



NORDIK® HEAVY DUTY RANGE

Reversible ceiling fans for commercial and industrial application

Reversible ceiling-mounted fans with 3 blades, specifically designed for continuous use, even at maximum speed, in the presence of high relative humidity, high temperatures (up to 50°C environment), concentrations of dusts and corrosive vapours, heavy duty conditions typical of contexts such as process industries, livestock farms, greenhouses, etc.

- 8 models: available in 4 sizes with 120, 140, 160 and 200 cm blades; versions with powder painted finishing and stainless steel.
- The BASE models are characterised by electro-galvanised steel sheet blades, treated with epoxy primer and successive grey epoxy paint and hammered finish. Electro-galvanised steel sheet caps, treated with epoxy primer and successive black epoxy paint and hammered finish.
- The STAINLESS STEEL models are distinguished by their blades, rods and caps in AISI 304 stainless steel with scotch brite finish. The die-cast aluminium motor covers are painted with black epoxy paint and embossed finish.
- External rotor type self-protected motors, operating clockwise and anti-clockwise, specifically designed to guarantee prolonged continuous service at maximum plate temperature in heavy duty conditions, thanks to:
 - impregnated stator windings, guaranteeing the most effective electric isolation;
 - rotors with magnetic laminations with high fused silica content in very pure aluminium fill (99.9%), inserted into a shell made in structural aluminium;
 - casings consisting of two die-cast aluminium alloy covers, painted with black epoxy powder, embossed finish, to guarantee high resistance to corrosion over time; circular, synthetic rubber gaskets (EPDM), positioned between the two shells, ensure high water and dust resistance, an essential requirement for prolonged use also in highly critical environments;
 - pair of ball bearings housed in the upper cover to prevent the risks of misalignment; a possible cause of malfunctioning over time.
- Connection terminal board to the mains, housed in the relevant box protected from dust and water.
- Support devices with 4 holes for firm and long-lasting anchorage, compatible with product mounting also in correspondence with steep sloping ceilings.
- Safety cable, compliant with the most recent international regulation regarding safety of ceiling fans, to prevent risks of fallin if the product is not installed correctly.
- Shock absorber, made up from a rubber elastic element overmoulded to an internal steel rope, designed to resist repeated start/stop cycles of the product, also at maximum speed (the life tests run allow duration of a period of 50 years of uninterrupted operation to be guaranteed).
- Bag of accessories containing the hardware necessary to mount the blades, the hook and the vibration damper rubber for ceiling mounting.
- Protection rating from dusts and water: IP55.
- Insulation class: Cl.I ⚡.
- Compliant with the requirements of European Regulation n° 206/2012 and Machine Directive (MD) 2006/42/EC.



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.

High operating temperature (up to 50 °C at maximum speed) facilitating use even in particularly severe environmental conditions, typical of some industrial processes.



Die-cast epoxy painted, motor covers, sealed with a EPDM gasket to prevent dust or water entry.



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 between floor and ceiling.

High corrosion resistance allowing use in environments with high concentrations of corrosive agents (process industries, agricultural farms, greenhouses...)





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TECHNICAL DATA

MODELS	CODE	COLOR	V	HZ	W	A	RPM	NR. BLADE	MAX AIRFLOW m ³ /h	Kg
NORDIK HEAVY DUTY 120	61020	POWDER PAINTED FINISHING	230	50	80	0.35	233	3	14050	7.7
NORDIK HEAVY DUTY 140	61021		230	50			236	3	16000	8.1
NORDIK HEAVY DUTY 160	61022		230	50	85	0.37	210	3	19300	8.6
NORDIK HEAVY DUTY 200	61023		230	50			186	3	22050	9.5
NORDIK HEAVY DUTY 120 INOX	61024	STAINLESS STEEL	230	50	80	0.35	233	3	14050	7.3
NORDIK HEAVY DUTY 140 INOX	61025		230	50			236	3	16000	7.7
NORDIK HEAVY DUTY 160 INOX	61026		230	50	85	0.37	210	3	19300	8.2
NORDIK HEAVY DUTY 200 INOX	61027		230	50			186	3	22050	9.1

