

AAKM2



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

AXM2

Peak power **135 kW**

Continuous power **85 kW**

Peak torque **200 Nm**

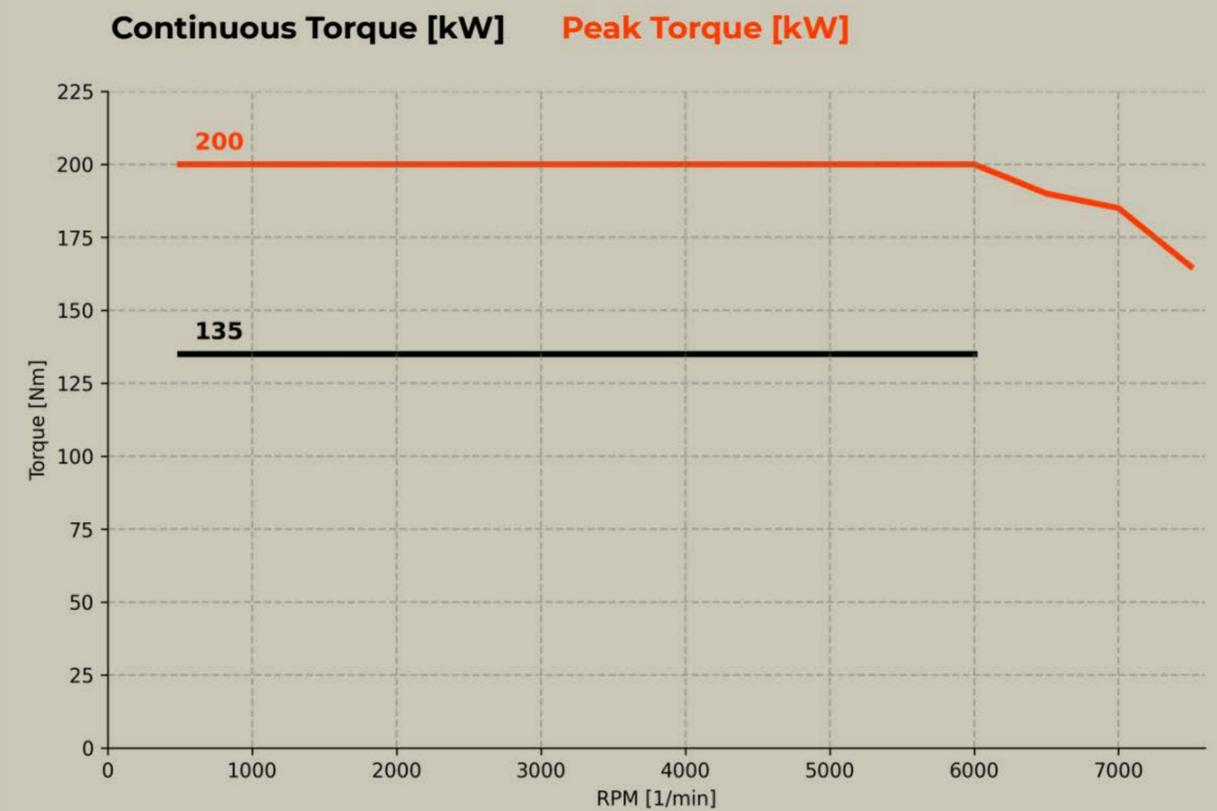
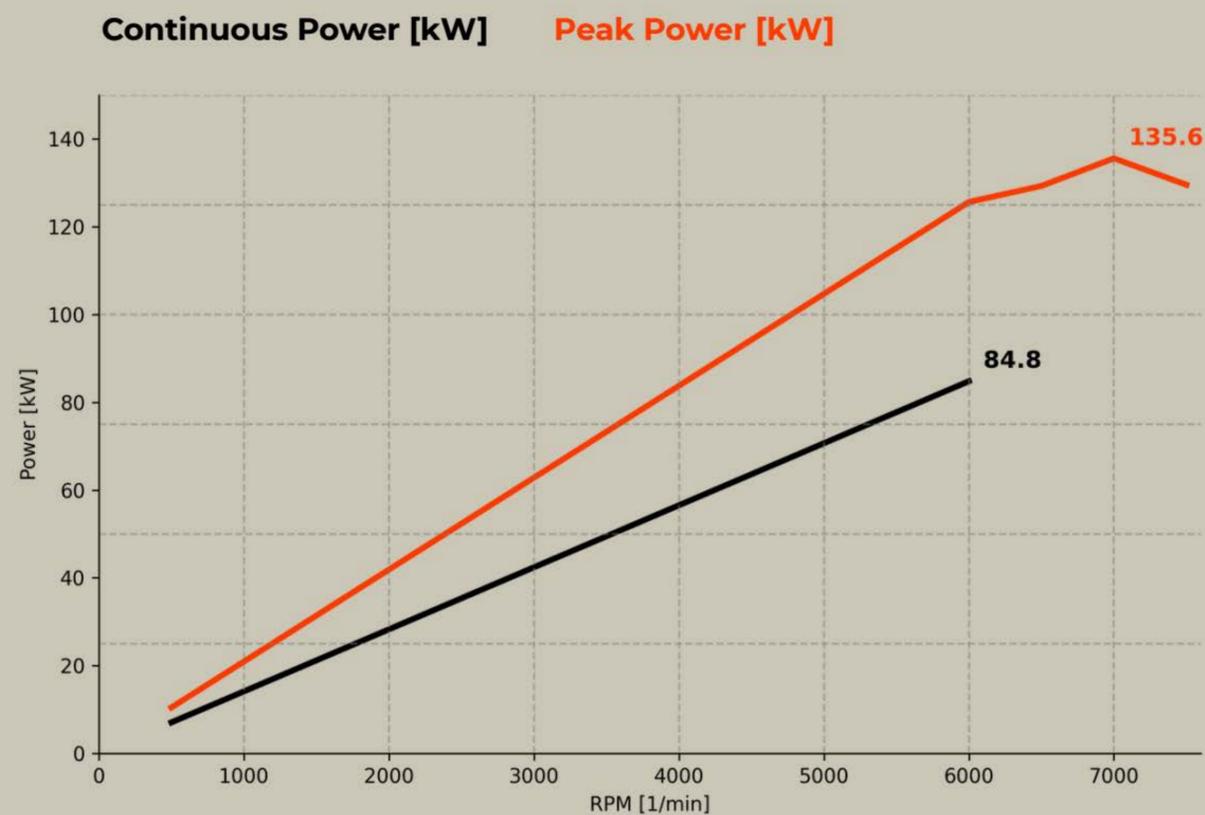
Continuous torque **135Nm**

