

REVERSIBLE CEILING FANS FOR COMMERCIAL AND INDUSTRIAL APPLICATION







Our current Vortice Headquarters have been located in Tribiano (Milan) since 1972.

Vortice has achieved European market leadership by dedicating their efforts to the production of products for ventilation, climate control, heating, extraction, purification and the treatment of air, for domestic, commercial and industrial applications. Since 1954 Vortice has been synonymous with quality and excellence and continues to make significant improvements by investing in continuous research to improve the efficiency and quality of its products.

# VORTICE IN THE WORLD

ON WORTICE.

FRANCE

Founded in 1974, Vortice France is located at Crétail about 10 Km from Paris.

#### ENGLAND



Founded in 1977, Vortice Limited is located at Burton on Trent in the East Midlands.

#### CHINA



Founded in 2012, Vortice Ventilation System is located about 200 Km from Shanghai.

#### SOUTH AMERICA



Founded in 2012, Vortice Latam in San Josè Costarica.

## **INDFX**

#### **COMMERCIAL AND INDUSTRIAL** VENTILATION

#### 04 NORDIK® HEAVY DUTY RANGE

Reversible heavy duty ceiling fans

#### 08 NORDIK® INTERNATIONAL PLUS

Reversible ceiling fans IPX5

#### 12 ACCESSORIES

Ceiling fans



#### **ErP COMPLIANT**

The ErP compliant logo indicates that the appliance is ecocompatible and adheres to the ErP directive 2009/125/CE.



The IMQ (Italian Mark Institute) mark certifies that the product is manufactured in compliance with the provisions of relevant established safety standards and directives.

#### **CE** MARKING

Commercial and Industrial ventialtion appliances conform to the following European Directives:

- 2006/42/EC Machines Directive (MD)
- 2006/95/EC Low Voltage Directive (LVD)
- 2004/108/EC Electromagnetic Compatibility Directive (EMC)
- 2009/125/EC ErP Directive, Ecocompatible design of energy-related products in accordance with EU regulation 327/2011.

 Safety:
 EMC:

 EN 60335-1
 EN 55014-1

 EN 60335-2-80
 EN 55014-2

 EN 60529
 EN 61000-3-2

 EN 62233
 EN 61000-3-3

European Regulation N° 1275/2008/UE European Regulation N° 206/2012.



## **NORDIK® HEAVY DUTY RANGE**

## Reversible heavy duty ceiling fans

PRODUCT SPECIFICATIONS





Appliances of the NORDIK HD range are reversible ceiling fans designed specifically for continuous use, even running at maximum speed.

- 8 models: available in 4 sizes with 1200, 1400, 1600 and 2000 mm blades; versions with POWDER PAINTED FINISHING and STAINLESS STEEL.
- The geometry of the 3 blades, available in 4 different sizes and shaped to ensure superiortorsional rigidity, guarantees high levels of performance (up to 22,000 m³/h with models 200 cm in size) combined with low noise emissions.
- POWDER PAINTED FINISHING models are characterized by blades of electrolytic zinc-coated steel, treated with an epoxy base coat and grey epoxy topcoat with hammered finish; cups are made of electrolytic zinc-coated steel, treated with an epoxy base coat and black epoxy topcoat with hammered finish.
- STAINLESS STEEL models differ from standard types in that they have blades made of 304 grade stainless steel with scotchbrite brushed finish; rods and cups are made of 304 grade stainless steel with scotchbrite brushed finish; motor cowls are epoxy powder coated in black with embossed finish.
- Impedence protected, class H, external rotor motor, equipped with impregnated stator windings and high silicon grade magnetic sheets melted in a high purity (99,9%) AC pack.
- Reversibility function: the direction of the air stream can be inverted from floor to ceiling, which has the effect of creating a less direct and more enveloping, fuller flow. In addition, an updraught improves the destratification of heat during winter, reducing the difference between temperatures at floor level (lowest) and at ceiling level (highest).
- 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.
- Supplied with steel hanging rod, length 290 cm.
- Stainless steel safety cable.
- Insulation class: Cl.I ④.

Compliant with the requirements of European Regulation  $n^{\circ}$  206/2012 and Machine Directive (MD) 2006/42/EC.









