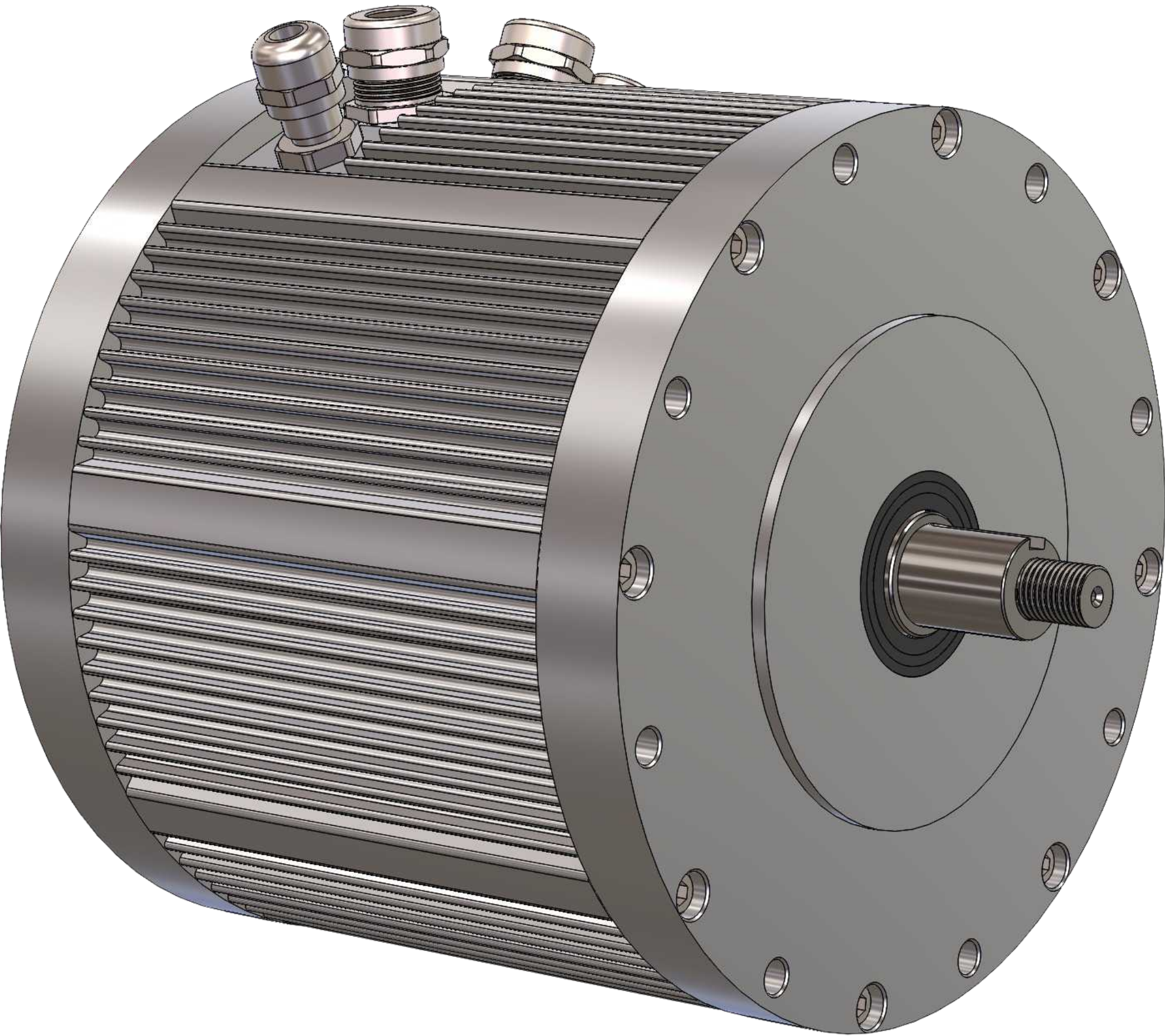


SGK40 65H Motor

Electric Performance Motor

HIGH-EFFICIENCY EV DRIVE MOTOR



VOLTAGE

72–120 V

PEAK POWER

40 kW

PEAK TORQUE

70 Nm

EFFICIENCY

≥94%

PERFORMANCE OVERVIEW

System Capabilities

VOLTAGE RANGE

72–120 V

PEAK POWER

40 kW (53 HP)

PEAK TORQUE

70 N·m

MAX PHASE CURRENT

700 A_{peak}

MAX EFFICIENCY

≥94%

MAX STABLE SPEED

7500 RPM

APPLICATION NOTE

The 160 65H Motor is engineered specifically for high-performance electric vehicle powertrains requiring sustained torque density and thermal stability. Its internal permanent magnet (IPM) architecture allows for extended field-weakening operation, making it suitable for both high-torque acceleration and high-speed cruising in light-to-medium weight EV platforms.

