tel. 0711 / 685-11 20 85
 Telefax 0711 / 687 60 56

Auftraggeber:
 Fa. EVT/Casafan-Ventilatoren
 Gelnhäuserstraße 35
 63505 Langenselbold
 www.casafan.de

Auftragnehmer:
 Forschungsgesellschaft Heizung-Lüftung-Klimatechnik Stuttgart mbH
 Pfaffenwaldring 6a
 70569 Stuttgart
 http://www.ihf.ike.uni-stuttgart.de

Stuttgart, den 6.9.1999

Vorbemerkung:
 Die nachfolgenden, beispielhaften Berechnungen basieren auf den heutigen Standards bei Wärmedämmung und Belüftung und sind daher eher konservativ. Bei älteren Gebäuden, bei denen diese Standards noch nicht eingehalten wurden, können die Einsparungen bei der Heizlast beim Einsatz des vorgestellten TDA-Systems gegenüber konventioneller Heizung mit Temperaturschichtungen in vertikaler Richtung durchaus höher ausfallen.

Ausgangssituation:
 Eine Produktionshalle soll beheizt werden. Hierfür sollen zwei Alternativen gegenüber gestellt werden:
 1. konventionelle Beheizung der Halle mit Warmluft (Temperaturschichtung in vertikaler Richtung).
 2. Beheizung der Halle mittels PWW-Lufterhitzer und Ventilator (keine oder nur geringe Temperaturschichtung in der Halle).

Verglichen werden dabei jeweils die Heizlasten (nur Transmission, keine Lüftung) zum Erreichen einer bestimmten Bedarfsanforderung. Die Betriebskosten beider Systeme werden nicht berücksichtigt. Hierzu liegen keine entsprechenden Daten vor.

Die ausgewählte Halle besitzt ein Flachdach mit Lichtkuppeln (10% der Deckenfläche). Die Innenabmessungen betragen 50m x 100m und die Höhe ist 12m. Die langen Seitenwände besitzen ein Fensterband (10% der Seitenfläche). An einer kurzen Seitenwand grenzt ein Bürogebäude an. Das Dach und die Wände haben einen Wärmedurchgangskoeffizienten von $k_D = k_W = 0,35 \text{ W/m}^2 \cdot \text{K}$ und die Oberlichter $k_{DL} = 3,0 \text{ W/m}^2 \cdot \text{K}$, und die Fenster in den Seitenwänden $k_F = 1,4 \text{ W/m}^2 \cdot \text{K}$. Der äquivalente Wärmedurchgangswiderstand des Hallenbodens zum Grundwasser ist $R_{GW} = 5 \text{ m}^2 \cdot \text{K/W}$. Der Aufenthaltsbereich (Behaglichkeitszone) soll eine Höhe von 5m und eine Raumtemperatur von $\theta_i = 18^\circ\text{C}$ haben. Für die Berechnung der Normheizlast ist eine Außentemperatur von $\theta_e = -12^\circ\text{C}$ vorgegeben. Ein Ausgleich der Behaglichkeitsdefizite durch die kalten Außenwände wird durch das Anheben der Raumlufttemperatur auf $\theta_{i,0} = 21^\circ\text{C}$ erreicht. Dadurch erhöhen sich für beide Lösungen die Heizlasten gegenüber einer idealen Beheizung der Halle.

Berechnung der Normheizlast für ideales Heizsystem ($\theta_i = 18^\circ\text{C}$, ideale Durchmischung)

Die Heizlast der Produktionshalle ergibt sich zu

$$\text{Wände: } \dot{Q}_{T,Wände} = \left[50\text{m} \cdot 12\text{m} \cdot 0,35 \frac{\text{W}}{\text{m}^2 \cdot \text{K}} + 200\text{m}(10,8\text{m} \cdot 0,35 + 1,2\text{m} \cdot 1,4) \right] \cdot 30\text{K} = 39,1 \text{ kW}$$

$$\text{Boden: } \dot{Q}_{T,Boden} = A_{Halle} \cdot \frac{\theta_i - \theta_{GW}}{R_{GW}} = 5000\text{m}^2 \cdot \frac{8\text{K}}{5 \text{ m}^2 \cdot \text{K/W}} = 8 \text{ kW}$$