#### **KEY FEATURES**

- High operating temperature (up to 50 °C at maximum speed) facilitating use even in particularly severe environmental conditions, typical of some industrial processes.
- High resistance against dust and water (IP55) allowing, together with full compliance with Machinery Directive, use in industrial premises.
- Die-cast epoxy painted, motor covers, sealed with a EPDM gasket to prevent dust or water entry.
- High corrosion resistance allowing use in environments with high concentrations of corrosive agents (process industries, agricultural farms, greenhouses...)
- Particularly suitable for use in food or pharmaceutical sector (stainless steel models).

NORDIK HEAVY DUTY INOX
Stainless Steel

NORDIK HEAVY DUTY 120 INOX code 61024
NORDIK HEAVY DUTY 140 INOX code 61025
NORDIK HEAVY DUTY 160 INOX code 61026
NORDIK HEAVY DUTY 200 INOX code 61027

Capability to operate as heat recovery units, especially when coupled with Vort Delta T Vortice's speed controller (available as optional ancillary), allowing automatic speed adjustment of up to 16 ceiling fans according to different temperatures beetwen floor and ceiling.



## NORDIK® HEAVY DUTY RANGE

## Reversible heavy duty ceiling fans

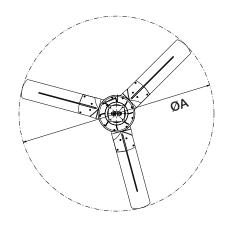
TECHNICAL DATA =

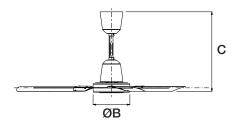
Models	Code	Color	V	Hz	W	А	RPM	Blades	Max Airflow m³/h	IP motor	Kg			
NORDIK HEAVY DUTY 120	61020	Powder painted finishing 230			80	0.35	233		14050	_	7.3			
NORDIK HEAVY DUTY 140	61021						236		16000		7.7			
NORDIK HEAVY DUTY 160	61022							85	0.07	210		19300		8.2
NORDIK HEAVY DUTY 200	61023				020	50	65	0.37	186	3	22050	55	9.1	
NORDIK HEAVY DUTY 120 INOX	61024		ess	230	50	00	0.35	233	3	14050		7.3		
NORDIK HEAVY DUTY 140 INOX	61025					80		236		16000		7.7		
NORDIK HEAVY DUTY 160 INOX	61026	Steel			85	0.37	210	1	19300	_	8.2			
NORDIK HEAVY DUTY 200 INOX	61027						186		22050		9.1			

NORDIK® HD RANGE | TECHNICAL DATA ACCORDING TO 206/2012 UE REGULATION =

	Reference parameter	Unit of	HD 120	HD 140	HD 160	HD 200	HD 120 INOX	HD 140 INOX	HD 160 INOX	HD 200 INOX
		measurement	cod.1020	cod. 61021	cod. 61022	cod. 61023	cod. 61024	cod. 61025	cod. 61026	cod. 61027
Maximum airflow	F	m³/min	234.00	266.60	321.60	367.50	234.00	266.60	321.60	367.50
Power consumption of the fan	Р	W	80	80	85	85	80	80	85	85
Operating values	SV	(m³/min)W	2.925	3.332	3.780	4.320	2.925	3.332	3.780	4.320
Sound power level	LWA	dB(A)	51.8	55.4	55.6	56.4	51.8	55.4	55.6	56.4
Air speed	С	m/sec	1.54	1.35	1.20	1.46	1.54	1.35	1.20	1.46
Measurement standards for operating		IEC 60879; EN62301: UNI EN ISO 3741								

#### DIMENSIONS



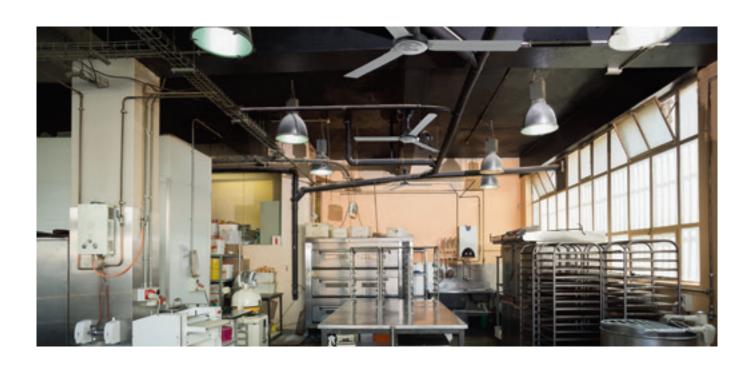


Models	ØA	ØB	С
HD 120	1218		
HD 140	1422	000	405
HD 160	1524	230	495
HD 200	2000		

Dimensions (mm)



