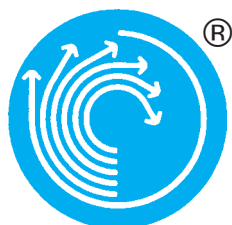


ATLI

DOUBLE INLET FORWARD CURVED CENTRIFUGAL FANS



comefri



Contents

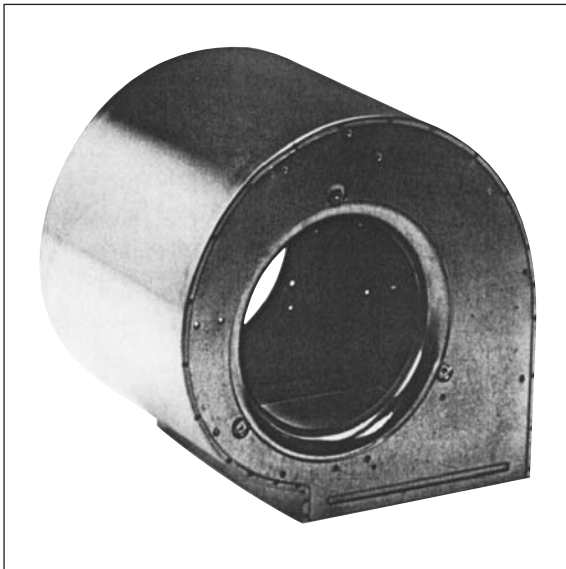
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**Fig. 1**

1. Standard ATLI fans range

Comefri's ATLI double inlet forward curved centrifugal fan series covers a size range from 7 to 40. All fans within this range have the following characteristics:

- optimally engineered for HVAC applications;
- high quality, compact design;
- class I and class II versions available (as per AMCA operating limits specification 99-2408-69);
- low power consumption; high efficiency
- quiet operation;
- all fans are fully performance tested and certified in Comefri's own state-of-the-art laboratory in accordance with DIN, ISO, BS and AMCA standards.

**Fig. 2**

2. Technical details

2.1. Housing

All fan housings from size 7 to 40 are manufactured in galvanized sheet steel (Fig. 1). From sizes 7 to 18, the fan sideplates are spot welded to the scroll housing (Fig. 2). From sizes 20 to 40 the fan sideplates are locked to the scroll housing through a Pittsburgh seam (Fig. 3) which ensures a high quality air tight seal, as well as a structurally reinforced housing.

The inlet cones are manufactured in galvanized sheet steel and are part of the housing sideplates. A series of standard holes are located on the sideplates to allow the installation of frames or mounting base. These holes are positioned in such a way that several standard accessories can be attached with the necessary fixing screws.

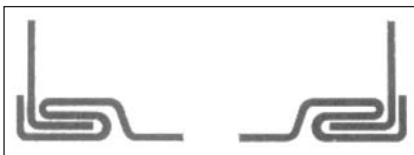
**Fig. 3**


Fig. 4

2.2. Impeller

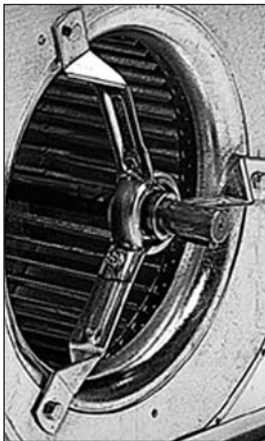
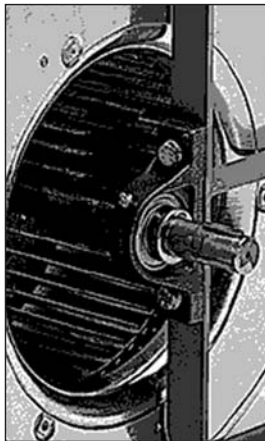
The impeller is manufactured in galvanized sheet steel with tab locked blades, (Fig. 4). All wheels are balanced, both statically and dynamically, to an accuracy grade of G = 6.3 in accordance to DIN ISO 1940-1 and ANSI S2.19 – 1989. All the impellers from size 7-7 to 40-40 are secured to the shaft via a hub. The hub bore is precision machined and incorporates a keyway and locking screw.