$$\text{Decke: } \text{Der mittlere Transmissionswärmestrom durch die Decke } \bar{q}_{T,D} \text{ und die Untertemperatur der Decke } \Delta\theta_D \text{ folgt aus den angegebenen Durchgangskoeffizienten sowie dem genormten Wärmeübergangswiderstand } R_{a,d} = 0,13 \text{ m}^2 \cdot \text{K/W} \text{.}$$

$$\bar{k}_D = 0,9 \cdot k_D + 0,1 \cdot k_{DL} = 0,615 \text{ W/m}^2 \cdot \text{K} \quad \bar{q}_{T,D} = \bar{k}_D (\theta_i - \theta_e) = 18,45 \text{ W/m}^2 \quad \Delta\theta_D = \bar{q}_{T,D} \cdot R_{a,d} = 2,4 \text{ K}$$

Die Heizlast der Produktionshalle ergibt sich zu

$$\dot{Q}_{T,Wände} = 39,1 \text{ kW}$$

$$\dot{Q}_{T,Boden} = 8 \text{ kW}$$

$$\dot{Q}_{T,Decke} = 101,5 \text{ kW}$$
 Oder zusammengefaßt $\dot{Q}_T = 155,5 \text{ kW}$.

Bei der Beheizung der Produktionshalle mit Luft durch Deckenventilator und PWW-Lufterhitzer wird die Lufttemperatur $\theta_{L,0}$ durch die thermische Behaglichkeit wiederum erfüllt sind (DIN 1946, operative Raumtemperatur). Durch die Decke ergibt sich zu $\dot{Q}_{T,Decke} = A_{Halle} \cdot \bar{q}_{T,D} = 5000\text{m}^2 \cdot 18,45 \text{ W/m}^2 = 92,3 \text{ kW}$. Die Basisheizlast (nur Transmission) für eine angenehme Innentemperatur (Lufttemperatur) bei idealer Durchmischung ergibt sich zu $\dot{Q}_T = 139,4 \text{ kW}$.

Heizlast für eine ideale Luftheizung (keine Temperaturschichtung in vertikaler Richtung)
 Durch die Decke ergibt sich zu $\dot{Q}_{T,Decke} = 101,5 \text{ kW}$. Die Basisheizlast (nur Transmission) für eine angenehme Innentemperatur (Lufttemperatur) bei idealer Durchmischung ergibt sich zu $\dot{Q}_T = 139,4 \text{ kW}$.

Die Heizlast der Produktionshalle ergibt sich zu $\dot{Q}_T = 139,4 \text{ kW}$. Die Basisheizlast (nur Transmission) für eine angenehme Innentemperatur (Lufttemperatur) bei idealer Durchmischung ergibt sich zu $\dot{Q}_T = 139,4 \text{ kW}$.

Bei der Beheizung der Produktionshalle mit Luft durch Deckenventilator und PWW-Lufterhitzer wird die Lufttemperatur $\theta_{L,0}$ durch die thermische Behaglichkeit wiederum erfüllt sind (DIN 1946, operative Raumtemperatur). Durch die Decke ergibt sich zu $\dot{Q}_{T,Decke} = 101,5 \text{ kW}$. Die Basisheizlast (nur Transmission) für eine angenehme Innentemperatur (Lufttemperatur) bei idealer Durchmischung ergibt sich zu $\dot{Q}_T = 139,4 \text{ kW}$.

Bei der Beheizung der Produktionshalle mit Luft durch Deckenventilator und PWW-Lufterhitzer wird die Lufttemperatur $\theta_{L,0}$ durch die thermische Behaglichkeit wiederum erfüllt sind (DIN 1946, operative Raumtemperatur). Durch die Decke ergibt sich zu $\dot{Q}_{T,Decke} = 101,5 \text{ kW}$. Die Basisheizlast (nur Transmission) für eine angenehme Innentemperatur (Lufttemperatur) bei idealer Durchmischung ergibt sich zu $\dot{Q}_T = 139,4 \text{ kW}$.

Bei der Beheizung der Produktionshalle mit Luft durch Deckenventilator und PWW-Lufterhitzer wird die Lufttemperatur $\theta_{L,0}$ durch die thermische Behaglichkeit wiederum erfüllt sind (DIN 1946, operative Raumtemperatur). Durch die Decke ergibt sich zu $\dot{Q}_{T,Decke} = 101,5 \text{ kW}$. Die Basisheizlast (nur Transmission) für eine angenehme Innentemperatur (Lufttemperatur) bei idealer Durchmischung ergibt sich zu $\dot{Q}_T = 139,4 \text{ kW}$.

