Refrigeration Compressor Housings

Low pressure die casting parts

Anhui Gaojian's aluminum alloy refrigeration compressor housings are precision-engineered to meet the core demands of high-performance cooling systems: unwavering reliability, superior sealing, and long-term structural integrity.

Superior Low-Pressure Casting

Crafted with advanced low-pressure casting technology, we ensure a calm and controlled mold filling process. This results in a housing with a exceptionally dense and uniform microstructure, significantly reducing defects like porosity and shrinkage. The outcome is an ideal balance of lightweight construction and robust structural strength.

Complex Cavity Precision with Sand-Core Technology

To meet the multi-chamber requirements of modern compressors, we utilize high-quality resin-coated sand cores. This technology allows us to accurately form intricate internal passages, guaranteeing dimensional accuracy and superior sealing between chambers. Our housings deliver on the core promise of being leak-proof and highly pressure-resistant, effectively preventing refrigerant loss even under sustained high-pressure conditions.

Enhanced Performance with T6 Heat Treatment

Every housing undergoes a specialized T6 heat treatment cycle (solution heat treatment and artificial aging). This critical process significantly enhances the aluminum's tensile strength, yield strength, and hardness, while also improving toughness and dimensional stability. This ensures the housing resists deformation and maintains peak performance under the stresses of long-term thermal cycling and high-frequency vibration.

Certified Quality & Global Compliance

We hold our products to the highest standards. All key performance metrics — including mechanical properties, corrosion resistance, and dimensional precision — are rigorously tested and fully comply with stringent European norms. This guarantees a product that meets international leading standards, making it the perfect, reliable choice for high-end refrigeration equipment worldwide.

Low-Pressure Casting； Leak-Proof； High Strength； Long-Term Reliability