TECHNICAL DATA

Specifications

ELECTRICAL SPECIFICATIONS

Peak Power @ 84V	42 kW
Phase Resistance	~1.5 mΩ
Phase Wire Terminal	35 mm ² (M6 Hole)

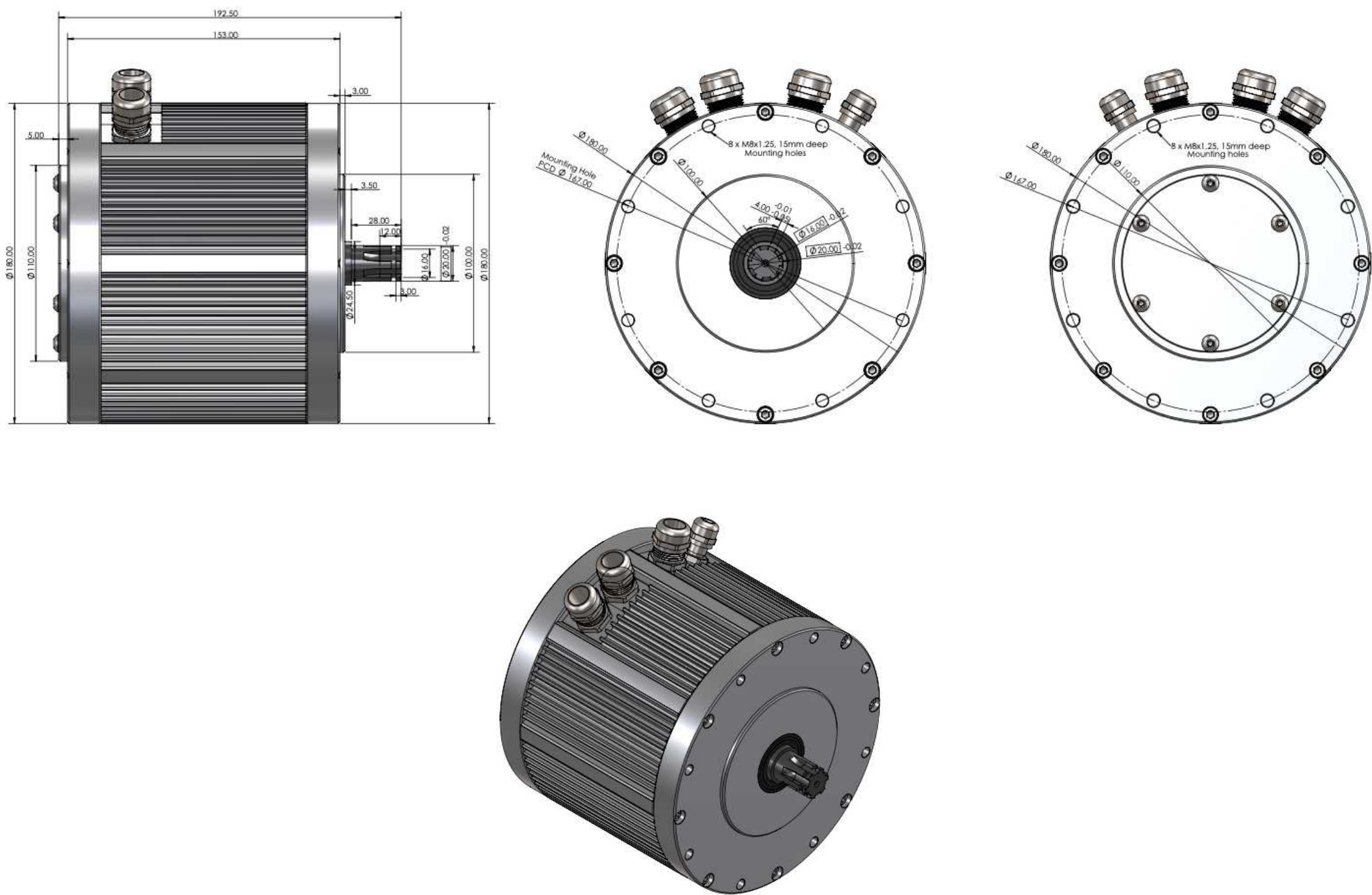
MECHANICAL SPECIFICATIONS

Shaft Diameter	20 mm
Shaft Material	20MnCr5 Steel Alloy
Bearing Type	SKF Sealed Deep Groove
Pole Pairs	5
Waterproof Rating	IP67

INTEGRATION

Mechanical images

SGK40 - 65H MOTOR DIMENSIONS



RELIABILITY & DURABILITY

BEARING SYSTEM

SKF rubber-sealed bearings for smooth high-speed operation.

WINDING INTEGRITY

Infinity winding technology eliminates internal solder joints at end-turns, reducing failure points and resistance.

STRUCTURAL

Shock-resistant housing design capable of maintaining stator alignment under high torque loads.

OPERATION

Stable operation verified under sustained high torque and RPM cycling conditions.

DISCLAIMER

The information provided in this datasheet is for reference purposes only and describes the typical performance of the product. 3Shul Motors reserves the right to modify specifications, materials, or designs at any time without prior notice to improve performance, reliability, or manufacturability. It is the responsibility of the system integrator to ensure the motor is suitable for the intended application and is operated within the specified limits. Damage resulting from exceeding these limits is not covered under warranty.