Bei der Beheizung der Produktionshalle mit Luft durch Deckenventilator und PWW-Lufterhitzer wird die Lufttemperatur $\theta_{L,0}$ durch die thermische Behaglichkeit wiederum erfüllt sind (DIN 1946, operative Raumtemperatur). Durch die Decke ergibt sich zu $\dot{Q}_{T,Decke} = 101,5 \text{ kW}$. Die Basisheizlast (nur Transmission) für eine angenehme Innentemperatur (Lufttemperatur) bei idealer Durchmischung ergibt sich zu $\dot{Q}_T = 139,4 \text{ kW}$.

TDA fans

Elegant Italian design. Heavy, ball bearing motor with thermal overload protection and start capacitor.

Aluminium die-cast motor housing to reduce electromagnetic resonance. Three aerodynamically designed metal blades with a large surface area for maximum air flow and range. 15 years motor guarantee. Scratch-proof epoxy resin coating in light grey. Vibration reducing suspension fittings.

Downrods for 495 mm ceiling gap can be shortened to any intermediate dimension. TDAX 1400 I with protection class IPX5.

Longer downrods with 100 cm for better airflow in high rooms are available as optional accessories.

In a prototype heat requirement analysis by the **Forschungsgesellschaft Heizung Lüftung Klima (FG HLK Stuttgart mbH)** at the University of Stuttgart, the required heating load was calculated for two identical halls with and without thermal stratification. In the hall without thermal stratification, **the heating load is 23 % lower** than in a hall without a system to reduce thermal stratification. You can find the text of the calculation beside. In the prototype calculation, the reduction in heating load relates to a hall built to the latest insulation standards. In older buildings constructed before current heat insulation regulations came into effect, **the savings can be much higher** (see the preliminary note to the calculation).

Applications:

Nordik SuperBlade HVLS

HVLS (High Volume Low Speed)

HVLS (High Volume Low Speed) ideal for cooling (in summer) and heat recirculation (in winter) in high rooms

COMMERCIAL USE

Approved according Machinery Directive 2006/42/EC Part 1 for commercial use

Perfect for the following applications:

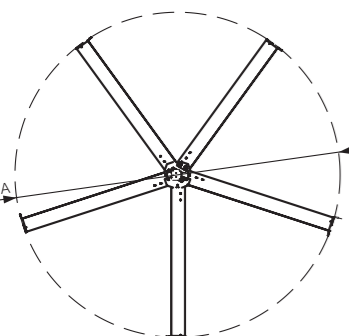
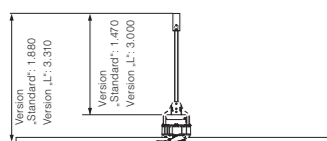
- Airports
- Agriculture
- Breweries
- Industry/Commercial
- Production
- Warehouse facilities/distribution
- Event facilities
- Fitness facilities
- And many more

IP65 Splash proof protection

insensitive to water, humidity, dust and dirt

- Available in 5 sizes from 3 to 7 m diameter
- Uniform air flow over large areas
- Low speed and noise
- For maximum thermal comfort of users in summer and winter

Dimensions (mm)



The heart: The brushless EC-Motor

- Power evenly distributed over the entire speed range.
- No maintenance and error-prone gearbox as with conventional AC HVLS fans.
- Brushless, maintenance-free motor with integrated inverter.
- Energy savings of up to 40% compared to conventional AC motors.
- Problem-free control by means of 0 - 10 V DC control signal. Optionally, control via building management system with Modbus protocol (RS 485).
- Large selection of control units with temperature, temperature difference, air velocity or humidity sensors, suitable for every requirement.
- Flexible operation with single-phase AC 230 V~50 Hz or three-phase AC 415 V~50 Hz.
- With IP65 protection and a motor that can withstand ambient temperatures from -20° C to +50° C, the Nordik HVLS SuperBlade can even be used in dusty and wet environments without any problems.

15 YEARS LIMITED MOTOR WARRANTY



in 5 sizes with Ø 300 to 700 cm available!



