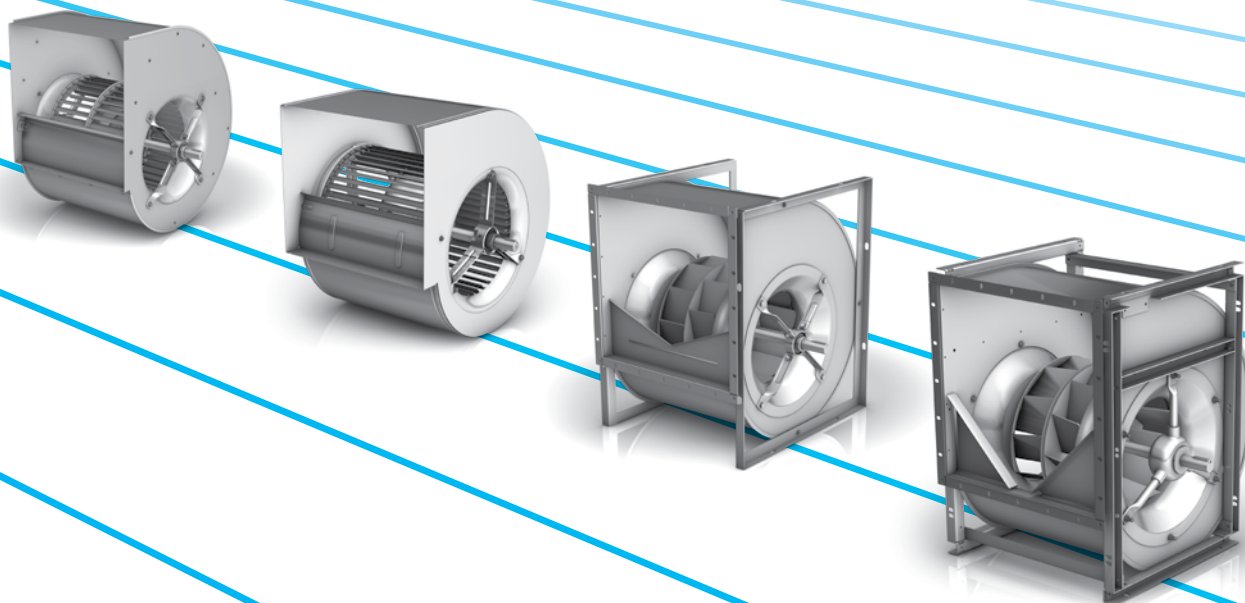


Centrifugal Fans AT

belt driven

Issue 2.5 EN
August 2013





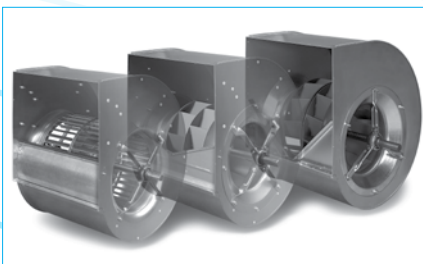
Nicotra Gebhardt S.p.A. (Italy) certifies that ADH-E fans of the E0, E2, E4, E6 and E7 versions, from sizes 0160 to 0560, RDH-E fans of the E0, E2, E4, E6 and E7 versions, from sizes 0180 to 0560, ADH and RDH fans of the L, R, K, K1 and K2 versions, from sizes 0630 to 1000, AT fans of the S, SC, C and TIC versions, from sizes 7/7 to 30/28, shown herein are licensed to bear the AMCA Seal.

Nicotra Gebhardt GmbH (Germany) certifies that RZR fans of the 11, 12, 15 versions, from sizes 0355 to 1000, shown herein are licensed to bear the AMCA Seal.

The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Air performance with Installation Type “A” (“with free outlet”), and that of the twin fan versions G2L, G2R, G2K, G2K2, G2E0, G2E2, G2E4, G2E7, SC2, G2C and G2C-C2, and that of the triple fan versions G3C and G3C-C2 in any installation type is not AMCA licensed.