**APPLICATIONS** 







#### NORDIK® INTERNATIONAL PLUS

## Reversible ceiling fans IPX5

PRODUCT SPECIFICATIONS





even running at maximum speed.

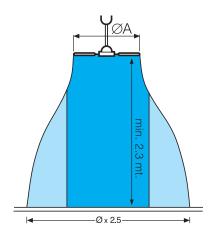
- Top and bottom motor covers moulded from heat-resistant and UV-resistant thermoplastic resin (ABS), colour white.
- Wiring connections at end of ceiling rod concealed by domes moulded from impact- and UV-resistant PP, colour white.
- Single phase start capacitor motor with external rotor, and shaft turning in ball bearings. Direction of rotation reversible.
- Maximum air flow: 13500 m<sup>3</sup>/h.
- 3 sheet steel blades powder coated with scratch-resistant polyester, colour white.
- Steel ceiling rod with polyester powder coated finish, colour white, length 375 mm.
- Bag of accessories containing nuts and bolts required for assembly of blades, ceiling hook and rubber anti-vibration washer.
- Factory-prepared to accept Light Kit (optional), suitable for lamp rated 150W. max with E27 screw fitting, or equivalent energy-saving lamp with E27 screw fitting.
- Speed selectable by way of control units (optional).
- Insulation calss: Cl.I (4).

#### Reverse function:

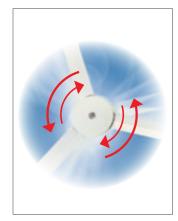
It allows to reverse the air flow direction from floor to ceiling: this means that the flow is no longer direct, but wider and moreall-round. It also help reducing the difference in temperature between the floor (where the temperature is lower) and the ceiling (where it is in winter time).

Appliances of the NORDIK HD range are reversible ceiling fans designed specifically for continuous use,

Compliant with the requirements of European Regulation n° 206/2012 and Machine Directive (MD) 2006/42/EC.











#### **KEY FEATURES**

- Low speed motor for high efficiency and noiseless operation.
- The 1400 mm diameter version is especially suitable for recirculating hot air that tends to stratify high up in industrial sheds and warehouses, consequently reducing the demand for heating energy and saving on fuel bills.
- Versions with enclosure rating IPX5 allow installation where there may be a need to use powerful water jets.
- Attractive appearance designed to favour installation in any interior: residential, commercial, industrial.
- High ventilation performance tested in a special booth, in accordance with IEC 60879 standard on electric circulating fans.
- Especially suitable for night-time operation in bedrooms, by virtue of fan blades with a profile designed to ensure low noise levels and high efficiency even at low speeds.



## NORDIK® INTERNATIONAL PLUS

# Reversible ceiling fans IPX5

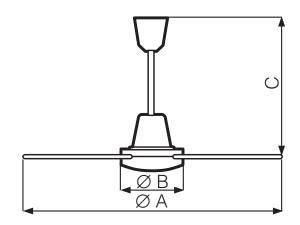
TECHNICAL DATA =

Models	Code	Color	V	Hz	W	А	RPM	Blades	Max Airflow m³/h	Kg
NORDIK INTERNATIONAL PLUS 140/56"	61742	white	220-240	50	70	0.33	231	3	13500	9.1

#### NORDIK® INTERNATIONAL PLUS | TECHNICAL DATA ACCORDING TO 206/2012 UE REGULATION =

	Reference	Unit of	NORDIK INTERNATIONAL PLUS 140/56"				
	parameter	measurement	cod. 61027				
Maximum airflow	F	m³/min	367.50				
Power consumption of the fan	Р	W	85				
Operating values	SV	(m³/min)W	4.320				
Sound power level	LWA	dB(A)	56.4				
Air speed	С	m/sec	1.46				
Measurement standards for operating	IEC 60879; EN62301: UNI EN ISO 3741						