Accessories SuperBlade HVLS

Product	Code No.	Description	
Vort T	21137	Control unit for up to 10 Nordik SuperBlade HVLS depending on temperature or air speed.	
TDA Control	983009	Temperature difference control with 0-10V interface for fully automatic control of the Nordik SuperBlade HVLS in Winter. Switchable for manual control in summer. Including floor and ceiling sensor.	
POT	12828	Manual control for up to 10 Nordik Super-Blade. Both surface and flush mounting possible.	
WP	21197	Optional anemometer for Vort T to control the Nordik SuperBlade HVLS depending on the air velocity.	
NHVS-RD	21615	Suspension tie rod kit for Nordik Superblade HVLS	
NHVS-RD-L	21136		
USB C	21198	Modbus-USB converter for controlling the Nordik SuperBlade HVLS via PC in connection with the Vort T control unit.	

Optimal blade profile:

Aerodynamic profile: Made of extruded aluminium profiles, with winglets that significantly reduce turbulence, pressure loss and noise at the wingtips.



Central control:

Automatic adjustment of the speed of the NORDIK SUPERBLADE ceiling fans to achieve or maintain temperature or air speed. Problem-free integration into the building management system due to open Modbus interface.



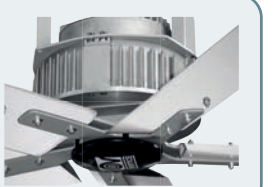
Unprecedented performance:

Extremely high air volumes and uniform air flow at low speed (low noise), up to 850,000 m3/h.



EC Motor:

With integrated inverter, equipped with thermal overload protection, state-of-the-art, energy-saving technology, with very high degree of protection (IP65) against dust and water.

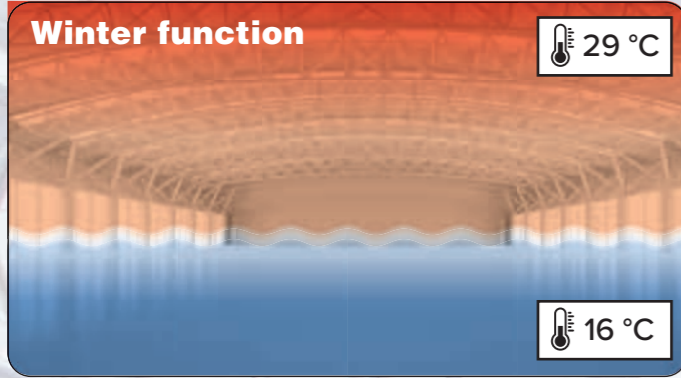


Nordik SUPERBLADE HVLS

Product	Airflow (m³/h)	Power max. (kW)	Current max. (A)	Size (m)	Min. Speed (rpm)	Max. Speed (rpm)
300/120" E	280.000	0,725	2,17	3	6	150
400/160" E	330.000	0,370	2,31	4	6	80
500/200"	530.000	0,850	1,67	5	10	80
600/240"	600.000	1,100	2,69	6	10	65
700/280"	650.000	0,525	1,35	7	5	38
700/280" S	850.000	0,665	1,65	7	5	50

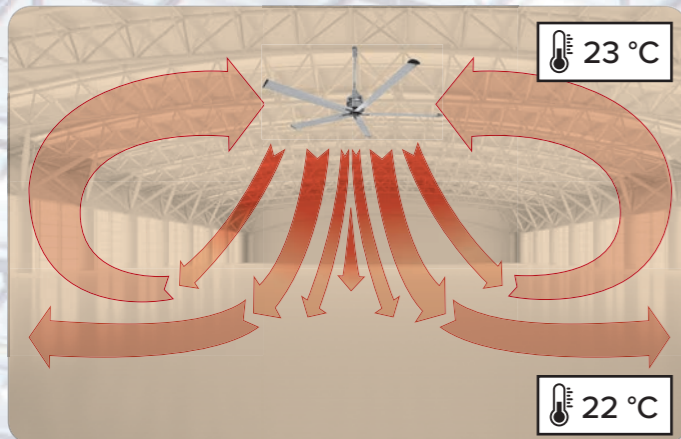
Sound pressure dB(A) (LP -3m)	Min. distance Blade - Floor (m)	Sugg. distance between 2 fans Axis - Axis (m)	Weight (kg)
< 42,5	3,0	9	85/95
< 37,5	3,2	12	91/101
< 27,5	3,6	15	128/137
< 27,5	4,0	18	136/145
< 27,5	4,8	21	144/153
< 27,5	4,8	21	155/164

Nordik SuperBlade HVLS



Without Nordik SuperBlade HVLS ceiling fans:
The heated air rises upwards under the hall ceiling and collects there, while the cold air sinks downwards. A lot of heating energy and costs have to be applied to bring the temperature on the floor to the desired level.