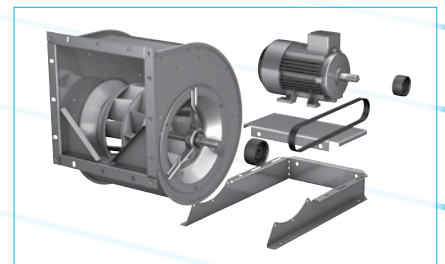
Nicotra Gebhardt stands for:



► Maximised flexibility and minimised design effort for customers, because all radial fan casings have identical dimensions – no matter what kind of impeller geometry



► Top product quality and shorter delivery times – thanks to state-of-the-art production technology



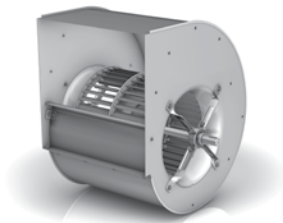
► Energy efficiency through comprehensive system know-how

The Nicotra Gebhardt portfolio

A strong provider for many optimal solutions

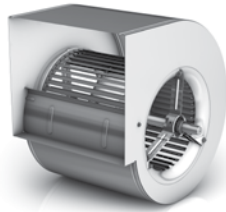
When it comes to radial fans, we are the first people you should talk to. From belt-driven radial fans to plugfans, it's all there in our product portfolio. We offer the largest, most comprehensive range of products in this area – and of course the matching services.

ADH-E / ADH



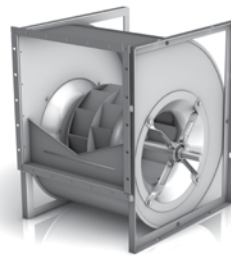
double-inlet
forward-curved
impeller geometry

AT



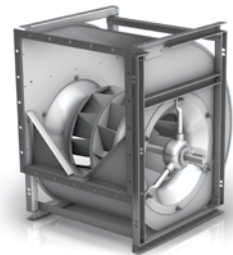
double-inlet
inch diameters
forward-curved impeller
geometry

RDH-E / RDH



double-inlet
backward-curved
impeller geometry

RZR



double-inlet
hollow aerofoil
impeller geometry

When everything fits

To us, perfection in our product portfolio means that all product series in the area of encased radial fans are attuned to one another and are 100% compatible in their dimensions.

How did we do it?

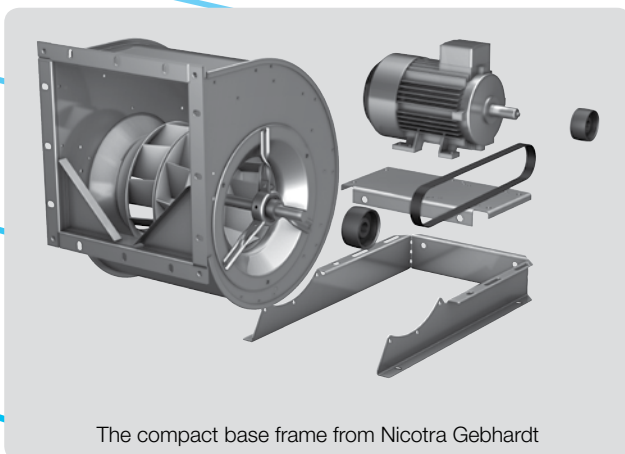
By using an identical design for the connection dimensions of every fan size in our newly developed series ADH-E and RDH-E and carefully coordinating our options and accessories.

In this way, we have standardised and harmonised our product portfolio in all relevant areas.

Well designed, easy to install, economical

A system that saves space, time, and money – in an air handling unit or any other application: our compact base frame offers decisive advantages:

- ▶ The frame lengths have been optimised and adjusted for the casing position and motor installation height to achieve the smallest possible overall height and length
- ▶ Exact, optimised coordination of all components, all the way through to installation, adjustment and testing
- ▶ Suitable for all fans of the series ADH-E0, RDH-E0 and RZR-11 up to size 0500



The compact base frame from Nicotra Gebhardt

AT 12/12

Performance certified is for installation type B - free inlet, ducted outlet.
 Power rating (kW) does not include transmission losses.
 Performance ratings do not include the effects of appurtenances (accessories).

Technical Data

Impeller Data

Impeller diameter	D_r	322 mm
Number of blades	z	43
Moment of Inertia	J	0.118 kgm ²

Impeller Data

Impeller weight	m	5.2 kg
Density of media	ρ_1	1.2 kg/m ³
Tolerance class (DIN 24166)		2

