

AXXMM3



PRODUCT DATA SHEET

Overview

With unmatched continuous power and torque density, our next-generation axial flux technology is the best choice for the automotive, marine, heavy machinery, and aerospace EVs of the future.

Why Beyond Motors?

1 SUPERIOR STRENGTH AND DURABILITY

Engineered to cope with high mechanical loads and work in the most robust applications.

2 UNMATCHABLE CONTINUOUS POWER DENSITY

The best continuous power-to-weight ratio on the market.

3 PATENT PENDING WATER COOLING SYSTEM

High heat extraction from the motor enables high efficiency, high continuous power and torque.

4 STACKABLE DESIGN FOR UP TO 3 FULL MOTORS

Motor design offers a quick and simple solution to multiply the power up to 3 times with the same diameter.

Key Data Points

AXM3

Peak power **260 kW**

Continuous power **155 kW**

Peak torque **545Nm**

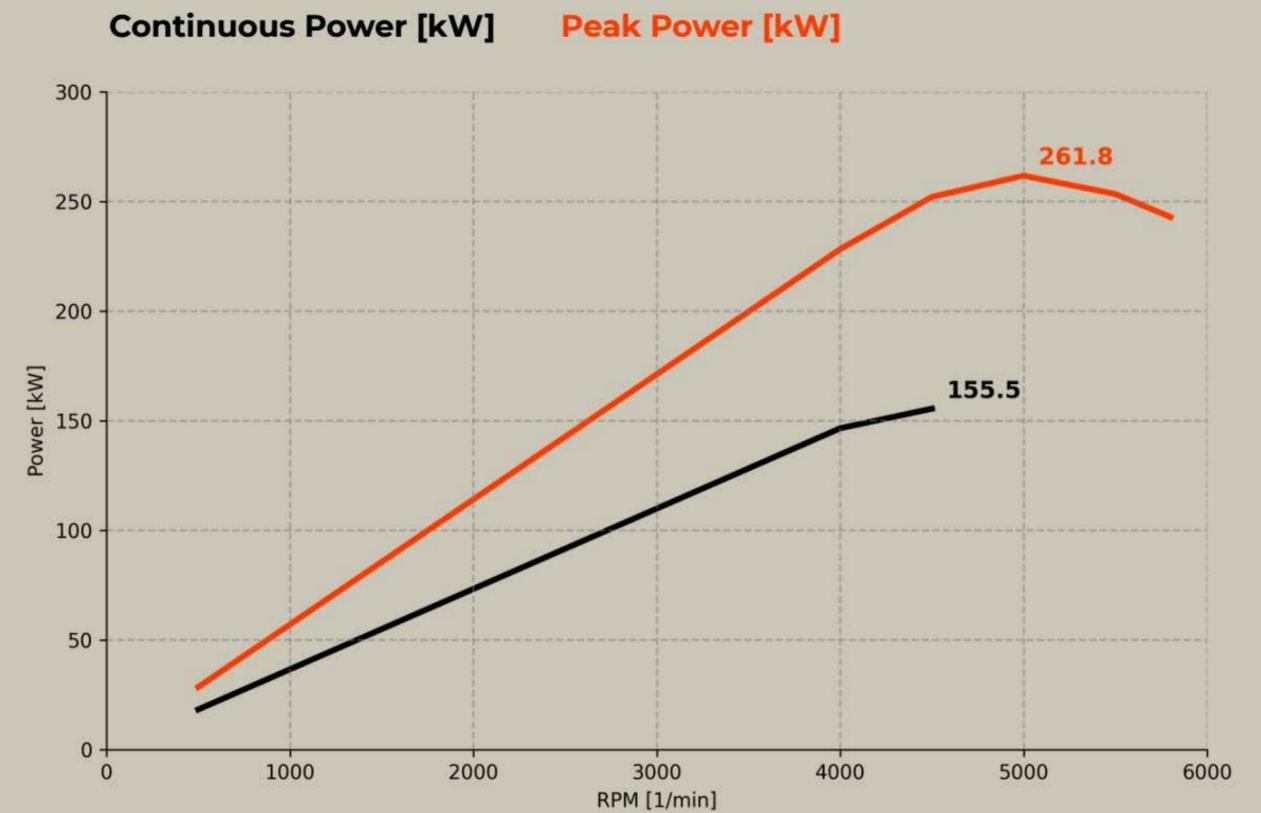
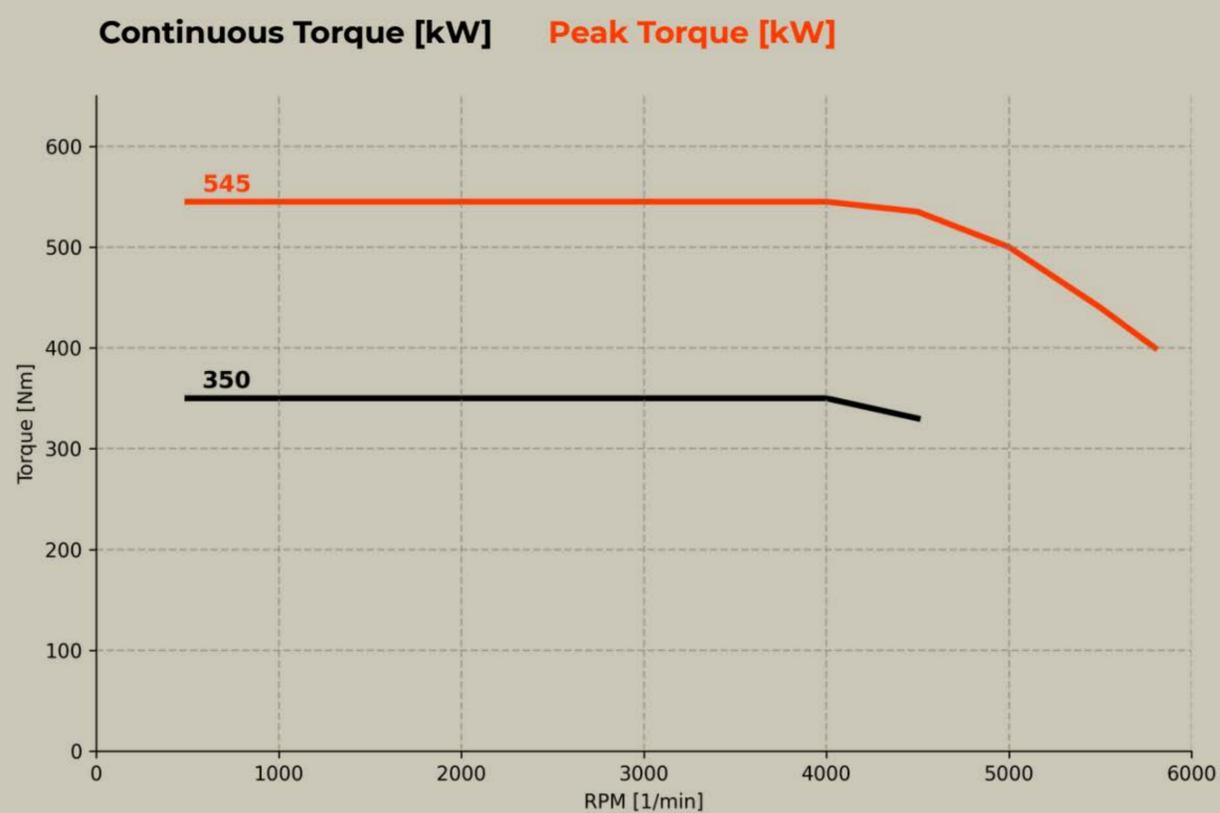
Continuous torque **350 Nm**

