# Highest system performance and best energy efficiency



## The RZR series

It is not difficult to make a centrifugal fan for an air conditioning unit a few euros

But to construct it so that it saves valuable energy during operation is a real technological challenge.

In this respect, the RZR from Nicotra Gebhardt continues to provide the technology with the highest level of system performance and with that, the best solution where energy efficiency counts.

rotavent - the efficient fan technology with centrifugal impeller and airfoil blades.

# Top quality for performance and a long service life!

### The advantages:

- ▶ Wide range of application even for high pressures
- ▶ Easy adaption to changed operating conditions thanks to the belt drive
- Easy and reliable layout, performance data complying with tolerance class 1
- ▶ High degree of performance density at the best efficiency
- Low level of noise thanks to the blade profile, a patented blade positioning and the
- ▶ Easy selection via the proSELECTA II electronic catalogue



### We do it very precisely!

### Why you should not compare apples with pears!

Nicotra-Gebhardt manufactures its centrifugal fans RZR with tolerance class1 in compliance with DIN 24166.

This gives you the necessary degree of security that you need when designing and planning ventilation installations. The tolerance class is also an important criterion for the objective comparison of fans.

If you compare the price/performance ratio of two fans, you should also always take the tolerance class of each into account, only then do you avoid comparing "apples



Performance data		Deviations per tolerance class			
		1	2	3	
Volume flow	q <sub>V</sub>	2.5 %	5 %	10 %	
Pressure increase	p <sub>F</sub>	2.5 %	5 %	10 %	
Power consumption	Ρ	+3 %	+8 %	+16 %	
Efficiency	η	-2 %	-5 %	-	
Sound power level (A weighted)	$L_{WA}$	+3 dB	+4 dB	+6 dB	

# Variety has a name

### RZR rotavent

RZR fans, double inlet with patented impeller geometry and tapered trailing airfoil blades are the leading edge for standard fans for ventilation and air conditioning units.

### Series RZR

- Sizes 0200/-1600
- Lap jointed scroll of galvanised sheet steel with V-Cut off (RZR 11; 12; 14; 15; 18)
- ▶ Scroll casing stitch welded and coated, with V-cut off (RZR 13; 19)
- ▶ Centrifugal impeller with 11 backward inclined steel blades, welded and coated (0200/-0280)
- ▶ High pervormance impeller with 12 hollow section true airfoil blades (0315/-1600)

### Series RZR

- ▶ Volume up to 300,000 m<sup>3</sup>/h
- Pressure up to 3,500 Pa

### The right fan for every specification!

Depending on the fan size, the RZR series have up to 7 mechanical versions of the single fan. In this way, we ensure that we have the perfect model for all requirements and any application.

Version	Description	Figure
RZR 11-0200/-0710	Lap jointed scroll with multi-position feet and discharge flange. Light duty bearing execution with pressed steel housing/strut assemblies.	20
RZR 12-0200/-0710	Lap jointed scroll with rectangular side frame and discharge flange. Light duty bearing execution with pressed steel housing/strut assemblies.	<b>2</b> 0
RZR 15-0400/-1000	Lap jointed scroll with heavy duty reinforced side frames and discharge flange.  Medium-heavy duty bearing execution with cast iron housing/strut assemblies.	
RZR 18-0400/-1000	Lap jointed scroll with discharge flange and heavy duty reinforced side frames.  Heavy duty bearing execution with split-type plummer block, mounted on robust pedestal.	

Version	Description	Figure
RZR 19-0200/-0355	Scroll casing stitch welded with discharge flange and multi-position feet.  Medium-heavy bearing execution with cast iron housing and tubular struts.	20
RZR 19-0400/-1000	Scroll casing stitch welded with discharge flange, and heavy duty reinforced side frames, epoxy coated.  Medium-heavy bearing execution with cast iron housing and tubular struts.	8
RZR 13-0400/-1000	Scroll casing stitch welded with discharge flange and heavy duty reinforced side frames, epoxy coated.  Heavy duty bearing execution with split-type plummer blocks, mounted on robust pedestal.	
RZR 13-1120/-1600	Heavy duty casing of sheet steel with stiffening members, step welded and painted, with discharge flange. Casing is split on one axis (Size 1120), split on two axis (Sizes 1250, 1400, 1600).  Heavy duty bearing execution with split-type plummer blocks, mounted on robust pedestal.	