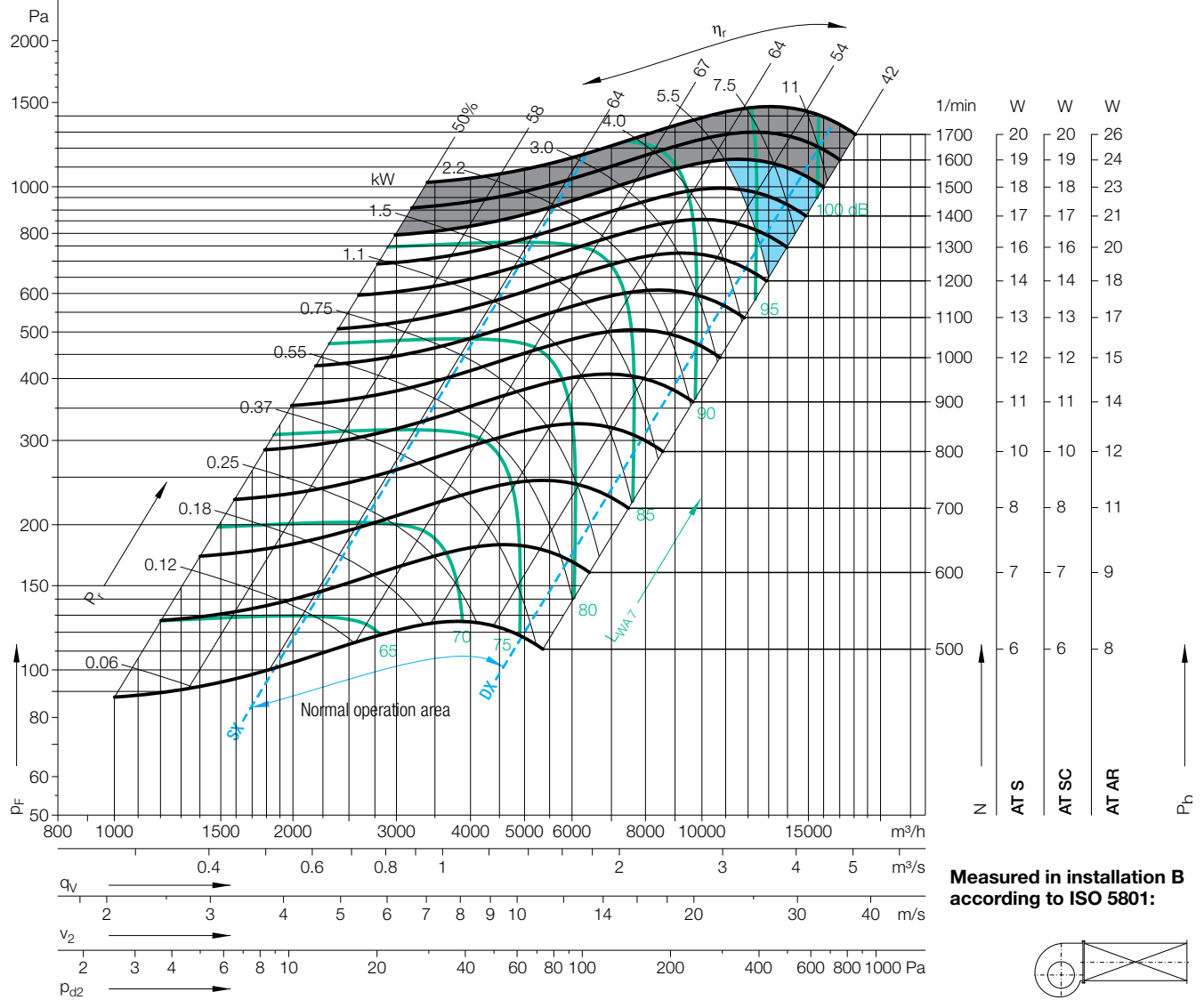
Performance Curves

Please note coloured area!

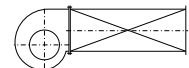
- all types suitable
- AT AR only
- do not use in this area



Nicotra Gebhardt S.p.A certifies that the fan shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings only.



Measured in installation B according to ISO 5801:



$\Delta L_{Wrel4}(A)$

Relative sound power level for inlet side L_{Wrel7} at octave centre frequencies f_c

Relative sound power level for discharge side L_{Wrel4} at octave centre frequencies f_c

Duty point	Speed 1/min	dB
SX	1400	2
SX	900	2
SX	600	2
$Q_{V,opt}$	1400	2
$Q_{V,opt}$	900	2
$Q_{V,opt}$	600	1
DX	1400	2
DX	900	2
DX	600	2