2.3. Shafts

All shafts are designed with a high safety factor and with the first critical speed well in excess of the maximum fan speed.

Made with hardened steel, the shafts are precision ground and polished, and includes keyways for the wheel hub and sheaves.

All shafts are coated with a protective paint for added corrosion protection prior to shipping.


Fig. 5

Fig. 6

2.4. Bearings

From size 7-7 B to 18-18 B and from size 7-7 R to 28-28 R, bearings are self-aligning, single row, deep groove ball type (Fig. 5). From size 20-15 T1 to 40-40 T1, from size 7-7 T2 to 28-28 T2, bearings are self-aligning, single row, deep groove ball type, in pillow block cast iron housings (Fig. 6).

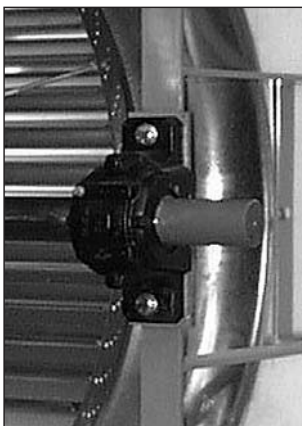
Size 32-32 T2, size 36-36 T2 and size 40-40 T2 bearings are double row roller bearings in pillow block split cast iron housings (Fig. 7).

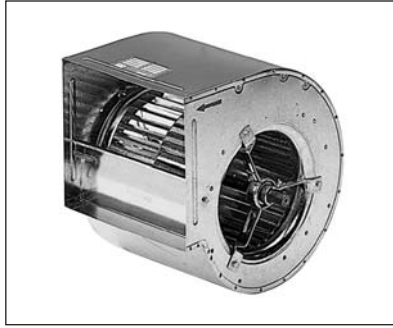
All bearings have been selected to guarantee a minimum L_{50} life time of 200,000 hours (as per AFBMA standards).

B and R framed fans have the bearings mounted in a rubber interliner, which in turn, fits in a sturdy three-arm or four-arm spider bracket (Fig. 5). These bearings are permanently lubricated and sealed for the life time of the fan.

T1 and T2 fans have the pillow block bearings mounted on a flat iron bar, welded to the T frame (Fig. 6, 7). These bearings are complete with re-lubrication fitting already installed.

Operating temperatures range from -4°F to $+176^{\circ}\text{F}$ (-20°C to $+80^{\circ}\text{C}$) for all blowers.


Fig. 7

3. ATLI series


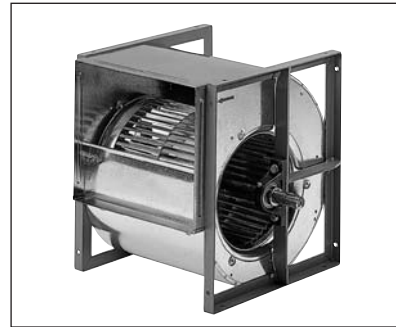
ATLI ___ B
Standard (base) version fan.



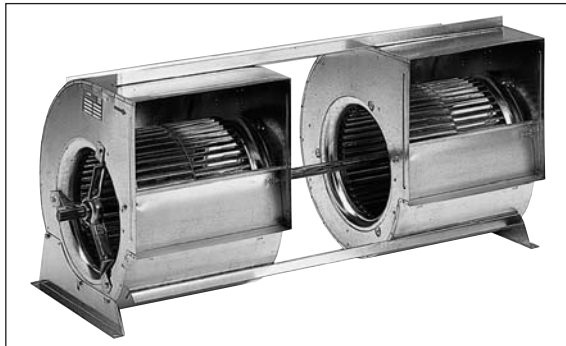
ATLI ___ F
Standard (base) version fan with mounting feet "F".