NORDIK® EVOLUTION GOLD RANGE | TECHNICAL DATA FOR REGULATION N° 206/2012 UE

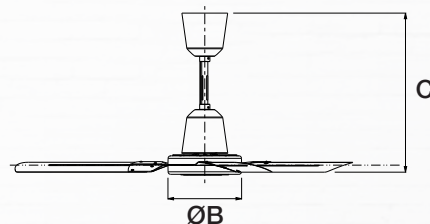
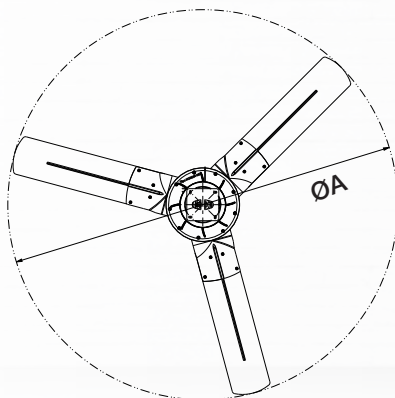
	SYMBOL	UNIT	HD 120	HD 140	HD 160	HD 200	HD 120 INOX	HD 140 INOX	HD 160 INOX	HD 200 INOX
CODE			61020	61021	61022	61023	61024	61025	61026	61027
Maximum fan air flow	F	m ³ /min	234.00	266.60	321.60	367.50	234.00	266.60	321.60	367.50
Fanpower input	P	W	80	80	85	85	80	80	85	85
Service value	SV	(m ³ /min)/W	2.925	3.332	3.780	4.320	2.925	3.332	3.780	4.320
Standby power consumption	PSB	kW	-	-	-	-	-	-	-	-
Fan sound power level	LWA	dB(A)	51.8	55.4	55.6	56.4	51.8	55.4	55.6	56.4
Maximum air velocity	C	m/sec	1.54	1.35	1.20	1.46	1.54	1.35	1.20	1.46

Measurement standard for service value

IEC 60879; EN62301; UNI EN ISO 3741

For more information refer to: Vortice Elettrosociali Spa, Strada Cerca, 2 - 20067 Zoate di Tribiano (MI) Italia

DIMENSIONS



MODELS	CODE	ØA	B	C
NORDIK HEAVY DUTY 120	61020 - 61024	1218	230	495
NORDIK HEAVY DUTY 140	61021 - 61025	1422	230	495
NORDIK HEAVY DUTY 160	61022 - 61026	1524	230	495
NORDIK HEAVY DUTY 200	61023 - 61027	2000	230	495

Dimensions (mm)





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ACCESSORIES

CEILING RODS

Various lengths to enable installation at desired height.



POWDER PAINTED FINISHING

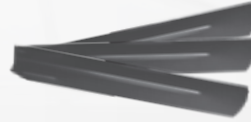
- Rod 290 mm (code 22717)
- Rod 665 mm (code 22718)
- Rod 915 mm (code 22719)



STAINLESS STEEL

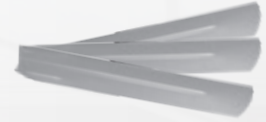
- Rod 290 mm (code 22721)
- Rod 665 mm (code 22722)
- Rod 915 mm (code 22723)

KIT SPARE BLADE



POWDER PAINTED FINISHING

- Kit blade 1200 mm (code 22724)
- Kit blade 1400 mm (code 22725)
- Kit blade 1600 mm (code 22726)
- Kit blade 2000 mm (code 22727)



STAINLESS STEEL

- Kit blade 1200 mm (code 22728)
- Kit blade 1400 mm (code 22729)
- Kit blade 1600 mm (code 22730)
- Kit blade 2000 mm (code 22731)

SCRR5 (code 12963)



- 5-position reversible speed controller for ceiling-mounted fans without light.
- Convertible to flush-mounted using SCBRR5/SL/M.
- 220-240V ~ 50 Hz.
- Maximum load: 100W.
- Weight: 0.58 Kg.
- Double insulation.

SCNR5 (code 12955)



- 5 position speed controller for ceiling-mounted fans without light.
- Convertible to flush-mounted using SCB5 Kit.
- 220-240V ~ 50 Hz.
- Maximum load: 100W.
- Weight: 0.58 Kg.w
- Double insulation.

MULTIPLE SPEED CONTROLLER



VORT DELTA T (Code 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 operating speed 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.

- 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.
- 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.