Mass **28,6 kg**

Stator cooling **Water cooling**

Maximum speed **5800 RPM**

Stacking option **Up to 3**



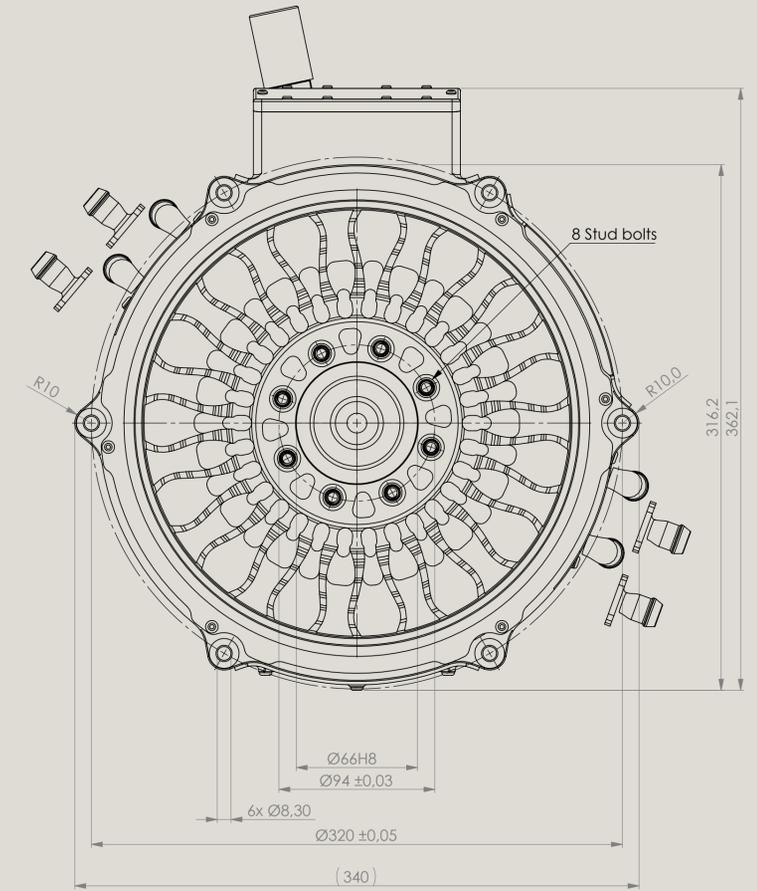
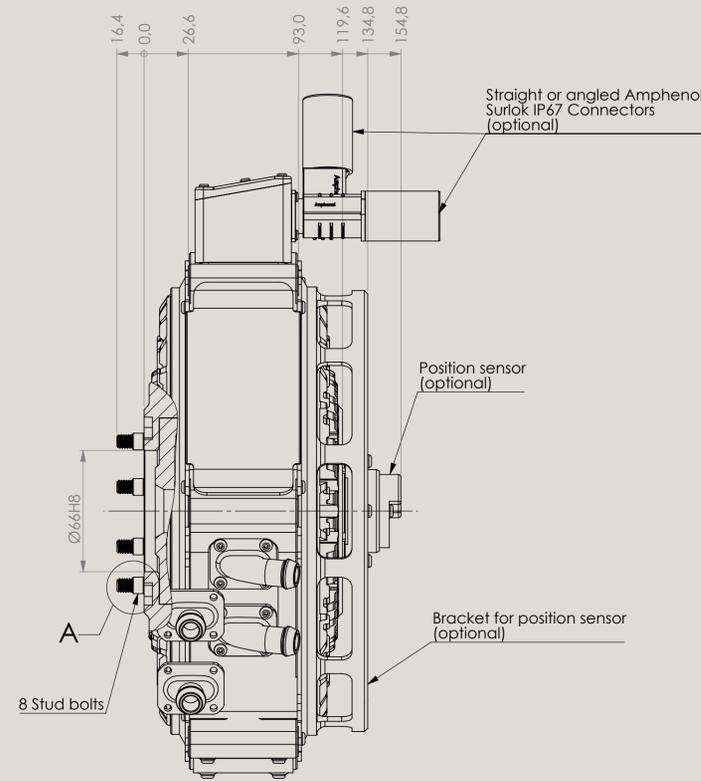
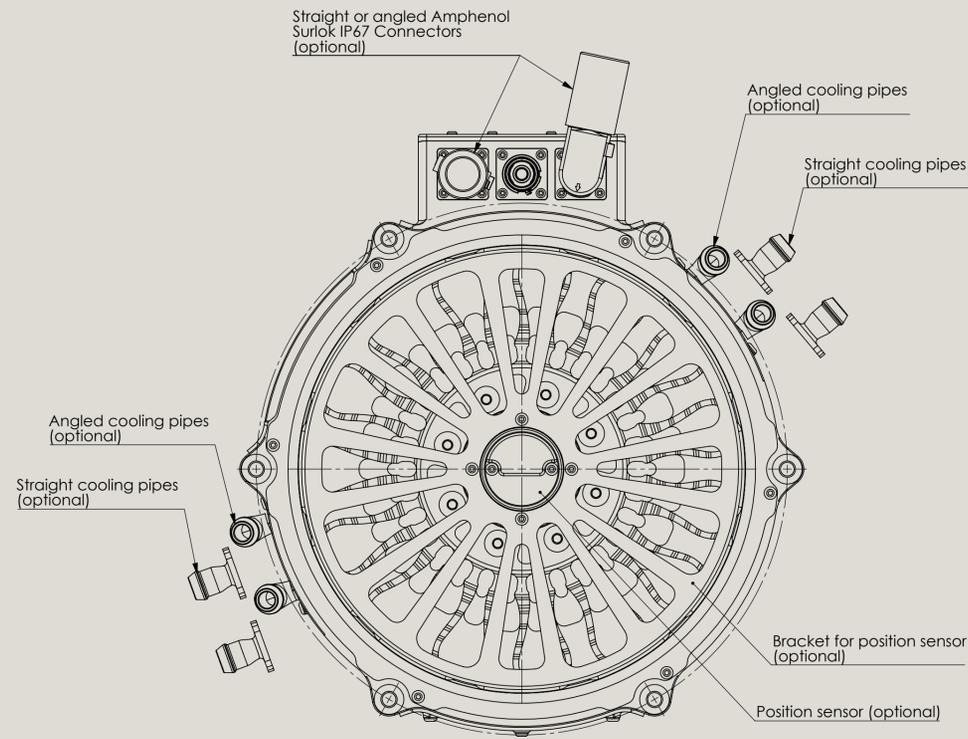
All motors can be made with redundancy option - 2xUVW phase connectors. Phase connectors can be cable lugs (standard option) or EMI IP67 Amphenol connectors (additional option).