Mass **15,1 kg**

Stator cooling **Water cooling**

Maximum speed **7500 RPM**

Stacking option **Up to 3**



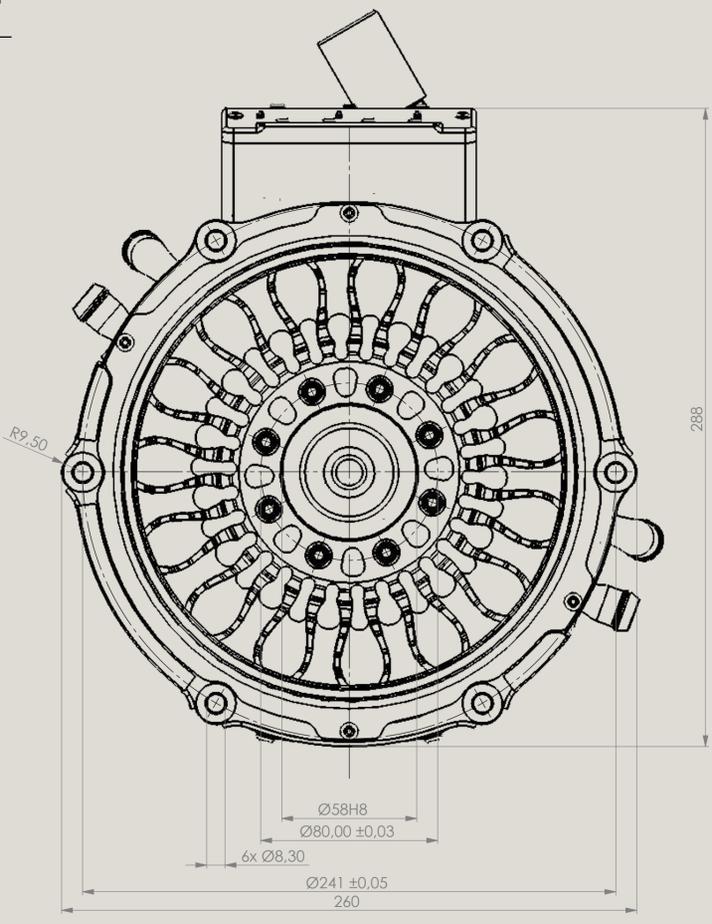
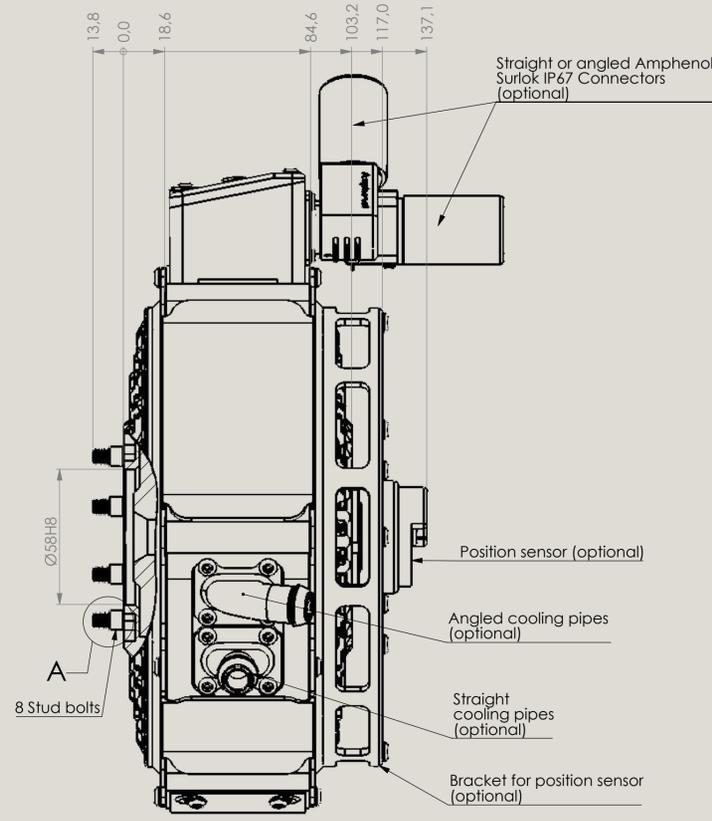
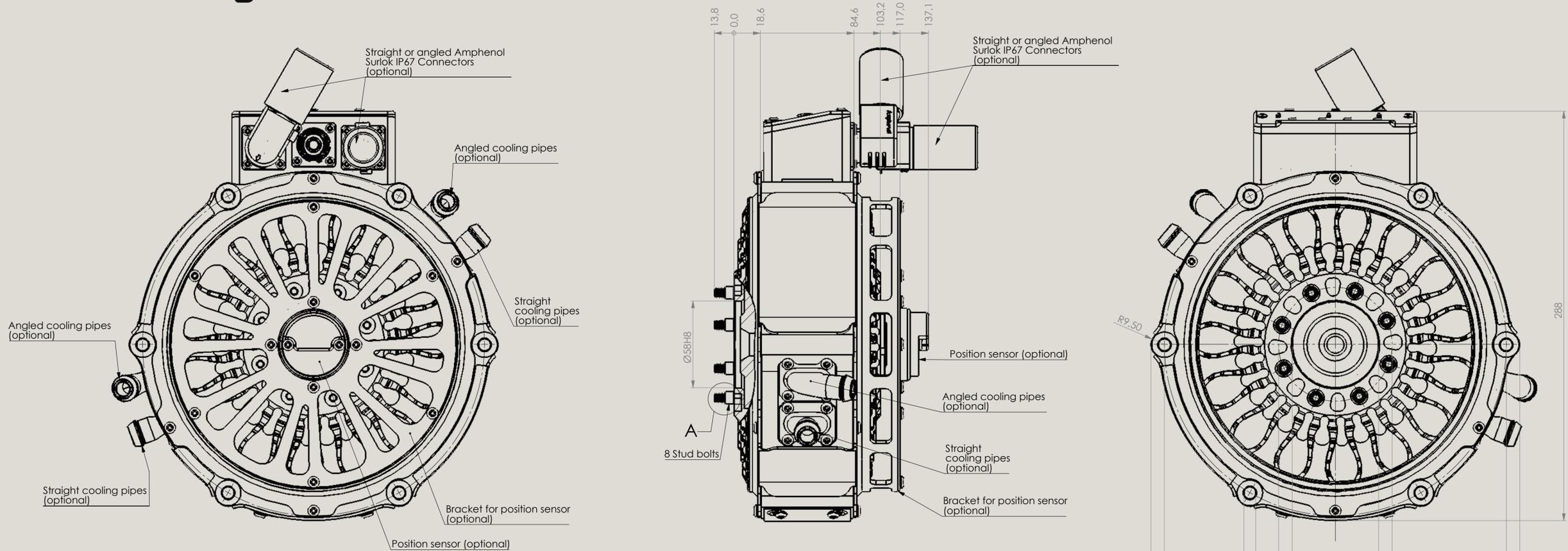
All motors can be made with redundancy option - 2xUVW phase connectors. Phase connectors can be cable lugs (standard option) or EMI IP67 Amphenol connectors (additional option).

