

KDE DIRECT XF GENERATION 3 BRUSHLESS MOTOR SERIES TECHNOLOGY REVIEW

INDUSTRY-LEADING PERFORMANCE

Magnetic field simulation and years of field testing utilized to optimize power-output efficiency and torque-curves for single-rotor specific applications. The new XF Generation 3 Brushless Motor Series produce industry-leading performance and are built to the highest-quality standards and manufacturing technologies available; including proprietary techniques never before introduced.



UNIVERSAL MOUNTING PATTERN

All XF Gen3 Series motors have dual-mounting hole patterns for easy installation into all helicopter brands and standard single-rotor motor mounts. In addition, all XF Gen3 versions are high-grade, Japanese brand quad-bearing supported for exceptional durability and vibration-free, smooth operation.



OPTIMIZED STATOR CONSTRUCTION

Stator construction uses the highest-grade, 0.2 mm silicon steel laminations and military-spec, Polyimide ultra-high temperature (240°C/464°F) windings for optimum efficiency and power transfer. Permanent bond to the stator is achieved with a Kevlar-tie wrap around all stator teeth and vacuum-pulled epoxy coating to reduce chance of winding failures.



MAGNET BELL CONSTRUCTION

All XF Gen3 Series motors use true-grade, ultra-high temperature rated N45UH Neodymium sintered-magnets (10-Pole, 85% magnetic surface coverage) for industry-leading performance. An upper CNC-machined magnet retaining ring, dedicated slots, and 360° epoxy bonds are incorporated at each magnet location to secure a permanent connection to the motor housing for unparalleled, failure-free operation.



HIGH-VOLUME CENTRIFUGAL FAN

The XF Gen3 Fan design is further optimized for high-volume airflow at minimal amperage-draw; providing a cool-running, 3D competition-ready motor, even under the hardest and most demanding flying styles and weather conditions. Through computer-aided analysis, peak efficiencies were maintained by optimizing the airflow requirements.



SILICON-WIRE POWER LEADS

High-temperature (200°C/392°F), silicon-wire power leads come pre-soldered with 24K male bullet connectors and rubber exit-wire gasket protection for easy installation.