Extended Data Sheet

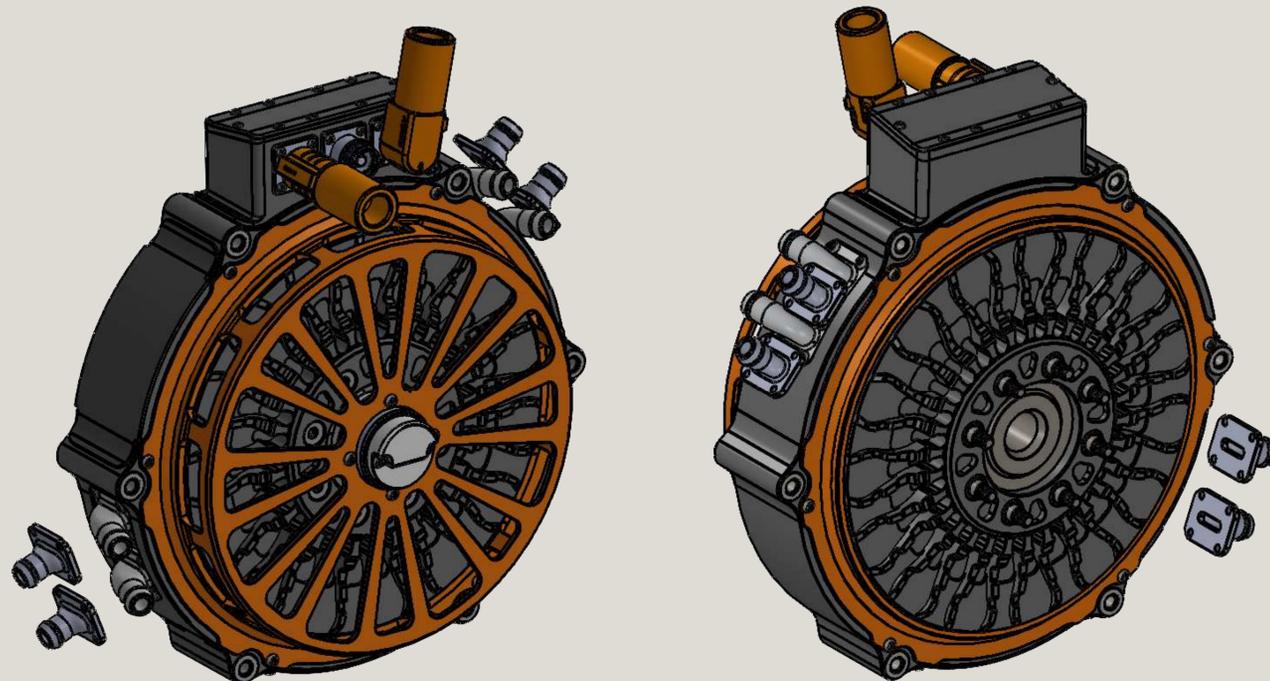
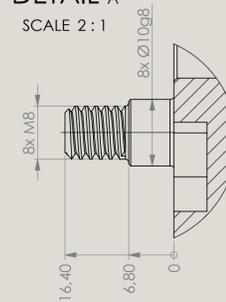
AXM3

Winding type	HIGH Voltage (800Vdc)	MEDIUM Voltage (550Vdc)	LOW Voltage (400Vdc)
Peak power	260 kW	260 kW	260kW
Continuous power	155 kW	155 kW	155 kW
Peak torque	545 Nm	545 Nm	545 Nm
Continuous torque	350 Nm	350 Nm	350 Nm
Maximum motor speed	5800 RPM	5800 RPM	5800 RPM
Continuous motor speed	4000 RPM	4000 RPM	4000 RPM
Weight	28,6 kg	28,6 kg	28,6 kg
Kv at no load	8.3	12	16.3
Kv at continuous torque	6.5	9.5	12.9
Kv at peak torque	5.8	8.4	11.45
Torque constant	1,22 Nm/Arms	0,84 Nm/Arms	0,62 Nm/Arms
Motor type	3-phase AC PM Nm/Arms	3-phase AC PM Nm/Arms	3-phase AC PM Nm/Arms