Extended Data Sheet

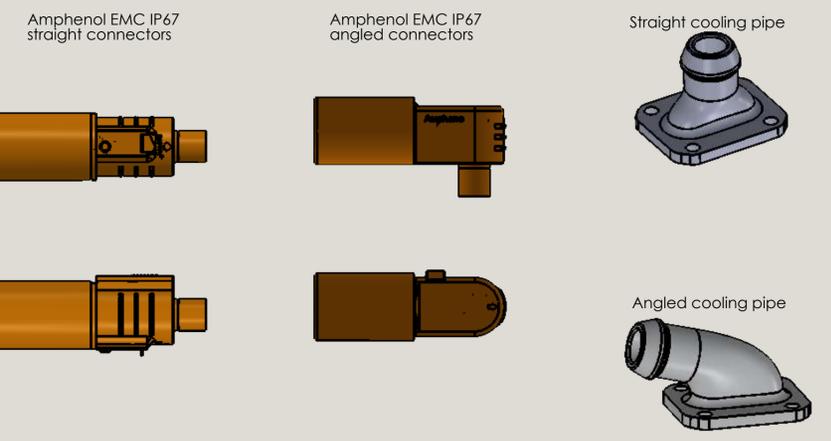
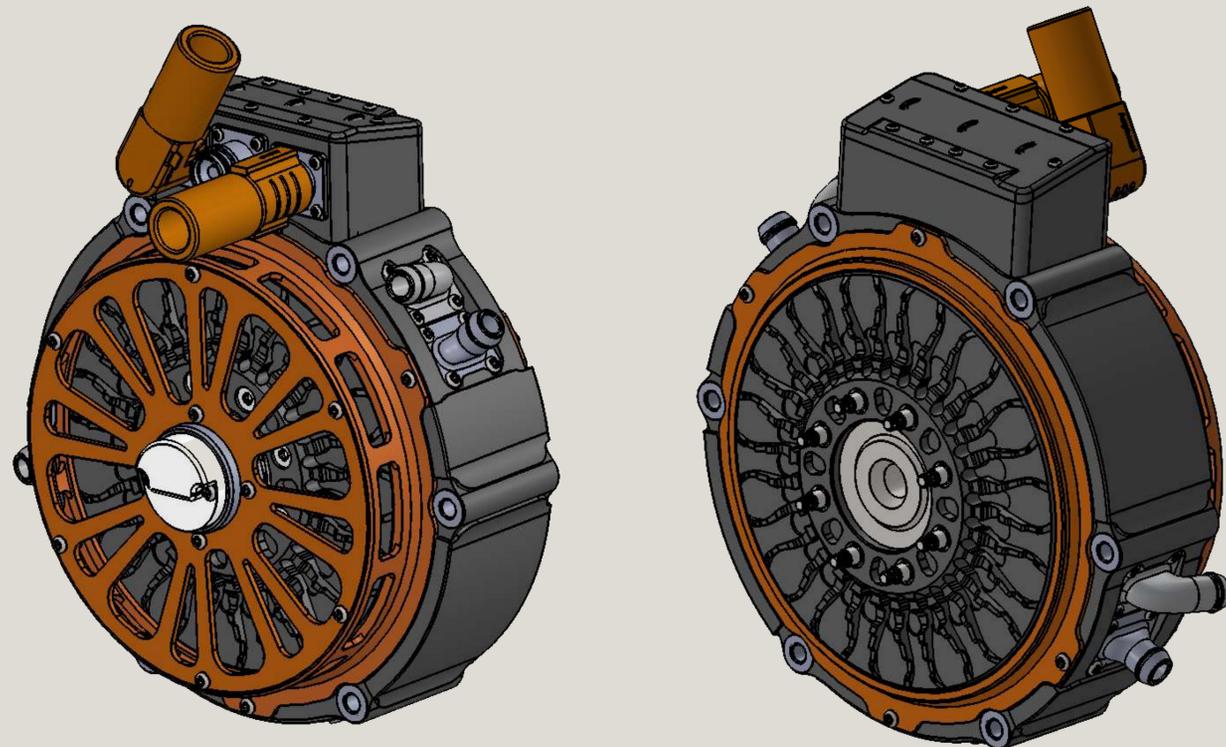
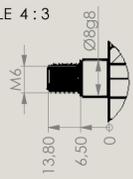
AXM2