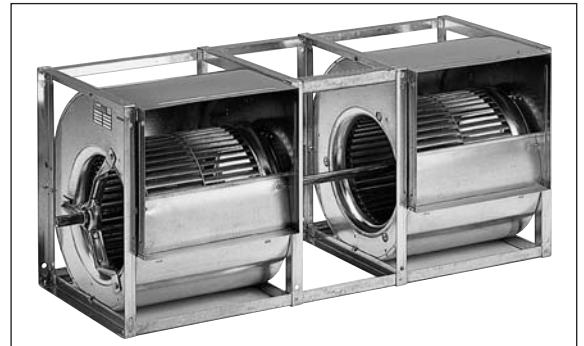
ATLI ___ R
Fan with galvanized steel frame "R".



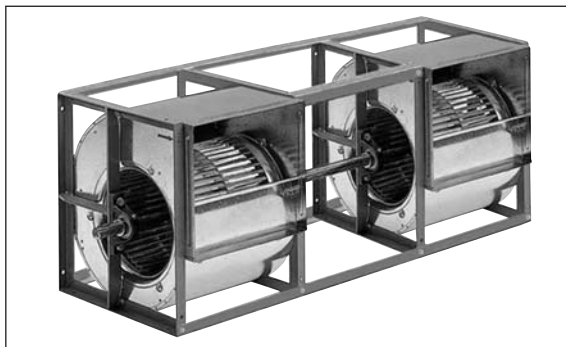
ATLI ___ T1 / ATLI ___ T2
Fan with reinforced angle iron frame "T1 or T2".



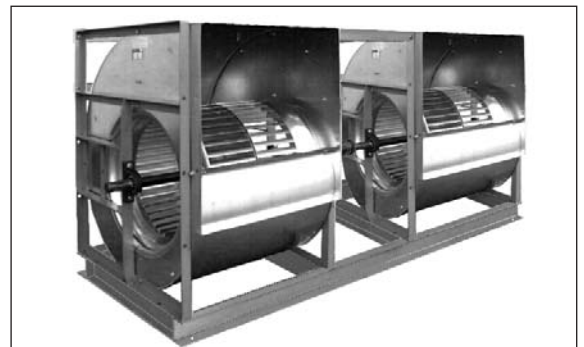
ATLI ___ BL
Twin fan in standard (base) version with mounting feet "F".



ATLI ___ BP
Twin fan with galvanized steel frames and angular joining galvanized steel stiffeners.