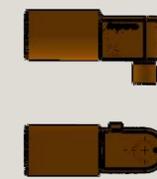
DETAIL A
SCALE 2:1



Amphenol EMC IP67 straight connectors



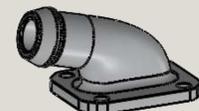
Amphenol EMC IP67 angled connectors



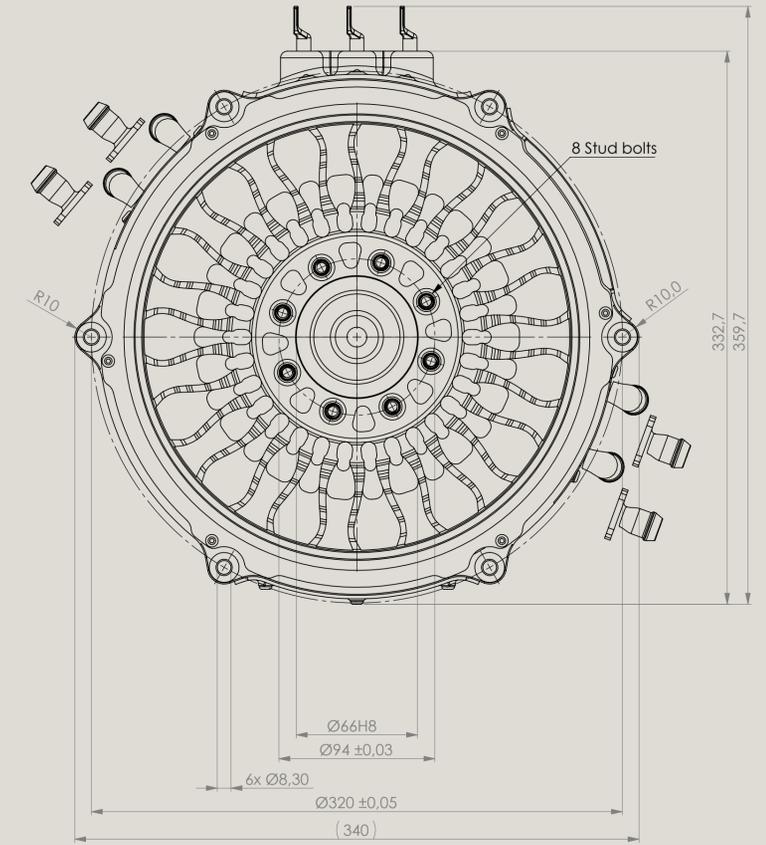
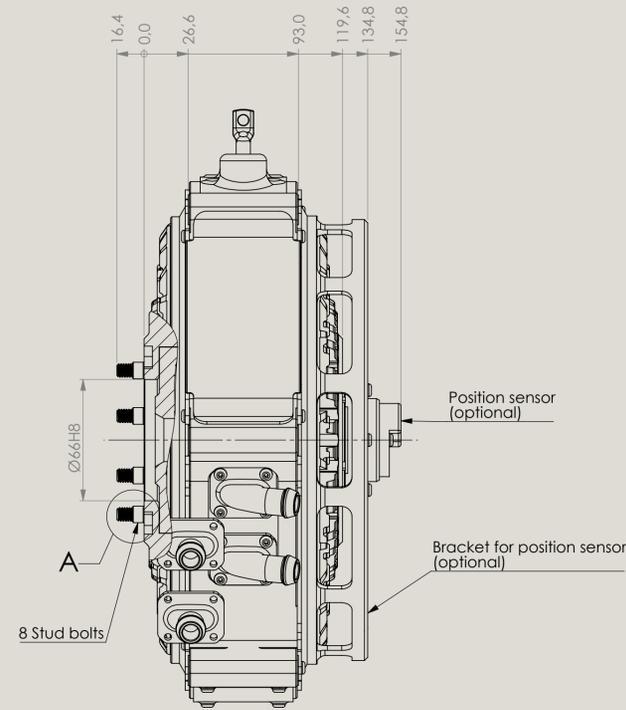
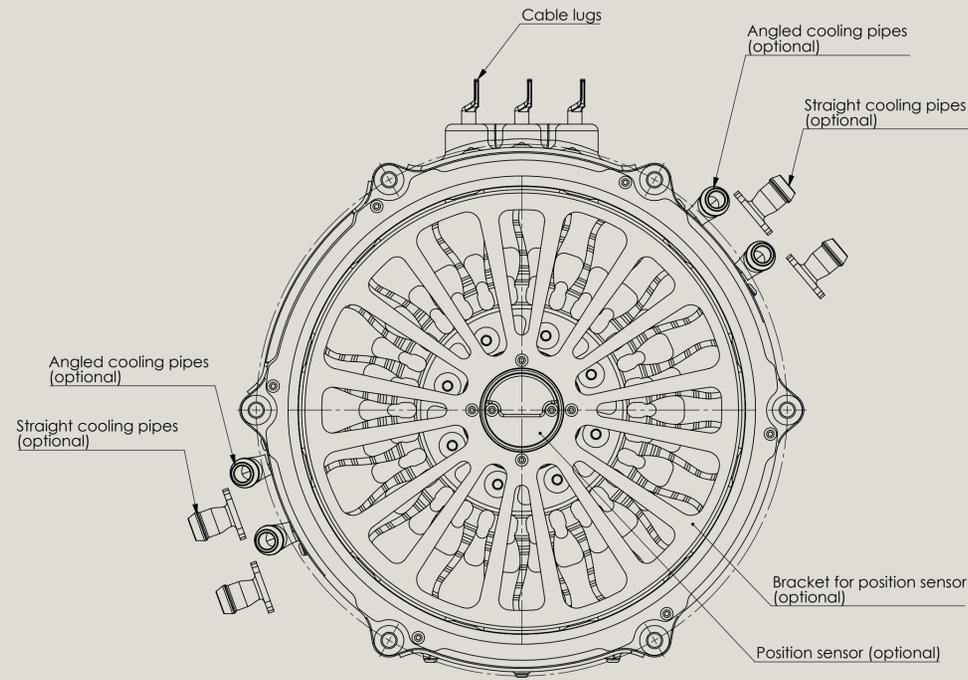
Straight cooling pipe



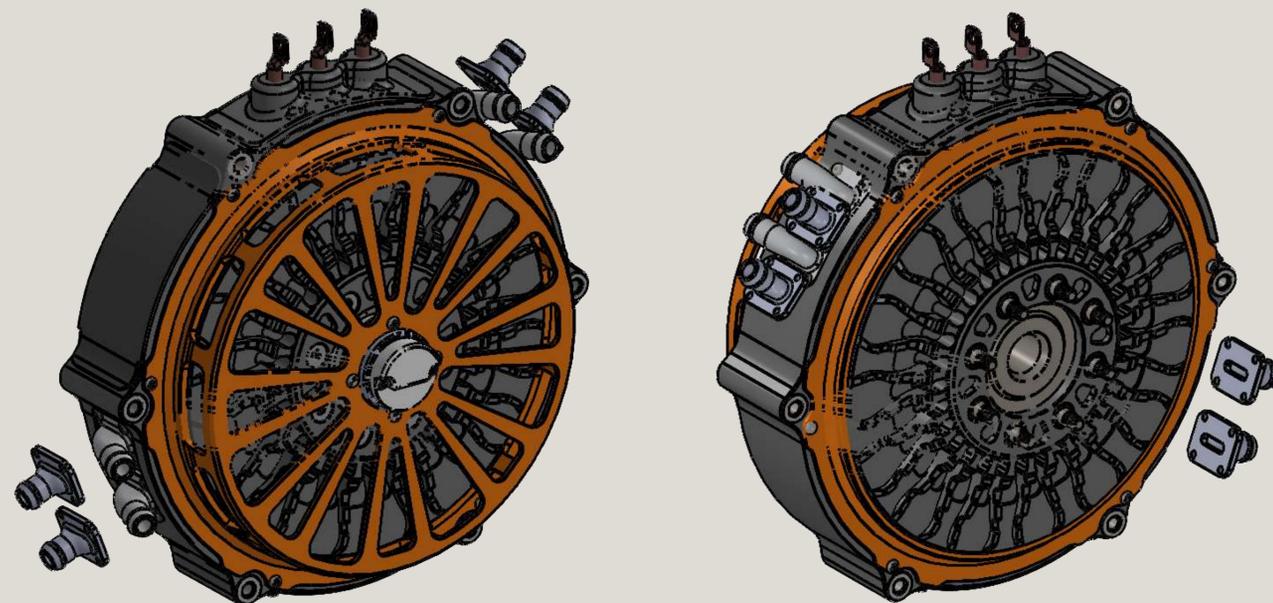
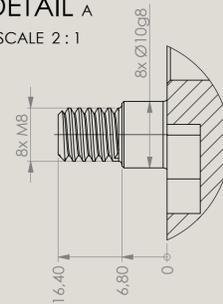
Angled cooling pipe