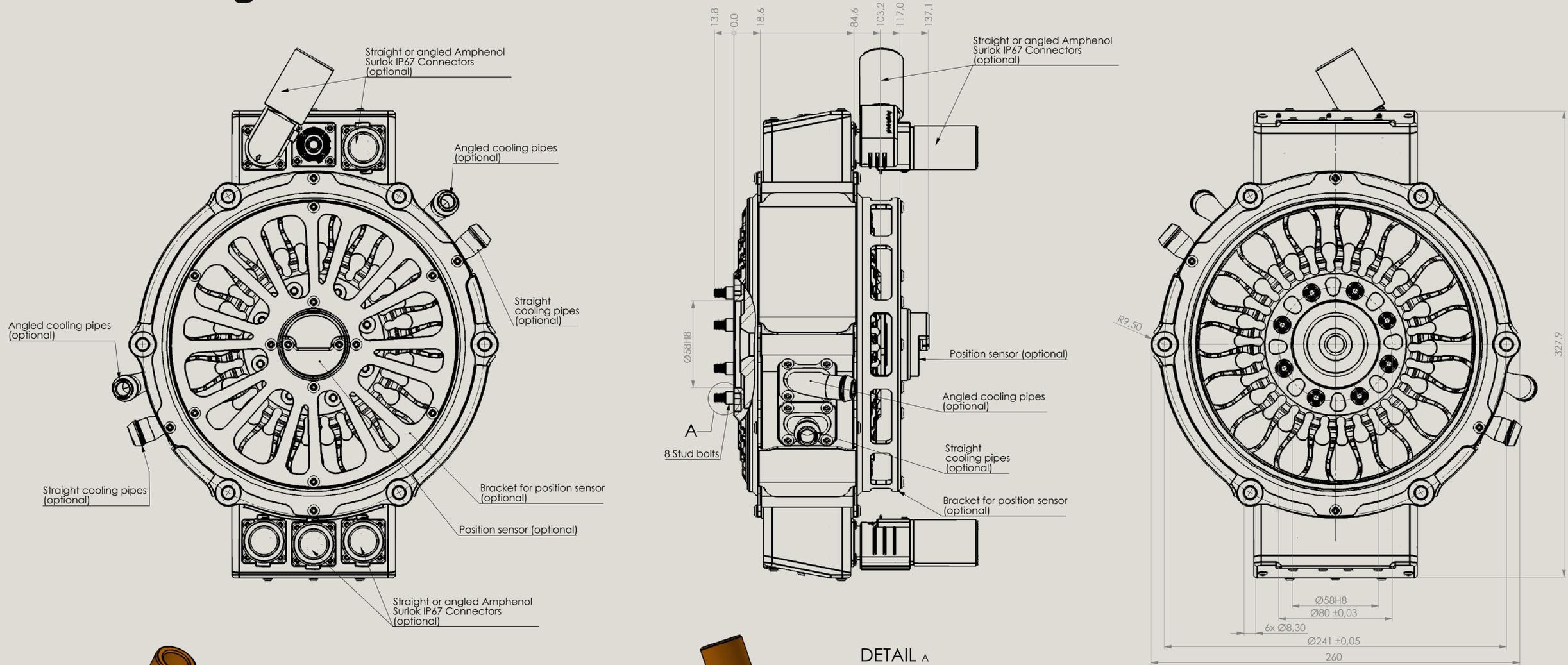
Winding type	HIGH Voltage (850Vdc)	MEDIUM Voltage (550Vdc)	LOW Voltage (300Vdc)
Peak power	135 kW	135 kW	135 kW
Continuous power	85 kW	85 kW	85 kW
Peak torque	200 Nm	200 Nm	200 Nm
Continuous torque	135 Nm	135 Nm	135 Nm
Maximum motor speed	7500 RPM	7500 RPM	7500 RPM
Continuous motor speed	6000 RPM	6000 RPM	6000 RPM
Weight	15,1 kg	15,1 kg	15,1 kg
Kv at no load	8.8	17.6	33.6
Kv at continuous torque	7	14	26.7
Kv at peak torque	6.2	12.3	23.5
Torque constant	0,95 Nm/Arms	0,48 Nm/Arms	0,25 Nm/Arms
Motor type	3-phase AC PM Nm/Arms	3-phase AC PM Nm/Arms	3-phase AC PM Nm/Arms



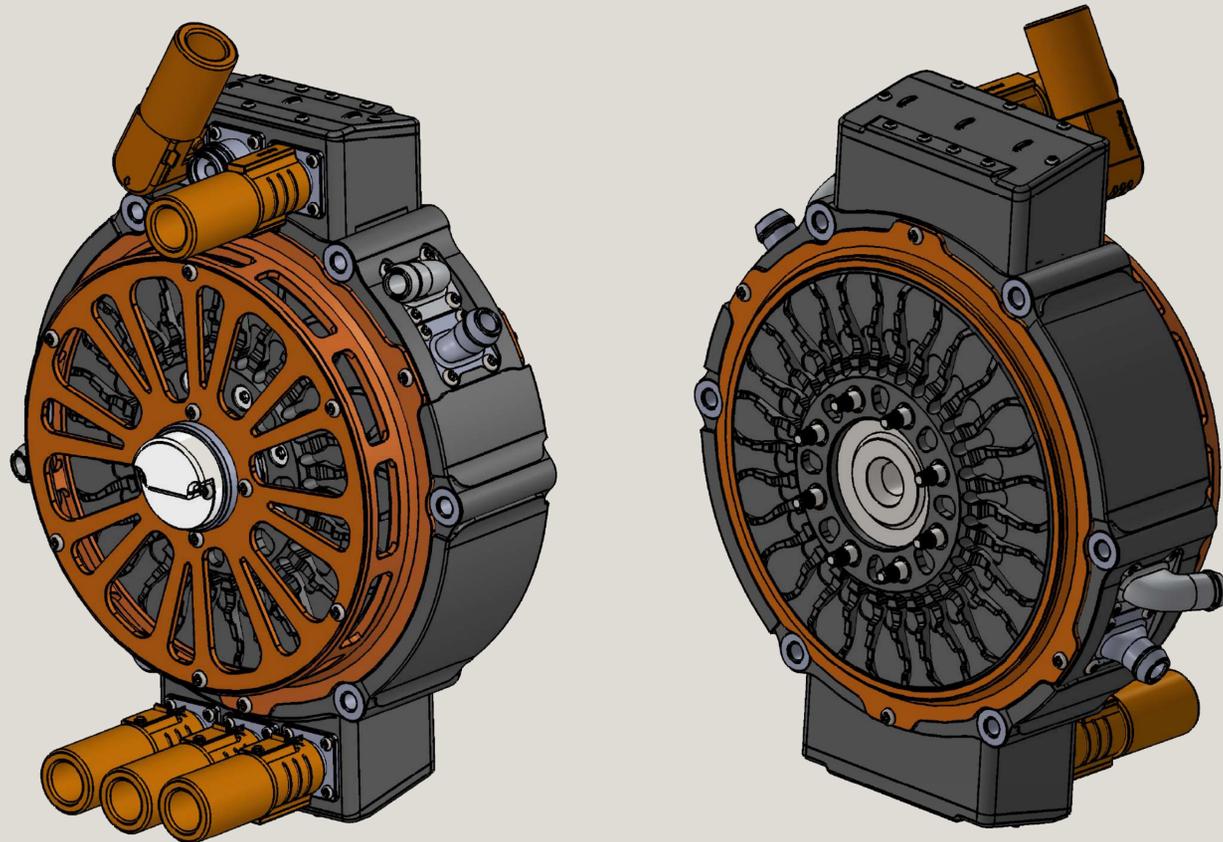
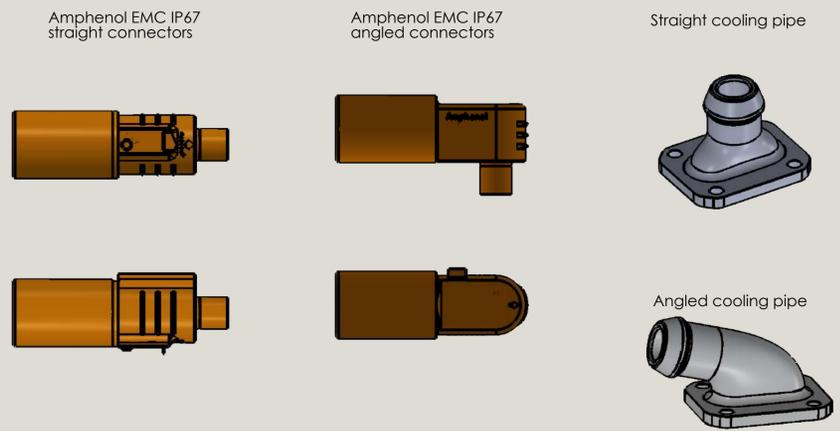
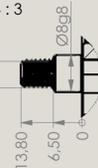