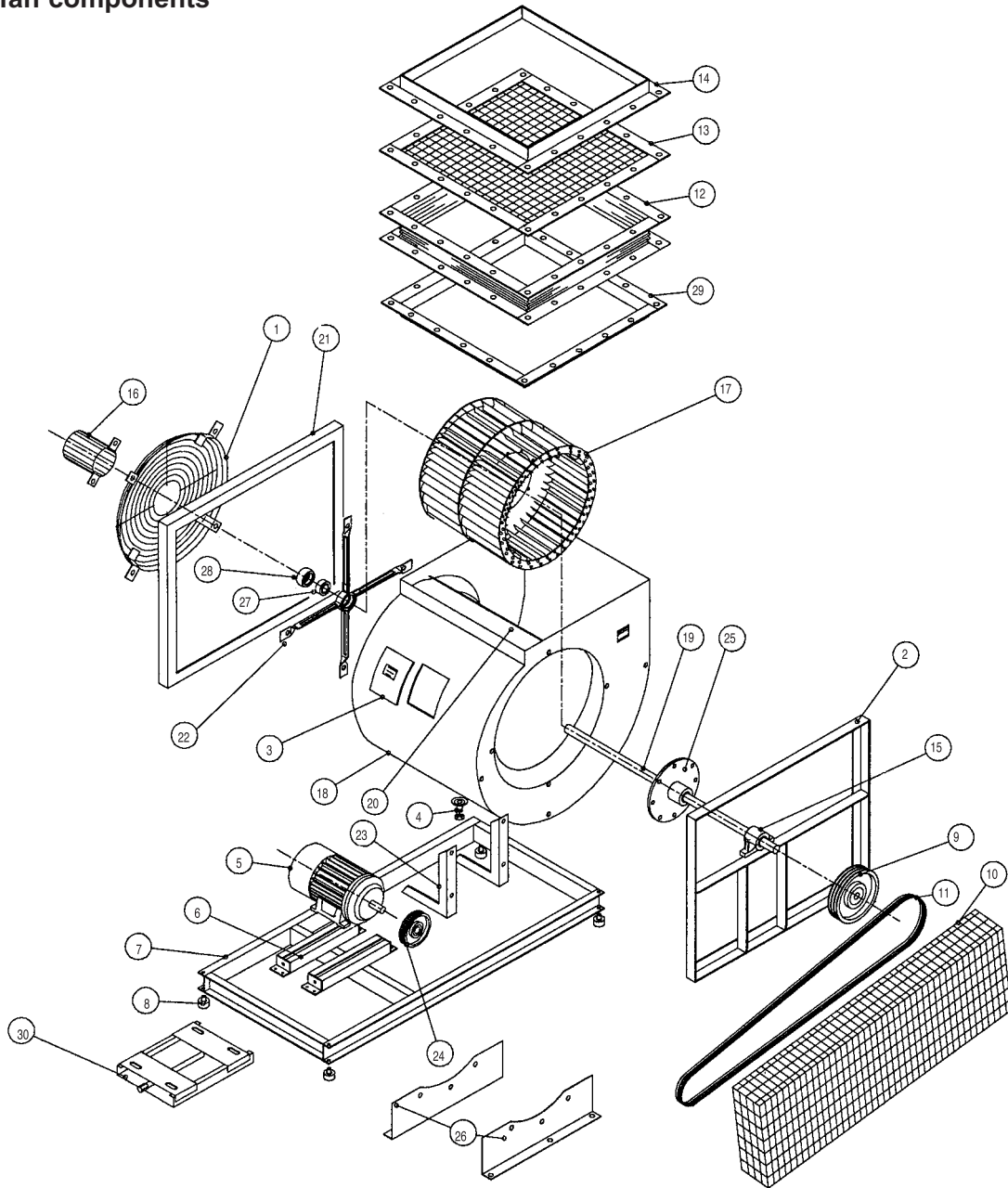
ATLI ___ BT
Twin fan with reinforced angle iron frames and angle iron joining stiffeners.



ATLI ___ BT2/T1
Twin fan with reinforced angle iron frames, angle iron joining stiffeners, common base frame and flexible couplings between the two shafts.



4. Labelling of fan components



1	INLET GUARD	16	SHAFT GUARD
2	FRAME for T EXECUTION	17	WHEEL
3	INSPECTION DOOR	18	HOUSING
4	DRAIN PLUG	19	SHAFT
5	MOTOR	20	CUT OFF
6	MOTOR RAILS SH	21	FRAME for R EXECUTION
7	BASE FRAME	22	BEARING BRACKET for BASE and R EXECUTION
8	ANTIVIBRATION MOUNTING	23	GUARD MOUNT
9	FAN PULLEY	24	MOTOR PULLEY
10	BELT GUARD	25	HUB
11	BELTS	26	FEET
12	OUTLET FLEXIBLE CONNECTION	27	BEARING for BASE and R EXECUTION
13	OUTLET GUARD	28	RUBBER BUSH for BASE and R EXECUTION
14	OUTLET COUNTERFLANGE	29	OUTLET FLANGE
15	BEARINGS for T EXECUTION	30	MOTOR BASE PLATE SY

COMEFRI reserves the right to make any dimensional design changes which are part of their improvement programme. Necessary corrections are updated on our AEOLUS PLUS selection program.

COMEFRI behält sich sämtliche Änderungen vor, die dem technischen Fortschritt dienen. Notwendige Korrekturen der Katalogdaten werden in unserem Auswahlprogramm AEOLUS PLUS berücksichtigt.

Comefri se réserve la possibilité d'apporter des modifications de dimensions sans aucun préavis ceci parce que ces informations font parties d'un programme interne de développement du produit. Les éventuelles variations et/ou corrections seront ajournés dans notre programme de sélection AEOLUS PLUS.

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