BEYOND MOTORS
AXM3



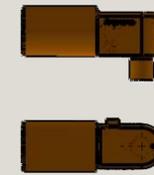
DETAIL A
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Amphenol EMC IP67
straight connectors



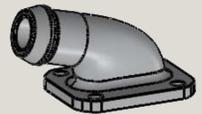
Amphenol EMC IP67
angled connectors



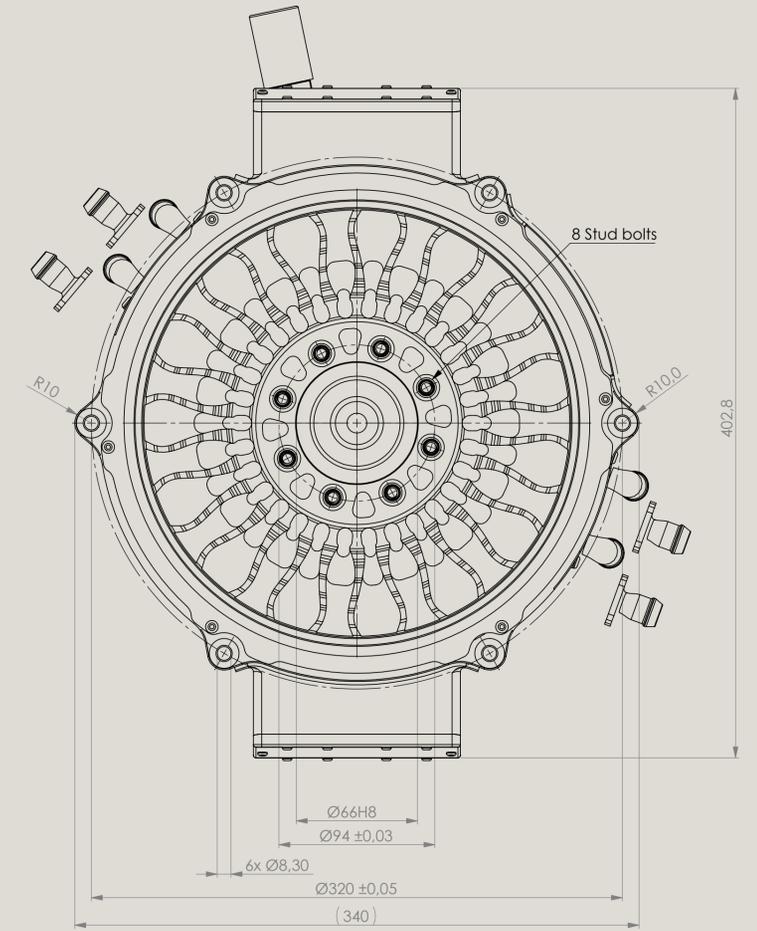
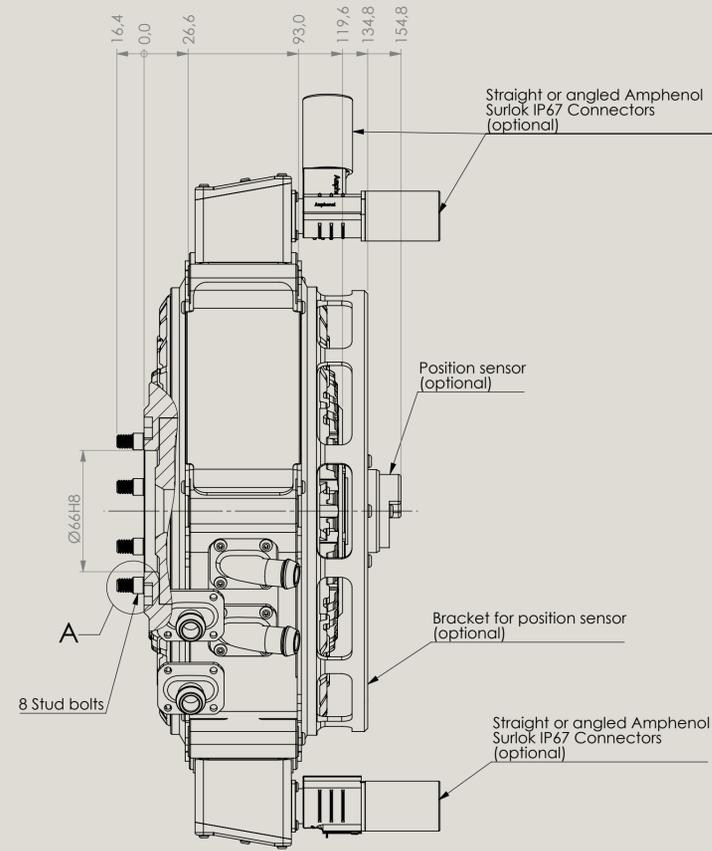
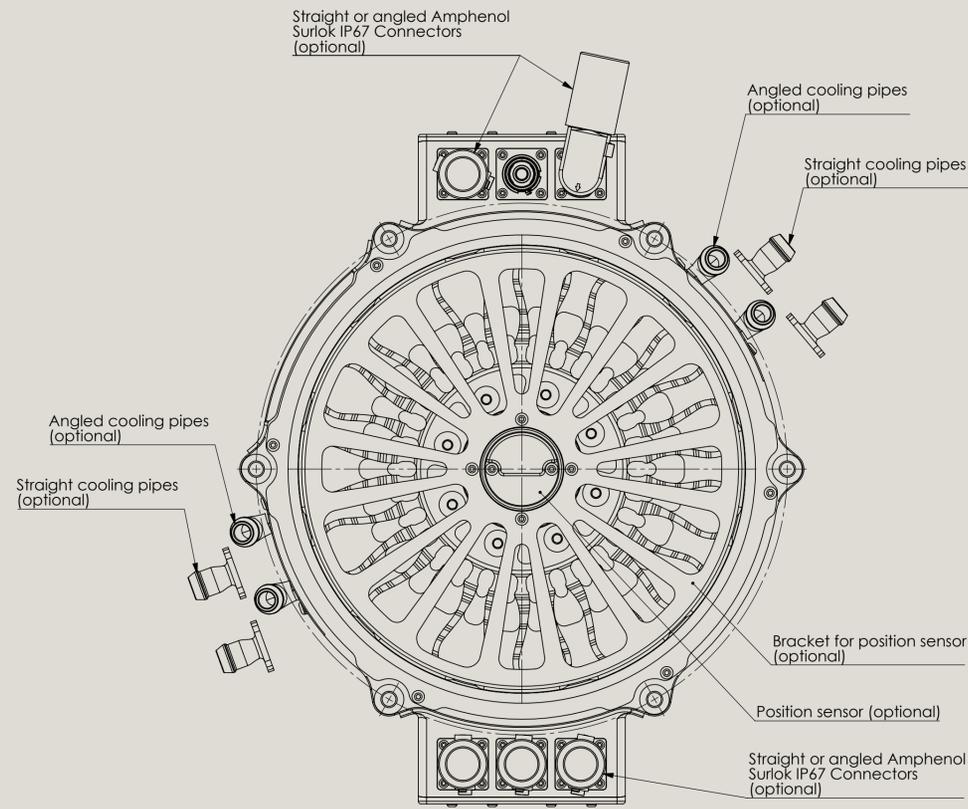
Straight cooling pipe