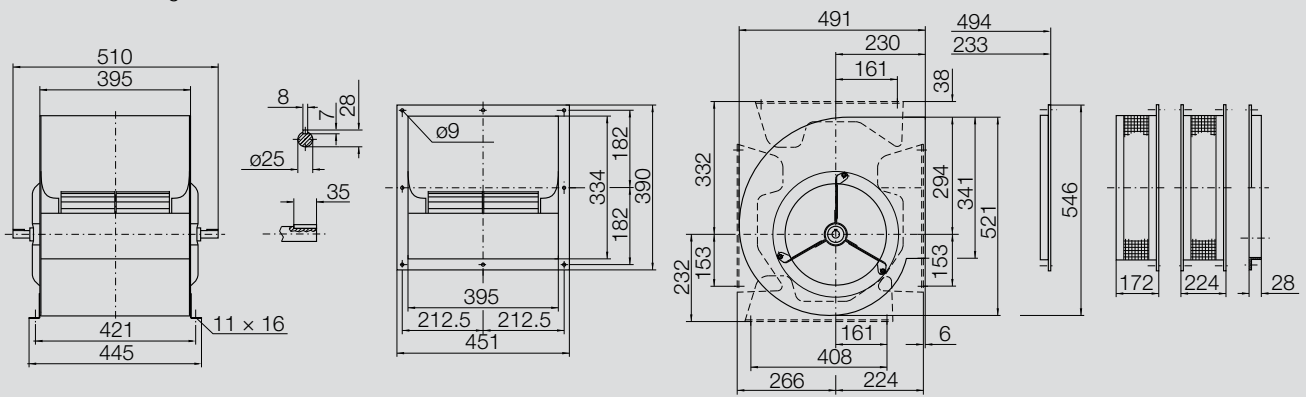
	63	125	250	500	1000	2000	4000	8000	Hz
	-6	1	2	-7	-7	-7	-9	-14	dB
	-2	5	-4	-6	-5	-7	-10	-18	dB
	5	3	-5	-4	-4	-7	-14	-21	dB
	-3	-2	-1	-7	-7	-6	-8	-13	dB
	-2	2	-5	-6	-5	-6	-9	-17	dB
	2	0	-5	-5	-4	-7	-12	-20	dB
	-4	-4	-3	-9	-8	-6	-7	-10	dB
	-4	-2	-6	-8	-6	-6	-8	-12	dB
	-2	-3	-8	-6	-4	-7	-10	-14	dB

	63	125	250	500	1000	2000	4000	8000	Hz
	2	6	6	-5	-6	-5	-7	-13	dB
	4	9	-1	-4	-4	-5	-8	-17	dB
	10	7	-2	-3	-3	-5	-12	-20	dB
	4	3	3	-5	-5	-5	-7	-11	dB
	3	5	-2	-4	-4	-5	-8	-16	dB
	6	3	-3	-3	-3	-6	-11	-20	dB
	2	1	0	-5	-5	-4	-6	-9	dB
	2	2	-3	-4	-4	-4	-7	-11	dB
	2	1	-4	-3	-3	-5	-8	-15	dB

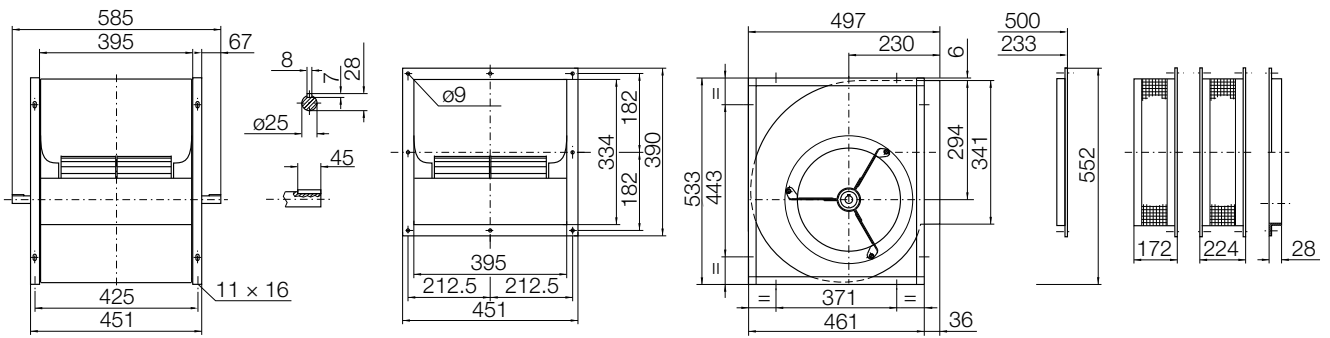
AT 12/12

Dimensions in mm, subject to change.

AT S-12/12 15.2 kg



AT SC-12/12 18.4 kg



AT AR-12/12 18.4 kg