DETAIL A
SCALE 4:3

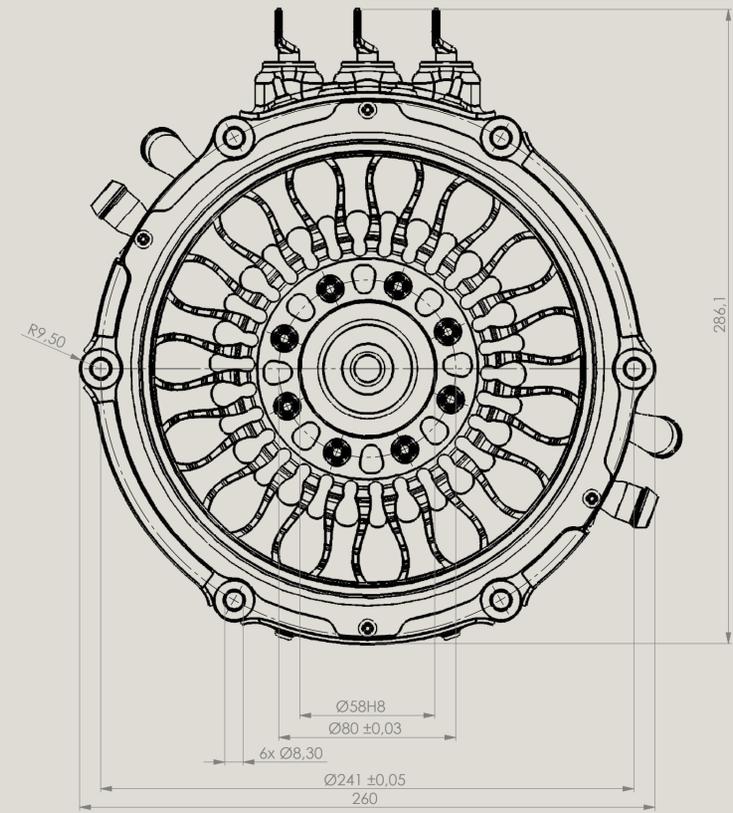
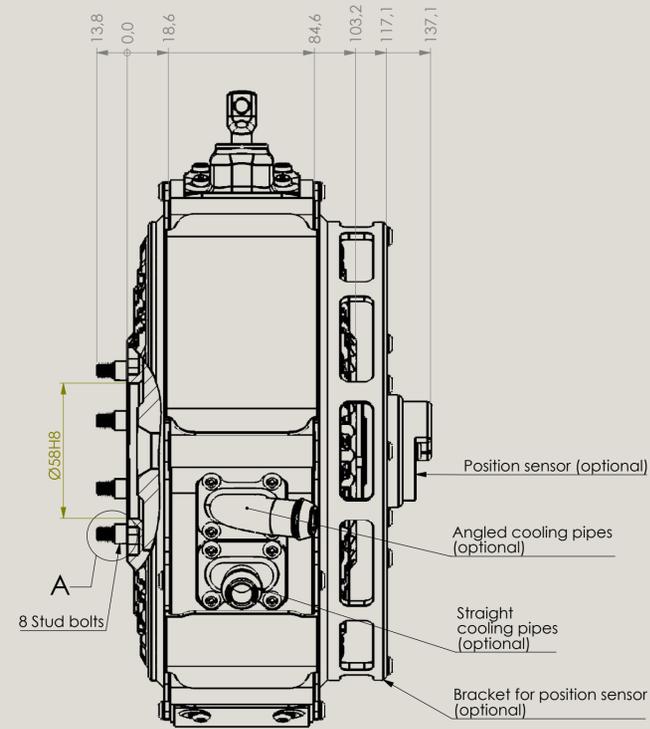
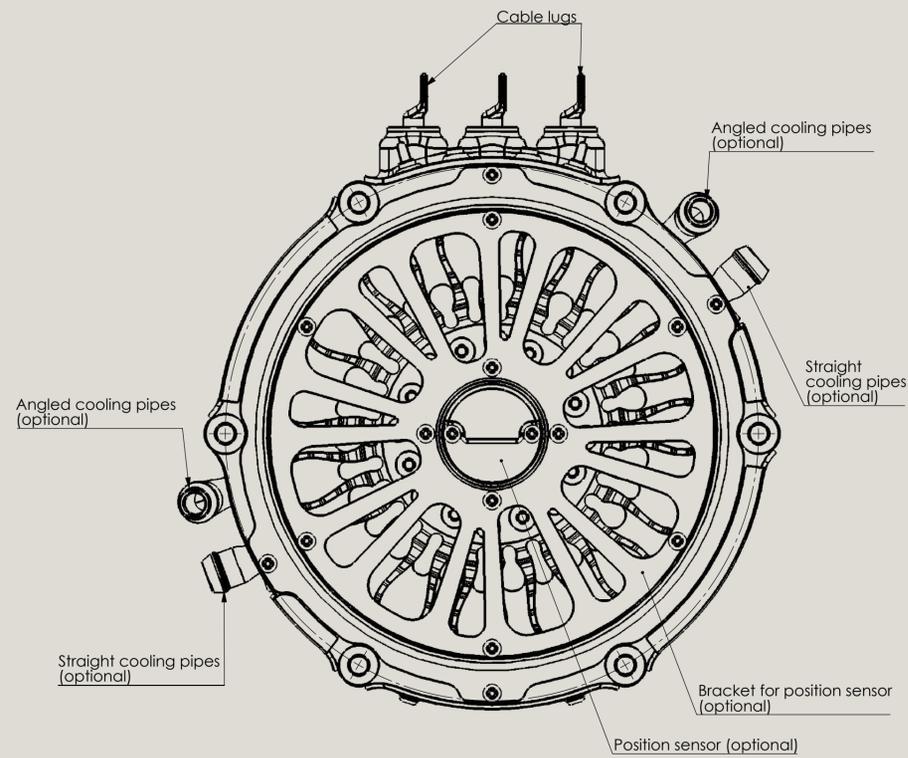