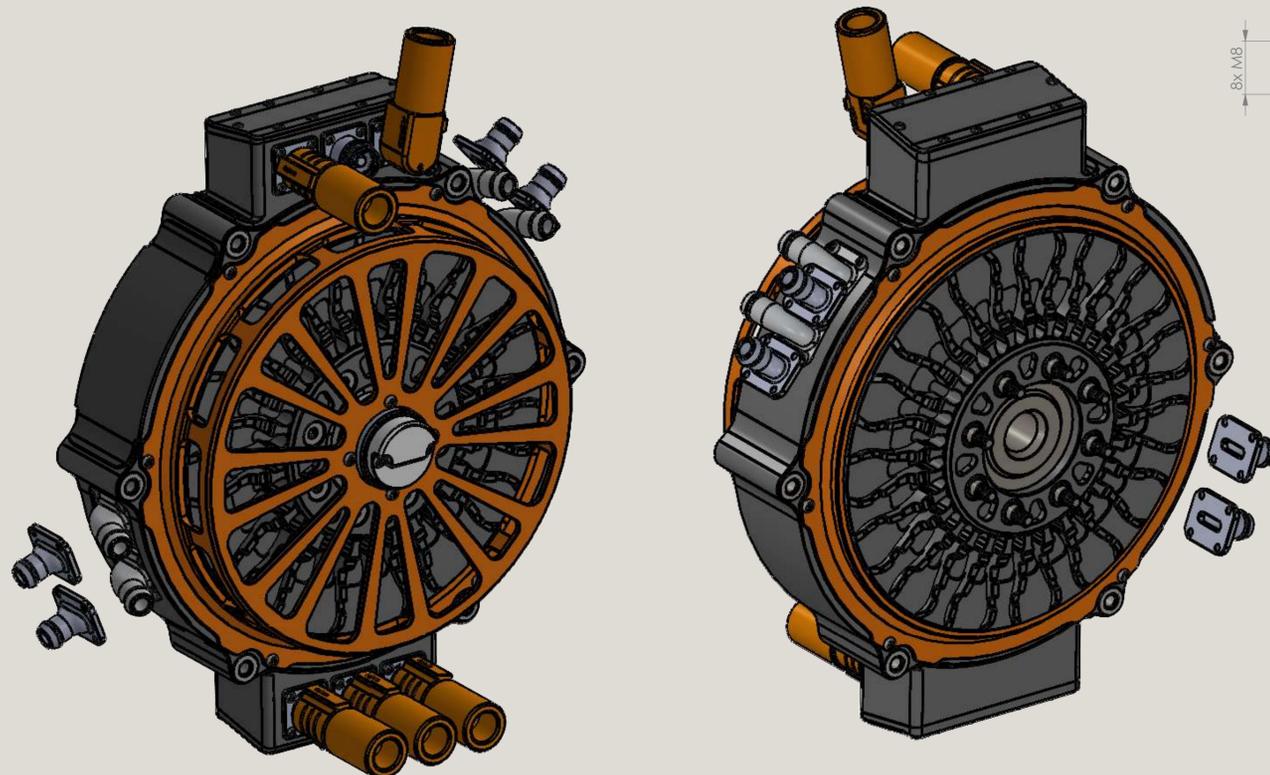
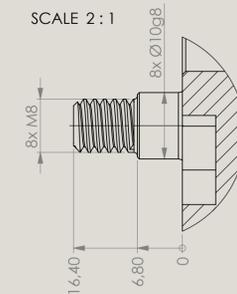
Angled cooling pipe



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AXM3
Cable lugs



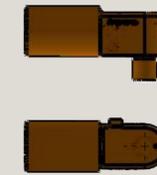
DETAIL A
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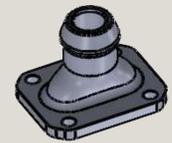
Amphenol EMC IP67 straight connectors