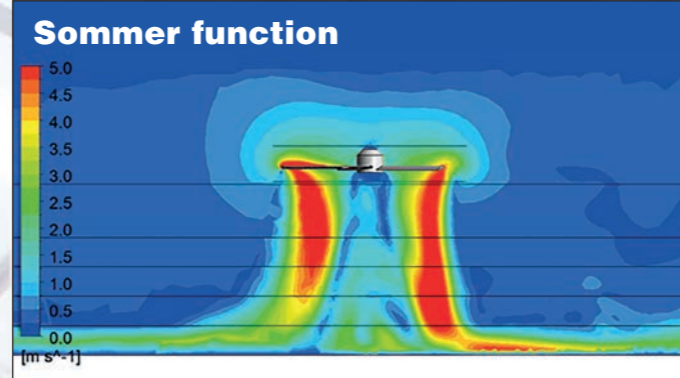
Warm air has a lower specific weight than cold air. For this reason, heated air always accumulates beneath the hall ceiling, while cold air sinks to the floor. The Nordik SuperBlade HVLS fans bring this otherwise lost heat draught-free to where it is needed: to the occupied area on the floor. The lower temperature at the ceiling reduces transmission losses. The heat is distributed more quickly and evenly throughout the hall. This can save up to 30% of heating costs.



With Nordik SuperBlade HVLS ceiling fans:
The warm air accumulated under the ceiling is led down slowly and draught-free. The temperature in the hall is balanced. Without additional heating costs, the temperature on the floor is increased.

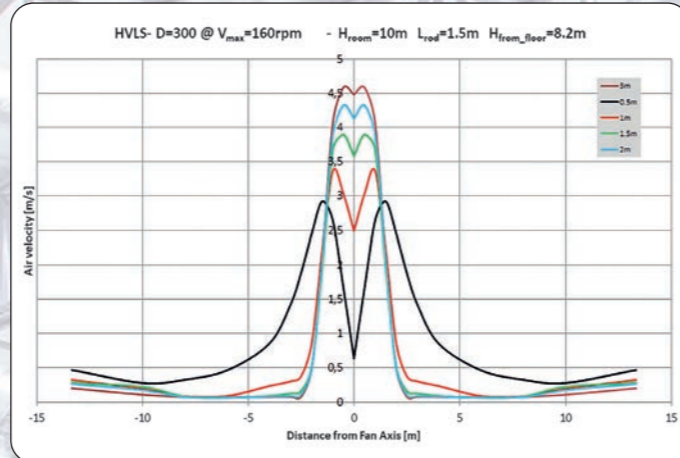
In the winter function (destratification), slowly running Nordik SuperBlade HVLS fans bring the warm air accumulated under the ceiling to where it is needed: downwards, back into the occupied area. It is important that the air speed is not too high, otherwise the pleasant effect of the "warm air shower" can quickly turn into the opposite and be perceived as a draught. The entire occupied area quickly becomes evenly warm, preheating times are reduced and cold and damp areas are avoided.

In combination with a control system with floor and ceiling sensors, the temperature difference between ceiling and floor is permanently determined and the speed of the fans is controlled accordingly. In addition, they only run when the temperature difference between ceiling and floor is above the set threshold.



The simulation of a Nordik Superblade HVLS 300:
The air flows vertically downwards and then flows off vertically to the side. Depending on the desired air speed, the size and number of fans are selected.

High temperatures and humidity worsen the working environment and have been shown to reduce employee efficiency. Concentration and productivity decrease with increasing temperature and humidity. Air conditioning systems to reduce room temperature are expensive to purchase, installation and maintain in commercial and industrial settings due to the large volume of space involved.