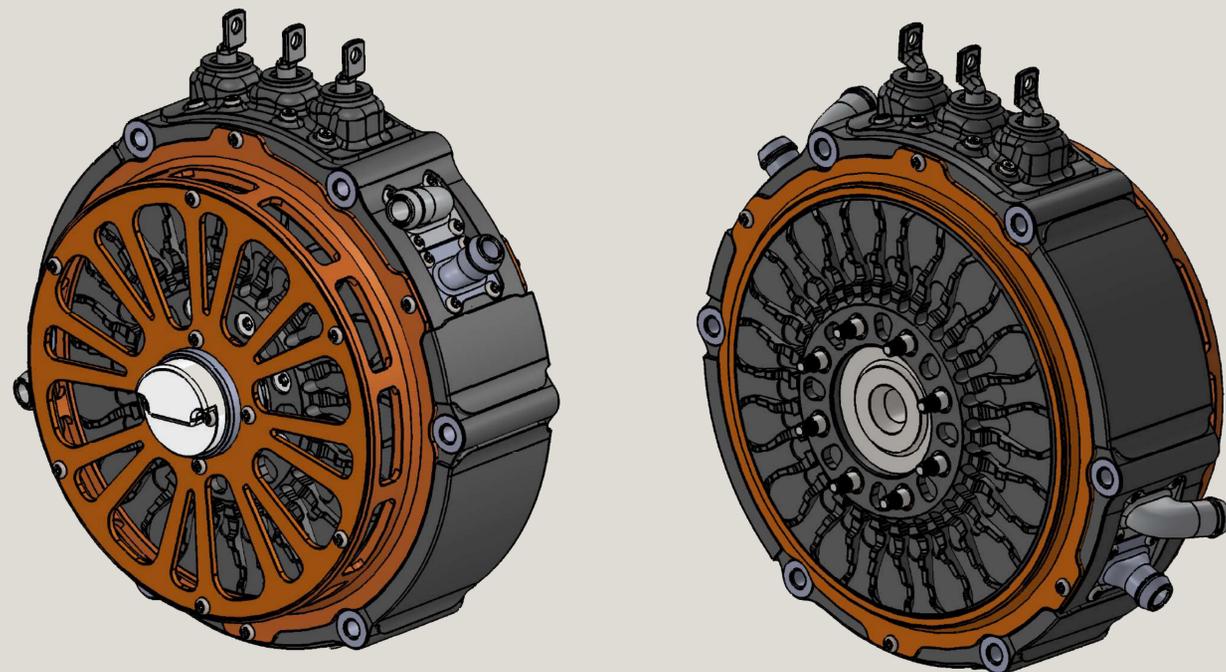
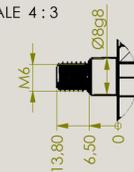
DETAIL A
SCALE 4:3



