



SPECIFICATION SUBMITTAL DATA

JET XP CIP SERIES

APPLICATION

JET® Series Explosion Resistant blower systems are crafted for seamless installation on roof curbs, enabling efficient up-blast extraction. designed to operate in highly corrosive, hazardous, and explosive atmospheric air applications such as: Laboratories, Chemical / Pharmaceutical Industries, Wastewater Treatment Plants, Petroleum Industries, EV Industries, Aquatic Industries, Costal Hotel / Resort Industries, etc...

MANUFACTURER

JET® Series Explosion Resistant blower systems shall be manufactured under the authority of PLASTEC Ventilation, Inc. located in Bradenton, Florida.

HOUSING AND CONE COVER (CARBON FIBER IMPREGNATED POLYPROPYLENE – CIP)

The housing is manufactured from a robust high-density UV treated carbon fiber impregnated polypropylene (CIP) Spark “A” compliant composite material to ensure superior corrosion and flame resistance. Constructed as a single seamless piece, either blow molded or injection molded, to prevent any gas or fume leakage. Split molded housings are not permitted. Housing comes with high-grade stainless-steel hardware, which supports the carbon fiber impregnated polypropylene (CIP) motor plate to the housing securely. Cone cover, curb pcp, and exhaust manifold system also constructed from carbon fiber impregnated polypropylene (CIP) composite material as single pieces, ensuring a cohesive and reliable design. The motor is located within the cone cover, fully protected from outdoor elements, and it is wired to a factory installed Explosion Resistant disconnect switch for ease and safe operations. JET® Series exhaust outlet manifold system is designed to create a high plume of exhaust airflow, maximizing the dilution of corrosive and flammable gases, thus enhancing safety and efficiency.

IMPELLER

The impeller shall be of forward-curved type, constructed of robust and uniformly infusion molded high-density carbon fiber impregnated polypropylene (CIP) Spark “A” compliant composite material. The impeller shall be both electronically and dynamically balanced. The blower impeller shall be equipped with a keyed motor hub bushing and O-ring sealed hubcap manufactured from carbon fiber impregnated polypropylene (CIP) material to fully safeguard the motor shaft end from any contact with corrosive gases and fumes. The impeller will be suitable for up to 3600RPM on models JET® 20, 25, and up to 1800RPM on model JET® 30. *(Option: High-grade stainless-steel impeller available for models JET® 20, 25, & 30 upon specific request)*

SUPPORT STRUCTURE

The JET® Series Explosion Resistant blower system is compatible with a durable and corrosion-resistant monolithic constructed galvanized aluminum flat roof fiberglass insulated roof curb. The roof curb features treated wood nailers, creating the ease of blower system installation.

CONDUCTIVE

The weather cone, housing, internal components, and accessories of the CIP JET® Series Explosion Resistant blower systems are manufactured from a carbon fiber impregnated polypropylene (CIP) composite material. This material exhibits electrical resistivity between $10^4\Omega$ and $10^6\Omega$, surpassing the recommended limit of $10^9\Omega$ ohms as outlined in many international standards. The highly conductive properties of the carbon fiber impregnated polypropylene (CIP) material ensure these blower systems are Spark “A” compliant, safeguarding operations in dangerous hazardous environments.

GROUNDING

For proper installation of CIP JET® Series Explosion Resistant blower systems, it is crucial to establish effective grounding through both the motor and the housing. All grounding procedures must comply with applicable local and state code regulations and requirements.

SPARK RESISTANT

The CIP JET® Series Explosion Resistant blower systems are manufactured from a carbon fiber impregnated polypropylene (CIP) composite material, without any ferrous material coming into contact within the potentially explosive airstream. This design complies with the stringent requirements as outlined in the AMCA Standard Classification for Spark Resistant Construction Fan (Spark “A”) compliance.

XP / ATEX

The JET® Series Explosion Resistant carbon fiber impregnated polypropylene (CIP) blower systems meet Declaration of Conformity for applications with explosive atmospheres as required.



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MOTORS

The motors shall be of high premium efficiency, direct drive, heavy-duty ball bearing type, suitable for continuous and/or inverter duty operations with multi-voltage capability. Explosion Proof Fan Cooled (XPFC) IP66 rated with a 1.15 safety factor. Motors will have an aluminum material construction with heatsink fins throughout, ensuring efficient cooling. PTC+PTO thermal electrical protection connections included. Rated as: Class I Division I motor. Motor features a high-strength high carbon steel shaft, which is electronically and dynamically balanced, specifically selected for continuous operations at indicated rated RPM on the nameplate. Includes an airtight seal around shaft on drive side to prevent any internal motor exposure. All motors comply with IEC, ANSI / UL, and CAN / CSA approval standards. *(Option: IEC Ex motors for applications requiring ATEX (International Standards for Explosive Atmospheric Conformity) motors available upon specific request)*

MATERIALS OF CONSTRUCTION TEMPERATURE LIMITATION

The carbon fiber impregnated polypropylene (CIP) housing and impeller are designed and approved for continuous operation within a temperature range of -40°F to 140°F. Also, capable of handling short periods of operations at high temperatures, up to 190°F, in 15-minute intervals.

PERFORMANCE

PLASTEC Ventilation, Inc. certifies that the PLASTEC® Series Explosion Resistant, JET® Series Explosion Resistant, and STORM® Series Explosion Resistant are licensed to bear the AMCA Seal. The ratings are based on the tests and procedures performed in accordance with AMCA publication 211 and 311 comply with the requirements of the AMCA CRP. Performance certified is for installation type D – Ducted inlet, Ducted outlet. The sound power level ratings shown are calculated per AMCA standard 301. Acoustic values shown are sound power levels for installation Type D: Ducted inlet, Ducted outlet. Ratings include the effects of duct end corrections.

WARRANTY

Plastec Ventilation, Inc. warrants its equipment, products, and parts, to be free from defects in workmanship and material under normal use and service for two years (2) after delivery to the first user. Motors carry a one-year (1) warranty. *(See full warranty available in the Installation, Operation & Maintenance Manual)*