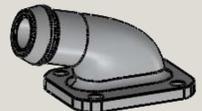
Amphenol EMC IP67 angled connectors



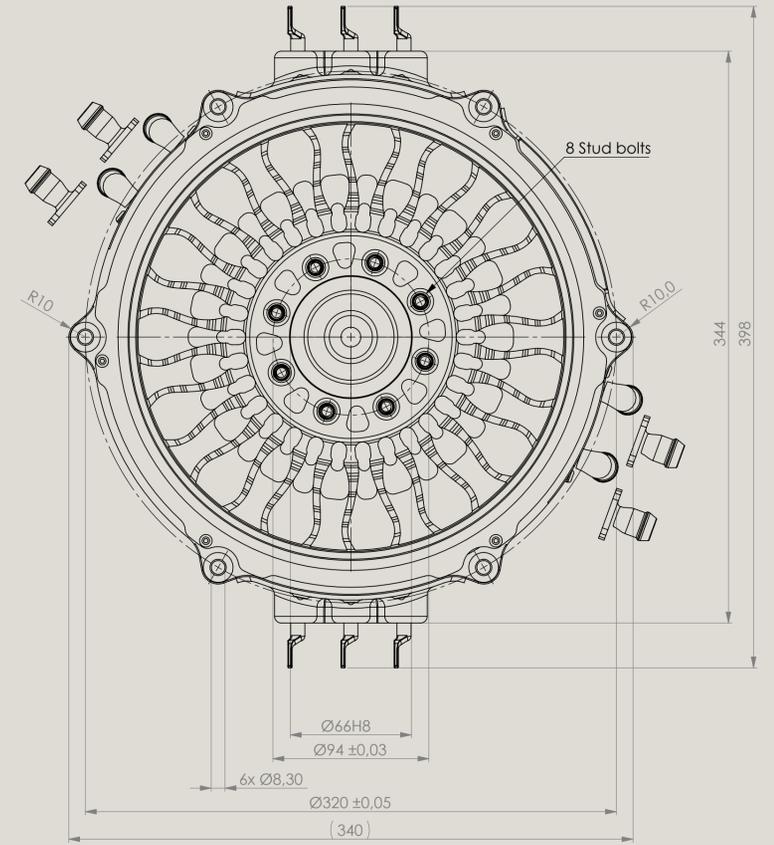
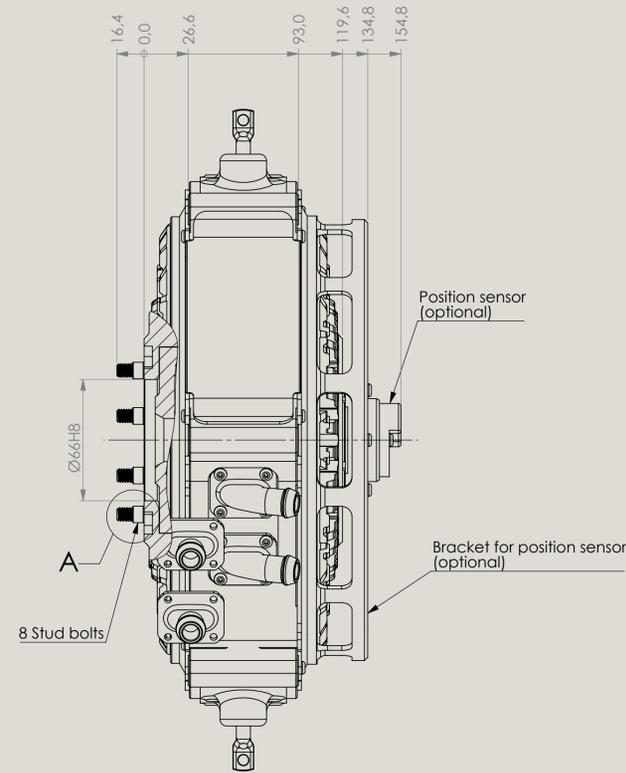
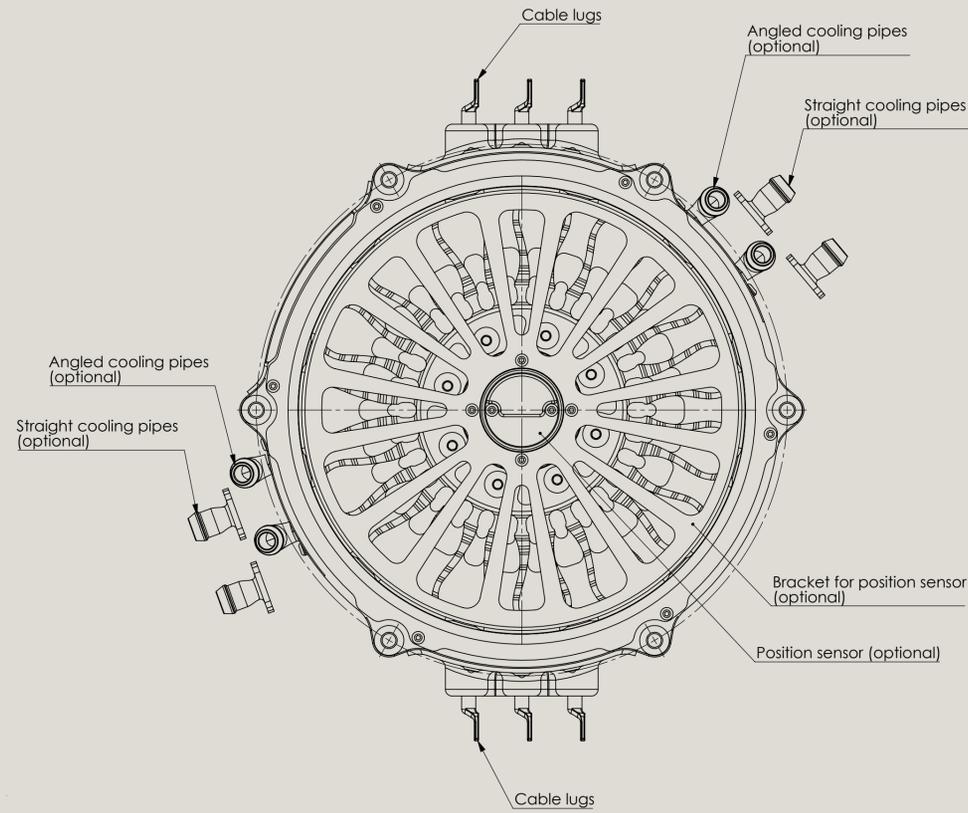
Straight cooling pipe