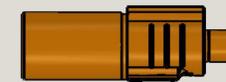
BEYOND MOTORS
AXM2
2xUVW



DETAIL A
SCALE 4 : 3



Amphenol EMC IP67 straight connectors



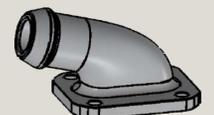
Amphenol EMC IP67 angled connectors



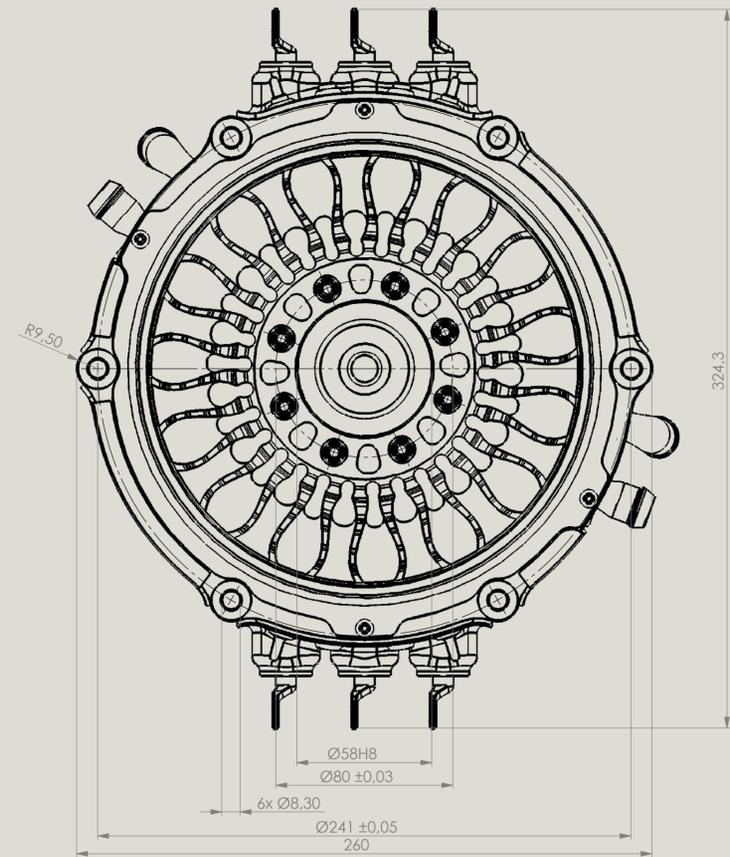
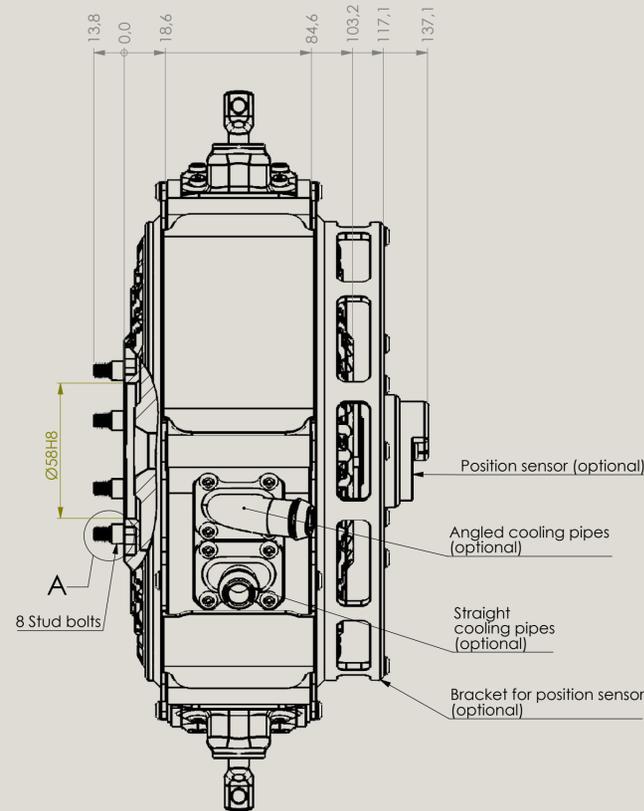
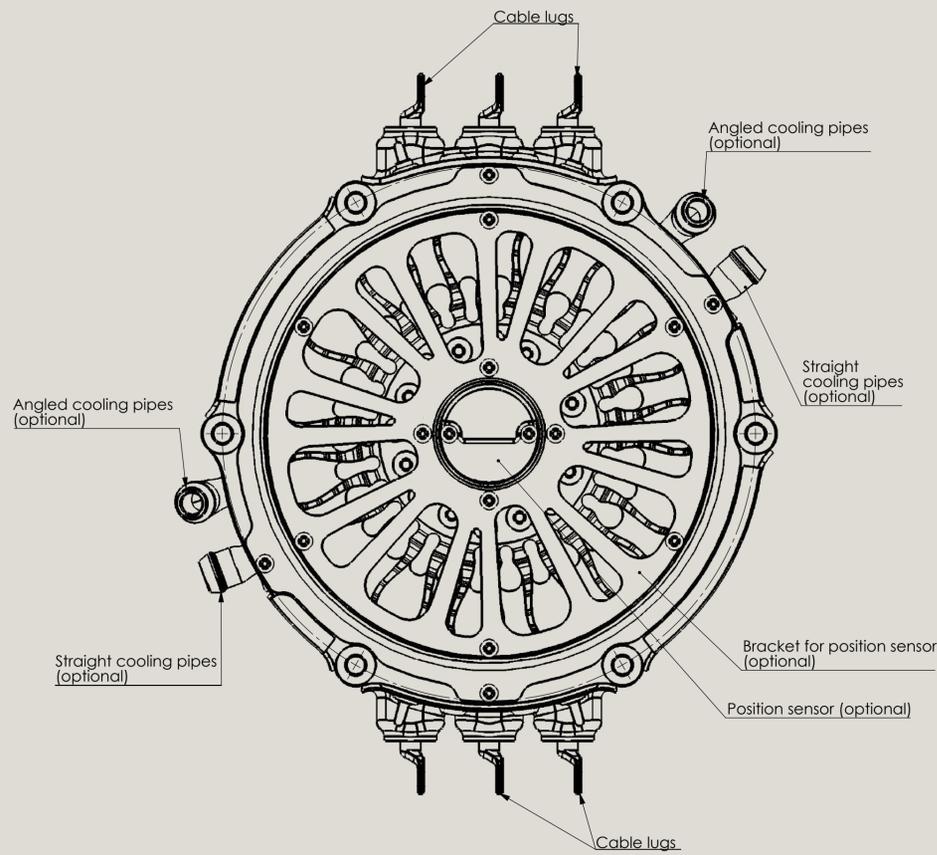
Straight cooling pipe