Higher air velocities are required for the summer function than in winter. The effect of adiabatic cooling lowers the surface temperature by evaporating moisture on the skin and extracts heat from the body. This reduces the "felt" temperature for people in a warm room by up to 6°C, depending on the air humidity and speed. Depending on the temperature and humidity, the cooling effect starts at an air speed of about 0.5 m/s, depending on the activity. Unlike in many tropical countries, the air speed in our temperate central European latitudes should not exceed 1.3 m/s at shoulder height in order to exclude a negative influence on the health of employees. The setting of the actual air speed in operation should always be made according to the personal feeling of the employees.

The Nordik SuperBlade fans generate a uniform vertical air flow under the radius of the blades, which is deflected into a horizontal flow to the outside until it then flows back over the fan.

Drying:

Unwanted moisture damages the health of employees, the building fabric and, last but not least, stored products and equipment. The example of breweries shows that bacterial and mould growth can become problematic during storage lasting several weeks until bottling. Due to the low temperatures during storage, a lot of condensate collects on the storage vessels, the pipes and the cold walls. The usual steam cleaning and introduction of warmer outside air introduces even more moisture, further fuelling the growth of bacteria and mould.

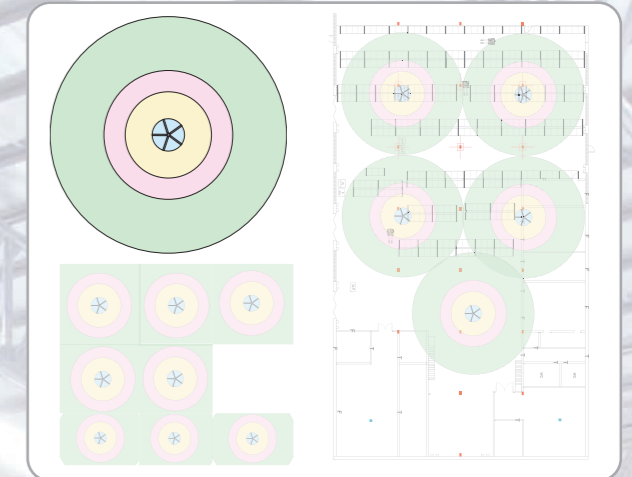
A permanent, uniform air movement generated by Nordik SuperBlade HVLS fans ensures optimal process conditions and reduces condensation and prevents the formation of mould. In combination with air dehumidification systems, this creates optimal process conditions, shortens cleaning times and extends cleaning intervals.

In the table below you will find the recommended area specification per size depending on the desired application.

