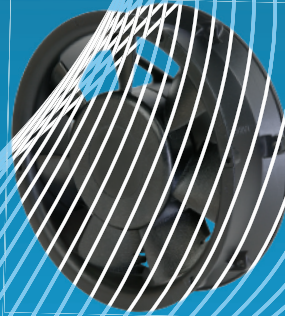


# COMAIR ROTRON MILITARY GRADE FANS

COTS Fans Designed For Military Applications

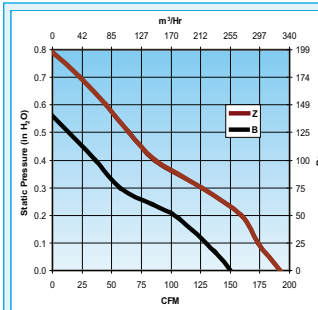
- Rugged
- Reliable
- Extended Temperature Range
- Harsh Environments
- Extended Life



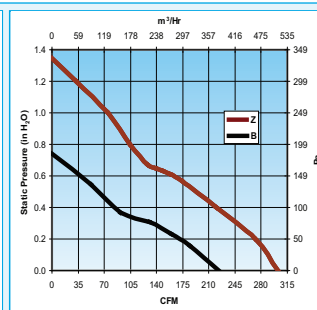
[www.comairrotron.com](http://www.comairrotron.com)

MODEL NAME (PREFIX)	Galaxy (GLD) Major XT (MJD) Major & Patriot (JQD / PQD)
SIZES	Galaxy 127 x 38 mm (5" x 1.5") Major XT 172 x 38 mm (6.75" x 1.5") Major & Patriot 172 x 51 mm (6.75" x 2")
BEARING SYSTEM	Ball Bearing
NOMINAL VOLTAGE	24, 48 VDC
OPERATING TEMP	-40° to +85° C
STORAGE TEMP	-55° to + 90° C
WEIGHT	Galaxy 620 g (1.38 lbs) Major XT 700 g (1.54 lbs) Major & Patriot 840 g (1.84 lbs)
POWER	Galaxy 15 Watts (B Speed) 30 Watts (Z Speed) Major XT 21 Watts (B Speed) 42 Watts (Z Speed) Major & Patriot 24 Watts (B Speed) 32 Watts (Z Speed)
NOISE	Galaxy 54 dBA (B Speed) 66 dBA (Z Speed) Major XT 56 dBA (B Speed) 60 dBA (Z Speed) Major & Patriot 54 dBA (B Speed) 60 dBA (Z Speed)

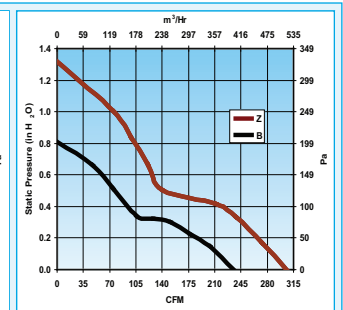
GALAXY



MAJOR XT



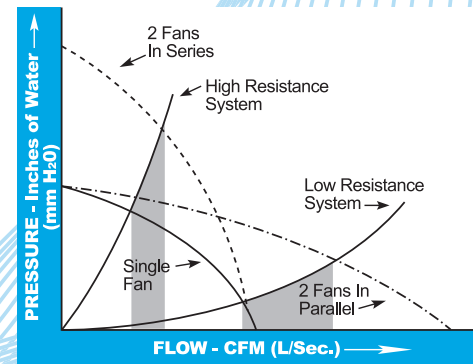
MAJOR and PATRIOT



For military applications requiring performance and durability that can't be found in standard commercial air movers Comair Rotron has developed a line of rugged fans able to handle the punishment found in many harsher environments. The Galaxy (127 x 38 mm) as well as Major and Patriot (172 x 51 mm) fans have motor encasement that offers both environmental protection as well as improvement to shock and vibration capability. In addition, materials used in construction of these fans are highly resistant to chemicals and corrosion. Further, to enhance the performance of these fans, the windings have been reconfigured to one continuous winding that can be energized with current flow in either direction. This means the motor is utilized to its full capacity when driving the fan. These fans also contain a microprocessor based driver circuit that allows for more precision in motor control. The result of all these improvements are fans with the durability and versatility needed for applications working under harsh conditions.

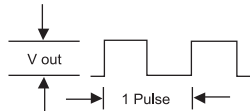
## Application Tips

- Tube axial fans are designed to provide a large amount of airflow in applications where the system impedance is limited. To limit the system impedance, airflow path should include the fewest number of turns and size reductions as possible. If a 90 degree turn is required, ensure there is an adequate plenum at the location of the turn to limit losses. Further, the inlet and outlet should be sized so they are at least 1.5 times of that of the fan.
- When an application calls for more than one tube axial fan, it must be determined if the air movers should be used in series or parallel. Parallel operation, fans located side by side, will increase the flow capabilities of the system. Series operation, fans, location back to back, will increase the pressure building capabilities.



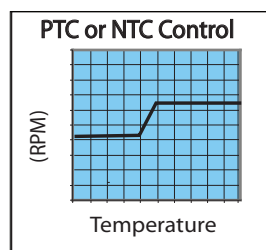
## Standard Features

- Chemical and Corrosion Resistant Construction
- "Enviroshield" Environmental Protection
- Locked Rotor Protection
- Overcurrent Protection
- Open Collector Tachometer



## Optional Features

- TTL Tachometer
- TTL or Open Collectors Rotation Alarms
- PTC or NTC Speed Control.



## Markets

The ruggedized Galaxy, Major, and Patriot ruggedized fans are ideal for any number of applications which require large volume air delivery in a harsh environment. Applications for these fans can typically be found in the following areas:

- COTS
- Heat Exchangers
- Outdoor Communications
- Power Supplies
- Industrial Equipment
- Transportaion