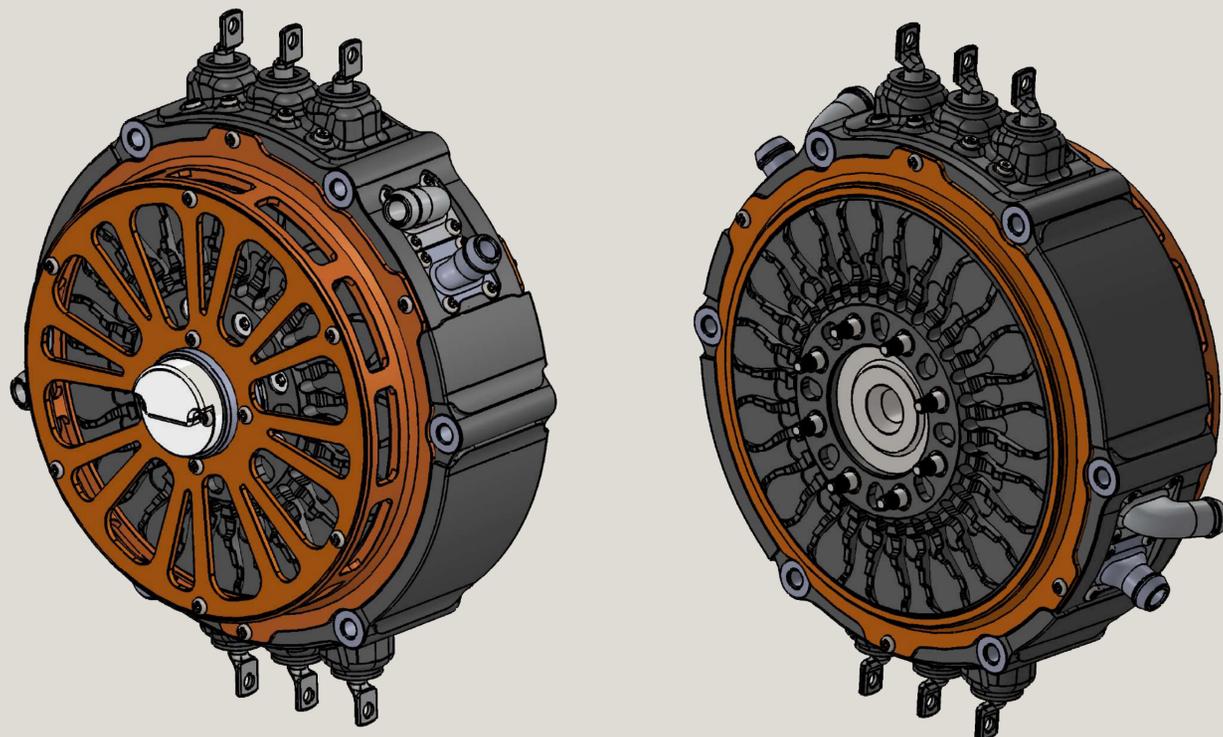
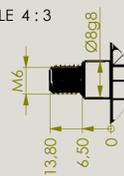
Angled cooling pipe



BEYOND MOTORS
AXM2
Cable lugs



DETAIL A
SCALE 4:3



Amphenol EMC IP67 straight connectors



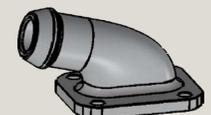
Amphenol EMC IP67 angled connectors



Straight cooling pipe



Angled cooling pipe



BEYOND MOTORS
AXM2
Cable lugs 2xUVW

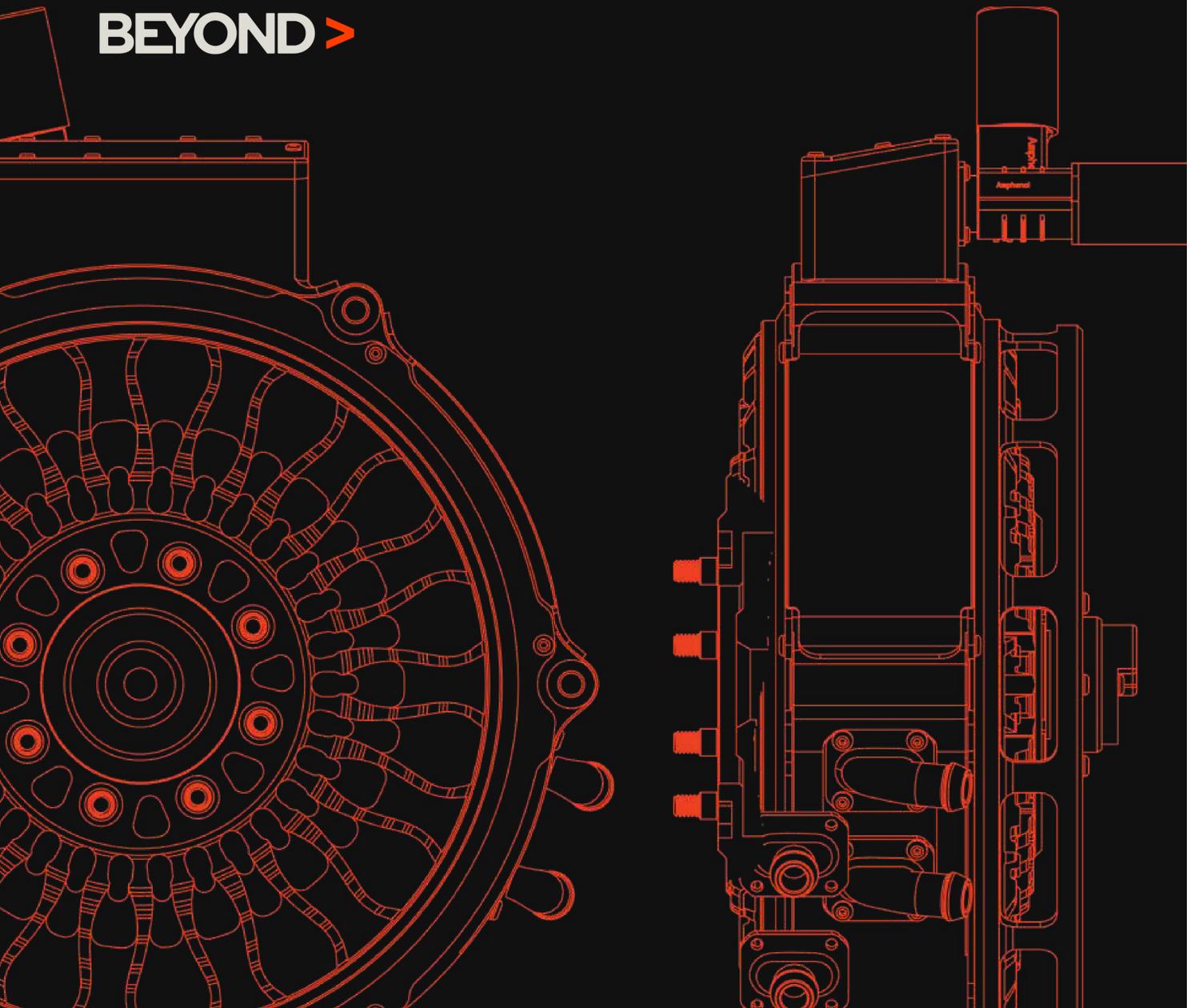
NEED MORE INFORMATION?

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

info@beyondmotors.io
+386 31 544 864

BEYOND >



Other Models

AXM3

P_{peak} **260 kW**

P_{cont} **155 kW**

Mass **28,6 kg**

[See full Data Sheet →](#)



AXM4

P_{peak} **430 kW**

P_{cont} **240 kW**

Mass **51,1 kg**

[See full Data Sheet →](#)



ENERGISING THE FUTURE