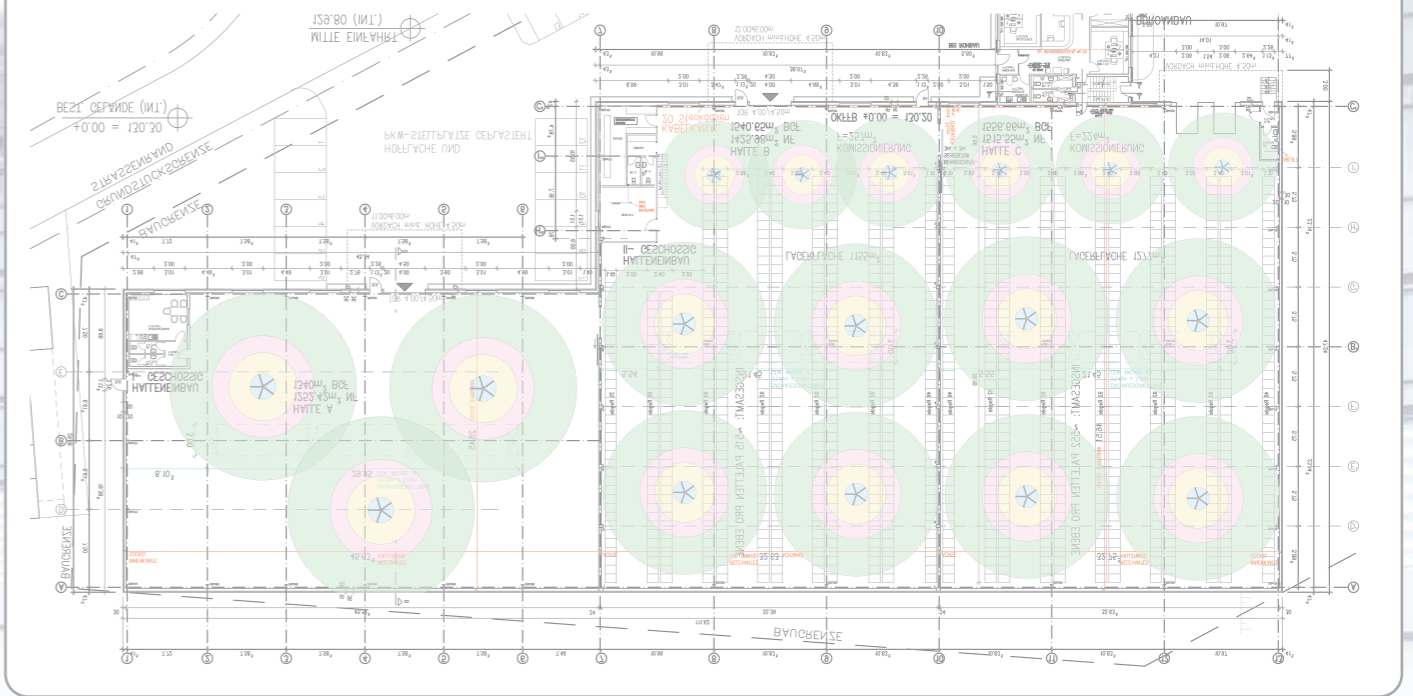
Product	Code No. Standard	Code No. L	Ø A (mm)	Hard physical work*		light physical work*		Winter function/ Destratifikation*	
				Ø m	m²	Ø m	m²	Ø m	m²
SuperBlade 300/120° E	61086	61087	3.000	4,1	14	5	20	33	854
SuperBlade 400/160° E	61096	61097	4.000	7,2	41	9	63	39	1.193
SuperBlade 500/200°	61082	61092	5.000	12,3	119	23	415	42	1.384
SuperBlade 600/240°	61083	61093	6.000	16,8	222	30	706	45	1.599
SuperBlade 700/280°	61084	61094	7.000	20,9	343	34	907	48	1.808
SuperBlade 700/280° S	61076	61077	7.000	22,6	400	38	1.133	51	2.041

Planning principles:

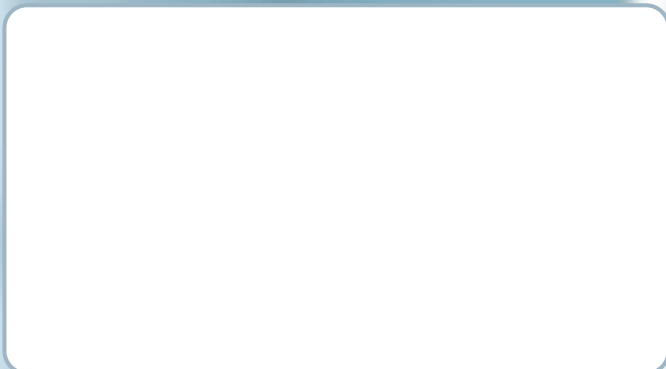
- The larger the diameter, the more air the Nordik SuperBlade HVLS fans move.
- As the diameter increases, the effective area in the occupied zone on the floor increases at the same speed.
- The higher the speed of the Nordik SuperBlade HVLS fans, the higher the air flow rate.
- Nordik SuperBlade HVLS fans with a large diameter ideally cover large areas in halls. Smaller units cover gaps in between or are used in smaller hall areas.
- Outside the blade radius, the vertical air movement changes to a horizontal air movement. Transverse air flows are obstructed by fixtures such as partition walls, high racking and high machinery. These create turbulence that can affect the reach and effective area of Nordik SuperBlade HVLS fans.
- There should be a free area above and to the side of the fan without additional fixtures so that the air flowing in is not obstructed.



* Effectiveness can change depending on rotation speed and distance from the floor.



CasaFan



The product offers in this catalogue are subject to change and are valid until the publication of a new catalogue. We reserve the right to make product changes, especially those that serve to improve the products, without special notice. We accept no liability for printing errors and mistakes. All technical specifications are those of the respective manufacturers. Vortice and CasaFan are registered trademarks of the respective manufacturers. All texts, graphics and images are the intellectual property of CasaFan, the background images of Shutterstock, Inc. and are protected by copyright and trademark law. The warranty periods stated in the catalogue for individual models or their components do not affect the statutory warranty.

©CasaFan 2022