#### DIMENSIONS =



Models	ØA	ØB	С
NORDIK INTERNATIONAL PLUS 140/56"	1422	230	495

Dimensions (mm)



**APPLICATIONS** 







### **ACCESSORIES**

## Ceiling fans

**ACCESSORIES ON REQUEST** 

## VORT DELTA T (Cod. 13039)

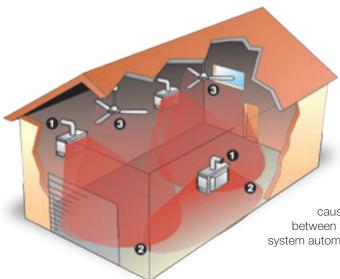
# Multiple speed controller up to 16 ceiling fans

The intelligent control system. Simply clever: Intelligent management ensures optimal, draughtfree operation Vort Delta T - the heart of the System.

- The new, intelligent control unit Vort Delta T is equipped with two semiconductor temperature sensors (included in the package), installed respectively at ceiling and floor level.
- Electrical power is with a normal two-phase cable, of up to 50 metres in length.
- The control unit registers the temperature at ceiling and floor level up to 60 times per minute, calculates the temperature differential and in accordance with this, regulates the operatingspeed of the fans. When the heat layer has been dissipated and the temperature differential has been reduced to an acceptable level, the Vort Delta T automatically switches the fans off.
- The minimal temperature differential, at which level the unit is activated, is adjustable, as are the lower and higher rotational fan speeds so as to avoid draughts. This also applies to permanent operation (e.g. during summer for cooling).
- This fully automatic control system governs the system optimally, without necessitating adjustment by the users. In this manner, unauthorised meddling with the system is impossible.



VORT DELTA T - code 13039



- 1 The commercial building has a warm air heating system.
- With the aid of adjustable laminar blades, the warm air is directed downwards in the recreation or working area.
- 3 Due to the fact that warm air has a lower specific weight than cold air, the warm air rises to ceiling height and accumulates there. The sensor controls registers the increasing temperature difference between the floor and ceiling. The Nordik fans are controlled so that the warm air from the ceiling is

conducted back into the recreating or working area without causing a draught. As soon as the temperature difference between the ground and ceiling areas is in equilibrium, the Vort Delta T system automatically switches the fans off.



#### **ACCESSORIES ON REQUEST**

#### SCRR5 (Cod. 12963)

Speed controller for ceiling-mounted fans



- 5 position reversible speed controller for ceiling-mounted fans.
- Convertible to flush-mounted using SCBRR5/5L/M (cod. 22498).
- 220-240 V ~ 50 Hz.
- Maximum load: 100 W.
- Double insulation.

#### SCRR/M (Cod. 12964)

Speed controller for ceiling-mounted fans



- 5 position reversible speed controller for ceiling-mounted fans.
- Convertible to flush-mounted using SCBRR5/5L/M (cod. 22498).
- 220-240 V ~ 50 Hz.
- Maximum load: 250 W (2.5 A).
- Double insulation.

#### SCRR/M (Cod. 12965)

Speed controller for ceiling-mounted fans



- Electronic, reversible speed controller for use with up to 6 ceiling-mounted fans.
- Convertible to flush-mounted using SCBRR5/5L/M (cod. 22498).
- 220-240 V ~ 50 Hz.
- Maximum load: 450 W (2.5 A).
- Double insulation.

#### CEILING RODS



Models	Colours	L rod = mm									
	Colours	200	250	290	350	500	665	750	915	1000	
Nordik Heavy Duty	Powder Painted Finishing	-	-	22717	-	-	22718	-	22719	-	
Nordik Heavy Duty	Stainless Steel	-	-	22721	-	-	22722	-	22723	-	
Nordik Evolution Plus	White	22032	22033	-	22042	22051	-	22074	-	22077	

# KIT SCBRR5/5L/M BUILT-IN (Cod. 22498)

Kit to convert SCRR5 and SCRR/M controllers from surface to flush-mounted.





## **NOTE**


Vortice replaces the air,
heats it, recovers the heat,
moves it, cools the air,
dehumidifies it, purifies it, dries it.



Cod. 5.170.084.996

10/16

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