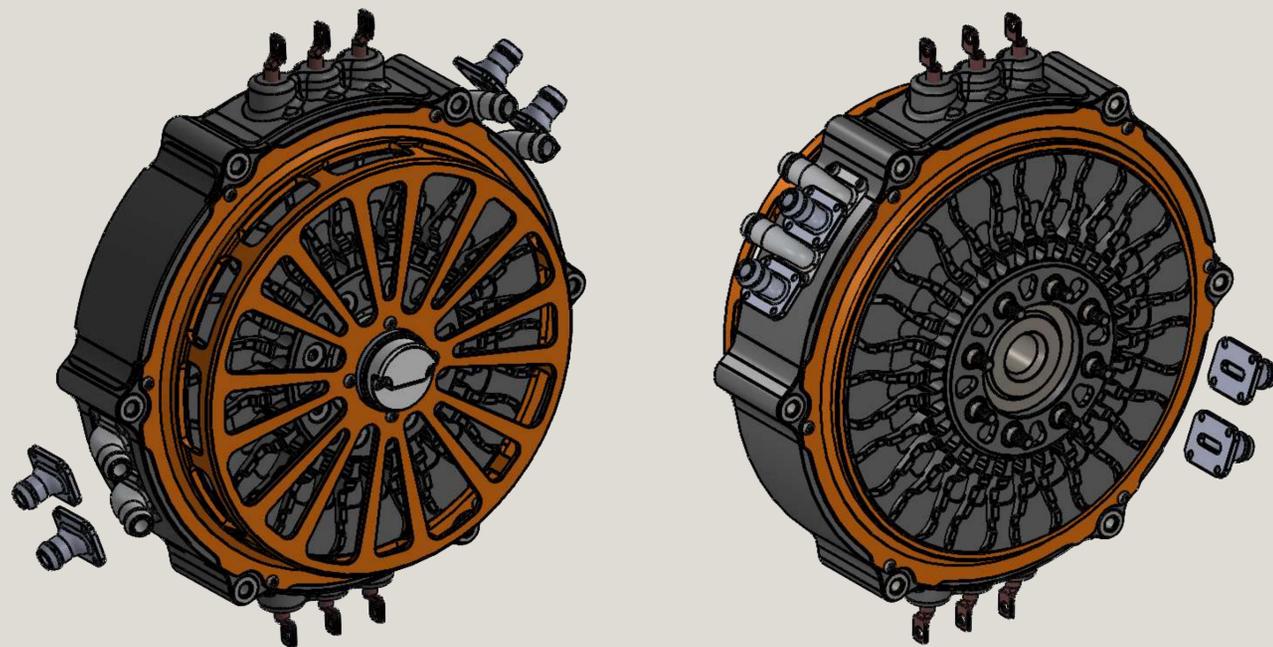
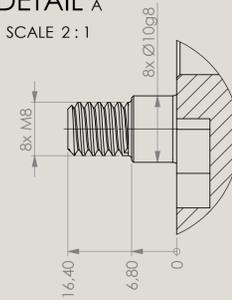
Angled cooling pipe



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2xUVW



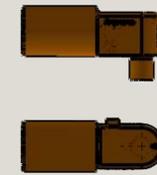
DETAIL A
SCALE 2 : 1



Amphenol EMC IP67 straight connectors



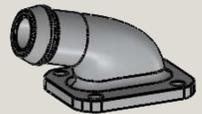
Amphenol EMC IP67 angled connectors



Straight cooling pipe



Angled cooling pipe



BEYOND MOTORS
AXM3
Cable lugs 2xUVW

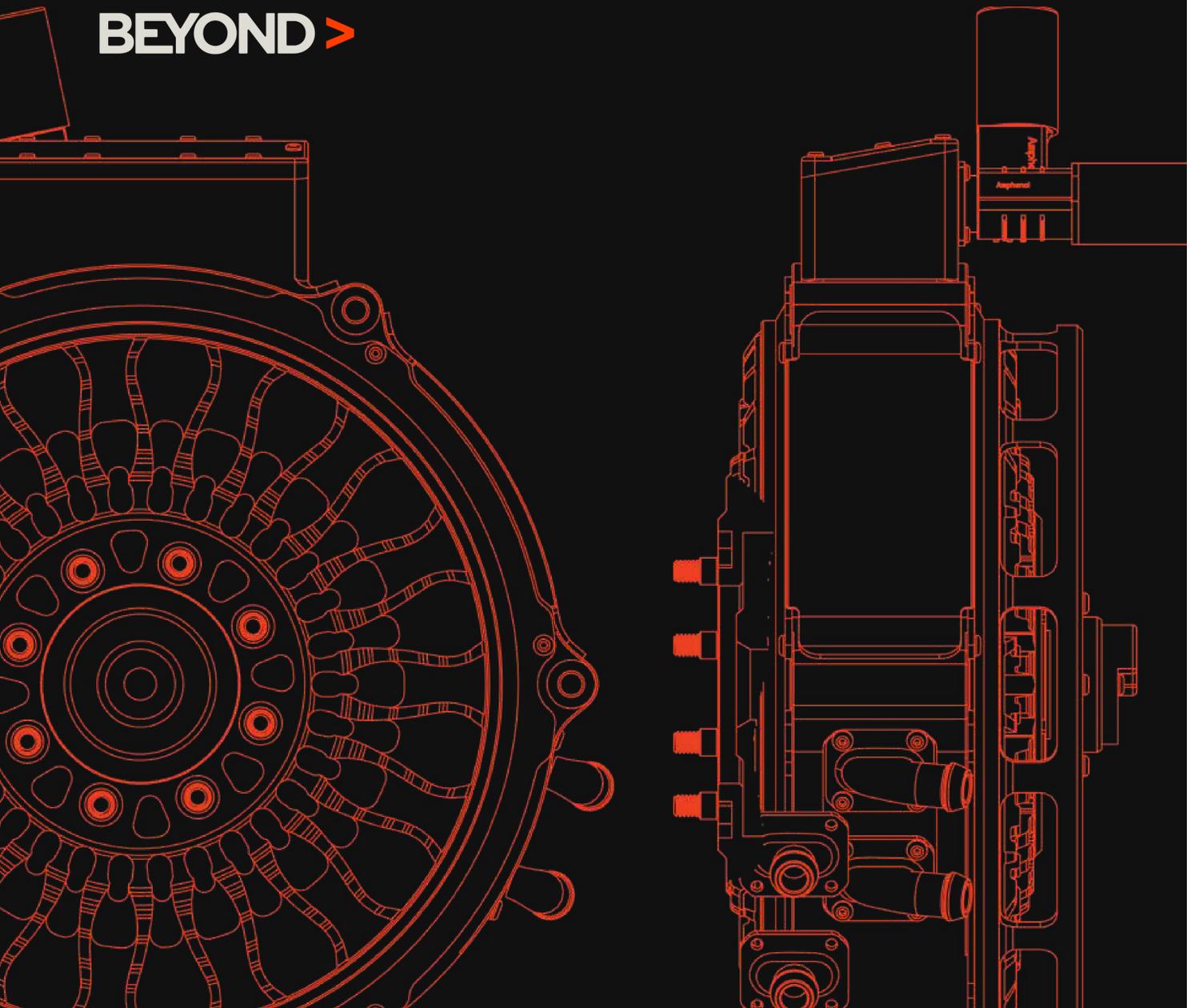
NEED MORE INFORMATION?

For additional product information or other questions, please contact us at info@beyondmotors.io or schedule a call with us through the [following link](#).

BEYONDMOTORS.IO

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BEYOND >



Other Models

AXM2

P_{peak} **135 kW**

P_{cont} **85 kW**

Mass **15,1 kg**

[See full Data Sheet →](#)



AXM4

P_{peak} **430 kW**

P_{cont} **240 kW**

Mass **51,1 kg**

[See full Data Sheet →](#)



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